Jamaica

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

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	18
1.5 Dual-use research and culture of responsible science	21
1.6 Immunization	23
CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL INTERNATIONAL CONCERN	24
2.1 Laboratory systems strength and quality	24
2.2 Laboratory supply chains	26
2.3 Real-time surveillance and reporting	27
2.4 Surveillance data accessibility and transparency	29
2.5 Case-based investigation	35
2.6 Epidemiology workforce	38
CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC	40
3.1 Emergency preparedness and response planning	40
3.2 Exercising response plans	44
3.3 Emergency response operation	46
3.4 Linking public health and security authorities	48
3.5 Risk communications	48
3.6 Access to communications infrastructure	51



3.7 Trade and travel restrictions	53
CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND P HEALTH WORKERS	ROTECT 55
4.1 Health capacity in clinics, hospitals, and community care centers	55
4.2 Supply chain for health system and healthcare workers	58
4.3 Medical countermeasures and personnel deployment	62
4.4 Healthcare access	63
4.5 Communications with healthcare workers during a public health emergency	65
4.6 Infection control practices and availability of equipment	67
4.7 Capacity to test and approve new medical countermeasures	67
CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLADDRESS GAPS, AND ADHERING TO GLOBAL NORMS	ANS TO
5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction	69
5.2 Cross-border agreements on public health and animal health emergency response	70
5.3 International commitments	72
5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)	73
5.5 Financing	74
5.6 Commitment to sharing of genetic and biological data and specimens	78
CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL T	THREATS
6.1 Political and security risk	80
6.2 Socio-economic resilience	84
6.3 Infrastructure adequacy	80
6.4 Environmental risks	87
6.5 Public health vulnerabilities	87



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

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

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

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

Current Year Score: 0

There is no publicly available evidence that Jamaica has a national AMR plan for the surveillance, detection and reporting of priority AMR pathogens. There is no evidence on the websites of the Ministry of Health and Wellness or Ministry of Agriculture of a national antimicrobial resistance action plan. [1,2] Jamaica is not included in the WHO's reports on such plans, and there is no national action plan listed in the WHO Library of national action plans. [3,4] A team led by the Ministry of Health and Wellness and the University of the West Indies began putting together a plan in 2014. [5] The plan was due for completion in November 2017. [6] The Pan American Health Organisation (PAHO) has said that it is in "the completion stage" of a draft plan. However, no publication date is indicated. [7] As of 2020, there is no evidence that the plan has been completed or published.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] World Health Organisation, Food and Agriculture Organisation of the United Nations, and World Organisation for Animal Health, July 2018, "Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR): Analysis report of the second round of results of AMR country self-assessment. [http://www.who.int/antimicrobial-resistance/publications/Analysis-report-of-AMR-country-se/en]. Accessed 21 September 2020.
- [4] World Health Organisation. "Library of national action plans". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 21 September 2020.
- [5] Jamaica Observer, November 2017, "Get professional advice before taking antibiotics, ministry urges".
- [http://www.jamaicaobserver.com/news/get-professional-advice-before-taking-antibiotics-ministry-urges_117068?profile=1373]. Accessed 21 September 2020.
- [6] Jamaica Observer, July 2017, "Jamaica's action plan on antibiotic resistance to be ready November".
- [http://www.jamaicaobserver.com/news/jamaica-8217-s-action-plan-on-antibiotic-resistance-to-be-ready-november 104396?profile=1373]. Accessed 21 September 2020.
- [7] Pan American Health Organisation, "PAHO provides technical support towards the finalisation of Antimicrobial Resistance (AMR) National Action Plans for Jamaica, Bermuda and The Cayman Islands".
- [https://www.paho.org/jam/index.php?option=com_content&view=article&id=175:paho-provides-technical-support-towards-the-finalization-of-antimicrobial-resistance-amr-action-plans-for-bermuda-jamaica-and-cayman&Itemid=381]. Accessed 21 September 2020.



1.1.1b

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

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

Current Year Score: 0

There is no publicly available evidence that Jamaica's national laboratory tests for the 7+1 priority AMR pathogens. Jamaica has a national public health laboratory, but little information is available from the Ministry of Health and Wellness on its competencies, including whether it has sentinel sites. [1] The laboratory does have the capability to test blood samples for the zika and chikungunya viruses, but these are not among the designated priority AMR pathogens. The laboratory has specific departments for haematology, clinical chemistry, emergency laboratory and specimen reception, microbiology, and core and molecular immunology. [2] There is no additional evidence on laboratory competencies from the websites of the Ministry of Health and Wellness and Wealth or the Ministry of Industry, Commerce, Agriculture and Fisheries, nor in the WHO Library of National Action Plans. [3,4,5]

- [1] Ministry of Health and wellness. 9 June 2016, "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.
- [2] Jamaica Information Service, 12 February 2017, "National Public Laboratory Gets New Equipment".

[https://jis.gov.jm/national-public-laboratory-gets-new-equipment]. Accessed 21 September 2020.

- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [5] World Health Organisation. 2018. "Antimicrobial Resistance: Library of National Action Plans.

[http://www.who.int/antimicrobial-resistance/national-action-plans/library/en]. Accessed 21 September 2020.

1.1.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the Jamaican government conducts detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms. There is no evidence that Jamaica has a national action plan for AMR on the website of the Ministry of Health and Wellness or in the WHO Library of national action plans. [1,2] The Ministry of Economic Growth and Job Creation is responsible for land, the environment, climate change and water management in Jamaica. There is no public evidence that it conducts regular detection or surveillance of antimicrobial residues or AMR organisms in soil or waterways. [3] However, occasional studies have been carried out to detect antimicrobial drugs in the environment. For example, a group of academics carried out tests on milk from bulk tanks and commercial vendors in Jamaica in 1996-97. [4]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] World Health Organisation. "Library of national action plans". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 21 September 2020.
- [3] Ministry of Economic Growth and Job Creation. 2016. "Biennial Update Report of Jamaica". [https://megjc.gov.jm/api/wp-content/uploads/2017/04/megjc_biennial_report_sep_2016.pdf]. Accessed 21 September 2020.



[4] Ministry of Economic Growth and Job Creation. [https://www.jampja.org/ministry/ministry-of-economic-growth-and-job-creation-megic/]. Accessed 21 September 2020.

[5] RE Baynes, R Lyman, KL Anderson and CF Browne. February 1999. "A Preliminary Survey of Antibiotic Residues and Viable Bacteria in Milk from Three Caribbean Basin Countries". Journal of Food Protection.

[http://jfoodprotection.org/doi/abs/10.4315/0362-028X-62.2.177]. Accessed 21 September 2020.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 0

There is no publicly available evidence that there is national legislation or regulation in place requiring prescriptions for antibiotic use for humans in Jamaica. While the Ministry of Health and Wellness includes a division that regulates pharmaceuticals, its website provides no information on its activities. [1] There is no evidence of legislation requiring prescriptions for antibiotic use for humans on the Ministry of Health and Wellness website and Jamaica does not have a national action plan in the WHO Library of National Action Plans. [2,3] There is no evidence of a requirement in Jamaica's 1975 Food and Drugs Act or in its Pharmacy Act. [4,5] A list of scheduled drugs that require prescriptions in the Food and Drugs Act does not appear to include common antibiotics. [4] According to a 2012 report from PAHO, antibiotics are sometimes sold over the counter without a prescription; there is no evidence of a more updated version of the report. [6] There is no evidence of relevant media reports or academic studies.

[1] Ministry of Health and Wellness. 2018. "Pharmaceutical and Regulatory Affairs Department".

[https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department]. Accessed 21 September 2020.

- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [3] World Health Organization. "Library of national action plans". [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 21 September 2020.
- [4] Goverment of Jamaica. 4 August 1975. "Food and Drugs Act".

[http://www.moa.gov.jm/VetServices/data/Acts%20and%20Regulations%20of%20Jamaica%20re%20Food%20safety/Food%20and%20Drugs%20Act%201975.pdf]. Accessed 21 September 2020.

[5] Government of Jamaiaca. 4 August 1975. "Pharmacy Act".

[https://moj.gov.jm/sites/default/files/laws/Pharmacy%20Act_1.pdf]. Accessed 21 September 2020.

[6] Ministry of Health and Pan American Health Organisation, September 2012, "Pharmaceutical Situation in Jamaica".

[https://www.paho.org/hq/dmdocuments/2012/HSS-MT-Pharmaceutical-JAM2012.pdf]. Accessed 21 September 2020.

1.1.2b

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

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

Current Year Score: 0

There is no evidence of national legislation or regulation on the websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries, requiring prescriptions for antibiotic use in animals. [1,2] There is no action plan for Jamaica listed in the World Health Organization (WHO) Library of national action plans. [3] Government



officials have emphasized that antibiotics should not be used as growth promoters in animal production, and have urged that they be used responsibly and under veterinary supervision. [4] However, regulations under the 1975 Food and Drugs Act only enable the minister to require manufacturers of animal drugs to provide details of tests carried out to ensure that drug residues are not present in food obtained from the animals in question. [5] There is no evidence of a requirement for prescription for antibiotic use in animals. There are no relevant provisions in the 1975 Pharmacy Act. [6] Additionally, a list of scheduled drugs that require prescriptions in the Food and Drugs Act does not appear to include common antibiotics. [5]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] World Health Organisation. 2018. "Antimicrobial Resistance: Library of National Action Plans.
- [http://www.who.int/antimicrobial-resistance/national-action-plans/library/en]. Accessed 21 September 2020.
- [4] Ministry of Industry, Commerce, Agriculture and Fisheries. November 2017. "Call issued for national plan of action on antibiotic resistance". [https://micaf.gov.jm/node/1328]. Accessed 21 September 2020.
- [5] Goverment of Jamaica. 4 August 1975. "Food and Drugs Act".
- [http://www.moa.gov.jm/VetServices/data/Acts%20and%20Regulations%20of%20Jamaica%20re%20Food%20safety/Food%20and%20Drugs%20Act%201975.pdf]. Accessed 21 September 2020.
- [6] Government of Jamaiaca. 4 August 1975. "Pharmacy Act".
- [https://moj.gov.jm/sites/default/files/laws/Pharmacy%20Act_1.pdf]. Accessed 21 September 2020.

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Jamaica has produced an over-arching strategy document on zoonotic disease. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries [1,2] A search of the Ministry of Health website shows only a weekly epidemiology bulletin that highlights the threat posed by flooding in spreading communicable diseases. [3] Jamaica has completed a PVS Evaluation mission but the report is not publicly available. [4] Jamaica has not completed a World Health Organization (WHO) Joint External Evaluation. [5] Jamaica has a public health laboratory, but there is little information shared online about its capacities. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] National Epidemiology Unit, Ministry of Health. September 2015. "Weekly Epidemiology Bulletin: Weekly Spotlight Flooding and communicable diseases". [https://www.moh.gov.jm/wp-content/uploads/2015/12/Weekly-Bulletin-EW-35.pdf]. Accessed 21 September 2020.
- [4] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/]. Accessed 21 September 2020.
- [5] World Health Organisation. "IHR Monitoring & Evaluation". [https://extranet.who.int/sph/ihr-monitoring-evaluation].



Accessed 21 September 2020.

[6] Ministry of Health and Wellness. 9 June 2016, "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.

1.2.1b

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

Yes = 1. No = 0

Current Year Score: 0

There is no evidence that Jamaica has national legislation, plans or equivalent strategy documents which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries [1,2] Jamaica has completed a PVS Evaluation mission but the report is not publicly available. [3] There is no evidence of relevant academic studies or media reports.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/]. Accessed 21 September 2020.

1.2.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence of an official plan or guidelines for the surveillance or control of zoonotic pathogens from the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2] However, the Ministry of Health and Wellness periodically promotes campaigns related to specific animal-borne diseases, such as zika and dengue fever. One such campaign—Caribbean Mosquito Awareness Week—is organised by a number of multilateral agencies. [3,4] There is no other evidence of relevant media reports or academic studies.

- $[1] \ Ministry \ of \ Health \ and \ Wellness. \ [https://www.moh.gov.jm]. \ Accessed \ 21 \ September \ 2020.$
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] Ministry of Health and Welnness. September 2018. "Caribbean Mosquito Awareness Week: Small Bite, Big Threat". [http://mosquitoawareness.carpha.org]. Accessed 21 September 2020.
- [4] Jamaica Information Service. 10 May 2018. "Jamaica to Observe Mosquito Awareness Week from May 14-20". [https://jis.gov.jm/jamaica-to-observe-mosquito-awareness-week-from-may-14-20/]. Accessed 21 September 2020.



1.2.1d

Is there a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries? Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the Jamaican government has a unit to coordinate responses to zoonotic diseases. Neither the Ministry of Health and Wellness nor the Ministry of Industry, Commerce, Agriculture and Fisheries provides any evidence of such a department, agency or similar unit dedicated to zoonotic disease that functions across ministries. [1,2] However, the Caribbean Public Health Agency (CARPHA) periodically convenes conferences and other events to discuss the threat posed by these diseases and possible responses. [3] There is no evidence of relevant media reports or academic studies.

- [1] Government of Jamaica. 2018. Ministry of Health. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [3] Caribbean Public Health Agency. March 2015. "CARPHA Chikungunya Consultastion". [http://carpha.org:8086/ChikVMeeting]. Accessed 28 September 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence of a mandatory national mechanism for owners of livestock to conduct and report on disease surveillance. Part II of The Animals (Diseases and Importation) Act of 1948 sets out detailed procedures for the control and surveillance of diseased animals. [1] The Act provides that anyone possessing a diseased animal must give notice "with all practicable speed" to an inspector or the nearest police station. It also sets out procedures for notifying the public and restricting activities within infected areas. Regulations under Section 14 of the Public Health Act of 1985 require that the Veterinary Services Division of the Ministry of Industry, Commerce, Agriculture and Fisheries must be notified of any animal infected by a listed disease. [2] The Ministry's website contains a list of the relevant diseases which include rabies, leptospirosis, and trypanosomiases. [3]

- [1] Government of Jamaica. 1948. "The Animals (Diseases and Importation) Act". [https://moj.gov.jm/laws/animals-diseases-and-importation-act]. Accessed 28 September 2020.
- [2] Government of Jamaica, 21 February 1985, "The Public Health Act".
- [http://nepa.gov.jm/new/legal_matters/laws/Other_Laws/Public_Health_Act_1985.pdf]. Accessed 28 September 2020.
- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. "Notifiable Diseases".
- [https://www.micaf.gov.jm/sites/default/files/pdfs/Notifiable%20Disease.pdf]. Accessed 28 September 2020.

1.2.2b

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



Yes = 1, No = 0

Current Year Score: 0

There is no public evidence on the websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries of laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals. [1,2] Jamaica has completed a PVS Evaluation mission but the report is not publicly available. [3] Jamaica has not completed a WHO Joint External Evaluation. [4] Jamaica passed the Data Proection Act in 2020, but it does not contain provisions related to the health or surveillance data of animals or humans. [5] There is no evidence of relevant media reports or academic studies.

- [1] Ministry of Health. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [3] World Organisation for Animal Health. "OIE PVS Evaluation Reports". [http://www.oie.int/en/solidarity/pvs-evaluations/pvs-evaluation-reports]. Accessed 28 September 2020.
- [4] World Health Organisation. "IHR Monitoring & Evaluation". [https://extranet.who.int/sph/ihr-monitoring-evaluation]. Accessed 28 September 2020.
- [5] Government of Jamaica. 2020. "The Data Protection Act, 2020".

[https://japarliament.gov.jm/attachments/article/339/The%20Data%20Protection%20Act,%202020.pdf]. Accessed 28 September 2020.

1.2.2c

Does the country conduct surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors)? Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence of surveillance of zoonotic disease in wildlife in Jamaica. There is no evidence on the websites of the Ministry of Health and Welnness or the Ministry of Industry, Commerce, Agriculture and Fisheries of regular surveillance of zoonotic disease in wildlife. [1,2] The Ministry of Industry, Commerce, Agriculture and Fisheries has taken a number of measures towards enhanced surveillance of zoonotic diseases. [3] These include an animal identification and tracing system for cattle, improvement of laboratory infrastructure and enhanced laboratory capability; however, none of these measure indicate the Ministry is conducting surveillance in wildlife. Some academic studies have been conducted on zoonotic disease in Jamaica, but they consist of analysis rather than surveillance, and do not indicate the presence of a surveillance system. [4] The Wildlife Protection Act of 1945 does not contain relevant provisions. [5]

- [1] Government of Jamaica. 2018. Ministry of Health. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [3] The Gleaner. 24 November 2014. "Ja's Health Standards High". [http://jamaica-gleaner.com/article/news/20141124/jas-health-standards-high]. Accessed 28 September 2020.
- [4] Robinson, Ralph D., et al. June 2013. "Rat Lungworm: An Emerging Zoonosis in Jamaica". Hawai'i Journal of Medicine and Public Health. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3689483]. Accessed 28 September 2020.
- [5] Government of Jamaica. 1945. "Wildlife Protection Act". [https://moj.gov.jm/laws/wild-life-protection-act]. Accessed 28 September 2020.



