

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

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

### 1.1 ANTIMICROBIAL RESISTANCE (AMR)

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

##### 1.1.1a

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

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

**Current Year Score: 0**

There is insufficient available evidence that Haiti has a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens. Although Haiti reported, in the 2018-19 World Health Organization (WHO) Self-assessment Survey for AMR, that a national AMR plan had been developed, the WHO's Library of National Action Plans does not include a national AMR plan for Haiti [1, 2]. Furthermore, in February of 2017, representatives of the health ministry, the national public health laboratory and the Pan-American Health Organization (PAHO) held a workshop on the national AMR plan for Haiti. In October 2017, a presentation introducing the plan was published by SPHaitiLab, a public health initiative for developing laboratory capacity [3]. However, there is no available evidence that this plan has been validated or implemented on the websites of the Ministry of Health, the Ministry of Agriculture nor on the one of the National Public Health Laboratory [4, 5, 6].

[1] World Health Organization (WHO). "Global database for antimicrobial resistance country self assessment 2018-2019 survey." [<http://amrcountryprogress.org/>]. Accessed 28 December, 2020.

[2] World Health Organization (WHO). "Antimicrobial resistance: Library of national action plans." [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 28 December, 2020.

[3] Lucien, M. October 2017. "National action plan on antimicrobial resistance (Plan d'action national de la résistance aux antimicrobiens)", SPHaitiLab (Public health project for laboratory development).

[<https://www.paho.org/hq/dmdocuments/2017/2017-cha-relavra-lucero-4-a.pdf>]. Accessed 28 December, 2020.

[4] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 28 December, 2020.

[5] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR).

[<http://agriculture.gouv.ht/view/01/>]. Accessed 28 December, 2020.

[6] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 28 December, 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 insufficient evidence that Haiti has a national laboratory/laboratory system which tests for priority AMR pathogens. In October of 2017, a presentation published by SPHaitiLab, on a health initiative to develop the country's laboratory capacity as part of a national AMR action plan, notes that Haiti has a national antimicrobial resistance surveillance system limited to certain pathogens (Tuberculosis, Cholera) which is carried out by the National Public Health Laboratory. However, this presentation states that there is a lack of laboratories with the capacity to identify pathogens and recommends developing such a system [1]. Furthermore, in December of 2017 the government announced the inauguration of a national biosafety level 3 laboratory to be used for tuberculosis (TB) and multi-drug resistant tuberculosis (MDR-TB) diagnosis. Yet there is no mention of it being used to test other priority AMR pathogens [2]. In addition, in the 2018-19 World Health Organization (WHO) Self-assessment Survey for AMR, Haiti reported that although it has some surveillance of AMR, "its capacity (including laboratory and for reporting data on AMR) is lacking" [3]. Moreover, the WHO's Library of National Action Plans does not include a national AMR plan for Haiti [4]. There is no further information on which pathogens are tested for on the websites of the Ministry of Health, the Ministry of Agriculture nor on the one for the National Public Health Laboratory [5, 6, 7].

[1] Lucien, M. October 2017. "National action plan on antimicrobial resistance (Plan d'action national de la résistance aux antimicrobiens)", SPHaitiLab (Public health project for laboratory development).

[https://www.paho.org/hq/dmdocuments/2017/2017-cha-relavra-lucero-4-a.pdf]. Accessed 28 December, 2020.

[2]. US Embassy. 21 December, 2017. "Haiti Opens National Biosafety Level 3 Laboratory with U.S. Government Support".

[https://ht.usembassy.gov/haiti-opens-national-biosafety-level-3-laboratory-u-s-government-support/]. Accessed 28 December, 2020.

[3] World Health Organization (WHO). "Global database for antimicrobial resistance country self assessment 2018-2019 survey." [http://amrcountryprogress.org/]. Accessed 28 December, 2020.

[4] World Health Organization (WHO). "Antimicrobial resistance: Library of national action plans."

[http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 28 December, 2020.

[5] Ministry of Public Health and Population of Haiti (MSPP). [https://www.mspp.gouv.ht/]. Accessed 28 December, 2020.

[6] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR).

[http://agriculture.gouv.ht/view/01/]. Accessed 28 December, 2020.

[7] National Public Health Laboratory. [http://mspp.gouv.ht/newsite/\_direction/pageService.php?IDDir=30]. Accessed 28 December, 2020.

### 1.1.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that the government of Haiti conducts environmental surveillance for antimicrobial residues or antimicrobial resistant (AMR) organisms. There is no evidence from the Ministry of Environment's website of AMR detection or surveillance activities [1]. The AMR self-assessment submitted to the World Health Organization for 2018-19 shows that representatives of Haiti's environment sector have been involved in developing the national AMR plan, which has yet to be implemented. However, the self-assessment notes that no surveillance plan exists for monitoring AMR pathogens in the environment [2]. In addition, the WHO's Library of National Action Plans does not include a national AMR plan for Haiti [3]. An academic article published in 2016 reported that personnel from the National Public Health Laboratory (LNSP) had collaborated on a one-off study funded by the French embassy, involving the collection and detection of AMR strains of *V. Cholerae* in surface waters in 35 sites around the country during the 2012 cholera outbreak [4.] Furthermore, in 2017 the government announced the creation of a new agency to monitor water resources, the National Water Resources Agency (ANARHY), yet the law establishing the agency did not mention AMR surveillance among its functions [5]. In addition,

in June of 2018 the the Ministry of Public Health launched Haiti's first National Laboratories Policy, however there is no evidence that this policy includes antimicrobial residue/AMR surveillance [6]. Moreover, there is no evidence of such a surveillance on the websites of the LNSP, the Ministry of Health, the Facebook page of the Tamarinier Veterinary and Food Quality Control Laboratory (it does not have a website) nor in the country's former laboratory policy plan or in the current national health and surveillance plans [7, 8, 9, 10, 11, 12].

- [1] Ministry of Environment of Haiti. [<https://www.mde.gouv.ht/index.php/fr/>]. Accessed 28 December, 2020.
- [2] World Health Organization (WHO). 2018-2019. "Global database for antimicrobial resistance country self assessment." [<http://amrcountryprogress.org/>]. Accessed 28 December, 2020.
- [3] World Health Organization (WHO). "Antimicrobial resistance: Library of national action plans." [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 28 December, 2020.
- [4] Baron, S. et al. 2016. "Antimicrobial Susceptibility of Autochthonous Aquatic Vibrio cholerae in Haiti," in *Frontiers in Microbiology*, 7 (2016). [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5073147/>]. Accessed 28 December, 2020.
- [5] General Secretariat of the Council of Ministers. 2017. "Presentation of the draft law governing the water sector and on the establishment, organization and functions of the National Water Resources Agency (ANARHY) (Présentation du projet de loi régissant le secteur de l'eau et portant création, organisation et fonctionnement de l'agence nationale des ressources hydriques (ANARHY).)". [<http://www.sgcm.gouv.ht/2167-2/>]. Accessed 28 December, 2020.
- [6] Merieux Foundation. 28 June, 2018. "The Ministry of Public Health and Population Launches Haiti's First National Laboratories Policy". [<https://www.fondation-merieux.org/actualites/ministere-de-sante-publique-de-population-lance-premiere-politique-nationale-laboratoires-dhaiti/#:~:text=La%20Politique%20Nationale%20des%20Laboratoires,des%20laboratoires%20m%C3%A9dicaux%20du%20pa ys>]. Accessed 28 December, 2020.
- [7] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 28 December.
- [8] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 28 December, 2020.
- [9] Tamarinier Veterinary and Food Quality Control Laboratory (LVQCQAT). Official Facebook page. [[https://www.facebook.com/pg/LVCQAT.MARNDR/about/?ref=page\\_internal](https://www.facebook.com/pg/LVCQAT.MARNDR/about/?ref=page_internal)]. Accessed 28 December, 2020.
- [10] Ministry of Public Health and Population (MSPP). 2010. "Five-year strategic plan on the national laboratory network (Plan stratégique quinquennal du reseau national de laboratoires)". [<http://mspp.gouv.ht/site/downloads/version%20finalisee%20Plan%20Strategique.pdf>]. Accessed 28 December, 2020.
- [11] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 28 December, 2020.
- [12] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 28 December, 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 that Haiti has a law requiring a prescription for antibiotics for human use but it lacks an effective, up-to-date regulatory framework to ensure its implementation and enforcement is very weak. The 1955 Pharmacies law -provided on the health ministry's website under the category of "procedures" - states: "Poisons, sulphamides and antibiotics can only be sold by pharmacists and only on prescription by certified doctors, dentists and veterinarians" [1]. The AMR self-assessment submitted to the World Health Organization for 2017-18 states that Haiti does not have "a national policy or legislation regarding the quality, safety and efficacy of antimicrobial products, and their distribution, sale or use (question 9.2) [2]. The National pharmaceutical policy (2014) committed the government to replacing the 1955 Pharmacies law with a new set of laws and regulations [3]. However, there is no evidence that regulations have been passed yet from the government's main legal database or that of the health ministry [4, 5]. Proposed legislation has existed in draft form since 2013 without being passed [6]. A Local media reporting suggests that there is a longstanding problem of self-medication in Haiti linked in part to lack of trust in the public health authorities; and that there is virtually no regulation of medicine distribution in practice. Medicines of all kinds can be purchased without prescription [7, 8].

[1] Government of Haiti. 1955. "Pharmacies law (Loi sur les pharmacies)".

[<http://mspp.gouv.ht/site/downloads/Loi%201955.pdf>]. Accessed 28 December, 2020.

[2] World Health Organization (WHO). "Global database for antimicrobial resistance country self assessment - 2018-2019."

[<http://amrcountryprogress.org/>]. Accessed 28 December, 2020.

[3] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 28 December, 2020.

[4] General Secretariat of the Council of Ministers. 2018. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>]. Accessed 28 December, 2020.

[5] Ministry of Public Health and Population of Haiti (MSPP) "Documentation centre (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 28 December, 2020.

[6] Government of Haiti. 2013. "Draft law regulating the production, distribution, the conditions of import and export, storage and consumption of medicines (Projet de loi réglementant la production, la distribution, les conditions d'importation et d'exportation, le stockage et la consommation des médicaments)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-Loi-reglementant-la-production-la-distribution-les-conditions-d%E2%80%99importation-et-d%E2%80%99exportation-le-stockage-et-la-consommation-des-m%C3%A9dicaments.pdf>].

Accessed 28 December 2020.

[7] Souverain, M. 10 Oct 2007. "Pharmaceutical practice in Haiti: Urgent need to take action (La pratique pharmaceutique En Haiti: l'urgence d'agir)". Le Nouvelliste. [<https://lenouvelliste.com/lenouvelliste/article/49475/La-Pratique-pharmaceutique-En-Haiti-lurgence-dagir>]. Accessed 28 December, 2020.

[8] Gabriel, S. 10 Apr 2017. "Self-medication in Haiti: A persistent danger (L'automédication en Haiti: Un danger qui persiste)". Ayibo Post. [<https://ayibopost.com/lautomedication-en-haiti-un-danger-qui-persiste/>]. Accessed 28 December, 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 that Haiti has a law requiring a prescription for antibiotics for animal use but it lacks an effective, up-to-date regulatory framework to ensure its implementation and enforcement is very weak. The 1955 Pharmacies law, published by the health ministry, states: "Poisons, sulphamides and antibiotics can only be sold by pharmacists and only on prescription by certified doctors, dentists and veterinarians" [1]. However, the situation seems to be unclear. The AMR self-assessment

submitted to the World Health Organization for 2018-19 states that Haiti does not have a national plan or system for monitoring sales/use of antimicrobials in animals. (question 7.2) [2]. Furthermore, the National pharmaceutical policy (2014) committed the government to replacing the 1955 Pharmacies law with a new set of laws and regulations [3]. However, there is no evidence that regulations have been passed yet from the government's main legal database or that of the Ministry of Health [4, 5]. Proposed legislation has existed in draft form since 2013 without being passed [6]. In addition, there is no evidence of regulations on antibiotic use on the Ministry of Agriculture's website or in its policies related to animal health. [7, 8, 9]. According to the 2010 PVS evaluation, there are no regulations restricting the use of veterinary medications to veterinarians. Any livestock owner can buy medicines in the street, and self-medication (by owners, of animals) is endemic [10].

[1] Government of Haiti. 1955. "Pharmacies law (Loi sur les pharmacies)".

[<http://mspp.gouv.ht/site/downloads/Loi%201955.pdf>]. Accessed 28 December, 2020.

[2] World Health Organisation (WHO). 2018-19. "Global database for antimicrobial resistance country self assessment."

[<http://amrcountryprogress.org/>]. Accessed 28 December, 2020.

[3] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 28 December, 2020.

[4] General Secretariat of the Council of Ministers. 2018. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>].

Accessed 28 December.

[5] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 28 December, 2020.

[6] Government of Haiti. 2013. "Draft law regulating the production, distribution, the conditions of import and export, storage and consumption of medicines (Projet de loi réglementant la production, la distribution, les conditions d'importation et d'exportation, le stockage et la consommation des médicaments)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-Loi-reglementant-la-production-la-distribution-les-conditions-d%E2%80%99importation-et-d%E2%80%99exportation-le-stockage-et-la-consommation-des-m%C3%A9dicaments.pdf>].

Accessed 28 December 2020.

[7] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website.

[<http://agriculture.gouv.ht/view/01/>]. Accessed 28 December, 2020.

[8] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Overview of actions for the development of animal health in Haiti 2010-2014 (Grandes lignes d'action pour le développement de la santé animale en Haïti 2010-2014)". [[http://agriculture.gouv.ht/view/01/IMG/pdf/Texte\\_SanteAnimale\\_-\\_MARNDR\\_2010.pdf](http://agriculture.gouv.ht/view/01/IMG/pdf/Texte_SanteAnimale_-_MARNDR_2010.pdf)]. Accessed 28 December, 2020.

[9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Animal health in Haiti (La santé animale en Haïti)". [<http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPy>]. Accessed 28 December, 2020.

[10] World Organization for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haïti)".

[[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 28 December, 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: 1**

There is evidence that Haiti has a national strategy document on zoonotic disease. It is the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety' published by the Ministry of Agriculture (MARNDR). It outlines a strategy for surveillance and control, including prevention and response, of key animal diseases and zoonoses (the latter distinctly identified), prioritizing rabies and anthrax but also including porcine plague and avian influenza. It calls for updates of disease-specific action plans [1]. From the human health side, the Ministry of Health (MSPP) published a surveillance strategy for 2013-2019 containing plans for a surveillance system to include several zoonoses: anthrax, rabies, plague, avian flu, tuberculosis, dengue fever and malaria. The strategy only addresses surveillance of human health and does not clearly identify the zoonoses [2]. Furthermore, Haiti's 2010 PVS evaluation noted the inadequacy of the legal framework for zoonoses from both animal and human health perspectives, and there is no evidence of new laws on this topic from the document repositories of the MSPP, the MARNDR, the central government, nor from the Pan-American Health Organization (PAHO) [3, 4, 5, 6, 7].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 28 December, 2020.

[2] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 28 December, 2020.

[3] World Organization for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haiti)". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 28 December, 2020.

[4] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 28 December, 2020.

[5] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 28 December, 2020.

[6] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 28 December, 2020.

[7] Pan-American Health Organization (PAHO) and World Health Organisation (WHO) Regional Office for the Americas. 2017. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 28 December, 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 insufficient evidence that Haiti has national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. Haiti has a national strategy document on zoonotic disease called the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety', published by the Ministry of Agriculture (MARNDR).

It outlines a strategy for surveillance and control, including prevention and response, of key animal diseases and zoonoses. However, there is no specific mention that this strategy includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans [1]. Furthermore, there is no evidence of such legislation or plan on the websites of the Ministry of Health nor the one for the National Public Health Laboratory [2, 3]. The country does, however, have a strategy for zoonotic disease spillover but it is specifically for rabies and not does not address other zoonotic diseases. In 2011, the Ministry of Agriculture in collaboration with the Ministry of Health, the Christian Veterinary Mission and the US-CDC, conceived the Haiti Animal Rabies Surveillance Program (HARSP). The HARSP is based on standard human and animal disease surveillance practices, including dog bite information from a variety of sources, surveillance of rabies in dogs, and also involves developing diagnostic capacity and training of rabies veterinary investigators [4]. Haiti also has a rabies strategy in collaboration with the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID). According to a 2019 report by the NCEZID, this strategy "has increased animal rabies detection 18-fold, decreased the risk of dying from rabies by 49%, and increased post-bite rabies vaccination by 230%" [5].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 28 December, 2020.

[2] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 28 December, 2020.

[3] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 28 December, 2020.

[4] World Health Organization (WHO). 2019. "A Tripartite Guide to Addressing Zoonotic Diseases in Countries". [<https://extranet.who.int/sph/docs/file/3853>]. Accessed 28 December, 2020.

[5] National Center for Emerging and Zoonotic Infectious Diseases (NCEZID). July 2019. "Protecting People in Haiti from Deadly Rabies". [<https://www.cdc.gov/ncezid/stories-features/global-stories/protecting-people-in-haiti-from-rabies.html>]. Accessed 28 December, 2020.

### 1.2.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti has national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern. Haiti's strategy document on zoonotic disease, the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety' published by the Ministry of Agriculture (MARNDR), states that disease-specific programs exist for key zoonoses: swine fever, highly-pathogenic avian flu, rabies and anthrax. The 2014-2019 plan outlines a high-level strategy for surveillance and control of these zoonoses, prioritizing rabies and anthrax. It states that "it will be essential to carry out a complete revision and update of the action plans for the control and eradication of [the priority] diseases." However, there is no available evidence that this strategy has been put into place nor that the action plans have been revised or updated [1]. Furthermore, there is no evidence of such a plan, legislation or guidelines from the MARNDR, from the repositories of the Ministry of Health, the central government, nor from the Pan-American Health Organization (PAHO) that the disease-specific plans (old or new) have been published [2, 3, 4, 5, 6]. From the human health side, the Ministry of Health (MSPP) published a surveillance strategy for 2013-2019 containing plans for a surveillance system to include several zoonoses: anthrax, rabies, plague, avian flu,

tuberculosis, dengue fever and malaria. However, the document does not clearly identify the zoonoses nor does it contain full control plans for each disease [7].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed on 29 December, 2020.

