

# Tonga

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

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

### 1.1 ANTIMICROBIAL RESISTANCE (AMR)

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

##### 1.1.1a

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

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

**Current Year Score: 0**

There is no evidence of a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens in Tonga. The World Health Organization (WHO) Library of National Action Plans shows that Tonga does not have a National AMR action plan. [1] The WHO Global Database for AMR which provides Country Self-Assessment reports and the Global Action Plan on AMR, confirm no records for Tonga. [2,3] There is also no evidence of a National AMR action plan on the website of the Ministry of Health, Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries (MOF), Ministry of Environment, Energy, Climate Change, Disaster Management, Meteorology, Information and Communications (MEIDECC). [4,5,6,7,8,9]. While there is no public evidence of such a separate national public health institute, or separate laboratory system, there is a Tonga National Health Information System which does not provide any evidence for a plan. [10]

[1] World Health Organisation (WHO). "Library of National Action Plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 31 July 2020

[2] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 31 July 2020.

[3] World Health Organisation (WHO). 2015. "Global Action Plan on Antimicrobial Resistance". [<https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>] Accessed 31 July 2020.

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 31 July 2020.

[5] Tonga, Ministry of Agriculture, Forestry, Food & Fisheries [<http://maff.gov.to/index.html>] Accessed 4 August 2020.

[6] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 4 August 2020.

[7] Tonga Meteorological Services [<http://www.met.gov.to/>] Accessed 27 August 2020.

[8] Tonga, Ministry of Information and Communications [<http://www.mic.gov.to/>] Accessed 27 August 2020.

[9] Tonga, Ministry of Climate Change [<https://climatechange.gov.to/>] Accessed 27 August 2020.

[10] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 4 August 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 evidence of a national laboratory/laboratory system which tests for priority AMR pathogens. The World Health Organization (WHO) Library of National Action Plans shows that Tonga does not have a National AMR action plan or

laboratory system. [1] The WHO Global Action Plan database on AMR also has no information showing a national lab system in Tonga. [2,3] There is no evidence of a lab system on the website of the Ministry of Health. [4,5] While there is no public evidence of such a separate national public health institute, or separate laboratory system, there is a Tonga National Health Information System which does not provide any evidence for a plan, and no information found in academic articles. [6]

[1] World Health Organisation (WHO). "Library of National Action Plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 31 July 2020.

[2] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 31 July 2020.

[3] World Health Organisation (WHO). 2015. "Global Action Plan on Antimicrobial Resistance". [<https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>]. Accessed 31 July 2020.

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 31 July 2020.

[5] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review". [[http://www.searo.who.int/entity/asia\\_pacific\\_observatory/publications/hits/hit\\_Tonga/en/](http://www.searo.who.int/entity/asia_pacific_observatory/publications/hits/hit_Tonga/en/)] Accessed 31 July 2020.

[6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 4 August 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 public evidence that Tonga conducts detection or surveillance activities (e.g. in soil, waterways ) for antimicrobial residues or AMR organisms. The World Health Organization (WHO) Library of National Action Plans shows that Tonga does not have a national action plan. [1] The WHO Global Action Plan database on AMR also has no information showing such surveillance activities in Tonga. [2,3] There is no evidence of this on the website of the Ministry of Health or in the website for the Tonga National Health Information System. [4,5] There is no evidence on the website of the Department of Environment (DOE) and there is no website for the Department of Climate Change. [6]

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

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

[3] World Health Organisation (WHO). 2015. "Global Action Plan on Antimicrobial Resistance". [<https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>] Accessed 4 August 2020.

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 4 August 2020.

[5] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 4 August 2020.

[6] Tonga, Department of Environment. [<https://www.environment.gov.to/>] Accessed 4 August 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 no public evidence of national legislation or regulation in place requiring prescriptions for antibiotic use for humans in Tonga. The World Health Organization (WHO) Library of National Action Plans shows that Tonga does not have a National AMR action plan or information on this. [1] The WHO Global Action Plan database on AMR also has no information showing this information in Tonga. [2,3] There is no evidence of such regulations or legislation on the website of the Ministry of Health, in the website for the Tonga National Health Information System. [4,5] Finally, there is no website or publicly available evidence of a pharmaceutical regulatory or any legislation repository/academic studies detailing such laws.

[1] World Health Organisation (WHO). "Library of National Action Plans, [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 5 August 2020.

[2] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments. [<http://amrcountryprogress.org/>] Accessed 5 August 2020.

[3] World Health Organisation (WHO). 2015. "Global Action Plan on Antimicrobial Resistance". [<https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>]. Accessed 5 August 2020..

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[5] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 5 August 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 available of national legislation or regulation in place requiring prescriptions for antibiotic use for animals in Tonga. The World Health Organization (WHO) Library of National Action Plans shows that Tonga does not have a National AMR action plan. [1] The WHO Global Action Plan database on AMR also has no information showing this information in Tonga. [2,3] There is no evidence of such regulations or legislation on the website of the Ministry of Health, Ministry of Agriculture, Forestry, & Forestry, and the Ministry of Fisheries. [4,5,6] Finally, there is no website or publicly available evidence of a pharmaceutical regulatory or any legislation repository/academic studies detailing such laws.

[1] World Health Organisation (WHO). "Library of National Action Plans, [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 5 August 2020.

[2] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments. [<http://amrcountryprogress.org/>] Accessed 5 August 2020.

[3] World Health Organisation (WHO). 2015. "Global Action Plan on Antimicrobial Resistance". [<https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>]. Accessed 5 August 2020.

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[5] Tonga, Ministry of Agriculture, Food and Forestry. [<http://maff.gov.to/index.html>] Accessed 5 August 2020.

[6] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

## 1.2 ZOOONOTIC 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 public evidence that Tonga has a national law, plan, or equivalent strategy document, on zoonotic disease. There is no evidence of such a plan on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry or Ministry of Fisheries. [1,2,3]. The website for the Quarantine Division of the Ministry of Agriculture is not operationally active. [4] There is also no information in related articles and studies.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 5 August 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 public evidence that Tonga has a national law, plan, or equivalent strategy document, which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. There is no evidence of such a plan on the websites of the Ministry of Health, the Ministry of Agriculture, Food & Forestry or the Ministry of Fisheries. [1,2,3]. The website for the Quarantine Division of the Ministry of Agriculture is not operationally active. [4] Despite the absence of any legislation, there is evidence that Tonga is working towards improving its capacity in this respect. According to the website of Pacific Community (SPC) - the principal scientific and technical institution of the Western Pacific - animal health and production officers from Tonga's Ministry of Agriculture and Forestry and Food undertook training conducted by SPC in 2016 on animal disease surveillance. The goal was for Tonga to maintain a proactive animal disease surveillance system that will safeguard livestock products for human consumption and reduce the risks of zoonotic diseases spreading to humans. [5]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 5 August 2020.

[5] Pacific Community (SPC) "Boost for Animal Disease Surveillance in Tonga,"

[<https://www.spc.int/updates/news/2016/08/boost-animal-disease-surveillance-tonga>] Accessed 5 August 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 Tonga has a national law, plan, or equivalent strategy document that accounts for the surveillance and control of multiple zoonotic pathogens. There is no evidence of such a plan on the websites of the Ministry of Health, the Ministry of Agriculture, Food & Forestry or the Ministry of Fisheries. [1,2,3]. Despite the absence of any legislation, there is evidence that Tonga is working towards improving its capacity in this respect. According to the website of Pacific Community (SPC) - the principal scientific and technical institution of the Western Pacific - animal health and production officers from Tonga's Ministry of Agriculture and Forestry and Food undertook training conducted by SPC in 2016 on animal disease surveillance. The goal was for Tonga to maintain a proactive animal disease surveillance system that will safeguard livestock products for human consumption and reduce the risks of zoonotic diseases spreading to humans. [4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Pacific Community (SPC) "Boost for Animal Disease Surveillance in Tonga," [<https://www.spc.int/updates/news/2016/08/boost-animal-disease-surveillance-tonga>] Accessed 5 August 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 public evidence that Tonga has a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. There is no evidence of such a plan on the websites of the Ministry of Health, the Ministry of Agriculture, Food & Forestry or the Ministry of Fisheries. [1,2,3]. Despite the absence of any legislation, there is evidence that Tonga is working towards improving its capacity in this respect. According to the website of Pacific Community (SPC) - the principal scientific and technical institution of the Western Pacific - animal health and production officers from Tonga's Ministry of Agriculture and Forestry and Food undertook training conducted by SPC in 2016 on animal disease surveillance. The goal was for Tonga to maintain a proactive animal disease surveillance system that will safeguard livestock products for human consumption and reduce the risks of zoonotic diseases spreading to humans. [4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Pacific Community (SPC) "Boost for Animal Disease Surveillance in Tonga," [<https://www.spc.int/updates/news/2016/08/boost-animal-disease-surveillance-tonga>] Accessed 5 August 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 Tonga has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency . There is no evidence of such a mechanism on the websites of the Ministry of Health or the Ministry of Agriculture, Food and Forestry. [1,2]. There was one academic report from 1996, that noted some surveillance exists for bovine tuberculosis and bovine brucellosis. [3] This could not be confirmed through any national sources and there are no newer reports available.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 5 August 2020

[2] Tonga, Ministry of Agriculture, Forestry, Food & Fisheries [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Peter Saville, "Animal Health Status of Tonga,"

[[https://www.researchgate.net/publication/237703977\\_THE\\_ANIMAL\\_HEALTH\\_STATUS\\_OF\\_TONGA](https://www.researchgate.net/publication/237703977_THE_ANIMAL_HEALTH_STATUS_OF_TONGA)] Accessed 5 August 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 public evidence that Tonga has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) . There is also no national mechanism related to this. There is no evidence of such laws on the websites of the Ministry of Health, Ministry of Agriculture, Food and Forestry, and Ministry of Fisheries.[1,2,3]. After subsequent attempts to search national sources and other sources, there was no public evidence of such a plan or legislation. There is some mention of privacy laws regarding patients personal data according to a WHO report on Tonga's public health system from 2015 - but nothing is specified on livestock. [4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 27 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [<https://iris.wpro.who.int/handle/10665.1/11371>] Accessed 5 August 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 public evidence that Tonga conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors, etc.) According to a 2015 World Health Organization (WHO) report on Tonga's Public Health system - the country does conduct surveillance activities with its Communicable Disease Section under its Ministry of Health which is responsible for undertaking surveillance activities and developing guidelines for prevention and control of outbreak-prone diseases such as dengue, typhoid and influenza-like illnesses. It does not reference surveillance in wildlife [1] There is no public evidence that Tonga conducts surveillance of zoonotic disease on the websites of the Ministry of Health or the Ministry of Agriculture, Forestry, Food & Fisheries. [2,3]. No studies were found which address this subject.

