

# Papua New Guinea

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

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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: 1**

Papua New Guinea has a national antimicrobial resistance (AMR) plan, but there is insufficient evidence that it covers surveillance, detection, and reporting of priority AMR pathogens. In August 2019 Papua New Guinea released its National Action Plan on Antimicrobial Resistance (AMR) 2019-2023. The plan appears to be more of a roadmap for future endeavors than a statement of protocols for surveillance, detection, and reporting of AMR pathogens. For example, while the plan discusses the importance of surveillance, it does not describe any ongoing AMR surveillance activities in the country. Instead, it states as a goal to "strengthen surveillance, diagnostic capacity and research". Individual planned activities to reach this goal include "Develop a national AMR surveillance system with a reference laboratory" and "Strengthen food safety capacity to combat AMR". These activities and supporting "sub-activities" are planned for the 2019-2023 period, with budget proposals. [1] There is no separate evidence showing that these planned activities have been completed. [1] There is no other relevant information shared via the public website of the Department of Health, the Department of Agriculture and Livestock, or the WHO Library of National Action Plans on AMR. [2,3,4] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Government of Papua New Guinea. August 2019. "National Action Plan on Antimicrobial Resistance (AMR) 2019-2023". [[https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919\\_signed.pdf?sfvrsn=1dd11db2\\_1&download=true](https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919_signed.pdf?sfvrsn=1dd11db2_1&download=true)]. Accessed 15 February 2021.

[2] World Health Organisation. "Library of National Action Plans for AMR". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 15 February 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

##### 1.1.1b

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

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

**Current Year Score: 1**

There is evidence that Papua New Guinea has a national laboratory system which tests for priority antimicrobial-resistant (AMR) pathogens, though there is insufficient evidence to show that the system tests for all World Health Organization (WHO)-defined 7+1 priority AMR pathogens. Further, there is insufficient evidence to show that this AMR testing is systematic, or how frequently it occurs. In August 2019 Papua New Guinea released its National Action Plan on Antimicrobial Resistance (AMR) 2019-2023. The plan reports AMR data obtained by the Papua New Guinea Institute of Medical Research (PNGIMR), the Central Public Health Laboratory (CPHL) and the pathology department of the Port Moresby General Hospital (PMGH), for the pathogens *Shigella* spp, *Salmonella typhi*, *N. gonorrhoea*, *S. aureus*, *E. coli*, and other pathogens not among the WHO priority pathogens. [1] However, the National Action Plan mentions that "available data to confirm the state and extent of drug resistance patterns and trends in the country are fragmented and not readily available". [1] Further, the data reported for the abovementioned pathogens are from dates ranging from 2004 to 2015, indicating that such testing does not occur on a regular basis. The country can also access the Labnet, a surveillance network set up by the Secretariat of the Pacific Community to assist participating countries by pairing the country with higher-capacity labs in the region, but there is no evidence of testing for AMR pathogens. [2] There is no other relevant information shared via the public website of the Department of Health, the Department of Agriculture and Livestock, or the WHO Library of National Action Plans on AMR. [3,4,5] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [6] The public websites of the PMGH and the PNGIMR do not include additional relevant information. [7]

[1] Government of Papua New Guinea. August 2019. "National Action Plan on Antimicrobial Resistance (AMR) 2019-2023". [[https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919\\_signed.pdf?sfvrsn=1dd11db2\\_1&download=true](https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919_signed.pdf?sfvrsn=1dd11db2_1&download=true)]. Accessed 15 February 2021.

[2] Secretariat of the Pacific Community. November 2020. "PPHSN LabNet catalog". [[https://pchs.spc.int/sites/default/files/p-related-files/2020-12/PPHSN\\_LabNet\\_Catalog\\_November\\_2020\\_Edition.pdf](https://pchs.spc.int/sites/default/files/p-related-files/2020-12/PPHSN_LabNet_Catalog_November_2020_Edition.pdf)]. Accessed 15 February 2021.

[3] World Health Organisation. "Library of National Action Plans for AMR". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 15 February 2021.

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[7] Port Moresby General Hospital. [<https://www.pomgen.gov.pg/>]. Accessed 15 February 2021.

[8] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

### 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 the Papuan government conducts environmental detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or antimicrobial resistant (AMR) organisms. In August 2019 Papua New Guinea released its National Action Plan on Antimicrobial Resistance (AMR) 2019-2023. Although the plan states that it intends to facilitate the collaboration of stakeholders from the animal and human health sectors and the environmental sector, it does not list any ongoing or planned activities for environmental surveillance. [1] There is no other relevant information shared via the public website of the Department of Health, the Department of Agriculture and Livestock, the Conservation and Environment Protection Authority, or the World Health Organization (WHO) Library of National Action

Plans on AMR. [2,3,4,5] There is no evidence of relevant academic studies.

- [1] Government of Papua New Guinea. August 2019. "National Action Plan on Antimicrobial Resistance (AMR) 2019-2023". [[https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919\\_signed.pdf?sfvrsn=1dd11db2\\_1&download=true](https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919_signed.pdf?sfvrsn=1dd11db2_1&download=true)]. Accessed 15 February 2021.
- [2] World Health Organisation. "Library of National Action Plans for AMR". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 15 February 2021.
- [3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [5] Conservation and Environment Protection Authority. [<http://www.pngcepa.com/>]. Accessed 15 February 2021.

## 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 via the Ministry of Health that there is national legislation or regulation in place requiring prescriptions for antibiotic use for humans. The "National Drug Policy for Papua New Guinea" released by the Ministry of Health in 1998 does not address antibiotics. [1] The "National Medicines Policy" released by the Department of Health in 2014 states that "the illegal sale of prescription medicines in market places and unlicensed outlets together with public ignorance about the dangers of medicines leads to self-prescribing by patients and irrational use of medicines. This can lead to serious long term outcomes such as antimicrobial resistance which poses a greater burden on the public health care system. The use of antibiotics for veterinary purposes and in animal husbandry does add to antimicrobial resistance". However, this is the only context within which antibiotics are mentioned in this document, which seems to be the latest policy document issued on medicines and drugs. There are no other passages suggesting a requirement for antibiotic prescriptions. [2] In August 2019 Papua New Guinea released its National Action Plan on Antimicrobial Resistance (AMR) 2019-2023. The plan states as a goal to "strengthen regulations to promote responsible use of antimicrobials with prescription only", suggesting that such requirements do not already exist. [3] There is no other relevant information shared via the public website of the Department of Health. [4] A Medicines Regulatory Authority described in a 2012 Pharmaceutical Country Profile published by the government does not have its own website. [5] The Food and Agriculture Organization of the United Nations' FAOLEX database does not include any relevant legislation for Papua New Guinea. [6] There is no other evidence of relevant academic studies.

- [1] Department of Health. January 1998. "National drug policy for Papua New Guinea". [<https://www.health.gov.pg/pdf/NATDRUGPOLICY.pdf>]. Accessed 15 February 2021.
- [2] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.
- [3] Government of Papua New Guinea. August 2019. "National Action Plan on Antimicrobial Resistance (AMR) 2019-2023". [[https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919\\_signed.pdf?sfvrsn=1dd11db2\\_1&download=true](https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919_signed.pdf?sfvrsn=1dd11db2_1&download=true)]. Accessed 15 February 2021.
- [4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [5] Department of Health. 2012. "Pharmaceutical Country Profile". [[https://www.who.int/medicines/areas/coordination/final\\_pharmaceutical\\_country\\_profile\\_png.pdf](https://www.who.int/medicines/areas/coordination/final_pharmaceutical_country_profile_png.pdf)]. Accessed 15 February 2021.

[6] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".  
[<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG>]. Accessed 15 February 2021.

### 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 via the Ministry of Health that there is national legislation or regulation in place requiring prescriptions for antibiotic use for animals. The "National Drug Policy for Papua New Guinea" released by the Ministry of Health in 1998 does not address antibiotics. [1] The "National Medicines Policy" released by the Department of Health in 2014 states that "the illegal sale of prescription medicines in market places and unlicensed outlets together with public ignorance about the dangers of medicines leads to self-prescribing by patients and irrational use of medicines. This can lead to serious long term outcomes such as antimicrobial resistance which poses a greater burden on the public health care system. The use of antibiotics for veterinary purposes and in animal husbandry does add to antimicrobial resistance". However, this is the only context within which antibiotics are mentioned in this document, which seems to be the latest policy document issued on medicines and drugs. There are no other passages suggesting a requirement for antibiotic prescriptions. [2] In August 2019 Papua New Guinea released its National Action Plan on Antimicrobial Resistance (AMR) 2019-2023. The plan states as a goal to "strengthen regulations to promote responsible use of antimicrobials with prescription only", suggesting that such requirements do not already exist. [3] There is no other relevant information shared via the public websites of the Department of Health and the Department of Agriculture and Livestock. [4,5] A Medicines Regulatory Authority described in a 2012 Pharmaceutical Country Profile published by the government does not have its own website. [6] The Food and Agriculture Organization of the United Nations' FAOLEX database does not include any relevant legislation for Papua New Guinea. [7] There is no other evidence of relevant academic studies.

[1] Department of Health. January 1998. "National drug policy for Papua New Guinea".

[<https://www.health.gov.pg/pdf/NATDRUGPOLICY.pdf>]. Accessed 15 February 2021.

[2] Department of Health. March 2014. "National Medicines Policy". [https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf). Accessed 15 February 2021.

[3] Government of Papua New Guinea. August 2019. "National Action Plan on Antimicrobial Resistance (AMR) 2019-2023".  
[[https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919\\_signed.pdf?sfvrsn=1dd11db2\\_1&download=true](https://cdn.who.int/media/docs/default-source/antimicrobial-resistance/png-action-plan-on-amr-090919_signed.pdf?sfvrsn=1dd11db2_1&download=true)]. Accessed 15 February 2021.

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Health. 2012. "Pharmaceutical Country Profile".

[[https://www.who.int/medicines/areas/coordination/final\\_pharmaceutical\\_country\\_profile\\_png.pdf](https://www.who.int/medicines/areas/coordination/final_pharmaceutical_country_profile_png.pdf)]. Accessed 15 February 2021.

[7] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".

[<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG>]. Accessed 15 February 2021.

## 1.2 ZOOBOTIC DISEASE

### 1.2.1 National planning for zoonotic diseases/pathogens

#### 1.2.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of the existence of a national plan or law for zoonotic diseases in Papua New Guinea. There is no mention of such a plan either via the Department of Health and the Department of Agriculture and Livestock websites. [1,2] The National Agricultural Development Plan 2007-2016 (the most recently available public plan) states that "although, PNG is currently relatively free of the major pest and diseases; it faces major challenges to the sustainability of our agriculture and resource base in particular with the emerging issues relating to zoonosis, and other animal and plant pests and diseases." The plan makes no other mention of zoonotic disease. [3] There is no mention of such a plan in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [4]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

#### 1.2.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. There is no mention of such a plan either via the Department of Health and the Department of Agriculture and Livestock websites. [1,2] The National Agricultural Development Plan 2007-2016 (the most recently available public plan) states that "although, PNG is currently relatively free of the major pest and diseases; it faces major challenges to the sustainability of our agriculture and resource base in particular with the emerging issues relating to zoonosis, and other animal and plant pests and diseases." The plan makes no other mention of zoonotic diseases, including of spillovers. [3] There is no mention of such a plan in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [4]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

implementation-plan-v2.pdf]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

### 1.2.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern. There is no evidence of such a plan shared via the public websites of either the Department of Health or the Department of Agriculture and Livestock. [1,2] The National Agricultural Development Plan 2007-2016 (the most recently available public plan) states that "although, PNG is currently relatively free of the major pest and diseases; it faces major challenges to the sustainability of our agriculture and resource base in particular with the emerging issues relating to zoonosis, and other animal and plant pests and diseases." The plan makes no other mention of zoonotic disease. [3] There is no mention of such a plan in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [4]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

### 1.2.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. There is no evidence of such an agency shared via the public websites of either the Department of Health or the Department of Agriculture and Livestock. [1,2] The National Agricultural Development Plan 2007-2016 (the most recently available public plan) states that "although, PNG is currently relatively free of the major pest and diseases; it faces major challenges to the sustainability of our agriculture and resource base in particular with the emerging issues relating to zoonosis, and other animal and plant pests and diseases." The plan makes no other mention of zoonotic disease or an agency that focuses on them. [3] There is no mention of such an agency in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [4]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.



[3] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

## 1.2.2 Surveillance systems for zoonotic diseases/pathogens

### 1.2.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that Papua New Guinea has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. A regional report by the Secretariat of the Pacific Community from 2012 noted that there were plans to develop a more robust reporting mechanism, but there is no evidence of a completed system. [1,2] There is no publicly available information about such a system shared via the public websites of the Department of Health and the Department of Agriculture and Livestock. [3,4]

[1] SPC Land Resource Division. 2012. "Importance of WAHIS Animal Disease Reporting in the SPC Region in support of Trade" [[http://lrd.spc.int/bat-publications/doc\\_download/1907-wahis2012workshopreport](http://lrd.spc.int/bat-publications/doc_download/1907-wahis2012workshopreport)]. Accessed 15 February 2021.

[2] Pacific Community. [<https://www.spc.int>]. Accessed 15 February 2021

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021

### 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 insufficient evidence to show that Papua New Guinea has legislation or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). The country has more general data protection laws in place through the National Information and Communications Technology Act of 2009 that state with regard to information on individuals "the right to reasonable privacy in respect of his private and family life, his communications with other persons and his personal papers and effects". These provisions do not appear to be specific enough to apply to animal health surveillance activities. [1] There is no evidence of other relevant legislation reported by the Food and Agriculture Organization of the United Nations' FAOLEX database. [2] There is no additional relevant information shared via a public websites by the Department of Health or the Department of Agriculture and Livestock. [3,4]

[1] Government of Papua New Guinea. "National Information and Communications Technology Act 2009".

[<https://www.nicta.gov.pg/legislative/acts/>]. Accessed 15 February 2021.

[2] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".

[<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG>]. Accessed 15 February 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021

### 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 insufficient evidence that there is a government agency which conducts surveillance for zoonotic disease in wildlife. The National Agricultural Development Plan 2007-2016 (the most recently available public plan) states that "although, PNG is currently relatively free of the major pest and diseases; it faces major challenges to the sustainability of our agriculture and resource base in particular with the emerging issues relating to zoonosis, and other animal and plant pests and diseases." The plan makes no other mention of zoonotic disease. [1] There is no mention of such a plan in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [2] A post on the website of Papua New Guinea's National Agricultural Research Institute stresses the importance of strengthening animal health surveillance (AHS) in the pacific region via the South Pacific Commission (SPC), but this does not mention zoonotic diseases. [3] There is no other relevant information shared via a public website by either the Department of Health or the Department of Agriculture and Livestock. [4,65]

[1] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

[3] Papua New Guinea National Agricultural Research Institute. "Animal health surveillance vital".

[<https://www.nari.org.pg/news/animal-health-surveillance-vital>]. Accessed 15 February 2021.

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

## 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: 0.18**

2018

OIE WAHIS database

### 1.2.4b

**Number of veterinary para-professionals per 100,000 people**

Input number

**Current Year Score: 0.99**

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 evidence that Papua New Guinea has a plan on zoonotic diseases, let alone such a plan that includes mechanisms for working with the private sector in controlling or responding to zoonoses. There is no relevant information in the National Agricultural Development Plan 2007-2016 (the most recently available public plan) or in the World Health Organization (WHO) Country Cooperation Strategy 2016-2020. [1,2] There is no relevant information shared via the public websites of the Department of Health or the Department of Agriculture and Livestock. [3,4] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Ministry of Agriculture and Livestock. "National Agriculture Development 2007-2016."

[<https://brusselsbriefings.files.wordpress.com/2018/07/png-national-agriculture-development-plan-2007-2016-implementation-plan-v2.pdf>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February

2021.