[2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Animal health in Haiti (La santé animale en Haiti)". [<http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPy>]. Accessed 29 December, 2020.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed on 29 December, 2020.

[4] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 29 December, 2020.

[5] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 29 December, 2020.

[6] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. 2017. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 29 December, 2020.

[7] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELRL). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELRL%202013-2018.pdf>]. Accessed 29 December, 2020.

### 1.2.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a cross-ministerial department, agency or unit dedicated to zoonotic disease. Haiti's plan on zoonotic disease, the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety' published by the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR), states that the Directorate of Production and Animal Health (DPSA) has a sub-division on animal health. Within this, an Epidemiology Service is charged with surveillance of animal diseases and zoonoses. It presents a vision for a new agency to integrate work on animal and food health [1]. The agency has been created and is referred to as the Sanitary Protection Unit (UPS) [2, 3]. Its scope goes beyond zoonoses and it only involves the MARNDR [1, 2, 3]. The 2014-2019 plan also states that it would be useful to establish an inter-sectoral committee to enable coordination with the Ministry of Public Health and Population of activities (MSPP) on zoonoses and food safety [1]. Furthermore, there is no evidence that such a committee has been established, from a 2015 update on the plan's implementation, from the MARNDR, from the repositories of the MSPP and the central government, or from the Pan-American Health Organization (PAHO) [2, 4, 5, 6, 7, 8]. In addition, the 2010 PVS evaluation states that most cooperation between animal and human health authorities on disease control is informal and based on goodwill, though protocols exist for avian flu and rabies [9].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des

aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed on 29 December, 2020.

[2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). September 2015. "Report based on the results of the zoo and phytosanitary protection sub-sector (Rapport basé sur les résultats du sous-secteur de la protection zoo et phytosanitaire)".

[[https://agriculture.gouv.ht/view/01/IMG/docx/rapport\\_valide\\_par\\_ups\\_041115rapport\\_base\\_sur\\_les\\_resultats\\_ups\\_2014\\_-\\_2015\\_version\\_corrige.docx](https://agriculture.gouv.ht/view/01/IMG/docx/rapport_valide_par_ups_041115rapport_base_sur_les_resultats_ups_2014_-_2015_version_corrige.docx)]. Accessed 29 December, 2020.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website.

[<http://agriculture.gouv.ht/view/01/>]. Accessed 28 December, 2020.

[4] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Animal health in Haiti (La santé animale en Haïti)". [<http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPy>]. Accessed 29 December, 2020.

[5] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Resources (Ressources)".

[<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed on 29 December, 2020.

[6] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 29 December, 2020.

[7] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>].

Accessed 29 December, 2020.

[8] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas.

"Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 29 December, 2020.

[9] World Organization for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haïti)".

[[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 29 December, 2020.

## 1.2.2 Surveillance systems for zoonotic diseases/pathogens

### 1.2.2a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti has a mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency, based on local animal health committees. Haiti's strategy document on zoonoses, published by the Ministry of Agriculture (MARNDR), assigns an important role in surveillance to 'Gwoupman Sante Bèt' (GSB), which are committees representing livestock farmers (mainly smallholders) in 565 communal sections (the smallest administrative level). Each GSB is assigned two or more veterinary officers. The local surveillance network consists of volunteer farmers trained by the public animal health authorities, who report outbreaks via the veterinary officers to local veterinary services [1, 2, 3]. Departmental (i.e. regional) health protection centers provide support to GSBs and transmit health alerts to the national-level veterinary services [2]. With regard to a legal requirement, the 1984 Rural Code states that "any animal infected with or suspected of having a contagious disease will be immediately isolated from the herd and the breeder or farmer shall give notice to the representative of the Department of Agriculture or any other competent body nearest or default to the Rural Police Officer" [4]. Yet, the 2010 PVS evaluation judged this 1984 law on animal health to be obsolete [5]. Furthermore, there is no evidence that more recent legislation has updated the requirement or mechanism for surveillance and reporting, from the document repositories of the MARNDR, the Ministry of Health, the central government, nor from the Pan-American Health Organization (PAHO) [6, 7, 8, 9].

- [1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed on 29 December, 2020.
- [2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). N.d. "Animal health in Haiti (La santé animale en Haiti)". [<http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPy>]. Accessed 29 December, 2020.
- [3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2015. "Operations manual for the program on modernization of zoo-phytosanitary protection services (Manuel d'opération du programme de modernisation des services de protection zoo-phytosanitaire)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/manuel\\_d\\_operation\\_sps\\_24\\_dec\\_2015\\_version\\_finale-0317.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/manuel_d_operation_sps_24_dec_2015_version_finale-0317.pdf)]. Accessed 29 December, 2020.
- [4] Ministry of Justice. 1984. "Rural Code (Code Rural)". [[http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code\\_Rural\\_1984.pdf](http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code_Rural_1984.pdf)]. Accessed 29 December, 2020
- [5]. World Organization for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haiti)". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 29 December, 2020.
- [6] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 29 December, 2020.
- [7] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 29 December, 2020.
- [8] General Secretariat of the Council of Ministers. 2018. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 29 December, 2020.
- [9] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 29 December, 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 publicly available evidence that Haiti has legislation and/or regulations that safeguards the confidentiality of information generated through surveillance activities for animals (for owners). Haiti drafted, in April of 2017 a law on personal data protection, the 'Draft law establishing the unique national identification card and relating to the protection of personal data'. It calls for provisions relating to appropriate storage and use of data to ensure it is not divulged beyond those who need to access it for a defined purpose. However, there is no evidence that this law has been enacted [1, 2]. Furthermore according to the United Nations Conference on Trade and Development (UNCTAD) database, Haiti has no legislation on consumer protection, data protection and privacy nor on Cybercrime [3]. In addition, Haiti's 1984 rural code does not address confidentiality of surveillance information and is considered obsolete by the 2010 PVS evaluation [4, 5]. Moreover, there is no evidence of any legislation or regulation that safeguards this type of confidentiality of information on the websites of the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government, nor on the one of the Pan-American Health Organization (PAHO) [6, 7, 8, 9]. Lastly, confidentiality is not discussed in Haiti's strategy for zoonoses, the 'Strategic and programmatic plan 2014-2019 for the

modernization of zoo-phytosanitary protection services and food safety' [10].

[1] Government of Haiti. 2017. "Draft law establishing the unique national identification card and relating to the protection of personal data (Projet de loi instituant la carte d'identification nationale unique et portant sur la protection des données personnelles)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-loi-instituant-la-carte-d%E2%80%99identification-nationale-unique-et-portant-sur-la-protection-des-donn%C3%A9es-personnelles.pdf>]. Accessed 29 December, 2020.

[2] ayibopost.com. Pierre-Louis Snyder. 2019. "The history of the identity card in Haiti is closely linked to the elections (L'histoire de la carte d'identité en Haïti est étroitement liée aux élections)". [<https://ayibopost.com/lhistoire-de-la-carte-didentite-en-haiti-est-etroitement-liee-aux-elections/#:~:text=Trois%20mois%20apr%C3%A8s%20son%20investiture,%C3%A9tait%20le%2019%20avril%202017>]. Accessed 29 December, 2020.

[3] United Nations Conference on Trade and Development (UNCTAD). "Cyberlaw Tracker: The case of Haiti". [<https://unctad.org/page/cyberlaw-tracker-country-detail?country=ht>]. Accessed 29 December, 2020.

[4] Ministry of Justice. 1984. "Rural Code (Code Rural)". [[http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code\\_Rural\\_1984.pdf](http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code_Rural_1984.pdf)]. Accessed 29 December, 2020.

[5] World Organisation for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haïti)". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 29 December, 2020.

[6] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed on 29 December, 2020.

[7] Ministry of Public Health and Population (MSPP). [<http://mspp.gouv.ht/>]. Accessed 29 December, 2020.

[8] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 9 November 2018.

[9] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 29 December, 2020.

[10] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 29 December, 2020.

### 1.2.2c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti conducts surveillance of zoonotic disease in wildlife though there is evidence that, in the past, it has conducted surveillance in wildlife for avian influenza. The 2010 PVS evaluation states that: "there are training guides for veterinary officers on avian influenza (AI), particularly on the surveillance of avian influenza transmitted by wildlife", and "veterinary officers are paid by the AI program to monitor water bodies" [1]. A 2013 evaluation of a World Bank-funded project on AI in Haiti, which aimed to support the implementation of the government of Haiti's National Avian Influenza Control and Pandemic Preparedness Plan 2006-2010, and was conducted in conjunction with the government, notes: "Studies of migratory wild bird species were conducted through eight different areas in Haiti during 2010 - 2011", implying that the surveillance in wildlife may have been temporary [2]. More recent policy documents addressing zoonoses do not mention surveillance in wildlife, including the Ministry of Agriculture's 'Strategic and programmatic plan 2014-2019

for the modernization of zoo-phytosanitary protection services and food safety', and the health ministry's 'Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018' [3, 4]. Furthermore, there is no information for Haiti in the wild animal health information database maintained by the World Organization for Animal Health (OIE) [5]. In addition, there is no other information on surveillance of wildlife on the websites of the Ministry of Agriculture, Ministry of Health, the Ministry of Environment, nor from a search for academic and media articles [6, 7, 8].

[1] World Organisation for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haiti)".

[[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport-Haiti.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport-Haiti.pdf)]. Accessed 29 December, 2020.

[2] World Bank. 2013. "Haiti - Preparedness avian influenza control and human influenza emergency preparedness and control". [<http://documents.worldbank.org/curated/en/313581474574397793/pdf/000020051-20140626002035.pdf>]. Accessed 29 December, 2020.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 29 December, 2020.

[4] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 29 December, 2020.

[5] World Organization for Animal Health (OIE). 2018. "World Animal Health Information System (WAHIS) - Wild interface: Haiti". [[http://www.oie.int/wahis\\_2/public/wahidwild.php/Countryinformation/Animalsituation](http://www.oie.int/wahis_2/public/wahidwild.php/Countryinformation/Animalsituation)]. Accessed 29 December, 2020.

[6] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 29 December, 2020.

[7] Ministry of Public Health and Population (MSPP). 2018. Official website. [<https://mspp.gouv.ht/>]. Accessed 29 December, 2020.

[8] Ministry of the Environment. Official website. [<https://www.mde.gouv.ht/index.php/fr/>]. Accessed 29 December, 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: 0.83**

2018

OIE WAHIS database

### 1.2.4b

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

Input number

**Current Year Score: 15.69**

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 publicly available evidence that Haiti's national plan on zoonotic disease includes mechanisms for working with the private sector in controlling or responding to zoonoses. However, the plan introduces preliminary measures to enable future collaboration. Haiti's national plan on zoonoses is the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety' published by the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). It notes that the World Organization for Animal Health (OIE) has recommended improving interaction with the private sector, including educating producers, establishing coordination mechanisms with producers, and establishing mechanisms for delegating certain functions to the private sector. To enable delegation, the plan assigned a budget for establishing an accreditation system for private veterinarians but it did not outline a mechanism for working with the private sector [1]. Furthermore, there is no evidence of a mechanism for working with the private sector on zoonoses on the websites or document repositories of the MARNDR, the Ministry of Public Health and Population, the National Public Health Laboratory, the central government's document repository, nor from the Pan-American Health Organization (PAHO) [2, 3, 4, 5, 6, 7, 8].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernisation of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed December 29, 2020.

[2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. Official website.

[<http://agriculture.gouv.ht/view/01/>]; notably "Animal health in Haiti (La santé animale en Haiti)".

[<http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPY>]. Accessed on 29 December, 2020.

- [3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2018. "Resources (Ressources)". [https://agriculture.gouv.ht/view/01/?page=document]. Accessed 29 December, 2020.
- [4] Ministry of Public Health and Population (MSPP). Official site. [https://mspp.gouv.ht/]. Accessed on 29 December, 2020.
- [5] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [https://www.mspp.gouv.ht/documentation/]. Accessed 29 December, 2020.
- [6] National Public Health Laboratory. [http://mspp.gouv.ht/newsite/\_direction/pageService.php?IDDir=30]. Accessed 29 December, 2020
- [7] General Secretariat of the Council of Ministers. "Documents (Documentation)." [http://www.sgcm.gouv.ht/lois/]. Accessed 29 December, 2020.
- [8] Pan-American Health Organisation (PAHO) and World Health Organisation (WHO) Regional Office for the Americas. "Haiti." [https://www.paho.org/salud-en-las-americas-2017/?p=4110]. Accessed 29 December, 2020.

## 1.3 BIOSECURITY

### 1.3.1 Whole-of- government biosecurity systems

#### 1.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities. The agency taking a lead on biosecurity in the country is the National Public Health Laboratory (LNSP), under the Directorate of Epidemiology, Laboratories and Research (DELR), part of the Ministry of Public Health and Population. It published a national laboratories policy in March 2018, which recognizes the absence of a biosecurity framework as a weakness that needs addressing. According to the policy, a unit will be created within the DELR to develop and oversee regulations and standards in medical biology and pathology, and to put in place a system of reactivogilance. A registration system will be introduced for public and private laboratories. However, there is no mention of a system for recording facilities storing or processing especially dangerous pathogens and toxins [1]. Furthermore, there is no evidence, since the national laboratories policy was published in 2018, that such a system was put in place from the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, nor from the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. In addition, no information or documents on biosecurity are available on the websites of the Ministry of Defense or the Ministry for Justice and Public security [11,12]. Moreover, the VERTIC BWC database of laws on biological weapons does not cite any laws in Haiti which directly address biosecurity [13]. Haiti is not party to the Biological Weapons Convention [14].

[1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)" [http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf]. Accessed 29 December, 2020.

[2] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [http://mspp.gouv.ht/newsite/\_direction/index.php?IDDir=9]. Accessed 29 December, 2020.

[3] Directorate for Epidemiology, Laboratories and Research (DELR). "Documentation centre (Centre de documentation)".

- [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 29 December, 2020.
- [4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 29 December, 2020.
- [5] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 29 December, 2020.
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### 1.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual and to provide staff training [1]. However, there is no evidence that this framework has been put in place nor are there any other documents addressing biosecurity available from the DELR, the LNSP, the Ministry of Public Health and Population and Ministry of Agriculture, Natural Resources and Rural Development, or the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. Furthermore, no information or documents on biosecurity are available from the Ministry of Defense or Ministry of Justice and Public Security [11, 12]. In addition, the VERTIC BWC database of laws on biological weapons does not cite any laws in Haiti which directly address biosecurity [13]. Haiti is not party to the Biological Weapons Convention [14].

[1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)" [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%2020>

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### 1.3.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has legislation or regulations on biosecurity or an agency charged with its oversight. The agency taking a lead on biosecurity is the National Public Health Laboratory (LNSP), under the Directorate of Epidemiology, Laboratories and Research (DELR), part of the Ministry of Public Health and Population (MSPP). It published a national laboratories policy in March 2018, which recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual. It states that a unit will be created within the DELR to develop and oversee regulations and standards in medical biology and pathology, and to put in place a system of reactovigilance. [1] However, there is no evidence that this unit has been created, or of other documents addressing oversight of biosecurity, from the DELR, the LNSP, MSPP and Ministry of Agriculture, Natural Resources and Rural Development, or the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. Furthermore, no information or documents on biosecurity are available from the Ministry of Defense or Ministry of Justice and Public Security. [11, 12] In addition, the VERTIC BWC database of laws on biological weapons does not cite any legislation in Haiti which directly address biosecurity [13]. Haiti is not party to the Biological Weapons Convention [14.]

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### 1.3.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities, or that it has any central record of such inventories. The country's agency which has taken a lead on biosecurity is the National Public Health Laboratory (LNSP), under the Directorate of Epidemiology, Laboratories and Research (DELR), part of the Ministry of Public Health and Population (MSPP). It published a national laboratories policy in March 2018, which recognizes the absence of a biosecurity framework as a weakness that needs addressing. According to the policy, a unit will be created within the DELR to develop and oversee regulations and standards in medical biology and pathology, and to put in place a system of reactivigilance. However, there is no mention of a system for recording inventories of especially dangerous pathogens and toxins, or for consolidating such inventories [1]. Furthermore, there is no evidence that such a unit has been put in place since the 2018 policy was published nor that there is such a system on the websites of the DELR, the LNSP, the MSPP and Ministry of Agriculture, Natural Resources and Rural

Development, or the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. In addition, no information or documents on biosecurity are available from the Ministry of Defense or Ministry of Justice and Public Security [11, 12]. The VERTIC BWC database of laws on biological weapons does not cite any legislation in Haiti which directly address biosecurity [13]. Haiti is not party to the Biological Weapons Convention [14].

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### 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 publicly available evidence that Haiti has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen. The National Public Health Laboratory (LNSP) does not give evidence of this on its website, including the list of services (which does not list specific tests) [1]. Furthermore, the Ministry of Public Health and Population's (MSPP) 'Package of minimum services' lists exams which should be available at laboratories at each level in the hierarchy yet it does not list PCR tests for either level [2]. Moreover,

there is no evidence of this capacity on the Ministry of Defense's website nor on the one for the MSPP, its 'Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018', nor in the 2018 national laboratories policy [3, 4, 5, 6], However, there is evidence that public health laboratories perform PCR testing for other diseases (*Streptococcus pneumoniae*, *Neisseria meningitidis*, and *Haemophilus influenzae*), but not for anthrax or Ebola [7]. The Ministry of Agriculture, Natural Resources and Rural Development's (MARNDR) 2014-2019 plan for the modernization of zoo-phytosanitary protection services assigns a budget for buying real-time PCR equipment for the Tamarinier Laboratory, the state veterinary laboratory, and aims for the laboratory to achieve biosafety level II accreditation [8]. However, there is no evidence of whether these aims have been achieved or whether the Tamarinier Laboratory can conduct PCR testing for anthrax or Ebola, from Tamarinier's Facebook page (its official website is not functioning), or from the MARNDR's website [9, 10, 11]. MARNDR staff received training on PCR testing for rabies from the World Organization for Animal Health (OIE) in 2017 but there is no mention of PCR testing for anthrax or Ebola [12]. In addition, the lack of this capacity was noted in April of 2020 when a representative from Zanmi Lausanne (sister organization to the Boston-based Partners In Health) noted that while they were stepping up rapid testing for Covid-19, they could not conduct PCR-based diagnostic testing in Haiti [13].

