

Guyana

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

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

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

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

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

Current Year Score: 0

Guyana does not have a national AMR plan for the surveillance, detection and reporting of priority AMR pathogens, although a plan has been drafted. [1] The draft plan is not available on a public website, so it is not possible to confirm that it covers surveillance, detection, and reporting of priority AMR pathogens. The plan is not available on the websites of the Ministry of Agriculture or the Ministry of Health. [2,3] The World Health Organization (WHO) library of national action plans for antimicrobial resistance does not list an entry for Guyana. [4] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [5] However, the WHO Global Database for Antimicrobial Resistance (AMR) Country Self Assessments reports that Guyana has developed a national AMR action plan that reflects Global Action Plan objectives, with an operational plan and monitoring agreements. [6] Surveillance and detection of AMR pathogens are core aspects of the Global Action Plan; however, the WHO Global Database for AMR Country Self Assessments also reports that Guyana "has no national plan for a system of surveillance of AMR". [6,7] In 2019, a programme called "Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance", organised by the WHO Pan-American Health Organization and the Caribbean Community (CARICOM), was initiated in Guyana. Over two years, it will also be rolled out in the other 14 CARICOM member states. [8,9] There is no evidence that the programme has yet produced any relevant outcomes.

[1] Haynes, Delicia. 27 June 2017. "National Action Plan on Antimicrobial Resistance drafted, stakeholders consulted". Department of Public Information. [<http://dpi.gov.gy/national-action-plan-on-antimicrobial-resistance-drafted-stakeholders-consulted/>]. Accessed 31 July 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 31 July 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 31 July 2020.

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

[5] World Health Organization (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 31 July 2020.

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

[7] World Health Organization (WHO). 2015. "Global Action Plan on Antimicrobial Resistance".

[http://apps.who.int/iris/bitstream/handle/10665/193736/9789241509763_eng.pdf?sequence=1]. Accessed 31 July 2020.

[8] Guyana Chronicle. 25 September 2019. "Antimicrobial resistance programme to roll out this week".

[<https://guyanachronicle.com/2019/09/25/antimicrobial-resistance-programme-to-roll-out-this-week-2/>]. Accessed 31 July 2020.

[9] World Health Organization (WHO) Pan American Health Organization. 23 July 2019. "Argentina, CARICOM and PAHO unite

to tackle Antimicrobial Resistance (AMR)". [<https://www.paho.org/en/news/23-7-2019-argentina-caricom-and-paho-unite-tackle-antimicrobial-resistance-amr>]. Accessed 31 July 2020.

1.1.1b

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

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

Current Year Score: 0

There is no public evidence that Guyana has a national laboratory or laboratory system, with designated sentinel sites, which tests for priority antimicrobial resistant (AMR) pathogens. The World Health Organisation (WHO) Global Database for Antimicrobial Resistance (AMR) Country Self Assessments reports that in Guyana, "National AMR surveillance activities for common bacterial infections follow national standards, and a national reference laboratory that participates in external quality assurance". [1] However, there are not enough additional details provided in the Database to confirm which AMR pathogens the laboratory (presumably the National Public Health Reference Laboratory, or NPHRL) conducts tests for, or whether it has designated sentinel sites. Further, the Database also does not make clear what the actual abilities of the facility in question are. [1] There is no mention of such a laboratory on the websites of the Ministry of Agriculture or the Ministry of Health. [2,3] The WHO library of national action plans for antimicrobial resistance does not list an entry for Guyana. [4] Neither the Ministry of Health nor the NPHRL provides a comprehensive list of the AMR pathogens for which the country may be able to test. [3] In 2019, a programme called "Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance", organised by the WHO Pan-American Health Organization and the Caribbean Community (CARICOM), was initiated in Guyana. Over two years, it will also be rolled out in the other 14 CARICOM member states. The programme includes collaboration between regional laboratories to improve testing and analysis of data, but available media releases did not indicate to what degree Guyana laboratories would be involved. In any case, the programme implementation is not yet complete. [4,5] There is no other evidence of other studies or articles that provide relevant information.

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 31 July 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 31 July 2020.

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

[4] Guyana Chronicle. 25 September 2019. "Antimicrobial resistance programme to roll out this week".

[<https://guyanachronicle.com/2019/09/25/antimicrobial-resistance-programme-to-roll-out-this-week-2/>]. Accessed 31 July 2020.

[5] World Health Organization (WHO) Pan American Health Organization. 23 July 2019. "Argentina, CARICOM and PAHO unite to tackle Antimicrobial Resistance (AMR)". [<https://www.paho.org/en/news/23-7-2019-argentina-caricom-and-paho-unite-tackle-antimicrobial-resistance-amr>]. Accessed 31 July 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 not enough evidence to confirm that Guyana's government conducts environmental detection or surveillance activities for antimicrobial residues or AMR organisms. The World Health Organisation (WHO) Global Database for Antimicrobial Resistance (AMR) Country Self Assessments reports that Guyana has developed a national AMR action plan, but the plan is not shared via a publicly available website (such as those of the Ministry of Agriculture or the Ministry of Health); thus, it is not possible to determine the details of the surveillance activities. [1,2,3] The WHO library of national action plans for antimicrobial resistance does not list an entry for Guyana. [4] Media reports suggest the plan is in draft form. [5] Neither the Ministry of Natural Resources, its Environmental Protection Agency Guyana (EPA), nor other Guyanese government entities share relevant information via a public website. [6,7,2,3] In 2019, a programme called "Strengthening National and Regional Antimicrobial Resistance (AMR) Detection and Surveillance", organised by the WHO Pan-American Health Organization and the Caribbean Community (CARICOM), was initiated in Guyana. Over two years, it will also be rolled out in the other 14 CARICOM member states. However, there is no evidence that the programme includes a component for environmental detection or surveillance activities; in any case, the programme's implementation is not yet complete. [8,9] There is no other evidence of relevant media reports or academic studies.

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 31 July 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 31 July 2020.

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

[5] Haynes, Delicia. 27 June 2017. "National Action Plan on Antimicrobial Resistance drafted, stakeholders consulted". Department of Public Information. [<http://dpi.gov.gy/national-action-plan-on-antimicrobial-resistance-drafted-stakeholders-consulted/>]. Accessed 31 July 2020.

[6] Environmental Protection Agency. [<http://www.epaguyana.org/epa/>]. Accessed 31 July 2020.

[7] Ministry of Natural Resources. [<https://www.nre.gov.gy/>]. Accessed 31 July 2020.

[8] Guyana Chronicle. 25 September 2019. "Antimicrobial resistance programme to roll out this week". [<https://guyanachronicle.com/2019/09/25/antimicrobial-resistance-programme-to-roll-out-this-week-2/>]. Accessed 31 July 2020.

[9] World Health Organization (WHO) Pan American Health Organization. 23 July 2019. "Argentina, CARICOM and PAHO unite to tackle Antimicrobial Resistance (AMR)". [<https://www.paho.org/en/news/23-7-2019-argentina-caricom-and-paho-unite-tackle-antimicrobial-resistance-amr>]. Accessed 31 July 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: 1

There is evidence of national legislation in place requiring prescriptions for antibiotic use for humans, but there is evidence of gaps in enforcement. Section 14 of the Antibiotics Act of Guyana stipulates that "no antibiotic shall be issued to any person except on the prescription of a medical practitioner, dentist or veterinary surgeon". [1] The Minister can exempt antibiotics from this rule based on recommendations from the Pharmacy and Poisons Board. [1] However, the Ministry of Health does not share additional information on the consistency of enforcement of this provision, nor is any such information reported by news media. [2] The website of the Ministry of Health's Food and Drug Department does not contain any information. [3] Despite the existence of regulations, there is evidence in local media and other sources that the purchasing of antibiotics and

other prescription medicines over the counter is a problem in Guyana. [4,5] The Guyana Pharmacists' Association 2017 National Report calls antibiotic abuse a "major issue" in the country. [6]

[1] Government of Guyana. Laws of Guyana, Chapter 34:02 (Act 40 of 1951) "Antibiotics Act". Amended 1955, 1958, and 1973. [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 3 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 3 August 2020.

[3] Government Analyst -- Food and Drug Department. [<http://gafdd.gy/>]. Accessed 14 August 2020.

[4] Stabroek News. 11 June 2012. "Chief Medical Officer warns about abuse of prescription drugs".

[<https://www.stabroeknews.com/2012/06/11/news/guyana/chief-medical-officer-warns-about-abuse-of-prescription-drugs/>]. Accessed 3 August 2020.

[5] Guyana Times. 26 March 2019. "Misuse/abuse of OTC drugs prevalent of in Guyana - CMO".

[<https://guyanatimesgy.com/misuse-abuse-of-otc-drugs-prevalent-of-in-guyana-cmo/>] Accessed 3 August 2020.

[6] Guyana Pharmacists Association. 2017. "National Report 2017". <https://commonwealthpharmacy.org/wp-content/uploads/2017/11/CPA-Activity-Report-2017-Guyana.pdf>. Accessed 3 August 2020.

1.1.2b

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

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

Current Year Score: 1

There is evidence of national legislation in place specifically requiring prescriptions for antibiotic use for animals, but there is evidence of gaps in enforcement. The 1951 Antibiotics Act of Guyana stipulates that "no antibiotic shall be issued to any person except on the prescription of a medical practitioner, dentist or veterinary surgeon", and that every such prescription shall specify the "name and address of the person for whose treatment it is given, or, if it is given by a veterinarian, of the person to whom the medicine is to be delivered". [1] However, the Antibiotics Act does not specifically mention animals, just veterinarians. [1] The Animal Health Act of 2011 designated the Guyana Livestock Development Authority (GLDA) as the regulator of veterinary medicines, including antibiotics. [2] However, the GLDA does not share additional information via a public website. There is no evidence in these laws of any exemptions, such as for animal feed. There is no publicly available evidence on the website of the Food and Drug Department. [3] Despite the existence of regulations, there is evidence in local media and other sources that the purchasing of antibiotics and other prescription medicines over the counter is a problem in Guyana. [4,5] The Guyana Pharmacist's Association 2017 National Report calls antibiotic abuse a "major issue" in the country. [6] Although there is scant evidence in media or academic reports relating specifically to the abuse of antimicrobials with animals, it appears that enforcement of prescription drugs is, in general, lacking. In 2014, the Ministry of Agriculture said that the "extensive, intensive and injudicious use of antimicrobials" has resulted in the high level of resistance. [7]

[1] Government of Guyana. Laws of Guyana, Chapter 34:02 (Act 40 of 1951) "Antibiotics Act". Amended 1955, 1958, and 1973. [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 3 August 2020.

[2] Government of Guyana. Act 7 of 2011. "Animal Health Act of 2011". [http://parliament.gov.gy/documents/acts/3623-act_no._7.pdf] Accessed 3 August 2020.

[3] Government Analyst -- Food and Drug Department. [<http://gafdd.gy/>]. Accessed 14 August 2020.

[4] Stabroek News. 11 June 2012. "Chief Medical Officer warns about abuse of prescription drugs".

[<https://www.stabroeknews.com/2012/06/11/news/guyana/chief-medical-officer-warns-about-abuse-of-prescription-drugs/>]. Accessed 3 August 2020.

[5] Guyana Times. 26 March 2019. "Misuse/abuse of OTC drugs prevalent of in Guyana - CMO".

[<https://guyanatimesgy.com/misuse-abuse-of-otc-drugs-prevalent-of-in-guyana-cmo/>] Accessed 3 August 2020.

[6] Guyana Pharmacists Association. 2017. "National Report 2017". <https://commonwealthpharmacy.org/wp-content/uploads/2017/11/CPA-Activity-Report-2017-Guyana.pdf>. Accessed 3 August 2020.

content/uploads/2017/11/CPA-Activity-Report-2017-Guyana.pdf]. Accessed 3 August 2020.

[7] Stabroek News. 14 October 2014. "Agri Minister wants more attention on antimicrobial resistance".

[<https://www.stabroeknews.com/2014/10/14/news/guyana/agri-minister-wants-attention-antimicrobial-resistance/>]. Accessed 3 August 2020].

1.2 ZOO NOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national law, plan, or equivalent strategy document, on zoonotic disease. The Ministry of Health's Veterinary Public Health division is responsible for the surveillance and mitigation of zoonotic diseases, but it does not share a plan via a public website. [1] The Ministry of Agriculture's Guyana Livestock Development Authority also provides surveillance of zoonotic diseases, but does not provide detailed information via a public website. [2,3] The World Organisation for Animal Health (OIE) does not list a Performance of Veterinary Services (PVS) evaluation report for Guyana. [4] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [5]

[1] Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 3 August 2020.

[2] Ministry of Agriculture. 9 August 2016. "Guyana Avoids Citations: Wildlife Bill Passed with Amendments". [<http://agriculture.gov.gy/2016/08/09/guyana-avoid-cites-sanctions-wildlife-bill-passed-with-amendments/>]. Accessed 3 August 2020.

[3] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 3 August 2020.

[4] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 3 August 2020.

[5] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 3 August 2020.

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national law, plan, or equivalent strategy document, which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. The Ministry of Health's Veterinary Public Health division is responsible for the surveillance and mitigation of zoonotic diseases, but it does not share a plan via a public website. [1] The Ministry of Agriculture's Guyana Livestock Development Authority also provides surveillance of zoonotic diseases, but does not provide detailed information via a public website. [2,3] The World Organisation for Animal Health (OIE) does not list a Performance of Veterinary Services (PVS) evaluation report for Guyana. [4] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [5] Government press releases suggest that

Guyana might have national plans or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern; however, these plans are not made available on public websites. For example, a government press release mentions that the Ministry of Public Health (MOPH, now the Ministry of Health) "has developed an action plan for Zika in pregnancy", but this plan is not available on the ministry's website. [6,7] Another government release mentions that Guyana has held a "National Emergency Animal Disease Preparedness Response" workshop focusing on the Guyana Livestock Development Authority's capacities, but no accompanying documentation is available via a public website. [8]

[1] Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 3 August 2020.

[2] Ministry of Agriculture. 9 August 2016. "Guyana Avoids Citations: Wildlife Bill Passed with Amendments". [<http://agriculture.gov.gy/2016/08/09/guyana-avoid-cites-sanctions-wildlife-bill-passed-with-amendments/>]. Accessed 3 August 2020.

[3] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 3 August 2020.

[4] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 3 August 2020.

[5] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 3 August 2020.

[6] Department of Public Information. 22 December 2016. "Successes Recorded in the Public Health Sector in 2016". [<http://dpi.gov.gy/successes-recorded-in-the-public-health-sector-in-2016/>]. Accessed 3 August 2020.

[7] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 3 September 2020.

[8] Department of Public Information. 3 May 2018. "National Emergency Animal Disease Preparedness Workshop Held". [<http://agriculture.gov.gy/2018/05/03/national-emergency-animal-disease-preparedness-response-workshop-held/>]. Accessed 3 August 2020.

1.2.1c

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

Yes = 1 , No = 0

Current Year Score: 0

Government press releases suggest that Guyana might have national plans or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern; however, these plans are not made available on public websites. For example, a government press release mentions that the Ministry of Public Health (MOPH, now the Ministry of Health) "has developed an action plan for Zika in pregnancy", but this plan is not available on the ministry's website. [1,2] Another government release mentions that Guyana has held a "National Emergency Animal Disease Preparedness Response" workshop focusing on the Guyana Livestock Development Authority's capacities, but again no accompanying documentation is available via a public website. [3] The World Organisation for Animal Health (OIE) does not list a Performance of Veterinary Services (PVS) evaluation report for Guyana. [4] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [5]

[1] Department of Public Information. 22 December 2016. "Successes Recorded in the Public Health Sector in 2016". [<http://dpi.gov.gy/successes-recorded-in-the-public-health-sector-in-2016/>]. Accessed 3 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 3 August 2020.

[3] Department of Public Information. 3 May 2018. "National Emergency Animal Disease Preparedness Workshop Held". [<http://agriculture.gov.gy/2018/05/03/national-emergency-animal-disease-preparedness-response-workshop-held/>]. Accessed 3 August 2020.

[4] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 3 August 2020.

[5] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 3 August 2020.

1.2.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a Guyanese department, agency, or similar unit dedicated zoonotic disease that functions across ministries. Among the government entities listed on public website as dealing with zoonotic disease are the Ministry of Health's Veterinary Health Services, the Ministry of Agriculture's Guyana Livestock Development Authority (GLDA), and the newly formed Epidemiology Unit within the GLDA. [1,2,3,4]. However, none of these entities provide detailed information about the scope of their activities such as whether they function across ministries via public websites.

[1] Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 3 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed Accessed 3 August 2020.

[3] Ministry of Agriculture. 9 August 2016. "Guyana Avoids Citations: Wildlife Bill Passed with Amendments".

[<http://agriculture.gov.gy/2016/08/09/guyana-avoid-cites-sanctions-wildlife-bill-passed-with-amendments/>]. Accessed 3 August 2020.

[4] Ministry of Agriculture. 16 July 2018. "IICA Supports Livestock Authority Programme for Animal Disease Management".

[<http://agriculture.gov.gy/2018/07/16/iica-supports-livestock-authority-programme-for-animal-disease-management/>]. Accessed 3 August 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Guyana has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. There is no mention of such a mechanism on the websites of the Ministry of Health or of the Ministry of Agriculture, or in media accounts. [1,2] The World Organisation for Animal Health (OIE) does not list a Performance of Veterinary Services (PVS) evaluation report for Guyana. [3] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [4]

[1] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.

[3] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 4 August 2020.

[4] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security

(SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 4 August 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals. Neither the Ministry of Health nor the Ministry of Agriculture share relevant information via public websites. [1,2] Further, there is no public evidence of Guyanese legislation dealing with data privacy in general, let alone dealing with animal surveillance activities specifically. [3] The National Data Management Authority, which deals with information and communications technology in the country, does not share information on data privacy policies or related information via a public website. [4] The lack of a data privacy law in Guyana is confirmed by the United Nations Conference on Trade and Development (UNCTAD). [5]

[1] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.

[3] Ministry of Legal Affairs and Attorney General's Chambers. "Laws of Guyana". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 4 August 2020.

[4] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 4 August 2020.

[5] United Nations Conference on Trade and Development. 2020. "Data Protection and Privacy Legislation Worldwide". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 4 August 2020.

1.2.2c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana conducts surveillance of zoonotic disease in wildlife. Among the government entities listed on public website as dealing with zoonotic disease are the Ministry of Health's Veterinary Health Services, the Ministry of Agriculture's Guyana Livestock Development Authority (GLDA), and the newly formed Epidemiology Unit within the GLDA. [1,2,3,4,7] However, none of these entities provide detailed information about the scope of their activities—such as whether they monitor wildlife—via public websites. Similarly, the Ministry of Natural Resources (Guyana's ministry for environmental matters) does not share relevant information via a public website. [5] The 2003 Animals (Movement) and Disease Prevention Act sets out a list of animal diseases that, if detected, require notification to the authorities, and this list includes zoonoses. However, the law does not describe surveillance activities. [6] There is no other evidence of studies or articles that provide relevant information.

[1] Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 3 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Ministry of Agriculture. 9 August 2016. "Guyana Avoids Citations: Wildlife Bill Passed with Amendments".

