

Grenada

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

CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH POTENTIAL FOR INTERNATIONAL CONCERN	4
1.1 Antimicrobial resistance (AMR)	4
1.2 Zoonotic disease	7
1.3 Biosecurity	12
1.4 Biosafety	17
1.5 Dual-use research and culture of responsible science	19
1.6 Immunization	21
CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN	22
2.1 Laboratory systems strength and quality	22
2.2 Laboratory supply chains	24
2.3 Real-time surveillance and reporting	25
2.4 Surveillance data accessibility and transparency	27
2.5 Case-based investigation	30
2.6 Epidemiology workforce	32
CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC	34
3.1 Emergency preparedness and response planning	34
3.2 Exercising response plans	37
3.3 Emergency response operation	39
3.4 Linking public health and security authorities	41
3.5 Risk communications	42
3.6 Access to communications infrastructure	45

3.7 Trade and travel restrictions	46
-----------------------------------	----

CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTECT HEALTH WORKERS 48

4.1 Health capacity in clinics, hospitals, and community care centers	48
---	----

4.2 Supply chain for health system and healthcare workers	50
---	----

4.3 Medical countermeasures and personnel deployment	55
--	----

4.4 Healthcare access	56
-----------------------	----

4.5 Communications with healthcare workers during a public health emergency	58
---	----

4.6 Infection control practices and availability of equipment	60
---	----

4.7 Capacity to test and approve new medical countermeasures	61
--	----

CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS TO ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS 64

5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction	64
---	----

5.2 Cross-border agreements on public health and animal health emergency response	65
---	----

5.3 International commitments	66
-------------------------------	----

5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)	68
--	----

5.5 Financing	69
---------------	----

5.6 Commitment to sharing of genetic and biological data and specimens	73
--	----

CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREATS 75

6.1 Political and security risk	75
---------------------------------	----

6.2 Socio-economic resilience	79
-------------------------------	----

6.3 Infrastructure adequacy	82
-----------------------------	----

6.4 Environmental risks	82
-------------------------	----

6.5 Public health vulnerabilities	83
-----------------------------------	----

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

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

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

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

Current Year Score: 0

There is insufficient evidence to prove that Grenada has a national AMR plan for surveillance, detection and reporting of priority AMR pathogens. The country page of Grenada on the Pan American Health Organization (PAHO) states that Grenada has an AMR plan but there is no record of the surveillance, detection and reporting of priority AMR pathogens. [1] The World Health Organization's (WHO) library of national action plans do not have a record of an AMR plan in Grenada.[2] The Ministry of Health of Grenada does not provide any such evidence.[3] The Ministry of Agriculture and Lands does not have a functioning online website to access information. Grenada's National Strategic Plan for 2016-2025 has no record of an national AMR plan.[4]

[1] Pan American Health Organisation. "Grenada Antimicrobial Resistance (AMR) National Action Plan".

[https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264]. Accessed 15 January 2021.

[2] World Health Organisation. "Antimicrobial resistance. Library of National Action Plans".

[<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>] Accessed 15 January 2021.

[4] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf].

Accessed 15 January 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: 0

There is no publicly available evidence to suggest that Grenada has a laboratory/laboratory system which tests for priority AMR pathogens. The Pan American Health Organization (PAHO) provides no such information of a laboratory system in place in Grenada on its country page. [1] There is no evidence of such a laboratory system in place on the website of the Ministry of Health. [2] The World Health Organization's (WHO) page of library of national action plans for AMR pathogens does not have a record of an AMR plan in Grenada.[3] PAHO's blog for Information System for Health (IS4H) mentions that, "Grenada's Health Information System has been continually strengthened in the past 8 years, through strategic partnerships with entities and organizations such as the Pan American Health Organization (PAHO), St. George's University (SGU), the National

Telecommunications Regulatory Commission (NTRC), The U.S. Centers for Disease Control and Prevention (CDC), as well as Government Ministries and other official entities." [4] But, the blog does not mention a laboratory plan for AMR pathogens. However, the Ministry of Health's National Strategic Plan for Health for 2016-2025 reports, "Recently, a number of new medical laboratories have been established, but there are no policy guidelines or regulations to govern operating standards. However, a Draft National Laboratory Strategic Plan and Legislation have been developed and are pending adoption." [5] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Pan American Health Organisation. "Grenada Antimicrobial Resistance (AMR) National Action Plan".

[https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264]. Accessed 15 January 2021.

[2] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>] Accessed 15 January 2021.

[3] World Health Organization (WHO). "Library of National Action Plans." [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 15 January 2021.

[4] Pan American Health Organization (PAHO) "IS4H Blog- Grenada aims to strengthen its health information systems." Accessed 15 January 2021.

[5] Ministry of Health and Security, Government of Grenada. "Strategic Plan for Health."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 15 January 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 evidence that the government of Grenada conducts environmental detection or surveillance activities (e.g., in soil, waterways) for antimicrobial residues or AMR organisms. The Pan American Health Organization (PAHO) has no mention of such a government capacity on its country page of Grenada. [1] The World Health Organization (WHO) does not have a record of an existing national AMR plan on its list of library of national action plans. [2] The Ministry of Health website does not have any information of such a capacity. [3] The National Strategic Plan for Health (2016-2025) does not have any evidence of the same. [4] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Pan American Health Organization (PAHO) "Grenada Antimicrobial Resistance National Action Plan."

[https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264] Accessed 15 January 2021.

[2] World Health Organization (WHO) "Library of National Action Plans for Antimicrobial resistance."

[https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264] Accessed 15 January 2021.

[3] The Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 15 January 2021.

[4] The Ministry of Health, "Strategic National Plan for Health (2016-2025)

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 15 January 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 evidence of a national legislation or regulation in place requiring prescriptions for antibiotic use for humans. The Pan American Health Organization's page on Grenada's AMR plan does not mention any such legislation. [1] The World Health Organization's Library of National Action Plans for AMR Pathogens does not mention an existence of such a plan in Grenada. [2] Grenada's Pharmaceutical Country Profile published last in 2012 by the Ministry of Health in collaboration with the World Health Organization (WHO) and Pan American Health Organization (PAHO) does not mention any such regulation relating to prescriptions for antibiotic use.[3] The Ministry of Health's National Strategic Plan for Health (2016-25) has no evidence of such a legislation in Grenada. [4] The Ministry of Agriculture and Lands does not have a functioning online website to access information. The Ministry of Health of Grenada does not provide any such evidence.[5]

[1] Pan American Health Organization (PAHO) "Grenada Antimicrobial Resistance Plan."

[https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264] Accessed 15 January 2021.

[2] World Health Organization (WHO) "Library of National Action Plans for AMR Resistance."

[<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 15 January 2021.

[3] The Ministry of Health "Grenada Pharmaceutical Country Profile"

[https://www.who.int/medicines/areas/coordination/Grenada_country_profile.pdf] Accessed 15 January 2021.

[4] Ministry of Health "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 15 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>] Accessed 15 January 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 publicly available evidence to show that there is national legislation or regulation in place requiring prescriptions for antibiotic use for animals. The Pan American Health Organization (PAHO) does not mention any such legislation requiring prescriptions for antibiotic use for animals on its country page for Grenada's national AMR plan. [1] The World Health Organization (WHO) does not have a record of an AMR plan in Grenada in its library of national action plans for AMR resistance. [2] The Ministry of Health of Grenada does not have any evidence of such a regulation. [3] The Ministry of Health's National Strategic Plan for Health (2016-2025) does not provide any such information on this matter as well. [4] A study conducted on 30 farms in Grenada published in Hindawi, a Veterinary Medical Journal on the non-regulation of antibiotics in the food animal industries found that, "Antibiotics were used on the majority of farms (25, 83.3%). More than half of the respondents, 19 (63.3%), stated they were only somewhat aware of issues related to the use of antibiotics and the majority, 21 (70.0%), were also unable to define antimicrobial resistance. There was inconsistency in the farmers' knowledge about how and when to use antibiotics. There was also a high level of noncompliance with manufacturers' recommendations for use of antibiotics." [5] The Ministry of Agriculture and Lands does not have a functioning online website to access

information.

- [1] Pan American Health Organization (PAHO) "Grenada Antimicrobial Resistance National Action Plan." [https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264] Accessed 15 January 2021.
- [2] World Health Organization (WHO) "Library of National Action Plans for Antimicrobial resistance." [https://www.paho.org/ecc/index.php?option=com_content&view=article&id=577:grenada-antimicrobial-resistance-amr-national-action-plan&Itemid=264] Accessed 15 January 2021.
- [3] The Ministry of Health, Government of Grenada [http://www.health.gov.gd/index.php?lang=en] Accessed 15 January 2021.
- [4] The Ministry of Health, "Strategic National Plan for Health (2016-2025)" [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 15 January 2021.
- [5] Hindawi, "Veterinary Medicine International" [https://www.hindawi.com/journals/vmi/2019/6785195/] Accessed 15 January 2021.

1.2 ZONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of national legislation, plans, or equivalent strategy documents on zoonotic disease in Grenada. There is no publicly available evidence on the websites of the Ministry of Health [1] The current version of Grenada's "Strategic Plan for Health, 2016-25" also makes no mention of zoonotic disease. [2] The plan deals mostly with health service delivery and resources. [2] The Ministry of Agriculture does not have an official website to access information.

[1] The Ministry of Health, Government of Grenada [http://www.health.gov.gd/index.php?lang=en] Accessed 15 January 2021.

[2] Ministry of Health, "National Strategic Plan for Health (2016-2025)." [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 15 January 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 to support that Grenada has a national legislation, plans or equivalent strategy document which includes measures for risk identification and reduction for zoonotic disease spillover from animals to humans. The website of the Ministry of Health of Grenada does not have such document or information about such a national legislation. [1] The

Ministry of Agriculture does not have an functioning online website to access information. There are no academic studies or articles which provide information of such legislation/strategy in Grenada. The Strategic National Plan for Health (2016-2025) does not lay out any measures for risk identification and reduction of zoonotic spillover events from animals to humans. [2]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 16 January 2021.

[2] Ministry of Health, "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 16 January 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 publicly available evidence to support that Grenada has a national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern. The website of the Ministry of Health does not have any information about the existence of such a surveillance system or guidelines. [1] The Ministry of Agriculture does not have a functioning website. A 2017 study titled "Compliance with the World Organisation for Animal Health guidelines for poultry production in Grenada", noted that "the current legislative framework in Grenada does not adequately address poultry food safety and that there is a need to strengthen the synergies between the agricultural and health sectors to enable a more thorough monitoring of antimicrobials use in poultry production. There is a need to strengthen epidemiology of zoonotic diseases, provisioning of education and information for key stakeholders about the use of antibiotics and the development of a system to monitor antibiotic procurement, distribution and use in Grenada." [2] There is no further evidence in the Strategic National Plan for Health (2016-2025). [3]

[1] Ministry of Health, Government of Grenada. "<http://www.health.gov.gd/index.php?lang=en>] Accessed 16 January 2021.

[2] World Poultry Science Journal. 13 June 2017. "Compliance with the World Organisation for Animal Health guidelines for poultry production in Grenada." [<https://www.cambridge.org/core/journals/world-s-poultry-science-journal/article/compliance-with-the-world-organisation-for-animal-health-guidelines-for-poultry-production-in-grenada/95871E407AD09364CAE99CE3F811BE40>] Accessed 16 January 2021.

[3] Ministry of Health, "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 16 January 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 publicly available evidence that Grenada has a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. The Ministry of Health does not have any information regarding the existence of such a unit in Grenada. [1] The Ministry of Agriculture does not have a functioning website. There are no academic articles or journals which provide information of such a department dedicated to zoonotic diseases in Grenada. There is no further evidence in

the Strategic National Plan for Health (2016-2025). [2]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 16 January 2021.

[2] Ministry of Health, "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]
Accessed 16 January 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: 1

There is limited but publicly available evidence that Grenada has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. The VERTIC legislation database on Grenada mentions Anthrax, Swine Fever and Rabies regulations in the country. Regulations specifically covering rabies, anthrax and swine fever set out mechanisms for veterinarians and inspectors to notify the local police of outbreaks of these diseases. [1] Regulations for anthrax, for example, also require any owner or person with an animal under his charge to report the nearest police station any suspected animals affected with anthrax. [1] These regulations also indicate that the police are then required to transmit the information either to the Superintendent of Agriculture or to an inspector, who must also notify the superintendent. The inspector may give directions in relation to the steps that must be taken in dealing with any infected animal. There is no additional information available on the Ministry of Health website. [2] Grenada's National Agricultural plan 2015 also does not mention anything regarding such a national mechanism. [3] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] VERTIC BWC Legislation Database "Grenada- Anthrax Regulations, Swine Fever Regulations, Rabies regulations."