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## 1.3.2 Biosecurity training and practices

### 1.3.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual and to provide staff training. It notes that training of laboratory personnel (not specifically with regard to biosecurity) is not standardized, with some employees coming from private schools which are not all recognized by the state. It does not mention training for personnel working with/around especially dangerous pathogens [1]. However, there is no evidence that, since 2018, that such a system to provide staff training has been put in place on the websites of the DELR, the LNSP, the Ministry of Public Health and Population and Ministry of Agriculture, Natural Resources and Rural Development, or the central government's document repository. [2, 3, 4, 5, 6, 7, 8, 9, 10]. Furthermore, no information or documents on biosecurity are available from the Ministry of Defense or the Ministry of Justice and Public Security's websites [11, 12]. In addition, in January of 2020, the Ministry of Health launched its first-ever National Health Research Policy which called for developing research in the health sector. However, there is no mention of plans to train personnel through a common curriculum or train-the-trainer program. The country does not have a ministry of research as this sector falls under the umbrella of the Ministry of Public Health [13]. Moreover, the VERTIC BWC database of laws on biological weapons does not cite any legislation in Haiti which directly address biosecurity [14]. Haiti is not party to the Biological Weapons Convention [15].

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- [13] Mérieux Foundation. 22 January, 2020. "Haiti's Ministry of Public Health and Population Launches its First National Health Research Policy (Le Ministère de la Santé Publique et de la Population d'Haïti lance sa première Politique Nationale de Recherche en Santé)". Accessed 29 December, 2020.
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### 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 publicly available evidence that Haiti has regulations or licensing conditions which specify that security and other personnel 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. Haiti's most recent national laboratories policy, published in March of 2018 by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual, to provide staff training, and to introduce a registration system for public and private laboratories [1]. However, there is no evidence that such a biosecurity framework, manual or regulation for security checks for personnel has since been put in place on the websites of the the DELR, the LNSP, the Ministry of Public Health and Population and Ministry of Agriculture, Natural Resources and Rural Development, or the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. Furthermore, no information or documents on biosecurity are available from the Ministry of Defense or Ministry of Justice and Public Security [11, 12]. In addition, in January of 2020, the Ministry of Health launched its first-ever National Health Research Policy which called for developing research in the health sector. However, there is no mention of plans to train personnel through a common curriculum or train-the-trainer program. The country does not have a ministry of research as this sector falls under the umbrella of the Ministry of Public Health [13]. Moreover, the VERTIC BWC database of laws on biological weapons does not cite any legislation or regulations in Haiti which directly address biosecurity [14]. Haiti is not party to the Biological Weapons Convention [15].

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)" [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 29 December, 2020.
- [2] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 29 December, 2020.
- [3] Directorate for Epidemiology, Laboratories and Research (DELR). "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 29 December, 2020.
- [4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 29 December, 2020.
- [5] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 29 December, 2020.
- [6] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 29 December, 2020.
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- [9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 29 December, 2020.
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- [11] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 29 December, 2020.
- [12] Ministry of Justice and Public Security. 2018. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 29 November, 2020.
- [13] Mérieux Foundation. 22 January, 2020. "Haiti's Ministry of Public Health and Population Launches its First National Health Research Policy (Le Ministère de la Santé Publique et de la Population d'Haïti lance sa première Politique Nationale de Recherche en Santé)". Accessed 29 December, 2020.
- [14] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 29 December, 2020.
- [15] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 29 December, 2020.

### 1.3.4 Transportation security

#### 1.3.4a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Haiti has publicly available information on national regulations on the safe and secure transport of infectious substances (Categories A and B). The country's 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosafety framework as a weakness that needs addressing and plans to organize a secure system for collecting and transporting biological samples in accordance with the International Health Regulations (IHR). This will include the provision

of specific packaging (type triple packaging) for the transfer of samples. It notes that most laboratories currently lack the correct packaging for the transfer of especially dangerous samples (such as suspected Ebola). However, it does not mention regulations or guidance on the safe transport of Category A and B substances [1]. According to Haiti's civil aviation regulations (published in September 2017 and approved in June 2020) require packages containing dangerous substances to be packaged and labelled in line with the Technical Instructions in Doc 9284 issued by the International Civil Aviation Organization (ICAO). The regulations do not specifically mention infectious or Category A and B substances, and no other guidance is available from the National Civil Aviation Office [2, 3]. Furthermore, there is no publicly available information on the transport of infectious substances from the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development or Ministry of Public Works, Transport and Communications, the central government's document repository, the Ministry of Defense or the Ministry of Justice and Public Security or the Customs Code. [4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16]. In addition, Haiti is not party to the Biological Weapons Convention and there is no evidence of such a regulation listed in the VERTIC BWC legislation database [17, 18].

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.
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- [3] National Civil Aviation Office. 2018. Official website. [<https://ofnac.gouv.ht/>]. Accessed 30 December, 2020.
- [4] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.
- [5] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.
- [6] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [7] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.
- [8] Ministry of Public Health and Population (MSPP). 2018. Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.
- [9] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)". [<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.
- [10] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.
- [11] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.
- [12] Ministry of Public Works, Transport and Communications. Official website. [<https://www.mtpc.gouv.ht/accueil>]. Accessed 30 December, 2020.
- [13] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.
- [14] Ministry of Defence. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.
- [15] Ministry of Justice and Public Security. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.

[16] Government of Haiti. 1987. "Customs Code (Code Douanier)".

[[http://haitijustice.com/pdf/accesauxcodes/code\\_douanier\\_haiti.pdf](http://haitijustice.com/pdf/accesauxcodes/code_douanier_haiti.pdf)]. Accessed 30 December, 2020.

[17] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 2020.

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

### 1.3.5a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has national 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. The Civil aviation regulations (published in September 2017 and approved in June 2020) address transport of dangerous goods, requiring compliance with the Technical Instructions in Doc 9284 issued by the International Civil Aviation Organization (ICAO). However, they do not mention checks of senders or recipients besides requiring appropriate labelling of packages [1]. The National Civil Aviation Office does not provide further information on its website and this subject is not addressed in the Customs Code nor on the Customs Administration's website [2, 3, 4]. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELIR), addresses the need to establish a biosecurity framework but does not mention cross-border transfer or end-user screening of dangerous substances [5]. Furthermore, there is no information on this subject from the DELIR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government's document repository, the Ministry of Defense, the Ministry of Justice and Public Security, nor from the VERTIC BWC database of laws on biological weapons [6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17]. Haiti is not party to the Biological Weapons Convention [18].

[1] Government of Haiti. "Civil aviation regulations published September 2017: Part 1 - General policy, administration and procedures, definitions. Approved June 2020 (Règlements de l'aviation civile: Partie 1 - Politique générale, administration et procédures, définitions)" [<https://ofnac.gouv.ht/wp-content/uploads/2020/11/RACH-Partie-1-Politique-Generale-Administration-et-Procédures-Definitions.pdf>]. Accessed 30 December, 2020.

[2] National Civil Aviation Office. Official website. [<https://ofnac.gouv.ht/>]. Accessed 30 December, 2020.

[3] Government of Haiti. 1987. "Customs Code (Code Douanier)".

[[http://haitijustice.com/pdf/accesauxcodes/code\\_douanier\\_haiti.pdf](http://haitijustice.com/pdf/accesauxcodes/code_douanier_haiti.pdf)]. Accessed 30 December, 2020.

[4] General Customs Administration. Official website. [<https://douane.gouv.ht/index.php>]. Accessed 30 December.

[5] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELIR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)".

[<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.

[6] Directorate for Epidemiology, Laboratories and Research (DELIR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.

[7] Directorate for Epidemiology, Laboratories and Research (DELIR). 2018. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December,

2020.

- [8] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [9] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.
- [10] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.
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- [12] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.
- [13] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.
- [14] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.
- [15] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.
- [16] Ministry of Justice and Public Security. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.
- [17] VERTIC. "BWC Legislation Database: Haiti". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/h.php>]. Accessed 30 December, 2020.
- [18] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 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 available evidence that Haiti has in place national biosafety legislation or regulations. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosafety framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual. It also states that safety equipment is lacking in many laboratories and support staff are rarely trained on biosafety [1]. Haiti's Labour Code contains provisions relevant to laboratory biosafety. Employers must ensure adequate protection of employees' health in the workplace, including requirements for dangerous substances to be stored safely and for protective clothing and equipment to be supplied by the employer if necessary. However this is not specific or detailed enough to constitute a biosafety law [2]. Haiti does have legislation on biosafety in the sense of protecting domestic agriculture from incoming biological threats, such as a 1986 law requiring authorization for the import of animals, vegetables and seeds [3]. Furthermore, there is no evidence that the country has national biosafety legislation or regulations on the websites of the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government's document repository nor in the VERTIC BWC database of laws on biological weapons [4, 5, 6, 7, 8, 9, 10, 11, 12, 13]. In addition, Haiti is

not party to the Biological Weapons Convention [14].

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf]. Accessed 30 December, 2020.
- [2] Government of Haiti. 1984. "Decree of 24 February 1984 updating the Labour Code of 12 September 1961 (Décret du 24 février 1984 actualisant le Code du travail du 12 septembre 1961)". International Labor Organization (ILO). [http://www.ilo.org/dyn/natlex/docs/WEBTEXT/135/64790/F61HTI01.htm]. Accessed 30 December 2020.
- [3] Government of Haiti. 1986. "Decree prohibiting the entry into Haiti of animals, vegetables, vegetable seeds and their derivatives, without authorisation from the minister of agriculture, natural resources and rural development (Décret interdisant l'entrée en Haïti d'animaux, de végétaux, de semences végétales et de leurs dérivés, sans une autorisation du Ministre de l'agriculture, des ressources naturelles et du développement rural)". [http://www.vertic.org/media/National%20Legislation/Haiti/HT\_Importation\_animaux\_vegetaux.pdf]. Accessed 30 December, 2020.
- [4] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [http://mspp.gouv.ht/newsite/\_direction/index.php?IDDir=9]. Accessed 30 December, 2020.
- [5] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. "Documentation centre (Centre de documentation)". [http://mspp.gouv.ht/newsite/\_direction/pageDocumentation.php?IDDir=9]. Accessed 30 December, 2020.
- [6] National Public Health Laboratory. Official site. [http://mspp.gouv.ht/newsite/\_direction/pageService.php?IDDir=30]. Accessed 30 December, 2020.
- [7] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [http://mspp.gouv.ht/newsite/\_direction/pageDocumentation.php?IDDir=30]. Accessed 30 December, 2020.
- [8] Ministry of Public Health and Population (MSPP). 2018. Official site. [https://mspp.gouv.ht/]. Accessed on 30 December, 2020.
- [9] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)". [http://mspp.gouv.ht/documentation]. Accessed 30 December, 2020.
- [10] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [http://agriculture.gouv.ht/view/01/]. Accessed 30 December, 2020.
- [11] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [https://agriculture.gouv.ht/view/01/?page=document]. Accessed 30 December, 2020.
- [12] General Secretariat of the Council of Ministers. "Documents (Documentation)". [http://www.sgcm.gouv.ht/lois/]. Accessed 30 December, 2020.
- [13] VERTIC "BWC Legislation Database: Haiti". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/]. Accessed 30 December, 2020.
- [14] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [https://bwc-ecbm.unog.ch/browse]. Accessed 30 December, 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 available evidence that Haiti has biosafety legislation or regulations, and thus no established agency responsible for the enforcement of biosafety legislation and regulations. The agency which has taken a lead on biosafety is the National

Public Health Laboratory (LNSP), under the Directorate of Epidemiology, Laboratories and Research (DELR), part of the health ministry. Its 2018 national laboratories policy recognizes the absence of a biosafety framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual [1]. Haiti's Labour Code contains provisions relevant to laboratory biosafety. Employers must ensure adequate protection of employees' health in the workplace, including requirements for dangerous substances to be stored safely and for protective clothing and equipment to be supplied by the employer if necessary. However, this is not specific or detailed enough to constitute a biosafety law [2]. Haiti has a law on biosafety but only in the sense of protecting domestic agriculture from incoming biological threats, such as a 1986 law requiring authorization for the import of animals, vegetables and seeds [3]. Furthermore, there is no evidence of biosafety legislation or regulations on the websites of DELR, the LNSP, the Ministry of Health, the Ministry of Agriculture, health nor in the central government's document repository [4, 5, 6, 7, 8, 9, 10, 11, 12]. In addition, there is no evidence of such legislation or regulation listed in the VERTIC BWC legislation database [13]. Haiti is not party to the Biological Weapons Convention [14].

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.
- [2] Government of Haiti. 1984. "Decree of 24 February 1984 updating the Labour Code of 12 September 1961 (Décret du 24 février 1984 actualisant le Code du travail du 12 septembre 1961)". International Labor Organization (ILO). [<http://www.ilo.org/dyn/natlex/docs/WEBTEXT/135/64790/F61HTI01.htm>]. Accessed 30 December, 2020.
- [3] Government of Haiti. 1986. "Decree prohibiting the entry into Haiti of animals, vegetables, vegetable seeds and their derivatives, without authorization from the minister of agriculture, natural resources and rural development (Décret interdisant l'entrée en Haïti d'animaux, de végétaux, de semences végétales et de leurs dérivés, sans une autorisation du Ministre de l'agriculture, des ressources naturelles et du développement rural)". [[http://www.vertic.org/media/National%20Legislation/Haiti/HT\\_Importation\\_animaux\\_vegetaux.pdf](http://www.vertic.org/media/National%20Legislation/Haiti/HT_Importation_animaux_vegetaux.pdf)]. Accessed 30 December, 2020.
- [4] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.
- [5] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.
- [6] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [7] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.
- [8] Ministry of Public Health and Population (MSPP). 2018. Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.
- [9] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)". [<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.
- [10] Ministry of Agriculture, Natural Resources and Rural Development (MARNDP). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.
- [11] Ministry of Agriculture, Natural Resources and Rural Development (MARNDP). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.
- [12] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.
- [13] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.

[14] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 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 available evidence that Haiti requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosafety framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual and to provide staff training. It also notes that the training of laboratory personnel (not specifically with regard to biosafety) is not standardized, with some employees coming from private schools which are not all recognized by the state. It does not mention training for personnel working with/around especially dangerous pathogens [1]. Furthermore, there is no evidence that a biosafety training system has been introduced on the websites of the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, nor on the central government's document repository [2, 3, 4, 5, 6, 7, 8, 9, 10]. In addition, there is no evidence of such legislation or regulation listed in the VERTIC BWC legislation database [11]. Haiti is not party to the Biological Weapons Convention [12].

[1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)".

[<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.

[2] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.

[3] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.

[4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.

[5] The National Public Health Laboratory. "Documentation centre (Centre de documentation)".

[[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.

[6] Ministry of Public Health and Population (MSPP). 2018. Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.

[7] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)".

[<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.

[8] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website.

[<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.

[9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)".

[<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.

[10] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.

[11] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.

[12] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 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 Haiti has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, and/or other dual use research. The agency which has taken a lead on biosecurity is the National Public Health Laboratory (LNSP), under the Directorate of Epidemiology, Laboratories and Research (DELR) which is part of the health ministry. The LNSP published a national laboratories policy in March 2018, which recognizes the absence of a biosecurity framework as a weakness that needs addressing and plans to introduce a registration system for public and private laboratories yet there is no mention of an assessment of potential dual-use research [1]. Haiti does not have a Ministry of Research. However, in March of 2020, the government adopted, by decree, three texts relating to higher education and scientific research. These included the decree on the organization, functioning and modernization of higher education and the decree organizing the National Agency for Higher Education and Scientific Research. Yet there is no mention in this decree that this Agency will conduct research on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research [2]. Furthermore, there is no evidence that an assessment of potential dual-use research has been carried out from the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government's document repository, the Ministry of National Education and Professional Training, the Ministry of Defense, the Ministry of Justice and Public Security, nor from the VERTIC BWC database of laws on biological weapons [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]. Haiti is not party to the Biological Weapons Convention [16].

[1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)".

[<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.

[2] Haiti 24.com. 16 May, 2020. "The State honors the governance of higher education and research (L'Etat met à l'honneur la gouvernance de l'enseignement supérieur et de la recherche)". [<http://haiti24.net/letat-met-a-lhonneur-la-gouvernance-de-lenseignement-superieur-et-de-la-recherche/>]. Accessed 30 December, 2020.

[3] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.

[4] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. "Documentation centre (Centre de

documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.

[5] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.

[6] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.

[8] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.

[9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.

[10] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.

[11] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.

[12] Ministry of National Education and Professional Training. Official website. [<http://menfp.gouv.ht/index.htm>]. Accessed 30 December, 2020.

[13] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.

[14] Ministry of Justice and Public Security. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.

[15] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.

[16] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 2020.

### 1.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has legislation or a regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. Haiti does not have legislation or regulations on dual-use research. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual. It does not mention oversight of dual-use research [1]. However, there is no evidence that such a manual has been put in place since then, nor are there any other documents addressing dual-use research available from the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government's document repository, the Ministry of National Education and Professional Training, the Ministry of Defense, the Ministry of Justice and Public Security, nor in the VERTIC BWC database of laws on biological weapons [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]. In addition, Haiti is not party to the Biological Weapons Convention [15].

[1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)".

- [<http://mspp.gouv.ht/site/downloads/MSP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.
- [2] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.
- [3] Directorate for Epidemiology, Laboratories and Research (DELR). "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.
- [4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [5] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.
- [6] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.
- [7] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.
- [8] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.
- [9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.
- [10] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgccm.gouv.ht/lois/>]. Accessed 30 December, 2020.
- [11] Ministry of National Education and Professional Training. Official website. [<http://menfp.gouv.ht/index.htm>]. Accessed 30 December, 2020.
- [12] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.
- [13] Ministry of Justice and Public Security. 2018. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.
- [14] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.
- [15] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 2020.