## 1.3 BIOSECURITY

### 1.3.1 Whole-of- government biosecurity systems

#### 1.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of a record 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 relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [1,2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] The Central Public Health Laboratory does not have an online presence. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[3] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[4] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[7] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

#### 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 of 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 in Papua New Guinea. Australia's Ministry of Agriculture, Water and the Environment has reported that it is working with Papua New Guinea to develop the latter's "biosecurity capacity", but this refers to the risk of pests and diseases arriving from neighbouring countries rather than the safety of facilities storing dangerous pathogens. [1] There is no relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [2,3,4,5,6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [9]

[1] Australia Ministry of Agriculture, Water and the Environment. 19 February 2019. "Working with PNG to strengthen Australia's biosecurity". [<https://www.awe.gov.au/news/media-releases/working-png-strengthen-australias-biosecurity>]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

[9] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 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 of an established agency responsible for the enforcement of biosecurity legislation or regulations, nor any evidence of such legislation or regulations. Australia's Ministry of Agriculture, Water and the Environment has reported that it is working with Papua New Guinea to develop the latter's "biosecurity capacity", but this refers to the risk of pests and diseases arriving from neighbouring countries rather than the safety of facilities storing dangerous pathogens. [1] There is no relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [2,3,4,5,6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws

can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [9]

- [1] Australia Ministry of Agriculture, Water and the Environment. 19 February 2019. "Working with PNG to strengthen Australia's biosecurity". [<https://www.awe.gov.au/news/media-releases/working-png-strengthen-australias-biosecurity>]. Accessed 15 February 2021.
- [2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [6] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.
- [9] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 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 Papua New Guinea has taken action to consolidate inventories of especially dangerous pathogens and toxins into a minimum number of facilities. There is no relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [1,2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

- [1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [2] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

[8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 1.3.1e

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence 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. According to a 2015 journal article from the Western Pacific Surveillance and Response Journal entitled "Risk posed by the Ebola epidemic to the Pacific islands: findings of a recent World Health Organization assessment" no laboratories in Papua New Guinea are able to test for Ebola as of 2015. [1] There is no public evidence related to this or the ability to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax which is considered endemic in the country. There is no relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [2,3,4,5,6] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [7]

[1] Craig, A., Ronsse, A., Hardie, K., Pavlin, B., Biaukula, V., & Nilles, E. (2015). Risk posed by Ebola epidemic to the Pacific islands: findings of a recent World Health Organization assessment. *Western Pacific Surveillance And Response*, 6

[2]. [<https://pubmed.ncbi.nlm.nih.gov/26306216/>]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[4] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[7] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 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 publicly available evidence that Papua New Guinea 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 relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [1,2,3,4,5] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[3] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[4] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

### 1.3.3 Personnel vetting: regulating access to sensitive locations

#### 1.3.3a

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

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

**Current Year Score: 0**

There is no evidence that Papua New Guinea 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 checks such as drug testing, background checks, and psychological or mental fitness checks. Indeed, there is no evidence of any regulations related to biosecurity which address requirements for facilities in which especially dangerous pathogens and toxins are stored or processed in Papua New Guinea, or which require biosecurity training for personnel working in facilities housing or working with especially dangerous pathogens. There is no relevant information shared via the Department of Health; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science, and



Technology; the Papua New Guinea Defence Force; or the Department of Agriculture and Livestock. [1,2,3,4,5] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[3] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[4] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

### 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**

Papua New Guinea does not have publicly available information on national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B). The Civil Aviation Safety Authority of Papua New Guinea in its Civil Aviation Rules briefly mentions infectious substances: "each operator who accepts dangerous goods for carriage by air shall stow packages of poisons and infectious substances in accordance with the Technical Instructions". [1] However, there is no further information on what these technical instructions entail. There is no public information shared via a publicly available website by the Department of Health; the Papua New Guinea Defence Force; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; the Department of Higher Education, Research, Science and Technology; or the Department of Transport. [2,3,4,5,6,7] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [8] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [9]

[1] Civil Aviation Safety Authority of Papua New Guinea. May 2017. "Civil Aviation Rules Part 92 Carriage of Dangerous Goods". [<https://www.casapng.gov.pg/attachments/article/95/Part%2092%20Carriage%20of%20Dangerous%20Goods.pdf>]. Accessed 15 February 2021.

- [2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [6] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [7] Department of Transport. [<http://www.transport.gov.pg/>]. Accessed 15 February 2021.
- [8] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [9] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

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

#### 1.3.5a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has legislation or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential. The Civil Aviation Safety Authority of Papua New Guinea in its Civil Aviation Rules briefly mentions infectious substances: "each operator who accepts dangerous goods for carriage by air shall stow packages of poisons and infectious substances in accordance with the Technical Instructions". [1] However, there is no further information on what these technical instructions entail. There is no public information shared via a publicly available website by the Department of Health, Papua New Guinea Defence Force, Department of Agriculture and Livestock, Papua New Guinea Institute of Medical Research, and Department of Higher Education, Research, Science and Technology. [2,3,4,5,6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8] Papua New Guinea departments and ministers that are responsible for foreign affairs, trade, commerce, and industry do not have public websites.

- [1] Civil Aviation Safety Authority of Papua New Guinea. May 2017. "Civil Aviation Rules Part 92 Carriage of Dangerous Goods". [<https://www.casapng.gov.pg/attachments/article/95/Part%2092%20Carriage%20of%20Dangerous%20Goods.pdf>]. Accessed 15 February 2021.
- [2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [6] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

## 1.4 BIOSAFETY

### 1.4.1 Whole-of-government biosafety systems

#### 1.4.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of national legislation or regulations pertaining to biosafety in terms of safety of laboratory workers working with dangerous pathogens. Papua New Guinea has a "National Biosafety Framework"; however, the document wholly refers to policies on genetically modified organisms (GMOs) and does not include any mention of pandemic pathogens or other harmful biological substances. [1] There is no relevant information shared via a public website by the Department of Health; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

[1] Department of Environment and Conservation. 23 April 2008. "Papua New Guinea's National Biosafety Framework". [[https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua\\_New\\_Guinea/3.pdf](https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua_New_Guinea/3.pdf)]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

[8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

#### 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 Papua New Guinea has an established agency responsible for the enforcement of biosafety legislation and regulations. Indeed, there is no evidence that such regulations exist. Papua New Guinea has a "National Biosafety Framework"; however, the document wholly refers to policies on genetically modified organisms (GMOs) and does not include any mention of pandemic pathogens or other harmful biological substances. [1] There is no relevant information shared via a public website by the Department of Health; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

[1] Department of Environment and Conservation. 23 April 2008. "Papua New Guinea's National Biosafety Framework".

[https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua\_New\_Guinea/3.pdf]. Accessed 15 February 2021.

[2] Department of Health. [https://www.health.gov.pg/]. Accessed 15 February 2021.

[3] Papua New Guinea Institute of Medical Research. [https://www.pngimr.org.pg/]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [https://web.dherst.gov.pg/]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [https://www.agriculture.gov.pg/]. Accessed 15 February 2021.

[6] United Nations. "Confidence Building Measures: Papua New Guinea". [https://bwc-ecbm.unog.ch/state/papua-new-guinea]. Accessed 15 February 2021.

[7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/]. Accessed 15 February 2021.

[8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

## 1.4.2 Biosafety training and practices

### 1.4.2a

**Does the country require biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?**

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. In general, Papua New Guinea does not have regulations relating to biosafety, in terms of dangerous substances. Papua New Guinea has a "National Biosafety Framework"; however, the document wholly refers to policies on genetically modified organisms (GMOs) and does not include any mention of pandemic pathogens or other harmful biological substances. [1] There is no relevant information shared via a public website by the Department of Health; the Department of Agriculture and Livestock; the Papua New

Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

- [1] Department of Environment and Conservation. 23 April 2008. "Papua New Guinea's National Biosafety Framework". [[https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua\\_New\\_Guinea/3.pdf](https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua_New_Guinea/3.pdf)]. Accessed 15 February 2021.
- [2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.
- [8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 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 evidence that Papua New Guinea has conducted an assessment to determine whether on-going dual use research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, or other dual use research. There is no relevant information shared via a publicly available website by the Department of Health; the Papua New Guinea Defence Force; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology.[1,2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

- [1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [2] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [4] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [5] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.
- [8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 1.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has legislation or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research. There is no relevant information shared via a publicly available website by the Department of Health; the Papua New Guinea Defence Force; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [1,2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

- [1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [2] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [4] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [5] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.
- [8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

2021.

### 1.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research. Indeed, there is no evidence that Papua New Guinea has relevant regulations. There is no relevant information shared via a publicly available website by the Department of Health; the Papua New Guinea Defence Force; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [1,2,3,4,5] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [6] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[4] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[5] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[6] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.

[7] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.

[8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 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 public evidence of a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold. Papua New Guinea's National Biosafety Framework of 2005 discusses DNA and synthesized DNA but does not mention DNA screening or sale. The framework is also primarily focused on genetically modified plants. [1]



There is no relevant information shared via a publicly available website by the Department of Health; the Papua New Guinea Defence Force; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [2,3,4,5,6] Although Papua New Guinea is party to the Biological Weapons Convention, there is no public evidence that it has submitted Confidence Building Measures reports since 1996. Access to the 1996 report is restricted, and it is unknown if it contains relevant information. [7] No relevant laws can be found on databases such as the VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. [8] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [9]

- [1] Department of Environment and Conservation. 23 April 2008. "Papua New Guinea's National Biosafety Framework". [[https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua\\_New\\_Guinea/3.pdf](https://www.sprep.org/att/IRC/eCOPIES/Countries/Papua_New_Guinea/3.pdf)]. Accessed 15 February 2021.
- [2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [5] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.
- [6] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.
- [7] United Nations. "Confidence Building Measures: Papua New Guinea". [<https://bwc-ecbm.unog.ch/state/papua-new-guinea>]. Accessed 15 February 2021.
- [8] VERTIC (Verification Research Training and Information Centre) Biological Weapons Convention Legislation Database. 2020. "P". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/p/>]. Accessed 15 February 2021.
- [9] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 1.6 IMMUNIZATION

### 1.6.1 Vaccination rates

#### 1.6.1a

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

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

**Current Year Score: 0**

2019

World Health Organization

#### 1.6.1b

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

Yes = 1, No = 0

**Current Year Score: 1**



2020

OIE WAHIS database

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

### 2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

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

##### 2.1.1a

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

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

**Current Year Score: 0**

There is insufficient evidence to indicate that Papua New Guinea's laboratory system can conduct at least 5 of the 10 World Health Organization (WHO)-defined core tests. The national laboratory system does not have a public website, and information about testing capabilities must be gleaned from studies conducted by other parties. A 2018 WHO report, "Epidemiology of Tuberculosis in Papua New Guinea", indicates that Papua New Guinea has 114 facilities across 275 Basic Management Units (data collection points for Tuberculosis) that test for Tuberculosis. [1] However, it is not clear what type of tuberculosis tests are employed. According to the Papua New Guinea National Guidelines for HIV Care and Treatment, testing for HIV is currently available across all provinces. However, the guidelines do not address whether the country has the capacity to test for HIV via serology. [2] According to a 2018 WHO post, polio testing must be outsourced to Australia. [3] According to a paper published in the Malaria Journal rapid diagnostic testing for plasmodium spp. (malaria) was found to be available throughout the country at local clinics and hospitals. [4] There is no public evidence to show the use of bacterial culture for Salmonella enteritidis serotype Typhi or the use of PCR to test for Influenza in Papua New Guinea. However, government releases since the start of the COVID-19 pandemic indicate that PCR tests are available for to test for COVID-19. [5] There is no additional relevant information shared via the public websites of the Department of Health or the Institute of Medical Research. [6,7] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [8]

[1] Aia, P., et al. 2018. "Epidemiology of tuberculosis in Papua New Guinea: analysis of case notification and treatment-outcome data, 2008-2016. Western Pacific Surveillance And Response", 9

[2]. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6053108/>]. Accessed 15 February 2021.

[2] National Department of Health. February 2017. "Papua New Guinea National Guidelines for HIV Care and Treatment". [[http://www.who.int/hiv/pub/guidelines/papua\\_art.pdf](http://www.who.int/hiv/pub/guidelines/papua_art.pdf)]. Accessed 15 February 2021.

[3] World Health Organisation. 4th September 2018. "Three additional polio cases reported in Papua New Guinea" [<http://www.wpro.who.int/papuanewguinea/mediacentre/releases/20180904-three-additional-polio-cases-reported-in-png/en/>]. Accessed 15 February 2021.

[4] Pulford, J., et al., 2013. "Malaria case management in Papua New Guinea following the introduction of a revised treatment protocol". *Malaria Journal*, 12, 433. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4222867/>]. Accessed 15 February 2021.

[5] Papua New Guinea National Control Centre for COVID-19. 7 May 2020. "More Tests to Study Spread of COVID-19 Says Manning". [<https://covid19.info.gov.pg/index.php/2020/05/07/more-tests-to-study-spread-of-covid-19-says-manning/>]. Accessed 15 February 2021.

[6] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[7] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[8] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 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 show that Papua New Guinea has a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, states that "testing for A/H5 or other novel influenza strains will continue to be carried out overseas for the foreseeable future", but otherwise does not contain relevant provisions. [1] While some evidence suggests that Papua New Guinea has developed a testing strategy in response to the COVID-19 pandemic, the strategy does not appear to be shared via a public website. The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, states as an action item that "a surge plan will be developed to manage increased testing volume" if the pandemic advances. [2] A July 2020 situation report on COVID-19 in Papua New Guinea, published by the World Health Organization (WHO), notes that "testing is to be expanded with the implementation of an enhanced testing strategy". [3] Despite such statements, there is no evidence of such a plan published to Papua New Guinea government websites or elsewhere. There is no other relevant information shared via the public websites of the Department of Health or the Department of Agriculture and Livestock, or via the government's dedicated COVID-19 information website. [4,5,6] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [7]

[1] Government of Papua New Guinea. 2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). 19 July 2020. "Coronavirus Disease 2019 (COVID-19) Health Situation Report #30". [[https://www.who.int/docs/default-source/wpro---documents/countries/papua-new-guinea/covid-19/png-covid-19-health-situation-report-30.pdf?sfvrsn=91c4846d\\_2](https://www.who.int/docs/default-source/wpro---documents/countries/papua-new-guinea/covid-19/png-covid-19-health-situation-report-30.pdf?sfvrsn=91c4846d_2)]

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[6] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19".

[<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[7] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 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 no evidence that Papua New Guinea has a national laboratory that serves as a reference facility and is accredited. Papua New Guinea's National Laboratory (the Central Public Health Laboratory) does not have an online presence and there is no information available about whether it can serve as a reference facility. A media source from 2015 indicates that Papua New Guinea did not have a national reference facility at that time. [1] No other relevant information is shared via a publicly available website by the Department of Health or the Department of Agriculture and Livestock. [2,3] There is no evidence that Papua New Guinea has a national public health institute.

[1] "Nation needs reference laboratory, doctor says." 2015. The National. [<https://www.thenational.com.pg/nation-needs-reference-laboratory-doctor-says>]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

### 2.1.2b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has a national laboratory that serves as a reference facility which is subject to external quality assurance review. Papua New Guinea's National Laboratory (the Central Public Health Laboratory) does not have an online presence and there is no information available about whether it can serve as a reference facility. A media source from 2015 indicates that Papua New Guinea did not have a national reference facility at that time. [1] No other relevant information is shared via a publicly available website by the Department of Health or the Department of Agriculture and Livestock. [2,3] There is no evidence that Papua New Guinea has a national public health institute.

[1] "Nation needs reference laboratory, doctor says." 2015. The National. [<https://www.thenational.com.pg/nation-needs-reference-laboratory-doctor-says>]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

## 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 public evidence to indicate the existence of a specimen transport system in Papua New Guinea, nationwide or otherwise. No relevant information is shared via a public website by the Department of Health or the Department of Agriculture and Livestock. [1,2] There is no online presence of the Central Public Health Laboratory, although evidence indicates it exists. [3] There is no evidence that Papua New Guinea has a national public health institute.