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 17 January 2021.

[2] Ministry of Health, "Government of Grenada." [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[3] Grenada, "National Agricultural Plan 2015"

[[https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_\(002\).pdf](https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_(002).pdf)]
Accessed 17 January 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 no publicly available evidence that Grenada has a legislation or regulations to safeguard the confidentiality of information generated through surveillance activities for animals (for owners). There is no information of such laws on the website of the Ministry of Health. [1] The Ministry of Agriculture does not have a functioning online website. The National Agricultural plan 2015 does not mention any such law or regulation in place as well. [2] There is no further evidence in the

Strategic National Plan for Health (2016-2025). [3]

[1] Ministry of Health, "Government of Grenada" [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] Grenada "National Agricultural Plan."

[[https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_\(002\).pdf](https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_(002).pdf)] Accessed 17 January 2021.

[3] Ministry of Health, "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 16 January 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 to support that Grenada conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors). The Ministry of Health does not have any information of such surveillance measures.[1] Grenada has conducted periodic surveillance of rabies, carried mainly by the small Indian mongoose. Suspected rabies cases have been submitted through passive surveillance via the St. George's University Small Animal Hospital, the Animal Control Unit of the Ministry of Health, local veterinarians, farmers and pet owners to the Department of Pathology in the School of Veterinary Medicine at St. George's University. [2] There is no additional information available on this subject on academic journals or in articles. The Ministry of Agriculture does not have a functioning online website. There is no further evidence in the Strategic National Plan for Health (2016-2025). [3]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] Ulrike Zieger and others. 16 October 2014. "The Phylogeography of Rabies in Grenada, West Indies, and Implications for Control". [<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0003251>]. Accessed 17 January 2021.

[3] Ministry of Health, "Strategic National Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 16 January 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: -

No data available

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Grenada has a national plan on zoonotic disease or other legislation, regulations, or plans that include mechanisms for working with the private sector in controlling or responding to zoonoses. The Ministry of Health website does not provide any information on this subject.[1] The Ministry of Agriculture does not have a functioning online website. In addition, the National Agricultural Plan for Grenada 2015 has no record of such a legislation laying out plans to work with the private sector in responding to zoonoses.[2] However, Grenada is a member of the Caribbean Animal Health Network (CaribVET), which seeks to improve communication between veterinarians, ministries of agriculture, other stakeholders and the public. [3] For example, Grenada has participated in CaribVET's "One Health, One Caribbean, One Love" project, implemented by the University of the West Indies. The project, which began in early 2014 and ended in early 2017, provided a framework to address zoonotic diseases in a broader and more coordinated manner by promoting collaboration across all government sectors and society. [4]

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] Grenada, "National Agricultural Plan 2015" [[https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_\(002\).pdf](https://agricarib.org/images/docs/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_(002).pdf)] Accessed 17 January 2021.

[3] Caribbean Agricultural Health and Food Safety Agency. 12 April 2016. "Good animal and veterinary public health, the key to a safe and prosperous region". [<https://www.cahfsa.org/12-news/55-good-animal-and-veterinary-public-health-the-key->

to-a-safe-and-prosperous-region]. Accessed 17 January 2021.

[4] CaribVET. 2018. "One Health, One Caribbean, One Love". [<https://www.caribvet.net/projects/ohocol-project>]. Accessed 17 January 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 publicly available evidence that Grenada has 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. The Ministry of Health does not have any information of a capacity in Grenada. [1] Grenada does not have a defence ministry, a research ministry or a national public health institute. The VERTIC legislation data base also has no mention of such facilities in any of its documents on Grenada. [2] Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3] There are no academic journals or articles which have any information of such facilities in Grenada. The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] VERTIC BWC Legislation Database, "Grenada." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 17 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 17 January 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 evidence that Grenada has any legislation or regulation related to biosecurity which addresses requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. The Ministry of Health does not provide any information on this subject on its website. [1] The VERTIC database for legislations does not have a record of such a legislation in Grenada. [2] Grenada does not have a defence ministry, research ministry, a national public health institute or a laboratory system that could oversee such operations. A 2016 report by the US Department of Agriculture also said that Grenada was making progress towards a biosafety bill and biosafety regulations, but does not mention biosecurity. [3] An unattributed and undated document states that Grenada has completed a biosafety bill, and that the cabinet has approved a biosafety policy,

but there is no mention of biosecurity legislation. [4] Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [5] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] VERTIC BWC Legislation Database, "G- Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 17 January 2021.

[3] USDA Foreign Agricultural Service. 1 November 2016. "Caribbean Basin: Agricultural Biotechnology Annual Caribbean Biosafety and Biotechnology Situation".

[https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Agricultural%20Biotechnology%20Annual_Miami%20ATO_Caribbean%20Basin_11-1-2016.pdf] Accessed 17 January 2021.

[4] Unattributed Document. "Update on Biosafety Activities in Grenada". [bch.cbd.int/database/attachment/?id=15303]. Accessed 17 January 2021.

[5] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 11 April 2019.

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 publicly available evidence of an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations in Grenada. The Ministry of Health website does not provide any information of such an agency.

[1] Grenada does not have a defence ministry, nor a national public health institute, nor a national laboratory system.

Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [2] The VERTIC database for national legislations do not show any record of such an established agency in Grenada. [3] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 17 January 2021.

[2] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 17 January 2021.

[3] VERTIC BWC Legislation Database, "Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 17 January 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 Grenada has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. The website of the Ministry of Health does not have any information regarding such facilities in Grenada. [1] The Ministry of Agriculture does not have a functioning online website to access information. Grenada does not have a ministry of Defence or a ministry of Research. There is no national public health

institute in the country nor a laboratory system. The VERTIC database for national legislations on Grenada does not have any record of such facilities.[2] Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3] Finally, there are no academic articles or journals that support the existence of such facilities in Grenada.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] VERTIC BWC Legislation Database. "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>] Accessed 18 January 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 public evidence that Grenada has an in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen. The Ministry of Health website does not provide any information on this subject. [1] The Anthrax regulations recorded in Grenada's VERTIC database for national legislations provides no information on PCR-based diagnostic testing.[2] Grenada does not have a ministry of Defence or a ministry of Research. There is no national public health institute in place or a laboratory system. However, the country is a member of the Caribbean Public Health Agency (CARPHA) whose laboratories are equipped to conduct RT-PCR (molecular) tests. [3] The Ministry of Agriculture and Lands does not have a functioning online website to access information.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] VERTIC BWC Legislation Database "Grenada- The Anthrax Regulations."

[https://www.vertic.org/media/National%20Legislation/Grenada/GD_Anthrax_Regulation.pdf] Accessed 18 January 2021.

[3] Caribbean Public Health Agency. 2018. "Laboratory Services". [<http://carpha.org/What-We-Do/Laboratory-Services-and-Networks>]. Accessed 18 January 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 evidence that Grenada requires biosecurity training, using a standardized, required approach such as through a common curriculum or a trainee-trainer program for personnel working in facilities housing or working with especially dangerous pathogens, toxins or biological materials with pandemic potential. The Ministry of Health website does not have any information of such a training program in Grenada. [1] Grenada does not have a national laboratory system or a national public health institute that could plan and execute such a program. In the past, biosafety training activities have been

organized by the University of the West Indies, under the Caribbean Regional Biosafety Capacity Building Project funded by the Global Environment Facility and coordinated by the United Nations Environment Program. [2] However, there is no indication that this is part of a standardized, required approach in Grenada. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter.[3] The VERTIC database for national legislations on Grenada does not have any further information. [4] The Ministry of Agriculture and Lands does not have a functioning online website to access information. Grenada does not have a ministry of defence or a ministry of research.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Update on Biosafety Activities in Grenada. Undated and Unattributed document.

[bch.cbd.int/database/attachment/?id=15303]. Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 2021.

[4] VERTIC BWC Legislation Database. "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 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 Grenada has regulations or licensing conditions that specify security and other personnel with access to especially dangerous pathogens, toxins or biological materials with pandemic potential are subject to following checks: drug testing, background checks, and psychological or mental fitness checks. There is no information provided on such rules or regulations on the website of the Ministry of Health. [1] Grenada does not have a national laboratory system or a public health institute. The VERTIC database for national legislations does not have any record of such regulations on its Grenada page.[2] Finally, there are no academic articles or journals that have any information on this matter. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter.[3] The Ministry of Agriculture and Lands does not have a functioning online website to access information. Grenada does not have a ministry of defence or a ministry of research.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] VERTIC BWC Legislation Database. "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 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

There is no evidence to suggest that Grenada has national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B). The Ministry of Health does not have any information regarding such regulations on its website.[1] The websites of the ministry of Agriculture and the ministry of Transport and Infrastructure are not accessible. Grenada does not have a Ministry of Research or a ministry of Defence. In addition, Grenada does not have an established national public health institute or a national laboratory system. Finally, the VERTIC database for national legislations does not provide any information regarding such regulations on Grenada's country page. [2] Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter.[3]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] VERTIC BWC Legislation Database. "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>] Accessed 18 January 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 insufficient public evidence of national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. Regulations issued under the Animals (Diseases and Importation) Act of 1953 control the cross-border transfer and end-user screening of animals, birds, reptiles and insects, including certain animal-related toxins. [1] The regulations set out procedures for notifying the authorities of various animal diseases and quarantining infected animals. They impose a total ban on imports of some animals, such as monkeys. The regulations define a "biological product" subject to control as "any substance commonly known as vaccines, sera, toxins, anti-toxins and antigens intended for use in the practice of veterinary medicine". [2] However, these regulations do not cover especially dangerous pathogens, toxins and pathogens with pandemic potential. Grenada does not have a public health institute, a national public health laboratory or a defence ministry. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter.[3] The Ministry of Agriculture and Lands does not have a functioning online website to access information. There is no further information on the VERTIC national legislation database. [4]

- [1] VERTIC BWC Legislation Database "Grenada- Animals (Disease and Importation) Control Regulation." [https://www.vertic.org/media/National%20Legislation/Grenada/GD_Animal_Diseases_Importation_Regulation_schedule.pdf] Accessed 18 January 2021.
- [2] Ministry of Health, Government of Grenada. [http://www.health.gov.gd/index.php?lang=en] Accessed 18 January 2021.
- [3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [https://bwc-ecbm.unog.ch/state/grenada] Accessed 18 January 2021.
- [4] VERTIC BWC Legislation Database. "G-Grenada" [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/] Accessed 18 January 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 that Grenada has in place a national biosafety legislation and/or regulations. A November 2016 report by the US Department of Agriculture said that Grenada was making progress towards a biosafety bill and biosafety regulations. It notes, "Biotech regulations have been virtually non-existent in the Caribbean. However, that may change in the years ahead as 12 Caribbean Community (CARICOM) countries move forward with a United Nations Environment Programme/Global Environment Facility (UNEP/GEF) Regional Project for Implementing National Biosafety Frameworks (NBFs) in the Caribbean. The project is expected to conclude in 2017, with its outcomes likely becoming the guideposts for future regulation of biotechnology within the participating CARICOM countries." [1] However, there is no evidence of such a National Biosafety Framework in effect or on paper available on the website of the Ministry of Health. [2] Grenada does not have either a ministry of Defence or a ministry of Research. The country does not have national laboratory system or public health institute. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3] The Ministry of Agriculture and Lands does not have a functioning online website to access information. There is no further information on the VERTIC national legislation database. [4]

- [1] USDA Foreign Agricultural Service. 1 November 2016. "Caribbean Basin: Agricultural Biotechnology Annual Caribbean Biosafety and Biotechnology Situation". [https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Agricultural%20Biotechnology%20Annual_Miami%20ATO_Caribbean%20Basin_11-1-2016.pdf]. Accessed 18 January 2021.
- [2] Ministry of Health, Government of Grenada. [http://www.health.gov.gd/index.php?lang=en] Accessed 18 January 2021.
- [3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [https://bwc-ecbm.unog.ch/state/grenada]. Accessed 18 January 2021.
- [4] VERTIC BWC Legislation Database. "G-Grenada" [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/] Accessed 18 January 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 publicly available evidence that Grenada has an agency responsible for the enforcement of biosafety legislation and regulations. In fact, there is no evidence that Grenada has any legislations or regulations related to biosafety. The Ministry of Health website does not have any information regarding this subject. [1] According to an undated update of the country's biosafety capability, "over the last two years, Grenada has been participating in the Caribbean Regional Biosafety Capacity Building Project which is funded by the Global Environment Facility (GEF) and coordinated by the United Nations Environment Programme (UNEP)". [2] The project includes the creation of a Caribbean Centre for Biosafety (CCB), a virtual information hub to provide project countries with access to a range of resources to enhance biosafety in the region.[3] However, there is no public evidence of whether the goals of this project have fructified in Grenada yet. Grenada does not have a national laboratory system or public health institute. There is no Ministry of Research in the country as well. The VERTIC database for legislation has no information of such an agency on Grenada's country page.[4] The Ministry of Agriculture and Lands does not have a functioning online website to access information. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [5] Grenada does not have a ministry of defence or a ministry of research.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Unattributed and Undated Document. "Update on Biosafety Activities in Grenada".