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://iris.wpro.who.int/handle/10665.1/11371] Accessed 5 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to/] Accessed 27 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry. [http://mafff.gov.to/index.html] Accessed 5 August 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: 2.87

2018

OIE WAHIS database

### 1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 14.35

2018

OIE WAHIS database

## 1.2.5 Private sector and zoonotic

### 1.2.5a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that Tonga has a national plan on zoonotic disease or other legislation, regulation or plan that includes mechanisms for working with the private sector in controlling or responding to zoonoses. There is no evidence of such a mechanism on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry, and the Ministry of Fisheries. [1,2,3] After subsequent attempts to search national sources including the Tonga National Health Information System website, there was no public evidence of such a mechanism and there is no public health institute or national laboratory system separate from the Ministry of Health. [3,4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 27 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.

[4] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [<https://iris.wpro.who.int/handle/10665.1/11371>] Accessed 5 August 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 public evidence that Tonga has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities . There is no evidence of such records on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry, Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to biosecurity. [6] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [7] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [8] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [9]

- [1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.
- [2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.
- [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.
- [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 5 August 2020.
- [5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 5 August 2020.
- [6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 5 August 2020.
- [7] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 5 August 2020.
- [8] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.
- [9] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 5 August 2020.

### 1.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that Tonga has in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. There is no evidence of such records on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence.[5] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to biosecurity. [6] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [7] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [8] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [9]

- [1] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 7 August 2020.
- [2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 5 August 2020.
- [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 5 August 2020.
- [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 5 August 2020.
- [5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 5 August 2020.
- [6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 5 August 2020.
- [7] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 5 August 2020.
- [8] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.
- [9] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 5 August 2020.

### 1.3.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that Tonga has an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations. There is no evidence of such records on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to biosecurity. [7] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [8] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [9] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [10]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 6 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 6 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 6 August 2020.

[5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 6 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 6 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 6 August 2020.

[8] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 6 August 2020.

[9] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.

[10] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 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 Tonga has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities . There is also no evidence of biosecurity legislations. There is no evidence of such records on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence

of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [8] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [9] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [10]

- [1] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 7 August 2020.
- [2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 6 August 2020.
- [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 6 August 2020.
- [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 6 August 2020.
- [5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 6 August 2020.
- [6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 6 August 2020.
- [7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 6 August 2020.
- [8] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 6 August 2020.
- [9] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.
- [10] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 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 that Tonga has an in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen . There is no evidence of such a capacity on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Ministry of Defence which has no website. [1,2,3,4]. There is evidence of a Biosecurity and Quality Management Division of MAFF, but its mandate focusses on biosafety and quarantine issues and does not details this issue. [5] After subsequent attempts to search national sources, there was no public evidence of such a specific capacity and there exists no separate national public health institute, or separate laboratory system. The website of the Tonga National Health Information System is still under construction and has no evidence on any testing. [6]

- [1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020..
- [2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 6 August 2020.
- [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 6 August 2020.
- [4] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 6 August 2020.
- [5] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 6 August 2020.
- [6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 6 August 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 Tonga 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. There is no evidence of biosecurity legislation in Tonga. There is no evidence of such training or approach on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [8] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [9] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [10]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 6 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 6 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 6 August 2020.

[5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 6 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 6 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 6 August 2020.

[8] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 6 August 2020.

[9] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.

[10] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 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 Tonga has 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. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [8] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [9] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [10]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 6 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 6 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 6 August 2020.

[5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 6 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 6 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 6 August 2020.

[8] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 6 August 2020.

[9] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 27 August 2020.

[10] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 2020.

### 1.3.4 Transportation security

#### 1.3.4a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available information on national regulations on the safe and secure transport of infectious substances (Categories A and B) in Tonga. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health



Information System is still under construction and has no evidence related to this. [7] The Ministry of Infrastructure which covers transportation-related matters does not have an active website. [8] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [9] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [10] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [11]

- [1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.  
 [2] Tonga, Ministry of Agriculture, Food and Forestry (MAFF) [<http://maff.gov.to/index.html>] Accessed 7 August 2020.  
 [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.  
 [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.  
 [5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 7 August 2020.  
 [6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.  
 [7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.  
 [8] Tonga, Ministry of Infrastructure [<http://www.moi.gov.to/>] Accessed 10 August 2020.  
 [9] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 7 August 2020.  
 [10] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.  
 [11] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 7 August 2020.

### 1.3.5 Cross-border transfer and end-user screening

#### 1.3.5a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence of 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 in Tonga. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries, Ministry of Trade and Economic Development or the Department of Environment. [1,2,3,4,5] There is no website for the Ministry of Defence. [6] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [7] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [8] The Ministry of Infrastructure which covers transportation-related matters does not have an active website. [9] There is a regional biosecurity plan, that includes Tonga, run by the Pacific Community but it focuses only on biosafety areas and there is no evidence of specific record-taking. [10] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding Tonga's biosecurity. [11] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [12]



- [1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.
- [2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.
- [3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.
- [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.
- [5] Tonga, Ministry of Trade and Economic Development [<http://mted.gov.to/>] Accessed 7 August 2020.
- [6] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 7 August 2020.
- [7] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.
- [8] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.
- [9] Tonga, Ministry of Infrastructure [<http://www.moi.gov.to/>] Accessed 10 August 2020.
- [10] Pacific Community (SPC) "The Regional Biosecurity Operating Procedures," [<http://bif.lrd.spc.int/alien-invasive-species-2/>] Accessed 7 August 2020.
- [11] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 7 August 2020.
- [12] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 7 August 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**

Although Tonga does have legislation in place which covers biosafety, they address biodiversity protections rather than protections for those working with dangerous pathogens. There is evidence of a Biosecurity and Quality Management Division of MAFF, but its mandate focusses on biosafety and quarantine issues - as is focussed on preventing accidental and unintentional misuse and release. Moreover, there is evidence of several regulations on both plant and animal quarantine restrictions to protect against infectious disease, etc, but these do not cover safety when working dangerous pathogens. [1] There is no evidence of biosafety legislation on the websites of the Ministry of Health, Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [2,3,4,5]. There is no evidence of a web presence for a national public health institute, or separate laboratory system. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [6] There is no evidence of such legislation in the VERTIC database. [7] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [8]

- [1] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.
- [2] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 28 August 2020.
- [3] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.
- [4] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.
- [5] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.
- [6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.
- [7] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.
- [8] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>]

Accessed 7 August 2020.

### 1.4.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Tonga has an agency responsible for the enforcement of biosafety legislation. There is also no evidence that Tonga has in place biosafety legislation and regulations. Although there is a specific agency within the Ministry of Health called the Biosecurity and Quality Management Division with a mandate on biosafety and quarantine issues, these address biodiversity protections (to protect local flora and fauna against infectious disease, etc), but do not cover safety when working dangerous pathogens. [1] There is no evidence of biosafety legislation on the websites of the Ministry of Health, Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [2,3,4,5]. There is no evidence of a web presence for a national public health institute, or separate laboratory system. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [6] There is no evidence of such legislation in the VERTIC database. [7] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [8]

[1] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to/>] Accessed 28 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.

[4] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.

[5] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.

[6] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.

[7] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.

[8] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 7 August 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 public evidence that Tonga requires biosafety training. Despite this, Tonga has signed and ratified the Cartagena Protocol - or Convention on Biological Diversity - which requires "Parties to have appropriate institutional mechanisms and infrastructure, well-trained human resources, adequate funding, access to relevant information and other types of capacities." [1] There is no evidence of biosafety legislation on the websites of the Ministry of Health, Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [2,3,4,5]. There is no evidence of a web presence for a national public health institute, or separate laboratory system. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [6] According to VERTIC's database on

biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail biosafety training requirements and is more focussed on biosecurity. [7] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [8]

[1] The Convention on Biological Diversity, "The Cartagena Protocol," [https://bch.cbd.int/protocol/cpb\_art22.shtml] Accessed 7 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to/] Accessed 28 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 7 August 2020.

[4] Tonga, Ministry of Fisheries [http://www.tongafish.gov.to/] Accessed 7 August 2020.

[5] Government of Tonga, Department of Environment (DOE) [https://www.environment.gov.to/] Accessed 7 August 2020.

[6] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 7 August 2020.

[7] Vertic. "National Implementation Measures - Biosecurity," [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/] Accessed 28 August 2020.

[8] Confidence Building Measures under the Biological Weapons Convention. [https://bwc-ecbm.unog.ch/state/tonga] Accessed 7 August 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 Tonga 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 . There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding dual-use research. [8] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [9]

[1] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 7 August 2020.

[3] Tonga, Ministry of Fisheries [http://www.tongafish.gov.to/] Accessed 7 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [https://www.environment.gov.to/] Accessed 7 August 2020.

[5] Tonga, Ministry of Defence [http://www.mic.gov.to/] Accessed 7 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [http://www.quarantine.gov.to/] Accessed 7 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.

[8] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.

[9] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 2020.

### 1.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding dual-use research. [8] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [9]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.

[5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 7 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.

[8] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.

[9] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 2020.

### 1.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence of an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry, Ministry of Fisheries or the Department

of Environment. [1,2,3,4] There is no website for the Ministry of Defence. [5] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [6] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [7] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding dual-use research. [8] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [9]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.

[5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 7 August 2020.

[6] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.

[7] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.

[8] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 28 August 2020.

[9] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 6 August 2020.

## 1.5.2 Screening guidance for providers of genetic material

### 1.5.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has national legislation, regulation, policy, or other guidance, requiring the screening of synthesized deoxyribonucleic acid (DNA) before it is sold. There is no evidence of such regulations on the websites of the Ministry of Health, the Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4] There is no website for the Ministry of Defence and the Ministry of Infrastructure which covers transportation-related matters does not have a functional website. [5,6] There is evidence of a Biosecurity and Quality Management Division of MAFF with an inaccessible website, but its mandate focusses on biosafety and quarantine issues. [7] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [8] According to VERTIC's database on biosecurity legislation, Tonga amended its Act on Criminal Offences (2007), but this amendment and Act do not detail any regulations or requirements regarding the screening of synthesized deoxyribonucleic acid (DNA) before it is sold. [9] There is no record that Tonga has submitted Confidence Building Measures under the Biological Weapons Convention. [10]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 7 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 7 August 2020.

- [4] Government of Tonga, Department of Environment (DOE) [<https://www.environment.gov.to/>] Accessed 7 August 2020.
- [5] Tonga, Ministry of Defence [<http://www.mic.gov.to/>] Accessed 7 August 2020.
- [6] Tonga, Ministry of Infrastructure [ <http://www.infrastructure.gov.to/> ] Accessed 28 August 2020.
- [7] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 7 August 2020.
- [8] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 7 August 2020.
- [9] Vertic. "National Implementation Measures - Biosecurity," [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>] Accessed 7 August 2020.
- [10] Confidence Building Measures under the Biological Weapons Convention. [<https://bwc-ecbm.unog.ch/state/tonga>] Accessed 7 August 2020.