### 1.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. The 2018 national laboratories policy, published by the National Public Health Laboratory (LNSP) under the Directorate for Epidemiology, Laboratories and Research (DELR), recognizes the absence of a biosecurity framework as a weakness that needs addressing and states the intention to develop a national biosafety and biosecurity manual. It does not mention oversight of dual-use research [1]. However, there is no evidence that such a manual has been put in place nor is there evidence of any document addressing dual-use research on the websites of the DELR, the LNSP, the Ministry of Public Health and Population, the Ministry of Agriculture, Natural Resources and Rural Development, the central government's document repository, the Ministry of National Education and Professional Training, the Ministry of Defense, the Ministry of Justice and Public Security, nor in the VERTIC BWC database of laws on biological weapons [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]. In addition, Haiti is

not party to the Biological Weapons Convention [15].

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.
- [2] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.
- [3] Directorate for Epidemiology, Laboratories and Research (DELR). "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=9)]. Accessed 30 December, 2020.
- [4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [5] The National Public Health Laboratory. "Documentation centre (Centre de documentation)". [[http://mspp.gouv.ht/newsite/\\_direction/pageDocumentation.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageDocumentation.php?IDDir=30)]. Accessed 30 December, 2020.
- [6] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed on 30 December, 2020.
- [7] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<http://mspp.gouv.ht/documentation>]. Accessed 30 December, 2020.
- [8] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 30 December, 2020.
- [9] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)". [<https://agriculture.gouv.ht/view/01/?page=document>]. Accessed 30 December, 2020.
- [10] General Secretariat of the Council of Ministers. 2018. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 30 December, 2020.
- [11] Ministry of National Education and Professional Training. Official website. [<http://menfp.gouv.ht/index.htm>]. Accessed 30 December, 2020.
- [12] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.
- [13] Ministry of Justice and Public Security. 2018. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.
- [14] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.
- [15] The United Nations Office at Geneva (UNOG). N.d. "BWC Electronic Confidence Building Measures Portal: Browse states parties." [<https://bwc-ecbm.unog.ch/browse>]. Accessed 30 December, 2020.

## 1.5.2 Screening guidance for providers of genetic material

### 1.5.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has legislation or a regulation requiring the screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold. Synthesized DNA is not mentioned in the the country's most recent agricultural laws and policies [1, 2, 3, 4]. A laboratory was opened in 2018 to certify seeds for sale in Haiti, which could eventually play a role in screening DNA of GMO seeds, but preliminary work on a draft law and policy on

seeds is, to date, not yet available online [4, 5, 6]. Furthermore, there is no information on screening of synthesized DNA from the central government's document repository, the Ministry of Environment, the Ministry of Public Health and Population, the Ministry of Defense, the Ministry of Justice and Public Security, nor in the VERTIC BWC database of laws on biological weapons [6, 7, 8, 9, 10, 11]. In addition, Haiti is not party to the Biological Weapons Convention [12].

[1] Ministry of Justice. 1984. "Rural Code (Code Rural)".

[[http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code\\_Rural\\_1984.pdf](http://www.agriculture.gouv.ht/view/01/IMG/pdf/Code_Rural_1984.pdf)]. Accessed on 30 December, 2020.

[2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 30 December, 2020.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2011. "Agricultural development policy 2010-2025 (Politique de développement Agricole 2010-2025)".

[[https://agriculture.gouv.ht/view/01/IMG/pdf/Politique\\_de\\_developpement\\_agricole-Version\\_finale\\_mars\\_2011.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Politique_de_developpement_agricole-Version_finale_mars_2011.pdf)].

Accessed 30 December, 2020.

[4] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website.

[<http://agriculture.gouv.ht/view/01/>]. Accessed on 30 December, 2020.

[5] Food and Agricultural Organization (FAO) Haiti. 3 July 2018. "Towards the establishment of a sustainable quality seed industry in Haiti (Vers la mise en place d'une industrie semencière de qualité durable en Haiti)".

[<http://www.fao.org/haiti/actualites/detail-events/ar/c/1143460/>]. Accessed 30 December, 2020.

[6] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>].

Accessed 30 December, 2020.

[7] Ministry of the Environment. Official site. [<https://www.mde.gouv.ht/index.php/fr/>]. Accessed 30 December, 2020.

[8] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 30 December, 2020.

[9] Ministry of Defense. Official website. [<https://md.gouv.ht/index.php>]. Accessed 30 December, 2020.

[10] Ministry of Justice and Public Security. Official website. [<http://www.mjsp.gouv.ht/presentation.htm>]; and "Action plan of the Ministry of Justice and Public Security 2012-2016 (Plan d'action du Ministère de la Justice et de la Sécurité Publique 2012-2016)". [[http://www.mjsp.gouv.ht/pdf/plan\\_d'action\\_2012-2016.pdf](http://www.mjsp.gouv.ht/pdf/plan_d'action_2012-2016.pdf)]. Accessed 30 December, 2020.

[11] VERTIC "BWC Legislation Database: Haiti". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 30 December, 2020.

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## 1.6 IMMUNIZATION

### 1.6.1 Vaccination rates

#### 1.6.1a

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

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

**Current Year Score: 0**

2019

World Health Organization

### 1.6.1b

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

Yes = 1, No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

### 2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

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

##### 2.1.1a

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

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

Current Year Score: 0

There is insufficient evidence that Haiti's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. There is evidence, however, that it can conduct 4 of them. It can conduct PCR testing for the Influenza virus, serology for HIV, microscopy for TB, and rapid diagnostic testing for plasmodium spp. (malaria) [1, 2, 3]. The national laboratory system can also conduct blood tests for typhoid but the test is unspecified and thus it cannot count as a diagnostic test [1, 2]. Furthermore, there is no available evidence either of capacity to perform WHO-defined core tests, or that Haiti has defined its own set of core tests, from articles published by staff of the National Public Health Laboratory (LNSP) on laboratory capacity, the websites of the Ministry of Public Health and Population, the LNSP or the Directorate for Epidemiology, Laboratories and Research (DELR), the 2018 laboratories policy, 2010 laboratories strategy, 2013 plan on disease surveillance, or information on Haiti from the U.S. Centers for Disease Control and Prevention (CDC) and the Pan-American Health Organization (PAHO) [1, 2, 4, 5, 6, 7, 8, 9, 10, 11].

[1] Juin, S. et al. 2017. "Strengthening national disease surveillance and response: Haiti, 2010-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97 (4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676630/>]. Accessed 30 December, 2020.

[2] Louis, F. et al. 2017. "Building and rebuilding: The National Public Health Laboratory systems and services before and after the earthquake and cholera epidemic, Haiti, 2009-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97

- (4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676632/>]. Accessed 30 December, 2020.
- [3] U.S. Centers for Disease Control and Prevention (CDC). 29 October 2010. "Rapid diagnostic tests for malaria - Haiti." Morbidity and Mortality Weekly Report. [<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5942a4.htm>]. Accessed 30 December, 2020.
- [4] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 30 December, 2020.
- [5] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 30 December, 2020.
- [6] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 30 December, 2020.
- [7] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 30 December, 2020.
- [8] Ministry of Public Health and Population (MSPP). 2010. "Five-year strategic plan on the national laboratory network (Plan stratégique quinquennal du réseau national de laboratoires)". [<http://mspp.gouv.ht/site/downloads/version%20finalisee%20Plan%20Strategique.pdf>]. Accessed 30 December, 2020.
- [9] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 30 December, 2020.
- [10] U.S. Centers for Disease Control and Prevention (CDC). "Global health - Haiti: Strengthening laboratory capacity." [<https://www.cdc.gov/globalhealth/countries/haiti/what/strengthening-laboratory-capacity.html>]. Accessed 30 December, 2020.
- [11] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. "Haiti." [<https://www.paho.org/hai/index.php?lang=en>]. Accessed 30 December, 2020.

### 2.1.1b

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

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

**Current Year Score: 0**

There is insufficient evidence that Haiti has a national plan for testing during a public health emergency which includes considerations for testing for novel pathogens, scaling capacity, and defining goals. In the country's Preparation and Response Plan to the Coronavirus of March 10, 2020, the Ministry of Health mentions a strategy to conduct country-level routine testing for COVID-19 and related diseases. It states that "if the Covid-19 epidemic has been confirmed in a community, the following should be done: virological tests to confirm the diagnosis of atypical cases and the need for surveillance [1]". However, there is no evidence that this plan includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing nor that it can be applied to multiple disease outbreaks on the websites of the Ministry of Health, the Ministry of Agriculture nor on the one of the National Public Health Laboratory [2, 3, 4].

[1] MSPP: "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP>]

%20au%20CoronaVirus.pdf]. Accessed 06 January, 2021.

[2] Ministry of Public Health and Population of Haiti (MSPP). Official website. [<https://www.mspp.gouv.ht/>]. Accessed 06 January, 2021.

[3] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR). [<http://agriculture.gouv.ht/view/01/>]. Accessed 06 January, 2021.

[4] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 06 January, 2021.

## 2.1.2 Laboratory quality systems

### 2.1.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no available evidence that Haiti's national reference laboratory, the National Public Health Laboratory (LNSP), is accredited. There is no evidence from the LNSP, the Directorate for Epidemiology, Laboratories and Research, the Ministry of Public Health and Population, or from the 2018 national laboratories policy that the LNSP has achieved ISO, CLIA or equivalent accreditation [1, 2, 3, 4]. The LNSP adopted country-specific standards in 2014, described in the "Harmonization and standardization of the national network of integrated and hierarchical laboratories of medical biology in Haiti", "The guide on the minimum requirements for medical laboratories in Haiti" and the supervisory grid that accompanies the guide [4]. However, these documents are not available online and the only available information does not suggest that it is a system comparable to ISO 15189 [5]. The LNSP is participating in an ongoing regional initiative, supported by the Pan American Health Organization (PAHO) and US Centers for Disease Control and Prevention (CDC) and administered by the Caribbean Regional Organization for Standards and Quality, to enable laboratory services to fulfill the ISO 15189: 2012 requirements: Laboratory Quality Management Systems — Stepwise Improvement Process (LQMS-SIP) [6]. However, there is no evidence from the LQMS-SIP web page that Haiti has achieved ISO 15189 [7].

[1] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 04 January, 2021.

[2] Directorate for Epidemiology, Laboratories and Research (DEL R). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 04 January, 2021.

[3] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 04 January, 2021.

[4] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DEL R). "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)".

[<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 04 January, 2021.

[5] Louis, F. et al. 2017. "Building and rebuilding: The National Public Health Laboratory systems and services before and after the earthquake and cholera epidemic, Haiti, 2009-2015," in The American Journal of Tropical Medicine and Hygiene, 97 (4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676632/>]. Accessed 04 January, 2021.

[6] Alemnji, G. et al. 2017. "Development and implementation of the Caribbean Laboratory Quality Management Systems Stepwise Improvement Process (LQMS-SIP) Towards Accreditation", in African Journal of Laboratory Medicine, 6 [1], February 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5523911/>]. Accessed 04 January, 2021.

[7] CARICOM Regional Organisation for Standards and Quality. 2016. "LQMS-SIP." [<https://website.crosq.org/lqms-sip/>].

Accessed 04 January, 2021.

### 2.1.2b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti's national reference laboratory, the National Public Health Laboratory (LNSP), is subject to external quality assurance (EQA) review. In 2012, the LNSP and Haiti's regional laboratories enrolled in the WHO-Afro Strengthening Laboratory Management Towards Accreditation (SLMTA) program and completed several workshops and progress assessments on quality assurance. In addition, the LNSP partners with the College of American Pathologists for EQA for their parasitology, bacteriology, and immunology sections. For TB and molecular biology (HIV PCR and EID), the LNSP receives panels twice a year from the US Centers for Disease Control and Prevention (CDC), Atlanta, for continuous assessment of quality improvements [1].

[1] Louis, F. et al. 2017. "Building and rebuilding: The National Public Health Laboratory systems and services before and after the earthquake and cholera epidemic, Haiti, 2009-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97 (4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676632/>]. Accessed 04 January, 2021.

## 2.2 LABORATORY SUPPLY CHAINS

### 2.2.1 Specimen referral and transport system

#### 2.2.1a

**Is there a nationwide specimen transport system?**

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti has a nationwide specimen transport system for certain diseases which is the National Specimen Referral Network (NSRN). The National Public Health Laboratory (LNSP) initially developed a limited specimen referral network for HIV viral load (VL) testing, and by October 2018 this had been scaled up into a national network (with support from the Centers for Disease Control and Prevention (CDC)) and expanded to combine centralized specimen transport for (HIV) early infant diagnosis, VL and disease surveillance; semi-centralized specimen transport for TB diagnosis and multi-drug-resistant TB detection; and decentralized specimen transport for national quality assurance programs. The NSRN covers 208 sites and facilitates the transport and electronic tracking and monitoring of specimen quality, quantities, and testing results [1, 2].

[1] Louis, F. et al. 2017. "Building and rebuilding: The National Public Health Laboratory systems and services before and after the earthquake and cholera epidemic, Haiti, 2009-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97 (4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676632/>]. Accessed 04 January, 2021.

[2] U.S. Centers for Disease Control and Prevention (CDC). "Global Health - Haiti: Strengthening laboratory capacity." [<https://www.cdc.gov/globalhealth/countries/haiti/what/strengthening-laboratory-capacity.html>]. Accessed 04 January, 2021.

## 2.2.2 Laboratory cooperation and coordination

### 2.2.2a

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

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

**Current Year Score: 0**

There is no available evidence that Haiti 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. In the country's Preparation and Response Plan to the Coronavirus of March 2020, the Ministry of Health mentions a strategy to "reinforce the National Public Health Laboratory diagnostic capacities by ensuring it has a sufficient supply of reagents and other laboratory resources". However, there is no mention of putting in place a plan to rapidly authorize or license laboratories to supplement this capacity to scale-up testing during an outbreak [1]. In addition, there is no evidence of such a plan on the websites of the Ministry of Health, the National Public Health Laboratory (LNSP), the Ministry of Agriculture nor on the government's main portal (2, 3, 4, 5).

[1] Ministry of Health and Population (MSPP). March 2020. "Preparation and Response plan of the MSPP to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)".

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 04 January, 2020.

[2] Ministry of Public Health and Population (MSPP). Official website. [<https://www.mspp.gouv.ht/>]. Accessed 04 January, 2021.

[3] Ministry of Agriculture of Natural Resources and Rural Development (MARNDR). [<http://agriculture.gouv.ht/view/01/>]. Accessed 04 January, 2021.

[4] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 04 January, 2021.

[5] General Secretariat of the Council of Ministers. Official website. [<http://www.sgcm.gouv.ht/>]. Accessed 04 January, 2021.

## 2.3 REAL-TIME SURVEILLANCE AND REPORTING

### 2.3.1 Indicator and event-based surveillance and reporting systems

#### 2.3.1a

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

Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2,

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

**Current Year Score: 0**

There is insufficient evidence that Haiti is conducting ongoing event-based surveillance and analysis for infectious disease. Haiti does have a surveillance system which is called the National Epidemiological Surveillance Network (NESN) and was established after the 2010 earthquake by the Ministry of Public Health and Population (MSPP) in collaboration with the U.S. Centers for Disease Control and Prevention (CDC) and the Pan American Health Organization (PAHO) [1]. However, although it produces weekly reports on the number of cases for 41 conditions such as malaria, rabies and tuberculosis and since March 2020, Covid-19, there is no evidence that it conducts ongoing event-based surveillance [2, 3, 4]. In addition, there is no

evidence of such a system on the websites of the MSPP, the Ministry of Agriculture, nor on the one of the National Public Health Laboratory [5, 6, 7].

- [1] Juin, S. et al. 2017. "Strengthening national disease surveillance and response: Haiti, 2010-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97(4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676630/>]. Accessed 08 January, 2021
- [2] Centers for Disease Control and Prevention (CDC). 23 October, 2018. "Improving Disease Surveillance in Haiti". [<https://www.cdc.gov/globalhealth/countries/haiti/infographics/surveillance-infographic.html>]. Accessed 08 January, 2021.
- [3] Ministry of Health and Population (MSPP). "Disease / Phenomena Report Under Epidemiological Surveillance (Rapport des Maladies / Phénomènes Sous Surveillance Épidémiologique)". 9-15 February, 2020. [[https://mspp.gouv.ht/site/downloads/Rapport\\_Reseau\\_National\\_Surveillance\\_7%C3%A8me\\_SE\\_2020.pdf](https://mspp.gouv.ht/site/downloads/Rapport_Reseau_National_Surveillance_7%C3%A8me_SE_2020.pdf)]. Accessed 08 January, 2021.
- [4] Ministry of Health and Population: Surveillance COVID-19, Haiti. 28 March, 2020. [[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/sitrep\\_28-03-2020.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/sitrep_28-03-2020.pdf)]. Accessed 08 January, 2021.
- [5] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 08 January, 2021.
- [6] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR). [<http://agriculture.gouv.ht/view/01/>]. Accessed 08 January, 2021.
- [7] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 08 January, 2021.

### 2.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has reported a potential public health emergency of international concern (PHEIC) including Covid-19 to the World Health Organization (WHO) within the last two years. No outbreaks or potential PHEIC's in Haiti have been reported in the past two years, either on the World Health Organization's (WHO) Disease Outbreak News page, the Pan American Health Organization (PAHO)'s Institutional Repository for Information Sharing (IRIS) or by the media [1, 2]. Furthermore, there is no available evidence that any outbreaks of diseases have been reported to the WHO in the past two years from the Ministry of Public Health and Population (MSPP) [3].

- [1] World Health Organization (WHO). 2020. "Disease Outbreak News". 2020 and 2019 pages. [<https://www.who.int/csr/don/archive/year/2020/en/>]; [<https://www.who.int/csr/don/archive/year/2019/en/>]. Accessed 08 January, 2021.
- [2] Pan American Health Organization (PAHO) -WHO. Institutional Repository for Information Sharing (IRIS). [<https://iris.paho.org/>]. Accessed 08 January, 2021.
- [3] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 08 January, 2021.

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

### 2.3.2a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti operates an electronic reporting surveillance system at both the national and the sub-national level. The country's National Epidemiologic Surveillance Network (NESN) was launched in 2010 by the Ministry of Health, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC) and the Pan American Health Organization among others, after a major earthquake. The NESN expanded from 51 sites in 2010 to 652 member healthcare facilities around the country. These facilities enter surveillance data into a web-based platform which enables direct reporting to the departmental (ie regional) and national level. Data is analyzed at the regional level before being sent to the national level [1, 2].