[bch.cbd.int/database/attachment/?id=15303]. Accessed 18 January 2021.

[3] Regional Project for Implementing National Biosafety Frameworks in the Caribbean Sub-Region. 2018. "Caribbean Centre for Biosafety". [<https://caribbeanbiosafety.org/centre-for-biosafety/>]. Accessed 18 January 2021.

[4] VERTIC BWC Legislation Database "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[5] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 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 Grenada requires biosafety training, using a standardized, required approach such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Ministry of Health website does not provide any information on such a training requirement. [1] The University of the West Indies at St. Augustine, Trinidad, has organized some training activities geared at enhancing the technical capabilities of key biosafety personnel. [2] A 2003 assessment of Grenada's capacity to implement the Biosafety Protocol concluded that "training therefore is needed by all personnel responsible for implementing the (Cartagena) Protocol or the group of competent individuals designated by the government". [3] The study identified several specific constraints, including limited competencies in risk assessment and management; inadequate legal framework; lack of an established administrative arrangement for risk management; lack of coherence in policies and programs among key implementing agencies; lack of, and/or insignificant awareness among the populace of the implications of biotechnology and inadequate systems of information exchange. The VERTIC database does

not provide any information on this matter. [4] Grenada does not have a public health institute or a national public health laboratory. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [5] The Ministry of Agriculture and Lands does not have a functioning online website to access information. Grenada does not have a ministry of defence or a ministry of research.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Unattributed and Undated Document. "Update on Biosafety Activities in Grenada".

[bch.cbd.int/database/attachment/?id=15303]. Accessed 18 January 2021.

[3] James De Vere Pitt and Dianne Roberts, University of Toronto, August 2004. "Assessment of Grenada's capacity to implement the Biosafety Protocol". [<https://tspace.library.utoronto.ca/handle/1807/3136>]. Accessed 18 January 2021.

[4] VERTIC BWC Database, "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[5] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 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 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. The Ministry of Health does not provide any information of such an assessment. [1] There is some information available on the research efforts done by the School of Veterinary Medicine and St. George's School of Medicine on zoonotic agents in various domestic and wild animals, and antimicrobial resistance patterns and molecular typing of zoonotic pathogens. These efforts are further enhanced by collaboration with Washington State University and the University of Florida in the US. [2] Grenada does not have a national laboratory system or a national public health institute. The country does not have a ministry of Research. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3] Finally, The VERTIC database legislation does not provide any information on this subject. [4] Grenada does not have a ministry of defence or a ministry of research.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] St. George's University. "SVM Areas of Research Emphasis". [<https://www.sgu.edu/research/school-veterinary-medicine-research/svm-areas-research-emphasis>]. Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 2021.

[4] VERTIC BWC Legislation "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 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 legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. The Ministry of Health website does not provide any information on this subject.[1] The Ministry of Agriculture does not have a functioning online website to access information. Grenada does not have a national public health institute or a laboratory system that could oversee such research on dangerous pathogens. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [2] Grenada does not have a ministry of defence or a ministry of research. Finally, The VERTIC database legislation does not provide any information on this subject. [3]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 January 2021.

[3] VERTIC BWC Legislation "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 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 publicly available evidence of an agency that is responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research in Grenada. The Ministry of Health does not provide any information regarding such an agency. [1] Grenada does not have a ministry of Defence or a ministry of Research. In addition, the country does not have a national public health institute or a laboratory system in place. The VERTIC database of national legislations does not have any record of such an agency in Grenada. [2] Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3] Finally, there are no academic journals or articles that give supporting evidence for such an agency in Grenada.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021. VERTIC BWC Legislation Database, "Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[2] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 November 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a legislation and/or regulation requiring screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold in Grenada. The website of the ministry of Health does not provide any information on this matter. [1] The ministry of Agriculture does not have a functioning online website to access information. The VERTIC database on Grenada has no record of such a legislation in place in Grenada. [2] Grenada does not have a national public health institute or a laboratory system to oversee the screening of synthesized DNA. Finally, there are no academic articles or journals that provide any evidence on this subject. Grenada does not have a ministry of defence or a ministry of research. Although Grenada submitted Confidence Building Measures in 2005, access to the report is restricted to the public, and it is unknown if they contain information on this matter. [3]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] VERTIC BWC Legislation Database. "G-Grenada" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>] Accessed 18 January 2021.

[3] Biological Weapons Convention: Implementation Support Unit. 2019. "BWC Electronic Confidence Building Measures Portal: Grenada". [<https://bwc-ecbm.unog.ch/state/grenada>]. Accessed 18 November 2020.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 1

2019

World Health Organization

1.6.1b

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

Yes = 1, No = 0

Current Year Score: 0

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is insufficient evidence to support that Grenada has a national laboratory system that has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. The Ministry of Health website does not provide any information regarding this subject. [1] The National Strategic Plan for Health (2016-2025) notes that, "The MOHSS (Ministry of Health and Social Security) does not have a laboratory network capable of supporting research on public health threats; consequently, the capacity to identify the causative agents of all reportable diseases in country is limited." [2] Grenada does not have a national public health institute; neither does it have a ministry of Research nor ministry of Defence.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Ministry of Health, "Grenada- National Strategic Plan for Health (2016-2025)."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 18 January 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 no publicly available evidence of 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 in Grenada. The Ministry of Health website does not provide any information on such a plan in Grenada. [1] Grenada's National Strategic Plan for Health (2016-2025) notes that, "There is also need for strengthening of the Public Health Emergency Response Plan to include the creation of multidisciplinary/multi-sectoral teams to respond to events constituting a Public Health Emergency of International Concern (PHEIC)." [2] However, any document containing the plan itself is publicly unavailable. Grenada does not have a national public health institute or a laboratory system in place. There are no academic journals or articles with information on this subject.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 2021.

[2] Ministry of Health, "Strategic National Plan for Health (2016-2025)."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 18 January 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 publicly available evidence that Grenada has 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]). The National Strategic Plan for Health (2016-2025) notes that, "Recently, a number of new medical laboratories have been established, but there are no policy guidelines or regulations to govern operating standards." [1] But this does not attest to national laboratory in Grenada. The Ministry of Health website does not have any information regarding this subject.[2] The Ministry of Agriculture does not have a functioning online website.

[1] Ministry of Health, "Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 18 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 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 Grenada has a national laboratory that serves as a reference facility which is subject to external quality assurance review. The Strategic plan for Health (2016-2025) of Grenada points out that, "Grenada utilizes the services of the Caribbean Regional Drug Testing Laboratory (CRDTL) through OECS/PPS," to check for the quality of manufactured drugs. It also notes that, "A four-weekly report on laboratory confirmed cases of selected diseases is submitted to the Caribbean Public Health Agency, (CARPHA). This regional entity is responsible for conducting regional analyses and interpretation of data received from countries as well as for following-up with countries to validate data and investigate unusual reports and changing disease trends." [1] However, this evidence is not sufficient to suggest that the Caribbean Regional Drug Testing Laboratory (CRDTL) or the Caribbean Public Health Agency (CARPHA) act as formal reference facilities for Grenada. In addition, there is no evidence that CRDTL and CARPHA are themselves subject to external quality assurance from an external laboratory. Grenada does not have a national public health institute or a laboratory network. The Ministry of Agriculture does not have a functioning online website. The Ministry of Health does not have any record of such reference facilities in Grenada.[2]

[1] Ministry of Health, "National Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 18 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 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 evidence that Grenada has a nationwide specimen transport system. The Ministry of Health website does not provide any information on the availability of such a system.[1] The ministries of transport and agriculture do not have accessible online websites. Grenada does not have a national public health institute or a laboratory network in place.

[1] Ministry of Health, Government of Grenada [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 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 publicly available evidence that Grenada has a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. The Ministry of Health does not have any record of such a plan in Grenada.[1] Grenada's National Strategic Plan for Health (2016-2025) notes that, "Recently, a number of new medical laboratories have been established, but there are no policy guidelines or regulations to govern operating standards. However, a Draft National Laboratory Strategic Plan and Legislation have been developed and are pending adoption." [2] However, whether the contents of this draft has put a plan in place to rapidly authorize laboratories is not public information. Grenada does not have a national public health institute or a laboratory system.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 2020.

[2] Ministry of Health, "Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]
Accessed 19 January 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: 0

There is insufficient evidence that Grenada is conducting ongoing event-based surveillance and analysis for infectious disease. The Strategic Plan for health (2016-2025) notes that, " The National Infectious Disease Control Unit (NIDCU) maintains an "Access-based" HIV patient monitoring and treatment database, equipped with an automated reporting function." [1] However, this is not an event-based surveillance and is limited to HIV-AIDS and not other infectious diseases. Grenada does not have a national public health institute or a laboratory system in place. The Ministry of Health website does not have information regarding this subject.

[1] Ministry of Health, "Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]
Accessed 18 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 18 January 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 Grenada reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years, including COVID-19. According to the World Health Organization's (WHO) country page on Grenada, no recent outbreaks have been posted from this country. [1] However, the WHO Disease Outbreak News reports on its "Health Emergency Dashboard" that Grenada has been affected by the Covid19 virus. [2] According to WHO, a total of 139 cases and one death related to Covid19 has been recorded in Grenada. [3] But, WHO's country page on Grenada maintains that the country has had no recent outbreaks. In addition, there is no evidence of Grenada reporting any potential public health emergency to WHO on the websites of the Ministry of Health or any other news articles.[4]

[1] World Health Organization (WHO) "Grenada | Emergencies preparedness, response"

[<https://www.who.int/csr/don/archive/country/grd/en/>] Accessed 19 January 2021.

[2] WHO, "WHO Health Emergency Dashboard." [<https://extranet.who.int/publicemergency>] Accessed 19 January 2021.

[3] WHO, "Grenada | The current Covid19 situation" [<https://www.who.int/countries/grd/>] Accessed 19 January 2021.

[4] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 no publicly available evidence that the government of Grenada operates an electronic reporting surveillance system at both the national and the subnational level. The Ministry of Health website does not provide any information on whether the government operates any kind of electronic reporting surveillance in the country. [1] Grenada's Health Sector Strategic Plan (2016-25) notes that "the current health information system is mostly manual with some implementation of electronic technology in recent years". [2] It adds that the Ministry of Health does not have a laboratory network capable of supporting research on public health threats; consequently, the capacity to identify the causes of all reportable diseases is limited. There is no formal mechanism for coordination and reference between the laboratory at the General Hospital and international laboratories. of recognized excellence. Grenada does not have a public health institute or a national laboratory network.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 2021.

[2] Ministry of Health, "Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 19 January 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 no evidence of an electronic reporting surveillance system in Grenada and on whether it collects ongoing or real-time laboratory data. The Strategic Plan for Health (2016-2025) notes that, "the current health information system is mostly manual with some implementation of electronic technology in recent years." [1] It adds that, "The Epidemiology Information Unit (EIU) monitors the data collection instruments and processes to ensure data quality and relevance to the health system. Gradually, the system is being upgraded by the introduction of electronic systems and new structures that ensure that data gets to the central level as scheduled while ensuring accuracy and completeness." However, there is no information on if whether such an electronic surveillance system is in place in Grenada. The Ministry of Health website does not provide any information on this subject. Grenada does not have a national public health institute or a laboratory network to oversee such a surveillance system.

[1] Ministry of Health, "Strategic Plan for Health (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 19 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 Grenada. The Strategic Plan for Health (2016-2025) notes that, "The EIU (Epidemiology Information Unit) monitors the data collection instruments and processes to ensure data quality and relevance to the health system. Gradually, the system is being upgraded by the introduction of electronic systems and new structures that ensure that data gets to the central level as scheduled while ensuring accuracy and completeness." [1]The Ministry of Health does not provide any information on the use of electronic health records.[2] Grenada does not have a national public health institute or a laboratory network in place.