## 1.6 IMMUNIZATION

### 1.6.1 Vaccination rates

#### 1.6.1a

##### Immunization rate (measles/MCV2)

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

**Current Year Score: 2**

2019

World Health Organization

#### 1.6.1b

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

Yes = 1 , No = 0

**Current Year Score: 1**

2020

OIE WAHIS database

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

### 2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

#### 2.1.1 Laboratory testing for detection of priority diseases

##### 2.1.1a

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

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

**Current Year Score: 0**

There is no public evidence that Tonga has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. There is evidence for a national laboratory that serves as a reference facility which is subject to external quality assurance review. The Vaoila Hospital Laboratory is noted to be national reference laboratory according to the Kingdom of Tonga: Health Systems Review by the Asia Pacific Observatory.[1] It is also recorded to be an "L1" laboratory for Tonga as a part of the Pacific Public Health Surveillance Network (PPHSN). According a report on the website from September 2013, the laboratory has verified to conduct certain screening tests including PCR testing for influenza and culture tests for typhoid but the necessary core diagnostic tests cannot be verified.[2] There is no evidence of any testing capacity on the website of the Ministry of Health. [3] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system, or Ministry of Research. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 12 August 2020.

[2] Pacific Public Health Surveillance Network (PPHSN). "PPHSN Net catalog: 2013 Edition"[https://www.pphsn.net/Services/LabNet/PPHSN\_LabNet\_catalogL1L2L3\_Sept2013.pdf] Accessed 12 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 7 August 2020.

[4] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 7 August 2020.

##### 2.1.1b

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

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

**Current Year Score: 0**

There is insufficient evidence to suggest that the country has a plan for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. The Ministry of



Health released the 'COVID-19 Preparedness & Response Plan 2020' on 7th January 2021 that states, "The Ministry plan focuses on working with our partners to strengthening our Public Health and Quarantine option for mild cases, IC for severe cases, laboratory services, while resourcing our health care facilities and equipping our staff to, maintains their safety and better respond to COVID19 and potential future pandemics that reach our shores". Furthermore, The National Laboratory did not have the capability to carry out COVID-19 test in-country until a new testing machine was purchased with support from New Zealand that arrived in Tonga in the week of 27th April. The 'COVID-19 Preparedness & Response Plan 2020' also states that in-country testing will be a key tool in screening incoming passengers to Tonga when the border is opened again. Passengers in quarantine will be tested at the end of the quarantine period and will only be released if result is negative. [1]

[1] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 1 April 2021.

## 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 some evidence of a national laboratory that serves as a reference facility but there is no evidence of any accreditation. The Vaoila Hospital Laboratory is noted to be national reference laboratory according to the Kingdom of Tonga: Health Systems Review by the Asia Pacific Observatory.[1] According to the 2015 Annual Report by the Ministry of Health, the Vaoila Laboratory is the "First Stepwise Laboratory Improvement Process Towards Accreditation(SLIPTA/ISO) audit was conducted in 2015 by the Pacific Paramedical Training Centre(PPTC) Wellington Hospital New Zealand". [2] The latest update available on the website from the Annual Report of 2016 only reports continuous improvement but there is no further update on the accreditation. There is no further evidence related to any accreditation on the website of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF) . [3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [[https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198_eng.pdf?sequence=1&isAllowed=y)] Accessed 12 August 2020.

[2] Tonga, Ministry of Health. Annual Reports [<http://www.health.gov.to/annual>] Accessed 12 August 2020.

[3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[4] Ministry of Agriculture, Food & Forestry (MAFF) [<http://mafff.gov.to/>] Accessed 28 August 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 some evidence for a national laboratory that serves as a reference facility but there is no evidence of it being subject to external quality assurance review. The Vaoila Hospital Laboratory is noted to be national reference laboratory according to the Kingdom of Tonga: Health Systems Review by the Asia Pacific Observatory. [1] According to the 2015 Annual Report by the Ministry of Health, the Vaoila Laboratory is the "First Stepwise Laboratory Improvement Process Towards Accreditation(SLIPTA/ISO) audit was conducted in 2015 by the Pacific Paramedical Training Centre(PPTC) Wellington Hospital



New Zealand". [2] The latest update available on the website from the Annual Report of 2016 only reports continuous improvement but there is no further update on the quality assurance review. There is no further evidence related to an external quality assurance review on the website of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 12 August 2020.

[2] Tonga, Ministry of Health. Annual Reports [http://www.health.gov.to/annual] Accessed 12 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 12 August 2020.

[4] Ministry of Agriculture, Food & Forestry (MAFF) [http://mafff.gov.to/] Accessed 28 August 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 publicly available evidence that there is a system for transporting specimens from the site of collection to a laboratory for testing. There is no evidence of transportation regulations on the websites of the Ministry of Health, Ministry of Agriculture, Food and Forestry (MAFF), Ministry of Fisheries or the Department of Environment. [1,2,3,4]. The Ministry of Infrastructure, which covers transportation-related matters, does not have an active website. [5] After subsequent attempts to search national sources, there was no public evidence of such a system and there exists no separate national public health institute, or separate laboratory system. The website of the Tonga National Health Information System is still under construction and has no evidence related to this. [6]

[1] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 7 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 7 August 2020.

[3] Tonga, Ministry of Fisheries [http://www.tongafish.gov.to/] Accessed 7 August 2020.

[4] Government of Tonga, Department of Environment (DOE) [https://www.environment.gov.to/] Accessed 7 August 2020.

[5] Tonga, Ministry of Infrastructure [ http://www.moi.gov.to/ ] Accessed 10 August 2020

[6] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 7 August 2020.

### 2.2.2 Laboratory cooperation and coordination

#### 2.2.2a

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

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

**Current Year Score: 0**

There is no plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. As per the 2016 revised edition of the Public Health Act, a Chief

Executive Officer may "approve a laboratory to analyse things taken under this Act if the Chief Executive Officer is satisfied the laboratory has the resources and expertise to conduct the analysis." [1] The National Disaster Management Plan is a support plan for specific hazards including Health-epidemic diseases by the Tonga Meteorological Services. [2] There is no specific plan for scaling-up testing during an outbreak. In response to the COVID-19 pandemic, the COVID-19 Emergency Response Component has been employed under the Tonga Climate Resilience Transport Project- the Contingency Emergency Response Component which does not contain any evidence on scaling-up testing during an outbreak. [3,4] This has been executed under the Emergency Management Act, 2007. [5] The Operations Manual for the Contingency Emergency Response Component, Emergency Action Plan (EAP) developed to assist activities under the CERC, and the COVID 19 National Action Plan are not accessible in the public domain as searched on the websites of the Ministry of Health, Department of Environment. [6,7] The Tonga National Health Strategic Plan also does not contain any evidence on scaling-up testing during an outbreak. [8] There is no evidence on the website of the Ministry of Agriculture, Food & Forestry (MAFF). [9]

[1] Tonga Attorney General's Office "PUBLIC HEALTH ACT"

[[https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct\\_2.pdf](https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct_2.pdf)] Accessed 10 August 2020.

[2] Kingdom of Tonga, Tonga Meteorological Services "NATIONAL DISASTER MANAGEMENT PLAN"[[http://www.met.gov.to/index\\_files/national%20disaster%20plan.pdf](http://www.met.gov.to/index_files/national%20disaster%20plan.pdf)] Accessed 10 August 2020.

[3] Tonga, Ministry of Health "COVID-19 Emergency Response Component" [<http://www.health.gov.to/node/89>] Accessed 10 August 2020.

[4] Tonga, Ministry of Health, "Tonga Climate Resilience Transport Project: Contingency Emergency Response Component" [[http://health.gov.to/drupal/sites/default/files//public\\_doc/Tonga%20CERC\\_ESMF\\_Final\\_0.pdf](http://health.gov.to/drupal/sites/default/files//public_doc/Tonga%20CERC_ESMF_Final_0.pdf)] Accessed 10 August 2020.

[5] Tonga, Attorney General's Office. "EMERGENCY MANAGEMENT ACT" [[https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0014/EmergencyManagementAct2007\\_1.pdf](https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2007/2007-0014/EmergencyManagementAct2007_1.pdf)] Accessed 10 August 2020.

[6] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 10 August 2020.

[7] Government of Tonga, Department of Environment [<https://www.environment.gov.to/>] Accessed 10 August 2020.

[8] Tonga, Ministry of Health "NATIONAL HEALTH STRATEGIC PLAN 2015-2020" [<http://health.gov.to/node/2>] Accessed 10 August 2020.

[9] Ministry of Agriculture, Food & Forestry (MAFF) [<http://mafff.gov.to/>] Accessed 28 August 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 some evidence that Tonga conducted indicator-based and event-based surveillance as part of its Early Warning, Alert and Response System (EWARS) system, but it cannot be verified if this surveillance is on-going. [1] Tonga has a National Emergency Operations Centre and also has a National Emergency Plan, but there is no evidence of a specific capacities in the plan. [2] There is also no evidence of this on the websites of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [3,4]. There is evidence of a National Aquatic Biosecurity Strategy that accounts for surveillance of aquatic

diseases, but there is no evidence if this is ongoing. [5]

[1] Ministry of Health, Tonga Weekly EWARS Bulletin. [<http://www.health.gov.to/content/tonga-weekly-ewars-bulletin>] Accessed 10 August 2020.

[2] Tonga, "National Emergency Management Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 14 August 2020.

[3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 10 August 2020.

[4] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 10 August 2020.

### 2.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence of a measles outbreak declared by the Government of Tonga on the 22 October, 2019 and has been recorded by the WHO. [1] The Ministry of Health Epidemic Task Force (ETF) responded to the measles outbreak according to the situation reports by the Government of Tonga with no deaths having been reported according to the latest situation report published on 13 February, 2020. [2] As of 11 August 2020, according to the website of the Ministry of Health, Tonga is COVID-19 free.

[1] Ministry of Health, "Situation Report: Tonga Measles Outbreak 2019-2020," [[https://reliefweb.int/sites/reliefweb.int/files/resources/SITREP18\\_Measles\\_Tonga\\_13Feb2020\\_draft.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/SITREP18_Measles_Tonga_13Feb2020_draft.pdf)] Accessed 28 August 2020.

## 2.3.2 Interoperable, interconnected, electronic real-time reporting systems

### 2.3.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Tonga's government operates an electronic reporting surveillance system at both the national and sub-national level. There is some evidence that the Ministry of Health is supported by a Early Warning, Alert and Response System (EWARS), which offers syndromic surveillance across 11 sites in Tonga. [1] The website of the EWARS project is not functional for further information on the level of reporting and the EWARS bulletin shows no evidence of an on-going electronic surveillance system. [2] While there is no public evidence of such a separate national public health institute, or separate laboratory system, there is a Tonga National Health Information System which does not provide any further information. [3]

[1] Ministry of Health, Tonga Weekly EWARS Bulletin. [<http://www.health.gov.to/content/tonga-weekly-ewars-bulletin>] Accessed 10 August 2020.