1.2.3 International reporting of animal disease outbreaks

1.2.3a

Has the country submitted a report to OIE on the incidence of human cases of zoonotic disease for the last calendar year? Yes = 1, No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 3.6

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 1.53

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Jamaica has a plan on zoonotic disease, let alone one that includes mechanisms for working with the private sector in controlling or responding to zoonoses. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries [1,2] A search of the Ministry of Health website shows only a weekly epidemiology bulletin that highlights the threat posed by flooding in spreading communicable diseases. [3] Jamaica has completed a PVS Evaluation mission but the report is not



publicly available. [4] Jamaica has not completed a World Health Organization (WHO) Joint External Evaluation. [5] There is no evidence that Jamaica has a national public health insitute.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020
- [3] National Epidemiology Unit, Ministry of Health. September 2015. "Weekly Epidemiology Bulletin: Weekly Spotlight Flooding and communicable diseases". [https://www.moh.gov.jm/wp-content/uploads/2015/12/Weekly-Bulletin-EW-35.pdf]. Accessed 21 September 2020.
- [4] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/]. Accessed 21 September 2020.
- [5] World Health Organisation. "IHR Monitoring & Evaluation". [https://extranet.who.int/sph/ihr-monitoring-evaluation]. Accessed 21 September 2020.

1.3 BIOSECURITY

1.3.1 Whole-of-government biosecurity systems

1.3.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of such facilities. Jamaica did not submit a report on such facilities in either 2017 or 2018 to the United Nations' Biological Weapons Convention Implementation Support Unit. [1] In addition, no evidence is available from the Ministry of Health and Wellness, Ministry of Industry, Commerce, Agriculture and Fisheries, or the Ministry of National Security. [2,3,4] The country does, however, have a Biosafety Clearing House, but its work focuses on plants rather than animals. It was set up under the Plants (Importation) Control Regulations of 1997. [5] Biosecurity is a relatively new concept in the Caribbean. [6] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [1] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations list any relevant laws or regulations. [7,8] There is no evidence that Jamaica has a national public health insitute. Jamaica has a public health laboratory, but there is little information shared online about its capacities. [9]

- [1] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [5] Jamaica Biosafety Clearing-House. "Biosafety Clearing-House Mechanism: Sharing the Information". [http://www.jamaicachm.org.jm/BCH/index.asp]. Accessed 28 September 2020.



[6] Caricom Today. 6 August 2018. "Barbados Home To Biosecurity Studies Centre".

[https://today.caricom.org/2018/08/06/barbados-home-to-biosecurity-studies-centre]. Accessed 28 September 2020.

- [7] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [8] FAOLEX Database. "Jamaica". [http://www.oie.int/en/solidarity/pvs-evaluations/pvs-evaluation-reports]. Acccessed 28 September 2020.
- [9] Ministry of Health and Wellness. 9 June 2016. "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.

1.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica has in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. There is no evidence on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries or the Ministry of National Security. [1,2,3] There is no evidence of biosecurity legislation or regulations which address physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which dangerous pathogens and toxins are stored for Jamaica on the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [4] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence that Jamaica has a national public health insitute. Jamaica has a public health laboratory, but there is little information shared online about its capacities. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [6] Ministry of Health and Wellness. 9 June 2016, "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.

1.3.1c

Is there an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations? Yes = 1, No = 0



Current Year Score: 0

There is no publicly available evidence that Jamaica has established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations, nor that the country even has such regulations. There is no evidence on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries or the Ministry of National Security. [1,2,3] There is no evidence of biosecurity legislation or regulations which address physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which dangerous pathogens and toxins are stored for Jamaica on the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [4] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence that Jamaica has a national public health insitute. Jamaica has a public health laboratory, but there is little information shared online about its capacities. [6] There is no evidence of relevant media reports or academic studies.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field form year tid=510]. Accessed 28 September 2020.
- [6] Ministry of Health and Wellness. 9 June 2016, "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.

1.3.1d

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica has taken action to consolidate its inventories of dangerous pathogens and toxins. There is no evidence on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries or the Ministry of National Security. [1,2,3] There is no evidence of relevant laws or regulations for Jamaica on the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [4] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence that Jamaica has a national public health insitute. Jamaica has a public health laboratory, but there is little information shared online about its capacities. [6] There is no evidence of relevant media reports or academic studies.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J".



[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.

[5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.

[6] Ministry of Health and Wellness. 9 June 2016, "Health Minister Congratulates National Public Health Laboratory on Achieving Accreditation Status". [https://www.moh.gov.jm/health-minister-congratulates-national-public-health-laboratory-on-achieving-accreditation-status]. Accessed 21 September 2020.

1.3.1e

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient public evidence that Jamaica has the capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax or Ebola. There is no further evidence on the websites of the Ministry of Health and Wellness, Ministry of National Security or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2,3] A detailed plan to counter anthrax, including testing, was outlined in 2001, but there is no evidence that it has been implemented or that it involves PCR. [4] In February 2017, the Pan American Health Organisation and the World Health Organization presented a new real-time polymerase chain reaction machine to Jamaica's National Public Health Laboratory. The equipment enables the laboratory to test for the zika and chikungunya viruses through better blood-sample analysis. It is not clear whether this equipment can also be used to test for Ebola or anthrax. [5] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [6]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [2] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Health. October 2001. "Action Plan for the Prevention and Control of Anthrax".

[http://webcache.googleusercontent.com/search?q=cache:Jn-b4clxQr0J:www.disaster-

info.net/lideres/english/jamaica/presentations/MarionBullockDuCasse_MOHActionPlanforAnthrax.pps+&cd=24&hl=en&ct=clnk&gl=ca]. Accessed 21 September 2020.

[5] Jamaica Information Service. 10 February 2017. "National Public Laboratory Gets New Equipment".

[https://jis.gov.jm/national-public-laboratory-gets-new-equipment]. Accessed 21 September 2020.

[6] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field form year tid=510]. Accessed 28 September 2020.

1.3.2 Biosecurity training and practices

1.3.2a

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

Yes = 1, No = 0



Current Year Score: 0

There is no publicly available evidence that Jamaica has a compulsory or standardised biosecurity training programme. There is no relevant information shared on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, or the Ministry of National Security. [1,2,3] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [4] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is no evidence that Jamaica has adopted regulations or licensing conditions that stipulate drug testing, background checks or psychological tests for personnel with access to dangerous biological materials. There is no relevant information shared on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, or the Ministry of National Security. [1,2,3] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [4] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.



[5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field form year tid=510]. Accessed 28 September 2020.

1.3.4 Transportation security

1.3.4a

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

Yes = 1, No = 0

Current Year Score: 0

There is no available evidence that Jamaica has publicly available information on national regulations on the safe and secure transport of infectious substances (Categories A and B). There is no evidence of such regulations on the websites of the Ministry of Health and Wellness; the Ministry of National Security; the Ministry of Transport and Mining; or the Transport Authority of Jamaica. [1,2,3,4] There is no mention of any related regulations in the National Security Policy for Jamaica. [5] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [6] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [7]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Transport and Mining. [http://www.mtw.gov.jm/]. Accessed 28 September 2020.
- [4] Transport Authority. [http://www.ta.org.jm]. Accessed 28 September 2020.
- [5] Government of Jamaica. 2007. "National Security Policy for Jamaica: Towards a Secure and Prosperous Nation". [http://www.oas.org/csh/spanish/documentos/national%20security%20policy%20-%20jamaica%20-%202007.pdf]. Accessed 28 September 2020.
- [6] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [7] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of rules governing the cross-border transfer and end-user screening of dangerous pathogens on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, the Ministry of Foreign Affairs and Foreign Trade, or the Ministry of National Security. [1,2,3,4] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database.



- [5] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [6]
- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Foreign Affairs and Foreign Trade. [http://mfaft.gov.jm/wp]. Accessed 28 September 2020.
- [4] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [5] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [6] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1. No = 0

Current Year Score: 0

There is no publicly available information that Jamaica has in place national biosafety legislation and/or regulations. There is no relevant evidence shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2] The Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database also gives no indication of a biosafety law, although regulations under the Animals (Diseases and Importation) Act of 1948 are in place to prevent the importation of animals contaminated by rabies, anthrax and poultry diseases, among others. [3,4] According to a 2006 Government of Jamaica report, the Ministry of Labour and Social Security "regulates the use of chemicals, physical and biological agents that may be hazardous to human health", but makes no mention of the prevention of accidents that involve the release of harmful biological substances. [5] This report also indicates there is a draft Occupation Safety and Health law, however it does not appear the bill has become law. [6] There are no other laws listed the International Labour Organization's NATLEX database that contain relevant provisions. [7] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [8]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [4] Ecolex. 2018. "Rabies Regulations 1948: Jamaica". [https://www.ecolex.org/details/legislation/rabies-regulations-1948-lex-faoc070760/?]. Accessed 28 September 2020.
- [5] Government of Jamaica. May 2006. "National Profile for the Management of Chemicals in Jamaica". [http://cwm.unitar.org/national-profiles/publications/cw/np/np_pdf/Jamaica_National_Profile.pdf]. Accessed 28 September



2020.

[6] Jamaica Occupational Health Professions Association (JOHSPA). 28 April 2018. "The Absence Of A Jamaica OSH Act". [http://johspa.org/the-absence-of-a-jamaica-osh-act/]. Accessed 28 September 2020.

[7] NATLEX. "Jamaica > Occupational safety and health".

[https://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=JAM&p_count=217&p_classification=14&p_class count=9]. Accessed 28 September 2020.

[8] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.

1.4.1b

Is there an established agency responsible for the enforcement of biosafety legislation and regulations? Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence of a specific agency responsible for the enforcement of biosafety legislation and regulations in Jamaica, nor is there evidence of such laws or regulations. There is no relevant evidence shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2] The Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database also gives no indication of a biosafety law, although regulations under the Animals (Diseases and Importation) Act of 1948 are in place to prevent the importation of animals contaminated by rabies, anthrax and poultry diseases, among others. [3,4] According to a 2006 Government of Jamaica report, the Ministry of Labour and Social Security "regulates the use of chemicals, physical and biological agents that may be hazardous to human health", but makes no mention of the prevention of accidents that involve the release of harmful biological substances. [5] This report also indicates there is a draft Occupation Safety and Health law, however it does not appear the bill has become law. [6] There are no other laws listed the International Labour Organization's NATLEX database that contain relevant provisions. [7] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [8]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [4] Ecolex. 2018. "Rabies Regulations 1948: Jamaica". [https://www.ecolex.org/details/legislation/rabies-regulations-1948-lex-faoc070760/?]. Accessed 28 September 2020.
- [5] Government of Jamaica. May 2006. "National Profile for the Management of Chemicals in Jamaica". [http://cwm.unitar.org/national-profiles/publications/cw/np/np_pdf/Jamaica_National_Profile.pdf]. Accessed 28 September 2020.
- [6] Jamaica Occupational Health Professions Association (JOHSPA). 28 April 2018. "The Absence Of A Jamaica OSH Act". [http://johspa.org/the-absence-of-a-jamaica-osh-act/]. Accessed 28 September 2020.
- [7] NATLEX. "Jamaica > Occupational safety and health".
- [https://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=JAM&p_count=217&p_classification=14&p_class count=9]. Accessed 28 September 2020.
- [8] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field form year tid=510]. Accessed 28 September 2020.



1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica requires biosafety training, using a standardised, required approach for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. There is no relevant evidence shared via the public websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, or the Ministry of Labour and Social Security. [1,2,3] The Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database also gives no indication of a biosafety law, although regulations under the Animals (Diseases and Importation) Act of 1948 are in place to prevent the importation of animals contaminated by rabies, anthrax and poultry diseases, among others. [4,5] According to a 2006 Government of Jamaica report, the Ministry of Labour and Social Security "regulates the use of chemicals, physical and biological agents that may be hazardous to human health", but makes no mention of the prevention of accidents that involve the release of harmful biological substances. [6] This report also indicates there is a draft Occupation Safety and Health law, however it does not appear the bill has become law. [7] There are no other laws listed the International Labour Organization's NATLEX database that contain relevant provisions. [8] Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [9]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Labour and Social Security. [www.mlss.gov.jm]. Accessed 28 September 2020.
- [4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.
- [5] Ecolex. 2018. "Rabies Regulations 1948: Jamaica". [https://www.ecolex.org/details/legislation/rabies-regulations-1948-lex-faoc070760/?]. Accessed 28 September 2020.
- [6] Government of Jamaica. May 2006. "National Profile for the Management of Chemicals in Jamaica".
- [http://cwm.unitar.org/national-profiles/publications/cw/np/np_pdf/Jamaica_National_Profile.pdf]. Accessed 28 September 2020.
- [7] Jamaica Occupational Health Professions Association (JOHSPA). 28 April 2018. "The Absence Of A Jamaica OSH Act". [http://johspa.org/the-absence-of-a-jamaica-osh-act/]. Accessed 28 September 2020.
- [8] NATLEX. "Jamaica > Occupational safety and health".
- [https://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=JAM&p_count=217&p_classification=14&p_class count=9]. Accessed 28 September 2020.
- [9] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field form year tid=510]. Accessed 28 September 2020.



1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

Is there publicly available evidence that the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research? Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research. There is no relevant information shared via the public websites of the Ministry of Health and Wellness; the Ministry of Industry, Commerce, Agriculture and Fisheries; the Ministry of National Security; or the Ministry of Science, Energy and Technology. [1,2,3,4] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Jamaica does not have a Ministry of Research. Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [6]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Science, Energy and Technology. [https://www.mset.gov.jm/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [6] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.

1.5.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has legislation or regulations requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research. There is no relevant information shared via the public websites of the Ministry of Health and Wellness; the Ministry of Industry, Commerce, Agriculture and Fisheries; the Ministry of National Security; or the Ministry of Science, Energy and Technology. [1,2,3,4] J amaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Jamaica does not have a Ministry of Research. Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence of relevant legislation in the Verification Research,



Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [6]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Science, Energy and Technology. [https://www.mset.gov.jm/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [6] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 2020.

1.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research. There is no relevant information shared via the public websites of the Ministry of Health and Wellness; the Ministry of Industry, Commerce, Agriculture and Fisheries; the Ministry of National Security; or the Ministry of Science, Energy and Technology. [1,2,3,4] J amaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Jamaica does not have a Ministry of Research. Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [5] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [6]

- [1] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Science, Energy and Technology. [https://www.mset.gov.jm/]. Accessed 28 September 2020.
- [5] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [6] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 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 that Jamaica has laws or regulations requiring the screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold. There is no relevant information shared via the public websites of the Ministry of Health and Wellness; the Ministry of Industry, Commerce, Agriculture and Fisheries; the Ministry of National Security; the Ministry of Transport and Mining; the Transport Authority of Jamaica; or the Ministry of Science, Energy, and Technology. [1,2,3,4,5,6] There is no mention of any related regulations in the National Security Policy for Jamaica. [5] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Although Jamaica is party to the UN Biological Weapons Convention, it has not submitted a report since 2011, and the report from 2011 is not accessible. [6] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database. [7]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of National Security. [https://mns.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Transport and Mining. [http://www.mtw.gov.jm/]. Accessed 28 September 2020.
- [5] Transport Authority. [http://www.ta.org.jm]. Accessed 28 September 2020.
- [6] Ministry of Science, Energy and Technology. [https://www.mset.gov.jm/]. Accessed 28 September 2020.
- [7] Government of Jamaica. 2007. "National Security Policy for Jamaica: Towards a Secure and Prosperous Nation". [http://www.oas.org/csh/spanish/documentos/national%20security%20policy%20-%20jamaica%20-%202007.pdf]. Accessed 28 September 2020.
- [8] United Nations Biological Weapons Convention Implementation Support Unit. "Confidence Building Measures -- Browse State Parties". [https://bwc-ecbm.unog.ch/?field_form_year_tid=510]. Accessed 28 September 2020.
- [9] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "J". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/j/]. Accessed 28 September 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: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is no publicly available evidence that Jamaica's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. News reports indicate that Jamaica has the ability to conduct some WHO-defined diagnostic tests, such as malaria, HIV and influenza, however the types of test conducted are not documented. [1, 2] Details of the full capabilities of the National Public Health Laboratory are not readily available on the Ministry of Health and Wellness website. [3] Jamaica has a National Influenza Centre, but it does not have a publicly available website. [4] There is no evidence that Jamaica has a national public health institute.

[1] Jamaica Observer. 24 August 2018. "Jamaica now better able to test for infectious diseases".

[http://www.jamaicaobserver.com/news/jamaica-now-better-able-to-test-for-infectious-diseases_142263?profile=0] Accessed 21 September 2020.

[2] The University of the West Indies at Mona, Jamaica. "Guarding the Region against Infectious Diseases".

[https://www.mona.uwi.edu/marcom/ecalendar/feature/guarding-region-against-infectious-diseases]. Accessed 21 September 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] Pan American Health Organizaiton and World Health Organization. May 2018. "PAHO Injects Life into Jamaica's Flu Information System". [https://www.paho.org/jam/index.php?option=com_content&view=article&id=155:paho-injects-life-into-jamaica-s-flu-information-system-2&Itemid=381]. Accessed 28 September 2020.