[<http://agriculture.gov.gy/2016/08/09/guyana-avoid-cites-sanctions-wildlife-bill-passed-with-amendments/>]. Accessed 4

August 2020.

[4] Ministry of Agriculture. 16 July 2018. "IICA Supports Livestock Authority Programme for Animal Disease Management". [<http://agriculture.gov.gy/2018/07/16/iica-supports-livestock-authority-programme-for-animal-disease-management/>]. Accessed 4 August 2020.

[5] Ministry of Natural Resources. [<https://nre.gov.gy/>]. Accessed 4 August 2020.

[6] Government of Guyana. Laws of Guyana, Act 14 of 2003. "Animals (Movement) and Disease Prevention Act".

[http://parliament.gov.gy/documents/acts/4623-act_no_14_of_2003.pdf]. Accessed 4 August 2020.

[7] Ministry of Agriculture. 2020. "GLDA". [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

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

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 10.99

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 10.73

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana has a national law, plan, or equivalent strategy document, on zoonotic diseases in general, and thus no evidence of provisions for coordinating such a plan with the private sector. The Ministry of Health's Veterinary Public Health division is responsible for the surveillance and mitigation of zoonotic diseases, but it does not share a plan via a public website. [1] The Ministry of Agriculture's Guyana Livestock Development Authority (GLDA) also conducts surveillance of zoonotic diseases, and runs a Veterinary Diagnostic Laboratory, but does not provide detailed information via a public website. [2,3,4,7] The World Organisation for Animal Health (OIE) does not list a Performance of Veterinary Services (PVS) evaluation report for Guyana. [5] Guyana has not completed a Joint External Evaluation (JEE) of International Health Regulations Core Capacities. [6] No other information from a national laboratory or national public health institute is shared via public websites. There is no evidence of articles or studies showing that Guyana does in fact have a national plan for zoonotic diseases, let alone a plan that makes such specifications for coordination with the private sector.

[1] Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 4 August 2020.

[2] Ministry of Agriculture. 9 August 2016. "Guyana Avoids Citations: Wildlife Bill Passed with Amendments". [<http://agriculture.gov.gy/2016/08/09/guyana-avoid-cites-sanctions-wildlife-bill-passed-with-amendments/>]. Accessed 4 August 2020.

[3] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[4] Inter-American Institute for Cooperation on Agriculture (IICA). 2018. "Guyana Simulation Exercise 2018". [<http://www.iica.int/en/press/news/guyana-simulation-exercise-2018>]. Accessed 4 August 2020.

[5] World Organisation for Animal Health (OIE). "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 4 August 2020.

[6] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): IHR Monitoring & Evaluation". [<https://extranet.who.int/sph/ihr-monitoring-evaluation>]. Accessed 4 August 2020.

[7] Ministry of Agriculture. 2020. "GLDA". [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Guyana has in place a record of facilities in which especially dangerous pathogens and toxins are stored or processed. There is no mention of such a record on the websites of the Ministry of Health, the Ministry of

Agriculture, the Guyana Livestock Development Authority (GLDA), the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission). [1,2,3,4,5] The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organisation (WHO) Regional Office for the Americas, reports that the National Public Health Reference Laboratory and the GLDA Veterinary Laboratory have infrastructure to receive level 3 biosafety samples, but there is no indication as to whether they actually do so; the Strategy notes that the necessary human resources are lacking. [6] No other information from a national laboratory or national public health institute is shared via public websites. Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [7] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) database. [8]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.

[4] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.

[5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.

[6] Pan American Health Organisation and World Health Organisation, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 4 August 2020.

[7] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

[8] Verification Research, Training and Information Centre (VERTIC) database

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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 evidence that Guyana has in place legislation or regulations related to biosecurity, including any that address requirements such as physical containment, operation practices, failure reporting systems or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. Neither the Ministry of Health, the Ministry of Agriculture, the Guyana Livestock Development Authority (GLDA), the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission) share relevant information via public websites. [1,2,3,4,5] No such law is listed for Guyana in the VERTIC Biological Weapons Convention Legislation Database, or by the Ministry of Legal Affairs and Attorney General's Chambers. [6,7] No other information from a national laboratory—such as the National Public Health Reference Laboratory (NPHRL) and the GLDA Veterinary Laboratory—is shared via a public website. Neither the GLDA nor the NPHRL has a website. Guyana has a draft Biosafety Framework (a 2007 version is available online), which contains a "biosecurity policy", but this framework largely deals with biosecurity in the sense of threats to biodiversity and the regulation of genetically modified organisms (GMOs), and not pathogens, toxins, or pandemics. Further, it is unclear whether this draft became official policy. [9] The website of the Environmental Protection Agency Guyana mentions the existence of a 2007 Biotechnology, Biosafety, and Biosecurity Policy, but the policy does not appear to be publicly available. [10] There is no evidence of any other biosecurity policies or laws, or other relevant articles or studies on the topic. Although Guyana is a party to the Biological Weapons Convention, the

country has not submitted Confidence Building Measures reports. [11]

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020. [2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.
- [3] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.
- [4] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.
- [5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.
- [7] VERTIC. "Biological Weapons Convention Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 4 August 2020.
- [8] Ministry of Legal Affairs and Attorney General's Chambers. "Laws of Guyana". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 4 August 2020.
- [9] Government of Guyana. 5 February 2007. "National Biosafety Framework for Guyana: Final Draft". [https://unep.ch/biosafety/old_site/development/Countryreports/GYNBFrep.pdf]. Accessed 4 August 2020.
- [10] Ministry of Natural Resources and the Environment and Environmental Protection Agency Guyana. September 2014. "Guyana's National Biodiversity Strategy and Action Plan (2012-2020)". [<https://www.cbd.int/doc/world/gy/gy-nbsap-v3-en.pdf>]. Accessed 4 August 2020.
- [11] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

1.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana has in place legislation or regulations related to biosecurity, or that it has designated any agency responsible for biosecurity. Neither the Ministry of Health, the Ministry of Agriculture, the Guyana Livestock Development Authority (GLDA), the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission) share relevant information via public websites. [1,2,3,4,5] No such law is listed for Guyana in the VERTIC Biological Weapons Convention Legislation Database, or by the Ministry of Legal Affairs and Attorney General's Chambers. [6,7] No other information from a national laboratory—such as the National Public Health Reference Laboratory and the GLDA Veterinary Laboratory—or national public health institute is shared via public websites. Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [8]

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.
- [2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.
- [3] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.
- [4] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.
- [5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.
- [6] VERTIC. "Biological Weapons Convention Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 4 August 2020.
- [7] Ministry of Legal Affairs and Attorney General's Chambers. "Laws of Guyana". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 4 August 2020.
- [8] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020..

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that shows that Guyana has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities, nor that that the country has such inventories. There is no mention of facilities for the management of dangerous pathogens and toxins on the website of the Ministry of Health or the Ministry of Agriculture. [1] Similarly, neither the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission) share relevant information via public websites. [2,3] No other information from a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—or national public health institute is shared via public websites. Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [4] There is no evidence of relevant legislation in the Verification Research, Training and Information Centre (VERTIC) database. [5]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.

[2] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.

[3] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.

[4] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

[5] Verification Research, Training and Information Centre (VERTIC) database

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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 no public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola. The Ministry of Agriculture, the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission) do not share information on capacities for Ebola and anthrax testing via public websites. [1,2,3,4] Similarly, no relevant information from a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—or national public health institute is shared via public websites. There is no evidence of articles or studies on the in-country capacity to conduct PCR-based diagnostic testing for these pathogens. PCR testing for Zika is conducted in Trinidad and Tobago, at the laboratories of the Caribbean Public Health Agency (CARPHA), in which Guyana participates. [5] However, the CARPHA does not provide any information via a public website confirming that it provides diagnostics for Ebola or anthrax. [6]

[1] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[2] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.

[5] Caribbean Public Health Agency. "Zika: Surveillance and Laboratory Testing". [http://missionmosquito.carpha.org/images/CPHD/2017/Zika_surveillance.pdf]. Accessed 4 August 2020.

[6] Caribbean Public Health Agency (CARPHA). "Laboratory Services". [<https://carpha.org/What-We-Do/LABS/Overview>]. Accessed 4 August 2020.

1.3.2 Biosecurity training and practices

1.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Guyana requires biosecurity training, using a standardised, required approach, such as through a common curriculum or a train-the-trainer programme, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. Indeed, it is not clear that Guyana has such facilities, or if it has them, whether they are operational. The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organisation (WHO) Regional Office for the Americas, reports that the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory have infrastructure to receive level 3 biosafety samples, but there is no indication as to whether they actually do so; the Strategy notes that the necessary human resources are lacking. [1] Neither the Ministry of Agriculture, the Ministry of Public Security, public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), nor other national laboratories share relevant information via public websites. [2, 3, 4, 5] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [6] There is no evidence of relevant provisions in the laws listed for Guyana in the Verification Research, Training and Information Centre (VERTIC) database. [7]

[1] Pan American Health Organisation and World Health Organisation, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 4 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.

[4] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.

[5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.

[6] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

[7] Verification Research, Training and Information Centre (VERTIC) database [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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 public evidence that regulations or licensing conditions specify that security and other personnel in Guyana with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to drug testing, background checks, and psychological or mental fitness checks. Indeed, it is not clear that Guyana has facilities that are equipped to house such materials, or if such facilities exist, whether they are operational. The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, reports that the National Public Health Reference Laboratory and the Guyana Livestock Development Authority (GLDA) Veterinary Laboratory have infrastructure to receive level 3 biosafety samples, but there is no indication as to whether they actually do so; the Strategy notes that the necessary human resources are lacking. [1] Neither the Ministry of Agriculture, the GLDA, nor national laboratories share relevant information via public websites. [2, 3] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [4] There is no evidence of relevant provisions in the laws listed for Guyana in the Verification Research, Training and Information Centre (VERTIC) database. [5]

[1] Pan American Health Organisation and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 4 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glida/>]. Accessed 4 August 2020.

[4] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

[5] Verification Research, Training and Information Centre (VERTIC) database

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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

Although there are regulations governing the transport of hazardous materials (including infectious substances), publicly available regulations make no specific mention of the safe and secure transport of Category A and Category B infectious substances. Guyana's Environmental Protection Act (Act 11 of 2000) governs some aspects of the transportation of hazardous materials, including hazardous waste (a category that explicitly includes infectious substances). However, the law

does not go into details about the kind of infectious substances it governs, only naming them broadly as "infectious". [1] Aside from the Environmental Protection Act, there is no evidence of other publicly available information on the transportation of infectious substances. The Ministry of Health's Health Vision 2020, nor the Guyana Country Cooperation Strategy 2016-2020 (a publication of the Pan American Health Organisation [PAHO] and the World Health Organization [WHO] Regional Office for the Americas) make any provisions for the transport of infectious substances. [2,3] There is no relevant information shared, via public websites, by the Ministry of Health, the Ministry of Agriculture, the Ministry of Public Infrastructure, the Ministry of Public Security, public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), or other national laboratories. [4,5,6,7,8,9] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [10] Guyana's 2013 Multi-Hazard Disaster Preparedness and Response Plan also does not contain relevant provisions. [11]

- [1] Government of Guyana. Laws of Guyana, Chapter 20:05 (Act 11 of 2000). "Environmental Protection Act". [http://www.vertic.org/media/National%20Legislation/Guyana/GY_Environmental_Protection_Act_Chap_20.05.pdf]. Accessed 4 August 2020.
- [2] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.
- [3] Pan American Health Organisation and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 4 August 2020.
- [4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.
- [5] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.
- [6] Ministry of Public Infrastructure. [<https://mopi.gov.gy/>]. Accessed 4 August 2020.
- [7] Guyana Livestock Development Authority (GLDA). [<http://agriculture.gov.gy/glda/>]. Accessed 4 August 2020.
- [8] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.
- [9] Civil Defence Commission. [<http://cdc.gy/>]. Accessed 4 August 2020.
- [10] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.
- [11] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 6 August 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a Guyanese national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. Neither the Ministry of Health, the Ministry of Agriculture, the Ministry of Business, nor public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission) share relevant information via public websites. [1,2,3,4,5] The Ministry of Business's Strategic Plan 2016-2020, a major policy document for trade and industry in Guyana, is also silent on such regulations or guidance. [6] Guyana's Environmental Protection Act (Act 11 of 2000) governs some aspects of the transportation of hazardous materials, especially hazardous waste. For example, it gives the Environmental Protection

Agency Guyana power to refuse environmental authorisation to facilities that produce hazardous waste if they do not have adequate plans for its transportation. It also requires transporters of hazardous waste to carry manifests. Further, it specifies penalties for violating the transportation provisions of the law. However, the act does not deal specifically with cross-border transportation or pathogens. [7] The Pesticides and Toxic Chemicals Control Act (act 13 of 2000) also regulates the transport of toxic substances, but does not focus on cross-border transfer or end-user screening, and does not deal with pathogens. [8] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [9]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 4 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Ministry of Businesses. [<http://www.business.gov.gy/>]. Accessed 4 August 2020.

[4] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.

[5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 2020.

[6] Ministry of Business. "Downloads". [<http://www.business.gov.gy/wp-content/uploads/2016/11/Ministry-of-Business-2016-2020-Strategic-Plan-1.pdf>]. Accessed 4 August 2020.

[7] Government of Guyana. Laws of Guyana, Chapter 20:05 (Act 11 of 2000). "Environmental Protection Act".

[http://www.vertic.org/media/National%20Legislation/Guyana/GY_Environmental_Protection_Act_Chap_20.05.pdf]. Accessed 4 August 2020.

[8] Government of Guyana. Laws of Guyana, Chapter 68:09 (Act 13 of 2000). "Pesticides and Toxic Chemicals Control Act".

[http://www.vertic.org/media/National%20Legislation/Guyana/GY_Pesticides_and_Toxic_Chemicals_Cap%206809.pdf]. Accessed 4 August 2020.

[9] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 4 August 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of national biosafety legislation and/or regulations in Guyana. Neither the Ministry of Health, the Ministry of Agriculture, nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—shares relevant information via public websites.

[1,2] The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, notes that Guyana has made progress toward the implementation of international health regulations (IHR) in "virtually all core capacities". It also reports that Guyana has a National IHR Inter-sectoral Action Plan, updated as recently as 2014; however, no details on this plan are provided. [3] Guyana has a draft Biosafety Framework (a 2007 version is available online), but this framework largely deals with biosafety in the sense of threats to biodiversity and the regulation of genetically modified organisms (GMOs), and not pathogens, toxins, or pandemics. Further, it is unclear, based both on Guyanese government websites and national media, whether this draft became official policy. [4] The Pesticides and Toxic Chemicals Control Act (Act 13 of 2000) gives the government authority to dictate measures that employers must take to protect their employees from toxic substances, including biological control agents used as pesticides, but does not go into any greater detail on biological substances in particular. [5]

Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [6]

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

[3] Pan American Health Organisation and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 5 August 2020.

[4] Government of Guyana. 5 February 2007. "National Biosafety Framework for Guyana: Final Draft".

[https://unep.ch/biosafety/old_site/development/Countryreports/GYNBFrep.pdf]. Accessed 5 August 2020.

[5] Government of Guyana. Laws of Guyana, Chapter 68:09 (Act 13 of 2000). "Pesticides and Toxic Chemicals Control Act".

[http://www.vertic.org/media/National%20Legislation/Guyana/GY_Pesticides_and_Toxic_Chemicals_Cap%206809.pdf].

Accessed 5 August 2020.

[6] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 August 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of national biosafety legislation and/or regulations in Guyana, nor of any specific established agency responsible for enforcing such measures. Neither the Ministry of Health, the Ministry of Agriculture, nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—share relevant information via public websites. [1,2] The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, notes that Guyana has made progress toward the implementation of international health regulations (IHR) in "virtually all core capacities". It also reports that Guyana has a National IHR Inter-sectoral Action Plan, updated as recently as 2014; however, no details on this plan are provided. [3] Guyana has a draft Biosafety Framework (a 2007 version is available online), but this framework largely deals with biosafety in the sense of threats to biodiversity and the regulation of genetically modified organisms (GMOs), and not pathogens, toxins, or pandemics. Further, it is unclear, based both on Guyanese government websites and national media, whether this draft became official policy. [4] The website of the Environmental Protection Agency (EPA) Guyana mentions the existence of a 2007 Biotechnology, Biosafety, and Biosecurity Policy, but the policy does not appear to be publicly available; further, it is unclear whether this differs from the draft Biosafety Framework of the same year. [5] The Pesticides and Toxic Chemicals Control Act (Act 13 of 2000) gives the government authority to dictate measures that employers must take to protect their employees from toxic substances, including biological control agents used as pesticides, but does not go into any greater detail on biological substances in particular. [6] Although the Guyana Biosafety Clearing-House (BCH) lists the EPA as the "lead agency for the BCH" in Guyana, there is no publicly shared evidence on the website of the EPA that would indicate that the agency concerns itself with biosafety in any other sense than that of the draft Biosafety Framework. [7,8] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [9]

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

[3] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020>]

en.pdf?sequence=1]. Accessed 5 August 2020.

[4] Government of Guyana. 5 February 2007. "National Biosafety Framework for Guyana: Final Draft".

[https://unep.ch/biosafety/old_site/development/Countryreports/GYNBFrep.pdf]. Accessed 5 August 2020.

[5] Ministry of Natural Resources and the Environment and Environmental Protection Agency Guyana. September 2014.

"Guyana's National Biodiversity Strategy and Action Plan (2012-2020)". [https://www.cbd.int/doc/world/gy/gy-nbsap-v3-en.pdf]. Accessed 5 August 2020.

[6] Government of Guyana. Laws of Guyana, Chapter 68:09 (Act 13 of 2000). "Pesticides and Toxic Chemicals Control Act".

[http://www.vertic.org/media/National%20Legislation/Guyana/GY_Pesticides_and_Toxic_Chemicals_Cap%206809.pdf]. Accessed 5 August 2020.

[7] Guyana Biosafety Clearing-House. "Competent National Authorities".

[http://gy.biosafetyclearinghouse.net/contacts/cna.shtml]. Accessed 5 August 2020.

[8] Environmental Protection Agency. [http://www.epaguyana.org/epa/]. Accessed 5 August 2020.

[9] United Nations. "Confidence Building Measures: Guyana". [https://bwc-ecbm.unog.ch/state/guyana]. Accessed 5 August 2020.

1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. Neither the Ministry of Health, the Ministry of Agriculture, nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—shares relevant information via public websites. [1,2] Guyana's draft Biosafety Framework (a 2007 version is available online) states the goal of training and train-the-trainer programs for biosafety. However, this framework largely deals with biosafety in the sense of threats to biodiversity and the regulation of genetically modified organisms (GMOs), and not pathogens, toxins, or pandemics. Further, it is unclear whether this draft became official policy. [3] The website of the Environmental Protection Agency (EPA) Guyana mentions the existence of a 2007 Biotechnology, Biosafety, and Biosecurity Policy, but the policy does not appear to be publicly available. [4] The Pesticides and Toxic Chemicals Control Act (Act 13 of 2000) gives the government authority to dictate measures that employers must take to protect their employees from toxic substances, including biological control agents used as pesticides, but does not go into any greater detail on biological substances in particular. [5] Although the Guyana Biosafety Clearing-House (BCH) lists the EPA as the "lead agency for the BCH" in Guyana, there is no publicly shared evidence on the website of the EPA that would indicate that the agency concerns itself with biosafety in any other sense than that of the draft Biosafety Framework. [6,7] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [8]

[1] Ministry of Health. [http://www.health.gov.gy/]. Accessed 5 August 2020.