[2] Early Warning, Alert and Response System (EWARS) [<http://www.ewars-project.org/>] Accessed 28 August 2020.

[3] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 28 August 2020.

### 2.3.2b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Tonga's government operates an electronic reporting surveillance system that collects ongoing or real-time laboratory data. There is some evidence that the Ministry of Health is supported by a Early Warning, Alert and Response System (EWARS), which offers syndromic surveillance across 11 sites in Tonga. [1] The website of the EWARS project is not functional for further information on the level of reporting and the EWARS bulletin shows no evidence of an on-going electronic surveillance system. [2] While there is no public evidence of such a separate national public health institute, or separate laboratory system, there is a Tonga National Health Information System which does not provide any further information. [3]

[1] Ministry of Health, Tonga Weekly EWARS Bulletin. [<http://www.health.gov.to/content/tonga-weekly-ewars-bulletin>] Accessed 10 August 2020.

[2] Early Warning, Alert and Response System (EWARS) [<http://www.ewars-project.org/>] Accessed 28 August 2020.

[3] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 28 August 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 publicly available evidence that Tonga commonly uses electronic health records. According to the WHO report in 2015, Tonga's Ministry of Health does not use electronic medical records and as such has not created a National eHealth policy. [1] There is no publicly available evidence on the website of the Ministry of Health. [2] After subsequent attempts to search national sources, there was no public evidence of such a policy and there exists no separate national public health institute, or separate laboratory system but there is a website for the Tonga National Health Information System which is still under construction. [3]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [[https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198_eng.pdf?sequence=1&isAllowed=y)] Accessed 11 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 11 August 2020.

[3] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 11 August 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 no publicly available evidence that Tonga's national public health system has access to electronic health records of individuals in their country. According to the World Health Organization (WHO) report in 2015, Tonga's Ministry of Health does not use electronic medical records and as such has not created a National eHealth policy. Tonga does, however, use an electronic patient administration system and clinical information system and has legislation to ensure privacy and confidentiality of personal information in medical records. [1] There is no publicly available evidence on the website of the Ministry of Health. [2] After subsequent attempts to search national sources, there was no public evidence of such a policy and there exists no separate national public health institute, or separate laboratory system but there is a website for the Tonga National Health Information System which is still under construction. [3]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 11 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 11 August 2020.

[3] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 11 August 2020.

### 2.4.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga commonly uses electronic health records and therefore there are no data standard to ensure data is comparable. According to the World Health Organization (WHO) report in 2015, Tonga's Ministry of Health does not use electronic medical records and as such has not created a National eHealth policy. Tonga does, however, use an electronic patient administration system and clinical information system and has legislation to ensure privacy and confidentiality of personal information in medical records. [1] There is no publicly available evidence on the website of the Ministry of Health. [2] After subsequent attempts to search national sources, there was no public evidence of such a policy and there exists no separate national public health institute, or separate laboratory system but there is a website for the Tonga National Health Information System which is still under construction. [3]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 11 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 11 August 2020.

[3] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 11 August 2020.

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

### 2.4.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data in Tonga . There is no evidence of such an assessment on the websites of the Ministry of Health, the Ministry of Agriculture, Forestry, Food & Fisheries (MAFF) or the Ministry of Environment and Climate Change. [1,2,3]. After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no separate national public health institute, or separate laboratory system. The website for the Quarantine Division of the Ministry of Agriculture is not operationally active. [4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 11 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 11 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 11 August 2020.

[4] Tonga, Quarantine Division, Ministry of Agriculture. [<http://www.quarantine.gov.to/>] Accessed 5 August 2020.

## 2.4.3 Transparency of surveillance data

### 2.4.3a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga makes de-identified health surveillance data on disease outbreaks publicly available via reports. There is no evidence on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry, Ministry of Fisheries, or, Department of Environment. [1,2,3,4] The website for the Quarantine Division of the Ministry of Agriculture is not operationally active.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 11 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry. [<http://mafff.gov.to/index.html>] Accessed 11 August 2020.

[3] Tonga, Ministry of Fisheries [<http://www.tongafish.gov.to/>] Accessed 11 August 2020.

[4] Tonga, Department of Environment. [<https://www.environment.gov.to/>] Accessed 11 August 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 the country made de-identified surveillance data available via daily reports. As per the website of the Ministry of Health, Tonga has been COVID-19 free as of 10 August 2020. [1] There are updates available on the website from April informing the number of individuals in and cleared from quarantine. Additionally, the websites also link the World Health Organisation COVID-19 dashboard which also confirms the lack of cases in Tonga. Tonga also has a dedicated COVID-19 website with only COVID-19 relief related information. [2] The website of the Government of Tonga also shares COVID-19 notices from the government including situation reports, but there was no evidence of any de-identified surveillance data.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 14 August 2020.

[2] Tonga COVID-19. [<https://tongacovid19.com/>] Accessed 14 August 2020.

[3] Government of the Kingdom of Tonga [<http://www.gov.to/>] Accessed 14 August 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 publicly available evidence that Tonga has laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. When searching national sources, there is no supporting evidence of such regulations on the website of the Ministry of Health or the National Health Information System. [1,2] After subsequent attempts to search national sources, there was no public evidence of such regulations and there exists no separate national public health institute, or separate laboratory system.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[2] Tonga National Health Information System. [<https://www.tonga-nhis.org/>] Accessed 12 August 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 publicly available evidence that Tonga has laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals. There is likewise no evidence of protection from cyber attacks. When searching national sources, there is no supporting evidence of such regulations on the website of the Ministry of Health, or the National Health Information system which is still under construction. After subsequent attempts to search national sources, there was no public evidence of such regulations and there exists no separate national public health institute, or separate laboratory system.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[2] Tonga National Health Information System [<https://www.tonga-nhis.org/>] Accessed 12 August 2020.

## 2.4.5 International data sharing

### 2.4.5a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Tonga has made a commitment via public statements, legislation, and/or a cooperative agreement to share surveillance data on one or more than one diseases during a public health emergency with other countries in the region. Even the latest Ministry of Health COVID-19 Preparedness and Response Plan 2020 has no mention of data sharing with any other country or in the region. [1]

[1] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 04 April 2021.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 04 April 2021.

## 2.5 CASE-BASED INVESTIGATION

### 2.5.1 Case investigation and contact tracing

#### 2.5.1a

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

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

**Current Year Score: 0**

There is no national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency. The legislation of Tonga accounts for contact tracing during an emergency under the Public Health Act of 2016 but it does not address any plans for the expansion of contact tracing. [1] There is no evidence of plans of expansion during an emergency on the websites of the Ministry of Health and the Department of Environment. [2,3]

[1] Tonga, Attorney General's Office. "PUBLIC HEALTH ACT"

[[https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct\\_2.pdf](https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct_2.pdf)] Accessed 1 September 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[3] Tonga, Department of Environment. [<https://www.environment.gov.to/>] Accessed 12 August 2020.

#### 2.5.1b

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

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

**Current Year Score: 0**

There is no evidence for any provision of wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention. [1,2]



[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[2] Government of the Kingdom of Tonga [<http://www.gov.to/>] Accessed 12 August 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**

The country does not make de-identified data on contact tracing efforts for COVID-19 available via daily reports on government websites of the Ministry of Health. As per the website of the Ministry of Health, Tonga has been COVID-19 free as of 12 August 2020. [1] The last update on the website regarding the individuals quarantined is from March 2020. Tonga has a legislation for contact tracing during an emergency under the Public Health Act of 2016 which includes coordination between different government departments but there is no information related to the de-identified data being released. [2]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[2] Tonga, Attorney General's Office. "PUBLIC HEALTH ACT"

[[https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct\\_2.pdf](https://ago.gov.to/cms/images/LEGISLATION/PRINCIPAL/2008/2008-0019/PublicHealthAct_2.pdf)] Accessed 1 September 2020.

## 2.5.2 Point of entry management

### 2.5.2a

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

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

**Current Year Score: 0**

There is insufficient publicly available evidence to suggest that there is a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of an active public health emergency.

The 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report states that the National Emergency Management Council (NEMC) is acting accordingly whenever an emergency occurs such as COVID-19 a tragedy that currently affecting the world. Although there is no confirmed case in Tonga (as of the day of research), the Government and the relevant stakeholders put their hands together in formulating the Plan to contain the point of entry of COVID-19 such as borders (air & sea). Furthermore, the report mentions when the facilities that are quarantining individuals reaches 80 – 90% capacity, then it is highly recommended that the borders close temporarily to allow the people to be discharged and free up rooms; Only once the 50 travellers are discharged will the borders reopen for another 50 travellers. If however the quarantine facility and healthcare facilities increase, we may be able to increase the quarantine capacity. Which is an evidence of coordination between the health and border authorities. [1] However, the plan falls short of highlighting a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and

potential cases in international travelers and trace and quarantine their contacts in the event of an active public health emergency.

[1] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 05 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: 1**

There is some publicly available evidence that applied epidemiology training program (such as FETP) is available in Tonga, but there is no evidence if this will continue. According to a report by the Australian Government's Indo-Pacific Centre for Health Security, individuals from Tonga participated in a FETP workshop as a part of an initiative by the Ministry of Foreign Affairs, Australia and hosted by the Australian National University in March, 2019. [1] There is no evidence of any training ever since. Prior to this, according to the US National Library of Medicine, National Institute of Health, Tonga is participated in a three-year pilot which started in 2016 and was delivered in country by epidemiologists working for Pacific Public Health Surveillance Network partners. The programme consisted of five courses: four one-week classroom-based courses and one field epidemiology project. Sessions were structured so that theoretical understanding was achieved through interaction and reinforced through practical hands-on group activities, case studies and other interactive practical learning methods. [2] When searching national sources however, there is no publicly available evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP). [3] There is also no evidence of this on Centre for Disease Control and Prevention (CDC) or TEPHINET websites.[4,5]

[1] Indo-Pacific Centre for Health Security, Australian Government. "Strengthening Field Epidemiology Training in the Asia-Pacific through workforce development: A Train-the-Trainers initiative [<https://indopacifichealthsecurity.dfat.gov.au/final-report-field-epidemiology-train-trainers>] Accessed 12 August 2020.

[2] US National Library of Medicine, National Institute of Health. "Lessons learnt from a three-year pilot field epidemiology training programme," [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5635332/>] 12 August 2020.

[3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 12 August 2020.

[4] Centre for Disease Control and Prevention. "Field Epidemiology Training Program (FETP)," [<https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm>] Accessed 1 September 2020.

[5] Training Programs in Epidemiology and Public Health Interventions Network. [<https://www.tephinnet.org/>] Accessed 1 September 2020.