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 2.2.2 Laboratory cooperation and coordination

#### 2.2.2a

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

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

**Current Year Score: 0**

There is no evidence that Papua New Guinea has a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, contains relevant provisions. [1,2] There is no other relevant information shared via the public website of the Department of Health, the Department of Agriculture and Livestock, or the Papua New Guinea Institute of Medical Research. [3,4] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Government of Papua New Guinea. 2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[5] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

## 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: 1**

There is evidence that Papua New Guinea is conducting ongoing event-based surveillance and analysis for infectious disease, but not that data is being analysed on a daily basis. The National Health Plan 2011-2020 for Papua New Guinea (the most recent) states that the National Department of Health, with support from the World Health Organization (WHO) and AusAid, has established a Command and Control Centre as a surveillance and response unit in the wake of the H1N1 pandemic. Per the plan, the Command Centre "now investigates and provides regular reporting on all infectious disease outbreaks in Papua New Guinea". [1] A 2013 article from the Western Pacific Surveillance and Response Journal confirms that the Command and Control Centre conducts event-based surveillance: "The EBS system was established to complement the existing indicator-based surveillance systems operating in provincial hospitals, which, due to poor timeliness, were inappropriate for the early detection of public health events". The journal article notes that the EBS system relies on a simple Microsoft Excel database that "captures the nature of events (e.g. chemical, infectious, food safety); location; dates of events, reports and follow-ups; sources of reporting; verification status; and responses. The database is maintained by an EBS Coordinator within the Command Centre of the Communicable Diseases Surveillance and Emergency Response (CDS&ER) Unit of NDOH [the National Department of Health NDOH]". [2] There is no other shared via a public website by the Department of Health, the Department of Agriculture and Livestock, or the Papua New Guinea National Disaster Centre. [3,4,5] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [6]

[1] Government of Papua New Guinea. June 2010. "National Health Plan 2011-2020: Volume 2 (Part A), Reference Data and National Health Pro&#64257;le." [https://www.medbox.org/pdf/5e148832db60a2044c2d4ded]. Accessed 15 February 2021..

[2] Dagina R et al. 2013. "Event-based surveillance in Papua New Guinea: strengthening an International Health Regulations (2005) core capacity". Western Pacific Surveillance and Response Journal. [https://pubmed.ncbi.nlm.nih.gov/24319609/]. Accessed 15 February 2021.

[3] Department of Health. [https://www.health.gov.pg/]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [https://www.agriculture.gov.pg/]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [https://pngndc.gov.pg/]. Accessed 15 February 2021.

[6] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

### 2.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Papua New Guinea has reported a potential public health emergency of international concern (PHEIC) to the World Health Organisation (WHO) in the last two years. The National Department of Health notified the World Health Organisation (WHO) of a polio outbreak in Papua New Guinea on 28 April 2018. [1] This was followed by a WHO-led outbreak response and vaccinating campaign. [2,3] No other recent disease outbreaks are listed on the WHO Disease Outbreak News website for Papua New Guinea. [4] Both the WHO and the Papua New Guinea government confirm that the COVID-19 pandemic has reached Papua New Guinea although there is no evidence that Covid-19 was reported as a PHEIC to the WHO. [5,6,7] There is no relevant information shared via the public website of the Department of Health; the WHO Papua New Guinea country profile; or the WHO Regional Office for the Western Pacific Region website. [8,9,10]

[1] Department of Health and the World Health Organization (WHO). 25 June 2018. "Papua New Guinea confirms poliovirus outbreak, launches response". [<https://reliefweb.int/report/papua-new-guinea/papua-new-guinea-confirms-poliovirus-outbreak-launches-response#:~:text=PORT%20MORESBY%2C%2025%20JUNE%202018,circulating%20in%20the%20same%20community.>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). 13 August 2018. "Polio case confirmed in Eastern Highlands Province, Papua New Guinea". [<https://www.who.int/papuanewguinea/news/detail/13-08-2018-polio-case-confirmed-in-eastern-highlands-province-papua-new-guinea#:~:text=A%20new%20polio%20case%20was,girl%20from%20Eastern%20Highlands%20Province.&text=Children%20can%20be%20protected%20from%20polio%20only%20with%20vaccination.>]. Accessed 15 February 2021.

[3] World Health Organisation. 20 February 2019. "Circulating vaccine-derived poliovirus type 1 - Papua New Guinea". [<https://www.who.int/csr/don/20-February-2019-polio-png/en/>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Disease Outbreak News: Papua New Guinea". [<https://www.who.int/csr/don/archive/country/png/en/>]. Accessed 15 February 2021.

[5] World Health Organization (WHO). "WHO Coronavirus Disease (COVID-19) Dashboard". [[https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGiEwAincsHDsiu3F\\_evEv5sAS03F77Qlpy\\_CkBTUzGKG8PN0UCpleR\\_MqmUXPghoCVpsQAvD\\_BwE](https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGiEwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkBTUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE)]. Accessed 15 February 2021.

[6] Department of Health. "COVID-19-Pandemic". [<https://www.health.gov.pg/subindex.php?news=1>]. Accessed 15 February 2021.

[7] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[8] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[9] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>], Accessed 15 February 2021.

[10] World Health Organization. "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

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

### 2.3.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence to show that Papua New Guinea operates an electronic reporting surveillance system at both the national and the sub-national levels. There is evidence that the country is rolling out an electronic surveillance network set up at the national level; but it is unclear how complete this system is, and evidence indicates that it may not yet be operational at the subnational level. According to the Melbourne School of Population and Global Health, there are two systems of surveillance, and both have to do with collecting information on mortality. "The DHIS [District Health Information System] is a software platform specific to PNG for reporting health facility discharge data and NHIS [National Health Information System], is a paper-based system for reporting aggregate data from rural areas. To improve completeness and timeliness, eNHIS was introduced in 2014. eNHIS is an electronic version of NHIS that incorporates all aggregate data. It has been piloted in five of PNG's 22 provinces with an expected rollout to the entire country by the end of 2019. eNHIS enables notification of health facility births and deaths to the National Department of Health, and provides morbidity-coded details of deaths and discharges." There is no more recent evidence that the system has been fully rolled out, or that it collects data other than health facility births and deaths. [1] Previous work to improve the surveillance system was done in 2015 and published in a paper titled "Health information system strengthening and malaria elimination in Papua New Guinea". This was a smaller-scale project and focused on malaria specifically. [2] There is no additional relevant information shared via a public website by the Department of Health. [3] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [4]

[1] Melbourne School of Population and Global Health. 27 April 2018. "Establishing mortality surveillance in Papua New Guinea". [<https://crvsgateway.info/Establishing-mortality-surveillance-in-Papua-New-Guinea~1279>]. Accessed 15 February 2021.

[2] Rosewell, A., et al. 2017. "Health information system strengthening and malaria elimination in Papua New Guinea". *Malaria Journal*, 16[1]. [<https://malariajournal.biomedcentral.com/articles/10.1186/s12936-017-1910-0>]. Accessed 15 February 2021.

[3] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[4] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

### 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 to show that Papua New Guinea has an electronic reporting surveillance system that collects ongoing or real-time laboratory data. There is evidence that the country is rolling out an electronic surveillance network set up at the national level; but no evidence that collects information from laboratories. Further, it is unclear how complete the system is. According to the Melbourne School of Population and Global Health, there are two systems of surveillance, and both have to do with collecting information on mortality. "The DHIS [District Health Information System] is a software platform specific to PNG for reporting health facility discharge data and NHIS [National Health Information System], is a paper-based system for reporting aggregate data from rural areas. To improve completeness and timeliness, eNHIS was introduced in 2014. eNHIS is an electronic version of NHIS that incorporates all aggregate data. It has been piloted in five of PNG's 22 provinces with an expected rollout to the entire country by the end of 2019. eNHIS enables notification of health facility births and deaths to the National Department of Health, and provides morbidity-coded details of deaths and



discharges." There is no more recent evidence that the system has been fully rolled out, or that it collects data other than health facility births and deaths. [1] Previous work to improve the surveillance system was done in 2015 and published in a paper titled "Health information system strengthening and malaria elimination in Papua New Guinea". This was a smaller-scale project and focused on malaria specifically. [2] There is no additional relevant information shared via a public website by the Department of Health. [3] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [4]

[1] Melbourne School of Population and Global Health. 27 April 2018. "Establishing mortality surveillance in Papua New Guinea". [<https://crvsgateway.info/Establishing-mortality-surveillance-in-Papua-New-Guinea~1279>]. Accessed 15 February 2021.

[2] Rosewell, A., et al. 2017. "Health information system strengthening and malaria elimination in Papua New Guinea". *Malaria Journal*, 16[1]. [<https://malariajournal.biomedcentral.com/articles/10.1186/s12936-017-1910-0>]. Accessed 15 February 2021.

[3] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[4] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 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 evidence that electronic health records are commonly in use in Papua New Guinea. There is no relevant information shared via the public website of the Department of Health. [1] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] The World Health Organization (WHO) Papua New Guinea Country Cooperation Strategy 2016-2020 does not mention electronic record keeping. [3]

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020". [<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

#### 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 evidence that Papua New Guinea's national public health system has access to electronic health records of individuals in the country, nor that such electronic records are commonly kept. There is no relevant information shared via the public website of the Department of Health. [1] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] The World Health Organization (WHO) Papua New Guinea Country Cooperation Strategy 2016-2020 does not mention electronic record keeping. [3]

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

### 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 public evidence that Papua New Guinea has data standards to ensure that electronic patient data is comparable, nor that electronic patient records are commonly kept. There is no relevant information shared via the public website of the Department of Health. [1] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] The World Health Organization (WHO) Papua New Guinea Country Cooperation Strategy 2016-2020 does not mention electronic record keeping or data standards. [3]

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

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

### 2.4.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data. There is no relevant information shared via the websites for the Department of Health; Department of Agriculture and Livestock; the Conservation and Environment Protection; the World Health Organization (WHO) Papua New Guinea country profile; or the WHO Regional Office for the Western Pacific Region website. [1,2,3,4,5] The Food and Agriculture Organization of the United Nations (FAO) announced in 2019 that Papua New Guinea was launching a One Health country plan, but such a plan cannot be located on a public website. [6] There is no relevant information in the WHO Papua New Guinea Country Cooperation Strategy 2016-2020. [7]

[1] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Conservation and Environment Protection Authority. [<http://www.pngcepa.com/>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>]. Accessed 15 February 2021.

[5] World Health Organization. "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

[6] Food and Agriculture Organization of the United Nations (FAO). 20 June 2019. "One Health Country Plan vital to improve food safety and nutrition". [<http://www.fao.org/papua-new-guinea/news/detail-events/en/c/1203035/>]. Accessed 15 February 2021.

[7] World Health Organization (WHO). "Papua New Guinea Country Cooperation Strategy 2016-2020".

[<https://iris.wpro.who.int/bitstream/handle/10665.1/13444/WPRO-2016-DPM-005-eng.pdf?ua=1>]. Accessed 15 February 2021.

## 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 insufficient evidence to show that Papua New Guinea makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other formats) on government websites. The only exception is the government's sharing of data about the COVID-19 pandemic via a dedicated website, as well as on a webpage of the Department of Health's website. [1,2] Date stamps on data releases on the dedicated COVID-19 website indicate that it is updated multiple times a week. [2] There is no other relevant information shared via the websites of the Department of Health; Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Papua New Guinea World Health Organization (WHO) country page. [3,4,5,6] The government has published statistics on disease patterns within its National Health Plan 2011-2020; however, this was last released in June 2010. [7]

[1] Department of Health. "COVID-19-Pandemic". [<https://www.health.gov.pg/subindex.php?news=1>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[5] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[6] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>], Accessed

15 February 2021.

[7] Government of Papua New Guinea. June 2010. "National Health Plan 2011-2020: Volume 2 (Part A), Reference Data and National Health Pro&#64257;le." [https://www.medbox.org/pdf/5e148832db60a2044c2d4ded]. Accessed 15 February 2021.

### 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**

Papua New Guinea makes de-identified COVID-19 surveillance data available on government websites, but there is insufficient evidence to show that data is updated on a daily basis. The government shares data about the COVID-19 pandemic via a dedicated website, as well as on a webpage of the Department of Health's website. [1,2] Date stamps on data releases on the dedicated COVID-19 website at the time of research were 2-3 days old. Information releases and situation reports from the past year indicate that COVID-19 data is generally updated multiple times a week, but there is no definitive description of data release frequency. [2] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [3]

[1] Department of Health. "COVID-19-Pandemic". [https://www.health.gov.pg/subindex.php?news=1]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [https://covid19.info.gov.pg/]. Accessed 15 February 2021.

[3] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

## 2.4.4 Ethical considerations during surveillance

### 2.4.4a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has legislation or regulations that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. The Papua New Guinea constitution states that "every person has the right to reasonable privacy in respect of his private and family life, his communications with other persons and his personal papers and effects, except to the extent that the exercise of that right is regulated or restricted by a law that complies with Section 38 (general qualifications on qualified rights)." There is no explicit mention of health or technological data being covered under "'privacy' in the constitution. [1] The country has more general data protection laws in place through the National Information and Communications Technology Act of 2009 that repeat the same passage from the constitution about "the right to reasonable privacy", but again, these provisions do not appear to be specific enough to apply to animal health surveillance activities. [2] There is no evidence of other relevant legislation reported by the Food and Agriculture Organization of the United Nations' FAOLEX database. [3] There is no additional relevant information shared via a public websites by the Department of Health. [4] There is no evidence that Papua New

Guinea has a national public health insitute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Government of Papua New Guinea. 16th September 1975. "Constitution of the Independent State of Papua New Guinea". [http://www.paclii.org/pg/legis/consol\_act/cotisopng534/]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "National Information and Communications Technology Act 2009". [https://www.nicta.gov.pg/legislative/acts/]. Accessed 15 February 2021.

[3] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".

[http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG]. Accessed 15 February 2021.

[4] Department of Health. [https://www.health.gov.pg/]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

#### 2.4.4b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has legislation and/or regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, let alone such legislation that includes mention of protections from cyber attacks. The Papua New Guinea constitution states that "every person has the right to reasonable privacy in respect of his private and family life, his communications with other persons and his personal papers and effects, except to the extent that the exercise of that right is regulated or restricted by a law that complies with Section 38 (general qualifications on qualified rights)." There is no explicit mention of health or technological data being covered under "'privacy' in the constitution. [1] The country has more general data protection laws in place through the National Information and Communications Technology Act of 2009 that repeat the same passage from the constitution about "the right to reasonable privacy", but again, these provisions do not appear to be specific enough to apply to animal health surveillance activities. [2] There is no evidence of other relevant legislation reported by the Food and Agriculture Organization of the United Nations' FAOLEX database. [3] There is no additional relevant information shared via a public websites by the Department of Health. [4] There is no evidence that Papua New Guinea has a national public health insitute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Government of Papua New Guinea. 16th September 1975. "Constitution of the Independent State of Papua New Guinea". [http://www.paclii.org/pg/legis/consol\_act/cotisopng534/]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "National Information and Communications Technology Act 2009". [https://www.nicta.gov.pg/legislative/acts/]. Accessed 15 February 2021.

[3] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".

[http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG]. Accessed 15 February 2021.

[4] Department of Health. [https://www.health.gov.pg/]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 2021.

## 2.4.5 International data sharing

### 2.4.5a

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

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

**Current Year Score: 0**

There is insufficient evidence to show that the Papua New Guinea government has made a commitment via public statements, legislation, or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region, whether for one disease or multiple diseases. A press release from the 26th Papua New Guinea - Australia Ministerial Forum's Joint Communique, in April of 2018 mentions that information about health security will be shared between Papua New Guinea and its neighbors in the South Pacific region. During the Forum, ministers acknowledged the importance of regional health security and agreed to cooperate further to contain and avoid infectious disease threats, including through Australia's Health Security Initiative in the Indo-Pacific. [1] However, this information does not directly deal with surveillance data during a public health emergency. Although Papua New Guinea is part of the Pacific Public Health Surveillance Network (PPHSN), there is no evidence of a requirement or commitment to share data; no such information can be found on the public websites of the PPHSN or the Pacific Community. [2,3] There is no other evidence of a cooperative agreement to share surveillance data during a public health emergency with other countries in the region via the Department of Health. [4] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [5]

[1] Department of Foreign Affairs, Australia. 6 April 2018. "26th Papua New Guinea - Australia Ministerial Forum - Joint Communique". [<https://www.dfat.gov.au/geo/papua-new-guinea/Pages/26th-australia-papua-new-guinea-ministerial-forum-joint-communique>]. Accessed 15 February 2021.

[2] Pacific Public Health Surveillance Network. "PPHSN Core Member". [<https://www.pphsn.net/Structure/CoreMembers.htm>]. Accessed 15 February 2021.