[2] Ministry of Agriculture. [http://agriculture.gov.gy/]. Accessed 5 August 2020.

[3] Government of Guyana. 5 February 2007. "National Biosafety Framework for Guyana: Final Draft".

[https://unep.ch/biosafety/old_site/development/Countryreports/GYNBFrep.pdf]. Accessed 5 August 2020.

- [4] Ministry of Natural Resources and the Environment and Environmental Protection Agency Guyana. September 2014. "Guyana's National Biodiversity Strategy and Action Plan (2012-2020)". [<https://www.cbd.int/doc/world/gy/gy-nbsap-v3-en.pdf>]. Accessed 5 August 2020.
- [5] Government of Guyana. Laws of Guyana, Chapter 68:09 (Act 13 of 2000). "Pesticides and Toxic Chemicals Control Act". [http://www.vertic.org/media/National%20Legislation/Guyana/GY_Pesticides_and_Toxic_Chemicals_Cap%206809.pdf]. Accessed 5 August 2020.
- [6] Guyana Biosafety Clearing-House. "Competent National Authorities". [<http://gy.biosafetyclearinghouse.net/contacts/cna.shtml>]. Accessed 5 August 2020.
- [7] Environmental Protection Agency. [<http://www.epaguyana.org/epa/>]. Accessed 5 August 2020.
- [8] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 August 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Guyana has conducted an assessment of dual use research in the country. Neither the Ministry of Health, the Ministry of Agriculture, the public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—shares relevant information via public websites. [1,2,3,4] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [5] There is no evidence of relevant provisions in the laws listed for Guyana in the Verification Research, Training and Information Centre (VERTIC) database. [6]

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 5 September 2020.
- [2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 September 2020.
- [3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 5 September 2020.
- [4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 5 September 2020.
- [5] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 September 2020.
- [6] Verification Research, Training and Information Centre (VERTIC) database. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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 of a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, or pathogens with pandemic potential. Neither the Ministry of Health, the Ministry of Agriculture, the public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—share relevant information via public websites. [1,2,3,4] There is no mention of regulations for research in the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas [5]. None of the Guyanese laws listed on the VERTIC Biological Weapons Convention Legislation Database deals with dual use research. [6] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [7]

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 5 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 5 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 5 August 2020.

[6] VERTIC. "Biological Weapons Convention Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 5 August 2020.

[7] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 August 2020.

1.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a Guyanese agency specifically responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual use research. Neither the Ministry of Health, the Ministry of Agriculture, the public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—share relevant information via public websites. [1,2,3,4] There is no mention of regulations for research in the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [5] None of the Guyanese laws listed on the VERTIC Biological Weapons Convention Legislation Database deal with dual use research. [6] The Caribbean Public Health Agency (CARPHA), in which Guyana participates, and which operates laboratories, does not share any information about dual use research via a public website. [7] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [8] There is no evidence of relevant provisions in the laws listed for Guyana in the Verification Research, Training and Information Centre (VERTIC) database. [9]

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

- [3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 5 August 2020.
- [4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 5 August 2020.
- [5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 5 August 2020.
- [6] VERTIC. "Biological Weapons Convention Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/g.php>]. Accessed 5 August 2020.
- [7] Caribbean Public Health Agency (CARPHA). [<http://carpha.org/>]. Accessed 5 August 2020.
- [8] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 August 2020.
- [9] Verification Research, Training and Information Centre (VERTIC) database [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>]. Accessed 2 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 of national legislation, regulation, policy, or other guidance, requiring the screening of synthesised DNA before it is sold. Neither the Ministry of Health, the Ministry of Agriculture, the public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission), nor a national laboratory—such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory—share additional relevant information via public websites. [1,2,3,4] Guyana's draft Biosafety Framework (a 2007 version is available online) states that projects involving recombinant DNA require a submission of a research biosafety protocol. No details are provided on this protocol, except that it must be submitted to a panel of experts called the Biosafety sub-Committee for review; the sub-Committee is a body of the National Biosafety Authority (NBA). However, the NBA does not have a publicly available website and it is unclear if it is actually operational. In any case, the Framework contains no mention of sales. Further, it is unclear, based on both Guyanese government websites and national media, whether the draft Framework became official policy. [5] Although Guyana is a party to the Biological Weapons Convention, the country has not submitted Confidence Building Measures reports. [6] There is no evidence of relevant provisions in the laws listed for Guyana in the Verification Research, Training and Information Centre (VERTIC) database. [7]

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 5 August 2020.
- [2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.
- [3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 5 August 2020.
- [4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 5 August 2020.
- [5] Government of Guyana. 5 February 2007. "National Biosafety Framework for Guyana: Final Draft". [https://unep.ch/biosafety/old_site/development/Countryreports/GYNBFrep.pdf]. Accessed 5 August 2020.
- [6] United Nations. "Confidence Building Measures: Guyana". [<https://bwc-ecbm.unog.ch/state/guyana>]. Accessed 5 August 2020.
- [7] VERTIC. "G". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/g/>].

Accessed 2 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 not enough publicly available evidence to confirm that Guyana's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 core tests defined by the World Health Organization (WHO). The National

Public Health Reference Laboratory (NPHRL) does not have a public website. However, the American Society for Microbiology reports that since 2009 it has supported the NPHRL in testing for mycobacterium tuberculosis (TB), and the Ministry of Health's National Tuberculosis Control Programme confirms that a GeneXpert machine is available for such tests. [1,2] Although the GeneXpert machine is indicated as a follow-up to conventional microscopy--suggesting that microscopy for TB may also be available--the machine itself does not employ microscopy, and there is no mention of microscopy in the aforementioned websites. [3] A 2012 Pan American Health Organisation (PAHO) report and a 2011 report from Health Systems 20/20 describe widespread HIV testing in Guyana, though the laboratories in which this is performed are not specified. [4,5] A 2004 report from the Guyana Responsible Parenthood Association and the Ministry of Public Health (now called the Ministry of Health) states that most HIV testing was performed (at that time) by the National Laboratory for Infectious Diseases. [6] However, it is unclear whether this laboratory is still operational--there is no current mention of it on the website of the Ministry of Health. [7] The National Malaria Strategic Plan states that there have been pilot programmes using rapid testing for malaria, but does not describe the test's broad adoption in the country. [9] The Ministry of Health's Health Vision 2020 strategic plan (2013) describes both a National Malaria Control Programme and the National Malaria Strategic Plan, but does not mention whether the Programme includes rapid testing. [8] The Ministry of Health's Vector Control unit (which is responsible for responding to malaria in the country), does not have a public website. Neither the Guyana Country Cooperation Strategy 2016-2020 (a publication of PAHO and the WHO Regional Office for the Americas) nor Health Vision 2020 discusses the other WHO-defined core tests, nor do they define country-specific tests. [8,10] The Ministry of Health does not share any other relevant information on testing via a public website. [7]

- [1] American Society for Microbiology. "Guyana". [<https://www.labcap.org/where/guyana.cfm>]. Accessed 5 August 2020.
- [2] Ministry of Health. 10 July 2016. "National Tuberculosis Control Programme: Key Accomplishments". [<https://www.health.gov.gy/index.php/component/content/article/78-messages/73-minmessage>]. Accessed 5 August 2020.
- [3] TBFACTS.ORG. "Genexpert Test - TB Diagnosis, TB Resistance Testing, CB-NAAT". [<https://www.tbfacts.org/genexpert/>]. Accessed 5 August 2020.
- [4] United States Agency for International Development and the Guyana Ministry of Health. October 2011. "Guyana Health System Assessment 2010". [<https://www.hfgproject.org/wp-content/uploads/2015/02/Guyana-Health-System-Assessment-2010.pdf>]. Accessed 5 August 2020.
- [5] Pan American Health Organization. 2012. "Guyana". Health in the Americas, 2012 Edition: Country Volume. [https://www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&view=download&category_slug=hia-2012-country-chapters-22&alias=133-guyana-133&Itemid=231&lang=en]. Accessed 5 August 2020.
- [6] Guyana Responsible Parenthood Association and the Guyana Ministry of Health. December 2005. "Guyana HIV/AIDS Service Provision Assessment Survey 2004". [<https://dhsprogram.com/pubs/pdf/SPA10/SPA10.pdf>]. Accessed 5 August 2020.
- [7] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 5 August 2020.
- [8] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 5 August 2020.
- [9] Guyana Vector Control Services. February 2018. "National Malaria Control Programme Strategic Plan". [<http://docs.bvsalud.org/biblioref/2018/07/906525/arbo-guy-005.pdf>]. Accessed 5 August 2020.
- [10] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 5 August 2020.

2.1.1b

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

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

Current Year Score: 0

There is no evidence that Guyana has a national plan, strategy or similar document for conducting testing during a public health emergency, let alone such a plan that includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. There is no relevant information shared via the websites of the Ministry of Health or the Ministry of Agriculture. [1,2] Neither Guyana's National Public Health Reference Laboratory nor the Guyana Livestock Development Authority Veterinary Laboratory has a public website. There is no evidence that Guyana has a public health institute. There is no other evidence of relevant studies or media reports.

[1] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 5 August 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

Guyana does not have a national laboratory that serves as a reference facility that is accredited. There is inadequate evidence to confirm that Guyana's National Public Health Reference Laboratory (NPHRL) is accredited, or that another laboratory that serves the country as a reference facility is accredited. The National Public Health Reference Laboratory (NPHRL) does not have a public website. It is not possible to determine from other government websites or news media which pathogens the NPHRL serves as a reference for. [1] No other information on its accreditation is provided by the Ministry of Health via a public website. [2] The Guyana Livestock Development Authority Veterinary Laboratory, another major national laboratory, does not share information via a public website, and it is not possible to determine what pathogens it serves as a reference for, if any, or whether it is accredited. There is no relevant information shared via the website of the Ministry of Agriculture. [2] Media reports in 2017 describing the certification by Guyana National Bureau of Standards of 10 medical laboratories noted that the labs in question did not yet have international accreditation. [3]

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

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 4 August 2020.

[3] Guyana Chronicle. 9 January 2017. "10 medical labs certified". [<https://guyanachronicle.com/2017/01/09/10-medical-labs-certified/>]

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 that Guyana's National Public Health Reference Laboratory (NPHRL) is subject to external quality assurance (EQA) review from various different entities. A 2013 document from the US President's Emergency Plan for AIDS Relief (PEPFAR) reports that most HIV-related laboratory services (including haematology and microbiology) provided by the NPHRL have EQA programs. [1] Among the entities supporting EQA at Guyana's laboratory are the US Centres for Disease Control (CDC), the World Health Organization (WHO), and the United Kingdom. [1] No additional information on EQA support is provided by the Ministry of Health, the Ministry of Agriculture via a public website, the NPHRL, or the Guyana Livestock Development Authority Veterinary Laboratory via public website. [2,3] Guyana is also a member of the Caribbean Public Health Agency (CARPHA), headquartered in Trinidad, whose facility serves as a reference laboratory for the Caribbean region. [4,5] CARPHA assists in coordinating EQAs for member country laboratories, but does not share information about its own EQA status via a public website. [6]

[1] US President's Emergency Plan for AIDS Relief (PEPFAR). 2013. "Guyana: Operation Plan Report FY 2013".

[https://www.pepfar.gov/documents/organization/222167.pdf]. Accessed 5 August 2020.

[2] Ministry of Health. [http://www.health.gov.gy/]. Accessed 5 August 2020.

[3] Ministry of Agriculture. [http://agriculture.gov.gy/]. Accessed 5 August 2020.

[4] Caribbean Public Health Agency (CARPHA). "Member States". [http://carpha.org/Who-We-Are/Member-States]. Accessed 5 August 2020.

[5] Caribbean Public Health Agency (CARPHA). "Laboratory Services". [https://carpha.org/What-We-Do/LABS/Overview]. Accessed 4 August 2020.

[6] Caribbean Public Health Agency (CARPHA). [http://carpha.org/]. Accessed 5 August 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Guyana has a specimen transport system, let alone a system that is nationwide. There is no mention of such a system on the websites of the Ministry of Health or the Ministry of Agriculture. [1,2] National laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory do not share information via public websites. The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, does not mention specimen transport. [3] The Caribbean Public Health Agency (CARPHA), in which Guyana participates, publishes guidelines for the transport of specimens within member countries, in its 2020 Laboratory User Manual. [4] But as per the lack of evidence described above, it is not possible to conclude that these guidelines are in fact integrated into a system within Guyana, notwithstanding the country's participation in CARPHA.

[1] Ministry of Health. [http://www.health.gov.gy/]. Accessed 6 August 2020.

[2] Ministry of Agriculture. [http://agriculture.gov.gy/]. Accessed 6 August 2020.

[3] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1]. Accessed 6 August 2020.

[4] Caribbean Public Health Agency (CARPHA). 1 April 2020. "CARPHA Laboratory User Manual".

[[https://carpha.org/Portals/0/GUL-Q05-001-05_User%20Manual\[1452\].pdf?ver=2020-04-16-180718-920](https://carpha.org/Portals/0/GUL-Q05-001-05_User%20Manual[1452].pdf?ver=2020-04-16-180718-920)]. Accessed 6 August 2020.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no evidence that Guyana 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 websites of the Ministry of Health or the Ministry of Agriculture. [1,2] Neither Guyana's National Public Health Reference Laboratory nor the Guyana Livestock Development Authority Veterinary Laboratory has a public website. There is no evidence that Guyana has a national public health institute. There is no other evidence of relevant studies or media reports. There is separate evidence that Guyana has participated in capacity building for its laboratories to respond to the COVID-19 pandemic. For example, Guyana is a participating in an initiative of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas to train technicians at laboratories that currently test for influenza, so that they can conduct more COVID-19 tests. [3] The Caribbean Public Health Agency (CARPHA), a network in which Guyana participates, has scaled up its testing capacities in response to the COVID-19 pandemic, and also lists measures that individual countries have taken to respond to the pandemic. There is no evidence shared via CARPHA's COVID-19 information portal suggesting that Guyana has a national plan to rapidly authorize laboratories to scale-up testing in response to the pandemic.

[1] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 5 August 2020.

[2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 5 August 2020.

[3] Pan American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. 12 February 2020. "PAHO prepares 8 Caribbean countries for laboratory diagnosis of new coronavirus". [https://www.paho.org/hq/index.php?option=com_content&view=article&id=15723:paho-prepares-8-caribbean-countries-for-laboratory-diagnosis-of-new-coronavirus&Itemid=1926&lang=en]. Accessed 6 August 2020.

[4] Caribbean Public Health Agency (CARPHA). 2020. "Coronavirus Disease (COVID-19)". [<https://carpha.org/What-We-Do/Public-Health/Novel-Coronavirus>]. Accessed 6 August 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

Current Year Score: 1

There is evidence that Guyana is conducting ongoing event-based surveillance and analysis for infectious disease; however, there is insufficient evidence it is analyzed 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. Guyana is one of the eight countries participating in THIS. [1, 2] Beyond CARPHA activities, there is no evidence of national-level event-based surveillance. Neither Guyana's Multi-hazard Disaster Preparedness and Response Plan nor the website of the Guyana Civil Defence Commission includes a mention of an EBS unit. [3,4] There is no evidence that an event-based surveillance unit (EBS) exists within Guyana's National Emergency Operations Centre (NEOC). The NEOC is housed within the Civil Defence Commission. [5] No relevant information is shared via a public website by the Ministry of Health, the Ministry of Agriculture, or national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [6,7] The Caribbean Disaster Emergency Management Agency (CDEMA), in which Guyana participates through its membership in the Caribbean Community (CARICOM), does not share any information on event-based surveillance via a publicly available website. [8]

[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] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 6 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 6 August 2020.

[5] Caribbean Centre for Development Administration. February 2014. "Strategic Plan for the Civil Defence Commission (CDC) -- Guyana -- 2014 to 2017". [[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/11.%20Strategic%20Plan%20for%20the%20Civil%20Defence%20Commission%20of%20Guyana%20\(2014%20to%202017\).pdf](https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/11.%20Strategic%20Plan%20for%20the%20Civil%20Defence%20Commission%20of%20Guyana%20(2014%20to%202017).pdf)]. Accessed 6 August 2020.

[6] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[7] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[8] Caribbean Disaster Emergency Management Agency (CDEMA). [<https://www.cdema.org>]. Accessed 6 August 2020.

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Guyana reported a potential health emergency of international concern (PHEIC) to the World Health Organization (WHO) within the last two years. The WHO Disease Outbreak News site reports no recent outbreaks of reportable diseases. [1] No relevant information is shared via a public website by the Ministry of Health or national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [2] An Epidemiological Bulletin from the Pan American Health Organization (PAHO)--which is meant to complement WHO Disease Outbreak News--is not available for Guyana. [3] News reports show that the global COVID-19 pandemic has spread to Guyana and the disease is present in multiple regions of the country. [4] Guyana did not record a case of COVID-19 until after it was already an acknowledged PHEIC. [5] Other than COVID-19, however, there are no media reports within the last two years of verified disease outbreaks in the last year.

- [1] World Health Organization (WHO). "Disease Outbreak News: Guyana".
[<http://www.who.int/csr/don/archive/country/guy/en/>]. Accessed 6 August 2020.
- [2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.
- [3] Pan American Health Organisation (PAHO). "Member States Epidemiological Bulletins".
[https://www.paho.org/hq/index.php?option=com_content&view=article&id=5717:2011-links-member-states-epidemiological-bulletins&Itemid=4117&lang=en#]. Accessed 6 August 2020.
- [4] Stabroek News. 13 May 2020. "COVID-19 Recorded in Seven Regions".
[<https://www.stabroeknews.com/2020/05/13/news/guyana/covid-19-recorded-in-seven-regions/>]. Accessed 6 August 2020.
- [5] Permanent Mission of the Cooperative Republic of Guyana to the United Nations. 12 March 2020. "Guyana records first case of Coronavirus...woman back from New York dies at GPHC during treatment...President discourages public gatherings, non-essential travel". [<https://www.un.int/guyana/news/guyana-records-first-case-coronavirus%E2%80%A6woman-back-new-york-dies-gphc-during-treatment%E2%80%A6president>]. Accessed 9 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 public evidence to confirm that Guyana operates an electronic reporting surveillance system at both the subnational and national level. The country has a Health Information System (HIS), which it has touted as being able to improve patient care; it appears that this system is electronic. [1] However, there is no evidence that this system is specifically used for the purposes of surveillance. Neither Guyana's Health Vision 2020 plan nor its Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, makes mention of electronic surveillance activities. [2,3] The Ministry of Health states a "key accomplishment" of having created a "surveillance database", but provides insufficient details to conclude that this constitutes an electronic reporting surveillance system. [4] No other relevant information is shared via a public website by the Ministry of Health, the National Data Management Authority, or national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [5,6] Measure Evaluation, a project of the United States Agency for International Development (USAID), reports that Guyana uses District Health Information Software (DHIS 2). [7] However, no details are provided about what this software is specifically used for, and its use is not explained on the websites of any of the above-mentioned Guyanese entities. Further, the website of DHIS 2 does not list Guyana as a country that uses the software. [8]

- [1] Guyana Chronicle. 12 April 2017. "Health Information System Restoration to Slash Patients Waiting-Time".
[<http://guyanachronicle.com/2017/04/12/health-information-system-restoration-to-slash-patients-waiting-time>]. Accessed 6 August 2020.
- [2] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.
- [3] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 6 August 2020.
- [4] Ministry of Health. "Key Accomplishments". [<https://www.health.gov.gy/index.php/24-surveillance-unit/67-surveillanceca>]. Accessed 6 August 2020.
- [5] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[6] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[7] Measure Evaluation. "Guyana: HIS Indicators". [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/guyana>]. Accessed 6 August 2020.