2.1.1b

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



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

Current Year Score: 0

There is no evidence that Jamaica has a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. There is no relevant information shared on the websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2] Jamaica has a national public health laboratory, but it does not have a website and information about its capacities is not shared online. There is no evidence that Jamaica has a national public health institute. Jamaica's Influenza Pandemic Preparedness and Response Plan, published in 2007, does not include details about testing during a pandemic. [3] Although Jamaica reports adequate testing in response to the COVID-19 pandemic, there is no evidence of a single testing plan that has been published in response to the pandemic. [4]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Health. "Influenza Pandemic Preparedness and Response Plan".
- [https://www.paho.org/hq/index.php?option=com_docman&view=download&category_slug=national-influenza-plans-2343&alias=46448-jamaica-ministry-of-health-influenza-pandemic-preparedness-and-response-plan&Itemid=270&lang=en]. Accessed 28 September 2020.
- [4] Pan American Health Organizaion and World Health Organizaion. 2020. "Building COVID-19 Testing and Surveillance across Jamaica". [https://www.paho.org/en/stories/building-covid-19-testing-and-surveillance-across-jamaica]. Accessed 28 September 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 1

Jamaica 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]). [1] Jamaica has a National Public Health Laboratory, but it does not have a website and information about its capacities is not shared online. However, according to a government press release, the laboratory is accredited by Jamaica's National Agency for Accreditation based on ISO 15189:2012. [1] Similarly, the laboratory operated by the Caribbean Public Health Agency (CARPHA), of which Jamaica is a member, is accredited under ISO 17025:2005. [2]

- [1] Jamaica Information Service. 11 June 2016. "National Public Lab gets Int'l Accreditation". [https://jis.gov.jm/national-public-lab-gets-intl-accreditation]. Accessed 28 September 2020.
- [2] Caribbean Public Health Agency. 1 December 2017. "CARPHA achieves international accreditation for testing quality of medicines". [https://carpha.org/More/Media/Articles/ArticleID/208/CARPHA-Achieves-International-Accreditation-for-Testing-Quality-of-Medicines]. Accessed 28 September 2020.



2.1.2b

Is there a national laboratory that serves as a reference facility which is subject to external quality assurance review? Yes = 1, No = 0

Current Year Score: 1

There is evidence Jamaica has national laboratory that serves as a reference facility is subject to external quality assurance review. The National Public Health Laboratory (NPHL) does not have its own website. Jamaica has a National Public Health Laboratory, but it does not have a website and information about its capacities is not shared online. However, according to a government press release, the laboratory is accredited by Jamaica's National Agency for Accreditation based on ISO 15189:2012. [1] \ISO 15189 certification requires external quality assurance reviews. [2]

[1] Jamaica Information Service. 11 June 2016. "National Public Lab gets Int'l Accreditation". [https://jis.gov.jm/national-public-lab-gets-intl-accreditation]. Accessed 28 September 2020.

[2] World Health Organization. "Content Sheet 10-1: Overview of External Quality Assessment (EQA)". [http://www.who.int/ihr/training/laboratory_quality/10_b eqa_contents.pdf]. Accessed 28 September 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 . No = 0

Current Year Score: 0

There is no evidence that Jamaica has a nationwide or even organized speciment transport system. There is no relevant information shared on the websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [1,2] Jamaica has a national public health laboratory, but it does not have a website and information about its capacities is not shared online. There is no evidence that Jamaica has a national public health institute.

[1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.

[2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no evidence that Jamaica 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. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and



Fisheries. [1,2] Jamaica has a national public health laboratory, but it does not share information about its capacities or policies via a public website. There is no evidence that Jamaica has a national public health institute. There is no evidence that Jamaica has implemented such a measure in response to the COVID-19 pandemic. [3]

[1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 21 September 2020. [2 Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 21 September 2020.

[3] Ministry of Health and Wellness. COVID-19 dashboard. [https://jamcovid19.moh.gov.jm/]. Accessed 2 October 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

Current Year Score: 1

There is evidence that Jamaica conducts ongoing event-based surveillance and analysis for infectious disease, but it is not clear if this is analysed on a daily basis.

The Caribbean Public Health Agency (CARPHA) hosts a Tourism and Health Information System (THiS), a real-time system for hotel management and public health officials to identify events such as outbreaks early. Jamaica is one of the eight countries participating in THiS. [1, 2]

Additionally, the Ministry of Health and Wellness's disaster mitigation and emergency services unit is responsible for surveillance and reporting of serious health risks. [3] Its tools include a self-reporting online survey that people with recent medical complaints are encouraged to fill in. [4] However, there is no evidence that data is being analysed on a daily basis. Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities. Jamaica's Office of Disaster Preparedness and Emergency Management (ODPEM) is responsible for preventing and reducing the impact of disasters, including pandemics. [5] Its preparedness and emergency operations division coordinates the response to disasters, and is responsible for the National Emergency Operations Centre. The agency also has a mitigation research and planning division. [4] However, there is no information on the ODPEM's website about event-based surveillance.

- [1] Caribbean Public Health Agency (CARPHA). "Tourism and Health Programme". [https://carpha.org/THP/About-The-Program]. Accessed 21 January 2021.
- [2] Caribbean Public Health Agency (CARPHA). "THP: THIS Hotel Based Surveillance". [https://carpha.org/THP/THIS-Hotel-Based-Surveillance]. Accessed 14 August 2020.
- [3] Ministry of Health and Wellness. "Disaster Mitigation and Emergency Services". [https://www.moh.gov.jm/disaster-mitigation-and-emergency-services]. Accessed 28 September 2020.
- [4] Ministry of Health. "Surveillance Self-Reporting Online Survey".
- [https://nhis.mohjm.com/survey/index.php?r=survey/index&sid=462121&lang=en]. Accessed 28 September 2020.
- [5] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/] Accessed 28 September 2020.
- [6] Office of Disaster Preparedness and Emergency Management. 2018. "Organization Structure".



[https://www.odpem.org.jm/organizational-structure/]. Accessed 28 September 2020.

2.3.1b

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

Yes = 1, No = 0

Current Year Score: 1

There is available evidence that Jamaica has reported a potential public health emergency of international concern to the World Health Organization (WHO) within the last two years. Jamaica notified the WHO in January 2019 of a significant increase in cases of dengue fever in the country to the point where they exceeded the threshold for classification as an epidemic. More than 330 suspected and confirmed cases, including six deaths, were reported from 1-21 January. Furthermore, according to the WHO, the number of reported dengue cases in 2018 was 4.5 times higher than that reported in 2017. Laboratory tests have identified DENV3 as the dengue serotype circulating. [1] The WHO country page for Jamaica does not list any other potential public health emergency of international concern in Jamaica, except for the COIVD-19 pandemic. [2] The WHO and the Ministry of Health confirm that the global COVID-19 pandemic has spread to Jamaica, with more than 6,400 cases as of September 2020. [3,4] The first COVID-19 cases were reported in Jamaica in March 2020, after COVID-19 had already been declared a PHEIC. [5]

- [1] World Health Organization. "Disease Outbreak news". [http://www.who.int/csr/don/archive/country/jam/en]. Accessed 28 September 2020.
- [2] World Health Organisation (WHO). "Jamaica". [https://www.who.int/countries/jam/en/]. Accessed 28 September 2020.
- [3] World Health Organization. "WHO Coronavirus Disease (COVID-19) Dashboard: Jamaica".

[https://covid19.who.int/region/amro/country/jm]. Accessed 1 October 2020.

- [4] Ministry of Health and Wellness. COVID-19 dashboard. [https://jamcovid19.moh.gov.jm/]. Accessed 1 October 2020.
- [5] Pan American Health Organization (PAHO). 3 Decembr 2020. "Situation Report COVID-19 Jamaica".

[https://www.paho.org/en/jamaica/situation-report-covid-19-jamaica]. Accessed 25 March 2021.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

Does the government operate an electronic reporting surveillance system at both the national and the sub-national level? Yes = 1, No = 0

Current Year Score: 0

There is insufficient publicly available evidence that the government operate an electronic reporting surveillance system at both the national and sub-national level. The Ministry of Health and Wellness has a self-reporting online survey that people with recent medical ailments are encouraged to fill in. The survey is highlighted on the ministry's website. [1] However, there is no public evidence from this source that the system includes hospitals, laboratories and clinics, or that it operates nationally. Jamaica has a National Health Information System (NHIS), and a strategic plan to improve the NHIS included utilizing the system for "surveillance". [2] However, there is no more recent evidence about what the scope of these surveillance measures may be, if they have been put in place at all. A July 2018 press release from the government of Jamaica indicated that a new NIHS was being developed. [3] There is no more recent relevant information shared by the Ministry of Health and Wellness or elsewhere. Jamaica has a National Public Health Laboratory, but it does not have a website and the country does not share information online about its capacities. There is no evidence that Jamaica has a national public health



institute.

[1] Ministry of Health and Wellness. "Surveillance Self-Reporting Online Survey".

[https://nhis.mohjm.com/survey/index.php?r=survey/index&sid=462121&lang=en]. Accessed 28 September 2020.

[2] Ministry of Health. October 2013. "National Health Information System Strengthening and e-Health Strategic Plan". [https://moh.gov.jm/wp-content/uploads/2015/07/MOH_NHIS-eHealth_StrategicPlanFINAL.pdf]. Accessed 28 September 2020.

[3] Jamaica Information Service. 31 July 2018. "Health Information System by End of Fiscal Year". [https://jis.gov.jm/health-information-system-by-end-of-fiscal-year/]. Accessed 28 September 2020.

2.3.2b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient publicly available evidence that the government operate an electronic reporting surveillance system at both the national and sub-national level, let alone such a system that collects ongoing or real-time laboratory data. The Ministry of Health and Wellness has a self-reporting online survey that people with recent medical ailments are encouraged to fill in. The survey is highlighted on the ministry's website. [1] However, there is no public evidence from this source that the system includes hospitals, laboratories and clinics, or that it operates nationally. Jamaica has a National Health Information System (NHIS), and a strategic plan to improve the NHIS included utilizing the system for "surveillance". [2] However, there is no more recent evidence about what the scope of these surveillance measures may be, if they have been put in place at all. A July 2018 press release from the government of Jamaica indicated that a new NIHS was being developed. [3] There is no more recent relevant information shared by the Ministry of Health and Wellness or elsewhere. Jamaica has a National Public Health Laboratory, but it does not have a website and the country does not share information online about its capacities. There is no evidence that Jamaica has a national public health institute.

[1] Ministry of Health and Wellness. "Surveillance Self-Reporting Online Survey".

[https://nhis.mohjm.com/survey/index.php?r=survey/index&sid=462121&lang=en]. Accessed 28 September 2020.

[2] Ministry of Health. October 2013. "National Health Information System Strengthening and e-Health Strategic Plan". [https://moh.gov.jm/wp-content/uploads/2015/07/MOH_NHIS-eHealth_StrategicPlanFINAL.pdf]. Accessed 28 September 2020.

[3] Jamaica Information Service. 31 July 2018. "Health Information System by End of Fiscal Year". [https://jis.gov.jm/health-information-system-by-end-of-fiscal-year/]. Accessed 28 September 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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



There is evidence of an electronic health record system in place, but insufficient evidence that electronic health records are commonly in use in Jamaica; in fact, the percentage of health facilities that use electronic health records is likely to be less than 50%. Jamaica has a National Health Information System (NHIS), but there is insufficient evidence to confirm how widely it is used. [1,2] A World Health Organization survey confirmed the existence of electronic health records in 2015, but does not contain information on how extensively they are used. [3] The Ministry of Health reported that an electronic health record pilot had launched in Saint Elizabeth parish, which was supposed to have been completed in 2016, but there is no more recent information available about the pilot. [4] A July 2018 press release from the government of Jamaica indicated that a new NIHS was being developed; other releases earlier that year said that the Ministry of Health and Wellness was moving toward having patient records online. [5,6] There is no evidence confirming the broad use of electronic health records. However, there is no more recent relevant information shared by the Ministry of Health and Wellness or elsewhere. Jamaica has a National Public Health Laboratory, but it does not have a website and the country does not share information online about its capacities. There is no evidence that Jamaica has a national public health institute.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health. October 2013. "National Health Information System Strengthening and e-Health Strategic Plan". [https://moh.gov.jm/wp-content/uploads/2015/07/MOH_NHIS-eHealth_StrategicPlanFINAL.pdf]. Accessed 28 September 2020.
- [3] World Health Organization. 2015. "Global Observatory for eHealth: Jamaica".
- [http://www.who.int/goe/publications/atlas/2015/jam.pdf?ua=1]. Accessed 28 September 2020.
- [4] Ministry of Health and Wellness. "Health Informatics". [https://www.moh.gov.jm/divisions-agencies/divisions/technical-services-division/health-informatics]. Accessed 28 September 2020.
- [5] Jamaica Information Service. 31 July 2018. "Health Information System by End of Fiscal Year". [https://jis.gov.jm/health-information-system-by-end-of-fiscal-year/]. Accessed 28 September 2020.
- [6] Jamaica Information Service. 12 January 2018. "Health Ministry Moving Towards Electronic Storage of Patients' Records" [https://jis.gov.jm/health-ministry-moving-towards-electronic-storage-patients-records]. Accessed 28 September 2020.

2.4.1b

Does the national public health system have access to electronic health records of individuals in their country? Yes = 1, No = 0

Current Year Score: 0

There is insufficient publicly available evidence that Jamaica's national public health system have access to electronic health records of individuals in their country. Jamaica has a National Health Information System (NHIS), but there is insufficient evidence to confirm how it is used. [1,2] The national 2014-18 e-health strategic plan envisages "an electronic record for each patient that can be accessed with authorization, regardless of the health facility at which they present for care." [2] The basis of this system is the Ministry of Health's electronic patient administration system (ePas). The system is intended to provide universal access to the record at any facility a patient attends based on a single electronic health record for each individual with a system-generated unique identifier consolidated to a central database for national reporting. A pilot program was expected to conclude in 2016, but there is no further evidence on if this was complete or if the system is yet in place. [3] A July 2018 press release from the government of Jamaica indicated that a new NIHS was being developed; other releases earlier that year said that the Ministry of Health and Wellness was moving toward having patient records online. [4,5] However, there is no more recent relevant information shared by the Ministry of Health and Wellness or elsewhere. Jamaica has a National Public Health Laboratory, but it does not have a website and the country does not share information online about its capacities. There is no evidence that Jamaica has a national public health institute.



- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Ministry of Health. October 2013. "National Health Information System Strengthening and e-Health Strategic Plan". [https://moh.gov.jm/wp-content/uploads/2015/07/MOH_NHIS-eHealth_StrategicPlanFINAL.pdf]. Accessed 28 September 2020.
- [3] Ministry of Health and Wellness. "Health Informatics". [https://www.moh.gov.jm/divisions-agencies/divisions/technical-services-division/health-informatics]. Accessed 28 September 2020.
- [4] Jamaica Information Service. 31 July 2018. "Health Information System by End of Fiscal Year". [https://jis.gov.jm/health-information-system-by-end-of-fiscal-year/]. Accessed 28 September 2020.
- [5] Jamaica Information Service. 12 January 2018. "Health Ministry Moving Towards Electronic Storage of Patients' Records" [https://jis.gov.jm/health-ministry-moving-towards-electronic-storage-patients-records]. Accessed 28 September 2020.

2.4.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence on the Ministry of Health's website or from statements by senior officials that data standards apply to the electronic patient administration system to ensure data is comparable. [1,2,3] A July 2018 press release from the government of Jamaica indicated that a new NIHS was being developed; other releases earlier that year said that the Ministry of Health and Wellness was moving toward having patient records online. [4,5] However, these releases do not mention data standards. However, there is no more recent relevant information shared by the Ministry of Health and Wellness or elsewhere. [6] Jamaica does not have a public health institute, and the National Public Health Laboratory does not have a website showing its capabilities.

- [1] Ministry of Health. 6 June 2018. "Highlights of Key initiatives: 2017-2018". [https://www.moh.gov.jm/wpcontent/uploads/2018/06/MoH-Highlighted-Achievement-FY2017-18.pdf]. Accessed 28 September 2020.
- [2] Ministry of Health. "Health Informatics". [https://www.moh.gov.jm/divisions-agencies/divisions/technical-services-division/health-informatics]. Accessed 28 September 2020.
- [3] Jamaica Information Service. 10 May 2017. "Use of Modern Technology Will Boost Healthcare Delivery Dr. Tufton". [https://jis.gov.jm/use-modern-technology-will-boost-healthcare-delivery-dr-tufton]. Accessed 28 September 2020.
- [4] Jamaica Information Service. 31 July 2018. "Health Information System by End of Fiscal Year". [https://jis.gov.jm/health-information-system-by-end-of-fiscal-year/]. Accessed 28 September 2020.
- [5] Jamaica Information Service. 12 January 2018. "Health Ministry Moving Towards Electronic Storage of Patients' Records" [https://jis.gov.jm/health-ministry-moving-towards-electronic-storage-patients-records]. Accessed 28 September 2020. [6] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.