### 2.6.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence Tonga's available field epidemiology training programs are explicitly inclusive of animal health professionals or evidence of a specific animal health field epidemiology training program offered (such as FETPV. ) According to a report by the Australian Government's Indo-Pacific Centre for Health Security, individuals from Tonga participated in a FETP workshop as a part of an initiative by the Ministry of Foreign Affairs, Australia in March,2019. [1] There is no evidence of any training ever since. Prior to this, according to the US National Library of Medicine, National Institute of Health, Tonga is participated in a three-year pilot which started in 2016 and was delivered in country by epidemiologists working for Pacific Public Health Surveillance Network partners. The programme consisted of five courses: four one-week classroom-based courses and one field epidemiology project. Sessions were structured so that theoretical understanding was achieved through interaction and reinforced through practical hands-on group activities, case studies and other interactive practical learning methods. But there was no specific mention of FETPV or animal health professionals taking part. [2] There is also no evidence of this on Centre for Disease Control and Prevention (CDC) or TEPHINET websites.[3,4]

[1] Indo-Pacific Centre for Health Security, Australian Government. "Strengthening Field Epidemiology Training in the Asia-Pacific through workforce development: A Train-the-Trainers initiative [<https://indopacifichealthsecurity.dfat.gov.au/final-report-field-epidemiology-train-trainers>] Accessed 12 August 2020.

[2] US National Library of Medicine, National Institute of Health. "Lessons learnt from a three-year pilot field epidemiology training programme," [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5635332/>]12 August 2020.

[3] Centre for Disease Control and Prevention. "Field Epidemiology Training Program (FETP)," [<https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm>] Accessed 1 September 2020.

[4] Training Programs in Epidemiology and Public Health Interventions Network. [<https://www.tephinet.org/>] Accessed 1 September 2020.

## 2.6.2 Epidemiology workforce capacity

### 2.6.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

2020

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

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

### 3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

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

##### 3.1.1a

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

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

**Current Year Score: 0**

There is no evidence that Tonga has an overarching national public health emergency plan which encompasses multiple communicable diseases with pandemic potential .

Although Tonga has a National Emergency Operations Centre (NEOC) and a National Emergency Plan, but these do not make reference to planning for public health emergency events. According to the National Emergency Plan , both the Ministry of Health and the Ministry of Agriculture, Forestry, Food & Fisheries (MAFF) are agencies tasked with response-leads in the NEOC. The Ministry of Health is responsible for epidemiology/disease surveillance and MAFF is the lead Agency relative to any outbreak of emergency animal or plant disease. However, there is no further evidence of planning on response for multiple communicable diseases, except outlining the role of the Ministry of Health during broader disaster events. [1] There is no additional evidence via the NEOC on the websites of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [2,3].

[1] Tonga, "National Emergency Management Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 13 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 13 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry. [<http://maff.gov.to/index.html>] Accessed 13 August 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 Tonga has an overarching national public health emergency plan which encompasses response for multiple communicable diseases with pandemic potential (and therefore no evidence of such a plan which has been updated in the past three years). Although Tonga has a National Emergency Plan, it does not include response planning for multiple communicable diseases of pandemic potential and has not been updated in the last three years. The plan was created in 2009 and was established under the Emergency Management Act of 2007. [1] There is no evidence of such a plan on the websites of the Ministry of Health and the Ministry of Agriculture, Food and Forestry. [2,3]

[1] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 13 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 13 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry. [http://mafff.gov.to/index.html] Accessed 13 August 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 Tonga has an overarching national public health emergency plan which encompasses response for multiple communicable diseases with pandemic potential (and therefore no evidence of such a plan which includes considerations for paediatric and other vulnerable populations). Although Tonga has a National Emergency Plan, it does not include response planning for multiple communicable diseases of pandemic potential and it does not include considerations for paediatric and other vulnerable populations. [1] There is no additional evidence of such a plan on the websites of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [2,3]

[1] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 13 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 13 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry. [http://mafff.gov.to/index.html] Accessed 13 August 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 public evidence that Tonga has mechanism to engage with the private sector to assist with outbreak emergency preparedness and response. According to Tonga's National Emergency Plan, it is the responsibility of individual agencies to develop and maintain their individual Business Continuity and Emergency Response Plans. Copies of individual agency Emergency Response Plans (along with any amendments made from time to time) are required to be submitted to the

National Emergency Management Office for ratification, and are to be maintained as annexes to the National Emergency Management Plan . But there is no additional context provided or evidence of a specific mechanism for this engagement. [1] There is however no additional evidence of such a mechanism on the website of the Ministry of Health or Tonga's National Emergency Management Office. [2, 3]

[1] Tonga, "National Emergency Management Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 13 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 13 August 2020.

[3] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 13 August 2020.

### 3.1.3 Non-pharmaceutical interventions planning

#### 3.1.3a

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

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

**Current Year Score: 1**

There is evidence to clearly suggest that the country does have a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic as per the 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report; but the measures are specific to Covid-19 and not any other disease per se. Activities such as Advocating for and supporting social distancing measures, Engaging in more direct community education, Defining and communicating quarantine protocols, etc are mentioned in the report which should count as non-pharmaceutical interventions (NPIs). [1]

[1] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 05 April 2021.

## 3.2 EXERCISING RESPONSE PLANS

### 3.2.1 Activating response plans

#### 3.2.1a

**Does the country meet one of the following criteria?**

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

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

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

**Current Year Score: 1**

There is evidence that the country has activated their national emergency response plan for an infectious disease outbreak in the past year. As per the website of the Ministry of Health, in response to the COVID-19 pandemic, the COVID-19 Emergency Response Component has been employed under component 4 of the Tonga Climate Resilience Transport Project- the

Contingency Emergency Response Component.[1] There is evidence of a COVID 19 National Action Plan: the 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report. [2] There is no evidence that Tonga has completed a national-level biological threat-focused exercise in the past year. [3]

[1] Tonga, Ministry of Health "COVID-19 Emergency Response Component" [<http://www.health.gov.to/node/89>] Accessed 05 April 2021.

[2] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 05 April 2021.

[3] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Simulation Exercise" [<https://extranet.who.int/sph/simulation-exercise>] Accessed 05 April 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: 1**

There is evidence that Tonga has, in the past year, undergone an exercise to identify a list of gaps and best practices through either an after action review (post emergency response) or a biological threat-focused International Health Regulations (IHR) exercise with the WHO. The WHO Strategic Partnerships Portal shows that an AAR was conducted in Tonga in July-September 2020. However, there is no evidence this was followed by development or publishing of a plan. [1] There is no additional evidence of such exercises on the website of the Ministry of Health or Tonga's National Emergency Management Office. [2,3] There is also no information on this in the WHO country strategy for Tonga [4].

[1] World Health Organisation (WHO) "Strategic Partnership for International Health Regulations and Health Security (SPH)," [<https://extranet.who.int/sph/after-action-review>] Accessed 13 August 2020.

[2] Care Evaluations. "Tropical Cyclone Gita Response Program Evaluation" [[https://humanitarianadvisorygroup.org/wp-content/uploads/2020/03/CARE\\_MORDI\\_LL-TC-Gita-Response-Final-Evaluation-Report\\_FINAL-FOR-CIRCULATION-1.pdf](https://humanitarianadvisorygroup.org/wp-content/uploads/2020/03/CARE_MORDI_LL-TC-Gita-Response-Final-Evaluation-Report_FINAL-FOR-CIRCULATION-1.pdf)] Accessed 13 August 2020.

[3] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 13 August 2020.

[4] World Health Organisation (WHO). "WHO Country Cooperation Strategy".

[<http://iris.wpro.who.int/bitstream/handle/10665.1/13957/WPRO-2017-DPM-023-ton-eng.pdf>] Accessed 13 August 2020.

## 3.2.2 Private sector engagement in exercises

### 3.2.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that the country in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives. There is no evidence that Tonga has completed a national-level biological threat-

focused exercise in the past year according to the Simulation Exercise page of the World Health Organisation (WHO). [1]

[1] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Simulation Exercise" [<https://extranet.who.int/sph/simulation-exercise>] Accessed 14 August 2020.

## 3.3 EMERGENCY RESPONSE OPERATION

### 3.3.1 Emergency response operation

#### 3.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 1**

Tonga has a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan. According to the Plan, both the Ministry of Health and the Ministry of Agriculture, Food & Forestry (MAFF) are agencies tasked with response-leads in the NEOC. The Ministry of Health is responsible for epidemiology/disease surveillance and MAFF is the lead Agency relative to any outbreak of emergency animal or plant disease. There is no specific reference to the NEOC's roles in health emergencies. [1] There is however no additional evidence of such roles with the NEOC on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry (MAFF) or, Tonga's National Emergency Management Office. [2,3,4]

[1] Tonga, "National Emergency Mangement Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 14 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 14 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 14 August 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**

Tonga has a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan, but there is insufficient publicly available evidence that it is required to conduct a drill for a public health emergency scenario or that it conducts a drill at least once per year. According to the Plan, both the Ministry of Health and the Ministry of Agriculture, Food & Forestry (MAFF) are agencies tasked with response-leads in the NEOC. The Ministry of Health is responsible for epidemiology/disease surveillance and MAFF is the lead Agency relative to any outbreak of emergency animal or plant disease. There is no specific reference to the NEOC's roles in health emergencies. [1] There is however no additional evidence of such roles with the NEOC or evidence of drills on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry (MAFF) or, Tonga's National Emergency Management Office. [2,3,4] The 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report mentions in its Activity no. 3.91 to Implement a drill of the entire process to ensure that the pipeline is secure and that any gaps are identified and addressed. The drill is essential for all healthcare workers and support staff [airline workers, cargo workers, security, transport drivers etc.]. Through the drill all individuals" part of the COVID-19 response team



will be identified and this drill will allow the teams to function on the field and to apply all the knowledge and skills learned during the training. The target is to implement at least one drill or two before the border opens; however, the frequency of drill is just one-off as stated in the same section of the aforementioned report. [5]

[1] Tonga, "National Emergency Mangement Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 14 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

[5] Tonga Ministry of Health [http://www.health.gov.to/en/ministry-health-national-covid-19-plan] Accessed 05 April 2021.

### 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 publicly available evidence that Tonga's National Emergency Operations Centre (NEOC) can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The National Emergency Plan does not detail these measures. [1] There is no additional evidence on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry (MAFF) or, Tonga's National Emergency Management Office. [2,3,4]

[1] Tonga, "Natioanl Emergency Mangement Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 14 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

## 3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

#### 3.4.1a

Does the country meet one of the following criteria?