[8] DHIS 2. "DHIS 2 in Action". [<https://www.dhis2.org/inaction>]. Accessed 6 August 2020.

2.3.2b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient public evidence to confirm that Guyana operates an electronic reporting surveillance system at both the subnational and national level, let alone a system that reports real-time laboratory data. The country has a Health Information System (HIS), which it has touted as being able to improve patient care; it appears that this system is electronic. [1] However, there is no evidence that this system is specifically used for the purposes of surveillance. Neither Guyana's Health Vision 2020 plan nor its Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, makes mention of electronic surveillance activities. [2,3] The Ministry of Health states a "key accomplishment" of having created a "surveillance database", but provides insufficient details to conclude that this constitutes an electronic reporting surveillance system. [4] No other relevant information is shared via a public website by the Ministry of Health, the National Data Management Authority, or national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [5,6] Measure Evaluation, a project of the United States Agency for International Development (USAID), reports that Guyana uses District Health Information Software (DHIS 2). [7] However, no details are provided about what this software is specifically used for, and its use is not explained on the websites of any of the above-mentioned Guyanese entities. Further, the website of DHIS 2 does not list Guyana as a country that uses the software. [8]

[1] Guyana Chronicle. 12 April 2017. "Health Information System Restoration to Slash Patients Waiting-Time". [<http://guyanachronicle.com/2017/04/12/health-information-system-restoration-to-slash-patients-waiting-time>]. Accessed 6 August 2020.

[2] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[3] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 6 August 2020.

[4] Ministry of Health. "Key Accomplishments". [<https://www.health.gov.gy/index.php/24-surveillance-unit/67-surveillanceka>]. Accessed 6 August 2020.

[5] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[6] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[7] Measure Evaluation. "Guyana: HIS Indicators". [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/guyana>]. Accessed 6 August 2020.

[8] DHIS 2. "DHIS 2 in Action". [<https://www.dhis2.org/inaction>]. Accessed 6 August 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 1

It appears that electronic health records are in use in Guyana, but it is difficult to say with certainty how common they are. The Ministry of Health's Health Vision 2020 (published in 2013) states the goal of developing, by 2015, an electronic medical records system "to collect and maintain a record of the medical history of clients". [1] Media reports from 2017 indicate that such a system is now in use. [2] No relevant information is shared via a public website by the Ministry of Health, the National Data Management Authority, or national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [3,4] Measure Evaluation, a project of the United States Agency for International Development (USAID), reports that Guyana uses District Health Information Software (DHIS 2). [5] However, no details are provided about what this software is specifically used for, and its use is not explained on the websites of any of the above-mentioned Guyanese entities. Further, the website of DHIS 2 does not list Guyana as a country that uses the software. [6]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[2] Guyana Chronicle. 12 April 2017. "Health Information System Restoration to Slash Patients Waiting-Time". [<http://guyanachronicle.com/2017/04/12/health-information-system-restoration-to-slash-patients-waiting-time>]. Accessed 6 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[4] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[5] Measure Evaluation. "Guyana: HIS Indicators". [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/guyana>]. Accessed 6 August 2020.

[6] DHIS 2. "DHIS 2 in Action". [<https://www.dhis2.org/inaction>]. Accessed 6 August 2020.

2.4.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to confirm that Guyana's national public health system has access to electronic health records of individuals in their country. Guyana has a five-level public health care system, ranging from primary care at the community and sub-district levels, to services at the district and regional levels, to the national level facilities. [1] The Ministry of Health's Health Vision 2020 (published in 2013) states the goal of developing, by 2015, an electronic medical records system "to collect and maintain a record of the medical history of clients". [1] Media reports from 2017 indicate that such a system was being developed at the time and its use imminent, but there have not been more recent media reports on its implementation. [2] Further, the extent and specificity of data sharing between different levels of the health care system remains unclear. Measure Evaluation, a project of the United States Agency for International Development (USAID), reports

that Guyana uses District Health Information Software (DHIS 2). [3] However, no details are provided about what this software is specifically used for, and its use is not explained on the websites of the Ministry of Health, the National Data Management Authority, national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, or other Guyanese government websites. [4,5] Further, the website of DHIS 2 does not list Guyana as a country that uses the software. [6]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[2] Guyana Chronicle. 12 April 2017. "Health Information System Restoration to Slash Patients Waiting-Time". [<http://guyanachronicle.com/2017/04/12/health-information-system-restoration-to-slash-patients-waiting-time>]. Accessed 6 August 2020.

[3] Measure Evaluation. "Guyana: HIS Indicators". [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/guyana>]. Accessed 6 August 2020.

[4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[5] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[6] DHIS 2. "DHIS 2 in Action". [<https://www.dhis2.org/inaction>]. Accessed 6 August 2020.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to confirm that there are data standards to ensure patient health data used by Guyana's national public health system is comparable. The Ministry of Health's Health Vision 2020 (published in 2013) states the goal of developing, by 2015, an electronic medical records system "to collect and maintain a record of the medical history of clients". [1] Media reports from 2017 indicate that such a system was being developed at the time and its use imminent, but there have not been more recent media reports on its implementation. [2] Further, no information is provided on the quality or comparability of the data housed in this system. Neither the Ministry of Health, the National Data Management Authority, nor national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory share relevant information via public websites. [3,4] There is no evidence that Guyana has a national public health institute.

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[2] Guyana Chronicle. 12 April 2017. "Health Information System Restoration to Slash Patients Waiting-Time". [<http://guyanachronicle.com/2017/04/12/health-information-system-restoration-to-slash-patients-waiting-time>]. Accessed 6 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[4] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

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

2.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to confirm the existence of mechanisms to share data between the relevant ministries responsible for animal, human and wildlife surveillance. However, various descriptions of Guyanese health surveillance activities suggest that there is significant collaboration between those ministries, which may rise to the level of data sharing. A 2007 report from the Pan American Health Organisation describes collaboration between the Veterinary Public Health Unit of the Ministry of Health, the Environmental Health Unit of the same ministry, and the Ministry of Agriculture. [1] The webpage of the Veterinary Health Unit confirms its continued responsibility for the collection and dissemination of epidemiological data, and for coordination with the Ministry of Agriculture to respond to natural disasters. [2] However, no further details on data sharing are made available via a public website by the Ministry of Health, the Ministry of Agriculture, the Ministry of Natural Resources, or national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [3,4] No mention of any such mechanism is made in Guyana's Health Vision 2020 (published in 2013) or in its Multi-Hazard Disaster Preparedness and Response Plan (also 2013). [5,6] Guyana's National Integrated Disaster Risk Management Plan and Implementation Strategy (also 2013), states the need for data sharing on risks, but there is no established mechanism in the implementation strategy. Further, the statements are about risks generically, and not specifically about animal, human, or wildlife surveillance. [7]

[1] Pan American Health Organization. 2007. "Guyana". Health in the Americas, 2007: Volume II. [http://ais.paho.org/hia_cp/en/2007/Guyana%20English.pdf]. Accessed 6 August 2020.

[2] Ministry of Health. "Veterinary Public Health". Ministry of Health. "Veterinary Public Health". [<https://health.gov.gy/index.php/27-veterinary-public-health>]. Accessed 6 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[5] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[6] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 6 August 2020.

[7] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 6 August 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana makes de-identified health surveillance data on disease outbreaks publicly available on government websites. Neither the Ministry of Health, the Ministry of Agriculture, the National Data Management Authority, nor national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory shares relevant information via a public website. [1,2,3] Both the Ministry of Health and the Ministry of Agriculture have news sections in their websites that may incidentally mention disease outbreaks, but there appears to be nothing systematic about their reporting of data. The National Bureau of Statistics reports several datasets via its public website, including its National Summary Data Page, which was launched in December 2019. However, there is no evidence of diseases surveillance data being shared on this site. [4,5,6] Guyana makes de-identified COVID-19 surveillance data available via the website of the Ministry of Health, but the frequency of the data sharing is unclear. A graphic on the ministry's website shows such details as the number of confirmed cases, the number of confirmed deaths, the number of people tested for COVID-19 to date, and other essential statistics on the outbreak. The graphic does not mention the frequency with which it is released. Additionally, it is unclear what the source of the data is; the graphic contains a caption that says "Source: WHO Situation Report & Guyana's Surveillance Report". [7] A document by the latter name, "Guyana Surveillance Report," could not be located online. There is no evidence that Guyana has a national public health institute.

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[3] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[4] Synieka Thorne. 18 December 2019. "Guyana's National Summary Data Page officially launched". Department of Public Information. [<https://dpi.gov.gy/guyanas-national-summary-data-page-officially-launched/#gsc.tab=0>]. Accessed 6 August 2020.

[5] Bureau of Statistics. [<https://statisticsguyana.gov.gy/>]. Accessed 6 August 2020.

[6] Government of Guyana. "National Summary Data Page". [National Summary Data Page (NSDP)]. Accessed 6 August 2020.

[7] Ministry of Health. 5 August 2020. "Guyana Covid 19 Dashboard."

[<https://health.gov.gy/index.php/component/k2/item/228-guyana-covid-19-dashboard>]. Accessed 6 August 2020.

2.4.3b

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

Yes = 1 , No = 0

Current Year Score: 0

Although Guyana makes de-identified COVID-19 surveillance data available via the website of the Ministry of Health, however the frequency of the data sharing on daily reporting is unclear. A graphic on the ministry's website shows such details as the number of confirmed cases, the number of confirmed deaths, the number of people tested for COVID-19 to date, and other essential statistics on the outbreak. The graphic does not mention the frequency with which it is released. Additionally, it is unclear what the source of the data is; the graphic contains a caption that says "Source: WHO Situation Report & Guyana's Surveillance Report". A document by the latter name, "Guyana Surveillance Report," could not be located online. [1] The National Public Health Laboratory does not share information via a public website, and there is no evidence that Guyana has a national public health institute. The Ministry of Health also shares updates on COVID-19 via its Facebook page that it describes as "daily". [2] Guyana has also established a website, the "Guyana COVID-19 Info Hub", which reports the same statistics as those posted to the Ministry of Health's homepage. [3]

[1] Ministry of Health. [<https://health.gov.gy/>]. Accessed 2 September 2020.

[2] Facebook. 10 August 2020. "COVID-19 Daily Update -- August 10, 2020".

[<https://www.facebook.com/watch/?v=586904808862443>]. Accessed 11 August 2020.

[3] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities. Neither the Ministry of Health nor the Ministry of Agriculture share relevant information via public websites. [1,2] Further, there is no public evidence of Guyanese legislation dealing with data privacy in general, let alone dealing with health data specifically. [3] The National Data Management Authority, which deals with information and communications technology in the country, does not share information on data privacy policies or related information via a public website. [4] National laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, do not share relevant information via a public website. Guyana's Health Vision 2020 (2013) mentions the goal of achieving confidentiality of health data, but no further details are provided. [5] Guyana makes de-identified COVID-19 surveillance data available via the website of the Ministry of Health, but there is no information about its confidentiality, and the data is not identifiable. [6] Both the Ministry of Health and the Ministry of Agriculture also have news sections in their websites that may incidentally mention disease outbreaks, but there appears to be nothing systematic about their reporting of data, nor any mention of data confidentiality. The lack of a data privacy law in Guyana is confirmed by the United Nations Conference on Trade and Development (UNCTAD). [7]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[3] Ministry of Legal Affairs and Attorney General's Chambers. "Laws of Guyana". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 6 August 2020.

[4] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[5] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[6] Ministry of Health. 5 August 2020. "Guyana Covid 19 Dashboard."

[<https://health.gov.gy/index.php/component/k2/item/228-guyana-covid-19-dashboard>]. Accessed 6 August 2020.

[7] United Nations Conference on Trade and Development. 2020. "Data Protection and Privacy Legislation Worldwide". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 4 August 2020.

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities, let alone any that specifically mention cyber attacks. Neither the Ministry of Health nor the Ministry of Agriculture share relevant information via public websites. [1,2] Further, there is no public evidence of Guyanese legislation dealing with data privacy in general, let alone dealing with health data specifically. [3] The National Data Management Authority, which deals with information and communications technology in the country, does not share information on data privacy policies or related information via a public website. [4] National laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, do not share relevant information via a public website. Guyana's Health Vision 2020 (2013) mentions the goal of achieving confidentiality of health data, but no further, substantial details are provided. [5] Guyana makes de-identified COVID-19 surveillance data available via the website of the Ministry of Health, but there is no information about its confidentiality, and the data is not identifiable. [6] Both the Ministry of Health and the Ministry of Agriculture also have news sections in their websites that may incidentally mention disease outbreaks , but there appears to be nothing systematic about their reporting of data, nor any mention of data confidentiality. The lack of a data privacy law in Guyana is confirmed by the United Nations Conference on Trade and Development (UNCTAD). [7]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[3] Ministry of Legal Affairs and Attorney General's Chambers. "Laws of Guyana". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 6 August 2020.

[4] National Data Management Authority. [<https://ndma.gov.gy/>]. Accessed 6 August 2020.

[5] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[6] Ministry of Health. 5 August 2020. "Guyana Covid 19 Dashboard."

[<https://health.gov.gy/index.php/component/k2/item/228-guyana-covid-19-dashboard>]. Accessed 6 August 2020.

[7] United Nations Conference on Trade and Development. 2020. "Data Protection and Privacy Legislation Worldwide". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 4 August 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is no public evidence that the government of Guyana has made a specific commitment to share surveillance data during a public health emergency with other countries in the region, either for a single disease or for more than one disease. There is no mention of surveillance data sharing on the websites of the Ministry of Health, the Ministry of Agriculture, or the Civil Defence Commission (which is responsible for responding to emergencies). [1,2,3] Through its membership in the Caribbean Public Health Agency (CARPHA), the government of Guyana presumably shares health surveillance data (since surveillance assistance is a function of CARPHA). [4] However, neither CARPHA nor CARICOM (the Caribbean Community,

CARPHA's parent organisation) 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. [5] There is no mention in news media of such surveillance data sharing. Guyanese national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, do not share relevant information via a public website. There is no mention of surveillance data sharing during public health emergencies in Guyana's Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas; in Guyana's Health Vision 2020; nor in the 2013 Multi-hazard Disaster Preparedness and Response Plan. [6,7,8]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 6 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 6 August 2020.

[3] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 6 August 2020.

[4] Caribbean Public Health Association (CARPHA). "Laboratory Services". [<https://carpha.org/What-We-Do/LABS/Overview>]. Accessed 6 August 2020.

[5] CARICOM. [<https://www.caricom.org/>]. Accessed 6 August 2020.

[6] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 6 August 2020.

[7] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 6 August 2020.

[8] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 6 August 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 not evidence that Guyana has a national system in place to provide support at the sub-national level (e.g. training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency. The Ministry of Health does not describe its contact tracing system in detail on its public website. [1] A video posted to Facebook by the Ministry of Health in May 2020 explains the concept of contact tracing in response to the COVID-19 pandemic, but does not indicate how broad contact tracing efforts are in the country. [2] Similarly, release from the Department of Public Information in April 2020 confirms that contact tracing is occurring but does not explain its extent or how systematic it is throughout the country. [3] A local media report from July 2020 indicates that Guyana lacks a national response team for contact tracing, and that there is a need for a more robust contact tracing initiative in the country. [4] Guyanese national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority

Veterinary Laboratory, do not share relevant information via a public website. There is no evidence that Guyana has a national public health institute.

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

[2] Ministry of Health. "Guyana's COVID-19 Contact Tracing Explained". Facebook.

[<https://www.facebook.com/watch/?v=2344221532536850>]. Accessed 7 August 2020.

[3] Department of Public Information. 13 April 2020. "Contact tracing, surveillance key to mitigating COVID-19 spread" [<https://dpi.gov.gy/contact-tracing-surveillance-key-to-mitigating-covid-19-spread/#gsc.tab=0>]. Accessed 7 August 2020.

[4] Kaiteur News. 20 July 2020. "Contact tracing is an effective method to tackle Guyana's rise in COVID-19 cases — PAHO Rep." [<https://www.kaiteurnewsonline.com/2020/07/20/contact-tracing-is-an-effective-method-to-tackle-guyanas-rise-in-covid-19-cases-paho-rep/>]. Accessed 7 August 2020.

2.5.1b

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

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

Current Year Score: 0

There is no evidence that Guyana 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 is no evidence of such services, or mention of any policies in support of those self-isolating, on the website of the Ministry of Health. [1] There is no evidence that such measures have been introduced in response to the COVID-19 pandemic; for example, there is no information about such support on the government's Guyana "COVID-19 Info Hub" website. [2] National laboratories, such as the National Public Health Reference Laboratory and the GLDA Veterinary Laboratory, do not share relevant information via a public website. There is no evidence that Guyana has a national public health institute. There are no media reports showing that Guyana provides such services.

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 15 August 2020.

[2] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

2.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

Guyana does not 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. The Ministry of Health provides updates on national-level COVID-19 data via its main website. There is no description of the frequency of the updates. However, these releases do not include any data about contact tracing or cases it may identify. [1] Guyana has also established a website, the "Guyana COVID-19 Info Hub", which reports the same statistics as those posted to the Ministry of Health's homepage. [2] There is no other relevant data shared via a public website. A video posted to Facebook by the Ministry of Health in May 2020 explains the concept of contact tracing in response to the COVID-19 pandemic, but does not

indicate how broad contact tracing efforts are in the country nor what kind of data they generate. [3] Similarly, a release from the Department of Public Information in April 2020 confirms that contact tracing is occurring but does not explain its extent or how systematic it is throughout the country. [4] A local media report from July 2020 indicates that Guyana lacks a national response team for contact tracing, and that there is a need for a more robust contact tracing initiative in the country. [5] Guyanese national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, do not share relevant information via a public website. There is no evidence that Guyana has a national public health institute.

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

[2] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

[3] Ministry of Health. "Guyana's COVID-19 Contact Tracing Explained". Facebook. [<https://www.facebook.com/watch/?v=2344221532536850>]. Accessed 7 August 2020.

[4] Department of Public Information. 13 April 2020. "Contact tracing, surveillance key to mitigating COVID-19 spread" [<https://dpi.gov.gy/contact-tracing-surveillance-key-to-mitigating-covid-19-spread/#gsc.tab=0>]. Accessed 7 August 2020.