[1] Juin, S. et al. 2017. "Strengthening national disease surveillance and response: Haiti, 2010-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97(4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676630/>]. Accessed 08 January, 2021.

[2] US Centers for Disease Control and Prevention (CDC). 23 October, 2018. "Improving Disease Surveillance in Haiti". [<https://www.cdc.gov/globalhealth/countries/haiti/infographics/surveillance-infographic.html>]. Accessed 08 January, 2021.

### 2.3.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is evidence that Haiti's surveillance system includes laboratory-based surveillance, but there is no evidence that real-time laboratory data is fed into the electronic reporting system. Laboratory-based surveillance of infectious diseases (going beyond HIV and TB) was introduced in 2012 and had been expanded to 15 sentinel sites by 2018. The laboratory-based surveillance system, known by its French acronym PRESEPI, collects information on and samples from a subset of cases of diarrhea, acute febrile illness, severe acute respiratory infection, and meningitis in sentinel hospitals. It is separate from the electronic surveillance system for healthcare facilities, the National Epidemiologic Surveillance Network (NESN). Specimens are tested at the National Public Health Laboratory and reports are shared monthly with stakeholders [1, 2]. Furthermore, the most recent national laboratories policy (March 2018) stated the need for a digital laboratory management system to collect and transmit laboratory data into the NESN [3].

[1] Juin, S. et al. 2017. "Strengthening national disease surveillance and response: Haiti, 2010-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97(4 Suppl), Oct 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676630/>]. Accessed 08 January, 2021.

[2] US Centers for Disease Control and Prevention (CDC). 23 October, 2018. "Improving Disease Surveillance in Haiti". [<https://www.cdc.gov/globalhealth/countries/haiti/infographics/surveillance-infographic.html>]. Accessed 08 January, 2021.

[3] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 08 January, 2021.

## 2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

### 2.4.1 Coverage and use of electronic health records

#### 2.4.1a

##### Are electronic health records commonly in use?

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

**Current Year Score: 1**

There is evidence that, in Haiti, electronic health records are commonly in use in HIV care and treatment facilities, but not in the wider healthcare sector. Haiti has three electronic medical record (EMR) systems for people living with HIV/AIDS: iSanté, GHESKIO and Partners In Health/Zanmi Lasante (PIH/ZL) [1]. Together, the systems cover 96% of HIV care and treatment sites [2]. iSanté is the largest system and is used at over 150 hospitals and clinics around Haiti and includes about 1.3 million patient records. It is focused on HIV/AIDS [1, 3, 4]. GHESKIO's system covers over 425,000 patients and covers HIV as well as several other clinical areas [5]. PIH/ZL's EMR system is focused on HIV/AIDS though there are plans to expand it to other clinical areas [6]. Furthermore, no information on electronic health records is available from the websites of the Ministry of Public Health and Population or its Directorate for Epidemiology, Laboratories and Research (DELR) [7, 8].

[1] Ministry of Public Health and Population (MSPP). December 2014. "HIV epidemiological surveillance bulletin for HIV/AIDS, no. 8 (Bulletin de Surveillance Epidémiologique VIH/SIDA, no. 8)".

[<https://mspp.gouv.ht/site/downloads/Bulletin%20de%20Surveillance%20Epidemiologique%20VIH%20Sida%20no%208.pdf>]. Accessed 08 January, 2021.

[2] U.S. Centers for Disease Control and Prevention (CDC). 2018. "Achieving epidemic control of HIV/AIDS."

[<https://www.cdc.gov/globalhealth/countries/haiti/what/achieving-epidemic-control-of-hiv-aids.html>]. Accessed 08 January, 2021.

[3] DeRiel, E. et al. March 2018. "Success factors for implementing and sustaining a mature electronic medical record in a low-resource setting: a case study of iSanté in Haiti," in Health Policy Plan, 33

[2]. [<https://www.ncbi.nlm.nih.gov/pubmed/29253138>]. Accessed 08 January, 2021.

[4] I-TECH. May 2017. "Health Information Systems in Haiti". [<https://www.go2itech.org/2017/05/health-information-systems-in-haiti/>]. Accessed 08 January, 2021.

[5] Marcelin, A. et al. 2015. "Developing an Electronic Medical Record for Interlinked Care Services in Haiti," in Studies in Health Technology and Informatics, 216. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573958/>]. Accessed 08 January, 2021.

[6] OpenMRS. April 2017. "Partners in Health Haiti EMR." [<https://openmrs.org/2017/04/partners-in-health-haiti-emr/>]. Accessed 08 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 08 January, 2021.

[8] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 08 January, 2021.

#### 2.4.1b

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

Yes = 1, No = 0

**Current Year Score: 1**

There is publicly available evidence that Haiti's national public health system has access to electronic health records of individuals in their country but these only cover a minority of the population. Haiti has a public health system which as of 2010 operated 31% of all health facilities, with 46% private and 23% mixed public-private facilities [1]. Haiti has three electronic medical record (EMR) systems, mainly used for people living with HIV/AIDS: iSanté, GHESKIO and Partners In Health/Zanmi Lasante (PIH/ZL). Together, the systems cover 96% of HIV care and treatment sites [2, 3]. The two largest systems cover nearly 1.3m patient records (Haiti has a population of 11 million). [4, 5, 6]. Only iSanté is government-owned, but all three systems feed into a centralized case surveillance database, along with surveillance and laboratory information, which is used by the public health authorities for analysis and quality assurance [7]. Community health workers also use information from the database to track patients missing from care [3].

- [1] Ministry of Public Health and Population (MSPP). 2012. "National health policy (Politique nationale de santé)". [<http://mspp.gouv.ht/site/downloads/PNS%2021juillet%20version%20finale.pdf>]. Accessed 8 January, 2021.
- [2] Ministry of Public Health and Population (MSPP). December 2014. "HIV epidemiological surveillance bulletin for HIV/AIDS, no. 8 (Bulletin de Surveillance Epidémiologique VIH/SIDA, no. 8)". [<https://mspp.gouv.ht/site/downloads/Bulletin%20de%20Surveillance%20Epidemiologique%20VIH%20Sida%20no%208.pdf>]. Accessed 08 January, 2021.
- [3] U.S. Centers for Disease Control and Prevention (CDC). 9 October, 2018. "Achieving epidemic control of HIV/AIDS." [<https://www.cdc.gov/globalhealth/countries/haiti/what/achieving-epidemic-control-of-hiv-aids.html>]. Accessed 08 January, 2021.
- [4] DeRiel, E. et al. March 2018. "Success factors for implementing and sustaining a mature electronic medical record in a low-resource setting: a case study of iSanté in Haiti," in Health Policy Plan, 33 [2]. [<https://www.ncbi.nlm.nih.gov/pubmed/29253138>]. Accessed 08 January, 2021.
- [5] Marcelin, A. et al. 2015. "Developing an Electronic Medical Record for Interlinked Care Services in Haiti," in Studies in Health Technology and Informatics. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573958/>]. Accessed 08 January, 2021.
- [6] I-TECH. May 2017. "Health Information Systems in Haiti". [<https://www.go2itech.org/2017/05/health-information-systems-in-haiti/>]. Accessed 08 January, 2021.
- [7] Ministry of Public Health and Population (MSPP) and National Alliance of Territorial AIDS Directors (NASTAD). 2012. "Evolution of the HIV/AIDS case surveillance system in Haiti." [<https://www.paho.org/hq/dmdocuments/2012/4-HAITI-Evolution-HIVAIDS-Case-Surveillance.pdf>]. Accessed 08 January, 2021.

### 2.4.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has established data standards for electronic health records. The country has three electronic medical record (EMR) systems: iSanté, GHESKIO and Partners In Health/Zanmi Lasante (PIH/ZL) [1]. Only iSanté is government-owned, but all three systems feed into a centralized case surveillance database, along with surveillance and laboratory information, which is used by the public health authorities [2]. Each was developed separately prior to the overall case surveillance system, and each uses different technology [3, 4]. They generate Excel spreadsheets which can be imported into the central database [2]. Furthermore, there is no evidence of data standards for electronic medical records on the website of the Ministry of Public Health and Population nor on the one of its Directorate for Epidemiology, Laboratories and Research (DELR), and Haiti does not have a national standards agency [5, 6].

- [1] Ministry of Public Health and Population (MSPP). December 2014. "HIV epidemiological surveillance bulletin for HIV/AIDS, no. 8 (Bulletin de Surveillance Epidémiologique VIH/SIDA, no. 8)".

[<https://mspp.gouv.ht/site/downloads/Bulletin%20de%20Surveillance%20Epidemiologique%20VIH%20Sida%20no%208.pdf>]. Accessed 08 January, 2021.

[2] Ministry of Public Health and Population (MSPP) and National Alliance of Territorial AIDS Directors (NASTAD). 2012. "Evolution of the HIV/AIDS case surveillance system in Haiti." [<https://www.paho.org/hq/dmdocuments/2012/4-HAITI-Evolution-HIVAIDS-Case-Surveillance.pdf>]. Accessed 08 January, 2021.

[3] Marcelin, A. et al. 2015. "Developing an Electronic Medical Record for Interlinked Care Services in Haiti," in Studies in Health Technology and Informatics. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573958/>]. Accessed 08 January, 2021

[4] OpenMRS. April 2017. "Partners in Health Haiti EMR." [<https://openmrs.org/2017/04/partners-in-health-haiti-emr/>]. Accessed 08 January, 2021

[5] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 08 January, 2021.

[6] Directorate for Epidemiology, Laboratories and Research (DELR). 2018. Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 08 January, 2021.

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

### 2.4.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a mechanism or protocol for data sharing between human, animal and wildlife surveillance authorities, though there is some collaboration on zoonoses between the animal and human health authorities. Haiti's strategy document on zoonotic disease, the 'Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety' published by the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR), presents a vision for a new agency to integrate work on animal and food health [1]. The agency has been created and is referred to as the Sanitary Protection Unit (UPS), but it only involves the MARNDR and there is no evidence of mechanisms for it to share data with the human or environmental health authorities [1, 2, 3]. The 2014-2019 plan also states that it would be useful to establish an inter-sectoral committee to enable coordination with the health ministry on activities regarding zoonoses and food safety [1]. However, there is no evidence that such a committee has been established, from a 2015 implementation update, from the MARNDR, from the repositories of the Ministry of Public Health and Population (MSPP) and the central government, nor from the Pan-American Health Organization (PAHO) [2, 4, 5, 6, 7, 8]. In addition, the 2010 PVS evaluation states that most cooperation between animal and human health authorities on disease control is informal and based on goodwill, though protocols exist for avian flu and rabies [9]. These disease-specific protocols are not publicly available [4, 5, 6, 7]. Furthermore, a 2017 article co-authored by public health officials states that the MSPP needs to improve coordination with the MARNDR to develop an integrated One Health strategy [10]. Moreover, there is no evidence that the Environment Ministry is conducting wildlife surveillance or One Health work [11].

[1] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). 2013. "Strategic and programmatic plan 2014-2019 for the modernization of zoo-phytosanitary protection services and food safety (Plan stratégique et programmatique 2014-2019 pour la modernisation des services de protection zoo-phytosanitaire et d'innocuité des aliments)". [[https://agriculture.gouv.ht/view/01/IMG/pdf/Cond\\_2-4\\_2-5-Plan\\_strategique\\_programmatique-SPS-SSA.pdf](https://agriculture.gouv.ht/view/01/IMG/pdf/Cond_2-4_2-5-Plan_strategique_programmatique-SPS-SSA.pdf)]. Accessed 08 January, 2021

[2] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). September 2015. "Report based on the

results of the zoo and phytosanitary protection sub-sector (Rapport basé sur les résultats du sous-secteur de la protection zoo et phytosanitaire)".

[https://agriculture.gouv.ht/view/01/IMG/docx/rapport\_valide\_par\_ups\_041115rapport\_base\_sur\_les\_resultats\_ups\_2014\_-2015\_version\_corrige.docx]. Accessed 08 January, 2021.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website.

[http://agriculture.gouv.ht/view/01/]. Accessed 08 January, 2021.

[4] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Animal health in Haiti (La santé animale en Haiti)". [http://agriculture.gouv.ht/view/01/?La-sante-animale-en-haiti#.W-HSQeKYRPy]. Accessed 08 January 2021.

[5] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). "Resources (Ressources)".

[https://agriculture.gouv.ht/view/01/?page=document]. Accessed 08 January, 2021.

[6] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)".

[https://www.mspp.gouv.ht/documentation/]. Accessed 08 January 2021.

[7] General Secretariat of the Council of Ministers. "Documents (Documentation)." [http://www.sgcm.gouv.ht/lois/].

Accessed 08 January, 2021.

[8] Pan-American Health Organisation (PAHO) and World Health Organization (WHO) Regional Office for the Americas. 2017.

"Haiti." [https://www.paho.org/salud-en-las-americas-2017/?p=4110]. Accessed 08 January, 2021.

[9] World Organization for Animal Health (OIE). 2010. "PVS evaluation report: Haiti (Rapport d'évaluation PVS: Haiti)".

[http://www.oie.int/fileadmin/Home/eng/Support\_to\_OIE\_Members/pdf/FinalReport-Haiti.pdf]. Accessed 08 January, 2021.

[10] Juin, S. et al. 2017. "Strengthening national disease surveillance and response: Haiti, 2010-2015," in The American Journal of Tropical Medicine and Hygiene, Vol. 97(4 Suppl), Oct 2017.

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676630/]. Accessed 08 January, 2021.

[11] Environment Ministry. Official website. [https://www.mde.gouv.ht/index.php/fr/]. Accessed 08 January, 2021.

## 2.4.3 Transparency of surveillance data

### 2.4.3a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti makes de-identified health surveillance data on infectious diseases publicly available via reports on government websites. The Ministry of Health and Population (MSPP) publishes daily reports on notifiable diseases on its "Document Center" page of its website as well as weekly reports under the national surveillance network section. This data includes, for example, the number of suspected and confirmed cases for Covid-19 but also for other diseases such as cholera, malaria, rabies and diphtheria. There is also the mortality rate as well as geographical data [1, 2]. However, there is no evidence available that the Ministry of Agriculture, Natural Resources and Rural Development publishes health surveillance data on its website [3].

[1] Ministry of Public Health and Population (MSPP). 2018. "Documentation centre (Centre de documentation)".

[https://www.mspp.gouv.ht/documentation/]. Accessed 08 January, 2021.

[2] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2018.

"National surveillance network: Report on diseases/events under epidemiological surveillance. 4th week 19-25 January, 2020. (Réseau national de surveillance: Rapport des maladies/phénomènes sous surveillance épidémiologique)".

[https://mspp.gouv.ht/site/downloads/Rapport\_Reseau\_National\_Surveillance\_4%C3%A8me\_SE\_2020.pdf]. Accessed 08 January, 2021.

[3] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [http://agriculture.gouv.ht/view/01/]. Accessed 08 January, 2021.

### 2.4.3b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti makes de-identified Covid-19 surveillance data available via daily reports on government websites. The Minister of Health and Population publishes on its home page, on a daily basis, the latest suspected, new and confirmed cases as well as the number of deaths and the number of those recovered [1]. It also makes this information available on the "Document Center" of its webpage [2].

[1] Minister of Health and Population. Official page. [https://www.mspp.gouv.ht/]. Accessed 11 January, 2021.

[2] Ministry of Health and Population. "Document Center". [https://www.mspp.gouv.ht/documentation/]. Accessed 11 January, 2021.

## 2.4.4 Ethical considerations during surveillance

### 2.4.4a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no available evidence that Haiti has legislation and/or regulations that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Haiti drafted a law in 2017 on personal data protection, which if enacted, could be applied to health information, including from surveillance. It has provisions relating to appropriate storage and use of data to ensure it is not divulged beyond those who need to access it for a defined purpose. However, there is no evidence that the law has been enacted nor that it defines personal data [1, 2]. Furthermore, according to the United Nations Conference on Trade and Development (UNCTAD) database, Haiti has no legislation on data protection and privacy nor on Cybercrime [3]. It does, however, have a draft law on consumer protection but in its current form, this draft law does not address information confidentiality [4]. This is not dealt with, either, in the 2013-2018 strategic plan on epidemiological surveillance, or in the 2012-2022 health masterplan, which discusses the health information system (HIS) [5, 6]. In addition, there is no evidence of other laws or guidelines on this topic from the document repositories of the Ministry of Public Health and Population or the central government, or from the Pan-American Health Organization (PAHO) [7, 8, 9]. Moreover, according to an August 2019 assessment of Haiti's HIS by the consultancy group Measure Evaluation, the only guidelines available on health data collection, reporting and analysis relate to how to complete forms; and a draft policy on HIS implementation is unavailable [10].

[1] Government of Haiti. 2017. "Draft law establishing the unique national identification card and relating to the protection of personal data (Projet de loi instituant la carte d'identification nationale unique et portant sur la protection des données personnelles)". [http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-loi-instituant-la-carte-d%E2%80%99identification-nationale-unique-et-portant-sur-la-protection-des-donn%C3%A9es-personnelles.pdf]. Accessed

11 January, 2021.

[2] ayibopost.com. Pierre-Louis Snyder. 2019. "The history of the identity card in Haiti is closely linked to the elections (L'histoire de la carte d'identité en Haïti est étroitement liée aux élections)". [<https://ayibopost.com/lhistoire-de-la-carte-didentite-en-haiti-est-etroitement-liee-aux-elections/#:~:text=Trois%20mois%20apr%C3%A8s%20son%20investiture,%C3%A9tait%20le%2019%20avril%202017>]. Accessed 11 January, 2021.

[3] United Nations Conference on Trade and Development (UNCTAD). "Cyberlaw Tracker: The case of Haiti". [<https://unctad.org/page/cyberlaw-tracker-country-detail?country=ht>]. Accessed 11 January, 2021.

[4] Government of Haiti. 2012. "Draft law on consumer protection (Projet de loi relative à la protection du consommateur)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/PROJET-DE-LOI-RELATIVE-A-LA-PROTECTION-DU-CONSOMMATEUR.pdf>]. Accessed 11 January, 2021.