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

2.4.2a

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

Yes = 1, No = 0



There is insufficient evidence of established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data. Jamaica does have a Mosquito Control and Research Unit Insectary at the University of the West Indies campus in Jamaica which engages in some type of collabotation. It opened in January 2018 as a partnership between the University and the Ministry of Health, supported by the US Agency for International Development. It serves as Jamaica's national mosquito control and research laboratory, complementing an insectary at the National Public Health Laboratory. [1,2] However, there is no specific evidence on the websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, or the Ministry of Water, Land, the Environment and Climate Change that the data is shared between animal, human and wildlife surveillance, for this or for other surveillance efforts. [3,4,5]

- [1] The Gleaner. 20 January 2018. "Mosquito Control Program Strengthened".
- [https://www.devdiscourse.com/article/agency-wire/1032-jamaican-mosquito-control-program-strengthened]. Accessed 28 September 2020.
- [2] Jamaica Information Service. "Mosquito Control Programme Strengthened". [https://jis.gov.jm/mosquito-control-programme-strengthened]. Accessed 28 September 2020.
- [3] Ministry of Water, Land, the Environment and Climate Change. [https://jis.gov.jm/procurements/ministry-water-land-environment-climate-change]. Accessed 28 September 2020.
- [4] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [5] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Jamaica makes de-identified health surveillance data on disease outbreaks publicly available via reports on government websites, except for its reporting on data from the COVID-19 outbreak. The government's COVID-19 infographic website shares de-identified health surveillance data. [1] There is no evidence of surveillance databases on disease outbreaks on the websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [2,3] The National Public Health Laboratory does not have its own website.

- [1] Ministry of Health and Wellness. COVID-19 dashboard. [https://jamcovid19.moh.gov.jm/]. Accessed 1 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [3] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.

2.4.3b

Does the country make de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar)? Yes = 1, No = 0



Jamaica makes de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc) available via daily reports on government websites. The government's COVID-19 infographic website shares de-identified health surveillance data, including the total number of cases, total number of cases for men and women, total number of recovered and total number of deaths. During the research period, the website was updated more than once a day. [1] A separate page on the website of the Ministry of Health and Wellness includes more detailed data on COVID-19, including the number of new cases in the last 24 hours; deaths and recoveries; source of infection (imported, local, from contacts of confirmed cases, etc.); number of tests administered; and other information. New updates are posted daily. [2]

- [1] Ministry of Health and Wellness. COVID-19 dashboard. [https://jamcovid19.moh.gov.jm/]. Accessed 2 October 2020.
- [2] Ministry of Health and Wellness. "COVID-19 Clinical Management Summary".

[https://www.moh.gov.jm/updates/coronavirus/covid-19-clinical-management-summary/]. Accessed 2 October 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence of laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Government officials and private medical practitioners have stressed the importance of safeguarding the confidentiality of individual health information. [1,2] However, there is no evidence on the Ministry of Health and Wellness website of laws or regulations mandating such confidentiality. [3] The National Public Health Laboratory does not have its own website. Neither the Ministry of Justice's database of laws nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

- [1] Jamaica Information Service. 28 February 2015. "Ministry of Health Issues Reminder". [https://jis.gov.jm/ministry-health-issues-reminder]. Accessed 28 September 2020.
- [2] Medical Protection Society. May 2016. "Confidentiality—General Principles".

[https://www.medicalprotection.org/docs/default-source/pdfs/factsheet-pdfs/caribbean-and-bermuda-factsheets/confidentiality-general-principles.pdf?sfvrsn=6]. Accessed 28 September 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] FAOLEX Database. "Jamaica". [http://www.oie.int/en/solidarity/pvs-evaluations/pvs-evaluation-reports]. Accessed 28 September 2020.
- [5] Ministry of Justice. "Laws.". [https://moj.gov.jm/laws]. Accessed 28 September 2020.

2.4.4b

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

Yes = 1 , No = 0



There is no evidence that Jamaica has 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. The government's National Cyber Security Strategy includes public health facilities in its definition of critical infrastructure to be protected from cyber-attacks. [1] However, there is no mention of the identifiable health information of individuals. Government officials and private medical practitioners have stressed the importance of safeguarding the confidentiality of individual health information. [2,3] However, there is no evidence on the Ministry of Health and Wellness website of laws or regulations mandating such confidentiality. [4] The National Public Health Laboratory does not have its own website. Neither the Ministry of Justice's databse of laws nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [5,6]

- [1] Government of Jamaica. 2015. "National Cyber Security Strategy". [https://www.mset.gov.jm/wp-content/uploads/2019/09/Jamaica-National-Cyber-Security-Strategy-2015.pdf]. Accessed 28 September 2020.
- [2] Jamaica Information Service. 28 February 2015. "Ministry of Health Issues Reminder". [https://jis.gov.jm/ministry-health-issues-reminder]. Accessed 28 September 2020.
- [3] Medical Protection Society. May 2016. "Confidentiality—General Principles".
- [https://www.medicalprotection.org/docs/default-source/pdfs/factsheet-pdfs/caribbean-and-bermuda-factsheets/confidentiality-general-principles.pdf?sfvrsn=6]. Accessed 28 September 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [5] FAOLEX Database. "Jamaica". [http://www.oie.int/en/solidarity/pvs-evaluations/pvs-evaluation-reports]. Accessed 28 September 2020.
- [6] Ministry of Justice. "Laws.". [https://moj.gov.jm/laws]. Accessed 28 September 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is no public evidence that the government of Jamaica has made a specific commitment to share surveillance data during a public health emergency with other countries in the region, either for one disease or for multiple diseases. There is no mention of surveillance data sharing on the websites of the Ministry of Health and Wellness, or the Office of Disaster Preparedness and Emergency Management (ODPEM) which is responsible for preventing and reducing the impact of disasters, including public health emergencies. [1,2] Through its membership in the Caribbean Public Health Agency (CARPHA), the government of Jamaica presumably shares health surveillance data (since surveillance assistance is a function of CARPHA). [3] CARPHA addresses health issues requiring a regional response. These issues include the surveillance and management of communicable diseases, such as HIV / AIDS; re-emerging diseases, like tuberculosis, and new communicable diseases that are endemic in the region. [4,5] However, neither CARPHA nor CARICOM (the Caribbean Community, CARPHA's parent organization share via a public website information on surveillance during emergencies. The exception to this is that CARICOM does share member states' COVID-19 pandemic data through its primary website; this, does not, however, indicate in itself a commitment to share surveillance data during a public health emergency, nor is there separate evidence that Jamaica has made a COVID-19-specific commitment. [6] Further, the CARPHA charter does not commit members to share public health surveillance data. [7]



- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 28 September 2020
- [3] Caribbean Public Health Association (CARPHA). "Laboratory Services". [https://carpha.org/What-We-Do/LABS/Overview]. Accessed 28 September 2020.
- [4] Caribbean Public Health Agency. "About the Caribbean Public Health Agency (CARPHA)".
- [http://carpha.org/About].Accessed 28 September 2020.
- [5] CARICOM. [https://www.caricom.org/]. Accessed 28 September 2020.
- [6] CARICOM "COIVD-19 Coronavirus". [https://today.caricom.org/covid19/regional/]. Accessed 25 March 2021.
- [7] Caribbean Public Health Agency. May 2011. "Agreement Establishing the Caribbean Public Health Agency (CARPHA)". [https://carpha.org/Portals/0/Documents/CARPHA IGA.pdf]. Accessed 28 September 2020.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no evidence that Jamaica has a national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency, whether for future emergencies or active public health emergencies. There is no indication of a national system on the public website of the Ministry of Health and Wellness. [1] Jamaica has a national public health laboratory, but it does not share information about its capacities via a public website. There is no evidence that Jamaica has a national public health institute. In response to the COVID-19 pandemic, the government has announced that it is conducting contact tracing throughout the country, in coordination with local authorities. [2,3,4,5] However, the government has not shared via a public website a description of a system for contact tracing that provides training, metrics standardization or financial resources at the sub-national level.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [2] Jamaica Information Service. 20 March 2020. "Get the facts talks about the Ministry of Health and Wellness' COVID-19 contact tracing process". [https://jis.gov.jm/radio_programs/get-the-facts-talks-about-the-ministry-of-health-and-wellness-covid-19-contact-tracing-process/]. Accessed 10 October 2020.
- [3] Jamaica Information Service. 11 May 2020. "Contact Tracers Playing Vital Role In Containing COVID-19".
- [https://jis.gov.jm/contact-tracers-playing-vital-role-in-containing-covid-19/]. Accessed 10 October 2020.
- [4] Jamaica Information Service. 25 September 2020. "Contact tracing has not ceased Dr. Tufton".
- [https://jis.gov.jm/contact-tracing-has-not-ceased-dr-tufton/]. Accessed 10 October 2020.
- [5] Jamaica Information Service. 10 October 2020. "Contact Tracing Remains Effective Tool in Containing COVID-19". [https://jis.gov.jm/features/contact-tracing-remains-effective-tool-in-containing-covid-19/]. Accessed 10 October 2020.



2.5.1b

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

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

Current Year Score: 0

There is insufficent evidence to confirm that Jamaica provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention. There are general economic support measures in place in response to the COIVD-19 pandemic, but they are not specific to those in guarantine, and ther are no specific measures to support the medical care of those in guarantine. Starting in March 2020, the government announced that it would take various measures to stimulate the economy in response to the COVID-19 pandemic; these interventions culminated in the COVID-19 Economic Recovery Task Force's "Rebuild Jamaica", published in June 2020. [1,2,3] The government has also issued individual cash benefits to those who have lost their jobs or suffered a loss of income as a result of the COVID-19 pandemic. [4] However, none of these announcements included mentions of measures intended to help individuals quarantined by COVID-19. The government has criticized some employer practices of furloughing employees who are self-isolating. The government has said that such employees are protected by the provisions of the Holidays with Pay Act and gazette notices published under the Disaster Risk Management Act. [5] The gazette notices posted under the Disaster Risk Management Act do specify how quarantine should be executed, and certain responsibilities of employers (such as facilitating work-from-home where possible). The Holidays with Pay Act also describes the circumstances in which employers must provide paid sick leave. However, a review of those laws does not reveal any provisions specifically supporting those who are self-isolating as a result of COVID-19 or other disease. The sick leave provisions under the Holidays with Pay Act appear too limited to guarantee job security (they are limited to certain types of employment and tied to the duration of employment); further, the law does not mention quarantine. [6,7] Similarly, there is no evidence of guaranteed medical care for those who are self-isolating. There is no additional relevant information shared via the public website of the Ministry of Health and Wellness. [8] Jamaica has a national public health laboratory, but it does not share information about its capacities via a public website. There is no evidence that Jamaica has a national public health institute.

- [1] Jamaica Information Service. 17 March 2020. "Statement To Parliament By Hon. Nigel Clarke, Minister Of Finance And The Public Service Fiscal Stimulus Response To The COVID-19". [https://jis.gov.jm/speeches/fiscal-stimulus-response-to-the-covid-19/]. Accessed 10 October 2020.
- [2] Jamaica Information Service. 27 March 2020. "Responding To The COVID-19 Pandemic: Jamaica Will Recover" Statement From JAMPRO Chairman, Senator Don Wehby". [https://jis.gov.jm/speeches/responding-to-the-covid-19-pandemic-jamaica-will-recover-statement-from-jampro-chairman-senator-don-wehby/]. Accessed 10 October 2020.
- [3] COVID-19 Economic Recovery Task Force (Ministry of Finance and the Public Service". 30 June 2020. "Rebuild Jamaica". [https://www.mof.gov.jm/downloads/programmes/economic-recovery/Rebuild%20Jamaica_%20COVID-19%20Economic%20Recovery%20Task%20Force%20Report%20FINAL.pdf]. Accessed 10 October 2020.
- [4] International Labour Organization. 6 April 2020. "Governments' Response to COVID-19".
- [https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_740917.pdf]. Accessed 10 October 2020.
- [5] Jamaica Information Service. 2 September 2020. "No such requirements under the Labour Laws Ministry of Labour and Social Security". [https://jis.gov.jm/no-such-requirements-under-the-labour-laws-ministry-of-labour-and-social-security/]. Accessed 10 October 2020.
- [6] Office of the Prime Minister. "Disaster Risk Management Act". [https://opm.gov.jm/category/disaster-risk-management-act/]. Accessed 10 October 2020.



[7] Government of Jamaica. 1947. "Holidays with Pay Act".

[https://moj.gov.jm/sites/default/files/laws/Holidays%20With%20Pay%20Act.pdf]. Accessed 10 October 2020.

[8] Ministry of Health and Wellness. [https://www.moh.gov.jm]. A Accessed 10 October 2020.

2.5.1c

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

Yes = 1. No = 0

Current Year Score: 1

Jamaica makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports on government websites. A page on the website of the Ministry of Health and Wellness includes detailed de-identified data on COVID-19, including the number of new cases in the last 24 hours and the source of infection (imported, local, from contacts of confirmed cases, etc.). New updates are posted daily. [1]

[1] Ministry of Health and Wellness. "COVID-19 Clinical Management Summary". [https://www.moh.gov.jm/updates/coronavirus/covid-19-clinical-management-summary/]. Accessed 2 October 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no evidence that Jamaica has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency, whether for future emergencies or active emergencies. There is no indication of a national system on the public website of the Ministry of Health and Wellness, the Jamaica Customs Agency, or the latter's Border Protection Unit. [1,2,3] Jamaica has a national public health laboratory, but it does not share information about its capacities via a public website. In response to the COVID-19 pandemic, the government has announced that it is conducting contact tracing throughout the country, in coordination with local authorities. [4,5,6,7] However, the government has not shared via a public website a description of a system for contact tracing that includes an agreement with border control authorities.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [2] Jamaica Customs Agency. [https://www.jacustoms.gov.jm/]. Accessed 10 October 2020.
- [3] Jamaica Customs Agency. "Border Protection Unit". [https://www.jacustoms.gov.jm/branch/border-protection-unit]. Accessed 10 October 2020.
- [4] Jamaica Information Service. 20 March 2020. "Get the facts talks about the Ministry of Health and Wellness' COVID-19 contact tracing process". [https://jis.gov.jm/radio_programs/get-the-facts-talks-about-the-ministry-of-health-and-wellness-



covid-19-contact-tracing-process/]. Accessed 10 October 2020.

[5] Jamaica Information Service. 11 May 2020. "Contact Tracers Playing Vital Role In Containing COVID-19".

[https://jis.gov.jm/contact-tracers-playing-vital-role-in-containing-covid-19/]. Accessed 10 October 2020.

[6] Jamaica Information Service. 25 September 2020. "Contact tracing has not ceased - Dr. Tufton".

[https://jis.gov.jm/contact-tracing-has-not-ceased-dr-tufton/]. Accessed 10 October 2020.

[7] Jamaica Information Service. 10 October 2020. "Contact Tracing Remains Effective Tool in Containing COVID-19".

[https://jis.gov.jm/features/contact-tracing-remains-effective-tool-in-containing-covid-19/]. Accessed 10 October 2020.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

Jamaica has an applied epidemiological training program available in country, but there is no evidence that the government provides resources to send citizens to another country to participate in applied epidemiology training programs. The Caribbean Regional Field Epidemiology Training Program (CR-FELTP) is a partnership between the Caribbean Public Health Agency (CARPHA), the health ministries of participating islands (including Jamaica), and the US Centres for Disease Control and Prevention (CDC), with additional technical support from the Pan American Health Organisation (PAHO), and the University of West Indies. [1] Training has been carried out in Jamaica under this programme. [2] However, there is no evidence on the Ministry of Health and Wellness's website that the government provides resources to send citizens abroad for such training. [3] Jamaica is not a member of Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). [4]

- [1] Caribbean Public Health Agency. "Introduction to the CR-FELTP". [http://carpha.org/feltp]. Accessed 28 September 2020.
- [2] Caribbean Public Health Agency. 9 March 2015. "CR-FELTP trains new mentors in Jamaica".

[https://carpha.org/More/Media/Articles/ArticleID/97/CR-FELTP-Trains-New-Mentors-in-Jamaica]. Accessed 28 September 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]. Accessed 28 September 2020.

2.6.1b

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

Yes = 1, No = 0



Current Year Score: 0

Jamaica participates in an applied epidemiological training program, but there is no evidence that it is explicitly inclusive of animal health professionals, nor that there is a specific animal health field epidemiology training program offered. The Caribbean Regional Field Epidemiology Training Program (CR-FELTP) is a partnership between the Caribbean Public Health Agency (CARPHA), the health ministries of participating islands (including Jamaica), and the US Centres for Disease Control and Prevention (CDC), with additional technical support from the Pan American Health Organisation (PAHO), and the University of West Indies. [1] Training has been carried out in Jamaica under this program, which is designed for health professionals "from diverse backgrounds". [2,3] However, there is no evidence on the Ministry of Health and Wellness or CARPHA websites that it specifically includes an animal-health component, or that it is available to animal-health professionals in Jamaica. [1,4] Jamaica is not a member of Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). [5]

- [1] Caribbean Public Health Agency. "Introduction to the CR-FELTP". [http://carpha.org/feltp]. Accessed 28 September 2020.
- [2] Caribbean Public Health Agency. 9 March 2015. "CR-FELTP trains new mentors in Jamaica".