[5] Kaitour News. 20 July 2020. "Contact tracing is an effective method to tackle Guyana's rise in COVID-19 cases — PAHO Rep." [<https://www.kaieteurnews.com/2020/07/20/contact-tracing-is-an-effective-method-to-tackle-guyanas-rise-in-covid-19-cases-paho-rep/>]. Accessed 7 August 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 Guyana 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. There is no evidence of such plans either for active public health emergencies or future emergencies. The Ministry of Health does not describe its contact tracing system in detail on its public website. [1] A video posted to Facebook by the Ministry of Health in May 2020 explains the concept of contact tracing in response to the COVID-19 pandemic, but does not indicate how broad contact tracing efforts are in the country. [2] Similarly, a release from the Department of Public Information in April 2020 confirms that contact tracing is occurring but does not explain its extent or how systematic it is throughout the country. [3] A local media report from July 2020 indicates that Guyana lacks a national response team for contact tracing, and that there is a need for a more robust contact tracing initiative in the country. [4] Guyanese national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory, do not share relevant information via a public website. There is no relevant information shared via a public website by the Guyana Revenue Authority (which enforces border and customs laws), the Ministry of Public Security, or other public defence agencies (such as the Guyana Defence Force and the Civil Defence Commission). [5,6,7] There is no evidence that Guyana has a national public health institute.

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

[2] Ministry of Health. "Guyana's COVID-19 Contact Tracing Explained". Facebook. [<https://www.facebook.com/watch/?v=2344221532536850>]. Accessed 7 August 2020.

- [3] Department of Public Information. 13 April 2020. "Contact tracing, surveillance key to mitigating COVID-19 spread" [<https://dpi.gov.gy/contact-tracing-surveillance-key-to-mitigating-covid-19-spread/#gsc.tab=0>]. Accessed 7 August 2020.
- [4] Kaiteur News. 20 July 2020. "Contact tracing is an effective method to tackle Guyana's rise in COVID-19 cases — PAHO Rep." [<https://www.kaiteurnewsonline.com/2020/07/20/contact-tracing-is-an-effective-method-to-tackle-guyanas-rise-in-covid-19-cases-paho-rep/>]. Accessed 7 August 2020.
- [5] Guyana Revenue Authority. [<https://www.gra.gov.gy/>]. Accessed 10 August 2020.
- [6] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 4 August 2020.
- [7] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 4 August 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

There is evidence that there are applied epidemiology training programs available to Guyana in country. The Workforce Institute and Development Branch (WIDB) of the US Centres for Disease Control and Prevention (CDC) leads a Zika-related field epidemiology training program (FETP) for Guyana. [1] The CDC description of the program makes it unclear whether the training is available in country, or whether the government provides resources to send citizens to another country for training. The CDC describes the FETP program as providing training "on the ground" for Guyanese workers, indicating that the training occurs in Guyana; however, this point is not stated with specificity. No relevant information is provided via public websites by the Ministry of Health or national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [2] Guyana is a member of the Caribbean Public Health Agency (CARPHA), which runs the Caribbean Regional Field Epidemiology and Laboratory Training Programme (CR-FELTP). As a CARPHA member, Guyana presumably has access to this program, but it is not clear whether it has actually participated, since the CR-FELTP does not list participants via a public website. [3] Still, TEPHINET (the Training Programs in Epidemiology and Public Health Interventions Network) explicitly states that Guyana does participate in CR-FELTP. TEPHINET provided assistance to develop a new advanced training track for CR-FELTP in November 2019. [4] Guyana is not a member of RedSur, the network of Central and South American FETPs. [5]

- [1] Centres for Disease Control and Prevention (CDC). "Leveraging Resources and Program to Respond to Zika". [<https://www.cdc.gov/globalhealth/healthprotection/fieldupdates/winter-2016/leveraging-resources-zika.html>]. Accessed 10 August 2020.
- [2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 10 August 2020.
- [3] Caribbean Public Health Agency (CARPHA). "FELTP". [<http://carpha.org/feltp>]. Accessed 10 August 2020.
- [4] Training Programs in Epidemiology and Public Health Interventions Network. "TEPHINET Helps Develop the Curriculum for a New, Advanced Caribbean Regional Field Epidemiology Training Program". [<https://www.tephinet.org/tephinet-helps>].

develop-the-curriculum-for-a-new-advanced-caribbean-regional-field-epidemiology]. Accessed 10 August 2020.

[5] RedSur. "Países". [http://redsur.org/paises/]. Accessed 10 August 2020.

[6] Centres for Disease Control and Prevention (CDC). "Field Epidemiology Training Program: Partners & Networks". [https://www.cdc.gov/globalhealth/healthprotection/fetp/partners.html]. Accessed 10 August 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to conclude that available field epidemiology training programs are explicitly inclusive of animal health professionals, or that such a program is offered specific to animal health. At least one applied epidemiology training program is available to Guyana: the Workforce Institute and Development Branch (WIDB) of the US Centres for Disease Control and Prevention (CDC) leads a Zika-related field epidemiology training program (FETP) for Guyana. [1] However, details on the background and number of Guyanese participants are not provided. No relevant information is provided via public websites by the Ministry of Health, the Ministry of Agriculture, or national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [2,3] Guyana is a member of the Caribbean Public Health Agency (CARPHA), which runs the Caribbean Regional Field Epidemiology and Laboratory Training Programme (CR-FELTP). As a CARPHA member, Guyana has access to this program, and TEPHINET (the Training Programs in Epidemiology and Public Health Interventions Network) explicitly states that Guyana does participate in CR-FELTP. [4] Still, it is not clear whether it has actually participated, since the CR-FELTP does not list participants via a public website. Further, CR-FELTP does not provide details about whether its FETPs are specific to animal or human health. [5] There is no additional information on FETPs that Guyana might participate in through TEPHINET. [6] Guyana is not a member of RedSur, the network of Central and South American FETPs. [7,8]

[1] Centres for Disease Control and Prevention (CDC). "Leveraging Resources and Program to Respond to Zika". [https://www.cdc.gov/globalhealth/healthprotection/fieldupdates/winter-2016/leveraging-resources-zika.html]. Accessed 10 August 2020.

[2] Ministry of Health. [http://www.health.gov.gy/]. Accessed 10 August 2020.

[3] Ministry of Agriculture. [http://agriculture.gov.gy/]. Accessed 31 July 2020.

[4] Training Programs in Epidemiology and Public Health Interventions Network. "TEPHINET Helps Develop the Curriculum for a New, Advanced Caribbean Regional Field Epidemiology Training Program". [https://www.tephinet.org/tephinet-helps-develop-the-curriculum-for-a-new-advanced-caribbean-regional-field-epidemiology]. Accessed 10 August 2020.

[5] Caribbean Public Health Agency (CARPHA). "FELTP". [http://carpha.org/feltp]. Accessed 10 August 2020.

[6] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [https://www.tephinet.org/training-programs]. Accessed 10 August 2020.

[7] RedSur. "Países". [http://redsur.org/paises/]. Accessed 10 August 2020.

[8] Centres for Disease Control and Prevention (CDC). "Field Epidemiology Training Program: Partners & Networks". [https://www.cdc.gov/globalhealth/healthprotection/fetp/partners.html]. Accessed 10 August 2020.

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is some evidence that Guyana has a national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, but the portions of the plan that apply to public health emergencies are not publicly available. Guyana has a national disaster response plan in place. This document, the 2013 Multi-hazard Disaster Preparedness and Response Plan, is intended to be a comprehensive blueprint for the whole of government response to any emergency. Further, the plan includes references to epidemics in its table of contents, and as a secondary risk of other disasters. However, the publicly available portion of the plan does not contain details about how the country plans to respond to epidemics. Rather, it provides a framework for coordination across different ministries, departments, and various other entities to respond to any disaster. While these entities include some involved in health care, they are not the primary focus of the report, and there is little discussion of the response to epidemics or disease outbreaks. Mainly, the plan recognizes that other disasters may create a risk of disease, and seeks to mitigate this risk. The plan makes references to annexes titled "Epidemics" and "Health", but these annexes are not included with the plan, and do not appear to be shared via a publicly available website. Thus, it is impossible to verify their contents. [1] Local media reports indicate that there have been training exercises dealing specifically with the public health aspects of the Multi-Hazard Disaster Plan, but again, those aspects of the plan are not available for review via a public website. [2] No additional information on the plan's relevance to pandemic diseases is made available via public website by the Ministry of Health or the Civil Defence Commission (the body responsible for national emergency response management). [3,4]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 10 August 2020.

- [2] Kaieteur News Online. 11 July 2018. "Health Emergency Plan Unveiled in Lethem".
[<https://www.kaieteurnews.com/2018/07/11/health-emergency-plan-unveiled-in-lethem/>]. Accessed 10 August 2020.
- [3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 10 August 2020.
- [4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 10 August 2020.

3.1.1b

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

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

Current Year Score: 0

There is no evidence that Guyana’s national public health emergency response plan, the Multi-Hazard Disaster Preparedness and Response Plan, has been updated since it was published in 2013. The plan covers all disasters, including epidemics, although detail on the epidemics plan is not publicly available. [1] The only version of the document available from the website of the Civil Defence Commission (the body responsible for national emergency response management) is from 2013. [1,2] The document is not available on any other website of the Guyanese government. However, local media reports and government press releases suggest that the plan has been reviewed and tested as recently as July 2018. [3,4]

- [1] Civil Defence Commission of Guyana. November 2013. “Multi-Hazard Disaster Preparedness and Response Plan”. [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 10 August 2020.
- [2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 10 August 2020.
- [3] Staff reporter. 3 July 2017. “Gov’t Tests Disaster Preparedness Plan”. Guyana Chronicle. [<http://guyanachronicle.com/2017/07/03/govt-tests-disaster-preparedness-plan>]. Accessed 10 August 2020.
- [4] Department of Public Information. 9 July 2018. “HEOC Displays Health Multi-Hazard Emergency Plan in Lethem”. [<http://dpi.gov.gy/heoc-displays-health-multi-hazard-emergency-plan-in-lethem/>]. Accessed 10 August 2020.

3.1.1c

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

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

Current Year Score: 0

There is not enough public evidence to confirm that Guyana’s national public health emergency response plan, the Multi-Hazard Disaster Preparedness and Response Plan, includes considerations for paediatric and other vulnerable populations. The plan covers all disasters, including epidemics, although detail on the epidemics plan is not publicly available. [1] No additional information on the plan’s relevance to pandemic diseases is made available via a public website by the Ministry of Health or the Civil Defence Commission (the body responsible for national emergency response management). [2,3]

- [1] Civil Defence Commission of Guyana. November 2013. “Multi-Hazard Disaster Preparedness and Response Plan”. [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 10 August 2020.
- [2] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 10 August 2020.
- [3] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 10 August 2020.

3.1.1d

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

Yes = 1, No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

Guyana's national public health emergency response plan, the Multi-Hazard Disaster Preparedness and Response Plan, which covers all disasters, makes explicit the need to involve the private sector in response to an emergency, including outbreak emergency preparedness and response. However, detail on the epidemics part of the Plan is not publicly available. [1] Guyana's Private Sector Commission is a member of the country's Disaster Risk Reduction Platform, which assists in programming the response to a disaster. [1,2] It should be noted that the Plan does not specifically address diseases with pandemic potential. [1] Rather, it provides a framework for coordination across different ministries, departments, and various other entities that constitute the Guyanese health sector, to respond to any health emergency. [1]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf]. Accessed 10 August 2020.

[2] Ministry of Health. [http://www.health.gov.gy/]. Accessed 10 August 2020.

[3] Civil Defence Commission. [https://cdc.gy/]. Accessed 10 August 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 0

There is no evidence that Guyana has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for one or more diseases. The World Health Organization (WHO) Strategic Partnership for International Health Regulations and Health Security (SPH) describes Guyana as having either no national plan or no publicly available national plan for pandemic preparedness and risk management. [1] Local media reports

from 2010 indicate that a pandemic plan was under development at that time. [2] But there is no evidence of such a plan shared via a public website by the Ministry of Health, the Civil Defence Commission, or other Guyana government agencies. [3,4] Guyana has implemented measures in response to the COVID-19 pandemic. These measures include curfews, business closures, and quarantine of individuals who may have been infected or exposed. [5] However, there is no evidence that these measures are part of a publicly available plan for responding to COVID-19. Instead, they seem to be emergency regulations issued in isolation. As of August 2020, Guyana was reorganizing its COVID-19 pandemic response. [6]

[1] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) National Plans for Pandemic Preparedness and Risk Management". [<https://extranet.who.int/sph/influenza-plan>]. Accessed 11 August 2020.

[2] Kaieteur News. 2 June 2010. "Pandemic preparedness plan in the making". [<https://www.kaieteurnewsonline.com/2010/06/02/pandemic-preparedness-plan-in-the-making/>]. Accessed 11 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

[5] WorldAware. 2 May 2020. "COVID-19 Alert: Guyana Modifies & Extends Measures Through June 3". [<https://www.worldaware.com/covid-19-alert-guyana-modifies-extends-measures-through-june-3>]. Accessed 11 August 2020.

[6] Department of Public Information. 8 August 2020. "'Politicised task force led to ineffective COVID-19 response' - says Health Minister". [<https://dpi.gov.gy/politicised-task-force-led-to-ineffective-covid-19-response-says-health-minister/#gsc.tab=0>]. Accessed 11 August 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: 0

There is not enough public evidence to confirm that Guyana has activated a national public health emergency response plan in the past year, nor that it has completed a national-level biological threat-focused exercise in the past year. Guyana's 2013 Multi-hazard Disaster Preparedness and Response Plan is intended to be a comprehensive blueprint for the whole of government response to any emergency. [1] However, there is no evidence that the plan was activated in response to the COVID-19 pandemic. Neither the government's "Guyana COVID-19 Info Hub" website nor other government websites indicate that the response to the pandemic has been made in consultation with the Multi-Hazard Disaster Preparedness and Response Plan. [2] No additional information about the activation of the plan is made available via public website by the Ministry of Health, the Ministry of Agriculture, or the Civil Defence Commission (the body responsible for national emergency response management). [3,4, 5] There is no evidence of a national-level biological threat-focused exercise shared via the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal, or in the WHO

Guyana country profile. [6,7,8,9]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf]. Accessed 10 August 2020.

[2] Ministry of Health. "Guyana COVID-19 Info Hub". [https://crushcovid.gov.gy/]. Accessed 11 August 2020.

[3] Ministry of Health. [http://www.health.gov.gy/]. Accessed 10 August 2020.

[4] Ministry of Agriculture. [http://agriculture.gov.gy/]. Accessed 13 August 2020.

[5] Civil Defence Commission. [https://cdc.gy/]. Accessed 10 August 2020.

[6] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 15 August 2020.

[7] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Guyana". [https://extranet.who.int/sph/country-status/guyana#aar]. Accessed 15 August 2020.

[8] World Health Organisation (WHO). "Guyana". [http://www.who.int/countries/guy/en/]. Accessed 15 August 2020.

[9] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Simulation Exercise". [https://extranet.who.int/sph/simulation-exercise]. Accessed 15 August 2020.

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 Guyana in the past year has identified a list of gaps and best practices in response to an infectious disease or to a biological threat-focused exercise, and developed a plan to improve response capabilities. There is no evidence of an after-action review on the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal, or in the WHO Guyana country profile. [1,2,3,4] There is no evidence of such an identification of gaps and best practices in response to the COVID-19 pandemic; for example, there is no information about such support on the government's Guyana "COVID-19 Info Hub" website. [5] There is no relevant information shared via the website of the Ministry of Health, the Civil Defence Commission, or other Guyana government agencies. [6,7]

[1] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 15 August 2020.

[2] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Guyana". [https://extranet.who.int/sph/country-status/guyana#aar]. Accessed 15 August 2020.

[3] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Simulation Exercise". [https://extranet.who.int/sph/simulation-exercise]. Accessed 15 August 2020.

[4] World Health Organisation (WHO). "Guyana". [http://www.who.int/countries/guy/en/]. Accessed 15 August 2020.

[5] Ministry of Health. "Guyana COVID-19 Info Hub". [https://crushcovid.gov.gy/]. Accessed 15 August 2020.

[6] Ministry of Health. [Ministry of Health. [http://www.health.gov.gy/]. Accessed 15 August 2020.

[7] Civil Defence Commission. [https://cdc.gy/]. Accessed 15 August 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana 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 information made available via public website by the Ministry of Health, the Ministry of Agriculture, or the Civil Defence Commission (the body responsible for national emergency response management). [1,2,3] There is no evidence of a national-level biological threat-focused exercise shared via the World Health Organization (WHO) International Health Regulations Strategic Partnership Portal, or in the WHO Guyana country profile. [4,5,6,7]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 10 August 2020.

[2] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 13 August 2020.

[3] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 10 August 2020.

[4] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 15 August 2020.

[5] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Guyana". [<https://extranet.who.int/sph/country-status/guyana#aar>]. Accessed 15 August 2020.

[6] World Health Organisation (WHO). "Guyana". [<http://www.who.int/countries/guy/en/>]. Accessed 15 August 2020.

[7] World Health Organisation. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 15 August 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Guyana has a National Emergency Operations Centre (NEOC), which is housed within the Guyana Civil Defence Commission, the Guyanese body responsible for the management of emergency responses. [1] Although the NEOC does not share information via a website, there are multiple reports and articles online confirming its existence and activity. [2] The Caribbean Disaster Management Agency (CDEMA), in which Guyana participates, does not share information about Guyana's NEOC via a public website. [3]

[1] Caribbean Centre for Development Administration. February 2014. "Strategic Plan for the Civil Defence Commission (CDC) -- Guyana -- 2014 to 2017". [[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/11.%20Strategic%20Plan%20for%20the%20Civil%20Defence%20Commission%20of%20Guyana%20\(2014%20to%202017\).pdf](https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/11.%20Strategic%20Plan%20for%20the%20Civil%20Defence%20Commission%20of%20Guyana%20(2014%20to%202017).pdf)]. Accessed 11 August 2020.

[2] Reliefweb. 22 December 2015. "CDC launches National Emergency Monitoring System".

[<https://reliefweb.int/report/guyana/cdc-launches-national-emergency-monitoring-system>]. Accessed 11 August 2020.

[3] Caribbean Disaster Emergency Management Agency (CDEMA). [<https://www.cdema.org/>]. Accessed 10 October 2018.

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 insufficient public evidence to confirm that Guyana's National Emergency Operations Centre (NEOC), which is housed within the Guyana Civil Defence Commission, is required to conduct a drill at least once a year, or that it does conduct a drill at least once a year. Neither the NEOC nor the Civil Defence Commission share relevant information via a public website. [1] The Ministry of Health does not share relevant information via a public website (including annual reports). [2] Neither Guyana's Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, nor the Ministry of Health's Health Vision 2020 mention the NEOC. [3,4] The 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana describe how the NEOC is organized, but do not mention anything about drills or their frequency. [5,6] The NEOC's standard operating procedures are not available via a public website.

[1] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

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

[3] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 11 August 2020.

[4] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 11 August 2020.