[3] Pacific Community. [<https://www.spc.int>]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[5] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 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 evidence that Papua New Guinea has a national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency, whether in response to active emergencies or to prepare for future emergencies. There is no relevant information shared via the public website of the Department of Health. [1] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] The Food and Agriculture Organization of the United Nations (FAO) announced in 2019 that Papua New Guinea was launching a One Health country plan, but such a plan cannot be located on a public website. [3] Papua New Guinea has launched contact-tracing efforts in response to the COVID-19 pandemic, but there is no evidence that this contact tracing has occurred as part of a broader plan that could be applied to other public health emergencies. [4]

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] Food and Agriculture Organization of the United Nations (FAO). "One Health Country Plan vital to improve food safety and nutrition". [<http://www.fao.org/papua-new-guinea/news/detail-events/en/c/1203035/>]. Accessed 15 February 2021.

[4] Government of Papua New Guinea. 2 January 2021. "Contact Tracing Continues in Parts of PNG".

[<https://covid19.info.gov.pg/index.php/2021/01/03/contact-tracing-continues-in-parts-of-png/>]. Accessed 15 February 2021.

### 2.5.1b

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

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

**Current Year Score: 0**

There is no evidence that Papua New Guinea provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, whether economic support (paycheck, job security) or medical attention. There is no relevant information shared via the public website of the Department of Health. There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] The Food and Agriculture Organization of the United Nations (FAO) announced in 2019 that Papua New Guinea was launching a One Health country plan, but such a plan cannot be located on a public website. [3] The country's 1953 Quarantine Act does not include any relevant provisions. [4] The Food and Agriculture Organization of the United Nations' FAOLEX database does not mention any relevant legislation for Papua New Guinea. [5] There is no evidence that Papua New Guinea has issued such a plan in response to the COVID-19 pandemic, especially such a plan that would apply to public health emergencies generally. [6] The country has launched an economic support program in response to the pandemic, but there is no evidence that it contains specific relevant provisions. [7]

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] Food and Agriculture Organization of the United Nations (FAO). "One Health Country Plan vital to improve food safety and nutrition". [<http://www.fao.org/papua-new-guinea/news/detail-events/en/c/1203035/>]. Accessed 15 February 2021.

[4] Government of Papua New Guinea. 1953. "Chapter 234: Quarantine Act of 1953".

[[http://www.paclii.org/pg/legis/consol\\_act/qa1953131.pdf](http://www.paclii.org/pg/legis/consol_act/qa1953131.pdf)]. Accessed 15 February 2021.

[5] Food and Agriculture Organization of the United Nations. "FAOLEX: Papua New Guinea".

[<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=PNG>]. Accessed 15 February 2021.

[6] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19".

[<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[7] World Bank. 10 July 2020. "Papua New Guinea in the Time of COVID-19 - From Relief to Recovery".

[<https://www.worldbank.org/en/country/png/publication/papua-new-guinea-in-the-time-of-covid-19---from-relief-to-recovery>]. Accessed 15 February 2021.

### 2.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea makes 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. Papua New Guinea makes de-identified COVID-19 surveillance data available on government websites, but it does not include information about the source of infections or contact tracing. The government shares data about the COVID-19 pandemic via a dedicated website, as well as on a webpage of the Department of Health's website. Reports do contain information about the number of individuals in quarantine, but no direct reports about the numbers of traced contacts. Further, there is insufficient evidence to show that data is updated on a daily basis. [1,2,3] Date stamps on data releases on the dedicated COVID-19 website at the time of research were 2-3 days old. Information releases and situation reports from the past year indicate that COVID-19 data is generally updated multiple times a week, but there is no definitive description of data release frequency. [2] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [4]

[1] Department of Health. "COVID-19-Pandemic". [<https://www.health.gov.pg/subindex.php?news=1>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19".

[<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Health. 15 February 2021. "Coronavirus Disease 2019 (COVID-19) Health Situation Report #60".

[[https://covid19.info.gov.pg/files/Situation%20Report/20210215\\_PNG%20COVID-19%20Health%20Situation%20Report%2060.pdf](https://covid19.info.gov.pg/files/Situation%20Report/20210215_PNG%20COVID-19%20Health%20Situation%20Report%2060.pdf)]. Accessed 20 February 2021.

[4] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

## 2.5.2 Point of entry management

### 2.5.2a

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

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



**Current Year Score: 0**

There is no evidence that Papua New Guinea has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency, whether in response to active emergencies or to prepare for future emergencies. The country's 1953 Quarantine Act does not include any relevant provisions. [1] The 2006 National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea describes the importance of border controls and quarantining measures for controlling an outbreak, but does not contain a joint plan or cooperative agreement. [2] The Papua New Guinea Emergency Preparedness and Response Plan for COVID-19 describes the importance of managing quarantine at points of entry, and contact-tracing, and identifies the Immigrations and Citizenship Authority as a key entity in pandemic response, but does not include a relevant plan or agreement. In any case, the document applies to the COVID-19 pandemic and not to public health emergencies generally. [3] There is no other relevant information shared via the public website of the Department of Health, the Immigrations and Customs Authority, or Customs Service. [4,5,6] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [7]

[1] Government of Papua New Guinea. 1953. "Chapter 234: Quarantine Act of 1953". [http://www.paclii.org/pg/legis/consol\_act/qa1953131.pdf]. Accessed 15 February 2021. Government of Papua New Guinea. 1953. "Chapter 234: Quarantine Act of 1953". [http://www.paclii.org/pg/legis/consol\_act/qa1953131.pdf]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea". [https://www.apaci.asia/images/Resources/Pandemic\_planning/papuanewguinea\_national\_contingency\_plan\_preparedness\_response\_influenza\_pandemic\_2006.pdf]. Accessed 15 February 2021.

[3] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf]. Accessed 15 February 2021.

[4] Department of Health. [http://www.health.gov.pg]. Accessed 15 February 2021.

[5] Immigration and Customs Authority. [https://ica.gov.pg/]. Accessed 15 February 2021.

[6] Customs Service. "Border Security". [http://customs.gov.pg/border-security/#]. Accessed 15 February 2021.

[7] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory". [https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea]. Accessed 15 February 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**

Papua New Guinea has an in-country field epidemiology training program (FETP), called the Papua New Guinea Field Epidemiology Training Program (FET-PNG) sponsored with technical and financial support from the National Department of Health, the World Health Organization, the US Centers for Disease Control and Prevention (CDC), the Thailand International Field Epidemiology Training Program, and the Australian Department of Foreign Affairs and Trade (DFAT) . [1,3] According to the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), Papua New Guinea had plans to launch a second, two-year advanced FETP in 2019, called Accelerating the Development of Evidence-based Policy and Practice. [4] There is no other evidence on Papua New Guinea government websites that this planned program has begun. There is no public information on whether resources are made available by the government for citizens to attend an epidemiological training program in another country. There is no relevant information shared via the public website of the Department of Health, U.S. Centers for Disease Control and Prevention, or TEPHINET. [2,3,4]

[1] World Health Organisation. 4th August 2014. "PNG first field epidemiologists' complete training".

[[http://mobile.wpro.who.int/papuanewguinea/mediacentre/field\\_epidemiology/en/](http://mobile.wpro.who.int/papuanewguinea/mediacentre/field_epidemiology/en/)]. Accessed 15 February 2021.

[2] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] U.S. Centers for Disease Control and Prevention. "Global Health - Papua New Guinea".

[<https://www.cdc.gov/globalhealth/countries/papua-new-guinea/default.htm>]. Accessed 15 February 2021.

[4] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Papua New Guinea".

[<https://www.tephinet.org/training-programs/papua-new-guinea-field-epidemiology-training-program>]. Accessed 15 February 2021.

**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 insufficient evidence to show that Papua New Guinea's available field epidemiology training programs explicitly include animal health professionals, nor that there is a specific animal health field epidemiology training program offered. Papua New Guinea has an in-country field epidemiology training program (FETP), called the Papua New Guinea Field Epidemiology Training Program (FET-PNG) sponsored with technical and financial support from the National Department of Health, the World Health Organization, the US Centers for Disease Control and Prevention (CDC), the Thailand International Field Epidemiology Training Program, and the Australian Department of Foreign Affairs and Trade (DFAT) . [1,3] Descriptions of this program do not mention the inclusion of veterinary officials. [1,3] According to the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), Papua New Guinea had plans to launch a second, two-year advanced FETP in 2019, called Accelerating the Development of Evidence-based Policy and Practice. [4] There is no mention of this program on Papua New Guinea government websites, including whether it includes veterinary professionals. There is no evidence of a separate program for animal health professionals. There is no relevant information shared via the public websites of the Department of Health, U.S. Centers for Disease Control and Prevention, or TEPHINET. [2,3,4]

[1] World Health Organisation. 4th August 2014. "PNG first field epidemiologists' complete training".

[[http://mobile.wpro.who.int/papuanewguinea/mediacentre/field\\_epidemiology/en/](http://mobile.wpro.who.int/papuanewguinea/mediacentre/field_epidemiology/en/)]. Accessed 15 February 2021.

[2] Department of Health. "Health Policy". [<http://www.health.gov.pg/pages/healthpolicyA.htm>]. Accessed September 1st 2018.

[3] U.S. Centers for Disease Control and Prevention. "Global Health - Papua New Guinea".

[<https://www.cdc.gov/globalhealth/countries/papua-new-guinea/default.htm>]. Accessed 15 February 2021.

[4] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Papua New Guinea".

[<https://www.tephinet.org/training-programs/papua-new-guinea-field-epidemiology-training-program>]. Accessed 15 February 2021.

## 2.6.2 Epidemiology workforce capacity

### 2.6.2a

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

Yes = 1, No = 0

Current Year Score: 1

2020

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

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

### 3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

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

##### 3.1.1a

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

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

Current Year Score: 0

There is no public evidence that Papua New Guinea has an overarching public health emergency plan that addresses planning for multiple communicable diseases with epidemic or pandemic potential. There are a "Disaster Management Act" of 1984 and a "National Disaster Mitigation Policy", written in 2010. The Disaster Management Act states its purpose as "being an Act to make provision with respect to emergencies arising out of epidemics, earthquakes, volcanic eruptions and other disasters, and for related purposes." The Departmental Head of the Department of Health is held responsible for health related disasters. [1] This is the only extent to which the law mentions health-related emergencies. The 2010 "National Disaster Mitigation Policy" does not mention health related emergencies or pandemics. [2] Papua New Guinea also has a National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, issued in 2006, and a Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in 2020; but neither of these are overarching plans for public health emergencies. [3,4] There is no other relevant information shared via

the public websites of the Department of Health or the National Disaster Centre. [5,6]

[1] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 2010. "National disaster mitigation policy". [[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea". [[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

### 3.1.1b

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

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

**Current Year Score: 0**

There is no public evidence that Papua New Guinea has an overarching public health emergency plan that addresses planning for multiple communicable diseases with epidemic or pandemic potential, let alone such a plan that has been updated in the last 3 years. There are a "Disaster Management Act" of 1984 and a "National Disaster Mitigation Policy", written in 2010. The Disaster Management Act states its purpose as "being an Act to make provision with respect to emergencies arising out of epidemics, earthquakes, volcanic eruptions and other disasters, and for related purposes." The Departmental Head of the Department of Health is held responsible for health related disasters. [1] This is the only extent to which the law mentions health-related emergencies. The 2010 "National Disaster Mitigation Policy" does not mention health related emergencies or pandemics. [2] Papua New Guinea also has a National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, issued in 2006, and a Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in 2020; but neither of these are overarching plans for public health emergencies. [3,4] There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [5,6]

[1] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 2010. "National disaster mitigation policy". [[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea". [[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

### 3.1.1c

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

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

**Current Year Score: 0**

There is no public evidence that Papua New Guinea has an overarching public health emergency plan that addresses planning for multiple communicable diseases with epidemic or pandemic potential, let alone such a plan that includes considerations for pediatric or other vulnerable populations. There are a "Disaster Management Act" of 1984 and a "National Disaster Mitigation Policy", written in 2010. The Disaster Management Act states its purpose as "being an Act to make provision with respect to emergencies arising out of epidemics, earthquakes, volcanic eruptions and other disasters, and for related purposes." The Departmental Head of the Department of Health is held responsible for health related disasters. [1] This is the only extent to which the law mentions health-related emergencies. The 2010 "National Disaster Mitigation Policy" does not mention health related emergencies or pandemics. [2] Papua New Guinea also has a National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, issued in 2006, and a Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in 2020; but neither of these are overarching plans for public health emergencies. [3,4] Moreover, neither contain sections dedicated to vulnerable or pediatric populations, though the influenza plan emphasizes the importance of certain interventions to protect children. [3,4] There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [5,6]

[1] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 2010. "National disaster mitigation policy". [[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea". [[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[6] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

### 3.1.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

### 3.1.2 Private sector involvement in response planning

#### 3.1.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence of a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. There is no publicly available evidence of a policy document that guides emergency response during outbreaks. The main emergency response policy document, written in 2010, is the National Disaster Mitigation Policy. This document does not address health emergencies, and also does not have information on any type of private sector response mechanism which can be used during an emergency situation. [1] The document does however, state that "donor agencies and international organisations assistance and support will be welcomed and these will be sought through normal administrative channels and arrangements." No further details of specific disaster related channels or mechanism is mentioned. [1] The 1984 Disaster Management Act also does not include any relevant information. [2] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, issued in 2006, mentions the importance of included the private sector in outbreak response, but does not describe a mechanism for doing so. [3] Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in 2020, states that "mechanism are in place [sic] for involvement of the Government and private sectors such as the health cluster to ensure multi-sector response". However, the plan does not describe what these mechanisms are. [4] A 2014 document, the Health Sector Partnership Policy, mentioned in a 2019 academic article appears to no longer be available for review via a public website. [5] There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [6,7]

[1] Government of Papua New Guinea. 2010. "The national disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Grundy, J., et al, 2019. "Independent State of Papua New Guinea Health System Review". Health Systems in Transition 9[1]. [<https://apps.who.int/iris/bitstream/handle/10665/280088/9789290226741-eng.pdf?sequence=5&isAllowed=y>]. Accessed 15 February 2021.

[6] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[7] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

### 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: 2**

There is evidence to show that Papua New Guinea has a policy, plan or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic, and there are guidelines for more than one disease. The country has individual disease plans that describe NPIs, including certain thresholds for their implementation. The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, issued in 2006, includes provisions for the introduction of NPIs such as social distancing. The plan organizes its outbreak response into six phases of increasing outbreak severity. Social distancing is introduced in Phase 5, at which point an outbreak is being contained or a pandemic averted. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in 2020, divides response into 4 phases: alert, containment, mitigation, and review. Each phase calls for escalation of NPIs, with the mitigation phase, defined by "human-tohuman transmission in clusters within the community", most firmly calling for social distancing, including the curtailing of mass gatherings, and implementation of work-from-home arrangements. [2] The main emergency response policy document, written in 2010, is the National Disaster Mitigation Policy and it does not contain any relevant information. [3] The 1984 Disaster Management Act also does not include any relevant information. [4] There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [5,6]

[1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. 2010. "The national disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[4] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>].

Accessed 15 February 2021.

[5] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[6] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 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: 0**

There is insufficient evidence that Papua New Guinea has activated its national emergency response plan for an infectious disease outbreak in the past year, and no evidence that the country has completed a national-level biological threat-focused exercise in the past year. According to a government description of the response to the COVID-19 pandemic, "the National Emergency Operations Center (NEOC) at the National Department of Health (NDOH) was activated as early as 27 January 2020, days before the global declaration of a public health emergency of international concern. Incident Management System was in place, with key staff identified for the critical areas of work." [1] However, Papua New Guinea does not have a stand-alone emergency response plan that covers public health emergencies, so the response to the COVID-19 pandemic would not count as an activation of the national emergency response plan. The National Disaster Mitigation Policy, a 2010 document, does not mention public health emergencies. [2] The World Health Organization (WHO) extranet list of all biological exercises shows that a simulation was conducted in Papua New Guinea in September 2018, but does not provide any details about the topic of the simulation exercise. [3] There do not appear to be any other online reports about this September 2018 exercise that would show what it focused on. There is no other relevant information shared via the public websites of the Department of Health; the Department of Agriculture; the National Disaster Centre; the WHO Papua New Guinea country profile; or the WHO Regional Office for the Western Pacific Region website. [4,5,6,7]

[1] Department of Health. 17 May 2020. "COVID-19 in Papua New Guinea First 100 Days of Health Sector Preparedness and Response". [<https://covid19.info.gov.pg/files/May%202020/100%20Days%20of%20COVID-19%20PNG%20Health%20Sector%20Response%20%282020-05-17%29%20NDOH%20FINAL.pdf>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 2010. "National disaster mitigation policy". [[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "Simulation Exercise: Papua New Guinea". [<https://extranet.who.int/sph/simulation-exercise?region=All&country=351#>]. Accessed 26 February 2021.