[https://carpha.org/More/Media/Articles/ArticleID/97/CR-FELTP-Trains-New-Mentors-in-Jamaica]. Accessed 28 September 2020

- [3] Caribbean Public Health Agency. "What is a FELTP?" [http://carpha.org/What-We-Do/FELTP/Introduction]. Accessed 28 September 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [5] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]

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 Jamaica has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential. Neither the 1997 National Disaster Action Plan nor the Disaster Risk Management Act passed in 2015 address planning for multiple communicable diseases with pandemic potential. [1, 2] Since 2015, the authorities have been working on regulations designed to make the legislation more effective; however, there is no indication that reforms include expanding the regulations in regards to managing disease. [3] The website of the Office of Disaster Preparedness and Emergency Management (ODPEM) includes a specific section with information on the H1N1 influenza virus. However, the page simply shares information about H1N1, and does not include a plan, disease-specific or otherwise. [4] No other disease is specifically mentioned in a plan on the office's website. [5] However, a 2009 powerpoint presentation on the ODPEM makes reference to the existence of a "Influenza Pandemic Preparedness and Response Plan" for Jamaica, "revised in 2007"; but this plan could not be located on the ODPEM website, the website of the Ministry of Health and Wellness, or elsewhere. [5,6,7] In 2020, the government released a document called "COVID-19 Preparedness and Response Plan for Outbreak Control", but the only portion of this document available online is one with guidance for clinical management of acute COVID-19 cases. It is not clear if there are other portions of the plan that may be more relevant to a public health response. [8] There is no other evidence of a relevant plan on the Ministry of Health and Wellness or the ODPEM websites. [5,7]

- [1] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [2] Government of Jamaica. "Disaster Risk Management Act of 2015."

[https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.

[3] Jamaica Information Service. 8 April 2018. "Regulations of Disaster Risk Management Act Being Reviewed".

[https://jis.gov.jm/regulations-disaster-risk-management-act-reviewed]. Accessed 5 October 2020.

[4] Office of Disaster Preparedness and Emergency Management. "Influenza A (H1N1) Pandemic".

[https://www.odpem.org.jm/influenza-h1n1/]. Accessed 5 October 2020.

- [5] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [6] Office of Disaster Preparedness and Emergency Management. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".

[https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&Iang=en]. Accessed 5 October 2020.



[7] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.

[8] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

3.1.1b

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

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

Current Year Score: 0

There is no publicly available evidence that Jamaica has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone one that has been updated in the last three years. Neither the 1997 National Disaster Action Plan nor the Disaster Risk Management Act passed in 2015 address planning for multiple communicable diseases with pandemic potential. [1, 2] Since 2015, the authorities have been working on regulations designed to make the legislation more effective; however, there is no indication that reforms include expanding the regulations in regards to managing disease. [3] The website of the Office of Disaster Preparedness and Emergency Management (ODPEM) includes a specific section with information on the H1N1 influenza virus. However, the page simply shares information about H1N1, and does not include a plan, disease-specific or otherwise. [4] No other disease is specifically mentioned in a plan on the office's website. [5] However, a 2009 powerpoint presentation on the ODPEM makes reference to the existence of a "Influenza Pandemic Preparedness and Response Plan" for Jamaica, "revised in 2007"; but this plan could not be located on the ODPEM website, the website of the Ministry of Health and Wellness, or elsewhere. [5,6,7] In 2020, the government released a document called "COVID-19 Preparedness and Response Plan for Outbreak Control", but the only portion of this document available online is one with guidance for clinical management of acute COVID-19 cases. It is not clear if there are other portions of the plan that may be more relevant to a public health response. [8] There is no other evidence of a relevant plan on the Ministry of Health and Wellness or the ODPEM websites. [5,7]

- [1] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [2] Government of Jamaica. "Disaster Risk Management Act of 2015."

[https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.

[3] Jamaica Information Service. 8 April 2018. "Regulations of Disaster Risk Management Act Being Reviewed".

[https://jis.gov.jm/regulations-disaster-risk-management-act-reviewed]. Accessed 5 October 2020.

[4] Office of Disaster Preparedness and Emergency Management. "Influenza A (H1N1) Pandemic".

[https://www.odpem.org.jm/influenza-h1n1/]. Accessed 5 October 2020.

- [5] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [6] Office of Disaster Preparedness and Emergency Management. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".

[https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&Iang=en]. Accessed 5 October 2020.

[7] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.

[8] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf].



Accessed 5 October 2020.

3.1.1c

If an overarching plan is in place, does it include considerations for pediatric and/or other vulnerable populations? Yes = 1, No /no plan in place= 0

Current Year Score: 0

There is no publicly available evidence that Jamaica has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, let alone one that includes considerations for pediatric or other vulnerable populations. Neither the 1997 National Disaster Action Plan nor the Disaster Risk Management Act passed in 2015 address planning for multiple communicable diseases with pandemic potential. [1, 2] Since 2015, the authorities have been working on regulations designed to make the legislation more effective; however, there is no indication that reforms include expanding the regulations in regards to managing disease. [3] The website of the Office of Disaster Preparedness and Emergency Management (ODPEM) includes a specific section with information on the H1N1 influenza virus. However, the page simply shares information about H1N1, and does not include a plan, disease-specific or otherwise. [4] No other disease is specifically mentioned in a plan on the office's website. [5] However, a 2009 powerpoint presentation on the ODPEM makes reference to the existence of a "Influenza Pandemic Preparedness and Response Plan" for Jamaica, "revised in 2007"; but this plan could not be located on the ODPEM website, the website of the Ministry of Health and Wellness, or elsewhere. [5,6,7] in 2020, the government released a document called "COVID-19 Preparedness and Response Plan for Outbreak Control", but the only portion of this document available online is one with guidance for clinical management of acute COVID-19 cases. It is not clear if there are other portions of the plan that may be more relevant to a public health response. [8] There is no other evidence of a relevant plan on the Ministry of Health and Wellness or the ODPEM websites. [5,7]

- [1] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [2] Government of Jamaica. "Disaster Risk Management Act of 2015."
- $[https://japarliament.gov.jm/attachments/341_The \%20D is a ter \%20 and \%20 Preparedness \%20 and \%20 Emergency \%20 Management \%20 Act, \%20 20 15 \%20 No. 1. pdf]. Accessed 5 October 20 20.$
- [3] Jamaica Information Service. 8 April 2018. "Regulations of Disaster Risk Management Act Being Reviewed".
- $[https://jis.gov.jm/regulations-disaster-risk-management-act-reviewed]. \ Accessed \ 5 \ October \ 2020.$
- [4] Office of Disaster Preparedness and Emergency Management. "Influenza A (H1N1) Pandemic".
- [https://www.odpem.org.jm/influenza-h1n1/]. Accessed 5 October 2020.
- [5] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [6] Office of Disaster Preparedness and Emergency Management. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".

[https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&lang=en]. Accessed 5 October 2020.

- [7] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [8] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.



3.1.1d

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

Yes = 1, No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence on the websites of the Ministry of Health and Wellness or the Office of Disaster Preparedensess and Emergency Management (ODPEM) of a mechanism to engage with the private sector on support for outbreak preparedness and response. [1,2] No other information appears to be available on engaging with the private sector.

- [1] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 1

There is evidence to confirm that Jamaica has a policy, plan or guidelines in place to implement non-pharmaceutical interventions (NPIs) in response to a single disease (COVID-19); however, there is no evidence of such guidelines that apply to multiple diseases. In response to the COVID-19 pandemic, the government has implemented various NPIs. The NPIs implemented in response to COVID-19 include required social distancing, limits on the sizes of gatherings, a curfew, restricting the hours for certain businesses, and encouring working from home, especially for older workers. [1] The Ministry of Health and Wellness has also issued a protocol for the steps businesses must take to open during the pandemic. [2] However, these plans are all specific to COVID-19. There is no other relevant information shared via a public website of the Ministry of Health and Wellness. [3] Jamaica has a national public health laboratory, but it does not share information about its capacities via a public website. There is no evidence that Jamaica has a national public health institute.



- [1] Jamaica Information Service. 1 April 2020. "Jamaicans Urged To Obey Social Distancing Rules".
- [https://jis.gov.jm/jamaicans-urged-to-obey-social-distancing-rules/]. Accessed 10 October 2020.
- [2] Ministry of Health and Wellnesss. May 2020. "COVID-19 Workplace Protocols". [https://www.moh.gov.jm/wp-content/uploads/2020/05/WORKPLACE-PROTOCOL-GeneralRequirements-for-the-Reopening-of-Establishment_May-29-2020.pdf]. Accessed 10 October 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

- Is there evidence that the country has activated their national emergency response plan for an infectious disease outbreak in the past year?
- Is there evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year?

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

Current Year Score: 1

There is evidence to confirm that Jamaica has, in the past year, either activated its national emergency response plan for an infectious disease outbreak, or completed a national-level biological threat-focused exercise.

The Office for Disaster Preparedeness and Emergency Management (ODPEM) announced in March 2020 that it had activated the National Emergency Operations Centre in response to the COVID-19 pandemic. However, its announcement included no mention of the country's National Diaster Action Plan. [1,2] The Disaster Risk Management Act (DRMA)of 2015 is key legislation that covers emergency response. [3] After the prime minister declared Jamaica a disaster area in March 2020, the country issued a series of Disaster Risk Management Enforcement Measures under the DRMA, which included detailed provisions on a range of responses to the COVID-19 pandemic, including, for example, instructions on social distancing and what businesses could be open. [8] There is no other evidence on the websites of the Ministry of Health and Wellness or the ODPEM of an activation of a national emergency response plan, or of a national-level biological threat-focused exercise. [4,5] There is no evidence of simulation exercises for Jamaica listed on the World Health Organization extranet list of simulation exercises. [6] Jamaica has published various sector-specific guidelines in response to the COVID-19 pandemic, but there is no evidence that it has developed a single COVID-19 emergency response plan and then activated it. [7] There is no evidence of relevant media reports or academic studies.

- [1] Office of Disaster Preparedeness and Emergency Management. 10 March 2020. "Full Activation of the National Emergency Operations Centre". [https://www.odpem.org.jm/odpem_in_the_media/full-activation-of-the-national-emergency-operations-centre-2/]. Accessed 5 October 2020.
- [2] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [3] Government of Jamaica. "Disaster Risk Management Act of 2015."
- [https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.



- [5] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [6] World Health Organization. "Simulation Exercises". [https://extranet.who.int/sph/simulation-exercise]. Accessed 5 October 2020.
- [7] Ministry of Health and Wellness. "COVID-19 Resources and Protocols". [https://www.moh.gov.jm/covid19/covid-19-resources-and-protocols/]. Accessed 26 March 2021.
- [8] Office of the Prime Minister. "Disaster Risk Managament Act (Enforcement Measures)".

[https://opm.gov.jm/category/disaster-risk-management-act/]. Access 26 March 2021.

3.2.1b

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

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

Current Year Score: 0

There is no evidence that Jamaica has, in the past year, identified a list of gaps and best practices in response to either an infectious disease or a biological-threat focused exercise, and developed a plan to improve response capabilities. There is no relevant evidence on the websites of the Ministry of Health and Wellness or the ODPEM of an activation of a national emergency response plan (such as the National Diaster Action Plan or the Disaster Risk Management Act of 2015, which are the only known national emergency response plans); a national-level biological threat-focused exercise; or any plan to improve capacities resulting from such activities. [1,2,3,4] There is no evidence of simulation exercises for Jamaica listed on the World Health Organization (WHO) extranet list of simulation exercises, nor is there any evidence of an after action review for Jamaica listed by the WHO. [5,6] There is no evidence of relevant media reports or academic studies.

- [1] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [2] Government of Jamaica. "Disaster Risk Management Act of 2015."
- [https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.
- [3] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [5] World Health Organization. "Simulation Exercises". [https://extranet.who.int/sph/simulation-exercise]. Accessed 5 October 2020
- [6] World Health Organization. "After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 5 October 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1, No = 0

Current Year Score: 0



There is no evidence that Jamaica in the past year has undergone a national-level biological threat-focused exercise, let alone one that has included private sector representatives. There is no relevant evidence on the websites of the Ministry of Health and Wellness or the ODPEM. [1,2] There is no evidence of simulation exercises for Jamaica listed on the World Health Organization (WHO) extranet list of simulation exercises, nor is there any evidence of an after action review for Jamaica listed by the WHO. [3,4] There is no evidence of a national-level biological threat-focused exercise shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Jamaica country profile; or in the WHO Regional Office for the Americas/ Pan American Health Organization website. [5,6,7] There is no evidence of relevant media reports or academic studies.

- [1] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [3] World Health Organization. "Simulation Exercises". [https://extranet.who.int/sph/simulation-exercise]. Accessed 5 October 2020.
- [4] World Health Organization. "After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 5 October 2020.
- [5] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Jamaica". [https://extranet.who.int/sph/country-status/jamaica#aar]. Accessed 15 August 2020.
- [6] World Health Organization. "Jamaica". [https://www.who.int/countries/jam/]. Accessed 5 October 2020.
- [7] World Health Organization Regional Office for the Americas / Pan American Health Organization. [https://www.paho.org/en]. Accessed 5 October 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Jamaica has a National Emergency Operations Centre (NEOC), which was activated in March 2020 in response to the COVID-19 pandemic. [1] The NEOC is managed by the Office of Disaster Preparedness and Emergency Management (ODPEM). The NEOC is a generalized operations centre which does not specifically cover health issues but, at least in the case of COVID-19, has been activated to do so. [1,2] The NEOC does not have its own website.

- [1] Office of Disaster Preparedeness and Emergency Management. 10 March 2020. "Full Activation of the National Emergency Operations Centre". [https://www.odpem.org.jm/odpem_in_the_media/full-activation-of-the-national-emergency-operations-centre-2/]. Accessed 5 October 2020.
- [2] Office of Disaster Preparedness and Emergency Management. 2018. "Organization Structure".

[https://www.odpem.org.jm/organizational-structure/]. Accessed 5 October 2020.

[3] Office of Disaster Preparedness and Emergency Management. "National Structure".

[https://www.odpem.org.jm/national-structure/]. Accessed 5 October 2020.



3.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica's National Emergency Operations Centre (NEOC) is required to conduct a drill for a public health emergency scenario at least once per year, or that it does conduct such a drill at least once per year. There is no relevant information on the websites of the Ministry of Health and Wellness, or the Office of Disaster Preparedness and Emergency Management, which manages the NEOC. [1,2,3] The NEOC does not have its own website.

- [1] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [3] Office of Disaster Preparedness and Emergency Management. 2018. "Organization Structure".

[https://www.odpem.org.jm/organizational-structure/]. Accessed 5 October 2020.

3.3.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to show that Jamaica's National Emergency Operations Centre (NEOC) 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 or scenario. The Office for Disaster Preparedeness and Emergency Management (ODPEM) announced on 10 March 2020 that it had activated the NEOC in response to the COVID-19 pandemic. [1] The first COVID-19 case in Jamaica was identified on the same day -- 10 March, 2020 -- at 11 a.m. [2] However, there is insufficent information to confirm that the activation occured within 120 minutes of the identification of the first COVID-19 case in the country; the ODPEM post about NEOC activation does not have a timestamp for the activation. [1] There is no other relevant information on the websites of the Ministry of Health and Wellness or the ODPEM. [3,4]

- [1] Office of Disaster Preparedeness and Emergency Management. 10 March 2020. "Full Activation of the National Emergency Operations Centre". [https://www.odpem.org.jm/odpem_in_the_media/full-activation-of-the-national-emergency-operations-centre-2/]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. 10 March 2020. "Jamaica confirms first imported Coronavirus case". [https://www.moh.gov.jm/jamaica-confirms-first-imported-coronavirus-case/]. Accessed 5 October 2020.
- [3] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.



3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no publicly available evidence that Jamaican authorities have carried out an exercise to respond to a potential deliberate biological event, such as a bio-terrorism attack, nor of joint operating procedures between the public health and security authorities to respond to such an event or attack. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or t Office of Disaster Preparedness and Emergency Management. [1,2]

- [1] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Jamaica has a risk communication plan that outlines how messages will reach populations and sectors with different communications needs. Documents indicate that the country developed a risk communication plan for influenza in 2009, but there is no evidence on the websites of the Ministry of Health or the Office of Disaster Preparedness and Emergency Management of a public-health response strategy, for different sections of the population, or otherwise. [1,2,3,4] The government's 2015 Communication Strategy does not contain a section on risk communication. [5]

[1] Sub-Regional Meeting on Pandemic Influenza Preparedness Response: Caribbean Experience and Lessons Learned. 10 September 2009. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".

[https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&Iang=en]. Accessed 5 October 2020.

[2] Renee Franklin Peroune. 5 October 2009. "Experiences & lessons learned in crisis communication for Influenza A H1N1



pandemic". [https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=courses-1&alias=996-experiences-lessons-learned-in-crisis-communication-for-influenza-a-h1n1-pandemic<emid=1179&lang=en]. Accessed 5 October 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. "Communication Strategy". [https://jis.gov.jm/media/FINAL-Nov.-11-2015-GoJ-Comm.-Policy-Final-doc.pdf]. Accessed 5 October 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Jamaica has, 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. Documents indicate that the country developed a risk communication plan for influenza in 2009, but there is no evidence on the websites of the Ministry of Health and Wellness or the Office of Disaster Preparedness and Emergency Management (ODPEM) of a current risk communication strategy, for public health emergencies or otherwise. [1,2,3,4] The government's 2015 Communication Strategy does not contain a section on risk communication. [5] Neither the 2010 National Disaster Action Plan for Jamaica nor the Disaster Risk Management Act of 2015 contains relevant provisions. [6,7] There is no other relevant information shared via the public websites of the Ministry of Health and Wellness or the ODPEM. [3,4]

- [1] Sub-Regional Meeting on Pandemic Influenza Preparedness Response: Caribbean Experience and Lessons Learned. 10 September 2009. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".
- [https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&lang=en]. Accessed 5 October 2020.
- [2] Renee Franklin Peroune. 5 October 2009. "Experiences & lessons learned in crisis communication for Influenza A H1N1 pandemic". [https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=courses-1&alias=996-experiences-lessons-learned-in-crisis-communication-for-influenza-a-h1n1-pandemic&Itemid=1179&lang=en]. Accessed 5 October 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. "Communication Strategy". [https://jis.gov.jm/media/FINAL-Nov.-11-2015-GoJ-Comm.-Policy-Final-doc.pdf]. Accessed 5 October 2020.
- [6] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [7] Government of Jamaica. "Disaster Risk Management Act of 2015."
- [https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.