[5] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[6] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence to show that Guyana's National Emergency Operations Centre (NEOC) can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. The 2013 Multi-Hazard Disaster Preparedness and

Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana describe how the NEOC is organised, but do not mention anything about the ability of the NEOC to launch an exercise in this timeframe. [1,2] Neither the NEOC, the Civil Defence Commission (in which the NEOC is housed), nor the Ministry of Health share relevant information via a public website. [3,4]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

[3] Civil Defence Commission. [<http://cdc.gy/>]. Accessed 11 August 2020.

[4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that Guyana's public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event, nor are there publicly available standard operating procedures, guidelines, or agreements between those entities regarding such events. Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing responses to disasters), nor other public defence agencies (such as the Guyana Defence Force) share relevant information via public websites [1,2,3]. Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions deliberate biological events or related terms. [4,5] The National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana does mention a need for a hazard-specific emergency response plan for biological events, as well as one for the health sector. [5]

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

[2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 11 August 2020.

[4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[5] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence Guyana has in place a risk communication plan that is specifically intended for use during a public health emergency and which outlines how messages will reach populations and sectors with different communications needs. Both the 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana discuss intended features of a communications plan. However, these plans do not contain detailed discussions of the communications channels that will be used to reach different audiences; in any case, they apply to emergency and risk communication generally and do not deal specifically with public health emergencies. [1,2] Neither the Ministry of Health nor the Civil Defence Commission (which is responsible for managing emergency response), shares relevant information via public websites [3,4]. Guyana's Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, states that a Draft National Risk Communication Plan has been developed, but there is no evidence of such a plan or draft plan on government websites. [5]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 11 August 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Guyana has in place a risk communication plan that is specifically intended for use during a public health emergency. Both the 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana discuss intended features of a communications plan. However, it is not clear if these plans were implemented; in any case, they apply to emergency and risk communication generally and do not deal specifically with public health emergencies. [1,2] Neither the Ministry of Health nor the Civil Defence Commission (which is responsible for managing emergency response), shares relevant information via public websites [3,4]. Guyana's Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, states that a Draft National Risk Communication Plan has been developed, but there is no evidence of such a plan or draft plan on government websites. [5]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 11 August 2020.

3.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Guyana has in place a risk communication plan that is specifically intended for use during a public health emergency, let alone such a plan that designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. Both the 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana discuss intended features of a communications plan. [1,2] Among these features, the Multi-Hazard plan states that "warnings/ alerts etc will originate from the Ministry of Agriculture, Ministry of Health and Ministry of Public Works and be

sent directly to the public". [1] However, it is not clear if these plans were implemented; in any case, they apply to emergency and risk communication generally and do not deal specifically with public health emergencies. [1,2] Neither the Ministry of Health nor the Civil Defence Commission (which is responsible for managing emergency response), shares relevant information via public websites [3,4]. Guyana's Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas, states that a Draft National Risk Communication Plan has been developed, but there is no evidence of such a plan or draft plan on government websites. [5]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 11 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 11 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 11 August 2020.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 2

There is evidence that the government has actively shared messages via online media platforms to inform the public about ongoing public health concerns, including both active emergencies and about general health concerns. The Ministry of Health has a Facebook page that it updates frequently. [1] Posts include information about the COVID-19 pandemic in Guyana and other news about the ministry. [2] Although recent posts in 2020 have been dominated by COVID-19 information, the ministry has also used the Facebook page to share other health information. [3] The Ministry of Health also has a Twitter page, which has been active since March 2019. This is updated less frequently than the Facebook page, but also shares COVID-19 and other information about public health concerns such as malaria and zika virus. [4] The Civil Defence Commission, which is responsible for the management of emergency responses, has a National Emergency Monitoring System, which can accept information from anyone via text message; it is not clear whether it can also disseminate information. [5] The 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana states the need to improve the use of text messages for disaster preparation, though it is not clear whether this has occurred. [6]

- [1] Facebook. "Ministry of Health - Guyana". [<https://www.facebook.com/mophguyana/>]. Accessed 11 August 2020.
- [2] Facebook. 10 August 2020. "COVID-19 Daily Update -- August 10, 2020". [<https://www.facebook.com/watch/?v=586904808862443>]. Accessed 11 August 2020.
- [3] Facebook. 20 September 2018. "Ministry of Health - Guyana: Exclusive Breastfeeding Lowering Infant Mortality Rate". [<https://www.facebook.com/mophguyana/>]. Accessed 11 August 2020.
- [4] Twitter. "Ministry of Health-Guyana". [<https://twitter.com/MinistryofPubl1>]. Accessed 11 August 2020.
- [5] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 11 August 2020.
- [6] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 11 August 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior Guyana leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. Frank Anthony, the Minister of Health since August 2020, appears to use his Facebook page and Twitter feed to share information on COVID-19. (However, neither page is a verified account.) [1,2] The president, Irfaan Ali, also has a Twitter account (also unverified), but has not recently used it to share information about infectious diseases. [3] Neither individual appears to have shared misinformation or disinformation about infectious diseases. There are no media reports about Guyanese officials sharing incorrect information via social media.

[1] Facebook. "@DrFrankkAnthony". [<https://www.facebook.com/Dr.FrankkAnthony/>]. Accessed 11 August 2020.

[2] Twitter. "@fcsanthony1". [<https://twitter.com/fcsanthony1>]. Accessed 11 August 2020.

[3] Twitter. "@IrfaanAliPPPC". [<https://twitter.com/IrfaanAliPPPC>]. Accessed 11 August 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: 37.33

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: 82.97

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

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

Input number

Current Year Score: 3.14

2018-2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 4.24

2018-2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that, in the past year, Guyana has issued a restriction on the export or import of medical goods, without international/bilateral support, 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 Guyana in the last year that prompted international movement restrictions of goods. [2] Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of Foreign Affairs share relevant information via public websites, including the Ministry of Foreign Affairs "COVID-19 Emergency Measures". [3,4,5,6] 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: Guyana". [<http://www.who.int/csr/don/archive/country/guy/en/>]. Accessed 11 August 2020.
- [2] World Organisation for Animal Health (OIE). "Weekly Disease Information". [https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 11 August 2020.
- [3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.
- [4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 11 August 2020.
- [5] Ministry of Foreign Affairs. [<https://www.minfor.gov.gy/>]. Accessed 11 2020.
- [6] Ministry of Foreign Affairs. 3 April 2020. "Notice: COVID-19 Emergency Measures". [<https://www.minfor.gov.gy/press-releases/notice-covid-19-emergency-measures/>]

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, Guyana 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 Guyana in the last year that prompted international movement restrictions of goods. [2] Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of Foreign Affairs shares relevant information via public websites, including the Ministry of Foreign Affairs' "COVID-19 Emergency Measures". [3,4,5,6] 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: Guyana". [<http://www.who.int/csr/don/archive/country/guy/en/>]. Accessed 11 August 2020.
- [2] World Organisation for Animal Health (OIE). "Weekly Disease Information". [https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 11 August 2020.
- [3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.
- [4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 11 August 2020.
- [5] Ministry of Foreign Affairs. [<https://www.minfor.gov.gy/>]. Accessed 11 2020.
- [6] Ministry of Foreign Affairs. 3 April 2020. "Notice: COVID-19 Emergency Measures". [<https://www.minfor.gov.gy/press-releases/notice-covid-19-emergency-measures/>]

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: 1

There is no evidence that Guyana has implemented a ban in the past year, without international/bilateral support, on travelers arriving from a specific country or countries 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 Guyana in the last year that prompted international movement restrictions of people, animals, or goods [2]. Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of Foreign Affairs share relevant information via public websites, including the Ministry of Foreign Affairs "COVID-19 Emergency Measures". [3,4,5,6] No mention of restrictions on the movement of people and goods could be found in a search of news media outlets. No mention of restrictions on a ban on travelers could be found in a search of news media outlets. Early in the pandemic, Guyana closed its borders to all travel, but this did not target specific countries. [7] A phased reopening began in July 2020. [8]

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

[<http://www.who.int/csr/don/archive/country/guy/en/>]. Accessed 11 August 2020.

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

[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 11 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 11 August 2020.

[5] Ministry of Foreign Affairs. [<https://www.minfor.gov.gy/>]. Accessed 11 2020.

[6] Ministry of Foreign Affairs. 3 April 2020. "Notice: COVID-19 Emergency Measures". [<https://www.minfor.gov.gy/press-releases/notice-covid-19-emergency-measures/>]

[7] WorldAware. 1 April 2020. "COVID-19 Alert: Guyana Closes Land Borders and Extends Cancellation of International Passenger Flights Through May 1". [<https://www.worldaware.com/covid-19-alert-guyana-closes-land-borders-and-extends-cancellation-international-passenger-flights>]. Accessed 13 August 2020.

[8] Caribbean National Weekly. 9 June 2020. "Guyana to Re-open International Airports in Phased Measures in July".

[<https://www.caribbeannationalweekly.com/caribbean-breaking-news-featured/guyana-to-re-open-international-airports-in-phased-measures-in-july/>]. Accessed 13 August 2020.

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 80.23

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 103.98

2018

WHO; national sources

4.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

Guyana does not appear to have a public workforce strategy in place that is less than five years old, which identifies fields where there is an insufficient workforce, and strategies to address these shortcomings. The Ministry of Health's 2013 Health Vision 2020 describes gaps in the health workforce in detail, specific objectives for the future, and plans for achieving those objectives. As noted, however, this plan is over five years old. [1] The recommendations of the Strategy build off Guyana's separate, earlier plan for developing its workforce, a 2010 report called Strengthening the Foundation: A Health Human Resource Action Plan for Guyana 2011-2016. As of 2020, this plan was no longer available via public websites; in any case, it is eight years old. [2] The Caribbean Community (CARICOM), of which Guyana is a member, has published a "Human Resource Development Strategy 2030" which contains some statistics on the Guyana workforce, but does not amount to a workforce strategy specific to the country, let alone one that specifically covers the health workforce. [3] No additional information is shared via a public website by the Ministry of Health, the Ministry of Education, or the Ministry of Social

Protection (which appears to be responsible for labor in the country). [4,5,6]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[2] Government of Guyana. December 2010. "Strengthening the Foundation: A Health Human Resources Action Plan for Guyana, 2011-2016". [https://pftp.paho.org/_layouts/15/WopiFrame.aspx?sourcedoc=/Public/GUY/UH/GUYANA%20HHR-FINAL%20REPORT-CAMERON_BB_Suggest.docx&action=default]. Accessed 28 September 2018.

[3] Caribbean Community (CARICOM). "Human Resource Development 2030 Strategy: Unlocking Caribbean Human Potential". [<https://caricom.org/documents/16065-caricom-hrd-2030-strategy-viewing.pdf>]. Accessed 11 August 2020.

[4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 11 August 2020.

[5] Ministry of Education. [<https://www.education.gov.gy/web/>]. Accessed 11 August 2020.

[6] Ministry of Social Protection. [<https://mosp.gov.gy/>]. Accessed 11 August 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 171

2016

WHO/World Bank; national sources

4.1.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Guyana has the capacity to isolate patients with highly communicable diseases in a patient isolation facility located within the country. The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organisation (WHO) Regional Office for the Americas, reports that there have been isolation rooms identified in Guyanese hospitals. However, no details are provided about the location of these rooms, except that procedures around their use were strengthened in the wake of the 2014 Ebola outbreak in West Africa. [1] Guyana's 2013 Multi-Hazard Disaster Preparedness and Response Plan does not mention biocontainment units or isolation facilities. [2] A government release in July 2018 indicated that the country planned to create isolation units at regional hospitals; it is not clear whether this occurred as planned. [3] The COVID-19 pandemic spurred the creation of several isolation units at both private hospitals and public facilities around the country. Private facilities include the St. Joseph Mercy Hospital in Georgetown. [4,5] Other facilities with self-described isolation units include the Wismar Hospital in Linden. [6] The United Nations High Commissioner for Refugees (UNHCR) has also provided some 48 mobile isolation units for use in the country. [7,8] In September 2020, a new infectious diseases facility in Georgetown was used to house COVID-19 patients. [9] However, in none of the above examples is there publicly available information showing that these facilities have advanced isolation capacities, such as negative/positive pressure, a separate air system, entrances/exits. There is no information about their precise features. The government does not share a master list of isolation facilities, and at least at

one point, was keeping the names of isolation facilities confidential. [10] Further, media has reported that poor and inadequate conditions exist at some of the designated isolation centers. [11,12] No additional information is provided via a public website by the Ministry of Health. [13] Georgetown Public Hospital, the country's largest health care facility, does not share relevant information via a public website. Neither St. Joseph Mercy Hospital nor the Medical Arts Centre, two prominent private facilities, share relevant information via a public website. [14]

[1] Pan American Health Organisation and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 4 August 2020.

[2] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 17 September 2018.

[3] Department of Public Information. 9 July 2018. "HEOC Displays Health Multi-Hazard Emergency Plan in Lethem". [<https://dpi.gov.gy/heoc-displays-health-multi-hazard-emergency-plan-in-lethem/>]. Accessed 28 September 2018.

[4] St. Joseph Mercy Hospital Georgetown. 24 May 2020. "Mercy Hospital's COVID19 Response". [<http://mercyhospital.gy/health-care/mercy-hospitals-covid19-response/>]. Accessed 11 August 2020.

[5] St. Joseph Mercy Hospital Georgetown. "Covid-19 Annexe". [<https://mercyhospital.gy/covid-19-annexe/>]. Accessed 11 August 2020.

[6] Guyana Chronicle. 10 April 2020. "Wismar Hospital identified as isolation facility for COVID-19 patients". [<https://guyanachronicle.com/2020/04/10/wismar-hospital-identified-as-isolation-facility-for-covid-19-patients/>]. Accessed 11 August 2020.

[7] Department of Public Information. 15 July 2020. "Guyana benefits from UNHCR pre-manufactured housing units". [<https://dpi.gov.gy/guyana-benefits-from-unhcr-pre-manufactured-housing-units/#gsc.tab=0>]. Accessed 11 August 2020.

[8] Department of Public Information. 7 August 2020. "UNHCR pre-manufactured housing units to boost COVID-19 quarantine and isolation capacity across the administrative regions in full operations.". [<https://dpi.gov.gy/unhcr-pre-manufactured-housing-units-to-boost-covid-19-quarantine-and-isolation-capacity-across-the-administrative-regions-in-full-operations/#gsc.tab=0>]. Accessed 11 August 2020.

[9] Dunkley, Jascene. 20 September 2020. "First batch of patients shifted to COVID-19 hospital in Guyana". Caricom Today. [<https://today.caricom.org/2020/09/03/first-batch-of-patients-shifted-to-covid-19-hospital-in-guyana/>]. Accessed 9 March 2021.

[10] Department of Public Information. 26 March 2020. "Guyana's Quarantine Facilities". [<https://dpi.gov.gy/guyanas-quarantined-facilities/#gsc.tab=0>]. Accessed 11 August 2020.

[11] News Room. 25 May 2020. "COVID-19 patients bemoan conditions at Diamond Isolation Unit". [<https://newsroom.gy/2020/05/25/covid-19-patients-bemoan-conditions-at-diamond-isolation-unit/>]. Accessed 11 August 2020.

[12] Stabroek News. 25 May 2020. "Doctors attempt to kick down door at Diamond isolation facility". [<https://www.stabroeknews.com/2020/05/25/news/guyana/doctors-attempt-to-kick-down-door-at-diamond-isolation-facility/>]. Accessed 11 August 2020.

[13] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 2 September 2020.

[14] St. Joseph Mercy Hospital. [<http://mercyhospital.gy/>]. Accessed 2 September 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 evidence to show that Guyana 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.

The COVID-19 pandemic spurred the creation of several isolation units at both private hospitals and public facilities around the country. Private facilities include the St. Joseph Mercy Hospital in Georgetown. [1,2] Other facilities with self-described isolation units include the Wismar Hospital in Linden. [3] The United Nations High Commissioner for Refugees (UNHCR) has also provided some 48 mobile isolation units for use in the country. [4,5] In September 2020, a new infectious diseases facility in Georgetown was used to house COVID-19 patients. [6] However, in none of the above examples is there publicly available information showing that these facilities are true biocontainment units. There is no information about their precise features. The government does not share a master list of isolation facilities, and at least at one point, was keeping the names of isolation facilities confidential. [6] Further, media has reported that poor and inadequate conditions exist at some of the designated isolation centers. [7,8] Aside from the response to the COVID-19 pandemic, there is no other recent evidence of the expansion of isolation facilities. The Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organisation (WHO) Regional Office for the Americas, reports that there have been isolation rooms identified in Guyanese hospitals. However, no details are provided about the location of these rooms, except that procedures around their use were strengthened in the wake of the 2014 Ebola outbreak in West Africa. [9] Guyana's 2013 Multi-Hazard Disaster Preparedness and Response Plan does not mention biocontainment units or isolation facilities. [10] A government release in July 2018 indicated that the country planned to create isolation units at regional hospitals; it is not clear whether this occurred as planned. [11] No additional information is provided via a public website by the Ministry of Health. [12] Georgetown Public Hospital, the country's largest health care facility, does not share relevant information via a public website. Neither St. Joseph Mercy Hospital nor the Medical Arts Centre, two prominent private facilities, share relevant information via a public website. [13]

[1] St. Joseph Mercy Hospital Georgetown. 24 May 2020. "Mercy Hospital's COVID19 Response".

[<http://mercyhospital.gy/health-care/mercy-hospitals-covid19-response/>]. Accessed 9 March 2021.

[2] St. Joseph Mercy Hospital Georgetown. "Covid-19 Annexe". [<https://mercyhospital.gy/covid-19-annexe/>]. Accessed 9 March 2021.

[3] Guyana Chronicle. 10 April 2020. "Wismar Hospital identified as isolation facility for COVID-19 patients".

[<https://guyanachronicle.com/2020/04/10/wismar-hospital-identified-as-isolation-facility-for-covid-19-patients/>]. Accessed 9 March 2021.

[4] Department of Public Information. 15 July 2020. "Guyana benefits from UNHCR pre-manufactured housing units".

[<https://dpi.gov.gy/guyana-benefits-from-unhcr-pre-manufactured-housing-units/#gsc.tab=0>]. Accessed 9 March 2021.

[5] Department of Public Information. 7 August 2020. "UNHCR pre-manufactured housing units to boost COVID-19 quarantine and isolation capacity across the administrative regions in full operations".

[<https://dpi.gov.gy/unhcr-pre-manufactured-housing-units-to-boost-covid-19-quarantine-and-isolation-capacity-across-the-administrative-regions-in-full-operations/#gsc.tab=0>]. Accessed 9 March 2021.

[6] Dunkley, Jascene. 20 September 2020. "First batch of patients shifted to COVID-19 hospital in Guyana". Caricom Today.

[<https://today.caricom.org/2020/09/03/first-batch-of-patients-shifted-to-covid-19-hospital-in-guyana/>]. Accessed 9 March 2021.

[7] News Room. 25 May 2020. "COVID-19 patients bemoan conditions at Diamond Isolation Unit".

[<https://newsroom.gy/2020/05/25/covid-19-patients-bemoan-conditions-at-diamond-isolation-unit/>]. Accessed 9 March 2021.

2021.

[8] Stabroek News. 25 May 2020. "Doctors attempt to kick down door at Diamond isolation facility".

[<https://www.stabroeknews.com/2020/05/25/news/guyana/doctors-attempt-to-kick-down-door-at-diamond-isolation-facility/>]. Accessed 9 March 2021.