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

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

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

**Current Year Score: 0**

There is no publicly available evidence that Tonga has carried out such exercises or has standards regulations or memorandums of understanding on a potential deliberate biological event. The National Emergency Plan does not detail these measures. [1] There is however no additional evidence of such roles with the NEOC on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry (MAFF) or, Tonga's National Emergency Management Office. [2,3,4]

[1] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 14 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

## 3.5 RISK COMMUNICATIONS

### 3.5.1 Public communication

#### 3.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has in place a risk communication plan and therefore also no evidence of how messages will reach populations and sectors with different communications needs during a public health emergency. There is no evidence of a national public health emergency response plan according to the World Health Organization (WHO). [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan. According to the Plan, the Ministry of Health is an agency tasked with response-leads in the NEOC. The Ministry of Health is responsible for epidemiology/disease surveillance but there is no specific mention of something resembling a risk communication plan. [2] [1] There is no additional evidence of such roles with the NEOC on the websites of the Ministry of Health, Ministry of Agriculture, Food & Forestry (MAFF) or, Tonga's National Emergency Management Office. [2,3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 14 August 2020.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[3] Tonga, Ministry of Agriculture, Food and Forestry [http://mafff.gov.to/index.html] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

### 3.5.1 Risk communication planning

#### 3.5.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has in place, either in the national public health emergency response plan or in other legislation, regulation or strategy documents, a section detailing a risk communication plan that is specifically intended for use during a public health emergency. There is no evidence of a national public health emergency response plan according to the WHO. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan. According to the Plan, the Ministry of Health is an agency tasked with response-leads in the NEOC. The Ministry of Health is responsible for e pidemiology/disease surveillance. But there is no specific mention of something resembling a risk communication plan. [2] There is also no evidence of such measures on the website of the Ministry of Health and Tonga's National Emergency Management Office. [3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 14 August 2020.

[2] Tonga, "Natioanl Emergency Mangement Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 14 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga,Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

#### 3.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has in place a risk communication plan and therefore none that designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The Emergency Management Act of 2007 and the National Emergency Management Plan directs the National Emergency Management Committee, District Emergency Committee and the Village Emergency Committee established under the Act to provide and support communications during an emergency. There is no evidence of a national public health emergency response plan according to the World Health Organization (WHO). [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan. According to the Plan, the Ministry of Health is an agency tasked with response-leads in the NEOC. The Ministry of Health is responsible for e pidemiology/disease surveillance. But there is no specific mention of something resembling a risk communication plan. [2] There is also no evidence of such measures website of the Ministry of Health and Tonga's National Emergency Management Office. [3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 14 August 2020.

[2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 14 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 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: 1**

There is some evidence that the public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation. The Ministry of Health provides information related to COVID-19 on its website which includes a section on misinformation in the local language. [1] The Ministry of Health (MoH) and the Government of Tonga also regularly updates information on their facebook pages but the MoH facebook page was created only on March 31,2020. [2,3] There is no evidence of any information on the website of the National Emergency Management Office. [4]

[1] Ministry of Health [http://www.health.gov.to/to/covid-19-faq-f] Accessed 14 August 2020.

[2] Facebook, Ministry of Health [https://www.facebook.com/mohtonga/] Accessed 1 September 2020.

[3] Facebook, Government of Tonga [https://www.facebook.com/TongaGovtPortal] Accessed 14 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 14 August 2020.

### 3.5.2b

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

No = 1, Yes = 0

**Current Year Score: 1**

There is no evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. There is no evidence of this on the website of the Government of Tonga, where official statements of senior leaders are commonly shared, or in any news sources. [1]

[1] Government of the Kingdom of Tonga [http://www.gov.to/] Accessed 8 September 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: 41.25

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: 59.43

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 the the country issued a restriction, without international/bilateral support, on the export/import of medical goods due to an infectious disease outbreak. The World Health Organization (WHO) Disease Outbreak News database shows no evidence of this. [1] Similarly, there is no evidence of this through the OIE Weekly Database. [2] There is no such information on the websites of the Ministry of Health and Minsitry of Agriculture, Food & Forestry. [3,4]

[1] World Health Organisation (WHO). "Disease Outbreak News," [<https://www.who.int/csr/don/en/>] Accessed 14 August 2020.

[2] OIE. "Weekly Disease Information" [[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)] Accessed 14 August 2020.

[3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 14 August 2020.

[4] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 14 August 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 public evidence in the past year that Tonga issued a restriction, without international/bilateral support, on the export/import of non-medical goods due to an infectious disease outbreak . The World Health Organization (WHO) Disease Outbreak News database shows no evidence of this. [1] Similarly, there is no evidence of this through the OIE Weekly Database. [2] There is no such information on the websites of the Ministry of Health, Minsitry of Agriculture, Food & Forestry and the Government of the Kingdom of Tonga. [3,4,5]

[1] World Health Organisation (WHO). "Disease Outbreak News," [<https://www.who.int/csr/don/en/>] Accessed 14 August 2020.

[2] OIE. "Weekly Disease Information" [[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)] Accessed 14 August 2020.

[3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 14 August 2020.

[4] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 14 August 2020.

[5] Government of the Kingdom of Tonga [<http://www.gov.to/>] Accessed 7 September 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 in the past year, that Tonga has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. The website of the Government of Tonga has released travel advisories issued by the Minister of Health from February with certain restrictions for travellers from China in the aftermath of the COVID-19 outbreak. [1]

[1] Government of Tonga. Travel Advisories [<http://www.gov.to/category/travel-advisories/>] Accessed 14 August 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: 54.03

2013

WHO; national sources

##### 4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 415.7

2018



WHO; national sources

#### 4.1.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence of a health workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings. The Tonga National Health Strategic Plan (2015-2020) on the website of the Ministry of Health identifies issues related to the health workforce as a key result area, under which there is a set of 15 strategies, indicators, targets and responsible personnel. [1] One of the strategies included also mention the implementation of a National Human Resource Strategic Plan by 2015 but there is no such evidence of this available. There is no information related to this on the websites of the Ministry of Commerce, Consumer Trade, Innovation and Labour or the Ministry of Education. [2,3]

[1] Tonga, Ministry of Health "NATIONAL HEALTH STRATEGIC PLAN 2015-2020" [<http://health.gov.to/node/2>] Accessed 7 September 2020.

[2] Tonga, Ministry of Commerce, Consumer Trade, Innovation and Labour [<http://www.mic.gov.to/>] Accessed 16 August 2020.

[3] Tonga, Ministry of Education and Training [<http://www.edu.gov.to/>] Accessed 16 August 2020.

### 4.1.2 Facilities capacity

#### 4.1.2a

**Hospital beds per 100,000 people**

Input number

**Current Year Score: 260**

2010

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 that Tonga has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility located within the country. In response to the COVID-19 pandemic, the COVID-19 Emergency Response Component has been employed under the Tonga Climate Resilience Transport Project- the Contingency Emergency Response Component. As per the Environment and Social Management Framework under this protocol, the procurement of equipment for Isolation Wards and rooms in Vaiola Hospital and other hospitals in

the outer islands have been enlisted. [1]. However there is no further evidence provided. There is no further evidence on the website of the Ministry of Health. [2]

[1] Tonga, Ministry of Health, "Tonga Climate Resilience Transport Project: Contingency Emergency Response Component" [[http://health.gov.to/drupal/sites/default/files//public\\_docs/Tonga%20CERC\\_ESMF\\_Final\\_0.pdf](http://health.gov.to/drupal/sites/default/files//public_docs/Tonga%20CERC_ESMF_Final_0.pdf)] Accessed 16 August 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 2020.

#### 4.1.2c

Does the country meet one of the following criteria?

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

Yes = 1, No = 0

Current Year Score: 1

There is publicly available evidence to suggest 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, and has demonstrated capacity to expand isolation capacity in the past two years.

The 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report under its Infection Prevention and Control (IPC) section categorically states as one of its plan of actions: "Map vulnerable populations and public and private health facilities in Tonga (including traditional healers, pharmacies and other providers) and identify alternative facilities that may be used to provide treatment / isolation / quarantine and fully equip and operationalize these facilities". There is also mention of a proposed Isoalition facility dedicated to children, i.e., a paediatric isolation ward. Furthermore, a plan to convert the Sluice room to be thoroughly decontaminated and converted to isolation nurses station. As a further evidence of expansion of isolation capacity the 'Mitigating Action' section of the report states the following: Symptomatic and/or suspected cases have an allocated vehicle to transport them directly to the Tali ai Camp Isolation Facility, where they will undergo isolation and constant monitoring. Hence, suggesting that an isolation camp has also been setup for use during this public health crisis. [1]

[1] Tonga Ministry of Health [<http://www.health.gov.to/en/ministry-health-national-covid-19-plan>] Accessed 05 April 2021.

## 4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

### 4.2.1 Routine health care and laboratory system supply

#### 4.2.1a

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

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

Current Year Score: 1

Tonga does have a national procurement protocol in place for medical and laboratory supplies and it is housed in the Ministry of Finance and National Planning.

This protocol services all departments, including the Ministry of Health and the Ministry of Agriculture, Forestry Foods & Fisheries, as per the Public Procurement Regulations (2015). [1] According to the Tonga Health Systems Review, Each ministry has an internal procurement unit which requests purchases through an Annual Procurement Plan which used for acquiring medical equipment and is not limited to tenders. The Procurement/Registration Unit of the Ministry of Health's Central Pharmacy and Medical Supplies is responsible for the procurement of drugs and medical supplies from overseas since there are no local manufacturers of pharmaceuticals. [2] There is no mention of the procurement of laboratory supplies. There is no evidence on the website of the Ministry of Health. [3]

[1] Tonga, Ministry of Finance and National Planning. "Procurement," [http://www.finance.gov.to/node/6] Accessed 16 August 2020.

[2] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 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 publicly available evidence that Tonga has in place a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE). There is no evidence of a these capacities according to the World Health Organization (WHO). [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no mention of a stockpile of medical supplies in the plan. [2] In response to the COVID-19 pandemic, the COVID-19 Emergency Response Component has been employed under the Tonga Climate Resilience Transport Project- the Contingency Emergency Response Component. As per the Environment and Social Management Framework under this protocol, the procurement of PPE has been listed as a activity with no further updates of its status. [3] There is no further evidence on the website of the Ministry of Health. [4] There is no website for the Ministry of Defence. [5]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] Tonga, "Natioanl Emergency Mangement Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health, "Tonga Climate Resilience Transport Project: Contingency Emergency Response Component" [http://health.gov.to/drupal/sites/default/files//public\_docs/Tonga%20CERC\_ESMF\_Final\_0.pdf] Accessed 16 August 2020.

[4] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[5] Ministry of Information & Communications. Defence [https://www.mic.gov.to/ministrydepartment/338-defence] Accessed 16 August 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 Tonga has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. There is no evidence of a these capacities according to the World Health Organization (WHO). [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no mention of laboratory supplies in the plan. [2] There is no evidence on the website of the Ministry of Health. [3] There is no website for the Ministry of Defence. [4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[4] Ministry of Information & Communications. Defence [https://www.mic.gov.to/ministrydepartment/338-defence] Accessed 16 August 2020.

#### 4.2.2c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence to suggest that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. The 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report has a detailed audit of the country's medical stockpile which has been assessed in the past year itself. The report also mentions that there would be a constant Monitoring and Evaluation of stockpile on a regular basis because it would widely affect Tonga's capabilities in dealing with a national public health emergency. [1] But there is no evidence of a requirement of annual review via the Ministry of Health or the government portal. [2, 3]

[1] Tonga Ministry of Health [http://www.health.gov.to/en/ministry-health-national-covid-19-plan] Accessed 05 April 2021.