3.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Jamaica has, either in the national public health emergency response plan or in other legislation, regulation, or strategy documents, a risk communication plan of any kind, let alone one that designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. Documents indicate that the country developed a risk communication plan for influenza in 2009, but there is no evidence on the websites of the Ministry of Health and Wellness or the Office of Disaster Preparedness and Emergency Management (ODPEM) of a current risk communication strategy, for public health emergencies or otherwise. [1,2,3,4] The government's 2015 Communication Strategy does not contain a section on risk communication. [5] Neither the 2010 National Disaster Action Plan for Jamaica nor the Disaster Risk Management Act of 2015 contains relevant provisions. [6,7] There is no other relevant information shared via the public websites of the Ministry of Health and Wellness or the ODPEM. [3,4]

[1] Sub-Regional Meeting on Pandemic Influenza Preparedness Response: Caribbean Experience and Lessons Learned. 10 September 2009. "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response".

[https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&Iang=en]. Accessed 5 October 2020.

- [2] Renee Franklin Peroune. 5 October 2009. "Experiences & lessons learned in crisis communication for Influenza A H1N1 pandemic". [https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=courses-1&alias=996-experiences-lessons-learned-in-crisis-communication-for-influenza-a-h1n1-pandemic&Itemid=1179&lang=en]. Accessed 5 October 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. "Communication Strategy". [https://jis.gov.jm/media/FINAL-Nov.-11-2015-GoJ-Comm.-Policy-Final-doc.pdf]. Accessed 5 October 2020.
- [6] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wpcontent/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [7] Government of Jamaica. "Disaster Risk Management Act of 2015."

 $[https://japarliament.gov.jm/attachments/341_The \%20D is a ter \%20 and \%20 Preparedness \%20 and \%20 Emergency \%20 Management \%20 Act, \%20 20 15 \%20 No. 1. pdf]. Accessed 5 October 20 20.$

3.5.2 Public communication

3.5.2a

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

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



Current Year Score: 2

There is evidence that, in the past year, the public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns, both during emergencies and at other times. The Ministry of Health and Wellness maintains a Twitter account (unverified) that has been sharing information about the COVID-19 pandemic and its impact on Jamaic for most of 2020. [1] This includes detailed information, such as the location of COVID-19 cases in the country. [2] Additionally, the the ministry uses its Twitter account to share information about other public health concerns, such as mental health, cardiovascular disease, and sickle cell anemia. [3,4,5] The Ministry of Health and Wellness also has a Facebook page on which it shares similar information. [6]

- [1] Twitter. @themohgovjm (Ministry of Health and Wellness). [https://twitter.com/themohwgovjm?lang=en]. Accessed 5 October 2020.
- [2] Twitter. 30 September 2020. Status update for @themohgovjm (Ministry of Health and Wellness).

[https://twitter.com/themohwgovjm/status/1311475705658716160?s=20]. Accessed 5 October 2020.

[3] Twitter. 6 October 2020. Status update for @themohgovjm (Ministry of Health and Wellness).

[https://twitter.com/themohwgovjm/status/1313531078502756357?s=20]. Accessed 6 October 2020.

[4] Twitter. 29 September 2020. Status update for @themohgovjm (Ministry of Health and Wellness).

[https://twitter.com/themohwgovjm/status/1311007445054095361?s=20]. Accessed 6 October 2020.

[5] Twitter. 30 September 2020. Status update for @themohgovjm (Ministry of Health and Wellness).

[https://twitter.com/themohwgovjm/status/1311369849470361600?s=20]. Accessed 5 October 2020.

[6] Facebook. Ministry of Health and Wellness. [https://www.facebook.com/themohgovjm/]. Accessed 5 October 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior Jamaican leaders have shared minisformation or disinformation on infectious diseases in the past two years. The prime minister, Andrew Holness, maintains a verified Twitter account that shows no evidence of misinformation. [1] There are no reports of misinformation sharing in major new outlets. [2,3,4]

[1] Twitter. @AndrewHolnessJM (Andrew Honess).

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

- [2] British Broadcasting Corporation. [https://www.bbc.com/news]. Accessed 5 October 2020.
- [3] The Gleaner. [http://jamaica-gleaner.com/]. Accessed 5 October 2020.
- [4] Jamaica Observer. [http://www.jamaicaobserver.com/]. Accessed 5 October 2020.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet



Input number

Current Year Score: 55.07

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: 102.56

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: 4.0

2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation



3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak? Yes = 0, No = 1

Current Year Score: 1

There is no evidence that, in the past year, Jamaica has issued a restriction, without international/bilateral support, on the export or import of medical goods due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them. [1] The World Organisation for Animal Health's Weekly Disease Information portal does not list any events in Jamaica in the last year that prompted international movement restrictions of goods. [2] Neither the Ministry of Health and Wellness, Ministry of Industry, Commerce, Agriculture and Fisheries, nor the the Ministry of Foreign Affairs and Foreign Trade shares relevant information via public websites. [3,4,5] No mention of restrictions on the movement of goods could be found in a search of news media outlets.

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

[https://www.who.int/csr/don/archive/country/jam/en/]. Accessed 28 September 2020.

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

[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 28 September 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [5] Ministry of Foreign Affairs and Foreign Trade. [http://mfaft.gov.jm/wp]. Accessed 28 September 2020.

3.7.1b

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that, in the past year, Jamaica has issued a restriction, without international/bilateral support, on the export or import of non-medical goods due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them. [1] The World Organisation for Animal Health's Weekly Disease Information portal does not list any events in Jamaica in the last year that prompted international movement restrictions of goods. [2] Neither the Ministry of Health and Wellness, Ministry of Industry, Commerce, Agriculture and Fisheries, nor the the Ministry of Foreign Affairs and Foreign Trade shares relevant information via public websites. [3,4,5] No mention of restrictions on the movement of goods could be found in a search of news media outlets.

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

[https://www.who.int/csr/don/archive/country/jam/en/]. Accessed 28 September 2020.



- [2] World Organisation for Animal Health (OIE). "Weekly Disease Information".
- [https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 28 September 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 28 September 2020.
- [4] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 28 September 2020.
- [5] Ministry of Foreign Affairs and Foreign Trade. [http://mfaft.gov.jm/wp]. Accessed 28 September 2020.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0. No = 1

Current Year Score: 0

In the last year, Jamaica implemented a ban, without international or bilateral support, on travelers arriving from specific countries due to an infectious disease outbreak. In response to the outbreak COVID-19 pandemic, on 31 January 2020, Jamaica banned all travelers, except for Jamaican nationals and permanent residents, arriving from China. On 27 February 2020, the ban was expanded to travelers arriving from South Korea, Iran, Singapore, and Italy. [1] In March, Jamaica imposed similar restrictions on travelers arriving from the United Kingdom, Germany, Spain and France. [2,3,4] In June 2020, Jamaica announced it would begin a phased reopening of borders. [5]

- [1] Ministry of Health and Wellness. 3 March 2020. "Jamaica's Travel Advisory for COVID-19".
- $[https://www.moh.gov.jm/jamaicas-travel-advisory-for-covid-19/]. \ Accessed \ 10 \ October \ 2020.$
- [2] Jamaica Information Service. 14 March 2020. "Gov't Imposes Travel Restrictions for the UK". [https://jis.gov.jm/govt-imposes-travel-restrictions-for-the-uk/]. Accessed 10 October 2020.
- [3] Jamaica Information Service. 17 March 2020. "Travellers From Countries With COVID-19 Required To Self-Quarantine". [https://jis.gov.jm/travellers-from-countries-with-covid-19-required-to-self-quarantine/]. Accessed 10 October 2020.
- [4] Ministry of Health and Wellness. 10 March 2020. "National Statement: COVID-19 Delivered by Dr. the Hon. Christopher Tufton Minister of Health and Wellness". [https://www.moh.gov.jm/presentation/covid-19-delivered-by-dr-the-hon-christopher-tufton-minister-of-health-and-wellness/]. Accessed 10 October 2020.
- [5] Office of the Prime Minister. 15 June 2020. "PM Announces Phased Reopening of Jamaica's Borders with Strict Protocols". [https://opm.gov.jm/news/pm-announces-phased-reopening-of-jamaicas-borders-with-strict-protocols/]. Accessed 10 October 2020.



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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 130.61

2017

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 80.68

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 evidence to show that Jamaica has a public workforce strategy in place, which has been updated in the last five years, to identify fields with an insufficient workforce and strategies to address these shortcomings. The Ministry for Health and Wellness's "Vision for Health 2030: Ten Year Strategic Plan 2019-2030" includes several measures designed to improve Jamaica's health workforce. It's "Strategic Goal 4" describes both workforce gaps and some strategies to address them. The main workforce shortcomings that it describes are an insufficient number of total medical workers; an unequal distribution of medical workers; migration of medical workers to other countries; and an aging health workforce. "Vision for Health 2030" goes on to list more than twenty "strategic outcomes" and "strategic actions" to achieve goals related to these shortcomings. Many of these strategic actions are simply calls to develop more detailed plans to respond to needs, but there are also some more specific measures listed, such as establishing "a network of key stakeholders in order to establish national health education and training priorities and implement changes"; conducting an annual review of health workforce priorities;



"training and education programmes that are consistent with the new model of care"; improving "Jamaica's supply and deployment of health human resources through a combination of recruitment, retention, education, and training strategies and labour market policies"; and better data sharing. Elsewhere, "Vision for Health 2030" also calls for identifying "training needs that speed-up the acquisition of relevant knowledge to implement and operate the new [primary health care]-based model and that provide, at the same time, improved career opportunities for workers"; as well as other efforts at training and education. [1] There is no other evidence of a workforce development plan shared via the public websites of the Ministry of Health and Wellness; the Ministry of Labour and Social Security; or the Ministry of Education, Youth and Information. [2,3,4]

- [1] Ministry of Health for Health and Wellness. 2019. "Vision for Health 2030: Ten Year Strategic Plan 2019-2030". [https://www.moh.gov.jm/wp-content/uploads/2019/05/MOHW-Vision-for-Health-2030-Final.pdf]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [3] Ministry of Labour and Social Security. [www.mlss.gov.jm]. Accessed 5 October 2020.
- [4] Ministry of Education, Youth and Information. [https://moey.gov.jm/]. Accessed 5 October 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people Input number

Current Year Score: 172

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 to confirm that Jamaica has the capacity to isolate patients with highly communicable diseases in a patient isolation facility located within the country. Several news articles and government websites mention the existence of isolation wards or units at Jamaican hospitals, but there is not enough information to conclude that these facilities are equipped as biocontainment facilities for patients with highly communicable diseases. The government has stated that the National Chest Hospital has an isolation unit that is equipped to house patients with highly communicable respiratory diseases such as COVID-19, but has not provided detailed information about what features the unit has. [1] The Bustamante Hospital for Children in Kingston also has a pediatric isolation ward. [2] The 25-bed unit was renovated in 2018, including a more secure structure and a decontamination area. [3] However, there is no information, shared via the Ministry of Health and Wellness that this pediatric facility or any another facility is capable of housing patients with highly communicable diseases. [4] Similarly, the website of the University Hospital of the West Indies has a section titled Isolation Unit, but it contains only a picture, and no description of the unit's facilities. [5] In yet another example, the government has stated that the Prince Margaret Hopsital has an isolation unit, but no details are available on the specific features of the unit.



[6]

- [1] Jamaica Information Service. 31 January 2020. "Jamaica Prepared To Handle Coronavirus". [https://jis.gov.jm/jamaica-prepared-to-handle-coronavirus/]. Accessed 5 October 2020.
- [2] Jamaica Observer. 2 June 2018. "Air Conditioned Isolation Rooms for Bustamante Hospital".

[http://www.jamaicaobserver.com/latestnews/Air_conditioned_isolation_rooms_for_Bustamante_Hospital_?profile=1]. Accessed 5 October 2020.

- [3] Jamaica Observer. 25 May 2018. "Isolation ward at children's hospital being renovated".
- [http://www.jamaicaobserver.com/news/isolation-ward-at-children-s-hospital-being-renovated_134062?profile=1470]. Accessed 5 October 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [5] University Hospital of the West Indies. "UHWI Isolation Unit". [http://uhwi.gov.jm/node/93]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. 10 June 2020. "Isolation Unit at Princess Margaret Hospital Receives Surveillance System". [https://serha.gov.jm/article/2074]. Accessed 5 October 2020.

4.1.2c

Does the country meet one of the following criteria?

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

Yes = 1, No = 0

Current Year Score: 1

There is some evidence to show that Jamaica has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years, but no evidence that it has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. There is inadequate information to identify the precise features of recently expanded facilities, and to confirm that they are advanced isolation facilities. The COVID-19 pandemic spurred the creation of several isolation units at both private hospitals and public facilities around the country. For example, the government has stated that the National Chest Hospital has an isolation unit that is equipped to house patients with highly communicable respiratory diseases such as COVID-19. [1] In another example, in October 2020 Cornwall Regional Hospital announced it had opened a 24-bed COVID-19 isolation unit. [2] The Bustamante Hospital for Children in Kingston also has a pediatric isolation ward. [3] The 25-bed unit was renovated in 2018, including a more secure structure and a decontamination area. (However, this renovation did not apparently come in response to an infecions disease outbreak.) [4] In none of these cases has the government provided detailed information about what features the units have. There is no information, shared via the Ministry of Health and Wellness that this pediatric facility or any another facility is capable of housing patients with highly communicable diseases. [5] Similarly, the website of the University Hospital of the West Indies has a section titled Isolation Unit, but it contains only a picture, and no description of the unit's facilities. [6] In yet another example, the government has stated that the Prince Margaret Hopsital has an isolation unit, but no details are available on the specific features of the unit. [7] There is no other relevant information shared via the public website of the Office of Disaster Preparedness and Emergency Management. [8]

- [1] Jamaica Information Service. 31 January 2020. "Jamaica Prepared To Handle Coronavirus". [https://jis.gov.jm/jamaica-prepared-to-handle-coronavirus/]. Accessed 5 October 2020.
- [2] Jamaica Information Service. 9 October 2020. "Cornwall Regional Hospital Opens 24-Bed Ward for COVID-19 Patients". [https://jis.gov.jm/cornwall-regional-hospital-opens-24-bed-ward-for-covid-19-patients/]. Accessed 26 March 2021.



[3] Jamaica Observer. 2 June 2018. "Air Conditioned Isolation Rooms for Bustamante Hospital".

[http://www.jamaicaobserver.com/latestnews/Air_conditioned_isolation_rooms_for_Bustamante_Hospital_?profile=1]. Accessed 5 October 2020.

[4] Jamaica Observer. 25 May 2018. "Isolation ward at children's hospital being renovated".

[http://www.jamaicaobserver.com/news/isolation-ward-at-children-s-hospital-being-renovated_134062?profile=1470]. Accessed 5 October 2020

- [5] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [6] University Hospital of the West Indies. "UHWI Isolation Unit". [http://uhwi.gov.jm/node/93]. Accessed 5 October 2020.
- [7] Ministry of Health and Wellness. 10 June 2020. "Isolation Unit at Princess Margaret Hospital Receives Surveillance System". [https://serha.gov.jm/article/2074]. Accessed 5 October 2020.
- [8] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 1

There is evidence to confirm that Jamaica has a national procurement protocol in place that can be utilized by the Ministry of Health and Wellness and the Ministry of Industry, Commerce, Agriculture and Fisheries for the acquisition of laboratory supplies but not medical supplies for routine needs.