[5] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haïti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 11 January, 2021.

[6] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 11 January, 2021.

[7] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 11 January, 2021.

[8] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 11 January, 2021.

[9] Pan-American Health Organisation (PAHO) and World Health Organization (WHO) Regional Office for the Americas. 2017. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 11 January, 2021.

[10] Measure Evaluation. August 2019. "Haiti: HIS indicators." [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/haiti>]. Accessed 11 January, 2021.

#### 2.4.4b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has legislation or regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, which includes mention of protections from cyber attacks. The country drafted in 2017 a law on personal data protection, which, if enacted, could be applied to health information, including from surveillance. It has provisions relating to appropriate storage and use of data to ensure it is not divulged beyond those who need to access it for a defined purpose. However, there is no evidence that the law has been enacted nor does it define personal data or mention protection from cyber attacks [1]. Furthermore, according to the United Nations Conference on Trade and Development (UNCTAD) database, Haiti has no legislation on data protection and privacy nor on Cybercrime [2]. It does, however, have a draft law on consumer protection but in its current form, this draft law does not address information confidentiality or protection from cyber attacks [3]. There is no mention of this, either in the 2013-2018 strategic plan on epidemiological surveillance, nor in the 2012-2022 health masterplan, which discusses the health information system (HIS) [4, 5]. In addition, there is no evidence of other laws or guidelines on protection from cyber attacks from the document repositories of the Ministry of Public Health and Population or the central government, or from

the Pan-American Health Organization (PAHO) [6, 7, 8]. Moreover, according to an August 2019 assessment of Haiti's HIS by the consultancy group Measure Evaluation, the only guidelines available on health data collection, reporting and analysis relate to how to complete forms; and a draft policy on HIS implementation is unavailable [9].

[1] Government of Haiti. 2017. "Draft law establishing the unique national identification card and relating to the protection of personal data (Projet de loi instituant la carte d'identification nationale unique et portant sur la protection des données personnelles)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-loi-instituant-la-carte-d%E2%80%99identification-nationale-unique-et-portant-sur-la-protection-des-donn%C3%A9es-personnelles.pdf>]. Accessed 11 January, 2021.

[2] United Nations Conference on Trade and Development (UNCTAD). "Cyberlaw Tracker: The case of Haiti". [<https://unctad.org/page/cyberlaw-tracker-country-detail?country=ht>]. Accessed 11 January, 2021.

[3] Government of Haiti. 2012. "Draft law on consumer protection (Projet de loi relative à la protection du consommateur)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/PROJET-DE-LOI-RELATIVE-A-LA-PROTECTION-DU-CONSOmmATEUR.pdf>]. Accessed 11 January, 2021.

[4] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 11 January, 2021.

[5] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 11 January, 2021.

[6] Ministry of Public Health and Population (MSPP). "Documentation centre (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 11 January, 2021.

[7] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 11 January, 2021.

[8] Pan-American Health Organisation (PAHO) and World Health Organization (WHO) Regional Office for the Americas. 2017. "Haiti." [<https://www.paho.org/salud-en-las-americas-2017/?p=4110>]. Accessed 11 January, 2021.

[9] Measure Evaluation. August 2019. "Haiti: HIS indicators." [<https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/haiti>]. Accessed 11 January, 2021.

## 2.4.5 International data sharing

### 2.4.5a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti has made a commitment via public statements, legislation and/or a cooperative agreement to share surveillance data, either for more than one disease or for only one disease, during a public health emergency with other countries in the region. Although the country is a member of the Caribbean Public Health Agency (CARPHA), there is no evidence that it has made such a public commitment through this membership [1]. CARPHA's founding agreement does not specifically commit members to share surveillance data during a public health emergency [2]. However, CARPHA's website contains policy guidelines for regional surveillance which outline the data sharing system as follows: "At the national level, the office of the National Epidemiologist is responsible for the transmission of surveillance

data and information to CAREC". At the regional level, "CAREC [an organization that has since merged into CARPHA] is responsible for the dissemination of data and information to the Pan-American Health Organization (PAHO), the World Health Organization (WHO) and other stakeholders and partners, including member countries." Reporting is usually weekly, but in the case of outbreaks early alerts are advised and outbreak investigation reports must be submitted [3]. Furthermore, CARPHA releases weekly updates on Covid-19 and epidemiology surveillance but this is done through the agency's website and not by individual members such as Haiti [4]. In addition, there is no evidence of such a commitment to share surveillance during a public health emergency with other countries in the region on the website of the Ministry of Public Health and Population (MPPS) [5].

[1] Caribbean Public Health Agency (CARPHA). Official website. [<http://carpha.org/>]. Accessed 11 January 2021.

[2] Caribbean Public Health Agency (CARPHA). June 2011. "Agreement establishing the Caribbean Public Health Agency (CARPHA)." [[https://carpha.org/Portals/0/Documents/CARPHA\\_IGA.pdf](https://carpha.org/Portals/0/Documents/CARPHA_IGA.pdf)]. Accessed 11 January, 2021.

[3] Pan-American Health Organization. June 2011. "Regional Surveillance Systems for CAREC Member Countries - Interim Policy Guidelines".

[[https://www.nastad.org/sites/default/files/resources/docs/13\\_WHO\\_PAHO\\_Regional\\_Surveillance\\_Policy.pdf](https://www.nastad.org/sites/default/files/resources/docs/13_WHO_PAHO_Regional_Surveillance_Policy.pdf)]. Accessed 11 January, 2021.

[4] CARPHA Situation Report no. 115, December 3, 2020: Coronavirus Disease (COVID-19) Pandemic.

[<https://carpha.org/Portals/0/Documents/COVID%20Situation%20Reports/Situation%20Report%20115%20-%20December%203,%202020.pdf>]. Accessed 11 January, 2021.

[5] Ministry of Public Health and Population (MSP). [<http://mspp.gouv.ht/>]. Accessed 11 January, 2021.

## 2.5 CASE-BASED INVESTIGATION

### 2.5.1 Case investigation and contact tracing

#### 2.5.1a

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

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

**Current Year Score: 0**

There is insufficient evidence that Haiti has a national system in place to provide support at the sub-national level to conduct contact tracing either in preparation for future public health emergencies or in response to an active public health emergency. In the country's Preparation and Response Plan to the Coronavirus of March 2020, the Ministry of Health mentions a strategy to improve existing surveillance systems and tools which includes 'training and equipping rapid response teams to investigate Covid-19 possible cases and clusters at the start of the outbreak, and conduct contact tracing within 24 hours". However, the plan does not mention any support at the sub-national level nor is there evidence that this plan could apply to other public health emergencies besides Covid-19 [1]. Furthermore, according to the Pan-American Health Organization (PAHO), by August of 2020, Haiti had 50 investigation teams and 299 contact tracing teams in operation throughout the country. However, this was organized and funded by PAHO and was not part of a national system [2]. The country also has a National Plan for the Elimination of Cholera in Haiti, 2013-2022. However, there is no mention of conducting contact tracing in this plan which was also criticized for lacking the necessary funding [3, 4]. In addition, there is no evidence of such a system on the websites of the Ministry of Public Health and Population, the National Public Health

Laboratory nor on the government's main portal [5, 6, 7].

[1] MSPP: "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 12 January, 2021.

[2] Pan-American Health Organization (PAHO). 12 August, 2020. "PAHO trains 2,800 community health workers in Haiti for COVID-19 Response". [<https://www.paho.org/en/news/12-8-2020-paho-trains-2800-community-health-workers-haiti-covid-19-response>]. Accessed 12 January, 2021.

[3] Risk Management and Health Care Policy. Victoria Koski-Karell et al. 24 May, 2016. "Haiti's progress in achieving its 10-year plan to eliminate cholera: hidden sickness cannot be cured".

[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4888864/>].

[4] The Journal of Infectious Diseases. 15 November, 2018. Yodeline Guillaume et al. "Responding to Cholera in Haiti: Implications for the National Plan to Eliminate Cholera by 2022".

[[https://academic.oup.com/jid/article/218/suppl\\_3/S167/5103913](https://academic.oup.com/jid/article/218/suppl_3/S167/5103913)].

[5] Ministry of Public Health and Population of Haiti (MSPP). Official website. [<https://www.mspp.gouv.ht/>]. Accessed 12 January, 2021.

[6] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 12 January, 2021.

[7] General Secretariat of the Council of Ministers. Official website. [<http://www.sgcm.gouv.ht/>]. Accessed 12 January, 2021.

### 2.5.1b

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

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

**Current Year Score: 0**

There is insufficient evidence that Haiti provides wraparound services to enable infected people and their contacts to self-isolate as recommended, particularly economic support and medical attention. In the country's Preparation and Response Plan to the Coronavirus of March 2020, the Ministry of Health states that "comprehensive medical, nutritional and psychosocial care will be provided for people with Covid-19". It also mentions a strategy that suspected cases in self-isolation will be provided with some medicines such as paracetamol in case of fever, 10 face masks and a list of recommendations when self-isolating. However, there is no mention of any economic support [1, 2]. The country also has a National Plan for the Elimination of Cholera in Haiti, 2013-2022. which mentions only that patients with cholera will receive medical attention and not economic support [3]. However, this plan has been criticized for lacking the necessary funding [4]. In addition, there is no evidence of any services that would include economic support on the websites of the Ministry of Public Health and Population, the National Public Health Laboratory nor on the government's main portal [5, 6, 7].

[1] MSPP: "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 12 January, 2021.

[2] Ministry of Public Health and Population (MSPP). March, 2020. "Early Detection of Suspected Cases (Détection précoce des cas suspects)". [<https://www.covid19compendium.com/wp-content/uploads/2020/03/Coronavirus-Haiti-De%CC%81tection-Pre%CC%81coce-018.pdf>]. Accessed 12 January, 2021.

- [3] The Journal of Infectious Diseases. 15 November, 2018. Yodeline Guillaume et al. "Responding to Cholera in Haiti: Implications for the National Plan to Eliminate Cholera by 2022".  
[[https://academic.oup.com/jid/article/218/suppl\\_3/S167/5103913](https://academic.oup.com/jid/article/218/suppl_3/S167/5103913)]. Accessed 12 January, 2021.
- [4] Risk Management and Health Care Policy. Victoria Koski-Karell et al. 24 May, 2016. "Haiti's progress in achieving its 10-year plan to eliminate cholera: hidden sickness cannot be cured".  
[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4888864/>]. Accessed 12 January, 2021.
- [5] Ministry of Public Health and Population of Haiti (MSPP). Official website. [<https://www.mspp.gouv.ht/>]. Accessed 12 January, 2021.
- [6] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 12 January, 2021.
- [7] General Secretariat of the Council of Ministers. Official website. [<http://www.sgcm.gouv.ht/>]. Accessed 12 January, 2021.

### 2.5.1c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti makes de-identified data on contact tracing efforts for COVID-19 available via daily reports, or another format, on government websites. Although the Minister of Public Health and Population publishes on its home page, on a daily basis, the latest suspected, new and confirmed cases as well as the number of deaths and the number of those recovered, there is no data on contact tracing efforts [1]. It also makes available de-identified data for Covid-19 on the "Document Center" of its webpage which also includes the gender, age and geographical location of Covid-19 cases. However, again, there is no data regarding contact tracing efforts [2]. Furthermore, there is no evidence of such data on the website of the National Public Health Laboratory [3].

[1] Minister of Health and Population. Official page. [<https://www.mspp.gouv.ht/>]. Accessed 12 January, 2021.

[2] Ministry of Health and Population. "Document Center". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 12 January, 2021.

[3] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 12 January, 2021.

## 2.5.2 Point of entry management

### 2.5.2a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti 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 response to an active public health emergency nor in preparation for future public health emergencies. In the country's Preparation and Response Plan to the Coronavirus of March 2020, the Ministry of Public Health and Population (MSPP) states that "international travelers returning from affected areas or who have had contact with a confirmed case 14 days prior to arrival and have not yet developed signs and symptoms of acute respiratory infection, will have to be placed under observation, in quarantine, either at home or in an institution". However, there is no mention that this is part of an agreement between the public health system and border control authorities [1]. Furthermore, in the daily Covid-19 reports published on the MSPP's website, it mentions the number of travelers screened at the airport and the main land and sea border crossings. It also states the number of cases put in quarantine as well as in self-isolation. However, there is no mention as to whether this is part of a national plan with border control authorities nor that this applies to other public health emergencies [2]. In addition, there is no evidence of such an agreement on the websites of the MSPP, the National Public Health Laboratory nor on the one for the Ministry of Defense which is responsible for border control [3, 4, 5].

[1] MSPP: "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 13 January, 2021.

[2] Ministry of Public Health and Population; Directorate of Epidemiology, Laboratories and Research (DELR). Covid-19 Surveillance, Haiti. 11 January 2021. [[http://mspp.gouv.ht/site/downloads/Sitrep%20COVID-19\\_11-01-2021.pdf](http://mspp.gouv.ht/site/downloads/Sitrep%20COVID-19_11-01-2021.pdf)]. Accessed 13 January, 2021.

[3] Ministry of Public Health and Population of Haiti (MSPP). Official website. [<https://www.mspp.gouv.ht/>]. Accessed 13 January, 2021.

[4] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 13 January, 2021.

[5] Ministry of Defense. Official website. [<https://www.md.gouv.ht/index.php>]. Accessed 13 January, 2021.

## 2.6 EPIDEMIOLOGY WORKFORCE

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

#### 2.6.1a

Does the country meet one of the following criteria?

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

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

**Current Year Score: 1**

There is available evidence that Haiti has an applied epidemiology training program, but there is no evidence of resources being provided by the government to send citizens to another country to participate in such programs. The U.S. Centers for Disease Control and Prevention (CDC) worked with the Ministry of Health and Population (MSPP) to establish a local field epidemiology training program (FETP) after the 2010 earthquake and cholera outbreak. It mirrors the CDC's Epidemic Intelligence Service program. The first cohort graduated in 2012, and by 2018 around 300 people had graduated from the program [1, 2,]. The plan is for basic and intermediate levels to be run in Haiti, while advanced-level residents are trained

overseas at the University Del Valle de Guatemala. Currently, training at only the basic and intermediate levels is offered [3, 4, 5]. Haiti is a member of the Caribbean Public Health Agency (CARPHA), which offers a field epidemiology and laboratory training program (CR-FELTP) [6]. There is no evidence, however, from the websites of CARPHA or the MSPP that students from Haiti have access to CR-FELTP training at home or can receive funding to attend it overseas [6, 7, 8]. In addition, there is no evidence from the MSPP or media reporting of other funded overseas FETP opportunities for students from Haiti [8].

[1] U.S. Centers for Disease Control and Prevention (CDC). November 2013. "Progress towards rebuilding Haiti's health system." [https://www.cdc.gov/globalhealth/healthprotection/errb/pdf/progresstowardrebuildinghaitishealthsystem.pdf]. Accessed 11 January, 2021.

[2] U.S. Centers for Disease Control and Prevention (CDC). 2018. "Haiti FETP: Boots on the ground - Issue 1." [https://www.cdc.gov/globalhealth/countries/haiti/stories/news-from-the-field/haiti-fetp-boots-on-the-ground-issue-1.html]. Accessed 11 January, 2021.

[3] U.S. Centers for Disease Control and Prevention (CDC). 5 October, 2018. Haiti - Building the Public Health Workforce. [https://www.cdc.gov/globalhealth/countries/haiti/what/public-health-workforce.html]. Accessed 11 January, 2021.

[4] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2018 [https://www.tephinet.org/training-programs/haiti-field-epidemiology-training-program]. Accessed 11 January, 2021.

[5] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). FETP Updates: April-June 2019. [https://www.tephinet.org/fetp-updates-april-june-2019]. Accessed 11 January, 2021.

[7] Caribbean Public Health Agency (CARPHA). "Who We Are." [https://carpha.org/Who-We-Are/About]. Accessed 11 January, 2021.

[8] Caribbean Public Health Agency (CARPHA). 2018. "FELTP - Introduction." [http://carpha.org/What-We-Do/FELTP/Introduction]. Accessed 11 January, 2021.

[8] Ministry of Public Health and Population (MSPP). Official site. [https://mspp.gouv.ht/]. Accessed 11 January, 2021.

### 2.6.1b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti's available field epidemiology training program is explicitly inclusive of animal health professionals. The U.S. Centers for Disease Control and Prevention (CDC) worked with the Ministry of Public Health and Population to establish a local field epidemiology training program after the 2010 earthquake and cholera outbreak. It mirrors the CDC's Epidemic Intelligence Service program. [1] By 2018, around 300 people had graduated from the program, including four veterinarians [2, 3].

[1] U.S. Centers for Disease Control and Prevention (CDC). November 2013. "Progress towards rebuilding Haiti's health system." [https://www.cdc.gov/globalhealth/healthprotection/errb/pdf/progresstowardrebuildinghaitishealthsystem.pdf]. Accessed 11 January, 2021.

[2] U.S. Centers for Disease Control and Prevention (CDC). 5 October, 2018. Haiti - Building the Public Health Workforce. [https://www.cdc.gov/globalhealth/countries/haiti/what/public-health-workforce.html]. Accessed 11 January, 2021.

[3] U.S. Centers for Disease Control and Prevention (CDC). 2018. "Haiti FETP: Boots on the ground - Issue 1." [https://www.cdc.gov/globalhealth/countries/haiti/stories/news-from-the-field/haiti-fetp-boots-on-the-ground-issue-1.html]. Accessed 11 January, 2021.