[1] Ministry of Health, "Strategic Plan for Health."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 19 January 2020.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 insufficient evidence that Grenada's national public health system has access to electronic records of individuals. The Strategic Plan for Health 2016-2025) notes that, "The EIU (Epidemiology Information Unit) monitors the data collection instruments and processes to ensure data quality and relevance to the health system. Gradually, the system is being upgraded by the introduction of electronic systems and new structures that ensure that data gets to the central level as scheduled while ensuring accuracy and completeness. " It adds, "This computerization process has commenced with the implementation of a Pilot Electronic Medical Records (EMR) project at the General Hospital." [1] Although there is a lack of a comprehensive public health system in Grenada, the onset of collecting electronic data is taking place and is accessible to authorized government officials. Grenada does not have a national public health institute or a laboratory network. There is no further information available on the website of the Ministry of Health. [2]

[1] Ministry of Health, "Strategic National Plan (2016-2025)"

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]

Accessed 19 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 evidence that Grenada follows data standards to ensure that data is comparable (e.g., ISO standards). The Ministry of Health does not provide any information on data standards.[1] Grenada does not have an established national public health institute.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 of established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data (e.g., through mosquito surveillance, brucellosis surveillance). The Ministry of Health website does not have any information on such mechanisms. [1] The Ministry of Agriculture and the Ministry of Environment do not have accessible online websites.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 January 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 limited evidence that Grenada makes 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). The Ministry of Health does provide a few health statistics on its website but the data is up-to-date only till 2014. There is no further evidence that Grenada is sharing disease statistics at least on a weekly basis and there is more than a one month lag in reporting. [1] There is no data available on the website of the Ministry of Health itself. Grenada does not have a national public health institute or a laboratory system.

[1] Ministry of Health, Government of Grenada. "Health Statistics" [http://www.health.gov.gd/index.php?option=com_content&view=article&id=192&Itemid=689&lang=en] Accessed 19 April 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

There is no evidence that Grenada makes de-identified COVID-19 Surveillance data (including details such as daily count, mortality rate, etc) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar). The Ministry of Health website does not have any evidence of any COVID-19 surveillance data.[1] The Ministry of Health even established another online portal to spread information about the government's rules and policies with respect to COVID-19 but this online portal does not give out any surveillance data or any other reports. [2] However, the World Health Organization (WHO) has a record of the latest Covid-9 data on Grenada. [3] Grenada does not have a national public health institute.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 20 January 2021.

[2] Ministry of Health, "Covid19" [<https://covid19.gov.gd/>] Accessed 20 January 2021.

[3] World Health Organization (WHO), "Grenada | WHO Coronavirus Disease Dashboard"

[<https://covid19.who.int/region/amro/country/gd>] Accessed 20 January 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: 1

There is evidence that Grenada has a legislation that safeguards the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. The Electronic Crimes Bill of 2013 provides for the prevention and punishment of distribution of sensitive online information. [1] Under Section 13 (3) (d), the definition of "sensitive electronic systems" covers "the protection of public safety including systems related to essential emergency services such as police, civil defence and medical services". However, there is no specific law or a regulation to safeguard the confidentiality of health information for individuals. The Ministry of Health does not have any information on this subject. [2]

[1] Government of Grenada, "Electronic Crimes Bill, 2013 | Explanatory notes." [[https://nowgrenada.com/wp-content/uploads/2013/07/Electronic-Crimes-](https://nowgrenada.com/wp-content/uploads/2013/07/Electronic-Crimes-Bill.pdf?x65460#:~:text=Regulations%20Page%205%205%20ELECTRONIC,crimes%20and%20for%20related%20matters.&text=)

[Bill.pdf?x65460#:~:text=Regulations%20Page%205%205%20ELECTRONIC,crimes%20and%20for%20related%20matters.&text=](https://nowgrenada.com/wp-content/uploads/2013/07/Electronic-Crimes-Bill.pdf?x65460#:~:text=Regulations%20Page%205%205%20ELECTRONIC,crimes%20and%20for%20related%20matters.&text=)

[\]](https://nowgrenada.com/wp-content/uploads/2013/07/Electronic-Crimes-Bill.pdf?x65460#:~:text=Regulations%20Page%205%205%20ELECTRONIC,crimes%20and%20for%20related%20matters.&text=) %20This%20Act%20shall%20come,Order%20published%20in%20the%20Gazette.] Accessed 20 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 20 January 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 of a legislation or a regulation safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks (e.g., ransomware). The Electronic Crimes Bill, 2013 prevents the distribution and thereby the misuse of online health information of individuals.[1] However, the Bill does not specifically mention protection from cyber attacks, but the Bill could be interpreted to criminalize cyber attacks such as ransomware. The Ministry of Health website does not have any information on this subject. [2] Grenada does not have a national public health institute or a laboratory network.

[1] Government of Grenada, "Electronic Crimes Bill, 2013 | Explanatory notes." [<https://nowgrenada.com/wp-content/uploads/2013/07/Electronic-Crimes-Bill.pdf?x65460#:~:text=Regulations%20Page%205%205%20ELECTRONIC,crimes%20and%20for%20related%20matters.&text=>

[%20This%20Act%20shall%20come,Order%20published%20in%20the%20Gazette.](#)] Accessed 20 January 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 20 January 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, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 0

There is no evidence that the government of Grenada 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. Organizations like the World Health Organization (WHO), Pan American Health Organization (PAHO) and Caribbean Health Agency (CARPHA) have a significant influence in matters of public health in Grenada. For instance, the Ministry of Health does not provide any statistics on the COVID-19 situation in Grenada but the WHO's country page on Grenada has detailed statistics of the situation.[1,2] However, there is no evidence of publicly made commitment to share surveillance data during a health emergency, even if it is implicit given the hold of these organizations in the region. Grenada does not have a public health institute nor a national public health laboratory.

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 20 January 2021.

[2] World Health Organization (WHO), "Grenada | Coronavirus (Covid19) Disease Outbreak Situation" [<https://covid19.who.int/region/amro/country/gd>] Accessed 20 January 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 publicly available evidence that the government of Grenada has a national system in place to provide support at the sub-national level (e.g. training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency. The Strategic Plan for Health (2016-2025) does not have any record of such a system in place in Grenada. [1] The Ministry of Health does not provide any information about such a capacity in the country. [2] Grenada does not have a national public health institute or a laboratory network in place.

[1] Ministry of Health, "Strategic Plan for Health (2016-2025)."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 19 April 2021.

[2] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 19 April 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 Grenada provides wraparound services to enable cases and suspected cases to self-isolate as recommended, particularly economic support (paycheck, job security). However, there is evidence that the Ministry of Health provides careful medical attention to those who have been affected by COVID-19. According to the Ministry of Health website, health officials keep track of individuals who have contracted COVID-19 and are self-isolating under the supervision of the Ministry. [1] But there is no evidence that Grenada provides any economic support in form of paychecks or job security. Grenada does not have a national public health institute or a laboratory network.

[1] Ministry of Health, Government of Grenada. "Covid19" [<https://covid19.gov.gd/>] Accessed 21 January 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 publicly available evidence that Grenada 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. The website of the Ministry of Health does not provide any information on Covid-19 data. [1] The government setup a separate website for Grenada's Covid19 regulations, but this website does not have any data on contact tracing efforts taking place in the country. [2]

[1] Ministry of Health, Government of Grenada. [<http://www.health.gov.gd/index.php?lang=en>] Accessed 20 January 2021.

[2] Ministry of Health, "Covid19" [<https://covid19.gov.gd/>] Accessed 20 January 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: 1

There is evidence that Grenada 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 an active public health emergency, but only in response to an ongoing emergency.

During the ongoing Covid-19 pandemic, the Ministry of Health has laid out strict travel protocols for international travelers. The Ministry of Health's portal for Covid19 information informs the following travel protocols, "1. Book approved accommodation for a MINIMUM of 7 days 2. Apply for travel authorization 3. Get tested 72 hours prior to travel 4. Show Travel Authorization Certificate AND copy of negative RT-PCR test before boarding 5. Take approved transportation to approved quarantine accommodation upon arrival 6. Get tested on day 5 7. Receive results in 48 hours 8. Continue to monitor and report for 7 days after being released from quarantine." [1] This suggests a detailed plan in place to prevent the virus to enter the country. Grenada does not have a national public health institute or a national laboratory network. There is no further evidence on the website of the Ministry of Health. [1]

[1] Ministry of Health, "Government of Grenada | Covid19". [<https://covid19.gov.gd/>]. Accessed 20 April 2021.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is evidence that Grenada has in place an applied epidemiology training program (such as FETP). The Training Programs for Epidemiology and Public Health Network (TEPHINET) records that it has established an effective FETP frontline across

Latin America and the Caribbean in response to the Zika virus. [1] It notes, "Over the course of 15 months, Frontline FETP training was successfully launched in Brazil, Colombia, Dominican Republic, Ecuador, Grenada, Haiti, Jamaica, Paraguay, Peru, St. Vincent and the Grenadines, Trinidad and Tobago, and Uruguay." Furthermore, in an online interview conducted by TEPHINET, an alumni interview series of those who undertook epidemiology training with TEPHINET, Shawn Charles, Medical Officer of Health, Epidemiology in Grenada attests that all employees in the Ministry of Health undertook the FETP training program provided by TEPHINET.[2] The Ministry of Health does not have any information on this subject.[3] The Strategic Plan for Health (2016-2025) does not have any record of an FETP training program for health workers in the country. [4]

[1] TEPHINET. "Establishing FETP Frontline Across Latin America and the Caribbean in Response to Zika". [https://www.tephinet.org/establishing-fetp-frontline-across-latin-america-and-the-caribbean-in-response-to-zika]. Accessed 20 January 2021.

[2] TEPHINET. 25 October 2017. "Alumni Spotlight: Meet Shawn Charles, Medical Officer of Health-Epidemiology in Grenada, 2016 graduate of the Caribbean Regional FELTP". [https://tephinet.org/news/27420]. Accessed 20 January 2021.

[3] Ministry of Health, Government of Grenada. [http://www.health.gov.gd/index.php?lang=en] Accessed 20 January 2021.

[4] Ministry of Health, "Strategic Plan for Health (2016-2025)."

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf] Accessed 20 January 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 no evidence that the available field epidemiology training programs are explicitly inclusive of animal health professionals or is there a specific animal health field epidemiology training program offered such as FETPV. Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) does not provide any evidence that the programs offered in Grenada were inclusive of animal health professionals or if there is a specific animal health epidemiology training program. The TEPHINET project only mentions health workers but does not delve into the details. [1] The Ministry of Health website does not provide any information on this matter. [2]

[1] TEPHINET. "Establishing FETP Frontline Across Latin America and the Caribbean in Response to Zika".

[https://www.tephinet.org/establishing-fetp-frontline-across-latin-america-and-the-caribbean-in-response-to-zika]. Accessed 20 January 2021.