The government of Jamaica has a national procurement policy, issued in 2010 and administered by an independent Contractor-General. [1] The procurement policy is accompanied by a three-volume Handbook of Public Sector Procurement Procedures. [2] Nowhere in the main policy or its handbook is there mention of the the Ministry of Health and Wellness and the Ministry of Industry, Commerce, Agriculture and Fisheries. The handbook states that it "should be utilized by all Government entities for the procurement of goods, works and services"; however, there is no mention of medical supplies and laboratory equipment. [3] (There is a list of excluded goods and services in the handbook, which does not include medical or laboratory supplies.) [3] Procurement is further governed by the 2015 Public Procurement Act, which does not mention medical or laboratory supplies specifically, but which defines different circumstances in which a bidding process is required and when direct procurement is permissable. Specifically, the law says that a bidding process is unnecessary when the goods in question are complex or the need for them is urgent, among several other circumstances. [4] The Ministry of Health and Wellness provides downloadable forms for the procurement of goods and services, though medical and laboratory supplies are not specified. [5] There is also evidence of procurement announcements for laboratory supplies (such as autoclaves and sterilizers) on the website of the Ministry of Health and Wellness, but these are actually tenders calling for bids, and not evidence of a separate protocol for procurement. [6] Such bids can be completed through the Government of Jamaica Electronic Procurement web portal. [6] There is no other evidence of sector- or ministry-specific procurement protocols shared via the public websites of the of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries. [7,8]



- [1] Ministry of Finance and the Public Service. November 2010. "\Public Sector Procurement Policy".
- [http://www.ppc.gov.jm/website_files/gpphandbook_ver4/procurement_policy-101230.pdf] Accessed 5 October 2020.
- [2] Ministry of Finance and the Public Service. March 2014. "Revised Handbook of Public Sector Procurement Procedures (March 2014)". [https://mof.gov.jm/procurement/revised-handbook-of-public-sector-procurement-procedures.html]. Accessed 5 October 3030.
- [3] Ministry of Finance and the Public Service. March 2014. "Handbook of Public Sector Procurement Procedures Volume 3". [https://mof.gov.jm/documents/documents-publications/document-centre/file/237-handbook-of-public-sector-procurement-procedures-volume-3.html]. Accessed 5 October 2020.
- [4] Government of Jamaica. 2015. "Public Procurement Act".
- [https://www.gojep.gov.jm/epps/viewInfo.do?section=eproc&selectedItem=viewInfo.do%3Fsection%3Deproc]. Accessed 5 October 2020.
- [5] Ministry of Health and Wellness. "Procurement". [https://www.moh.gov.jm/national-hiv-sti-tb-programme/nhp-components/procurement/]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. 10 August 2019. "Procurement for the Supply, Delivery, Installation and Commissioning of Hospital Lights, Autoclaves and Sterilizers tor the Cornwall Regional Hospital Rehabilitation Programme".
- [https://www.moh.gov.jm/procurement-for-the-supply-delivery-installation-and-commissioning-of-hospital-lights-autoclaves-and-sterilizers-for-the-cornwall-regional-hospital-rehabilitation-programme/]. Accessed 5 October 2020.
- [7] Government of Jamaica Electronic Procurement. [https://www.gojep.gov.jm/epps/home.do]. Accessed 5 October 2020.
- [8] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [9] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 5 October 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 0

There is no evidence that Jamaica maintains a stockpile of medical supplies (such as medicines, vaccines, medical equipment, medical countermeasures, or personal protective equipment, or PPE) for national use during a public health emergency. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such stockpiles in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".
- [https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department/]. Accessed 5 October 2020.
- [3] Government of Jamaica. Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control".



[https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

4.2.2b

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

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

Current Year Score: 0

There is no evidence that Jamaica has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such stockpiles in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".
- [https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department/]. Accessed 5 October 2020.
- [3] Government of Jamaica. Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica conducts or requires an annual review of a national stockpile to ensure the supply is sufficient for a public health emergency, nor that such a stockpile exists. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such stockpiles in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".

[https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department/]. Accessed 5 October 2020.



- [3] Government of Jamaica. Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that Jamaica has a plan, mechanism or agreement to procure or to leverage domestic manufacturing capacity to produce medical supplies (such as medicines, vaccines, medical equipment, medical countermeasures, or personal protective equipment, or PPE) for national use during a public health emergency. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; or the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such a plan or mechanism in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such a plan. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".
- [https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department/]. Accessed 5 October 2020.
- [3] Government of Jamaica. Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

4.2.3b

Does the country meet one of the following criteria?

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



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

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

Current Year Score: 0

There is no evidence that Jamaica has a plan, mechanism or agreement to procure or to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; or the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such a plan or mechanism in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such a plan. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".

[https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-affairs-department/]. Accessed 5 October 2020.

- [3] Government of Jamaica. Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National Disaster Plan for Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1. No = 0

Current Year Score: 0

There is no evidence that Jamaica has a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. There is no relevant information shared via a public website by the Ministry of Health and Wellness (including the Pharmaceutical and Regulatory Affairs Department); the Ministry of National Security; or the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3,4] There is no mention of such a plan or guidelines in the government's National Disaster Action Plan. [5] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such a plan. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of Health and Wellness. "Pharmaceutical and Regulatory Affairs Department".

[https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-divisions/standards-and-regulation-division/pharmaceutical-and-regulatory-divisions-divis



affairs-department/]. Accessed 5 October 2020.

- [3] Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [5] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [6] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

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

4.3.2a

Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency? Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has a public plan in place to receive health personnel from other countries to respond to a public health emergency. There is no relevant information shared via the public websites of the Ministry of Health and Wellness; the Ministry of National Security; or the Office of Disaster Preparedness and Emergency Management (ODPEM). [1,2,3] There are no relevant provisions in the National Disaster Action Plan for Jamaica. [4] There is no evidence that Jamaica has published a new policy for receiving health personnel from other countries in response to the COVID-19 pandemic. For example, there is no announcement of such a policy in the government's COVID-19 Preparedness and Response Plan for Outbreak Control. [5] There are news reports that foreign doctors were dispatched to Jamaica (namely, from Cuba) to help combat the COVID-19 pandemic; however, there is no indication that this occurred as part of a broader public plan. [5]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Ministry of National Security. [https://www.mns.gov.jm]. Accessed 5 October 2020.
- [3] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [4] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [5] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.
- [6] Torres, Nora Gámez and Jacqueline Charles. 15 April 2020. "Despite U.S. warnings, Cuba's medical diplomacy triumphs in the Caribbean during pandemic". Miami Herald. [https://www.miamiherald.com/news/nation-world/world/americas/cuba/article241745281.html]. Accessed 5 October 2020.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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



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2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.1

2011

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: 93.54

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0



There is no evidence that the Jamaican government has issued legislation, a policy, or a public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. There is no relevant information shared via the public website of the Ministry of Health and Wellness. [1] There is no mention of such a policy in the government's National Disaster Action Plan, or in other plans and legislation on the Office of Disaster Preparedness and Emergency Management's list of national legislation, plans, and policies. [2,3] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such a policy. [4] The Minister of Health and Wellness stated in a news report in August 2020 that the ministry "[tries] to give some priority to front-line workers like healthcare workers" for testing and care, but it is not clear that such a position is part of an official policy. [5]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [3] Office of Disaster Management. "National LEgilsation, Plans and Policies". [https://www.odpem.org.jm/national-legislation-plans-policies/]. Accessed 5 October 2020.
- [4] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.
- [5] Barrett, Livern. 30 Augusut 2020. "Danger On The Front Lines Concerns Mount As Emergency Services Take Virus Hit Amid Surge In Cases". The Gleaner. [http://jamaica-gleaner.com/article/lead-stories/20200830/danger-front-lines-concerns-mount-emergency-services-take-virus-hit]. Accessed 5 October 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has in place a system for public health officials and healthcare workers to communicate during a public health emergency. There is no relevant information shared via the public website of the Ministry of Health and Wellness. [1] In 2018, the Office of Disaster Preparedness and Emergency Management (ODPEM) reported that Jamaica was setting up a national emergency communication system, funded by Japan, that was to be completed by 2020. The project, which is primarily designed to address disasters such as hurricanes, is supposed to provide an effective infrastructure and platform for communication among government agencies and first responders [2] However, as of March 2021 there was no publicly available evidence that the project had been completed. Releases from the government in February 2020 and February 2021 indicated the system is still under development. [3,4,5] There is no mention of such a system in the government's National Disaster Action Plan, or in other plans and legislation on the Office of Disaster Preparedness and Emergency Management's list of national legislation, plans, and policies. [6,7]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Jamaica Information Service. 26 June 2018. "Emergency Communication System to be operational by 2020".



[https://jis.gov.jm/emergency-communication-system-to-be-operational-by-2020]. Accessed 5 October 2020.

- [3] Jamaica Information Service. 14 February 2020. "\$239 Million Set Aside For IECSJ Project". [https://jis.gov.jm/239-million-set-aside-for-iecsj-project/]. Accessed 5 OCtober 2020.
- [4] Office of Disaster Preparedness and Emergency Management. 2019. "2017-2018 Annual Report".
- [https://odpem.org.jm/wp-content/uploads/2019/09/ODPEM-Annual-REPORT-2017-2018_compressed.pdf]. Accessed 5 October 2020.
- [5] Jamaica Information Service. 23 February 2021. "Funds Allocated To Improve National Emergency Communication System". [https://jis.gov.jm/funds-allocated-to-improve-national-emergency-communication-system/]. 23 February 2021.
- [6] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [7] Office of Disaster Management. "National LEgilsation, Plans and Policies". [https://www.odpem.org.jm/national-legislation-plans-policies/]. Accessed 5 October 2020.

4.5.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has in place a system for public health officials and healthcare workers to communicate during a public health emergency, let alone one that includes those in both the public and private sectors. There is no relevant information shared via the public website of the Ministry of Health and Wellness. [1] In 2018, the Office of Disaster Preparedness and Emergency Management (ODPEM) reported that Jamaica was setting up a national emergency communication system, funded by Japan, that was to be completed by 2020. The project, which is primarily designed to address disasters such as hurricanes, is supposed to provide an effective infrastructure and platform for communication among government agencies and first responders [2] However, as of March 2021 there was no publicly available evidence that the project had been completed. Releases from the government in February 2020 and February 2021 indicated the system is still under development. [3,4,5] There is no mention of such a system in the government's National Disaster Action Plan, or in other plans and legislation on the Office of Disaster Preparedness and Emergency Management's list of national legislation, plans, and policies. [6,7]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Jamaica Information Service. 26 June 2018. "Emergency Communication System to be operational by 2020".
- [https://jis.gov.jm/emergency-communication-system-to-be-operational-by-2020]. Accessed 5 October 2020.
- [3] Jamaica Information Service. 14 February 2020. "\$239 Million Set Aside For IECSJ Project". [https://jis.gov.jm/239-million-set-aside-for-iecsj-project/]. Accessed 5 OCtober 2020.
- [4] Office of Disaster Preparedness and Emergency Management. 2019. "2017-2018 Annual Report".
- [https://odpem.org.jm/wp-content/uploads/2019/09/ODPEM-Annual-REPORT-2017-2018_compressed.pdf]. Accessed 5 October 2020.
- [5] Jamaica Information Service. 23 February 2021. "Funds Allocated To Improve National Emergency Communication System". [https://jis.gov.jm/funds-allocated-to-improve-national-emergency-communication-system/]. 23 February 2021.
- [6] Government of Jamaica. May 1997. "National Disaster Action Plan for Jamaica". [http://www.abacusjamaica.com/wp-content/uploads/2010/08/National_Disaster_Plan_for_Jamaica.pdf]. Accessed 5 October 2020.
- [7] Office of Disaster Management. "National LEgilsation, Plans and Policies". [https://www.odpem.org.jm/national-legislation-plans-policies/]. Accessed 5 October 2020.



4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the national public health system monitoring for and tracking the number of health care associated infections that take place in healthcare facilities in Jamaica. The Ministry of Health and Wellness has published a manual on health facilities infection control and procedures. [1] The Pan American Health Organisation provides technical support to the ministry to assess and strengthen infection prevention and control in Jamaica's hospitals. [2] However, there is no evidence on the public website of the Ministry of Health and Wellness of a database or report containing details of such monitoring. [3] Jamaica does not have a public health institute, and the national laboratory system does not have a website showing its capabilities.

- [1] Ministry of Health. December 2014. "Register of Guidelines, Policies, Protocols and Manuals". [https://moh.gov.jm/wp-content/uploads/2015/03/MOH-Register-of-Manuals-and-Policies-2014-2015.pdf]. Accessed 5 October 2020.
- [2] Pan American Health Organisation. 22 October 2015. "PAHO/WHO supports Jamaica's Ministry of Health to strengthen infection prevention and control".

 $[https://www.paho.org/jam/index.php?option=com_content \& view=article \& id=116: pahowho-supports-jamaicas-ministry-of-health-to-strengthen-infection-prevention-and-control \& Itemid=346]. Accessed 5 October 2020.$

[3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

Is there a national requirement for ethical review (e.g., from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient public evidence to confirm the existence of a national requirement for ethical review before beginning a clinical trial. The Ministry of Health and Wellness has published guidelines for "good ethical practice" in any research involving human subjects. [1,2] However, there is no evidence on its website of a requirement for an ethical review before starting a clinical trial. [3] Jamaica does not have a Ministry of Research. A 2016 local media article noted the lack of



legislation regarding clinical trials. [4] There is no other evidence of relevant media reports or academic studies.

[1] Ministry of Health and Wellness. April 2010. "Guidelines for the Conduct of Research on Human Subjects". [https://www.moh.gov.jm/wp-content/uploads/2015/07/Guidelines-for-the-Conduct-of-Research.pdf]. Accessed 5 October 2020.

[2] Ministry of Health and Wellness. "Guidelines for the Conduct of Research on Human Subjects".

[https://www.moh.gov.jm/guidelines/guidelines-for-the-conduct-of-research-on-human-subjects/]. Accessed 5 October 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Jamaica Observer. 23 January 2016. "Legal Protection Needed". [http://www.jamaicaobserver.com/news/legal-protection-needed 49447]. Accessed 5 October 2020.

4.7.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. Jamaica's research guidelines do not include an expedited process for approving clinical trials in the event of a pandemic. Research may only be expedited in cases of observation studies or collection of data where no additional procedures are to be performed on the subject of the research. [1,2] In these cases, the local medical officer of health for a parish may expedite the review of research protocols. The Clinical Trials Centre at the University of the West Indies has no documented provision for expedited approval of trials. [3] Jamaica's Food and Drugs Act does not cover clinical trials. [4] Jamaica does not have a Ministry of Research.

[1] Ministry of Health. April 2010. "Guidelines for the Conduct of Research on Human Subjects".

[https://www.moh.gov.jm/wp-content/uploads/2015/07/Guidelines-for-the-Conduct-of-Research.pdf]. Accessed 5 October 2020.

[2] Ministry of Health and Wellness. "Guidelines for the Conduct of Research on Human Subjects".

[https://www.moh.gov.jm/guidelines/guidelines-for-the-conduct-of-research-on-human-subjects/]. Accessed 5 October 2020

[3] University of the West Indies. "Faculty of Medical Sciences: Clinical Trials Centre".

[https://www.mona.uwi.edu/fms/clinical-trials-centre]. Accessed 5 October 2020.

[4] Government of Jamaica. "The Food and Drugs Act 1975".

[http://www.vertic.org/media/National%20Legislation/Jamaica/JM_Food_and_Drugs_Act.pdf]. Accessed 5 October 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1, No = 0

Current Year Score: 1



Jamaica has a government agency responsible for approving new medical countermeasures (MCM) for humans. The Ministry of Health and Wellness's Standards and Regulation Division is responsible for reviewing and approving new medical countermeasures. Drugs for the treatment of life-threatening diseases must be registered with the ministry prior to importation, distribution and sale. The Division's Pharmaceutical and Regulatory Affairs branch focuses on three areas: product registration, import permit processing, and registration and monitoring of institutions and facilities. [1]

[1] Ministry of Health and Wellness. "Standards and Regulation Division". [https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division]. Accessed 5 October 2020.

4.7.2b

Is there an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies. There is no relevant information shared via the public websites of the Office of Disaster Preparedness and Emergency Management or the Ministry of Health and Wellness, including the latter's Standards and Regulations Division, which is responsible for approving new MCMs. [1,2,3] Jamaica does not have a Ministry of Research. There is no other evidence of relevant media reports or academic studies.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [2] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [3] Ministry of Health and Wellness. "Standards and Regulation Division". [https://www.moh.gov.jm/divisions-agencies/divisions/standards-and-regulation-division]. Accessed 5 October 2020.

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 . No = 0

Current Year Score: 1



2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to confirm that pandemics are integrated into Jamaica's National Risk Reduction Strategy. The Strategy lists diseases as one of the natural hazards that it covers, but there is no mention of which type of diseases and whether this also covers pandemic diseases. [1] The National Disaster Risk Management Act of 2015 does not address pandemics. [2] There is no further evidence on the websites of the Office of Disaster Preparedness and Emergency Management or the Ministry of Health and Wellness of a separate, standalone strategy for pandemics. [3] There is no evidence of relevant media reports or academic studies.

[1] Ministry of Land and Environment. July 2005. "National Hazard Risk Reduction Policy for Jamaica". [https://www.odpem.org.jm/wp-content/uploads/2019/09/National-Hazard-Risk-Reduction-Policy-for-Jamaica.pdf]. Accessed 5 October 2020.

[2] Government of Jamaica. "Disaster Risk Management Act of 2015."

[https://japarliament.gov.jm/attachments/341_The%20Disater%20and%20Preparedness%20and%20Emergency%20Manage ment%20Act,%202015%20No.1.pdf]. Accessed 5 October 2020.

- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 2

Jamaica is a member of several regional groups involved in public health emergencies, and there is no evidence of gaps in implementation. These include the Caribbean Disaster Emergency Management Agency (CDEMA), the Caribbean Public Health Agency (CARPHA) and the Pan American Health Organization (PAHO). [1,2,3] CARPHA is an agency of the Caribbean Community (CARICOM). [4] Among other functions, it coordinates responses to public health crises in the Caribbean. CDEMA has a mandate to be the "facilitator, driver, coordinator and motivating force for the promotion and engineering of Comprehensive Disaster Management (CDM)" in all member states. However, CDEMA does not specifically include public



health emergencies in its mandate. Neither of these organizations shares information via a public website that reveals the depth of commitment to cross-border activities that membership in theory entails. There is no evidence in media reports or academic studies of gaps in implementation of these groups or agreements. The Ministry of Health and Wellness includes CDEMA, CAPRHA, and PAHO in the list of international commitments on its website. [5]

- [1] Caribbean Disaster Emergency Management Agency. "CDEMA News". [https://www.cdema.org]. Accessed 10 October 2020.
- [2] Caribbean Public Health Agency. "About CARPHA". [http://carpha.org/About]. Accessed 10 October 2020.
- [3] Pan American Health Organisation / World Health Organization. [https://www.paho.org/hq/index.php?lang=en]. Accessed 10 October 2020.
- [4] CARICOM Caribbean Community. "Who We Are". [https://caricom.org/about-caricom/who-we-are]. Accessed 10 October 2020.
- [5] Ministry of Health and Wellness. "International Commitments and Projects". [https://www.moh.gov.jm/divisions-agencies/divisions/emergency-disaster-management-and-special-services/international-commitments-and-projects/]. Accessed 10 October 2020.