[2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[3] Government of the Kingdom of Tonga [http://www.gov.to/] Accessed 12 August 2020.

### 4.2.3 Manufacturing and procurement for emergencies

#### 4.2.3a

**Does the country meet one of the following criteria?**

- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

**- Is there evidence of a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?**

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

**Current Year Score: 0**

There is no public evidence that Tonga has a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies for national use during a public health emergency. There is no mention of manufacturing medical supplies domestically in the 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report. [1]

There is evidence in the 'Ministry of Health COVID-19 Preparedness and Response Plan 2020' report to suggest the existence of a plan for procurement of medical supplies. Public Procurement Regulations in the country recognise open competitive tendering as the default method of procurement. However, other methods of procurement are allowed as long as conditions for their use, have been met. These include the following methods: Competitive bidding methods, both local and international competitive bidding; Two-stage Competitive Bidding Method; Selective Bidding Method; etc. [1]

[1] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[2] Kingdom of Tonga, Tonga Meteorological Services "NATIONAL DISASTER MANAGEMENT PLAN"[http://www.met.gov.to/index\_files/national%20disaster%20plan.pdf] Accessed 16 August 2020.

[3] Contingency Emergency Response Component, Tonga Climate Resilience Transport Project [http://documents1.worldbank.org/curated/en/589931537184611239/text/Tonga-CERC-ESMF-Report-Sept-2018.txt] Accessed 16 August 2020.

[4] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 8 September 2020.

[5] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 8 September 2020

[6] Ministry of Information & Communications. Defence [https://www.mic.gov.to/ministrydepartment/338-defence] Accessed 8 September 2020.

### 4.2.3b

**Does the country meet one of the following criteria?**

**- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency?**

**- Is there evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency?**

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

**Current Year Score: 0**

There is no evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency. There is no evidence of this in the National Emergency Management Plan or in the National Disaster Management Plan. [1,2] While there is some evidence of plan to procure medical supplies for national use during a public health emergency, there is no mention of any laboratory reagents. [3] There is no evidence of plans to leverage domestic manufacturing capacity to produce laboratory supplies, or a plan to procure laboratory supplies for national use during a public health emergency on the websites of the Ministry of Health or the National Emergency Management Office. [4,5] There is no website for the Ministry of Defence. [6]

[1] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

- [2] Kingdom of Tonga, Tonga Meteorological Services "NATIONAL DISASTER MANAGEMENT PLAN"[[http://www.met.gov.to/index\\_files/national%20disaster%20plan.pdf](http://www.met.gov.to/index_files/national%20disaster%20plan.pdf)] Accessed 16 August 2020.
- [3] Contingency Emergency Response Component, Tonga Climate Resilience Transport Project [<http://documents1.worldbank.org/curated/en/589931537184611239/text/Tonga-CERC-ESMF-Report-Sept-2018.txt>] Accessed 16 August 2020.
- [4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 8 September 2020.
- [5] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 8 September 2020
- [6] Ministry of Information & Communications. Defence [<https://www.mic.gov.to/ministrydepartment/338-defence>] Accessed 8 September 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 publicly available evidence that Tonga has in place a plan, program, or guidelines for dispensing medical countermeasures for national use during a public health emergency. There is no evidence of these capacities according to the World Health Organization. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no mention of countermeasures in the plan. [2] There is no evidence on the website of the Ministry of Health or the National Emergency Management Office. [3,4] There is no website for the Ministry of Defence. [5]

- [1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [[https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198_eng.pdf?sequence=1&isAllowed=y)] Accessed 16 August 2020.
- [2] Tonga, "National Emergency Management Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 16 August 2020.
- [3] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 14 August 2020.
- [4] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 16 August 2020
- [5] Ministry of Information & Communications. Defence [<https://www.mic.gov.to/ministrydepartment/338-defence>] Accessed 16 August 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 publicly available evidence that Tonga has in place public plan in place to receive health personnel from other countries to respond to a public health emergency . There is no evidence of such a plan according to the WHO. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no mention of such a plan to cooperate with other countries in such a scenario. [2] There is also no evidence of this on the websites of the Ministry of Health and the National Emergency Management Office. [3,4] There is evidence of a regional laboratory network involving Tonga called LabNet run by the Pacific Public Health Surveillance Network (PPHSN), but no evidence of a plan in place to respond to such emergencies. [5]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] Tonga, "Natioanl Emergency Mangement Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[4] The National Emergency Management Office in Tonga,Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.

[5] Pacific Public Health Surveillance Network (PPHSN). "PPHSN Net catalog: 2013 Edition"[https://www.pphsn.net/Services/LabNet/PPHSN\_LabNet\_catalogL1L2L3\_Sept2013.pdf] Accessed 16 August 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: 95.5**

2012

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: 35.65

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 publicly available evidence that Tonga has issued legislation, a policy or a public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. There is no evidence of such legislation according to the World Health Organization. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no mention of such legislation in the plan. [2] There is no such evidence on the websites of the Ministry of Health and the National Emergency Management Office. [3,4]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 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 publicly available evidence that Tonga has a system in place for public health officials and healthcare workers to communicate during a public health emergency. There is no evidence of such a system according to the World Health Organization. [1] It is worth noting that the WHO Country Cooperation Strategy lists it as a priority for 2018-2022 to: "Enhance the core public health functions needed for early warning, incident management and risk communication." [2] There is no evidence of such a system on the website of the Ministry of Health or the National Emergency Management Office. [3,4] . Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no specific mention of this in the Plan. [5]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] World Health Organisation (WHO). "WHO Country Cooperation Strategy".

[http://iris.wpro.who.int/bitstream/handle/10665.1/13957/WPRO-2017-DPM-023-ton-eng.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.

[5] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

#### 4.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has a system in place for public health officials and healthcare workers to communicate during a public health emergency. There is no evidence of such a system according to the World Health Organisation (WHO). [1] It is worth noting that the WHO Country Cooperation Strategy lists it as a priority for 2018-2022 to: "Enhance the core public health functions needed for early warning, incident management and risk communication." [2] There is no evidence of such a system on the website of the Ministry of Health or the National Emergency Management Office. [3,4] . Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no specific mention of this in the Plan. [5]

- [1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.
- [2] World Health Organisation (WHO). "WHO Country Cooperation Strategy". [http://iris.wpro.who.int/bitstream/handle/10665.1/13957/WPRO-2017-DPM-023-ton-eng.pdf] Accessed 16 August 2020.
- [3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.
- [4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.
- [5] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 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 public evidence that Tonga has a national public health system monitoring for and tracking the number of health care associated infections that take place in healthcare facilities. There is no evidence of this according to the World Health Organisation. [1] There is no evidence of such a system on the website of the Ministry of Health. [2] While there is no public evidence of a separate national public health institute, or separate laboratory system, there is a Tonga National Health Information System which does not provide any evidence for a plan. [3]

- [1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020
- [2] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.
- [3] Tonga National Health Information System [https://www.tonga-nhis.org/] Accessed 8 September 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 that Tonga has a national requirement for ethical review (e.g. from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial. There is no evidence of such a requirement on the website of the Ministry of Health [1]. After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no Ministry of Research or separate national public health institute, or separate laboratory system.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 2020.

#### **4.7.1b**

**Is there an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics?**

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. There is no evidence of such a process on the website of the Ministry of Health. [1] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no Ministry of Research or separate national public health institute, or separate laboratory system.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 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: 0**

There is no publicly available evidence that Tonga has a government agency responsible for approving new medical countermeasures for humans. There is no evidence of such evidence on the website of the Ministry of Health. [1] . After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no Ministry of Research.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 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 publicly available evidence that Tonga has an expedited process for approving medical countermeasures for human use during public health emergencies. There is no evidence of such evidence on the website of the Ministry of Health. [1] After subsequent attempts to search national sources, there was no public evidence of such a mechanism and there exists no Ministry of Research.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 2020.

## Category 5: Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms

### 5.1 INTERNATIONAL HEALTH REGULATIONS (IHR) REPORTING COMPLIANCE AND DISASTER RISK REDUCTION

#### 5.1.1 Official IHR reporting

##### 5.1.1a

Has the country submitted IHR reports to the WHO for the previous calendar year?

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

#### 5.1.2 Integration of health into disaster risk reduction

##### 5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that pandemics are integrated into the national risk reduction strategy or that there is a standalone national disaster risk reduction strategy for pandemics in Tonga. There is no evidence of this according to the World Health Organisation. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan. [2]According to the Plan, the Ministry of Health is an agency tasked with response-leads in the NEOC. The Ministry of Health is responsible for e pidemiology/disease surveillance. But there is no specific mention of pandemics or anything resembling a risk reduction plan. [2] There is also no evidence of such a plan with on the website of the Ministry of Health and Tonga's National Emergency Management Office. [3,4]

- [1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.
- [2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.
- [3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.
- [4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.

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

### 5.2.1 Cross-border agreements

#### 5.2.1a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Tonga has cross-border agreements, protocols or MOUs with neighbouring countries, or as part of a regional group, with regards to public health emergencies. There is no evidence of this according to the World Health Organization. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no specific mention of this in the Plan. [2] There is also no evidence of such a plan on the website of the Ministry of Health. [3] There is also no website available for Tonga's National Emergency Management Office. [3,4] Tonga is also a member of the Pacific Public Health Surveillance Network (PPHSN). While the PPHSN provides a mechanism for communication regarding public health emergencies, including those of international concern (PacNet), this is for communicating the emergency to the WHO. [5]

- [1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.
- [2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.
- [3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.
- [4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.
- [5] Pacific Public Health Surveillance Network (PPHSN). "PPHSN Net catalog: 2013 Edition" [https://www.pphsn.net/Services/LabNet/PPHSN\_LabNet\_catalogL1L2L3\_Sept2013.pdf] Accessed 16 August 2020.

#### 5.2.1b

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

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

**Current Year Score: 0**

There is no publicly available evidence that Tonga has cross-border agreements, protocols or MOUs with neighbouring countries, or as part of a regional group, with regards to animal health emergencies. There is no evidence of this according to the World Health Organization. [1] Tonga does have a National Emergency Operations Centre (NEOC) and also has a National Emergency Plan but there is no specific mention of this in the Plan. [2] There is also no evidence of such a plan on the website of the Ministry of Health. [3] There is also no website available for Tonga's National Emergency Management Office. [3,4] Tonga is also a member of the Pacific Public Health Surveillance Network (PPHSN). While the PPHSN provides a mechanism for communication regarding public health emergencies, including those of international concern (PacNet), this is for communicating the emergency to the WHO. [5]

[1] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 16 August 2020.

[2] Tonga, "National Emergency Management Plan," [https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf] Accessed 16 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 16 August 2020.

[4] The National Emergency Management Office in Tonga, Ministry of Works. [https://tonganemo.wordpress.com/] Accessed 16 August 2020.