[4] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[6] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>]. Accessed 15 February 2021.

[7] World Health Organization (WHO). "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

### 3.2.1b

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

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

**Current Year Score: 0**

There is no evidence that Papua New Guinea has, in the past year, 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. According to a government description of the response to the COVID-19 pandemic, "the National Emergency Operations Center (NEOC) at the National Department of Health (NDOH) was activated as early as 27 January 2020, days before the global declaration of a public health emergency of international concern. Incident Management System was in place, with key staff identified for the critical areas of work." [1] However, there is no evidence of a list of gaps and best practices yet published about the COVID-19 response. The World Health Organization (WHO) extranet list of all biological exercises shows that a simulation was conducted in Papua New Guinea in September 2018, but does not provide



any details about the topic of the simulation exercise. [2] There do not appear to be any other online reports about this September 2018 exercise that would show what it focused on. There is no evidence that an After Action Review was published for the exercise. [3,4] There is no other relevant information shared via the public websites of the Department of Health; the Department of Agriculture; the National Disaster Centre; the WHO Papua New Guinea country profile; or the WHO Regional Office for the Western Pacific Region website. [5,6,7,8]

[1] Department of Health. 17 May 2020. "COVID-19 in Papua New Guinea First 100 Days of Health Sector Preparedness and Response". [<https://covid19.info.gov.pg/files/May%202020/100%20Days%20of%20COVID-19%20PNG%20Health%20Sector%20Response%20%282020-05-17%29%20NDOH%20FINAL.pdf>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "Simulation Exercise: Papua New Guinea". [<https://extranet.who.int/sph/simulation-exercise?region=All&country=351#>]. Accessed 26 February 2021.

[3] World Health Organization (WHO). "Strategic Partnership for Health Security and Emergency Preparedness (SPH) Portal: Papua New Guinea". [<https://extranet.who.int/sph/country/papua-new-guinea>]. Accessed 15 February 2021.

[4] World Health Organization (WHO). "After Action Review: Papua New Guinea". [<https://extranet.who.int/sph/after-action-review?region=All&country=351>]. Accessed 15 February 2021.

[5] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[6] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[7] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>]. Accessed 15 February 2021.

[8] World Health Organization (WHO). "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

## 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, in the past year, Papua New Guinea has undergone a national-level biological threat-focused exercise that has included private sector representatives. The World Health Organization (WHO) extranet list of all biological exercises shows that a simulation was conducted in Papua New Guinea in September 2018, but does not provide any details about the topic of the simulation exercise. [1] There do not appear to be any other online reports about this September 2018 exercise that would show what it focused on, including whether it included private sector representatives. [2,3] There is no other relevant information shared via the public websites of the Department of Health; the Department of Agriculture; the National Disaster Centre; the WHO Papua New Guinea country profile; or the WHO Regional Office for the Western Pacific Region website. [4,5,6,7]

[1] World Health Organization (WHO). "Simulation Exercise: Papua New Guinea". [<https://extranet.who.int/sph/simulation-exercise?region=All&country=351#>]. Accessed 26 February 2021.

[2] World Health Organization (WHO). "Strategic Partnership for Health Security and Emergency Preparedness (SPH) Portal: Papua New Guinea". [<https://extranet.who.int/sph/country/papua-new-guinea>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "After Action Review: Papua New Guinea". [<https://extranet.who.int/sph/after-action-review?region=All&country=351>]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[5] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[6] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>]. Accessed 15 February 2021.

[7] World Health Organization (WHO). "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

## 3.3 EMERGENCY RESPONSE OPERATION

### 3.3.1 Emergency response operation

#### 3.3.1a

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

Yes = 1, No = 0

**Current Year Score: 1**

There is evidence that Papua New Guinea has both a generalized emergency operations centre as well as a more specialised health-focused centre. The National Health Plan 2011-2020 for Papua New Guinea states that the National Department of Health, with support from WHO and AusAid, established the Command and Control Centre as a surveillance and response unit in the wake of the H1N1 pandemic. Per the plan, the Command Centre "now investigates and provides regular reporting on all infectious disease outbreaks in Papua New Guinea". [1] Additionally, there is a National Disaster Centre (NDC) which was established by the Disaster Management Act 1984, and exists under legislation to provide the necessary and appropriate disaster management services to the people of Papua New Guinea. There are two divisions at NDC; Risk Management (RM) and Community Government Liaison (CGL). The Risk Management Division deals with proactive matters through research, analysis, awareness, education and training, while the Community Government Liaison handles rapid response and operations. The Centre supervises the national state of preparedness for emergencies and disasters, among which it lists biological hazards. It defines biological hazards as "processes of organic origin or those conveyed by biological vectors, including exposure to pathogenic micro organisms, toxins and bio-active substances". Within biological hazards it lists the following examples: outbreaks of epidemic diseases in plants or animals, and contagion and extensive infestation. [2]

[1] Government of Papua New Guinea. June 2010. "National Health Plan 2011-2020: Volume 2 (Part A), Reference Data and National Health Pro&#64257;le." [<https://www.medbox.org/pdf/5e148832db60a2044c2d4ded>]. Accessed 15 February 2021.

[2] Papua New Guinea National Disaster Centre. "Hazards in PNG". [[https://pngndc.gov.pg/?page\\_id=55](https://pngndc.gov.pg/?page_id=55)]. Accessed 15 February 2021.

#### 3.3.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea's Emergency Operations Center (EOC) is required to conduct a drill for a public health emergency scenario at least once per year or that it conducts a drill at least once per year. Papua New Guinea has two EOCs: for either the Department of Health's Command and Control Centre or the National Disaster Centre. There are no relevant provisions regarding drills for either in the Disaster Management Act or the National Disaster Mitigation Policy. [1,2]

There is no relevant information shared via the public websites of the Department of Health, the National Disaster Centre, or the Papua New Guinea Defence Force. [3,4,5] There is evidence of drills having been conducted within the past few years, but these are usually connected to specific funding and programmes by external organisations. An example is a Tsunami drill in April of 2018, funded by the Japanese Government. [6] The National Disaster Centre does not appear to publish annual reports.

[1] Government of Papua New Guinea. 1984. "Disaster Management Act". [<http://www.ifrc.org/docs/idrl/323EN.pdf>]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. 2010. "National disaster mitigation policy". [[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[3] Papua New Guinea National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[6] United Nations Development Network. 9th April 2018. "Tsunami drills piloted in two provinces". [[http://www.pg.undp.org/content/papua\\_new\\_guinea/en/home/presscenter/pressreleases/2018/04/09/tsunami-drills-piloted-in-two-provinces.html](http://www.pg.undp.org/content/papua_new_guinea/en/home/presscenter/pressreleases/2018/04/09/tsunami-drills-piloted-in-two-provinces.html)]. Accessed 15 February 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 insufficient evidence to show that the National Disaster Centre or the Department of Health's Command and Control Centre has conducted coordinated response or exercise within 120 minutes to respond to a public health emergency or scenario. According to media reports, Papua New Guinea declared a state of emergency in response to the COVID-19 pandemic on March 22, 2020, 9 days after the first identified case, a migrant worker, had entered the country. There is no information about how much time elapsed after the case was identified before a state of emergency was declared, or when a coordinated response was initiated. [1] On the Department of Health website, links to archived "Health Situation Reports" dating to the early part of the pandemic are broken, making it difficult to assess the early actions taken by the government. [2] There is no other relevant information shared via the public websites of the National Disaster Centre or the Department of Health. [3,4]

[1] Lyons ,Kate. 22 March 2020. "Papua New Guinea declares state of emergency after first coronavirus case". [<https://www.theguardian.com/world/2020/mar/23/papua-new-guinea-declares-state-of-emergency-after-first-coronavirus-case>]. Accessed 15 February 2021.

[2] Department of Health. "Health Situation Reports". [<https://www.health.gov.pg/subindex.php?news=5>]. Accessed 15 February 2021.

[3] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

## 3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

#### 3.4.1a

Does the country meet one of the following criteria?

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

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

**Current Year Score: 0**

There is no public evidence the Papua New Guinea public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event, nor that the country has 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. There is no relevant information shared via the public websites of the Department of Health, the National Disaster Centre, or the World Health Organization's country page for Papua New Guinea. [1,2,3,4]

[1] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] World Health Organization (WHO). "Papua New Guinea". [<https://www.who.int/papuanewguinea>], Accessed 15 February 2021.

[4] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

## 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: 1**

There is evidence to show that Papua New Guinea has a risk communication plan that outlines how messages will reach populations and sectors with different communications need; however, this plan was developed specifically for the COVID-19 pandemic. The National Contingency Plan for Preparedness and Response for Influenza Pandemic for Papua New Guinea, a 2006 document, describes the importance of risk communication for a complete influenza response plan, but does not itself contain such a plan. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, contains more detailed plans for risk communication, such as "Develop communication products targeting various audiences: public, health workers and facilities, schools, private sector and make them available to

provinces and all partners", among several other planned interventions. This plan applies specifically to the COVID-19 pandemic, and there is no evidence that it is also intended as a plan for public health emergencies more generally. [2] In April 2020, the government released a much more detailed communications plan for COVID-19 that includes extensive planning for risk communication, with different messages for different audiences. This plan includes provisions for translating and testing risk communication messages in "target audiences (Tok Pisin, Motu, Enga and other major languages)". This plan also only covers the COVID-19 pandemic and not public health emergencies in general. [3] There is no other relevant information shared via a public website by the Department of Health or the National Disaster Centre. [4,5]

[1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Department of Health. April 2020. "Communications Plan for Coronavirus Disease 2019 (COVID-19) (Risk Communication and Community Engagement)". [[https://www.health.gov.pg/covid19/PNGCOVID-19CP\(NDOH%20ver04\).pdf](https://www.health.gov.pg/covid19/PNGCOVID-19CP(NDOH%20ver04).pdf)]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

### 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: 1**

There is evidence to show that Papua New Guinea has a risk communication plan, although this plan was developed specifically for the COVID-19 pandemic. The National Contingency Plan for Preparedness and Response for Influenza Pandemic for Papua New Guinea, a 2006 document, describes the importance of risk communication for a complete influenza response plan, but does not itself contain such a plan. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, contains more detailed plans for risk communication, such as "Develop communication products targeting various audiences: public, health workers and facilities, schools, private sector and make them available to provinces and all partners", among several other planned interventions. This plan applies specifically to the COVID-19 pandemic, and there is no evidence that it is also intended as a plan for public health emergencies more generally. [2] In April 2020, the government released a much more detailed communications plan for COVID-19 that includes extensive planning for risk communication, with different messages for different audiences. This plan also only covers the COVID-19 pandemic. [3] There is no other relevant information shared via a public website by the Department of Health or the National Disaster Centre. [4,5]

[1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Department of Health. April 2020. "Communications Plan for Coronavirus Disease 2019 (COVID-19) (Risk Communication and Community Engagement)". [[https://www.health.gov.pg/covid19/PNGCOVID-19CP\(NDOH%20ver04\).pdf](https://www.health.gov.pg/covid19/PNGCOVID-19CP(NDOH%20ver04).pdf)]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

### 3.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence to show that Papua New Guinea has designated a primary spokesperson to the public during a public health emergency. The National Contingency Plan for Preparedness and Response for Influenza Pandemic for Papua New Guinea, a 2006 document, describes the importance of risk communication for a complete influenza response plan, but does not itself contain a risk communication plan. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, contains more detailed plans for risk communication, such as "Develop communication products targeting various audiences: public, health workers and facilities, schools, private sector and make them available to provinces and all partners", among several other planned interventions. However, this plan does not identify a specific position within the government as spokesperson. [2] In April 2020, the government released a much more detailed communications plan for COVID-19 that includes extensive planning for risk communication, with different messages for different audiences. This plan designates several different government positions as spokespersons for different topics related to pandemic response, including the prime minister, health minister "or designate", the Department of Health secretary, and a "communications team". This plan also only covers the COVID-19 pandemic. [3] There is no other relevant information shared via a public website by the Department of Health or the National Disaster Centre. [4,5]

[1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Department of Health. April 2020. "Communications Plan for Coronavirus Disease 2019 (COVID-19) (Risk Communication and Community Engagement)". [[https://www.health.gov.pg/covid19/PNGCOVID-19CP\(NDOH%20ver04\).pdf](https://www.health.gov.pg/covid19/PNGCOVID-19CP(NDOH%20ver04).pdf)]. Accessed 15 February 2021.

[4] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[5] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

## 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 evidence that, in the past year, Papua New Guinea's public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns; however, the system has been most active in sharing updates only during active emergencies. The Department of Health has a Facebook page which it has used throughout 2020 and early 2021 to provide updates on the COVID-19 pandemic in Papua New Guinea, including such information as case counts, and the location and number of new cases. Aside from COVID-19 related posts, there appear to be only infrequent posts in the last year, which are mostly promotional messages. [1] The Department of Health also has a Twitter page, but it appears to have been inactive since early 2018, and before that only infrequently shared posts. [2] There is no evidence that the National Disaster Centre has a social media presence. [3] There is no other relevant information shared via the public website of the Department of Health. [4]

[1] Facebook. "Papua New Guinea National Department of Health @Pngndoh ". [<https://www.facebook.com/PNGNDOH/>]. Accessed 26 February 2021.

[2] Twitter. "@1health3". [<https://twitter.com/1health3?lang=en>]. Accessed 26 February 2021.

[3] National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 26 February 2021.

[4] Department of Health. [<https://www.health.gov.pg/>]. Accessed 26 February 2021.

### 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 Papua New Guinea leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. There is no evidence of relevant media reports in national or international outlets. [1,2,3]

[1] Papua New Guinea Post-Courier. [<https://postcourier.com.pg/>]. Accessed 26 February 2021.

[2] The National (Papua New Guinea). [<https://www.thenational.com.pg/>]. Accessed 26 February 2021.

[3] British Broadcasting Corporation (BBC). "Papua New Guinea". [<https://www.bbc.com/news/topics/c50znx8v0wvt/papua-new-guinea>]. Accessed 26 February 2021.



## 3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

### 3.6.1 Internet users

#### 3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 11.21

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: 47.62

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, in the past year, Papua New Guinea has issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. There is no relevant information shared via a public website by the Department of Health; the Department of Agriculture and Livestock; the Immigrations and Customs Authority; or the Customs Service. [1,2,3,4] Papua New Guinea departments and ministers that are responsible for foreign affairs, trade, commerce, and industry do not have public websites. Publicly available documents describing Papua New Guinea's response to the COVID-19 pandemic do not indicate the existence of such restrictions. [5,6,7] There is no evidence of such restrictions in media reports. The International Trade Centre (ITC) reports no such restrictions for Papua New Guinea. [8] No mention of restrictions on the movement of goods could be found in a search of news media outlets.

[1] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Immigration and Customs Authority. [<https://ica.gov.pg/>]. Accessed 15 February 2021.

[4] Customs Service. "Border Security". [<http://customs.gov.pg/border-security/#>]. Accessed 15 February 2021.

[5] Department of Health. 17 May 2020. "COVID-19 in Papua New Guinea First 100 Days of Health Sector Preparedness and Response". [<https://covid19.info.gov.pg/files/May%202020/100%20Days%20of%20COVID-19%20PNG%20Health%20Sector%20Response%20%282020-05-17%29%20NDOH%20FINAL.pdf>]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[7] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

[8] International Trade Centre. "COVID-19 Temporary Trade Measures". [<https://www.macmap.org/covid19>]. Accessed 31 January 2021.