## 2.6.2 Epidemiology workforce capacity

### 2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

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

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

### 3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

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

##### 3.1.1a

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

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

Current Year Score: 1

There is no publicly available evidence that Haiti has an overarching national public health emergency response plan in place but there is evidence that the country has some disease-specific response plans in place. In March 2020, the Ministry of Public Health and Population (MSPP) enacted its Preparation and Response Plan to the Coronavirus, yet there is no mention that it addresses planning for communicable diseases other than Covid-19 [1]. The country also has a National Plan for the Elimination of Cholera in Haiti, 2013-2022. However, there is no evidence in this plan that it addresses other communicable diseases [2]. In addition, Haiti's national emergency response plan, which was last updated in 2009, does not contain a plan for addressing communicable diseases with epidemic or pandemic potential [3]. The country does have a National Plan for Disaster and Risk Management (2019-2030) but it does not mention any strategy regarding planning for multiple communicable diseases as well [4]. Furthermore, the 2012-2022 health masterplan states the need for plans for controlling contagious diseases and for contingency plans for the health sector's response to disasters generally, but there is no evidence that such plans have been put in place [5]. The 2013-2018 'Strategic plan for reinforcing epidemiological surveillance in Haiti' notes the need for outbreak response planning, quantifying the extent of such planning at 50% of the target but there is no evidence post-2018 that the other 50% of the target has been met [6]. Moreover, there is no evidence of an overarching national public health emergency response plan from the MSPP, its Directorate for Epidemiology, Laboratories and Research, the Ministry of the Interior's Directorate of Civil Protection, nor from the central government's

document repository [7, 8, 9, 10].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 13 January, 2021.

[2] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 13 January, 2021.

[3] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 13 January, 2021.

[4] Ministry of the Interior. "National Disaster and Risk Management Plan (Plan national de gestion des risques de désastre) 2019 - 2030". [[https://www.preventionweb.net/files/72907\\_plannationaldegestiondesrisquesdeds.pdf](https://www.preventionweb.net/files/72907_plannationaldegestiondesrisquesdeds.pdf)]. Accessed 13 January, 2021.

[5] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 13 January, 2021.

[6] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 13 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 13 January, 2021.

[8] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 13 January, 2021.

[9] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 13 January, 2021.

[10] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>]. Accessed 13 January, 2021.

### 3.1.1b

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

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

**Current Year Score: 0**

There is no evidence that Haiti has an overarching plan in place and hence no evidence of a plan that was updated in the last 3 years. The country has two disease-specific response plans in place but neither one has been updated in the last 3 years. Haiti's Preparation and Response Plan to the Coronavirus was enacted in March of 2020 and there is no evidence that the National Plan for the Elimination of Cholera in Haiti, 2013-2022, was updated within the past 3 years [1, 2]. In addition, Haiti's national emergency response plan of 2001, was last updated in 2009 [3]. The country did update its National Plan for Disaster and Risk Management (2019-2030) in the past 3 years but it is not an overarching plan [4]. Furthermore, there is no evidence of such an overarching plan on the websites of the Ministry of Public Health and Population, its Directorate for Epidemiology, Laboratories and Research, the Ministry of Interior's Directorate of Civil Protection, nor on the central government's document repository [5, 6, 7, 8].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP>

%20au%20CoronaVirus.pdf]. Accessed 13 January, 2021.

[2] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [https://mspp.gouv.ht/site/downloads/Plan\_elimination\_du\_cholera\_2012\_2022.pdf]. Accessed 13 January, 2021.

[3] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)". [https://www.preventionweb.net/files/30709\_788fr1.pdf]. Accessed 13 January, 2021.

[4] Ministry of the Interior. "National Disaster and Risk Management Plan(Plan national de gestion des risques de désastre) 2019 - 2030". [https://www.preventionweb.net/files/72907\_plannationaldegestiondesrisquesdedes.pdf]. Accessed 13 January, 2021.

[5] Ministry of Public Health and Population (MSPP). Official site. [https://mspp.gouv.ht/]. Accessed 13 January, 2021.

[6] Directorate for Epidemiology, Laboratories and Research (DELIR). Official site. [http://mspp.gouv.ht/newsite/\_direction/index.php?IDDir=9]. Accessed 13 January, 2021.

[7] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [http://www.mict.gouv.ht/direction-de-la-protection-civile/]. Accessed 13 January, 2021.

[8] General Secretariat of the Council of Ministers. "Documents (Documentation)." [http://www.sgcm.gouv.ht/lois/]. Accessed 13 January, 2021.

### 3.1.1c

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

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

**Current Year Score: 0**

There is no evidence that Haiti has an overarching plan in place and hence no evidence of a plan that includes considerations for pediatric and/or other vulnerable populations. Although Haiti's response plans for Covid-19 and Cholera mention helping the most vulnerable, there is no explicit mention of how pediatric and vulnerable populations are treated. These plans are also disease-specific and not part of an overarching plan. For example, Haiti's March 2020 Preparation and Response Plan to the Coronavirus mentions mapping vulnerable populations and "taking particular care of pregnant women, children and immunocompromised people", yet it does not offer any specific details on this strategy [1]. Furthermore, the country's National Plan for the Elimination of Cholera in Haiti, 2013-2022, includes a geographical analysis to pinpoint the most vulnerable zones in terms of poverty and lack of clean water but this is not part of an overarching plan [2]. In addition, Haiti's national emergency response plan, which was last updated in 2009, does not include considerations for pediatric or vulnerable populations [3]. The country does have a National Plan for Disaster and Risk Management (2019-2030) but it does not mention any strategy regarding planning for multiple communicable diseases [4]. Furthermore, the 2012-2022 health masterplan states the need for plans for controlling contagious diseases and for contingency plans for the health sector's response to disasters generally, but there is no evidence that such plans have been put in place [5]. Moreover, there is no evidence of an overarching national public health emergency response plan from the MSPP, its Directorate for Epidemiology, Laboratories and Research, the Ministry of the Interior's Directorate of Civil Protection, nor from the central government's document repository [6, 7, 8, 9].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf]. Accessed 13 January, 2021.

[2] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [https://mspp.gouv.ht/site/downloads/Plan\_elimination\_du\_cholera\_2012\_2022.pdf]. Accessed 13 January, 2021.

[3] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)". [https://www.preventionweb.net/files/30709\_788fr1.pdf]. Accessed 13 January, 2021.

[4] Ministry of the Interior. "National Disaster and Risk Management Plan (Plan national de gestion des risques de désastre) 2019 - 2030". [[https://www.preventionweb.net/files/72907\\_plannationaldegestiondesrisquesdedes.pdf](https://www.preventionweb.net/files/72907_plannationaldegestiondesrisquesdedes.pdf)]. Accessed 13 January, 2021.

[5] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 13 January, 2021.

[6] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 13 January, 2021.

[7] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 13 January, 2021.

[8] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 13 January, 2021.

[9] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>].

Accessed 13 January, 2021.

### 3.1.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

## 3.1.2 Private sector involvement in response planning

### 3.1.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Haiti has a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. The 2001 national emergency response plan, last updated in 2009, does not mention the existence of a mechanism or plan for engaging with the private sector on outbreak response [1]. Nor is there any mention of such a mechanism in the country's 2012-2022 health masterplan nor in Haiti's National Plan for Disaster and Risk Management (2019-2030) [2, 3]. In addition, there is no mention of a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response in the country's National Plan for the Elimination of Cholera in Haiti, 2013-2022 nor in its Preparation and Response Plan to the Coronavirus of March 2020 [4, 5]. However, there is evidence that the private sector has been helping financially during the Covid-19 pandemic. In April of 2020, it was announced that a group of private companies donated money and material to the Ministry of Public Health and Population (MSPP) and to hospitals in the amount of one million dollars [6]. Furthermore, there is no evidence of such a mechanism or document on the websites of the MSPP, its Directorate for Epidemiology, Laboratories and Research, the Minister of the Interior's Directorate of Civil Protection, nor in the central government's document repository [7, 8, 9, 10].

- [1] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)". [[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 14 January, 2021.
- [2] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 14 January, 2021.
- [3] Ministry of the Interior. "National Disaster and Risk Management Plan(Plan national de gestion des risques de désastre) 2019 - 2030". [[https://www.preventionweb.net/files/72907\\_plannationaldegestiondesrisquesdede.pdf](https://www.preventionweb.net/files/72907_plannationaldegestiondesrisquesdede.pdf)]. Accessed 14 January, 2021.
- [4] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 14 January, 2021.
- [5] Ministry of Public Health and Population (MSPP). "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020. [<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 14 January, 2021.
- [6] Haiti Press Network. Godson Lubrun, 11 April, 2020. "Haiti-coronavirus: Haitian private sector donates nearly one million dollars in cash (Haïti-coronavirus: le secteur privé haïtien donne près d'un million de dollars en cash)". [<https://www.hpnhaiti.com/nouvelles/index.php/societe/53-sante/7302-haiti-coronavirus-le-secteur-prive-haitien-donne-pres-d-un-million-de-dollars-en-cash>]. Accessed 14 January, 2021.
- [7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 14 January, 2021.
- [8] Directorate for Epidemiology, Laboratories and Research (DELR). Official site. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 14 January, 2021.
- [9] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 14 January, 2021.
- [10] General Secretariat of the Council of Ministers. "Documents (Documentation)". [<http://www.sgcm.gouv.ht/lois/>]. Accessed 14 January, 2021.

### 3.1.3 Non-pharmaceutical interventions planning

#### 3.1.3a

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

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

**Current Year Score: 1**

There is evidence that Haiti has a plan to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic but only for one disease. On March 19, following the confirmation of the first positive Covid-19 cases in Haiti, the president declared a state of health emergency throughout the country and announced a number of measures to prevent the spread of the virus, including the closure of airports and ports to all passengers, the closure of all schools and factories, the banning of meetings or gatherings of more than 10 people, a nationwide curfew between the hours of 8pm and 5am and instructions for social distancing [1].

- [1] UN Office for the Coordination of Humanitarian Affairs (OCHA). Haiti, Covid-19. Flash Update No 1 as of 23 March 2020. [[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323\\_-\\_flash\\_update\\_no.\\_1\\_covid-19\\_-\\_ocha\\_haiti\\_-\\_en.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323_-_flash_update_no._1_covid-19_-_ocha_haiti_-_en.pdf)]. Accessed 14 January, 2021.

## 3.2 EXERCISING RESPONSE PLANS

### 3.2.1 Activating response plans

#### 3.2.1a

Does the country meet one of the following criteria?

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

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

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

**Current Year Score: 1**

There is evidence that Haiti activated its national emergency response plan for an infectious disease outbreak in the past year but there is no evidence that it has completed a national-level biological threat-focused exercise in the past year. In March of 2020, Haiti activated its Preparation and Response Plan to the Coronavirus outbreak [1]. However, regarding the completion of a national-level biological threat-focused exercises in the past year, there is no such evidence on the World Health Organization (WHO)'s simulation exercise webpage, nor on the WHO's country profile and newsroom pages [2, 3, 4]. There is also no evidence of such an exercise having been carried out in the past year on the websites of the Ministry of Public Health and Population (MSPP) or the Ministry of Defense [5, 6].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf]. Accessed 14 January, 2021.

[2] World Health Organization (WHO) Simulation Exercise. [https://extranet.who.int/sph/simulation-exercise?region=203&country=261]. Accessed 14 January, 2021.

[3] WHO country profile. Haiti. [https://www.who.int/hac/crises/hti/background/profile/en/]. Accessed 14 January, 2021.

[4]. WHO newsroom. [https://www.who.int/news]. Accessed 14 January 2021.

[5]. Ministry of Public Health and Population of Haiti (MSPP). Official site. [https://www.mspp.gouv.ht/]. Accessed 14 January, 2021.

[6] Ministry of Defense. Official site. [https://www.md.gouv.ht/]. Accessed 14 January, 2021.

#### 3.2.1b

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti, in the past year, has identified a list of gaps and best practices in response through either an infectious disease response or a biological-threat focused exercise and developed a plan to improve response capabilities. The World Health Organization (WHO) does not list any after action reviews or a biological-threat

focused exercise planned or conducted by Haiti in the past year [1, 2]. Furthermore, there is no evidence of such an exercise on the websites of the Ministry of Public Health and Population, its Directorate for Epidemiology, Laboratories and Research, the Ministry of the Interior's Directorate of Civil Protection or in government press releases [3, 4, 5, 6]. Haiti has a National Emergency Operations Centre (COUN) but it does not have a website.

[1] World Health Organization (WHO). "After action review." [<https://extranet.who.int/sph/after-action-review>]. Accessed 14 January, 2021.

[2] World Health Organization (WHO) Simulation Exercise. [<https://extranet.who.int/sph/simulation-exercise?region=203&country=261>]. Accessed 14 January,

[3] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 14 January, 2021.

[4] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 14 January, 2021.

[5] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 14 January, 2021.

[6] General Secretariat of the Council of Ministers. "News (Actualités)." [<http://www.sgcm.gouv.ht/category/actualites/>]. Accessed 14 January, 2021.

## 3.2.2 Private sector engagement in exercises

### 3.2.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti, in the past year, has undergone a national-level biological threat-focused exercise and hence no evidence that this would include private sector representatives. There is no available evidence that Haiti has completed a national-level biological threat-focused exercises in the past year on the World Health Organization (WHO)'s simulation exercise webpage, nor on the WHO's country profile and newsroom pages [1, 2, 3]. Furthermore, there is no evidence of such an exercise in the past year on the websites of the Ministry of Public Health and Population, the Ministry of Agriculture, the National Public Health Laboratory, the Ministry of Defense nor in recent government press releases [4, 5, 6, 7, 8]. Haiti has a National Emergency Operations Centre (COUN) but it does not have a website.

[1] World Health Organization (WHO) Simulation Exercise. [<https://extranet.who.int/sph/simulation-exercise?region=203&country=261>]. Accessed 14 January, 2021.

[2] WHO country profile. Haiti. [<https://www.who.int/hac/crises/hti/background/profile/en/>]. Accessed 14 January, 2021.

[3]. WHO newsroom. [<https://www.who.int/news>]. Accessed 14 January 2021.

[4] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 14 January, 2021.

[5] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR).

[<http://agriculture.gouv.ht/view/01/>]. Accessed 14 January, 2021.

[6] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 14 January, 2021.

[7] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 14 January, 2021.

[8] General Secretariat of the Council of Ministers. "News (Actualités)." [<http://www.sgcm.gouv.ht/category/actualites/>]. Accessed 14 January, 2021.

## 3.3 EMERGENCY RESPONSE OPERATION

### 3.3.1 Emergency response operation

#### 3.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is publicly available evidence that Haiti has an Emergency Operations Center. The country's national emergency response plan of 2001 (last updated in 2009), mentions the creation of a National Emergency Operations Center (Centre d'Opérations d'Urgence National (COUN)) which is overseen by the Prime Minister's Office who in turn can delegate to the Ministry of the Interior and the "Permanent Secretariat for Risk Management" [1]. Besides being involved in surveillance and control, its responsibilities include, among other things, health and population assistance as well as overseeing international aid and provisions. It also has 10 regional emergency operations centers [2]. The COUN is not a permanent entity but is activated in times of emergency including public health emergencies. It has been activated both during the country's cholera epidemics as well as during the Covid-19 pandemic [3, 4].

[1] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 15 January, 2021.

[2] Haiti: Organizational Chart of the National Emergency Operations Center (COUN).

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/organigramme\\_du\\_coun.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/organigramme_du_coun.pdf)]. Accessed 15 January, 2021.

[3] Situation Report - Emergency Operations Center, Cholera outbreak in Haiti (Rapport de Situation- Centre d'opérations d'Urgence, Eruption du choléra à Haiti). [<https://reliefweb.int/report/haiti/rapport-de-situation-centre-dop%C3%A9rations-durgence-cou-%C3%A9ruption-de-chol%C3%A9ra-en-ha%C3%Afti>]. Accessed 15 January, 2021.

[4] UN Office for the Coordination of Humanitarian Affairs. Haiti. Covid-19 flash update as of 23 March, 2020.

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323\\_-\\_flash\\_update\\_no.\\_1\\_covid-19\\_-\\_ocha\\_haiti\\_-\\_en.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323_-_flash_update_no._1_covid-19_-_ocha_haiti_-_en.pdf)]. Accessed 15 January, 2021.

#### 3.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti's Emergency Operations Center (EOC) is required to conduct a drill for a public health emergency scenario at least once per year nor is there evidence that they conduct a drill at least once per year. Since 2005, Haiti's EOC has conducted emergency response simulation exercises (referred to as SIMEX) every year in preparation for the cyclone season [1]. The most recent one took place in July of 2019. However, although these exercises involve both the national and regional EOCs, they are a drill to test their response to the cyclone season and not to a public health emergency scenario [2]. Furthermore, there is no evidence of such a requirement to conduct a drill for a public health emergency scenario, nor any evidence that they conduct a drill at least once per year, on the websites of the Ministry of Public Health and Population, the Ministry of Interior, nor on the government's main portal [3, 4, 5]. The National Emergency Operations

Center does not have a website.

- [1] UNICEF. 25 July 2011. "Mission end report: SIMEX Haiti 2011 (Rapport de fin de mission: SIMEX Haiti 2011)". [[https://www.preventionweb.net/files/26636\\_26636rapportsimex2011haitifinal1.pdf](https://www.preventionweb.net/files/26636_26636rapportsimex2011haitifinal1.pdf)]. Accessed 15 January, 2021.
- [2] Ici Haiti. 11 July, 2019. "SIMEX 2019: Cyclone alert simulation exercise". [<https://www.ichaiti.com/en/news-28213-ichaiti-simex-2019-cyclonic-alert-simulation-exercise.html>]. Accessed 14 January, 2021.
- [3] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 15 January, 2021.
- [4] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 15 January, 2021.
- [5] General Secretariat of the Council of Ministers. Official site [<http://www.sgcm.gouv.ht>]. Accessed 15 January, 2021.

### 3.3.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti's 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. The country's National Emergency Operations Center (Centre d'Opérations d'Urgence National (COUN)) was activated after Haiti's president declared a national health emergency on March 19, 2020. However, there is no evidence that this was done within 120 minutes of the identification of the public health emergency. Furthermore, it was the The Directorate of Civil Protection (DPC) which activated the COUN and coordinated the response [1]. The COUN does participate in annual simulation exercises but they are related to cyclone response (SIMEX) and not a public health emergency. The most recent exercise took place in July of 2019 [2]. In addition, there is no evidence that the COUN conducted, within the last year, either type of emergency response or exercise on the website of the Ministry of Interior, nor the one of Ministry of Public Health and Population [3, 4]. The National Emergency Operations Center does not have a website.