[5] Pacific Public Health Surveillance Network (PPHSN). "PPHSN Net catalog: 2013 Edition" [https://www.pphsn.net/Services/LabNet/PPHSN\_LabNet\_catalogL1L2L3\_Sept2013.pdf] Accessed 16 August 2020

## 5.3 INTERNATIONAL COMMITMENTS

### 5.3.1 Participation in international agreements

#### 5.3.1a

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

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

**Current Year Score: 2**

2021

Biological Weapons Convention

#### 5.3.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

2021

Biological Weapons Convention



### 5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

### 5.3.1d

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

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

Current Year Score: 1

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 the country has allocated national funds to improve capacity to address epidemic threats within the past three years. There is no evidence on the websites of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [1,2] Tonga stands COVID-free as of 25 August 2020, as updated on the website of the Ministry of Health. As per the budget of the 2020-21, health is given the first priority under the Government Priority Agenda (GPA) are extended to the Medium-Term, FY 2020/21- 2022/23, with COVID-19, Non-communicable diseases (NCDs) and Universal Health Coverage (UHC) as the major themes covered. About 22% has been funded from the government recurrent budget and the National Emergency Fund, while the rest has been sourced from Development Partners. [3] The website of the Prime Minister's Office of Tonga is under construction. [4]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 8 September 2020.

[2] Tonga, Ministry of Agriculture, Forestry, Food & Fisheries [<http://mafff.gov.to/index.html>] Accessed 8 September 2020.

[3] Ministry of Finance, Government of Tonga, "BUDGET STATEMENT 2020-21" [[http://www.finance.gov.to/sites/default/files/2020-08/Budget%20Statement%202020-21\\_20Apr%20-postLA\\_TC%20Harold\\_06.08.20%2012.00PM.pdf](http://www.finance.gov.to/sites/default/files/2020-08/Budget%20Statement%202020-21_20Apr%20-postLA_TC%20Harold_06.08.20%2012.00PM.pdf)] Accessed 8 September 2020.

[4] Prime Minister's Office, Government of Tonga [[www.pmo.gov.to](http://www.pmo.gov.to)] Accessed 8 September 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**

Tonga is an International Development Association (IDA) eligible borrower, according to the World Bank and therefore is eligible for a World Bank pandemic financing facility. [1,2] After checking national sources, there is no additional evidence of government-reserved funds for this. Tonga does have a National Emergency Plan but there is no specific mention of this in the Plan. [3] here is also no evidence of such a plan with on the website of the Ministry of Health and Tonga's National Emergency Management Office. [4,5]

[1] International Development Association (IDA), World Bank. "Borrowing Countries"

[<http://ida.worldbank.org/about/borrowing-countries>] Accessed 16 August 2020.

[2] World Bank, "Pandemic Emergency Financing Facility (PEF) Operational Brief for Eligible Countries December 2017,"

[<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>] Accessed 16 August 2020.

[3] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review,"

[[https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198_eng.pdf?sequence=1&isAllowed=y)] Accessed 16 August 2020.

[2] Tonga, "National Emergency Management Plan," [<https://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2020/04/National-Emergency-Management-Plan.pdf>] Accessed 16 August 2020.

[4] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 16 August 2020.

[5] The National Emergency Management Office in Tonga, Ministry of Works. [<https://tonganemo.wordpress.com/>] Accessed 16 August 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 leaders, in the past three years, have made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support. There is no evidence of any such press release on the website of the Government of Tonga, Ministry of Health. [1,2] There is no website for the Ministry of Foreign Affairs and Trade (MFAT). [3] There is also no evidence that senior leaders, in the past three years, have made a public commitment to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. The Ministry of Tonga however signed an amended Tonga Health Systems Support Program (THSSP) Phase 2 with the Government of Australia to increase capacity in May 2020. The program aims to build and increase capacity to monitor and improve the health systems in Tonga. The aid extension for 2020-21 of about 1.29 million USD is provided with an additional commitment of 0.7 million USD for the COVID-preparedness. [4]

[1] Government of the Kingdom of Tonga [<https://www.gov.to/>] Accessed 8 September 2020.

[2] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 8 September 2020.

[3] Ministry of Foreign Affairs and Trade (MFAT)[<https://www.gov.to/ministry-of-foreign-affair-2/>] Accessed 8 September 2020.

[4] Government of the Kingdom of Tonga. "Government of Australia extends partnership with the Ministry of Health" [<http://www.gov.to/press-release/government-of-australia-extends-partnership-with-the-ministry-of-health/>] Accessed 17 August 2020.

### 5.5.4b

Is there evidence that the country has, in the past three years, either:

- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

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

**Current Year Score: 1**

There is evidence that Tonga invested finances (from donors) to improve its own domestic capacity to address epidemic threats over the past three years. According to the Global Health Security Funding Tracking Dashboard, Tonga has 18.2 million USD from 2014-2020; an additional 14.2 million USD has been committed but not yet dispersed. This funding has come from New Zealand, the World Health Organization, the European Union, Japan and the Food and Agriculture Organization (donors in order of financial commitment). New Zealand, the largest donor, has contributed to the laboratory systems and preparedness among others. [1] The Budget of the FY2020-21 accounts for all the development aid Tonga has received from multiple development partners, including pandemic preparedness. [2] There is no publicly available information that Tonga has lent support to other countries to improve capacity to address epidemic threats by providing

financing or support in the past three years via the Ministry of Health, the Ministry of Foreign Affairs or through the WHO reports . [3,4,5]

[1] Georgetown University. "Georgetown Health Security Tracking Dashboard"

[https://tracking.ghscosting.org/details/228/recipient] Accessed 17 August 2020.

[2] Government of Tonga. "Budget Statement 2020-2021" [http://www.finance.gov.to/sites/default/files/2020-08/Budget%20Statement%202020-21\_20Apr%20-postLA\_TC%20Harold\_06.08.20%2012.00PM.pdf] Accessed 17 August 2020.

[3] Tonga, Ministry of Health. [http://www.health.gov.to] Accessed 17 August 2020.

[4] Tonga, Ministry of Foreign Affairs [http://www.mic.gov.to/] Accessed 17 August 2020.

[5] Asia-Pacific Observatory on Health Systems and Policies. "The Kingdom of Tonga Health System Review," [https://apps.who.int/iris/bitstream/handle/10665/208225/9789290617198\_eng.pdf?sequence=1&isAllowed=y] Accessed 17 August 2020.

### 5.5.4c

**Is there evidence that the country has fulfilled its full contribution to the WHO within the past two years?**

Yes = 1 , No = 0

**Current Year Score: 1**

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

## 5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

### 5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

#### 5.6.1a

**Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?**

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Tonga has a plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza . There is no evidence of such a plan on the website of the Ministry of Health or the Ministry of Agriculture, Food & Forestry (MAFF). [1,2] After subsequent attempts to search national sources and external documentation, there was no public evidence of such a plan and there exists no Ministry of Research.

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 17 August 2020.

[2] Tonga, Ministry of Agriculture, Food and Forestry [<http://mafff.gov.to/index.html>] Accessed 17 August 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 Tonga has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. There is no evidence of this via local media or via the WHO reports on the PIP framework.

[1]

[1] World Health Organisation (WHO). "Pandemic Influenza Preparedness Framework"

[<https://www.who.int/influenza/pip/en/>] Accessed 17 August 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 Tonga has not shared pandemic pathogen samples during an outbreak in the past two years. There is no such public evidence via the local media or through the World Health Organization reports. As of 25 August 2020, according to the website of the Ministry of Health, Tonga is COVID-19 free. [1]

[1] Tonga, Ministry of Health. [<http://www.health.gov.to>] Accessed 8 September 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: 1**



2020

Economist Intelligence

**6.1.1b**

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

Input number

Current Year Score: 1

2020

Economist Intelligence

**6.1.1c**

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

Input number

Current Year Score: 1

2020

Economist Intelligence

**6.1.1d**

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

Input number

Current Year Score: 1

2020

Economist Intelligence

**6.1.1e**

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

Input number

Current Year Score: 43

2020

Transparency International

### 6.1.1f

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

Input number

**Current Year Score: 1**

2020

Economist Intelligence

### 6.1.1g

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

Input number

**Current Year Score: 1**

2020

Economist Intelligence

## 6.1.2 Orderly transfers of power

### 6.1.2a

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

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

**Current Year Score: 2**

2021

Economist Intelligence

## 6.1.3 Risk of social unrest

### 6.1.3a

**What is the risk of disruptive social unrest?**

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

**Current Year Score: 2**

2021

Economist Intelligence

## 6.1.4 Illicit activities by non-state actors

### 6.1.4a

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

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

Current Year Score: 3

2021

Economist Intelligence

### 6.1.4b

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

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

Current Year Score: 4

2020

UN Office of Drugs and Crime (UNODC)

### 6.1.4c

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

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

Current Year Score: 1

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: 2

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: 99.41

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: 0.58

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: 0.2**

2015

World Bank; Economist Impact

### 6.2.3b

**Share of employment in the informal sector**

Greater than 50% = 2, Between 25-50% = 1, Less than 25% = 0

**Current Year Score: 1**

As per the Tonga Labour Force Survey 2018, the informal sector accounted for 46.8% of the total employment. [1]

[1] Tonga Statistics Department. Labour Force Survey [<https://tongastats.gov.to/survey/labour-force-survey/>] Accessed 16 August 2020.

### 6.2.3c

**Coverage of social insurance programs (% of population)**

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

**Current Year Score: 0**

2016, or latest available

World Bank; Economist Impact calculations

## 6.2.4 Public confidence in government

### 6.2.4a

**Level of confidence in public institutions**

Input number

**Current Year Score: 1**

2021

Economist Intelligence Democracy Index

## 6.2.5 Local media and reporting

### 6.2.5a

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

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

## 6.2.6 Inequality

### 6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.38

Latest available.

World Bank; Economist Impact calculations

## 6.3 INFRASTRUCTURE ADEQUACY

### 6.3.1 Adequacy of road network

#### 6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

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

Current Year Score: 2

2021

Economist Intelligence

### 6.3.2 Adequacy of airports

#### 6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

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

Current Year Score: 3

2021

Economist Intelligence

### 6.3.3 Adequacy of power network

#### 6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 2

2021

Economist Intelligence

## 6.4 ENVIRONMENTAL RISKS

### 6.4.1 Urbanization

#### 6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 23.11

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: 1

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: 70.8

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: 624.8

2019

WHO

#### 6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 5.94

2019

World Bank

#### 6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 30.2

2018



World Bank

### **6.5.1e**

**Prevalence of obesity among adults**

Input number

**Current Year Score: 48.2**

2016

WHO

## **6.5.2 Access to potable water and sanitation**

### **6.5.2a**

**Percentage of homes with access to at least basic water infrastructure**

Input number

**Current Year Score: 99**

2017

UNICEF; Economist Impact

### **6.5.2b**

**Percentage of homes with access to at least basic sanitation facilities**

Input number

**Current Year Score: 93.45**

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: 224.73**

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