#### 3.7.1b

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

Yes = 0, No = 1

**Current Year Score: 1**

There is no evidence that Papua New Guinea has, in the past year, issued a restriction, without international/bilateral support, on the export/import of non-medical goods due to an infectious disease outbreak. The Disease Outbreak News of

the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them. [1] There is no relevant information shared via a public website by the Department of Health; the Department of Agriculture and Livestock; the Immigrations and Customs Authority; or the Customs Service. [2,3,4,5] Papua New Guinea departments and ministers that are responsible for foreign affairs, trade, commerce, and industry do not have public websites. Publicly available documents describing Papua New Guinea's response to the COVID-19 pandemic do not indicate the existence of such restrictions. [6,7,8] There is no evidence of such restrictions in media reports. The International Trade Centre (ITC) reports no such restrictions for Papua New Guinea. [9] No mention of restrictions on the movement of goods could be found in a search of news media outlets.

- [1] World Health Organization (WHO). "Disease Outbreak News: Papua New Guinea". [<https://www.who.int/csr/don/archive/country/png/en/>]. Accessed 15 February 2021.
- [2] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.
- [3] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [4] Immigration and Customs Authority. [<https://ica.gov.pg/>]. Accessed 15 February 2021.
- [5] Customs Service. "Border Security". [<http://customs.gov.pg/border-security/#>]. Accessed 15 February 2021.
- [6] Department of Health. 17 May 2020. "COVID-19 in Papua New Guinea First 100 Days of Health Sector Preparedness and Response". [<https://covid19.info.gov.pg/files/May%202020/100%20Days%20of%20COVID-19%20PNG%20Health%20Sector%20Response%20%282020-05-17%29%20NDOH%20FINAL.pdf>]. Accessed 15 February 2021.
- [7] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.
- [8] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.
- [9] International Trade Centre. "COVID-19 Temporary Trade Measures". [<https://www.macmap.org/covid19>]. Accessed 31 January 2021.

## 3.7.2 Travel restrictions

### 3.7.2a

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

Yes = 0, No = 1

**Current Year Score: 0**

There is evidence that, in the past year, Papua New Guinea implemented a ban, without international or bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. On March 22, 2020, Papua New Guinea declared a state of emergency in response to the COVID-19 pandemic. [1] As part of this declaration, "incoming flights were totally cancelled, except for essential staff, supplies and logistics". [2] From the end of January until the time of this declaration, "Papua New Guinea restricted entry into the country people who have travelled to mainland China unless they have spent 14 consecutive days in a country outside of the designated region. It later expanded to all other affected countries as the pandemic evolved in the rest of the world". [2] In April 2020, the government announced a list of reasons that could be approved for travel. [3] By late April 2020, it was possible for foreigners to travel to Papua New Guinea with special approval from the Emergency Controller; and quarantine measures were announced for arriving international travelers. [4] Similar measures remained in effect as of early 2021. [5] There is no other evidence of travel bans shared via the public websites of the Department of Health; The Department of Agriculture and Livestock; the Immigrations and Customs Authority; or the Customs Service. [6,7,8,9] Papua New Guinea departments and ministers that are responsible for

foreign affairs, trade, commerce, and industry do not have public websites. The Disease Outbreak News of the World Health Organisation (WHO) does not list any relevant bans, or disease outbreaks that prompted them. [10]

- [1] Lyons ,Kate. 22 March 2020. "Papua New Guinea declares state of emergency after first coronavirus case". [https://www.theguardian.com/world/2020/mar/23/papua-new-guinea-declares-state-of-emergency-after-first-coronavirus-case]. Accessed 15 February 2021.
- [2] Department of Health. 17 May 2020. "COVID-19 in Papua New Guinea First 100 Days of Health Sector Preparedness and Response". [https://covid19.info.gov.pg/files/May%202020/100%20Days%20of%20COVID-19%20PNG%20Health%20Sector%20Response%20%282020-05-17%29%20NDOH%20FINAL.pdf]. Accessed 15 February 2021.
- [3] Government of Papua New Guinea. 10 April 2020. "Emergency Direction—Valid Reasons for Travel". [https://covid19.info.gov.pg/files/16-04-2020/Direction-Reasons%20for%20Travel%2010%20April.pdf]. Accessed 28 February 2021.
- [4] Government of Papua New Guinea. 29 April 2020. "Quarantine Instructions—International Travelers". [https://covid19.info.gov.pg/files/28042020/Quarantine%20Instructions%20International%20travellers.pdf]. Accessed 28 February 2021.
- [5] Office of the Controller. 20 January 2021. "Measure No. 02—International Travel Measures". [https://www.airniugini.com.pg/wp-content/uploads/2021/01/Measure-2-InternationalTravel-20.01.21.pdf]. Accessed 28 February 2021.
- [6] Department of Health. [http://www.health.gov.pg]. Accessed 15 February 2021.
- [7] Department of Agriculture and Livestock. [https://www.agriculture.gov.pg/]. Accessed 15 February 2021.
- [8] Immigration and Customs Authority. [https://ica.gov.pg/]. Accessed 15 February 2021.
- [9] Customs Service. "Border Security". [http://customs.gov.pg/border-security/#]. Accessed 15 February 2021.
- [10] World Health Organization (WHO). "Disease Outbreak News: Papua New Guinea". [https://www.who.int/csr/don/archive/country/png/en/]. Accessed 15 February 2021.

## 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: 6.99

2018

WHO; national sources

#### 4.1.1b

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

Input number

**Current Year Score: 45.48**

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 to show that Papua New Guinea has 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. There is a health workforce strategy, but it is more than five years old. The most recent document, "Health Sector Human Resource Policy" was drafted in 2013 and addresses the shortage of health staff and lays out workforce strategies. [1] There is no evidence of a more recent strategy. There is no relevant information shared via the public websites of the Department of Health, the Department of Education, or the Department of Labour and Industrial Relations (the latter of which has a website dedicated only to work permits). [2,3,4] The World Health Organization's Global Health Workforce Alliance website for Papua New Guinea does not contain any more recent relevant information. [5]

[1] Government of Papua New Guinea. 2013. "Health Sector Human Resource Policy".  
[[https://www.health.gov.pg/pdf/HRH%20fP\\_IG\\_2014.pdf](https://www.health.gov.pg/pdf/HRH%20fP_IG_2014.pdf)]. Accessed 15 February 2021.

[2] Department of Health. [<http://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Education. Education.gov.pg. [<https://www.education.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Labour and Industrial Relations. "Work PERmits". [<https://www.workpermits.gov.pg/>]. Accessed 15 February 2021.

[5] World Health Organization (WHO). "Global Health Workforce Alliance Country responses-Papua New Guinea".  
[<http://www.who.int/workforcealliance/countries/png/en/>]. Accessed 15 February 2021.

### 4.1.2 Facilities capacity

#### 4.1.2a

**Hospital beds per 100,000 people**

Input number

**Current Year Score: 317.5**

2008-2015

WHO/World Bank; national sources

#### 4.1.2b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence to show that Papua New Guinea 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. There is evidence of facilities that the government or hospitals describe as isolation facilities, but there is not enough information about them to show that they are biocontainment facilities or isolation units for patients with highly infectious diseases. A 2013 post on the website of the Port Moresby General Hospital describes the opening of a "new isolation ward" for tuberculosis patients, with "six isolation rooms that meet international standards for isolation of airborne infections". However, no additional details are provided about the facility. [1] During the COVID-19 pandemic, there were multiple government announcements of new isolation wards or units for COVID-19 patients that were either open or still under construction as of early 2021. However, these posts also did not include details about such facilities' precise capabilities. [2,3] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, describes standards for the establishing of isolation units, but does not mention whether any exist. There is no publicly available information via the websites for the Pacific International Hospital, Port Moresby General Hospital, Kudjip Nazarene Hospital, or the Department of Health. [4,5,6,7,8]

[1] Port Moresby General Hospital. 23 September 2013. "New isolation ward boosts the fight against TB in PNG".

[<https://www.pomgen.gov.pg/new-isolation-ward-boosts-the-fight-against-tb-in-png/>]. Accessed 15 February 2021.

[2] Western Highlands Provincial Health Authority. 5 June 2020. "New Isolation Unit at Mt Hagen Hospital opened".

[<https://www.whhs.gov.pg/2020/06/new-isolation-unit-at-mt-hagen-hospital-opened/>]. Accessed 15 February 2021.

[3] Western Highlands Provincial Health Authority. 8 February 2021. "Work progresses well on new Covid-19 quarantine and isolation unit". [<https://www.whhs.gov.pg/2021/02/work-progresses-well-on-new-covid-19-quarantine-and-isolation-unit-2/>]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Pacific International Hospital. [<https://www.pihpng.com/>]. Accessed 15 February 2021.

[6] Port Moresby General Hospital. [<http://www.pomgen.gov.pg>]. Accessed 15 February 2021.

[7] Kudjip Nazarene Hospital. [<http://nazpng.org/hospital/>]. Accessed 15 February 2021.

[8] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.

#### 4.1.2c

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

- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?

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

Yes = 1, No = 0

**Current Year Score: 1**

There is some evidence to show that Papua New Guinea has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years, but not that it has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. There is evidence of facilities that the government or hospitals describe as isolation facilities, but there is not enough information about them to show that they are biocontainment facilities or isolation units for patients with highly infectious diseases. A 2013 post on the website of the Port Moresby General Hospital describes the opening of a "new isolation ward" for tuberculosis patients, with "six isolation rooms that meet international standards for isolation of airborne infections" [1] During the COVID-19 pandemic, there were multiple government announcements of new isolation wards or units for COVID-19 patients that were either open or still under construction as of early 2021. [2,3] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, describes standards for the establishing of isolation units, and mentions the need for expansion of capacity at different stages of the pandemic, but does not include a plan for expanding capacity. [4] There is no relevant publicly available information shared via the websites for the Pacific International Hospital, Port Moresby General Hospital, Kudjip Nazarene Hospital, or the Department of health. [5,6,7,8] The 2006 National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea describes the Defence Force and hospital as being responsible for expanding isolation capacity. It also describes a pandemic preparedness action of "identify additional sites for isolation facilities", an action which it describes as "started". It also describes an action of establishing isolation wards in four referral hospitals, but the document does not include a plan for expanding capacity; in any case, it is more than a decade old. [9]

- [1] Port Moresby General Hospital. 23 September 2013. "New isolation ward boosts the fight against TB in PNG". [<https://www.pomgen.gov.pg/new-isolation-ward-boosts-the-fight-against-tb-in-png/>]. Accessed 15 February 2021.
- [2] Western Highlands Provincial Health Authority. 5 June 2020. "New Isolation Unit at Mt Hagen Hospital opened". [<https://www.whhs.gov.pg/2020/06/new-isolation-unit-at-mt-hagen-hospital-opened/>]. Accessed 15 February 2021.
- [3] Western Highlands Provincial Health Authority. 8 February 2021. "Work progresses well on new Covid-19 quarantine and isolation unit". [<https://www.whhs.gov.pg/2021/02/work-progresses-well-on-new-covid-19-quarantine-and-isolation-unit-2/>]. Accessed 15 February 2021.
- [4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.
- [5] Pacific International Hospital. [<https://www.pihpng.com/>]. Accessed 15 February 2021.
- [6] Port Moresby General Hospital. [<http://www.pomgen.gov.pg>]. Accessed 15 February 2021.
- [7] Kudjip Nazarene Hospital. [<http://nazpng.org/hospital/>]. Accessed 15 February 2021.
- [8] Department of Health. [<http://www.health.gov.pg>]. Accessed 15 February 2021.
- [9] Government of Papua New Guinea. 2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea". [[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 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**

Papua New Guinea has national procurement protocols in place which can be utilised by the Department of Health and the Department of Agriculture and Livestock for the acquisition of laboratory supplies, but insufficient evidence to show that both departments can use these protocols to procure medical supplies.

The National Procurement Commission, established in April 2019, provides via its website information procurement regulations, as well as instructions and forms for any procurement of goods, works, or services by a public agency in Papua New Guinea. Although these protocols and tools are not specific to laboratory needs, they can be used by all government agencies for the procurement of goods. [1] Bid documents are shared on the commission's website; there is evidence that they have been utilised for the construction of laboratories at secondary schools. [2,3,4]

In terms of medical supplies, the website provided what appears to be a list of approved suppliers for medical supplies in response to the COVID-19 pandemic, but there is no other evidence that the portal has been used for medical supplies. [5] The commission was established under the National Procurement Act, 2018, which provides additional regulations on procurement, including detailing rules for different values of contracts. [6] Papua New Guinea also has a Medical Supplies Procurement & Distribution (MSPD) entity, a branch of the Department of Health, which works in partnership with the department to supply both medicine and medical supplies to the various hospitals around the country. However, there is no public evidence to suggest that this can be utilized by the Department of Agriculture and Livestock for the acquisition of laboratory needs or medical supplies. [7]

Despite the existence of these protocols, past studies have described weaknesses in Papua New Guinea's public procurement system. According to a 2017 paper in the Malaria Journal, the procurement system was not robust at the time and there were major issues to consistent supply and competitive pricing. Some of these issues include the lack of an established system for handling incoming orders, which were handled in a first come, fist served base. Further, there was no competitive buying against international costs. [8,9] It is unclear whether the new regulations and commission have improved these issues. There is no additional relevant information shared via the public websites the Department of Health or the Department of Agriculture and Livestock . [10,11]

[1] National Procurement Commission. [<http://www.procurement.gov.pg/>]. Accessed 15 February 2021.

[2] National Procurement Commission. "Tender Notices". [<http://www.procurement.gov.pg/tender-notices/page/2/>]. Accessed 15 February 2021.

[3] National Procurement Commission. 9 July 2020. "NPC2020-08: Construction of Science Laboratory, Neregaima High School, Kerowagi". [[http://www.procurement.gov.pg/tender\\_notices/npc2020-08-construction-of-science-laboratory-neregaima-high-school-kerowagi/](http://www.procurement.gov.pg/tender_notices/npc2020-08-construction-of-science-laboratory-neregaima-high-school-kerowagi/)]. Accessed 15 February 2021.

[4] National Procurement Commission. 18 March 2019. "NPCTP0027 CSTB 3862 Construction of a Standard Science Laboratory for Siassi High School, Siassi, Morobe Province". [[http://www.procurement.gov.pg/tender\\_notices/npctp0027-construction-of-a-standard-science-laboratory-for-siassi-high-school-siassi-morobe-province/](http://www.procurement.gov.pg/tender_notices/npctp0027-construction-of-a-standard-science-laboratory-for-siassi-high-school-siassi-morobe-province/)]. Accessed 15 February 2021.

[5] National Procurement Commission. "COVID-19 Procurement". [<https://www.procurement.gov.pg/covid-19-procurement/>]. Accessed 15 February 2021.

[6] Government of Papua New Guinea. Act 12 of 2018. National Procurement Act. [<http://www.procurement.gov.pg/wp-content/uploads/2019/03/Certified-National-Procurement-Act-2018.pdf>]. Accessed 15 February 2021.

[7] Pngi Central. 2018. "Govt Stalling On Medicine Supply Reform As Death Toll Rises". Accessed November 17 2018. [<http://pngicentral.org/reports/govt-stalling-on-medicine-supply-reform-as-death-toll-rises#the-system>]. Accessed 15 February 2021.

[8] USAID. December 16, 2016. "Market Analysis of Medicines and Medical Supplies in Papua New Guinea"

[<https://pngportal.org/directory/market-analysis-of-medicines-and-medical-supplies-in-papua-new-guinea>]. Accessed 15 February 2021.

[9] Rosewell, A., et al. (2017). Health information system strengthening and malaria elimination in Papua New Guinea. *Malaria Journal*, 16[1]. [<https://doi.org/10.1186/s12936-017-1910-0>]. Accessed 15 February 2021.