[2] Ministry of Health, Government of Grenada. [http://www.health.gov.gd/index.php?lang=en] Accessed 20 January 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: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 0

There is no publicly available evidence that Grenada has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 to provide a comprehensive user friendly guide to health sector stakeholders that will enable prompt and effective health service response in the event of any disaster or emergency. The main objectives of the plan are to prevent death, diseases and disabilities resulting from the impact of any hazard. The plan also provides emergency procedures for infectious disease outbreaks.[1] However there is no information about the implementation of plan. The Disaster Risk Reduction Plan,2014 mentions outbreaks of illness and epidemics.[2] However it does not mention any specific health emergency response plan. Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 publicly available evidence of an overarching health response plan that has been updated in the last three years. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 to provide a comprehensive user friendly guide to health sector stakeholders that will enable prompt and effective health service response in the event of any disaster or emergency. The main objectives of the plan are to prevent death, diseases and disabilities resulting from the impact of any hazard. The plan also provides emergency procedures for infectious disease outbreaks.[1] But there is no information about the implementation of the plan. The Disaster Risk Reduction Plan,2014 mentions outbreaks of illness and epidemics.[2] However it does not mention any specific health emergency response plan. Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 publicly available evidence of an overarching health response plan that includes considerations for pediatric and/or other vulnerable populations. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 to provide a comprehensive user friendly guide to health sector stakeholders that will enable prompt and effective health service response in the event of any disaster or emergency. The main objectives of the plan are to prevent death, diseases and disabilities resulting from the impact of any hazard. The plan also provides emergency procedures for infectious disease outbreaks. It mentions developing a register of high risk/vulnerable groups under the Roles and responsibilities of the Community Health Service (CHS) section. [1] However it does not explicitly include the considerations of vulnerable populations. There is no mention of these populations in the Disaster Risk Reduction Plan,2014. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and>

<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and>

%20Petit%20Martinique%20-%202017.pdf]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 insufficient evidence that Grenada has a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 that covers the general actions to be undertaken by the Ministry of Health (MOH) and its associated divisions and departments, including Administration, Hospital Services, Community Health Services, Environmental Health Services and any other programs of the MOH and affiliated private sector services. [1] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014 provides details about engagement of the private sector in early warning and communications systems, mobilisation of recovery resources and emergency management. The draft model comprehensive disaster management bill prepared by Caribbean Disaster Emergency Management Agency (CDEMA) mentions that "the Disaster Management regulations make provision for civil society to work in collaboration with the National Disaster Management Agency to implement the disaster policies as required." [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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: 0

There is no publicly available evidence that Grenada has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 which mentions about the protocols when Dangerous Infectious Diseases (DID) occurs. This includes protocols for hand washing, correct usage of Personal Protective Equipment (PPE), putting on the PPE, removal of PPE, sanitizing the Triage Room and protocol for general cleaning. [1] However there is no information about the implementation of this plan. There is no information about NPIs in the National Disaster Risk Reduction Plan, 2014. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 no publicly available evidence that Grenada has either activated their national emergency response plan for an infectious disease outbreak in the past year or has completed a national-level biological threat-focused exercise in the past

year. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 that also provides an emergency response plan for an infectious disease outbreak. The plan includes surveillance, alerting process and general infection control protocols. [1] However there is no information about the implementation of the plan. There is no evidence regarding biological threat focussed exercises on the World Health Organization (WHO) Simulation Exercise Portal, or in the WHO After Action Review. [2,3]. The National Disaster Risk Reduction Plan, 2014 provides no such information. [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6] The country's COVID-19 response webpage does not provide any information on a plan to combat the virus either. [7]

- [1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 April 2021.
- [2] World Health Organisation. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise?region=All&country=258>]. Accessed 15 January 2021.
- [3] World Health Organisation. "After Action Review". [<https://extranet.who.int/sph/after-action-review?region=All&country=258>]. Accessed 15 April 2021.
- [4] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 April 2021.
- [5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.
- [6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 April 2021.
- [7] Ministry of Health Grenada [<https://covid19.gov.gd/>]. Accessed 22 April 2021.

3.2.1b

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

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

Current Year Score: 0

There is no publicly available evidence that Grenada in the past year has undergone an exercise to identify a list of gaps and best practices either through an infectious disease response or a biological threat-focused exercise. There is no evidence regarding an after-action review or biological threat focussed exercises on the World Health Organization (WHO) Simulation Exercise Portal, or in the WHO After Action Review. [1,2]. The National Disaster Risk Reduction Plan, 2014 provides no such information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

- [1] World Health Organisation. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise?region=All&country=258>]. Accessed 15 January 2021.
- [2] World Health Organisation. "After Action Review". [<https://extranet.who.int/sph/after-action-review?region=All&country=258>]. Accessed 15 January 2021.
- [3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.
- [4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 publicly available evidence that Grenada in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives. There is no evidence regarding an after-action review or biological threat focussed exercises on the World Health Organization (WHO) Simulation Exercise Portal, or in the WHO After Action Review. [1,2]. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 that covers the general actions to be undertaken by the Ministry of Health (MOH) and its associated divisions and departments, including Administration, Hospital Services, Community Health Services, Environmental Health Services and any other programs of the MOH and affiliated private sector services. [3] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014 provides details about engagement of the private sector in early warning and communications systems, mobilisation of recovery resources and emergency management. The draft model comprehensive disaster management bill prepared by Caribbean Disaster Emergency Management Agency (CDEMA) states that “the Disaster Management regulations make provision for civil society to work in collaboration with the Agency to implement the disaster policies as required.” [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6]

[1] World Health Organisation. “Simulation Exercise”. [<https://extranet.who.int/sph/simulation-exercise?region=All&country=258>]. Accessed 15 January 2021.

[2] World Health Organisation. “After Action Review”. [<https://extranet.who.int/sph/after-action-review?region=All&country=258>]. Accessed 15 January 2021.

[3] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[4] National Disaster Management Agency (NaDMA). November 2014. “Country Document on Disaster Risk Reduction for Grenada, 2014”. [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[5] Government of Grenada. “Ministry of Health”. [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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: 0

There is no publicly available evidence that Grenada has an Emergency Operations Center (EOC) that covers health issues. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 which states that “when the National Multi Hazard Health Sector Disaster Emergency Management plan is activated the Chief Medical Officer (CMO) in collaboration with the Health Disaster Management Officer (HDMO) will open the Health EOC which will support the implementation of the plan. The Health Emergency Operations Centre (HEOC) is the coordinating hub for the management of emergencies and disasters by the Health Sector.” The purpose of the EOC is to facilitate the management of the health disaster and to ensure that all information regarding the threats or impacts to health are consolidated in one place. [1] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan,2014 mentions that the National Disaster Management Agency (NaDMA) has a designated National Emergency Operations Centre at the national level which is activated once an emergency is confirmed. NaDMA does not have a specific Emergency Response Committee and does not have response plans for all prevalent hazards. It handles emergency response through its 15 sub-committees and their district response plans, guided by the National Emergency Operations Centre. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 15 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. “Country Document on Disaster Risk Reduction for Grenada, 2014”. [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. “Ministry of Health”. [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 publicly available evidence that Grenada has an Emergency Operations Center (EOC) that is required to conduct a drill for a public health emergency scenario at least once per year or any evidence that suggests that they conduct a drill at least once per year. Caribbean Disaster Emergency Management Agency (CDEMA) conducted an Emergency Operations Training in Grenada from February 24th - 26th 2016. 53 representatives from both District and National Emergency Operations Centres (EOCs) in Grenada benefitted from a 3 day training workshop on emergency management centre operations. The training was facilitated by the Caribbean Disaster Emergency Management Agency (CDEMA) in collaboration with the National Disaster Management Agency (NaDMA) and financed under the 10th European Development Fund African, Caribbean and Pacific Group of States European Union (ACP-EU) Project. [1] However there is no information regarding any further training or drills. The National Disaster Risk Reduction Plan,2014 does not provide any such information. [2] Both the Ministry of Health and the main website of the government do not provide any information.[3,4]

[1] Caribbean Disaster Emergency Management Agency (CDEMA) News. "CDEMA conducts Emergency Operations Training in Grenada". [https://www.cdema.org/index.php?option=com_content&view=article&id=1558%3Acde-ma-conducts-

emergency-operations-training-in-grenada&catid=35%3Apress-releases&Itemid=1]. Accessed 15th January 2021

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 2021.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Grenada has an Emergency Operations Center (EOC) that has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The National Disaster Risk Reduction Plan, 2014 mentions that the National Disaster Management Agency (NaDMA) has a designated National Emergency Operations Centre at the national level, which is activated once an emergency is confirmed. NaDMA does not have a specific Emergency Response Committee and does not have response plans for all prevalent hazards. It handles emergency response through its 15 sub-committees and their district response plans, guided by the National Emergency Operations Centre. [1] Caribbean Disaster Emergency Management Agency (CDEMA) conducted an Emergency Operations Training in Grenada from February 24th - 26th 2016. 53 representatives from both District and National Emergency Operations Centres (EOCs) in Grenada benefitted from a 3 day training workshop on emergency management centre operations. [2] However there is no information regarding any emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The National Disaster Risk Reduction Plan, 2014 does not provide any such information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

[1] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 15 January 2021.

[2] Caribbean Disaster Emergency Management Agency (CDEMA) News. "CDEMA conducts Emergency Operations Training in Grenada". [https://www.cdema.org/index.php?option=com_content&view=article&id=1558%3Acde-ma-conducts-emergency-operations-training-in-grenada&catid=35%3Apress-releases&Itemid=1]. Accessed 15th January 2021

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 15 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 15 January 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 available 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) or that there are standard operating procedures, guidelines, Memorandum of Understanding (MOUs) or other agreements between the public health and security authorities to respond to a potential deliberate biological event in Grenada. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 that contains no evidence of any operating procedures, guidelines or agreements relating to bioterrorism attacks. [1] The National Disaster Risk Reduction Plan,2014 mentions no operating procedures, guidelines or agreements relating to bioterrorism attacks. [2] In general, Grenada's disaster management services are mainly geared towards hurricanes and related events, rather than pandemics or bioterrorism. The National Disaster Risk Reduction Plan,2014 does not provide any such information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 18 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 18 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 January 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: 0

There is insufficient publicly available evidence that Grenada has a risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) that outlines how messages will reach populations and sectors with different communications needs (eg different languages, location within the country, media reach). The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique- 2017 which mentions that the Health Promotion Department (HPD) is responsible for developing a disaster /emergency response plan, to include the duties and responsibilities of staff and also communication strategies for managing hazards. It has the responsibility to develop a Risk Communication Plan for Health. This plan contains a separate section for media strategy which states that "all matters related to the sharing of information with the media will be handled by the Health Promotion and Public Relation Department of the Ministry of Health. This Department will develop a media

strategy and a designated liaison for communicating with the media." [1] However there is no information about how messages will reach populations and sectors with different communications needs like different languages, location within the country, media reach during public health emergencies. The National Disaster Risk Reduction Plan, 2014 mentions no such plans. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 18 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 18 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 January 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: 0

There is no publicly available evidence that Grenada has in place, either in the national public health emergency response plan or in other legislation, regulation, or strategy documents, a section detailing a risk communication plan that is specifically intended for use during a public health emergency. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017. Under the 'Brief overview of the Health Care Services' section, the plan mentions that "the Health Promotion Department (HPD) is responsible for developing a disaster /emergency response plan, to include the duties and responsibilities of staff and also communication strategies for managing hazards." The HPD has the responsibility to develop a Risk Communication Plan for Health. [1] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014 mentions no such plans. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 18 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 18 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 January 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: 0

There is no publicly available evidence that Grenada has a risk communication plan that designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017. Under the 'Brief overview of the Health Care Services' section, the plan mentions that "the Health Promotion Department(HPD) is responsible for developing a disaster /emergency response plan, to include the duties and responsibilities of staff and also communication strategies for managing hazards." The HPD has the responsibility to develop a Risk Communication Plan for Health. [1] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan,2014 mentions no such plans. [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 18 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 18 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 January 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 publicly available evidence that the government utilises media platforms to inform the public about ongoing public health emergencies, such as Covid-19. The Government of Grenada has Twitter and Facebook accounts, and the Ministry of Health has its own page. [1,2,3] The Health Ministry's Facebook page includes real time updates on coronavirus disease (Covid-19) including number of patients, guidelines and precautions to be followed. The Health Ministry website mostly has information on its services, facilities and job openings. [4]

[1] Twitter. "Grenada News". [<https://twitter.com/grenadanews?lang=en>]. Accessed 18 January 2021.

[2] Facebook. "GIS -- Government Information Service of Grenada". [<https://www.facebook.com/GISgrenada>]. Accessed 18

January 2021.

[3] Facebook. "Ministry of Health Grenada". [<https://www.facebook.com/HealthGrenada/>]. Accessed 18 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 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 publicly available evidence that senior leaders of Grenada have shared misinformation or disinformation on infectious diseases in the past two years on social media platforms like Facebook and Twitter. The Prime Minister of Grenada, Dr. Keith Mitchell has a Facebook account. [1] But there is no sign of misinformation or disinformation from his account. The Minister of Health, Social Security and International Business, Mr Nickolas Steele has a Twitter account. [2] However, there is no evidence of misinformation or disinformation on his account. There is no further evidence on the website of the Ministry of Health as well as international and national news outlets. [3]

[1] Facebook. "Prime Minister Dr. the Rt Hon. Keith Mitchell". [<https://www.facebook.com/drkeithcmitchell/>]. Accessed 18 January 2021

[2] Twitter. "@SteeleNickolas". [<https://twitter.com/steelenickolas?lang=en>]. Accessed 18 January 2021

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 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: 59.07

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: 102.08

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: 3.14

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: 4.24

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 publicly available evidence that Grenada 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. World Integrated Trade Solution (WITS) database does not provide any information regarding any restriction by the government during coronavirus disease (Covid-19) outbreak. [1] Both the Ministry of Health and the main website of the government do not provide any information. [2,3] The official websites of the Ministry of Agriculture, Lands and Forestry and the Ministry of Foreign Affairs, International Business and Caricom Affairs are not operational as of 18 January 2021.