5.2.1b

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

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

Current Year Score: 2

Together with other countries in the region, Jamaica is a member of the Caribbean Animal Health Network (CaribVET), which has high-level ties with the Caribbean Disaster Emergency Management Agency (CDEMA), and there is no evidence of gaps in implementation. [1,2] CaribVET, among other functions, coordinates responses to animal health emergencies and leads regional planning in this area. Its mandate includes "Strengthen national capacities related to preparedness, surveillance, monitoring and management of animal and zoonotic diseases", and assisting in early detection and response to such diseases. [3] There is no additional information provided on Jamaica's involvement with CaribVET on the websites of the Ministry of Health and Wellness or the Office of Disaster Preparedness and Emergency Management. [4,5] However, there is also no evidence in media reports or academic studies of gaps in implementation. CaribVet collaborates with the University of the West Indies, which has a campus in Jamaica. [6]

- [1] Caribbean Animal Health Network. "The Caribbean Animal Health Network (CaribVET) establishes high-level ties with Caribbean Disaster Emergency Management Agency (CDEMA)". [https://www.caribvet.net/news/the-caribbean-animal-health-network-caribvet-establishes-high-level-ties-with-caribbean-disaster-emergency-management-agency-cdema]. Accessed 5 October 2020.
- [2] CaribVET. [https://www.caribvet.net/]. Accessed 5 October 2020.
- [3] CaribVET. "About the Network: Objectives". [https://www.caribvet.net/about-the-network/objectives]. Accessed 5 October 2020.
- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [5] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.
- [6] CaribVET. "Organization". [https://www.caribvet.net/about-the-network/organization]. Accessed 5 October 2020.



5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

Has the country submitted confidence building measures for the Biological Weapons Convention in the past three years? Yes = 1, No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 1

2021

Biological Weapons Convention



5.3.2 Voluntary memberships

5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

5.4.1a

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

Yes = 1, No = 0

Current Year Score: 0

2021

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

5.4.1b

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

Yes = 1, No = 0

Current Year Score: 0

2021

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



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

5.4.2a

Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years? Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

Has the country completed and published a Performance of Veterinary Services (PVS) gap analysis in the last five years? Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has allocated national funds to improve capacity to address epidemic threats within the past three years. In March 2020 government committed more than \$2 billion to the health sector to respond to the COVID-19 pandemic. [1,2] However, this allocation was made in response to a single public health emergency, and was not directed to improve the country's general capacity to respond to epidemic threats. In another example of allocations to respond to ongoing outbreaks (but not epidemic threats in general), in January 2019, Jamaica's health minister announced that the government was allocating \$250m for enhanced measures to contain the spread of dengue fever in the country. However, this was primarily to respond to an ongoing outbreak, versus committing to capacity-building for the country. [3] There is no other relevant information shared via the public websites of the Ministry of Health and Wellness, the Ministry of Industry, Commerce, Agriculture and Fisheries, or the Office of the Prime Minister. [4,5,6] Independent analyses of the national budget do not show any investment in capacist to adddress epidemic threats in the past three years. [7] The prime minister's speech for the 2020/2021 budget discusses the impacts of COVID-19 on the economy, does not describe any programs designed to address epidemic threats generally. [8]



[1] Loop News. 19 March 2020. "\$2b allocation to health sector for initial COVID-19 fight - Holness".

[https://www.loopjamaica.com/content/2b-allocation-health-sector-initial-covid-19-fight-holness]. Accessed 10 October 2020.

[2] Ministry of Health and Wellness. 2 May 2020. "Health Ministry spends \$2.5 Billion on COVID-19 response measures".

[https://www.moh.gov.jm/health-ministry-spends-2-5-billion-on-covid-19-response-measures/]. Accessed 10 October 2020.

[3] Jamaica Observer. 3 January 2019. "Health ministry allocates \$250m as dengue surpasses epidemic threshold".

[http://www.jamaicaobserver.com/latestnews/Health_ministry_allocates_\$250m_as_dengue_surpasses_epidemic_threshol d?profile=1228]. Accessed 10 October 2020.

- [4] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [5] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 10 October 2020.
- [6] Office of the Prime Minister. [https://opm.gov.jm/]. Accessed 10 October 2020.
- [7] PWC. "Jamaica Budget". [https://www.pwc.com/jm/en/research-publications/taxpublications/jamaica-2020-2021-budget.html]. Accessed 10 October 2020.
- [8] Jamaica Information Service. 19 March 2020. "Contribution By Prime Minister The Most Honourable Andrew Holness ON, MP To The 2020/2021 Budget Debate". [https://jis.gov.jm/speeches/2020-2021-budget-debate-contribution-by-the-prime-minister-the-most-ho-andrew-holness/]. Accessed 10 October 2020.

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments



5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency. Jamaica is not eligible for IDA borrowing, and thus cannot access the World Bank pandemic financing facility. [1,2] There is also no evidence on the websites of the Ministry of Health or the Office of Disaster Preparedness and Emergency Management of a domestic public financing mechanism specifically earmarked for public health emergencies. [3,4]

- [1] IDA, The World Bank's Fund for the Poorest. "Borrowing Countries". [http://ida.worldbank.org/about/borrowing-countries]. Accessed 10 October 2020.
- [2] Pandemic Emergency Financing Facility (PEF). December 2017. "Operational Brief for Eligible Countries". [http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf]. Accessed 10 October 2020.
- [3] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 5 October 2020.
- [4] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 5 October 2020.

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?
- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

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

Current Year Score: 0

There is no evidence that senior leaders, in the past three years, have made a public commitment to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support, or to support other countries to improve capacity to address epidemic threats by providing financing or support. There is, however, evidence of relief. The prime minister, Andrew Honess, announced in March 2020 the government's commitment of more than \$2 billion to the health sector to respond to the COVID-19 pandemic. [1,2] However, this allocation was made in response to a single public health emergency, and was not directed to improve the country's general capacity to respond to epidemic threats. In another example of allocations to respond to ongoing outbreaks (but not epidemic threats in general), in January 2019, Jamaica's health minister announced that the government was allocating \$250m for enhanced measures to contain the spread of dengue fever in the country. However, this was primarily to respond to an ongoing outbreak, versus committing to capacity-building for the country. [3] There is no evidence on the public websites of the Ministry of Health, the Ministry of Foreign Affairs and Foreign Trade, or the United Nations that senior Jamaican government leaders have supported other



countries or make investments domestically, apart from Jamaica's participation in regional and international organizations such as the Caribbean Public Health Agency and UNAids. [4,5,6] There is no relevant information shared via the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal; in the WHO Jamaica country profile; or in the WHO Regional Office for the Americas/ Pan American Health Organization website. [7,8,9]

- [1] Loop News. 19 March 2020. "\$2b allocation to health sector for initial COVID-19 fight Holness". [https://www.loopjamaica.com/content/2b-allocation-health-sector-initial-covid-19-fight-holness]. Accessed 10 October 2020.
- [2] Ministry of Health and Wellness. 2 May 2020. "Health Ministry spends \$2.5 Billion on COVID-19 response measures". [https://www.moh.gov.jm/health-ministry-spends-2-5-billion-on-covid-19-response-measures/]. Accessed 10 October 2020. [3] Jamaica Observer. 3 January 2019. "Health ministry allocates \$250m as dengue surpasses epidemic threshold". [http://www.jamaicaobserver.com/latestnews/Health_ministry_allocates_\$250m_as_dengue_surpasses_epidemic_threshold."
- [4] UNAids. 12 November 2015. "Jamaica is on the Fast-Track to ending its AIDS epidemic". [http://www.unaids.org/en/resources/presscentre/featurestories/2015/november/20151112_jamaica]. Accessed 10 October 2020.
- [5] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [6] Office of Disaster Preparedness and Emergency Management. [https://www.odpem.org.jm/]. Accessed 10 October 2020.
- [7] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Jamaica". [https://extranet.who.int/sph/country-status/jamaica#aar]. Accessed 15 August 2020.
- [8] World Health Organization. "Jamaica". [https://www.who.int/countries/jam/]. Accessed 5 October 2020.
- [9] World Health Organization Regional Office for the Americas / Pan American Health Organization. [https://www.paho.org/en]. Accessed 5 October 2020.

5.5.4b

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

d?profile=1228]. Accessed 10 October 2020.

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

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

Current Year Score: 1

Jamaica has invested funds from donors within the past three years to improve its capacity to address epidemic threats. For example, it began a project in October 2017 in partnership with the US Agency for International Development (USAID) to reduce and control the presence of mosquitoes responsible for transmitting zika, dengue and chikungunya. [1] More generally, Jamaica has a strong record of cooperation on the international stage for addressing epidemic threats. According to Talus Analytics' Global Health Security Funding Tracker dashboard, an estimated US\$203m was disbursed to Jamaica between 2018 and 2020, all of which was for Internation Health Regulations (IHR) capacity building. For example, in 2014-2020, the World Health Organization contributed approximately US\$20,000 for control strategies, plans and capacities developed for diseases such as cholera, viral haemorrhagic fever, meningitis and influenza and those due to vector-borne, emerging and re-emerging pathogens. [2] Another example of Jamaica obtaining funds for capacity building is the development of a message guide for zika communication in 2017. The project was led by the Ministry of Health, with technical assistance from the Johns Hopkins Center for Communication Programs Health Communication Capacity Collaborative Project through the support of the US Agency for International Development (USAID). The Pan American Health Organization, the United Nations Children's Fund, and the International Federation of Red Cross and Red Crescent Societies were also part of the process. [3] In another example, USAID has committed US\$700,000 to respond to the COVID-19



pandemic in Jamaica. [4] There is no evidence that Jamaica has provided other countries with financing or technical support to improve capacity to address epidemic threats. The Global Health Security Funding Tracker describes Jamaica as mainly a recipient of assistance. [2]

[1] USAID. "Jamaica". [https://www.usaid.gov/jamaica]. Accessed 10 October 2020.

[2] Global Health Security Funding Tracker. "Jamaica". [https://tracking.ghscosting.org/table/114/recipient]. Accessed 10 October 2020.

[3] Ministry of Health and Wellness. December 2017. "Message Guide for Zika Communication".

[https://healthcommcapacity.org/wp-content/uploads/2017/08/Jamaica-Message-Guide-for-Zika-Communication_Aug-20175b15d.pdf]. Accessed 10 October 2020.

[4] USAID. 1 April 2020. "United States Provides Assistant to Jamaica to Respond to COVID-19".

[https://www.usaid.gov/jamaica/press-releases/apr-1-2020-united-states-provides-assistance-jamaica-respond-covid-19. Accessed 10 October 2020.

5.5.4c

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

Yes = 1, No = 0

Current Year Score: 1

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Jamaica has 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 or other countries that goes beyond influenza. There is no relevant information shared via the public websites of the Ministry of Health and Wellness or the Ministry of Industry, Commerce, Agriculture and Fisheries . [1,2] Jamaica is a member of the Caribbean Travel and Health Network (CaTHNET), an information sharing network of public health agencies designed to share disease outbreak information. The network aims to promote health security by providing information on issues of public health concern to travellers visiting the Caribbean. However, there is no evidence that CaTHNET has a genetic data sharing agreement that applies to Jamaica. [3] The government has not publicized any relevant policy as part of its response to the



COVID-19 pandemic. [6]

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [2] Ministry of Industry, Commerce, Agriculture and Fisheries. 2018. [http://www.micaf.gov.jm]. Accessed 10 October 2020.
- [3] Caribbean Public Health Agency. "Zika: The Collective Response".

[http://missionmosquito.carpha.org/images/CPHD/2017/Zika response.pdf]. Accessed 10 October 2020.

[4] Ministry of Health and Wellness. March 2020. "COVID-19 Preparedness and Response Plan for Outbreak Control". [https://www.moh.gov.jm/wp-content/uploads/2020/04/2019nCoV-COVID-19-Clinical-Management-Guidelines-V2.pdf]. Accessed 5 October 2020.

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0, No = 1

Current Year Score: 1

There is no public evidence that Jamaica has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. There is no reference to sharing influenza data on the Ministry of Health and Wellness website and there has not been any reports of Jamaica not sharing samples in either national and international media. [1] The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not refer to Jamaica not sharing samples, nor does it list Jamaica as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [2] There is no evidence in media of a failure to share samples.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [2] World Health Organisation (WHO). 2016. "External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution—High-Level Implementation Plan 2013-2016".

[http://www.who.int/about/evaluation/pip_evaluation_report.pdf]. Accessed 10 October 2020.

5.6.1c

Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?

Yes = 0, No = 1

Current Year Score: 1

There is no public evidence that Jamaica has not shared pandemic pathogen samples during an outbreak in the past two years, including samples related to the COVID-19 pandemic. There is no relevant information shared via the public website of the Ministry of Health and Wellness. [1] There is no relevant information shared wia the World Health Organization (WHO) Disease Outbreak News website. [1] Likewise, there is no relevant information shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Jamaica country profile; in the WHO Regional Office for the Americas/Pan American Health Organization website; or the WHO COVID-19 dashboard for Jamaica. [3,4,5,6] There is no evidence in media of a failure to share samples.

- [1] Ministry of Health and Wellness. [https://www.moh.gov.jm]. Accessed 10 October 2020.
- [2] World Health Organisation (WHO). "Disease Outbreak News: Jamaica".

[https://www.who.int/csr/don/archive/country/jam/en/]. Accessed 10 October 2020.



[3] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Jamaica". [https://extranet.who.int/sph/country-status/jamaica#aar]. Accessed 10 October 2020.

[4] World Health Organization. "Jamaica". [https://www.who.int/countries/jam/]. Accessed 10 October 2020.

[5] World Health Organization Regional Office for the Americas / Pan American Health Organization.

[https://www.paho.org/en]. Accessed 10 October 2020.

[6] World Health Organization. "WHO Coronavirus Disease (COVID-19) Dashboard: Jamaica".

[https://covid19.who.int/region/amro/country/jm]. Accessed 1 October 2020.

Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

Policy formation (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 3

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: 3

2020



Economist Intelligence

Economist Intelligence

6.1.1d
Vested interests/cronyism (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 1
2020
Economist Intelligence
6.1.1e
Country score on Corruption Perception Index (0-100, where 100=best)
Input number
Current Year Score: 44
2020
Transparency International
6.1.1f
Accountability of public officials (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 1
2020
Economist Intelligence
6.1.1g
Human rights risk (Economist Intelligence score; 0-4, where 4=best)
Input number
Current Year Score: 2
2020



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: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

How likely is it that domestic or foreign terrorists will attack with a frequency or severity that causes substantial disruption? No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 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: 2



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: 0

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 3



2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

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

Input number

Current Year Score: 88.1

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: 0.59

2018

United Nations Development Programme (UNDP); The Economist Intelligence Unit

6.2.3 Social inclusion

6.2.3a

Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)

Input number

Current Year Score: 0.4

2004

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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



Current Year Score: 1

In a report on informality in the Caribbean, the Interntional Labour Organization (ILO) reports that Jamaica's share of employment in the informal sector was 49.8% in 2015. [2,3] No more recent data appears to be available -- neither the ILOSTAT data explorer nor the World Bank report informal employment data for Jamaica. [2,3]

[1] International Labour Organization. 2017. "Informality and Economic Units in the Caribbean".

[https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-

port of spain/documents/publication/wcms 619979.pdf]. Accessed 10 October 2020.

[2] International Labour Organization. "Country Profiles". ILOSTAT. [https://ilostat.ilo.org/data/country-profiles/]. Accessed 10 October 2020.

[3] World Bank. "Informal employment (% of total non-agricultural employment) - Jamaica".

[https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=JM]. Accessed 10 October 2020.

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: 2

2021



Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.46

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

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

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

Current Year Score: 2

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

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

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

Current Year Score: 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: 2



2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 55.98

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: 3.52

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)



Input n	umber Current Year Score: 74.37
2018	
	Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA) Factbook
6.5.1k	b
Age-sta	ndardized NCD mortality rate (per 100 000 population)
Input nu	
	Current Year Score: 454.4
2019	
WHO	
6.5.4	
6.5.10	
	tion ages 65 and above (% of total population)
Input n	
	Current Year Score: 8.92
2019	
2019	
World E	Bank
World E	
6.5.10	d
Prevale	nce of current tobacco use (% of adults)
Input nu	
	Current Year Score: 11
2018	
2018	
2018 World E	Bank
	Bank
World E	
World E	2
World E	nce of obesity among adults
World E	nce of obesity among adults umber
World E	nce of obesity among adults
World E	nce of obesity among adults umber



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: 90.65

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 87.31

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: 363.09

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