[10] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[11] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

## 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 insufficient evidence to show that the country has a stockpile of medical supplies (including equipment, PPE, or medical countermeasures) for national use during a public health emergency. There is no publicly available information via the Department of Health, the National Disaster Centre, or the Papua New Guinea Defence Force. [1,2,3] The Department of Health National Medicines Policy does not contain relevant provisions. [4] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, mentions the importance of stockpiling medical supplies such as personal protective equipment (PPE) in preparation for a pandemic, but does not definitively state that such stockpiles already exist. [5] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, states as an action item "review existing PPE stockpiles", but does not indicate what kind of stockpiles, if any, actually exist. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

### 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 insufficient evidence to show that the country maintains a stockpile of laboratory supplies for national use during a public health emergency. There is no relevant information shared via the Department of Health, the National Disaster Centre,

or the Papua New Guinea Defence Force. [1,2,3] The Department of Health National Medicines Policy does not contain relevant provisions. [4] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, mentions the importance of stockpiling reagents in preparation for a pandemic, but does not definitively state that such stockpiles already exist. [5] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, only mentions that the World Health Organization (WHO) can help Papua New Guinea access reagents, but does not indicate what kind of stockpiles, if any, exist in the country. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

#### 4.2.2c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea conducts or requires an annual review of a national stockpile to ensure the supply is sufficient for a public health emergency; in fact, there is no evidence of such a national stockpile. There is no publicly available information via the Department of Health, the National Disaster Centre, or the Papua New Guinea Defence Force. [1,2,3] The Department of Health National Medicines Policy does not contain relevant provisions. [4] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, mentions the importance of stockpiling medical supplies such as personal protective equipment (PPE) in preparation for a pandemic, but does not definitively state that such stockpiles already exist. [5] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, states as an action item "review existing PPE stockpiles", but does not indicate what kind of stockpiles, if any, actually exist. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus

Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

## 4.2.3 Manufacturing and procurement for emergencies

### 4.2.3a

Does the country meet one of the following criteria?

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

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

**Current Year Score: 0**

There is no evidence to show that Papua New Guinea has a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (including equipment, PPE, or medical countermeasures) for national use during a public health emergency, or that it has a plan or mechanism to procure such supplies for use during a public health emergency. There is no relevant information shared via the Department of Health, the National Disaster Centre, or the Papua New Guinea Defence Force. [1,2,3] The Department of Health National Medicines Policy does not contain relevant provisions. [4] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, assigns to the Department of Health the responsibility to "reassess the availability of PPE, antivirals, antibiotics, sterilisers, and ventilators, and procure them if necessary", but otherwise does not contain a relevant plan. [5] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, describes as an action item "Develop contingency plans/SOPs for expediting procurement and other operational logistics to meet demands and urgent timelines", but otherwise does not contain a relevant plan. [6] There are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [7]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[7] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

### 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 to show that Papua New Guinea has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency, or that it has a plan or mechanism to procure laboratory supplies for use during a public health emergency. There is no relevant information shared via the Department of Health, the National Disaster Centre, or the Papua New Guinea Defence Force. [1,2,3] The Department of Health National Medicines Policy does not contain relevant provisions. [4] The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, assigns to the Department of Health the responsibility to "reassess the availability of PPE, antivirals, antibiotics, sterilisers, and ventilators, and procure them if necessary", but otherwise does not contain a relevant plan. [5] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, describes as an action item "Develop contingency plans/SOPs for expediting procurement and other operational logistics to meet demands and urgent timelines", but otherwise does not contain a relevant plan. [6] There are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [7]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[6] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[7] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

## 4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

### 4.3.1 System for dispensing medical countermeasures (MCM) during a public health emergency

#### 4.3.1a

Does the country have a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency (i.e., antibiotics, vaccines, therapeutics and diagnostics)?

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence of a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, mentions the need to stockpile medical countermeasures, but does not include a plan

for dispensing them. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19) does not contain relevant information. [2] In any case, both of these plans are disease-specific and not intended for use in a public health emergency generally. There is no other relevant information shared via the public websites of the Department of Health, Papua New Guinea Defence Force, or the National Disaster Centre. [3,4,5] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [6]

- [1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".  
[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.
- [2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.
- [3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [4] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.
- [5] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [6] Government of Papua New Guinea. 2010. "National disaster mitigation policy".  
[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

### 4.3.2 System for receiving foreign health personnel during a public health emergency

#### 4.3.2a

**Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency?**

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence to show that Papua New Guinea has a public plan in place to receive health personnel from other countries to respond to a public health emergency. There is no relevant information shared via the public websites of the Department of Health, the Papua New Guinea Defence Force, or the National Disaster Centre. [1,2,3] Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, contain relevant provisions. [4,5] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [6]

- [1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [2] Papua New Guinea Defence Force. [<http://www.defence.gov.pg/>]. Accessed 15 February 2021.
- [3] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.
- [4] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".  
[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.
- [5] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.
- [6] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

## 4.4 HEALTHCARE ACCESS

### 4.4.1 Access to healthcare

#### 4.4.1a

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

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

**Current Year Score: 0**

2020

World Policy Analysis Center

#### 4.4.1b

**Access to skilled birth attendants (% of population)**

Input number

**Current Year Score: 56.4**

2018

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: 9.35**

2017

WHO Global Health Expenditure database

### 4.4.2 Paid medical leave

#### 4.4.2a

**Are workers guaranteed paid sick leave?**

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

**Current Year Score: 2**

2020



World Policy Analysis Center

### 4.4.3 Healthcare worker access to healthcare

#### 4.4.3a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence to show that the government has 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. The National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, states that vaccination of health care workers is among the "occupational health issues which need to be considered", but does not discuss prioritized care for such workers. [1] The Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, does not contain relevant provisions. [2] In any case, both of these plans are disease-specific and not intended for use in a public health emergency generally. There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [3,4] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [5]

[1] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[2] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.8.

[4] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

## 4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

### 4.5.1 Communication with healthcare workers

#### 4.5.1a

**Is there a system in place for public health officials and healthcare workers to communicate during a public health emergency?**

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence to show that Papua New Guinea has a system in place for public health officials and healthcare workers to communicate during a public health emergency. There is no relevant information shared via the public websites

of the Department of Health or National Disaster Centre. [1,2] Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, contain relevant provisions. [3,4] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [5] The Communications Plan for Coronavirus Disease 2019 (COVID-19): (Risk Communication and Community Engagement), an April 2020 document, focuses on communication from the authorities to the public, and not between healthcare workers and health officials. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.8.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[6] Department of Health. April 2020. "Communications Plan for Coronavirus Disease 2019 (COVID-19) (Risk Communication and Community Engagement)". [[https://www.health.gov.pg/covid19/PNGCOVID-19CP\(NDOH%20ver04\).pdf](https://www.health.gov.pg/covid19/PNGCOVID-19CP(NDOH%20ver04).pdf)]. Accessed 15 February 2021.

#### 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 insufficient evidence to show that Papua New Guinea has a system in place for public health officials and healthcare workers to communicate during a public health emergency, let alone such a system that encompasses healthcare workers in both the public and private sector. There is no relevant information shared via the public websites of the Department of Health or National Disaster Centre. [1,2] Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, contain relevant provisions. [3,4] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [5] The Communications Plan for Coronavirus Disease 2019 (COVID-19): (Risk Communication and Community Engagement), an April 2020 document, focuses on communication from the authorities to the public, and not between healthcare workers and health officials. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.8.

[2] National Disaster Centre. [<http://pngndc.gov.pg/>]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[4] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus

Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[5] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

[6] Department of Health. April 2020. "Communications Plan for Coronavirus Disease 2019 (COVID-19) (Risk Communication and Community Engagement)". [[https://www.health.gov.pg/covid19/PNGCOVID-19CP\(NDOH%20ver04\).pdf](https://www.health.gov.pg/covid19/PNGCOVID-19CP(NDOH%20ver04).pdf)]. Accessed 15 February 2021.

## 4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

### 4.6.1 Healthcare associated infection (HCAI) prevention and control programs

#### 4.6.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that the Papua New Guinea national public health system is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities. There is no relevant information shared via the public website of the Department of Health. [1] There is no evidence that Papua New Guinea has a national public health institute. The Central Public Health Laboratory does not have an online presence. [2] Although news reports in spring 2021 noted that healthcare workers were falling ill during a COVID-19 surge in the country the government's dashboard of COVID-19 data did not report such data. [3,4]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Indo-Pacific Centre for Health Security. "Central Public Health Laboratory".

[<https://indopacifichealthsecurity.dfat.gov.au/central-public-health-laboratory-papua-new-guinea>]. Accessed 15 February 2021.

[3] Needham, K. 17 March 2021. "COVID 'tornado' hitting Papua New Guinea's fragile hospitals, say health workers". Reuters. [<https://www.reuters.com/article/us-health-coronavirus-australia-papua-wo/covid-tornado-hitting-papua-new-guineas-fragile-hospitals-say-health-workers-idUSKBN2B90VR>]. Accessed 4 May 2021.

[4] Government of Papua New Guinea. "Joint Agency Task Force: National Control Centre for COVID-19". [<https://covid19.info.gov.pg/>]. Accessed 15 February 2021.

## 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 public evidence that there is a national requirement for ethical review (e.g. from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial. According to the January 2012 World Health Organization (WHO) pharmaceutical country profile for PNG, the Medicines Regulatory Act of 1999 requires Medicines Regulatory Authority (MRA) authorization for clinical trials. [1,2] The Medicines Regulatory Act makes no reference to ethical review. [2] The WHO country profile adds that there "there are no additional laws requiring the agreement by an ethics committee or institutional review board of the clinical trials to be performed. Clinical trials are not required to be entered into an international, national and/or regional registry, by law". [1] However, the 2012 Health Research Policy states that the Medical Research Council under the Department of Health took over responsibility for research ethical matters, and that the country intended to establish a Papua New Guinea Health Research Council by 2015. [2] There is no public evidence that this council was established. There is no relevant information shared via the public websites of the Department of Health, or the Department of Higher Education, Research, Science and Technology. [3,4] The Medicines Regulatory Authority does not have a public website. The National Medicines Policy does not contain relevant provisions. [5]

[1] WHO/ Papua New Guinea Department of Health. January 2012. "Papua New Guinea Pharmaceutical Country Profile". [[http://www.who.int/medicines/areas/coordination/final\\_pharmaceutical\\_country\\_profile\\_png.pdf](http://www.who.int/medicines/areas/coordination/final_pharmaceutical_country_profile_png.pdf)]. Accessed 15 Friday 2021.

[2] Government of Papua New Guinea. 1999. "Medicines and Cosmetics Act 1999". [<https://wipolex.wipo.int/en/text/198949>]. Accessed 15 Friday 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

#### 4.7.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics. According to the January 2012 World Health Organization (WHO) pharmaceutical country profile for PNG, the Medicines Regulatory Act of 1999 requires Medicines Regulatory Authority (MRA) authorization for clinical trials. [1,2] The Medicines Regulatory Act makes no reference to ethical review.[2] The WHO country profile adds that there "there are no additional laws requiring the agreement by an ethics committee or institutional review board of the clinical trials to be performed. Clinical trials are not required to be entered into an international, national and/or regional registry, by law". [1] However, the 2012 Health Research Policy states that the Medical Research Council under the Department of Health took over responsibility for research ethical matters, and that the country intended to establish a Papua New Guinea Health Research Council by 2015. [2] There is no public evidence that this council was established. There is no relevant information shared via the public websites of the Department of Health, or the Department of Higher Education, Research, Science and Technology. [3,4] The Medicines Regulatory Authority does not have a public website. The National Medicines Policy does not contain relevant provisions. [5] Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea

Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), released in March 2020, contains relevant provisions. [6,7]

[1] WHO/ Papua New Guinea Department of Health. January 2012. "Papua New Guinea Pharmaceutical Country Profile". [[http://www.who.int/medicines/areas/coordination/final\\_pharmaceutical\\_country\\_profile\\_png.pdf](http://www.who.int/medicines/areas/coordination/final_pharmaceutical_country_profile_png.pdf)]. Accessed 15 Friday 2021.

[2] Government of Papua New Guinea. 1999. "Medicines and Cosmetics Act 1999". [<https://wipolex.wipo.int/en/text/198949>]. Accessed 15 Friday 2021.

[3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[6] Government of Papua New Guinea. 2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[7] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)". [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

## 4.7.2 Regulatory process for approving medical countermeasures

### 4.7.2a

**Is there a government agency responsible for approving new medical countermeasures (MCM) for humans?**

Yes = 1, No = 0

**Current Year Score: 1**

There is evidence that Papua New Guinea has a government agency responsible for approving new medical countermeasures for humans. The National Medicines Policy notes that "only medicines duly registered by the National Regulatory Authority (Pharmacy Board) shall be allowed to be marketed and used in the country". The policy does not make any specific references to "medical countermeasures" or medicines for use during a public health emergency. [1] The Pharmaceutical Services Standards Branch (PSSB) of the Department of Health is responsible for approving all medicinal products. Specifically, the Product Registration Unit of the PSSB is "responsible for administration and implementation of the Medicines and Cosmetics Act 1999 and its regulations to ensure that medicinal products and medical devices are safe, effective and of good quality for use by people of Papua New Guinea". [2,3] Although the PSSB webpage on the website of the Department of Health does not make reference to the National Medicines Policy or describe itself as the "pharmacy board", this would seem to be the entity referred to in the policy. [1,2]

[1] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[2] Department of Health. "Pharmaceutical".

[[https://www.health.gov.pg/subindex.php?pharm=1#:~:text=Pharmaceutical%20Services%20Standards%20Branch%20\(PSSB\)%20is%20responsible%20for%20administration%20and,people%20of%20Papua%20New%20Guinea](https://www.health.gov.pg/subindex.php?pharm=1#:~:text=Pharmaceutical%20Services%20Standards%20Branch%20(PSSB)%20is%20responsible%20for%20administration%20and,people%20of%20Papua%20New%20Guinea)]. Accessed 15 February 2021.

[3] Government of Papua New Guinea. 1999. "Medicines and Cosmetics Act 1999".

[<https://wipo.lex.wipo.int/en/text/198949>]. Accessed 15 Friday 2021.

#### 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 of an expedited process for approving medical countermeasures for human use during public health emergencies. The National Medicines Policy notes that "only medicines duly registered by the National Regulatory Authority (Pharmacy Board) shall be allowed to be marketed and used in the country". The policy further states that "registration procedures for essential medicines will be prioritized and fast tracked". [1] However, there is no reference made to the fast-tracking of approvals in response to a public health emergency. There is no additional relevant information shared via a publicly available website by the Department of Health or the Department of Higher Education, Research, Science and Technology. [2,3] Neither the National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea, a 2006 document, nor the Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19), a March 2020 document, contain relevant provisions. [4,5] Additionally, there are no relevant plans or provisions in the National Disaster Mitigation Policy, a 2010 document that does not mention public health emergencies. [6]

[1] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

[4] Government of Papua New Guinea. "2006. "National Contingency Plan for Preparedness and Response for Influenza Pandemic Papua New Guinea".

[[https://www.apaci.asia/images/Resources/Pandemic\\_planning/papuanewguinea\\_national\\_contingency\\_plan\\_preparedness\\_response\\_influenza\\_pandemic\\_2006.pdf](https://www.apaci.asia/images/Resources/Pandemic_planning/papuanewguinea_national_contingency_plan_preparedness_response_influenza_pandemic_2006.pdf)]. Accessed 15 February 2021.

[5] Department of Health. 2 March 2020. "Papua New Guinea Emergency Preparedness and Response Plan: Coronavirus Disease 2019 (COVID-19)." [<https://www.health.gov.pg/covid19/PNGEPRPCOVID19.pdf>]. Accessed 15 February 2021.

[6] Government of Papua New Guinea. 2010. "National disaster mitigation policy".

[[https://www.preventionweb.net/files/22034\\_18270mitigationpolicy1.pdf](https://www.preventionweb.net/files/22034_18270mitigationpolicy1.pdf)]. Accessed 15 February 2021.

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

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

#### 5.1.1 Official IHR reporting

##### 5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

World Health Organization

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

##### 5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Papua New Guinea has a risk reduction strategy that integrates pandemics and epidemics, or that is there a standalone national disaster risk reduction strategy for epidemics and pandemics. The National Disaster Mitigation Policy, a 2010 document, does not mention public health emergencies. [1] The National Health Plan 2011-2020 states that Papua New Guinea has "adopted the Disaster Risk Reduction and Disaster Management Framework for Action". [2] The National Disaster Centre addresses the "outbreak of epidemic diseases in plants and animals" as one of the biological hazards it supervises. [3] Despite these focuses, there is no evidence that the country has produced a relevant risk reduction strategy. There is no relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [4,5] The 2011-2013 National progress report on the implementation of the Hyogo Framework for Action (2011-2013) focuses primarily on natural disasters and makes no mention of epidemics or pandemics. [6]

[1] Department of Health. March 2014. "National Medicines Policy". [[https://www.health.gov.pg/pdf/M\\_Policy.pdf](https://www.health.gov.pg/pdf/M_Policy.pdf)]. Accessed 15 February 2021.