[1] World Integrated Trade Solution (WITS). "Tariff data by Country". [<https://wits.worldbank.org/tariff/trains/country-byhs6product.aspx?lang=en>]. Accessed 18 January 2021.

[2] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[3] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 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 publicly available evidence that Grenada has issued a restriction, without international/bilateral support, on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak. World Integrated Trade Solution (WITS) database does not provide any information regarding any restriction by the government during coronavirus disease (Covid-19) outbreak. [1] Both the Ministry of Health and the main website of the government do not provide any information. [2,3] The official websites of the Ministry of Agriculture, Lands and Forestry and the Ministry of Foreign Affairs, International Business and Caricom Affairs are not operational as of 18 January 2021.

[1] World Integrated Trade Solution (WITS). "Tariff data by Country". [<https://wits.worldbank.org/tariff/trains/country-byhs6product.aspx?lang=en>]. Accessed 18 January 2021.

[2] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 18 January 2021.

[3] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 18 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 Grenada has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. Most recently in December 2020, authorities in Grenada announced new restrictions due to a spike in local Covid-19 confirmed cases, as well as a travel ban for the UK due to a variant strain of the disease. [1]

[1] Garda. "Grenada: Authorities introduce COVID-19-related curfew measures and a travel ban for the UK as of Dec. 22". [<https://www.garda.com/crisis24/news-alerts/419556/grenada-authorities-introduce-covid-19-related-curfew-measures-and-a-travel-ban-for-the-uk-as-of-dec-22-update-22>]. Accessed 18 January 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: 140.67

2017

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 628.37

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: 1

There is publicly available evidence of a public 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 for Grenada. The Strategic Plan for Health 2016-25 includes a section on human resources that addresses issues such as retention, recruitment policy and succession planning in the health sector. [1] It specifically covers human resources development and training in public health, and notes that "the Ministry of Health and Social Security evaluates the current need for public health workers in its system to perform public health functions and services and identifies gaps in the public health workforce of composition and availability needing to be filled". The plan outlines the size of Grenada's health workforce and emphasizes the problem of shortages in key areas such as dermatology, oncology, urology, psychiatry, psychology, community mental health, radiology, laboratory services and environmental health. The plan also sets out numerous possible strategies to address the shortcomings, including succession planning, public-private partnerships, training and measures to improve staff retention.

[1] Both the Ministry of Health and the main website of the government do not provide any information. [2,3] The official websites of the Ministry of Education, Human Resource Development, Religious Affair and Information and the Ministry of Labour are not operational as of 19 January 2021.

[1] Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 January 2021.

[2] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[3] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 2021.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 357

2017

WHO/World Bank; national sources

4.1.2b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient public evidence that Grenada 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. The website of the Grenada General Hospital mentions a plan to convert an existing ward, known as Duncan's ward, into an isolation unit, but gives no further details. [1] However, the General Hospital has a new 9-bed isolation ward where Covid-19 patients who need medical care will be treated. [2] The website of another hospital, the Princess Royal Hospital, mentions that the facility had isolation facilities for infectious diseases when it was built in 1907, does not indicate any modern isolation capacity. [3] Both the Ministry of Health and the main website of the government do not provide any information.[4,5]

[1] Government of Grenada. "Ministry of Health: The General Hospital". [http://health.gov.gd/index.php?option=com_content&view=article&id=170&Itemid=601&lang=en]. Accessed 19 January 2021.

[2] Grenada Now. 08 April 2020. "Isolation unit for Covid-19 patients receives portable ultrasound devices". [<https://www.nowgrenada.com/2020/04/isolation-unit-for-covid-19-patients-receives-portable-ultrasound-machines/>]. Accessed 19 January 2021.

[3] Government of Grenada. "Ministry of Health: Princess Royal Hospital". [http://health.gov.gd/index.php?option=com_content&view=article&id=163&Itemid=599&lang=en]. Accessed 19 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 publicly available evidence that Grenada has either has demonstrated capacity to expand isolation capacity or updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

The Strategic Plan for Health does not mention creating or expanding isolation capacity. [1] The Ministry of Health website has page dedicated to infectious diseases but it does not outline any isolation plan. [2] The Caribbean Public Health Agency dashboard (CARPHA) does not provide any information on isolation either. [3] The website of the Grenada General Hospital mentions a plan to convert an existing ward, known as Duncan's ward, into an isolation unit, but gives no further details. [4] However, the General Hospital has a new 9-bed isolation ward where Covid-19 patients who need medical care will be treated. [5]

[1] The Strategic Plan for Health 2016-2025, [https://gov.gd/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 22 April 2021.

[2] Government of Grenada, "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 22 April 2021.

[3] The Caribbean Public Health Agency, [<https://www.carpha.org/>]. Accessed 22 April 2021.

[4] Government of Grenada. "Ministry of Health: The General Hospital".

[http://health.gov.gd/index.php?option=com_content&view=article&id=170&Itemid=601&lang=en]. Accessed 19 January 2021.

[5] Grenada Now. 08 April 2020. "Isolation unit for Covid-19 patients receives portable ultrasound devices".

[<https://www.nowgrenada.com/2020/04/isolation-unit-for-covid-19-patients-receives-portable-ultrasound-machines/>]. Accessed 19 January 2021.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 0

There is no publicly available evidence that Grenada has a national procurement protocol in place for the acquisition of laboratory supplies and medical supplies. Grenada has an Office of Public Procurement set up under the Public Procurement and Disposal of Public Property Act and related regulations. The office sets procedures for government purchases of goods, works and services by all public entities. [1] The Strategic Health Plan for 2016-25 says that some laboratory equipment is obtained through lease arrangements and third parties. It mentions a procurement committee, but indicates that it has not functioned for years. According to the plan “The Biomedical unit is responsible for the identification, procurement and maintenance of all medical equipment at both the Hospitals and the Community Health facilities. The Procurement Committee which is responsible for the purchasing of equipment has been nonfunctional for a number of years, Hence, whenever new or replacement equipment are to be procured there is great reliance on the requesting divisional head and the expertise of the Senior Biomedical Technician. There is currently no Biomedical Engineer employed within the health sector.” [2] Both the Ministry of Health and the main website of the government do not provide any information. [3,4] The national laboratory does not have an individual website. The official website of the Ministry of Agriculture, Lands and Forestry is not operational as of 19 January 2021.

[1] Government of Grenada. 2019. "Office of Public Procurement". [<http://www.procurement.gd>]. Accessed 19 January 2021.

[2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 no publicly available evidence that Grenada has a stockpile of medical supplies for national use during a public health emergency. The Ministry of Health has drafted a National Multi-Hazard Health Sector Disaster Emergency Management Plan-2017 for Grenada, Carriacou and Petite Martinique which states that the Health Services Committee is responsible for ensuring an adequate supply and requisition of emergency medical supplies through the relevant departments. It also mentions that the Procurement Officer coordinates and advises on the establishment of Memorandum of Understanding (MOUs) with suppliers for obtaining emergency medical supplies, accessories and materials. [1] However, there is no evidence of implementation of this plan. The Strategic Health Plan for 2016-25 doesn't provide any information about the stockpile of medical supplies for national use during a public health emergency. [2] The National Disaster Risk Reduction Plan, 2014, does not provide any information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 22 April 2021.

[2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 22 April 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 22 April 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 22 April 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 22 April 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 no publicly available evidence that Grenada has a stockpile of laboratory supplies for national use during a public health emergency. The Strategic Health Plan for 2016-25 states that "some laboratory equipment are procured through lease arrangements with the manufacturers for the purchase of reagents while others are sourced through third party agents in collaboration with medical specialists through technical assistance from the St. George's University." [1] However there is no mention about the stockpile of laboratory supplies. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 drafted by the Health Ministry does not provide any relevant information. [2] The National Disaster Risk Reduction Plan, 2014 does not provide any information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 19 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 insufficient evidence that Grenada conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. The Strategic Health Plan for 2016-25 says that some laboratory equipment is obtained through lease arrangements and third parties. It mentions a procurement committee, but indicates that it has not functioned for years. However, it does not mention anything about conducting an annual review. The plan does state that "Donation of large quantities of medicines and medical supplies create problems for storage and disposal. Oftentimes, donated medicines are not listed in the Essential Medicine List and are not relevant to country disease pattern and are not prescribed by the doctors. Ultimately, they expire and are stockpiled at CMS and at Pharmacies." [1] The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petit Martinique - 2017 mentions that it is the responsibility of the Chief Procurement Unit (CPU) to maintain stocks but does not mention whether or not the CPU conducts an annual review. [2] There is no relevant information on the Ministry of Health or the National Portal of Grenada website. [3]

[1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 April 2021.

[2] The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petit Martinique - 2017 [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>] Accessed 19 April 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 April 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 April 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 publicly available evidence that Grenada has either a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies or a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency. The Strategic Health Plan for 2016-25 states that "the Biomedical unit is responsible for the identification, procurement and maintenance of all medical equipment at both the Hospitals and the Community Health facilities. The Procurement Committee, which is responsible for the purchasing of equipment, has been nonfunctional for a number of years. Hence, there is great reliance on the requesting divisional head and the expertise of the Senior Biomedical Technician. [1] The Strategic Health Plan for 2016-25 states that "in the Public Sector, Pharmaceutical services are provided at the four Hospitals, six (6) Health Centers and thirty (30) Medical Stations by twenty-two (22) Pharmacists. Limited access to medicines remains a common problem. The Ministry of Health procures vaccines through Pan-American Health Organization (PAHO) revolving fund. Procurement is funded exclusively by the Government of Grenada however, local private medical doctors are allowed vaccines free of cost on request." [2] But there is no mention about the domestic manufacturing of the supplies. According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 the Procurement Officer is responsible for

the management of the Central Procurement Unit and ensuring the availability of appropriate and adequate quantities of domestic, medical and pharmaceutical supplies and accessories. [2] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014, does not provide any information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 April 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 19 April 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 April 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 April 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 publicly evidence that Grenada has either a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency or a plan/mechanism to procure laboratory supplies. Grenada has an Office of Public Procurement set up under the Public Procurement and Disposal of Public Property Act and related regulations. The office sets procedures for government purchases of goods, works and services by all public entities.[1] The Strategic Health Plan for 2016-25 says that some laboratory equipment is obtained through lease arrangements and third parties. It mentions a procurement committee, but indicates that it has not functioned for years. [2] However it does not mention domestic manufacturing capacity to produce laboratory supplies. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 neither provide a plan for domestic manufacturing capacity to produce laboratory supplies nor for procuring laboratory supplies. [3] The National Disaster Risk Reduction Plan, 2014 does not provide any information. [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] Government of Grenada. 2019. "Office of Public Procurement". [<http://www.procurement.gd>]. Accessed 19 January 2021.

[2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf].

Accessed 19 January 2021.

[3] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 19 January 2021.

[4] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 publicly available evidence that Grenada has a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency. The Strategic Health Plan for 2016-25 states that "in the Public Sector, Pharmaceutical services are provided at the four Hospitals, six (6) Health Centers and thirty (30) Medical Stations by twenty-two (22) Pharmacists. Limited access to medicines remains a common problem. The Ministry of Health procures vaccines through Pan-American Health Organization (PAHO) revolving fund. Procurement is funded exclusively by the Government of Grenada however, local private medical doctors are allowed vaccines free of cost on request." [1] But it does not provide details regarding dispensing medical countermeasures (MCM). According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 that has been drafted by the Health Ministry, the Chief Pharmacist ensures adequate stocks of essential medical and pharmaceutical supplies are maintained for distribution.[2] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014 does not provide any information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 19 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for

Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 no publicly available evidence that Grenada has a public plan in place to receive health personnel from other countries to respond to a public health emergency. However, foreign personnel play an important day-to-day role in the country's healthcare system. The Pan American Health Organisation (PAHO) has noted that bilateral assistance from Cuba is used to fill the shortage of specialists, such as oncologists, obstetricians and gynaecologists, and internal medicine physicians. Scholarships from China, Cuba, and other countries also provide support for specialist training in such fields as obstetrics and gynaecology, ophthalmology, and pathology. [1] But it does not mention anything about public health emergencies. The National Disaster Risk Reduction Plan, 2014 does not provide any information. [2] Both the Ministry of Health and the main website of the government do not provide any information.[3,4] The official website of the Ministry of National Security, Public Administration, Youth Development, Home Affairs, ICT and Disaster Management is not operational as of 19 January 2021.