[9] Pan American Health Organisation and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 9 March 2021.

[10] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 9 March 2021.

[11] Department of Public Information. 9 July 2018. "HEOC Displays Health Multi-Hazard Emergency Plan in Lethem". [<https://dpi.gov.gy/heoc-displays-health-multi-hazard-emergency-plan-in-lethem/>]. Accessed 9 March 2021.

[12] Department of Public Information. 26 March 2020. "Guyana's Quarantine Facilities". [<https://dpi.gov.gy/guyanas-quarantined-facilities/#gsc.tab=0>]. Accessed 9 March 2021.

[13] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 9 March 2021.

[14] St. Joseph Mercy Hospital. [<http://mercyhospital.gy/>]. Accessed 9 March 2021.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 0

Guyana has national procurement protocols in place, but it is unclear that they are or can be utilized by the Ministry of Health and the Ministry of Agriculture for the acquisition of laboratory supplies and medical supplies for routine needs. The National Procurement and Tender Administration (NPTA) is the body that issues and facilitates procurement regulations in the country. [1] The NPTA has published multiple guidelines describing the procedures for government procurement, which are available on its website. These include the May 2009 Guyana Legal and Policy Framework for Public Procurement and the September 2010 Guyana Procurement Planning Manual. [2,3] These guidelines are based on the Guyanese laws governing procurement: the Procurement Act of 2003 and the Regulations made under the act and issued in November 2004. [4,5] But although these regulations serve as the governing regulations for all public procurement in Guyana, they do not specifically deal with or mention the Ministries of Public Health and Agriculture, nor mention laboratory or medical supplies specifically. Further, neither the Ministry of Health nor the Ministry of Agriculture shares additional information on procurement via public websites. [6,7] Similarly, national laboratories such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory do not share information via public websites.

[1] National Procurement and Tender Administration (NPTA). "About the NPTA". [<http://www.npta.gov.gy/npta.html>]. Accessed 12 August 2020.

[2] Government of Guyana. May 2009. "Guyana Legal and Policy Framework for Public Procurement: Guide to the Public Procurement Procedures". [http://www.npta.gov.gy/docs/Guyana_Public_Procurement_Guide_May2009.pdf]. Accessed 12

August 2020.

[3] Government of Guyana. September 2010. "Guyana Procurement Planning Manual".

[http://www.npta.gov.gy/docs/Guyana_Procurement_Planning_Manual_Sept2010.pdf]. Accessed 12 August 2020.

[4] Government of Guyana. Laws of Guyana, Chapter 73:05 (Act 8 of 2003). "Procurement Act".

[<http://www.npta.gov.gy/docs/Procurement%20Act%202003.pdf>]. Accessed 12 August 2020.

[5] Government of Guyana. 26 November 2004. "Regulations Made under the Procurement Act 2003 (No. 8 of 2003)". The official Gazette (Legal Supplement) - B. [<http://www.npta.gov.gy/docs/Procurement%20Regulations%202004.pdf>]. Accessed 12 August 2020.

[6] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 12 August 2020.

[7] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 12 August 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 0

There is insufficient evidence to conclude that Guyana 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. Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares information via public websites about such stockpiles. [1,2,3] Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020 nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions stockpiles or other relevant information. [4,5,6] In response to the COVID-19 pandemic, the Ministry of Health has announced efforts to increase its stocks of PPE, but it is unclear how extensive such stocks are, or if they will be retained as a permanent stockpile. [7] There are no media reports or other information shared via government websites indicating a new policy for medical countermeasure stockpiling in response to COVID-19.

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

[2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 12 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 12 August 2020.

[4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 12 August 2020.

[5] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.

[6] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[7] Rover, Kellon. 13 April 2020. "MoPH working to restock PPE regularly". Department of Public Information. [<https://dpi.gov.gy/moph-working-to-restock-ppe-regularly/#gsc.tab=0>].

4.2.2b

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

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

Current Year Score: 0

There is insufficient evidence to conclude that Guyana maintains a stockpile of laboratory supplies for national use during a public health emergency. Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares information via public websites about such stockpiles. [1,2,3] Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020 nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions stockpiles or other relevant information. [4,5,6] There are no media reports or other information shared via government websites indicating a new policy for laboratory supply stockpiling in response to COVID-19.

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

[2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 12 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 12 August 2020.

[4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 12 August 2020.

[5] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[6] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Guyana conducts or requires an annual review of a national stockpile of medical supplies to ensure the supply is sufficient for a public health emergency, nor that such a stockpile exists. Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares information via public websites about such stockpiles. [1,2,3] Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020 nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions stockpiles or other relevant information. [4,5,6] In response to the COVID-19 pandemic, the Ministry of Health has announced efforts to increase its stocks of PPE, but it is unclear how extensive such stocks are, or if they will be retained as a permanent stockpile. [7] There are no media reports or other information shared via government websites indicating a new policy for medical countermeasure stockpiling in response to COVID-19.

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 12 August 2020.
- [2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 12 August 2020.
- [3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 12 August 2020.
- [4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 12 August 2020.
- [5] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.
- [6] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.
- [7] Rover, Kellon. 13 April 2020. "MoPH working to restock PPE regularly". Department of Public Information. [<https://dpi.gov.gy/moph-working-to-restock-ppe-regularly/#gsc.tab=0>].

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 insufficient evidence to conclude that, for national use during a public health emergency, Guyana has a plan or agreement to leverage domestic manufacturing capacity to produce medical supplies (such as medicines, vaccines, medical equipment, medical countermeasures, or personal protective equipment, or PPE), or a plan or mechanism to procure medical supplies (such as medicines, vaccines, medical equipment, medical countermeasures, or personal protective equipment, or PPE). Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares information via public websites about such plans or mechanisms. [1,2,3] Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020 nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions relevant information. [4,5,6] In response to the COVID-19 pandemic, the Ministry of Health has announced efforts to increase its stocks of personal protective equipment (PPE), in part depending on donations from the Pan American Health Organization. However, there is no publicly available evidence that these efforts are unified under a single plan or mechanism. [7]

- [1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 12 August 2020.
- [2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 12 August 2020.
- [3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 12 August 2020.
- [4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 12 August 2020.
- [5] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.

Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.

[6] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[7] Rover, Kellon. 13 April 2020. "MoPH working to restock PPE regularly". Department of Public Information. [<https://dpi.gov.gy/moph-working-to-restock-ppe-regularly/#gsc.tab=0>].

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 insufficient evidence to conclude that, for national use during a public health emergency, Guyana has a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies, or a plan or mechanism to procure laboratory supplies. Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares information via public websites about such plans or mechanisms. [1,2,3] Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020 nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana mentions relevant information. [4,5,6]

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

[2] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 12 August 2020.

[3] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 12 August 2020.

[4] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 12 August 2020.

[5] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 12 August 2020.

[6] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 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 a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. Neither the 2013 Multi-Hazard Disaster Preparedness and Response Plan, the Ministry of Health's Health Vision 2020, nor the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana contains a plan for dispensing medical countermeasures. [1,2,3] The Multi-Hazard document appoints the Civil Defence Commission to distribute medicines and medical equipment during an emergency, and calls for the supplying of "medical supplies ... to the affected population" during a disaster, but does not go into any greater detail. [1] Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares relevant information via public websites. [4,5,6] There is no evidence that Guyana has articulated a new policy for dispensing MCMs in response to the COVID-19 pandemic. For example, legislation mandating masks and social distancing, "COVID-19 Emergency Measures", issued in spring and summer 2020, does not include a plan for MCM distribution. [7]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 13 August 2020.

[2] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[3] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 13 August 2020.

[4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.

[5] Civil Defence Commission. [<http://cdc.gy/>]. Accessed 13 August 2020.

[6] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 13 August 2020.

[7] Government of Guyana. "COVID-19 Emergency Measures (No. 7)". Official Gazette Legal Supplement — B. 30 July 2020. [<https://crushcovid.gov.gy/resources/>]. Accessed 13 August 2020.

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

4.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public plan in place to receive health personnel from other countries to respond to a public health emergency. There is no mention of such a mechanism or plan in the 2013 Multi-Hazard Disaster Preparedness and Response Plan or the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana. [1,2] Neither the Ministry of Health, the Civil Defence Commission (which is responsible for managing emergency response), nor other public defence agencies (such as the Guyana Defence Force) shares relevant information via public websites. [3,4,5] There is no evidence that Guyana 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 on the government's "Guyana COVID-19 Info Hub" website. [6]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana".

[http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf]. Accessed 13 August 2020.

[3] Ministry of Health. [http://www.health.gov.gy/]. Accessed 13 August 2020.

[4] Civil Defence Commission. [http://cdc.gy/]. Accessed 13 August 2020.

[5] Ministry of Public Security. [https://mops.gov.gy/]. Accessed 13 August 2020.

[6] Ministry of Health. "Guyana COVID-19 Info Hub". [https://crushcovid.gov.gy/]. Accessed 11 August 2020.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 85.7

2014

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: 131.53

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 of legislation, policies, or public statements regarding prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. No mention of such a policy occurs in the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organisation (PAHO) and the World Health Organisation (WHO) Regional Office for the Americas; in the Ministry of Health's Health Vision 2020 plan; in the 2013 Multi-Hazard Disaster Preparedness and Response Plan; or in the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana. [1,2,3,4] The Ministry of Health does not provide any other relevant information via a public website. [5] In response to the COVID-19 pandemic, Guyana offered housing and other services to health workers. [7] However, it has not publicized any policy of prioritized health care services to these workers, through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [6]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf]. Accessed 13 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.

[4] Civil Defence Commission. [<http://cdc.gy/>]. Accessed 13 August 2020.

[5] Ministry of Public Security. [<https://mops.gov.gy/>]. Accessed 13 August 2020.

[6] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

[7] Ministry of Health. 3 April 2020. "MOPH looking to house COVID-19 health workers". [<https://crushcovid.gov.gy/moph-looking-to-house-covid-19-health-workers/>]. Accessed 13 August 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Guyana. Both the 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana discuss intended features of a communications plan. The Multi-Hazard Plan states in its introduction that it "incorporates all disaster management activities from preparedness to response. It presents a framework for emergency response at different levels of government structures; identifies the roles and responsibilities of various stakeholders; and lays down coordination mechanism for activities with civil society, the news media, public and private sector". However, despite such assertions, these plans do not actually contain detailed discussions of the communications channels that should be used between public health officials and healthcare workers; in any case, they apply to emergency and risk communication generally and do not deal specifically with public health emergencies. In both plans, discussions of communications focus on communicating between authorities and the public, and not between different government entities (let alone different government health entities). The Integrated Disaster Risk Management Plan suggests the development of a national telecommunications plan. According to its table of contents, an annex of the Multi-Hazard Plan (which was published the same year as the Disaster Risk Management Plan) is titled "National Telecommunications Plan", but the annex is not included in the published version of the plan and there is no evidence that is available elsewhere via a public website, so it is impossible to evaluate its contents or to know whether it exists. [1,2] Neither the Ministry of Health nor the Civil Defence Commission (which is responsible for managing emergency response), shares relevant information via public websites. [3,4] A May 2018 release from the Department of Public Information indicated that Guyana was in the process of drafting a new "National Communication Strategic Plan" for health. However, no version of this plan (old or new) could be found on government websites or elsewhere on the internet. [5] The government has not publicized any relevant communications plan as part of its response to the COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [6]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 13

August 2020.

August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 13 August 2020.

[5] Department of Public Information. 7 May 2018. "Health Ministry to adopt more people-centred health communication strategy". [<https://dpi.gov.gy/health-ministry-to-adopt-more-people-centred-health-communication-strategy/>]. Accessed 13 August 2020.

[6] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Guyana. Both the 2013 Multi-Hazard Disaster Preparedness and Response Plan and the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana discuss intended features of a communications plan, let alone one that incorporates such workers in both the public and the private sector. The Multi-Hazard Plan states in its introduction that it "incorporates all disaster management activities from preparedness to response. It presents a framework for emergency response at different levels of government structures; identifies the roles and responsibilities of various stakeholders; and lays down coordination mechanism for activities with civil society, the news media, public and private sector". However, despite such assertions, these plans do not actually contain detailed discussions of the communications channels that should be used between public health officials and healthcare workers; in any case, they apply to emergency and risk communication generally and do not deal specifically with public health emergencies. In both plans, discussions of communications focus on communicating between authorities and the public, and not between different government entities (let alone different government health entities). The Integrated Disaster Risk Management Plan suggests the development of a national telecommunications plan. According to its table of contents, an annex of the Multi-Hazard Plan (which was published the same year as the Disaster Risk Management Plan) is titled "National Telecommunications Plan", but the annex is not included in the published version of the plan and there is no evidence that is available elsewhere via a public website, so it is impossible to evaluate its contents or to know whether it exists. [1,2] Neither the Ministry of Health nor the Civil Defence Commission (which is responsible for managing emergency response), shares relevant information via public websites. [3,4] A May 2018 release from the Department of Public Information indicated that Guyana was in the process of drafting a new "National Communication Strategic Plan" for health. However, no version of this plan (old or new) could be found on government websites or elsewhere on the internet. [6] The government has not publicized any relevant communications plan as part of its response to the COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [6]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[<http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 13 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.

[4] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 13 August 2020.

[5] Department of Public Information. 7 May 2018. "Health Ministry to adopt more people-centred health communication strategy". [<https://dpi.gov.gy/health-ministry-to-adopt-more-people-centred-health-communication-strategy/>]. Accessed 13 August 2020.

[6] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Guyana's public health system monitors for and tracks the number of health care associated infections (HCAIs) that take place in healthcare facilities. HCAIs are not mentioned in the Ministry of Health's Health Vision 2020, or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [1,2] The Georgetown Public Hospital, the largest healthcare facility in the country, reports in a 2013 Infection Prevention and Control Manual that it has monitored HCAIs for decades, but does not provide additional details. [3] Moreover, the statement is specific to that hospital and not the public health system generally. The WHO library of national action plans for antimicrobial resistance does not list an entry for Guyana; such plans sometimes provide relevant information. [4] No additional information is made available via a public website by the Ministry of Health, or national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [5,6]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[2] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 13 August 2020.

[3] Georgetown Public Hospital Corporation. 2013. "Infection Prevention and Control Manual". [https://www.paho.org/canada/index.php?option=com_docman&view=download&alias=6685-infection-prevention-and-control-manual&category_slug=guyana&Itemid=308&lang=en]. Accessed 13 August 2020.

[4] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 13 August 2020.

[5] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.

[6] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 13 August 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: 1

There is a national requirement for ethical review before beginning a clinical trial in Guyana, though few details on what this entails are publicly available. Section 14(3) of the Medical Practitioners Act of 1991 states that before any clinical research involving human beings begins, a research protocol must be submitted to and reviewed by "an appropriate Ethics Committee of the Ministry of Health". [1] No information on clinical trials or ethics committees is provided via a public website by the Ministry of Health, the Ministry of Education, or national laboratories, such as the National Public Health Reference Laboratory and the Guyana Livestock Development Authority Veterinary Laboratory. [2,3,4] The Medical Council of Guyana, which is empowered under the 1991 Act, released regulations in 2008 that also mention the Ethics Committee requirement for clinical research, but which do not provide any clarification beyond what already exists in the law. [5] No other relevant information is shared via a public website by the Medical Council. [6]

[1] Government of Guyana. Laws of Guyana, Chapter 32:02 (Act 16 of 1991). "Medical Practitioners Act". [<https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000>]. Accessed 13 August 2020.

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

[3] Ministry of Education. [<https://www.education.gov.gy/web/>]. Accessed 13 August 2020.

[4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 13 August 2020.

[5] Medical Council of Guyana. 2008. "Regulations Made under the Medical Practitioners Act (Act No. 16 of 1991)". [http://medicalcouncil.org.gy/doctors/Code_of_Ethics_Regulations.pdf]. Accessed 13 August 2020.

[6] Medical Council of Guyana. [<http://www.medicalcouncil.org.gy/medcouncil/>]. Accessed 13 August 2020.

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. There is no mention of expedited clinical trials in the 2013 Multi-Hazard Disaster Preparedness and Response Plan; the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana; the government's Health Vision 2020; the Medical Practitioners Act of 1991; or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [1,2,3,4,5] Neither the Ministry of Health, the Ministry of Education, the Civil Defence Commission (the body responsible for managing disaster responses), nor the Medical Council of Guyana share additional relevant information via public websites. [6,7,8,9] The government has not publicized any relevant policy as part of its response to the

COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [10]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan".

[https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf]. Accessed 13 August 2020.

[3] Ministry of Health. December 2013. "Health Vision 2020". [http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf]. Accessed 4 August 2020.

[4] Government of Guyana. Laws of Guyana, Chapter 32:02 (Act 16 of 1991). "Medical Practitioners Act". [https://mola.gov.gy/information/laws-of-guyana?limit=1000&limitstart=1000]. Accessed 13 August 2020.

[5] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1]. Accessed 13 August 2020.

[6] Ministry of Health. [http://www.health.gov.gy/]. Accessed 13 August 2020.

[7] Ministry of Education. [https://www.education.gov.gy/web/]. Accessed 13 August 2020.

[8] Ministry of Health. [https://www.health.gov.gy/]. Accessed 13 August 2020.

[9] Civil Defence Commission. [https://cdc.gy/]. Accessed 13 August 2020.

[10] Medical Council of Guyana. [http://www.medicalcouncil.org.gy/medcouncil/]. Accessed 13 August 2020.

[11] Ministry of Health. "Guyana COVID-19 Info Hub". [https://crushcovid.gov.gy/]. Accessed 11 August 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Guyana has a government agency responsible for approving new medical countermeasures for humans. The World Health Organization (WHO) reports that approval is governed by the Food and Drugs Act, 1971, and that the body in charge of regulation is the Food and Drug Department of the Ministry of Health. [1] The Act does not make it clear by what process the department manages approval. [2,3] The Food and Drug Department's website has little information about approval processes for medical countermeasures (focusing instead on food quality inspection), but a brochure that is downloadable from the website confirms the Department's role in regulating "foods, drugs, cosmetics, medical devices and water". [3,4] However, both the content of the Act and academic analyses make it clear that the law "controls the manufacture, importation, sale, advertising, labelling, packaging, and distribution of drug samples, and the testing of drugs". [2,5] A February 2017 report from the Guyanese Department of Public Information (DPI) indicated that the 1971 Act was due for an update in 2017. [6] However, there is no publicly available evidence that such an update has yet taken place. Another DPI report from March 2018 indicates that deliberations about updates were ongoing at that time. [7] Neither the Ministry of Health, the Ministry of Education, nor the Medical Council of Guyana share additional relevant information via public website. [8,9,10]

[1] World Health Organisation. "Medical Devices Regulatory Systems at Country Level: Guyana".

[http://www.who.int/medical_devices/countries/regulations/guy.pdf]. Accessed 14 August 2020.

[2] Government of Guyana. Laws of Guyana, Chapter 34:03 (Act 12 of 1971). "Food and Drugs Act".

[http://www.vertic.org/media/National%20Legislation/Guyana/GY_Food_and_Drugs_Act_Cap._34.03.pdf]. Accessed 14 August 2020.