[2] Government of Papua New Guinea. June 2010. "National Health Plan 2011-2020: Volume 2 (Part A), Reference Data and National Health Pro&#64257;le." [<https://www.medbox.org/pdf/5e148832db60a2044c2d4ded>]. Accessed 15 February 2021.

[3] National Disaster Centre. "Hazards in PNG". [[https://pngndc.gov.pg/?page\\_id=55](https://pngndc.gov.pg/?page_id=55)]. Accessed 15 February 2021.

[4] National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[5] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[6] Preventionweb. 2012. "Papua New Guinea: National progress report on the implementation of the Hyogo Framework for



Action (2011-2013) - Interim". [[https://www.preventionweb.net/files/28697\\_png\\_NationalHFAprogress\\_2011-13.pdf](https://www.preventionweb.net/files/28697_png_NationalHFAprogress_2011-13.pdf)]. Accessed 15 February 2021.

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

### 5.2.1 Cross-border agreements

#### 5.2.1a

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

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

**Current Year Score: 2**

There is evidence that Papua New Guinea has cross-border agreements, protocols or MOUs as part of a regional group with regards to public health emergencies, and there is no evidence of gaps in implementation. Papua New Guinea is part of the Pacific Public Health Surveillance Network (PPHSN) which operates Epi-Net, a network of "multi-disciplinary national/territorial outbreak response teams" to aid response to public health emergencies. [1] There is no other relevant information shared via the public websites of the Department of Health or the National Disaster Centre. While there is not evidence that there are gaps in implementation of the PPHSN Epi-Net, it is not clear how active the network is. For instance, the most recent meeting identified on its website is from 2015. [4]

[1] Pacific Public Health Surveillance Network. "EpiNet - Multi-disciplinary national/territorial outbreak response teams". [<https://www.pphsn.net/Services/EpiNet/intro.htm>]. Accessed 15 February 2021.

[2] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[3] National Disaster Centre. [<https://pngndc.gov.pg/>]. Accessed 15 February 2021.

[4] Pacific Public Health Surveillance Network. "EpiNet - Multi-disciplinary national/territorial outbreak response teams: meetings". [<https://www.pphsn.net/Services/EpiNet/meetings.htm>]. Accessed 15 February 2021.

#### 5.2.1b

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

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

**Current Year Score: 0**

There is no evidence that Papua New Guinea has cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies. There is no relevant information shared via the public websites of the Department of Health or the National Disaster Centre. [1,2] Papua New Guinea is a member of the Pacific Community which is an associate of the governments in the Pacific that exchanges training and lends some support but there is no specific evidence in terms of cross-border agreements, protocols or MOUs with neighbouring countries, or as part of a regional group, with regards to animal health emergencies. [3] There is no relevant information shared via the public website of the Pacific Public Health Surveillance Network (PPHSN), which Papua New Guinea is also a member. [4] There is no evidence of relevant media reports or academic studies.

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] National Disaster Centre. [<https://pngdc.gov.pg/>]. Accessed 15 February 2021.

[3] The Pacific Community. "Governance". [<https://www.spc.int/about-us/governance>]. Accessed 15 February 2021.

[4] Pacific Public Health Surveillance Network. [<https://www.pphsn.net/index.htm>]. Accessed 15 February 2021.

## 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: 0

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 Papua New Guinea has allocated national funds to improve capacity to address epidemic threats within the past three years. [1] There are no relevant provisions mentioned in budget documents for 2018 or 2020. [1,2] (The 2019 budget does not appear to be hosted online.) There is no other relevant information on the websites of the Department of Health, The Department of Agriculture and Livestock, or the office of the prime minister. [3,4,5] Although the 2021 budget is not shared to the Department of Treasury's public website, a description of the budget published by an external consultancy does not mention relevant provisions. [6]

- [1] Department of Treasury. "National Budget - 2018". [[https://www.treasury.gov.pg/html/national\\_budget/2018.html](https://www.treasury.gov.pg/html/national_budget/2018.html)]. Accessed 15 February 2021.
- [2] Department of Treasury. "National Budget - 2020". [[https://www.treasury.gov.pg/html/national\\_budget/2020.html](https://www.treasury.gov.pg/html/national_budget/2020.html)]. Accessed 15 February 2021.
- [3] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.
- [4] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.
- [5] Office of the Prime Minister. [<https://www.pm.gov.pg/>]. Accessed 15 February 2021.
- [6] Deloitte. 2020. "Papua New Guinea Budget 2021". [<https://www2.deloitte.com/content/dam/Deloitte/pg/Documents/financial-services/deloitte-pg-fs-papua-new-guinea-budget-2021-171120.pdf>]. Accessed 15 February 2021.

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

### 5.5.2a

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

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

Current Year Score: 0

2021

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

### 5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

## 5.5.3 Financing for emergency response

### 5.5.3a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Papua New Guinea can access an emergency fund for public health emergencies. Papua New Guinea is an eligible IDA borrowing country, and thus has access the World Bank's Pandemic Emergency Financing Facility. [1,2] There is also evidence that Papua New Guinea's government has allocated funding for disaster preparedness, although no indication is made if this can be used for public health emergencies. [3]

[1] World Bank. 2018. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 15 February 2021.

[2] Pandemic Emergency Financing Facility. February 2019. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/134541557247094502/PEF-Operational-Brief-Feb2019.pdf>]. Accessed 15 February 2021.

[3] Natioual Disaster Centre. 18 July 2013. "Papua New Guinea government improves disaster preparedness funding" [[https://pngndc.gov.pg/?page\\_id=400](https://pngndc.gov.pg/?page_id=400)]. Accessed 15 February 2021.

## 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 public evidence that a senior leader of Papua New Guinea has, in the past three years, made a public commitment either to improve the country's own domestic capacity to address epidemic threats by expanding financing or requesting support, or to support other countries to improve capacity to address epidemic threats by providing financing or support. There is no evidence of relevant information shared by the World Health Organization (WHO), Department of Health, media outlets, or the Global Health Security Funding Tracking Dashboard. [1,2,3,4] Papua New Guinea departments and ministers that are responsible for foreign affairs do not have public websites. There is no relevant information shared via the public website of of the prime minister's office. [5] In October 2020, leaked documents showed that the prime minister had approved \$3 million of funding for treatments for COVID-19, but this was not a public commitment, and did not seem to target capacity to adress epidemic threats. [6] The prime minister praised World Bank funding to assist in Papua New Guinea's response to COVID-19 in April 2020, but there is no evidence of a public request for this funding. [7]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>], Accessed 15 February 2021.

[3] UN. "UN in Papua New Guinea". [[http://pg.one.un.org/content/unct/papua\\_new\\_guinea/en/home/press.html](http://pg.one.un.org/content/unct/papua_new_guinea/en/home/press.html)]. Accessed 15 February 2021.

[4] GHS Tracking Dashboard. "Papua New Guinea". [<https://tracking.ghscosting.org/details/1023/recipient>]. Accessed 15 February 2021.

[5] Office of the Prime Minister. [<https://www.pm.gov.pg/>]. Accessed 15 February 2021.

[6] Kuku, Rebecca. 31 October 2020. "Papua New Guinea to give \$3m to unknown firm for Covid treatment".

[<https://www.theguardian.com/world/2020/nov/01/png-government-to-give-3m-to-unknown-firm-for-covid-treatment>]. Accessed 15 February 2021.

[7] World Bank. 14 April 2020. "World Bank commits to Papua New Guinea's fight against COVID-19".

[<https://reliefweb.int/report/papua-new-guinea/world-bank-commits-papua-new-guinea-s-fight-against-covid-19>]. Accessed 15 February 2021.

### 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 Papua New Guinea has invested finances (from donors) to improve domestic capacity to address epidemic threats in the last three years, but no evidence that Papua New Guinea has provided financing or technical support for those purposes. According to Talus Analytics' Global Health Security Funding Tracker dashboard, an estimated US\$415.4m was disbursed to Papua New Guinea between 2018 and 2020, all of which was for International Health Regulations (IHR) capacity building. [1] The tracker notes that Papua New Guinea has received funding from multiple donors to enhance its capacity on global security preparedness, including, for example, a World Health Organization (WHO) project to support polio eradication that was active at least through 2019. [1,2] In another example, the Bill and Melinda Gates Foundation funded a project called "Outbreak preparedness: Developing a pandemic risk map" for which US\$1.27m were disbursed since 2014. However, the precise duration of this project was not specified and could not be found in external documentation. [3] In April 2020, the World Bank committed US\$20m to Papua New Guinea's response to the COVID-19 pandemic, to "fund rapid health support for PNG focused on protecting health workers and others in the response effort, helping PNG health authorities quickly scale-up testing capacity, and strengthening public education to combat the spread of the virus". This project does not appear to be described in the Global Health Security Funding Tracker. [4]

[1] Global Health Security Funding Tracker. [<https://tracking.ghscosting.org/#/data>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "Papua New Guinea: Polio Eradication". [<https://open.who.int/2018-19/country-programme/PNG/10.001>]. Accessed 15 February 2021.

[3] Global Health Security Funding Tracker. "Table of Funda". [<https://tracking.ghscosting.org/table/1023/recipient>]. Accessed 15 February 2021.

[4] World Bank. 14 April 2020. "World Bank Commits to Papua New Guinea's Fight Against COVID-19".

[<https://www.worldbank.org/en/news/press-release/2020/04/14/world-bank-commits-to-papua-new-guineas-fight-against-covid-19>]. Accessed 15 February 2021.

### 5.5.4c

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

Yes = 1, No = 0

**Current Year Score: 0**

2021



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

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

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

#### 5.6.1a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Papua New Guinea has a publicly available plan or policy for sharing genetic data, clinical specimens, or isolated specimens along with the associated epidemiological data with international organizations or other countries that goes beyond influenza. There is no relevant information shared via the Department of Health; the Department of Agriculture and Livestock; the Papua New Guinea Institute of Medical Research; or the Department of Higher Education, Research, Science and Technology. [1,2,3,4 There is no evidence of relevant media reports or academic studies.

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] Department of Agriculture and Livestock. [<https://www.agriculture.gov.pg/>]. Accessed 15 February 2021.

[3] Papua New Guinea Institute of Medical Research. [<https://www.pngimr.org.pg/>]. Accessed 15 February 2021.

[4] Department of Higher Education, Research, Science, and Technology. [<https://web.dherst.gov.pg/>]. Accessed 15 February 2021.

#### 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 Papua New Guinea has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. There is no reference to sharing influenza data on the Department of Health website, and there have not been any reports of Papua New Guinea not sharing samples in either national and international media. [1] The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not refer to Papua New Guinea not sharing samples, nor does it list Papua New Guinea as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [2]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] World Health Organisation (WHO). 2016. "External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution—High-Level Implementation Plan 2013-2016".

[[https://www.who.int/about/evaluation/pip\\_evaluation\\_report.pdf?ua=1](https://www.who.int/about/evaluation/pip_evaluation_report.pdf?ua=1)]. Accessed 15 February 2021.

### 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 Papua New Guinea has not shared pandemic pathogen samples during an outbreak in the past two years, including for Covid-19. There is no reference to sharing pandemic pathogen data on the Department of Health website, and there have not been any reports of Papua New Guinea not sharing samples in either national and international media. [1] Likewise, there is no relevant information shared via the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal; in the WHO Papua New Guinea country profile; in the WHO Regional Office for the Western Pacific Region website; or the WHO COVID-19 dashboard for Papua New Guinea. [2,3,4,5] There is no relevant information shared via the World Health Organization (WHO) Disease Outbreak News website. [6]

[1] Department of Health. [<https://www.health.gov.pg/>]. Accessed 15 February 2021.

[2] World Health Organization (WHO). "International Health Regulations Strategic Partnership Portal". [<https://extranet.who.int/sph/>]. Accessed 15 January 2021.

[3] World Health Organization (WHO). "Our Work in Papua New Guinea". [<https://www.who.int/papuanewguinea>], Accessed 15 February 2021.

[4] World Health Organization. "Western Pacific Region". [<https://www.who.int/westernpacific/>]. Accessed 15 February 2021.

[5] World Health Organization (WHO). "WHO Coronavirus Disease (COVID-19) Dashboard".

[[https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeIwAincsHDsiu3F\\_evEv5sAS03F77Qlpy\\_CkbtUzGKG8PN0UCpleR\\_MqmUXPghoCVpsQAvD\\_BwE](https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeIwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkbtUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE)]. Accessed 15 February 2021.

[6] World Health Organization (WHO). "Disease Outbreak News: Papua New Guinea".

[<https://www.who.int/csr/don/archive/country/png/en/>]. Accessed 15 February 2021.

## Category 6: Overall risk environment and vulnerability to biological threats

### 6.1 POLITICAL AND SECURITY RISK

#### 6.1.1 Government effectiveness

##### 6.1.1a

Policy formation (Economist Intelligence score; 0-4, where 4=best)

Input number

**Current Year Score: 2**

2020

Economist Intelligence

**6.1.1b**

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

Input number

Current Year Score: 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: 27

2020

Transparency International

**6.1.1f**

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

Input number

**Current Year Score: 2**

2020

Economist Intelligence

### **6.1.1g**

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

Input number

**Current Year Score: 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: 1**

2021

Economist Intelligence

## **6.1.3 Risk of social unrest**

### **6.1.3a**

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

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

**Current Year Score: 1**

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: 3

2021

Economist Intelligence

## 6.1.6 Government territorial control

### 6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

## 6.1.7 International tensions

### 6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

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

Current Year Score: 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: 61.6

2008-2018

United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO);  
The Economist Intelligence Unit

### 6.2.2 Gender equality

#### 6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

Current Year Score: 0.26

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: 14.8**

2009

World Bank; Economist Impact

### 6.2.3b

#### Share of employment in the informal sector

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

**Current Year Score: 2**

There is scanty data on the share of employment in the informal sector in Papua New Guinea, but various studies suggest it is well over 50%. Neither the ILOSTAT database of the International Labour Organization, nor the World Bank report statistics for the share of employment in the informal sector in Papua New Guinea. [1,2] According to a 2017 paper published by the National Research Institute of Papua New Guinea, in 2010 "well over half (62%) of [a] sampled population derived incomes from engaging in informal economic activities". [3] A 2019 article published by the Oxford Business Group states that, in 2018, "that 80% of the adult population was employed informally, and that informal work generates 90% of household income". The cited data, according to the article, comes from the "National Informal Economy Audit Report 2018", published by the Department Community and Religion. [4] The original report does not appear to be shared via a public website. [4]

[1] International Labour Organization. "Country Profiles". ILOSTAT. [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 11 December 2020.

[2] World Bank. "Informal employment (% of non-agricultural employment: Papua New Guinea)—Papua New Guinea". [<https://data.worldbank.org/country/papua-new-guinea?view=chart>]. Accessed 15 February 2021.

[3] Kopel, Elizabeth. April 2017. "The Informal Economy in Papua New Guinea: Scoping Review of Literature and Areas for Further Research". National Research Institute of Papua New Guinea. Accessed 15 February 2021.

[4] Oxford Business Group. 2 October 2019. "The 'sleeping giant' at the heart of PNG's economy". [<https://oxfordbusinessgroup.com/news/%E2%80%98sleeping-giant%E2%80%99-heart-png%E2%80%99s-economy>]. Accessed 15 February 2021.

### 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: 2

2021

Economist Intelligence Democracy Index

## 6.2.6 Inequality

### 6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.42

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: 0

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: 2

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: 0

2021

Economist Intelligence

## 6.4 ENVIRONMENTAL RISKS

### 6.4.1 Urbanization

#### 6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 13.25

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: -0.61

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: 64.26

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: 837.5

2019

WHO

#### 6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 3.51

2019

World Bank

### **6.5.1d**

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 28.94

2018

World Bank

### **6.5.1e**

Prevalence of obesity among adults

Input number

Current Year Score: 21.3

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: 41.33

2017

UNICEF; Economist Impact

### **6.5.2b**

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 12.95

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: 70.94

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