[1] PAHO-WHO. "Health in the Americas: Grenada". [<https://www.paho.org/salud-en-las-americas-2017/?p=4276>]. Accessed 19 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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: 99.3

2016

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: 377.95

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 publicly available evidence that the government of Grenada 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. Neither the Strategic Health Plan for 2016-25 nor the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 provides any details. [1,2] The National Disaster Risk Reduction Plan, 2014 does not provide any information. [3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

- [1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 19 January 2021.
- [2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 19 January 2021.
- [3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 19 January 2021.
- [4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 19 January 2021.
- [5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 19 January 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 no publicly available evidence that Grenada has a system in place for public health officials and healthcare workers to communicate during a public health emergency. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 mentions that the Health Promotion Department (HPD) is responsible for developing a disaster /emergency response plan, to include the duties and responsibilities of staff and also communication strategies for managing hazards. It also provides information about the responsibility of hospital service to maintain communication with the Health Emergency Operation Centre (HEOC). The Health Promotion Department (HPD) is responsible for facilitating communication training for internal, external and associate staff. The plan states that the National Disaster Management Agency (NaDMA's) communication system, once operational, is designed to provide linkages with key responders especially Police and Health and therefore should be well understood by key stakeholders. The system is expected to activate an alerting system that is linked by radios to the key responding agencies in Grenada, in the case of a disaster. [1] However there is no specific mention about the communication system for public health officials and healthcare workers. Neither the Strategic Health Plan for 2016-25 nor the National Disaster Risk Reduction Plan, 2014, provide any relevant information. [2,3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

- [1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.
- [2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf].

Accessed 20 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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 no publicly available information that Grenada has the system for public health officials and healthcare workers to communicate during an emergency that encompasses healthcare workers in both the public and private sector. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 mentions that the Health Promotion Department (HPD) is responsible for developing a disaster /emergency response plan, to include the duties and responsibilities of staff and also communication strategies for managing hazards. It also provides information about the responsibility of hospital service to maintain communication with the Health Emergency Operation Centre (HEOC). The Health Promotion Department (HPD) is responsible for facilitating communication training for internal, external and associate staff. The plan states that the National Disaster Management Agency (NaDMA's) communication system, once operational, is designed to provide linkages with key responders especially Police and Health and therefore should be well understood by key stakeholders. The system is expected to activate an alerting system that is linked by radios to the key responding agencies in Grenada, in the case of a disaster. [1] However there is no specific mention about the communication system for public health officials and healthcare workers that encompasses healthcare workers in both the public and private sector. Neither the Strategic Health Plan for 2016-25 nor the National Disaster Risk Reduction Plan, 2014, provide any relevant information. [2,3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.

[2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 20 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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 publicly available evidence that the national public health system in Grenada is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities. The Strategic Health Plan for 2016-25 mentions that the current Health Information System (HIS) is mostly manual with some implementation of electronic technology in recent years. Health information is managed nationally by the Epidemiology and Information Unit (EIU). The EIU collects data mainly from CHS, hospital services, the Registrar General Department (Births and Deaths), private physicians and institutions and the Central Statistical Office (CSO). The HIS includes routine service delivery information system, epidemiological surveillance system, vital registration and census data. The Medical Records Unit at the General Hospital compiles monthly inpatient statistics on admissions, discharges, and bed occupancy rates by ward based on individual patient discharge records. [1] But there is no information about the healthcare associated infections in the plan. There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and the National Disaster Risk Reduction Plan, 2014. [2,3] The World Health Organisation (WHO) Global Database for Antimicrobial Resistance (AMR) Country Self Assessments states that Grenada has no national AMR action plan, which might address monitoring of infections in healthcare facilities. [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6] The website of the Grenada General Hospital does not provide any information. [7] The National Laboratory does not appear to have an individual website.

[1] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 20 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[4] World Health Organisation (WHO). "Global Database for Antimicrobial Resistance Country Self Assessment". [<https://amrcountryprogress.org/>]. Accessed 20 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 2021.

[7] Government of Grenada. "Ministry of Health: The General Hospital".

[http://health.gov.gd/index.php?option=com_content&view=article&id=170&Itemid=601&lang=en]. Accessed 20 January 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 publicly available evidence of a national requirement for ethical review before beginning a clinical trial in Grenada. According to the Strategic Health Plan for 2016-25, the Ministry of Health has not yet developed a public health research agenda. Institutional capacity is yet to be strengthened in this area including the provision of adequate analytical tools. The ministry does not have a laboratory network capable of supporting research on public health threats; consequently, the capacity to identify the causative agents of all reportable diseases in the country is limited. [1] There is no mention of clinical trials or the need for ethical review in this plan. There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and the National Disaster Risk Reduction Plan, 2014. [2,3] According to a 2012 pharmaceutical profile of Grenada published by the Ministry of Health and the World Health Organization, Grenada has no laws requiring the agreement of an ethics committee or institutional review board for clinical trials. There are no legal provisions requiring authorisation for conducting clinical trials, and clinical trials are not required to be registered. [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6]

[1] Ministry of Health. Government of Grenada. "Strategic Plan for Health 2016-25".

[http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 20 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[4] Ministry of Health, World Health Organisation, Pan American Health Organisation. 2012. "Grenada: Pharmaceutical Country Profile". [http://www.who.int/medicines/areas/coordination/Grenada_country_profile.pdf]. Accessed 20 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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 publicly available evidence that Grenada has an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics. According to the 2012 pharmaceutical profile of Grenada published by the Ministry of Health and the World Health Organization, legal provisions do not exist requiring authorization for conducting Clinical Trials by the Medicines Regulatory Authority (MRA) in Grenada. 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 a registry, by law. The government does not publish Good Clinical Practice (GCP) guidelines. [1] However there is no specific information about unregistered medical countermeasures (MCM) to treat ongoing epidemics. The Strategic Health Plan for 2016-25 does not give any details about clinical trials. [2] There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and the National Disaster Risk Reduction Plan, 2014. [3,4] Both the Ministry of Health and the main website of the government provides any information. [5,6]

[1] Ministry of Health, World Health Organisation, Pan American Health Organisation. 2012. "Grenada: Pharmaceutical Country Profile". [http://www.who.int/medicines/areas/coordination/Grenada_country_profile.pdf]. Accessed 20 January 2021.

[2] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 20 January 2021.

[3] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.

[4] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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: 0

There is no publicly available evidence of a government agency responsible for approving new medical countermeasures for humans in Grenada. According to the 2012 pharmaceutical profile of Grenada published by the Ministry of Health and the World Health Organization, Grenada's Medicines Regulatory Authority has no control over clinical trials. [1] The agency's functions include marketing authorisation, inspection, import control, licensing and pharmacovigilance. The authority is part of the Ministry of Health and does not have its own website. The document does not provide any information regarding an authority to approve new medical countermeasures for humans in Grenada. According to RegDesk, a US-based provider of regulatory intelligence, Grenada did not have a medical regulatory approval process as of early 2017.[2] The Strategic Health Plan for 2016-25 does not give any details about clinical trials. [3] There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and

the National Disaster Risk Reduction Plan, 2014. [4,5] Both the Ministry of Health and the main website of the government do not provide any information. [6,7]

[1] Ministry of Health, World Health Organisation, Pan American Health Organisation. 2012. "Grenada: Pharmaceutical Country Profile". [http://www.who.int/medicines/areas/coordination/Grenada_country_profile.pdf]. Accessed 20 January 2021.

[2] RegDesk Inc. 25 January 2017. "List of Countries without Formal Regulatory Approval Process". [<https://www.regdesk.co/countries-no-medical-device-regulations>]. Accessed 20 January 2021.

[3] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 20 January 2021.

[4] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.

[5] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.

[6] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[7] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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 that Grenada has an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies. According to the 2012 pharmaceutical profile of Grenada published by the Ministry of Health and the World Health Organization, the functions of Grenada's Medicines Regulatory Authority are limited to marketing authorisation, inspection, import control, licensing and pharmacovigilance.[1] The agency is part of the Ministry of Health and does not have its own website. The document does not contain any information regarding the process for approving medical countermeasures for human use during public health emergencies. According to RegDesk, a US-based provider of regulatory intelligence, Grenada did not have a medical regulatory approval process as of early 2017.[2] The Strategic Health Plan for 2016-25 does not give any details about clinical trials. [3] There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and the National Disaster Risk Reduction Plan, 2014. [4,5] Both the Ministry of Health and the main website of the government do not provide any information. [6,7]

[1] Ministry of Health, World Health Organisation, Pan American Health Organisation. 2012. "Grenada: Pharmaceutical Country Profile". [http://www.who.int/medicines/areas/coordination/Grenada_country_profile.pdf]. Accessed 20 January 2021.

[2] RegDesk Inc. 25 January 2017. "List of Countries without Formal Regulatory Approval Process". [<https://www.regdesk.co/countries-no-medical-device-regulations>]. Accessed 20 January 2021.

[3] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf].

Accessed 20 January 2021.

- [4] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 20 January 2021.
- [5] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 20 January 2021.
- [6] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.
- [7] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 20 January 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: 1

There is publicly available evidence that pandemics are integrated with other national emergencies in Grenada's national risk reduction strategy contained in the Country Document on Disaster Risk Reduction for Grenada, 2014. [1] The strategy puts specific emphasis on the growing threat of pandemics in Grenada caused by climate change: "It is projected that there will be an increase in vector borne diseases. One can expect that mosquito borne illnesses like Dengue Fever and Chikungunya will

continue to affect the population in the future. Additionally the possibility of lower rainfall can result in droughts with the potential to compromise sanitation practices." However, the strategy notes that the Public Health Act 1925 also makes provision for preventing the spread of infectious diseases more generally. Part V addresses the powers of the Sanitary Authority to gazette regulations regarding prevention of the spread of specific diseases and the power of the Minister to extend the definition of infectious disease. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 mentions the responsibility of Health Services Committee to develop a program for prevention and management of epidemics. [2] However there is no evidence of the implementation of the plan. Both the Ministry of Health and the main website of the government do not provide any information. [3,4]

[1] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[3] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[4] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 publicly available evidence that Grenada has cross-border agreements pertaining to public health emergencies. It is a member of the Caribbean Public Health Agency (CARPHA), CARPHA's specialised laboratories provide support for the surveillance, prevention, promotion and control of public health issues in the region. [1] It is also a member of the Pan American Health Organisation (PAHO), whose health emergencies department focuses on strengthening local capacities in prevention, risk reduction, preparedness, surveillance, response, and early recovery for emergencies and disasters. [2] The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 mentions a list of Mutual Aid Agreements and Memorandum of Understanding (MOU's) which includes CARPHA and PAHO Agreements. [3] The Country Document on Disaster Risk Reduction for Grenada, 2014 does not provide any information. [4] Both the Ministry of Health and the main website of the government do not provide any information. [5,6]

[1] Caribbean Public Health Agency (CARPHA). "Member States". [<https://www.carpha.org/Who-We-Are/Member-States>]. Accessed 21 January 2021.

[2] Pan American Health Organisation (PAHO). "Health Emergencies: About Us". [https://www.paho.org/disasters/index.php?option=com_content&view=article&id=699:about-us&Itemid=918&lang=en]. Accessed 21 January 2021.

[3] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada,

Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[4] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 20 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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: 2

There is publicly available evidence that Grenada has cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies. This takes the form of membership of the Caribbean Animal Health Network (CaribVET), whose objectives include: strengthening national capacities related to preparedness, surveillance, monitoring and management of animal and zoonotic diseases; supporting implementation of early warning, early detection and quick response mechanisms for animal and zoonotic diseases; and improving and harmonising the surveillance and control of animal and zoonotic diseases. [1] There is no information available in both the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017 and the National Disaster Risk Reduction Plan, 2014. [2,3] Both the Ministry of Health and the main website of the government do not provide any information. [4,5]

[1] Caribbean Animal Health Network (CaribVET). "Network Objectives". [<https://www.caribvet.net/about-the-network/objectives>]. Accessed 21 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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: 1

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

Does the country meet at least 2 of the following criteria?

- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)

- Membership in the Australia Group (AG)

- Membership in the Proliferation Security Initiative (PSI)

Needs to meet at least two of the criteria to be scored a 1 on this measure. , Yes for five = 1 , Yes for four = 1 , Yes for three = 1 , Yes for two = 1 , Yes for one = 0 , No for all = 0

Current Year Score: 0

2021

Global Health Security Agenda; JE Alliance; Global Partnership; Australia Group; PSI

5.4 JOINT EXTERNAL EVALUATION (JEE) AND PERFORMANCE OF VETERINARY SERVICES PATHWAY (PVS)

5.4.1 Completion and publication of a Joint External Evaluation (JEE) assessment and gap analysis

5.4.1a

Has the country completed a Joint External Evaluation (JEE) or precursor external evaluation (e.g., GHSA pilot external assessment) and published a full public report in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.4.1b

Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.4.2 Completion and publication of a Performance of Veterinary Services (PVS) assessment and gap analysis

5.4.2a

Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

Has the country completed and published a Performance of Veterinary Services (PVS) gap analysis in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

Is there evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Grenada has allocated national funds to improve capacity to address epidemic threats within the past three years. According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017, "a line item in the annual budget should be included so that funds will be available to conduct some of the activities necessary to mitigate potential risks." It also mentions that the Minister of Health (MOH) is responsible to ensure that funds for Disaster Management are included in the annual budget of the Ministry before submission to the Minister of Finance.[1] However there is no evidence regarding the implementation of the plan. The National Disaster Risk Reduction Plan, 2014 states that the government has not allocated a Calamity Fund in its budget. Calamities are provided for through participation in the Caribbean Catastrophe Risk Insurance Facility (CCRIF).[2] The Strategic Health Plan for 2016-25 provides information about securing adequate and sustainable funds to support national health development goals. The strategic objectives under health financing includes implementing appropriate financing strategies that will ensure accessible, efficient and equitable provision of health care, protecting people from financial catastrophe and impoverishment as a result of using health services, establishing an evidenced- based system for the equitable and efficient allocation of resources and optimizing the use of existing resources through improved inventory management.[3] There is no specific mention about allocation of funds to improve capacity to address epidemic threats. Both the Ministry of Health and the main website of the government do not provide any information. [4,5] The official website of the Ministry of Agriculture, Lands and Forestry is not operational as of 21 January 2021.

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi->

Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf]. Accessed 21 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[3] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 21 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 publicly available evidence of publicly identified special emergency public financing mechanisms and funds which Grenada can access in the face of a public health emergency. Grenada is eligible to borrow from the World Bank's International Development Association (IDA). [1] Grenada can access funds from the World Bank's Pandemic Emergency Financing Facility (PEF) [2] According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017, "a line item in the annual budget should be included so that funds will be available to conduct some of the activities necessary to mitigate potential risks." [3] However there is no information about existing financing mechanisms and funds which Grenada can access in the face of a public health emergency. The Strategic Health Plan for 2016-25 provides information about securing adequate and sustainable funds to support national health development goals. The strategic objectives under health financing includes implementing appropriate financing strategies that will ensure accessible, efficient and equitable provision of health care, protecting people from financial catastrophe and impoverishment as a result of using health services, establishing an evidence-based system for the equitable and efficient allocation of resources and optimizing the use of existing resources through improved inventory management. [4] There is no specific mention about financing mechanism that can be accessed in health emergency. The National Disaster Risk Reduction Plan, 2014 does not provide any information. [5] Both the Ministry of Health and the main website of the government do not provide any information. [6,7]

[1] International Development Association. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 21 January 2021.

[2] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 21 January 2021.

[3] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[4] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 21 January 2021.

[5] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[6] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[7] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 publicly available evidence that senior leaders have made a public commitment to improve Grenada's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity in the past three years, nor committed to providing financing or support to other countries for such purposes in the past three years. The Global Health Security Tracking Dashboard does not report any grants specifically geared toward improving Grenada's capacity to address epidemic threats in the past three years. [1] There is no evidence of senior leaders making commitments in international news media or from United Nations or WHO press releases. According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017, a member of the Health Emergency Operation Centre (HEOC) should take part in the International donor's meetings and assist in guiding this group as to what health areas their assistance is needed. The plan mentions the role of the National Disaster Management Agency (NaDMA) to solidify Regional and International arrangements for Humanitarian and Emergency relief assistance. However there is no mention about improving domestic capacity by expanding financing or requesting support to improve capacity in the document.[2] Both the the National Disaster Risk Reduction Plan, 2014 and the Strategic Health Plan for 2016-25 do not provide any information.[3,4] Both the Ministry of Health and the main website of the government do not provide any relevant information. [5,6] The official website of the Ministry of Foreign Affairs, International Business and Caricom Affairs is not operational as of 21 January 2021.

[1] Global Health Security Tracking Dashboard. "Grenada". [<https://tracking.ghscosting.org/#analysis/NR/r>]. Accessed 21 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[4] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 21 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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: 0

There is no insufficient available evidence that Grenada has provided other countries with financing or technical support to improve capacity to address epidemic threats or it has requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. There is insufficient evidence from the Global Health Security Funding Tracker of support from donors or support from Grenada to other countries to improve their capacity to address epidemic threats. [1] There is no evidence in international news media or from United Nations or WHO press releases that Grenada has made a request for such support in the last three years. According to the National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017, a member of the Health

Emergency Operation Centre (HEOC) should take part in the International donor’s meetings and assist in guiding this group as to what health areas their assistance is needed. The plan mentions the role of the National Disaster Management Agency (NaDMA) to solidify Regional and International arrangements for Humanitarian and Emergency relief assistance. However there is no mention about technical support from donors to improve the country’s domestic capacity to address epidemic threats. [2] Both the the National Disaster Risk Reduction Plan, 2014 and the Strategic Health Plan for 2016-25 do not provide any information. [3,4] Both the Ministry of Health and the main website of the government do not provide any relevant information. [5,6] The official website of the Ministry of Foreign Affairs, International Business and Caricom Affairs is not operational as of 21 January 2021.

[1] Global Health Security Tracking Dashboard. "Grenada". [<https://tracking.ghscosting.org/#analysis/NR/r>]. Accessed 21 January 2021.

[2] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[3] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[4] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 21 January 2021.

[5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, or isolated specimens (biological materials) with international organisations and/or other countries that goes beyond influenza. The National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique-2017, the National Disaster Risk Reduction Plan, 2014 and the Strategic Health Plan for 2016-25 do not provide any information.[1,2,3] Both the Ministry of Health and the main website of the government do not provide any relevant information. [4,5] The official website of the Ministry of Agriculture, Lands and Forestry is not operational as of 21 January 2021.

[1] Ministry of Health. June 2017. "National Multi-Hazard Health Sector Disaster Emergency Management Plan for Grenada, Carriacou and Petite Martinique - 2017". [<http://www.health.gov.gd/images/PDF2/Publications-Resources/Other/National%20Multi-Hazard%20Health%20Sector%20Disaster%20Emergency%20Management%20Plan%20for%20Grenada%20Carriacou%20and%20Petit%20Martinique%20-%202017.pdf>]. Accessed 21 January 2021.

[2] National Disaster Management Agency (NaDMA). November 2014. "Country Document on Disaster Risk Reduction for Grenada, 2014". [<http://dipecholac.net/docs/files/871-documento-pais-grenada-web.pdf>]. Accessed 21 January 2021.

[3] The Ministry of Health & Social Security. Government of Grenada. "Strategic Plan for Health 2016-25". [http://www.gov.gd/moh/ced/mofa/sites/moh/files/grenada_health_sector_strategic_plan_2016-2015_approved.pdf]. Accessed 21 January 2021.

[4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 Grenada has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. There is no evidence on the website of the World Health Organisation (WHO) or in the media that Grenada has not shared influenza samples in accordance with the PIP framework in the past two years. [1] The ministry's epidemiology unit had said in March 2018 that it would send swabbing samples to Trinidad for testing as part of a campaign to counter an unusual spike in influenza cases. [2] The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not mention Grenada in its report. [3] There is no mention about sharing samples in the National Influenza Pandemic Preparedness Plan, 2007. [4] Both the Ministry of Health and the main website of the government do not provide any relevant information. [5,6]

[1] World Health Organisation (WHO). "IHR State Party Self- Assessment Annual Report (SPAR)". [<https://extranet.who.int/sph/spar?region=All&country=258>]. Accessed 21 January 2021.

[2] Grenada NOW. 29 March 2018. "Ministry of Health reports increase in influenza cases". [<http://www.nowgrenada.com/2018/03/ministry-of-health-reports-increase-in-influenza-like-cases>]. Accessed 21 January 2021.

[3] 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]. Accessed 21 January 2021.

- [4] Pan American Health Organisation (PAHO). "Grenada: National Influenza Pandemic Preparedness Plan". [<https://www.paho.org/hq/images/stories/AD/HSD/CD/INFLUENZA/grenada%20nipp.pdf?ua=1>]. Accessed 21 January 2021.
- [5] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 21 January 2021.
- [6] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 21 January 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 publicly available evidence that Grenada has not shared pandemic pathogen samples during an outbreak in the past two years. The World Health Organisation (WHO) Disease Outbreak News site reports no recent outbreaks of reportable diseases for Grenada. [1] There is no mention about sharing pathogen samples in the WHO country cooperation strategy at a glance report, 2018. [2] As per the Loop Cayman News report, "Grenada has indicated that it will use the Caribbean Public Health Agency (CARPHA) to conduct testing for the Novel Coronavirus in the event it reaches the country's shores. Acting Chief Medical Officer Dr Francis Martin says CARPHA now has the ability to test for the coronavirus and Grenada is in possession of swabs to collect samples when needed." [3] There are no reports of non-sharing samples of Covid-19. Both the Ministry of Health and the main website of the government do not provide any relevant information. [4,5]

- [1] World Health Organisation (WHO). "Emergencies preparedness, response: Grenada". [<https://www.who.int/csr/don/archive/country/grd/en/>]. Accessed 22 January 2021.
- [2] World Health Organisation (WHO). "WHO country cooperation strategy at a glance: Grenada". [<https://www.who.int/publications/i/item/WHO-CCU-18.02-Grenada>]. Accessed 22 January 2021.
- [3] Loop Cayman. 11 February 2020. "Grenada: CARPHA can test for coronavirus". [<https://www.loopcayman.com/content/grenada-carpha-can-test-coronavirus-0>]. Accessed 22 January 2021.
- [4] Government of Grenada. "Ministry of Health". [<http://www.health.gov.gd/index.php?lang=en>]. Accessed 22 January 2021.
- [5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 22 January 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: 2

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 53

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 3

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.4b

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

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

Current Year Score: 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: 2

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

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

Current Year Score: 4

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 98.6

2014

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: 0.67

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: 1.1

2008-2018

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 0

There is insufficient publicly available evidence on the share of employment in the informal sector in Grenada. According to the Informal Economy in Latin America and the Caribbean report, 2018, mentioned that, "a working paper from the IMF estimated the size of the informal economy in, along with other jurisdictions, several Latin American and Caribbean countries in the early 2000s (Vuletin, 2008) showing significant differences in the size of the informal economy across countries. The economies like the Bahamas, Grenada, St. Kitts and Nevis, Trinidad and Tobago, and Barbados, the informal share is below 25% of GDP." [1] The World Bank report on Youth Unemployment in the Caribbean, 2014 mentions that 48% of individuals in Grenada spend more than a year unemployed after they lost or left their last job as per the study undertaken between 2007 and 2010. The report also states that 66% of employers were having difficulty finding new workers and were also unable to find workers with the required skills. [2] The International Labour Organization database (ILOSTAT) mentions that the total labour force participation rate of Grenada is 71.2%, employment-population ratio is 77.1% and unemployment rate is 22.9% [3] However this data was last updated in 2015. The World Bank data also does not contain any data regarding employment in the informal sector. [4] The main website of the government does not provide any relevant information. [5]

[1] Organisation for Economic Co-operation and Development (OECD). 1 April 2019. "Informal Economy in Latin America and the Caribbean: Implications for Competition Policy". [[https://one.oecd.org/document/DAF/COMP/LACF\(2018\)4/en/pdf](https://one.oecd.org/document/DAF/COMP/LACF(2018)4/en/pdf)]. Accessed 22 January 2021.

[2] The World Bank. April 2014. "Youth Unemployment in the Caribbean". [<http://documents1.worldbank.org/curated/en/756431468012643544/pdf/883620WP0Box385224B00PUBLIC00April02014.pdf>]. Accessed 22 January 2021.

[3] International Labour Organization (ILOSTAT). "Country profiles". [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 22 January 2021.

[4] The World Bank. "Informal employment (% of total non-agricultural employment-Grenada)". [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?end=2018&locations=GD&start=1960>]. Accessed 22 January 2021.

[5] National Portal of the Government of Grenada. [<http://www.gov.gd/>]. Accessed 22 January 2021.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 1

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

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

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.45

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

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

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

Current Year Score: 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: 3

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 36.4

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: 0

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

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

Current Year Score: 0

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 72.38

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: 617.9

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 9.68

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 14.78

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: 95.63

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 91.49

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: 265.02

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