[3] Government Analyst -- Food and Drug Department. "Resources". [<http://gafdd.gy/resources/>]. Accessed 14 August 2020.

[4] Government Analyst -- Food and Drug Department. [<http://gafdd.gy/>]. Accessed 14 August 2020.

[5] Woo-Ming, Rex. B. January 1993. "The Drug Regulatory and Review Process in Guyana". *Journal of Clinical Pharmacology* 33[1] : 14-21. [<https://accp1.onlinelibrary.wiley.com/doi/abs/10.1002/j.1552-4604.1993.tb03897.x>]. Accessed 14 August 2020

[6] Department of Public Information. 15 February 2017. "Gov't Analyst Food, Drug Dept. to Have Governing Documents Amended—Among Other Plans for 2017". [<https://dpi.gov.gy/govt-analyst-food-drug-dept-to-have-governing-documents-amended-among-other-plans-for-2017/>]. Accessed 14 August 2020.

[7] Department of Public Information. 19 March 2018. "Consultation Held to Review Pharmaceutical Acts and Regulations". [<https://dpi.gov.gy/consultation-held-to-review-pharmaceutical-acts-and-regulations/>]. Accessed 14 August 2020

[8] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 14 August 2020.

[9] Ministry of Education. [<https://www.education.gov.gy/web/>]. Accessed 14 August 2020.

[10] Medical Council of Guyana. [<http://www.medicalcouncil.org.gy/medcouncil/>]. Accessed 14 August 2020.

4.7.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. There is no mention of expedited approvals in the 2013 Multi-Hazard Disaster Preparedness and Response Plan; the 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana; the Ministry of Health's Health Vision 2020; or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [1,2,3,4] Neither the Ministry of Health, the Ministry of Education, the Civil Defence Commission (the body responsible for managing disaster responses), nor the Medical Council of Guyana shares additional relevant information via public websites. [5,6,7,8] There is no relevant information shared via the website of the Food and Drug Department of the Ministry of Health, which is the body in charge of regulation under the Food and Drugs Act, 1971. [9,10,11] The government has not publicized any relevant policy as part of its response to the COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [12]

[1] Civil Defence Commission of Guyana. November 2013. "Multi-Hazard Disaster Preparedness and Response Plan". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/9.%20Multi-hazard%20Disaster%20Preparedness%20&%20Response%20Plan.pdf>]. Accessed 13 August 2020.

[2] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 13 August 2020.

[3] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[4] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 13 August 2020.

- [5] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 13 August 2020.
- [6] Ministry of Education. [<https://www.education.gov.gy/web/>]. Accessed 13 August 2020.
- [7] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 13 August 2020.
- [8] Medical Council of Guyana. [<http://www.medicalcouncil.org.gy/medcouncil/>]. Accessed 13 August 2020.
- [9] World Health Organisation. "Medical Devices Regulatory Systems at Country Level: Guyana". [http://www.who.int/medical_devices/countries/regulations/guy.pdf]. Accessed 14 August 2020.
- [10] Government Analyst -- Food and Drug Department. [<http://gafdd.gy/>]. Accessed 14 August 2020.
- [11] Government of Guyana. Laws of Guyana, Chapter 34:03 (Act 12 of 1971). "Food and Drugs Act". [http://www.vertic.org/media/National%20Legislation/Guyana/GY_Food_and_Drugs_Act_Cap._34.03.pdf]. Accessed 14 August 2020.
- [12] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

Pandemics are not integrated into Guyana's national risk reduction strategy, and there is not a standalone national disaster risk reduction strategy for pandemics. The 2013 National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana is intended as a risk management plan only for floods and droughts "as these are agreed by all

stakeholders as comprising the major hazards for the country". [1] The Plan lists epidemics and pandemics as being among those dangers that still require the development of a risk management plan. No other relevant information is provided via a public website by the Ministry of Health or the Civil Defence Commission (which is responsible for disaster responses). [2,3]

[1] Civil Defence Commission. October 2013. "National Integrated Disaster Risk Management Plan and Implementation Strategy for Guyana". [<https://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/3.%20National%20Integrated%20Disaster%20Risk%20Management%20Plan%20for%20Guyana.pdf>]. Accessed 14 August 2020.

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

[3] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 14 August 2020.

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 2

There is evidence that Guyana has cross-border agreements as part of a regional group, with regards to public health emergencies, and there is no evidence of gaps in implementation of these agreements. Guyana is a member of the Trinidad-based Caribbean Public Health Agency (CARPHA), which, among other functions, coordinates responses to public health crises in the Caribbean. [1] For example, CARPHA has conducted extensive work on Zika, a virus that is a major concern in the region and infections of which have been observed in Guyana. [2] CARPHA is a body of the Caribbean Community, or CARICOM. [1] Guyana is one of the 18 members of the Barbados-headquartered Caribbean Disaster Emergency Management Agency (CDEMA), which 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. [3] Neither of these organisations share information via a public website that reveal the depth of commitment to cross-border activities that membership in theme entails. There is no evidence of cross-border agreements between Guyana and its terrestrial neighbours: Brazil, Suriname and Venezuela. There is no relevant information shared via the public website of the Ministry of Health. [4]

[1] Caribbean Public Health Association (CARPHA). [<https://carpha.org/>]. Accessed 14 August 2020.

[2] Caribbean Public Health Association (CARPHA). "Zika Virus Infection". [<http://carpha.org/zika>]. Accessed 14 August 2020.

[3] Caribbean Disaster Emergency Management Agency (CDEMA). "About Us". [<https://www.cdema.org/about-us>]. Accessed 14 August 2020.

[4] Ministry of Health. [<https://health.gov.gy/>]. Accessed 14 August 2020.

5.2.1b

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

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

Current Year Score: 2

Guyana has a cross-border agreement as part of a regional group, with regards to animal health emergencies, and there is no evidence of gaps in implementation of these agreements. Guyana is a partner to CaribVET, the Caribbean animal health network. [1] CaribVET, among other functions, coordinates responses to animal health emergencies and leads regional planning on the topic. For example, CaribVET's mandate includes "strengthen national capacities related to preparedness, surveillance, monitoring and management of animal and zoonotic diseases" and to assist in early detection and response to such diseases. [2] In addition to participation from a Guyanese veterinary officer, Carib Vet collaborates with the University of Guyana. [3] There is no additional information provided on Guyana's involvement with CaribVET via a public website by the Ministry of Health, the Ministry of Agriculture, the Civil Defence Commission (the body responsible for managing disaster responses), or the University of Guyana. [4,5,6,7]

[1] CaribVET. [<https://www.caribvet.net/>]. Accessed 14 August 2020.

[2] CaribVET. "About the Network: Objectives". [<https://www.caribvet.net/about-the-network/objectives>]. Accessed 14 August 2020.

[3] CaribVET. "Organization". [<https://www.caribvet.net/about-the-network/organization>]. Accessed 14 August 2020.

[4] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 14 August 2020.

[5] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 14 August 2020.

[6] Civil Defence Commission. [<https://cdc.gy/>]. Accessed 14 August 2020.

[7] University of Guyana. [<https://www.uog.edu.gy/>]. Accessed 14 August 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 1

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

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

5.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that, in the last three years, Guyana has allocated national funds to improve Guyana's capacity to address epidemic threats . There is no mention of such a commitment or request in the Ministry of Public Health's Health Vision 2020, or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [1,2] There is no evidence in international news media or from United Nations or WHO press releases that Guyana has made a request for such funding in the last three years. Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of the Presidency, shares relevant information via public websites. [3,4,5,6] Green State Development Strategy Vision 2040, a development plan, describes development priorities for Guyana, including improving the public health sector, but does not mention epidemic preparedness. [7]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[2] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 15 August 2020.

[3] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 15 August 2020.

[4] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 15 August 2020.

[5] Ministry of the Presidency. [<https://motp.gov.gy/>]. Accessed 15 August 2020.

[6] Ministry of Finance. [<https://finance.gov.gy/>]. Accessed 15 August 2020.

[7] Government of Guyana. 2019. "Green State Development Strategy Vision 2040".

[<https://doe.gov.gy/published/document/5cf94d3847cb401cd490ccc8>]. Accessed 15 August 2020.

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 1

There are publicly identified special emergency public financing mechanism and funds which Guyana can access in the face of a public health emergency. These include the World Bank's International Development Association (IDA), from which Guyana is eligible to borrow. [1] As a qualified borrower from the IDA, Guyana is also eligible to access funds from the World Bank's Pandemic Emergency Financing Facility (PEF). [2] There is no other publicly available evidence that Guyana has a dedicated national reserve fund. The Ministry of Health does not share relevant information via a public website. [3]

[1] International Development Association. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 14 August 2020.

[2] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 14 August 2020.

[3] World Bank. "Pandemic Emergency Financing Facility". [<https://www.worldbank.org/en/topic/pandemics/brief/pandemic-emergency-financing-facility>]. Accessed 14 August 2020.

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

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

5.5.4a

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

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

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

Current Year Score: 1

There is evidence that, in the last three years senior Guyanese leaders have made a public commitment to improve Guyana's own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. In March 2020, the former Minister of Finance, Winston Jordan, requested US\$5 million from the World Bank's Rapid Response Facility to support the country's response to the COVID-19 pandemic. The finance minister also stated that US\$120 million had already been spent on other improvements to the health infrastructure to respond to the COVID-19 pandemic. [1] The former president, David Granger, announced in July 2020 the commissioning of a new Infectious Diseases hospital in Guyana that would primarily respond to the COVID-19 pandemic. However, an announcement from his office on the new hospital did not indicate that this commissioning was accompanied by a commitment of funds or capacity development. [2] Frank Anthony, the Minister of Health since August 2020, has used his Facebook page and Twitter feed to share information on COVID-19. (Though neither page is a verified account.) [3,4] In August 2020, he published posts on his Facebook page that describe the gaps in COVID-19 preparedness—and sharply criticize Guyana's response so far—and said that he is in the process of assessing the costs of improving the country's capacity to respond to the pandemic. Among these costs, he has said, is refurbishing the new hospital, which he claims was not built with adequate facilities. [5] Also in August 2020, Anthony announced a program to train technicians to test for COVID-19. The announcement did not include an estimate of the cost. [6] Aside from the response to COVID-19, there is little evidence of senior leaders' announcement of relevant commitments. There is no mention of such a commitment or request in the Ministry of Public Health's Health Vision 2020, or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [7,8] There is no evidence in international news media or from United Nations or WHO press releases that Guyana has made a request for such funding in the last three years. Neither the Ministry of Public Health, the Ministry of Foreign Affairs, the Ministry of the Presidency, nor the Office of the Prime Minister shares additional relevant information via public websites. [9,10,11] The Global Health Security Tracking Dashboard does not report any grants specifically geared toward improving Guyana's capacity to address epidemic threats in the past three years. [12] There is no evidence that Guyana leaders have committed to supporting other countries' capacity.

[1] Seoraj, Navendra. 20 March 2020. "Guyana requests US\$5M from World Bank to combat COVID-19". Guyana Chronicle. [<https://guyanachronicle.com/2020/03/20/guyana-requests-us5m-from-world-bank-to-combat-covid-19/>]. Accessed 15 August 2020.

[2] Ministry of the Presidency. 30 July 2020. "President Granger commissions Guyana's first Infectious Diseases hospital". [<https://motp.gov.gy/index.php/2015-07-20-18-49-38/2015-07-20-18-50-14/4083-president-granger-commissions-guyana-s-first-infectious-diseases-hospital>].

[3] Facebook. "@DrFrankkAnthony". [<https://www.facebook.com/Dr.FrankkAnthony/>]. Accessed 11 August 2020.

[4] Twitter. "@fcsanthony1". [<https://twitter.com/fcsanthony1>]. Accessed 11 August 2020.

[5] Facebook. 6 August 2020. "News Room: New Health Minister Knocks Disjointed COVID-19 Response". [<https://www.facebook.com/watch/?v=298208817957547>]. Accessed 15 August 2020.

[6] Haynes, Delicia. 8 August 2020. "Technicians to be trained to test for COVID-19". Department of Public Information.

- [https://dpi.gov.gy/technicians-to-be-trained-to-test-for-covid-19/?fbclid=IwAR1AORV6SHqHwGG8r1jCGnsE5NTq2KcpfqMKOEw9gx2SaafHnnU6sXqx0HM]. Accessed 15 August 2020.
- [7] Ministry of Public Health. December 2013. "Health Vision 2020". [http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf]. Accessed 4 August 2020.
- [8] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1]. Accessed 15 August 2020.
- [9] Ministry of Health. [http://www.health.gov.gy/]. Accessed 15 August 2020.
- [10] Ministry of Foreign Affairs. [https://transguyana.net/]. Accessed 15 August 2020.
- [11] Ministry of the Presidency. [https://motp.gov.gy/]. Accessed 15 August 2020.
- [12] Global Health Security Tracking Dashboard. "Guyana". [https://tracking.ghscosting.org/details/96/recipient]. Accessed 15 August 2020.

5.5.4b

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

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

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

Current Year Score: 1

There is evidence that Guyana has invested finances (from donors) to improve domestic capacity to address epidemic threats in the last three years, but no evidence that Guyana has provided financing or technical support for those purposes. According to Talus Analytics' Global Health Security Funding Tracker dashboard, an estimated US\$18.4m was disbursed to Guyana between 2018 and 2020, all of which was for International Health Regulations (IHR) capacity building. [1] The tracker notes that Guyana has received funding from multiple donors to enhance its capacity on global security preparedness, including, for example, Canada-financed "Support to the Polio Eradication Endgame Strategic Plan". This project has disbursed \$7.63m in funding to Guyana since 2014, and was still active in 2020. [2,3] In another example, Guyana was a recipient of Canadian financing to "Support to COVID-19 Response in Latin America and the Caribbean". [3] In another example, in March 2020, the former Minister of Finance, Winston Jordan, requested US\$5 million from the World Bank's Rapid Response Facility to support the country's response to the COVID-19 pandemic. [4] Neither the Ministry of Health nor the Ministry of Foreign Affairs shares additional relevant information via public websites. [5,6]

- [1] Global Health Security Funding Tracker. [https://tracking.ghscosting.org/#/data]. Accessed 9 March 2021.
- [2] Government of Canada. "Canada's new contribution to the Global Polio Eradication Initiative". [https://www.canada.ca/en/global-affairs/news/2017/06/backgrounder_canadasnewcontributiontotheglobalpolioeradicationin0.html]. Accessed 9 March 2021.
- [3] Global Health Security Funding Tracker. "Table of Funds". [https://tracking.ghscosting.org/table/958/recipient]. Accessed 9 March 2021.
- [4] Seoraj, Navendra. 20 March 2020. "Guyana requests US\$5M from World Bank to combat COVID-19". Guyana Chronicle. [https://guyanachronicle.com/2020/03/20/guyana-requests-us5m-from-world-bank-to-combat-covid-19/]. Accessed 15 August 2020.
- [5] Ministry of Health. [http://www.health.gov.gy/]. Accessed 15 August 2020.
- [6] Ministry of Foreign Affairs. [https://transguyana.net/]. Accessed 15 August 2020.

5.5.4c

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

Yes = 1, No = 0

Current Year Score: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza. There is no mention of such a plan in the Ministry of Health's Health Vision 2020, or the Guyana Country Cooperation Strategy 2016-2020, a publication of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) Regional Office for the Americas. [1,2] Neither the Ministry of Health, the Ministry of Education, a national laboratory—such as the National Public Health Reference Laboratory and the GLDA Veterinary Laboratory—nor the Ministry of Agriculture share relevant information via public websites. [3,4,5] There is no evidence of such a plan in media, academic studies, or other external documentation. The government has not publicized any relevant policy as part of its response to the COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [6] However, local media reports that some laboratories in Guyana were using overseas testing facilities for COVID-19 testing; these efforts did not appear to be associated with an overarching policy. [7]

[1] Ministry of Health. December 2013. "Health Vision 2020". [<http://extwprlegs1.fao.org/docs/pdf/guy169658.pdf>]. Accessed 4 August 2020.

[2] Pan American Health Organization and World Health Organization, Regional Office for the Americas. "Guyana Country Cooperation Strategy 2016-2020". [<http://apps.who.int/iris/bitstream/handle/10665/258607/ccs-guy-2016-2020-en.pdf?sequence=1>]. Accessed 17 September 2018.

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

[4] Ministry of Education. [<https://www.education.gov.gy/web/>]. Accessed 14 August 2020.

[5] Ministry of Agriculture. [<http://agriculture.gov.gy/>]. Accessed 14 August 2020.

[6] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

[7] Papannah, David. 20 April 2020. "Eureka Labs to take samples for overseas COVID-19 testing". Stabroek News.

[<https://www.stabroeknews.com/2020/04/20/news/guyana/eureka-labs-to-take-samples-for-overseas-covid-19-testing/>]. Accessed 14 August 2020.

5.6.1b

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

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Guyana 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 website and there has not been any reports of Guyana 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 Guyana not sharing samples, nor does it list Guyana as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [2]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 15 August 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 15 August 2020.

5.6.1c

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

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Guyana has not shared pandemic pathogen samples during an outbreak in the past two years. There is no reference to sharing pandemic pathogen data on the Ministry of Health website and there have not been any reports of Guyana not sharing samples in either national and international media. [1] The World Health Organisation Disease Outbreak News site reports no recent outbreaks of reportable diseases. [2] There is no evidence of withholding of samples related to the COVID-19 pandemic, whether through the government's "Guyana COVID-19 Info Hub" website or elsewhere. [3] Local media reports that some laboratories in Guyana were using overseas testing facilities for COVID-19 testing. [4]

[1] Ministry of Health. [<http://www.health.gov.gy/>]. Accessed 15 August 2020.

[2] World Health Organisation (WHO). "Disease Outbreak News: Guyana".

[<http://www.who.int/csr/don/archive/country/guy/en/>]. Accessed 15 August 2020.

[3] Ministry of Health. "Guyana COVID-19 Info Hub". [<https://crushcovid.gov.gy/>]. Accessed 11 August 2020.

[4] Papannah, David. 20 April 2020. "Eureka Labs to take samples for overseas COVID-19 testing". Stabroek News.

[<https://www.stabroeknews.com/2020/04/20/news/guyana/eureka-labs-to-take-samples-for-overseas-covid-19-testing/>]. Accessed 14 August 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: 1

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 41

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

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 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: 4

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

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

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

Current Year Score: 2

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 1

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: 85.64

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: 0.51

2018

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

6.2.3 Social inclusion

6.2.3a

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

Input number

Current Year Score: 1.1

2008-2018

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 2

Guyana's share of employment in the informal sector was 58.1% in 2018, the most recent year for which data is available, according to the International Labour Organization. [1]

[1] International Labour Organization. "Country Profiles". ILOSTAT. [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 15 August 2020.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 2

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 0

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: 0.45

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

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

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

Current Year Score: 1

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: 1

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 26.69

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -0.48

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

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

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

Current Year Score: 0

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 69.77

2018

United Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA)
World Factbook

6.5.1b

Age-standardized NCD mortality rate (per 100 000 population)

Input number

Current Year Score: 800.5

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 6.71

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 12.2

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 20.2

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 95.54

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 85.76

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: 317.36

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