- [1] UN Office for the Coordination of Humanitarian Affairs. Haiti. Covid-19 flash update as of 23 March, 2020. [[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323\\_-\\_flash\\_update\\_no.\\_1\\_covid-19\\_-\\_ocha\\_haiti\\_-\\_en.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200323_-_flash_update_no._1_covid-19_-_ocha_haiti_-_en.pdf)]. Accessed 15 January, 2021.
- [2] Ici Haiti. 11 July, 2019. "SIMEX 2019: Cyclone alert simulation exercise". [<https://www.ichaiti.com/en/news-28213-ichaiti-simex-2019-cyclonic-alert-simulation-exercise.html>]. Accessed 15 January, 2021.
- [3] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 15 January, 2021.
- [4] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 15 January, 2021.

## 3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

#### 3.4.1a

Does the country meet one of the following criteria?

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

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti's public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event, nor is there evidence of standard operating procedures, MOUs or other agreements between the public health and security authorities to respond to such an event. Haiti's emergency response plans are mostly focused on natural disasters such as cyclones and earthquakes, and the risk of a deliberate biological event is not discussed in planning documents [1, 2, 3, 4]. A 2018 summary document on emergency response (generally) shows direct lines of communication between the Ministry of Public Health and Population (MSPP) and the Directorate of Civil Protection, which hosts the national emergency operations centre, but lacks detail or any reference to biological events [4]. Furthermore, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) has published 'Guidelines for civil military coordination in Haiti', endorsed by the Ministry of Interior, which clarify civil and military roles and coordination in responding to humanitarian emergencies. It does not mention any cooperative agreement between public health and security authorities [5]. In addition, there is no relevant evidence on the website of the Ministry of Interior, nor on the one of the MSPP [6, 7]. The National Emergency Operations Center does not have a website.

[1] Government of Haiti. 2001 (updated 2009). "National emergency response plan (Plan national de réponse aux urgences)". [[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 15 January, 2021.

[2] Ministry of the Interior, Directorate of Civil Protection. December 2014. "Haiti, facing risks together (Haiti, ensemble face aux risques)". [[http://www.ht.undp.org/content/dam/haiti/docs/Prevention%20des%20crises/UNDP-HT-GRD-Haiti\\_Ensemble\\_face\\_aux\\_risques-fr\\_20150305.pdf](http://www.ht.undp.org/content/dam/haiti/docs/Prevention%20des%20crises/UNDP-HT-GRD-Haiti_Ensemble_face_aux_risques-fr_20150305.pdf)]. Accessed 15 January, 2021.

[3] Ministry of the Interior. "National Disaster and Risk Management Plan (Plan national de gestion des risques de désastre) 2019 - 2030". [[https://www.preventionweb.net/files/72907\\_plannationaldegestiondesrisquesdedes.pdf](https://www.preventionweb.net/files/72907_plannationaldegestiondesrisquesdedes.pdf)]. Accessed 15 January, 2021.

[4] Ministry of the Interior, Directorate of Civil Protection and United Nations Office for the Coordination of Humanitarian Affairs (OCHA). May 2018. "Haiti - Aide-memoire: Emergency response (Haiti - Aide-mémoire: Réponse aux urgences)". [[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/aide-memoire\\_reponse\\_aux\\_urgences\\_haiti\\_mai\\_2018\\_vf.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/aide-memoire_reponse_aux_urgences_haiti_mai_2018_vf.pdf)]. Accessed 15 January, 2021.

[5] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). July 2013. "Guidelines for civil military coordination in Haiti."

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/revised\\_guidelines\\_for\\_civil-military\\_coordination\\_in\\_haiti\\_2013\\_eng.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/revised_guidelines_for_civil-military_coordination_in_haiti_2013_eng.pdf)]. Accessed 15 January, 2021.

[6] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 15 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 15 January, 2021.

## 3.5 RISK COMMUNICATIONS

### 3.5.1 Public communication

#### 3.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti's risk communication plan outlines how messages will reach populations and sectors with different communication needs. Although the country's Preparation and Response Plan to the Coronavirus of March 10, 2020 mentions, in its communication section, to "verify that changes to community engagement approaches are evidence- and needs-based, and ensure that all engagement is culturally appropriate and supportive, it does not offer specific details on how this will be carried out [1]. Furthermore, in a report published by UNICEF on September 17, 2020, it mentions how volunteers from the NGO, Caritas, travel, by horse or donkey, "to raise awareness about the coronavirus among vulnerable populations living in mountainous areas that cars cannot reach". UNICEF notes that they work closely with the Ministry of Public Health and Population to deliver messages to those who are isolated, however there is no mention that this is part of the country's risk communication plan [2]. In addition, there is no evidence in the country's National Plan for the Elimination of Cholera in Haiti, 2013-2022 as to how it will reach populations and sectors with different communication needs. It only mentions the launch of a massive information and risk awareness campaign for the population and that "priority is given to cities and rural communities where there is a lack of sanitation facilities" [3].

[1] MSPP: "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 15 January, 2021.

[2] UNICEF. Ndiaga Seck. 17 September, 2020. "Informing the Most Vulnerable Populations About COVID-19 on Horseback". [<https://reliefweb.int/report/haiti/informing-most-vulnerable-populations-about-covid-19-horseback>]. Accessed 15 January, 2021.

[3] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 15 January, 2021.

### 3.5.1 Risk communication planning

#### 3.5.1a

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

Yes = 1 , No = 0

**Current Year Score: 1**

Haiti has, in its Preparation and Response Plan to the Coronavirus of March 10, 2020, a section detailing a risk communication plan that is specifically intended for use during a public health emergency. The strategy includes, among other things, a mass communication campaign on the risks of Covid-19 by identifying and working with community and religious leaders, local networks (women and youth groups, traditional healers, etc), and local media and NGOs. It also calls for using "two-way channels" for sharing community and public information such as telephone hot lines (text and conversation), responsive social media where available and with systems to detect and respond quickly to disinformation and misinformation as well as to document lessons learned to develop future preparedness and response actions [1]. Furthermore, in the National Plan for the Elimination of Cholera in Haiti, 2013-2022, there is a risk communication section (albeit a small one) which calls for "the launch of a massive information and risk awareness campaign for the population thanks to the cooperation of the local press" [2].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 15 January, 2021.

[2] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 15 January, 2021.

### 3.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that Haiti's risk communication plan designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The country's Preparation and Response Plan to the Coronavirus of March 10, 2020, mentions "designating an official spokesperson to regularly inform the public of developments and provide information on measures taken to prevent and stop the transmission of Covid-19". [1]. This lack of a primary spokesperson to inform the public during a public health emergency came under sharp criticism during the Covid-19 pandemic. In a May 28, 2020 interview with the chief editor of the Haitian newspaper "Le Nouvelliste", he states that Haiti lacks "an authoritative and permanent voice to speak about the evolution of the disease and give advice to the population", He also says that the Minister of Public Health and Population is rarely seen in public to speak about the disease and is only doing the "bare minimum" [2]. In addition, the government's official spokesperson is the Minister of Culture who, gives some information regarding the coronavirus situation in Haiti through interviews and press releases. However, there is no evidence that he has been designated as the primary spokesperson to speak to the public during a public health emergency [3]. Furthermore, there is no additional information regarding this position on the websites of the Ministry of Public Health and Population nor on the government's main portal [4, 5].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 15 January, 2021.

[2] Radio France Internationale (RFI). Marie Normand. 28 May, 2020. Haiti: "There is no official spokesperson in the fight against Covid-19 (Haïti: Il manque un porte-parole officiel de la lutte contre le Covid-19)". [<https://www.rfi.fr/fr/am%C3%A9riques/20200528-ha%C3%A9ti-il-manque-porte-parole-officiel-la-lutte-contre-le->

covid-19]. Accessed 15 January, 2020.

[3] The Haitian Times. "Haiti back on red alert as Covid-19 cases rise". 11 November, 2020.

[https://haitiantimes.com/2020/11/12/haiti-back-on-red-alert-as-covid-19-cases-rise/]. Accessed 15 January, 2021.

[4] Ministry of Public Health and Population (MSPP). Official site. [https://mspp.gouv.ht/]. Accessed 15 January, 2021.

[5] General Secretariat of the Council of Ministers. Official site [http://www.sgcm.gouv.ht/]. Accessed 15 January, 2021.

## 3.5.2 Public communication

### 3.5.2a

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

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

**Current Year Score: 2**

There is publicly available evidence that Haiti's public health system has, in the past year, 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. The Ministry of Public Health and Population (MSPP) publishes, on a daily basis, in the documentation section of its website, both in French and in Creole, the latest updates on Covid-19. It also shares messages on other health concerns such as the cholera outbreak. Furthermore the MSPP uses its website to dispel rumors such as proof that a flight coming from Hong Kong in January of 2020 did not allow its Chinese passengers to disembark in Port-au-Prince [1, 2]. In addition, the MSPP has used its Twitter account and Facebook page (again both in French and in Creole), in the past year to share messages about the Covid-19 pandemic and, to a lesser extent, information on eliminating cholera in Haiti [3, 4].

[1] Ministry of Public Health and Population (MSPP) Documentation site. [https://www.mspp.gouv.ht/documentation/]. Accessed 16 January, 2021.

[2] MSPP "news". 01 February, 2020. "Press Release: The Ministry of Culture and Communication informs the population that the jet from Hong Kong did not make contact with Haitian soil. (Communiqué: Le Ministère de la Culture et de la Communication informe la population que le jet provenant de Hong-Kong n'a pas eu contact avec le sol haïtien)". [https://www.mspp.gouv.ht/wp-content/uploads/Ministere-de-la-Culture-et-de-la-Communication.pdf]. Accessed 16 January, 2021.

[3] MSPP Twitter account. [https://twitter.com/msppofficiel?lang=en]. Accessed 16 January, 2021.

[4] MSPP Facebook page. [https://www.facebook.com/msppht/]. Accessed 16 January, 2021

### 3.5.2b

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

No = 1, Yes = 0

**Current Year Score: 1**

There is insufficient evidence that Haiti's senior leaders have shared misinformation or disinformation on infectious diseases in the past two years. There has been criticism by groups such as the Haiti Action Committee that the government

announced the first positive Covid-19 cases in Haiti only after it discovered that it could access millions of dollars in international aid. The criticism goes on to say that despite the government announcing it would, for example, buy equipment and supplies for health facilities to fight the pandemic, poor conditions in hospitals and lack of clean water and medical supplies are rampant in the country [1]. However, there is no evidence of this or that senior leaders shared misinformation or disinformation on infectious diseases in the past two years on the following media outlets: "Le Nouvelliste", "Haiti Progrès", "Haiti Libre" or "Metropole Haiti" [2, 3, 4, 5]. Furthermore, it should be noted that, according to Reporters Without Borders, many of Haiti's media are privately-owned and are strongly influenced by their owners and journalists not only "suffer a cruel lack of financial resources" but that their work is hampered by threats, violence and government interference [6]. There is no further evidence on international and national news outlets.

[1] Global Exchange - Haiti Action Committee. Pierre Labossiere. 22 July, 2020. "Resisting Covid-19 in Haiti".

[https://globalexchange.org/2020/07/22/resisting-covid-19-in-haiti/?gclid=CjwKCAiAgJWABhArEiwAmNVTB96CshZzhwRwfldKEnxh8v0kRiUqeOm9WB81nAOV31xIYmGOp-Y4nhoCKAYQAvD\_BwE]. Accessed 16 January, 2021.

[2] Le Nouvelliste. Official website. [https://lenouvelliste.com/]. Accessed 16 January, 2021.

[3] Haiti Progrès. Official website. [https://haitiprogres.com/news/]. Accessed 16 January, 2021.

[4] Haiti Libre. Official website. [https://www.haitilibre.com/en/]. Accessed 16 January, 2021.

[5] Metropole Haiti. Official website. [http://www.metropolehaiti.com/]. Accessed 16 January, 2021.

[6] BBC. "Haiti Profile - Media". [https://www.bbc.com/news/world-latin-america-19548813#:~:text=Radio%20is%20Haiti's%20key%20news,owned%20and%20broadcast%20in%20Creole.]. Accessed 16 January, 2021.

## 3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

### 3.6.1 Internet users

#### 3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 32.47

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: 57.53

2019

International Telecommunication Union (ITU)

### 3.6.3 Female access to a mobile phone

#### 3.6.3a

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

Input number

Current Year Score: 4.0

2019

Gallup; Economist Impact calculation

### 3.6.4 Female access to the Internet

#### 3.6.4a

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

Input number

Current Year Score: 18

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: 0

There is evidence that Haiti, in the past year, issued a restriction, without international/bilateral support, on the export of medical goods due to an infectious disease outbreak. According to the International Trade Center (ITC) for Transparency in Trade which monitors temporary trade measures enacted by government authorities in relation to COVID-19, on May 4, 2020, the prime minister banned factories from exporting personal protective equipment until they supplied the government first. The ban was still in place at the time of conducting this research [1].

[1] ICT Transparency in Trade: COVID-19 Temporary Trade Measures [<https://www.macmap.org/covid19>]. Accessed 18 January, 2021.

#### 3.7.1b

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

Yes = 0, No = 1

**Current Year Score: 1**

There is no publicly available evidence that Haiti, in the past year, issued a restriction, without international/bilateral support, on the export/import of non-medical goods due to an infectious disease outbreak. According to the International Trade Center (ITC) for Transparency in Trade which monitors temporary trade measures enacted by government authorities in relation to COVID-19, Haiti has neither imposed restrictions on exports nor on imports of non-medical goods (such as food or textiles) in the past year [1]. Furthermore, there is no evidence of such a restriction on the websites of the Ministry of Public Health and Population (including the document section, where it publishes outbreak alerts), the Ministry of Agriculture, Natural Resources and Rural Development, nor from government press releases or media reporting [2, 3, 4]. In addition, no disease outbreaks have been reported by Haiti to the World Health Organization (WHO) or World Organization for Animal Health (OIE) in the past year [5, 6].

[1] ICT Transparency in Trade: COVID-19 Temporary Trade Measures [<https://www.macmap.org/covid19>]. Accessed 18 January, 2021.

[2] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 18 January, 2021.

[3] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR). [<http://agriculture.gouv.ht/view/01/>]. Accessed 18 January, 2021.

[4] Ministry of Communication. "Press releases." [<https://www.communication.gouv.ht/rubrique/communiqués/>]. Accessed 18 January, 2021.

[5] World Health Organization. "Disease Outbreak News". 2019 and 2020 pages. [<https://www.who.int/csr/don/archive/year/2019/en/>]. [<https://www.who.int/csr/don/archive/year/2020/en/>]. Accessed 18 January, 2021.

[6] World Organization for Animal Health (OIE). "Weekly Disease Information". Wahis Interface. [[https://www.oie.int/wahis\\_2/public/wahid.php/Diseaseinformation/WI](https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI)]. Accessed 18 January, 2021.

### 3.7.2 Travel restrictions

#### 3.7.2a

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

Yes = 0, No = 1

**Current Year Score: 0**

Haiti has, in the past year, implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. On March 19, 2020, Haiti's president declared a state of emergency and announced that the country's ports, airports and borders would be closed until further notice [1]. This included the suspension of flights from Europe, Canada, the Dominican Republic, and Latin America [2].

[1] US News & World Report. 19 March, 2020. "Haiti Declares Emergency Over Coronavirus, Imposes Curfew, Shuts Borders". [<https://www.usnews.com/news/world/articles/2020-03-19/haiti-declares-emergency-over-coronavirus-imposes-curfew-shuts-border>]. Accessed 18 January, 2021.

[2] Miami Herald. 15 March, 2020. "Coronavirus: Haiti shuts Dominican Republic border, suspends most international flights". [<https://www.miamiherald.com/news/nation-world/world/americas/haiti/article241212621.html>]. Accessed 18 January, 2021.

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

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

#### 4.1.1 Available human resources for the broader healthcare system

##### 4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 23.43

2018

WHO; national sources

##### 4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 67.98

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

There is no publicly available evidence that Haiti has a health workforce strategy in place and hence no evidence of one that has either been updated in the past five years nor one which identifies fields where there is an insufficient workforce and strategies to address these shortcomings. The 2012 'National health policy' notes the absence of strategic planning for Human Resources for Health (HRH) and incomplete knowledge of the numbers of medical and paramedical professionals operating in the country. It calls for workforce planning and more regulation and standardization of the medical profession [1]. The 2013 'Health masterplan 2012-2022' expands on the points made in the national health policy with regard to what is needed, but does not provide a health workforce strategy [2]. This lack of such a strategy has been highlighted in a health workforce data audit conducted by the USAID Health Finance and Governance (HFG) in 2017. The HFG worked with the Ministry of Public Health and Population (MSPP)'s Directorate of Human Resources to conduct nationwide facility-level surveys of health workers in both the public and private sectors. These audits revealed a severe shortage of health workers

including doctors, nurses, and midwives. The results also led the MSPP to remove 670 "ghost workers"—individuals receiving regular paychecks from the MSPP but no longer actually employed there. Furthermore, according to the HFG, it planned to support the MSPP in formally launching a multi-sectoral committee to develop Haiti's HRH strategy in late 2017 [3]. However, a similar audit in August of 2019 made no mention that such a strategy had been put in place only that in 2018 the MSPP did present a Health and Human Resources (HRH) strategy to a donors' roundtable [4]. In addition, there is no evidence of a health workforce strategy on the MSPP's website nor on the one of the Ministry of Education [5, 6]. The Ministry of Labour and Social Affairs does not have a working website.

[1] Ministry of Public Health and Population (MSPP). 2012. "National health policy (Politique nationale de santé)".

[<http://mspp.gouv.ht/site/downloads/PNS%2021juillet%20version%20finale.pdf>]. Accessed 18 January, 2021.

[2] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 18 January, 2021.

[3] USAID Health Finance and Governance (HFG). 2017. "Haiti Health Workforce Data Audits Lead to Human Resources for Health Improvements". [<https://www.hfgproject.org/health-workforce-data-audits-lead-improvements-human-resources-health-haiti/>]. Accessed 18 January, 2021.

[4] US AID. Health Finance Governance project. August 2019. "Strengthening Human Resources for Health (HRH) in Haiti". [<https://www.slideshare.net/HFGProject/strengthening-human-resources-for-health-hrh-in-haiti>]. Accessed 18 January, 2021.

[5] Ministry of Public Health and Population (MSPP). 2018. Official website. [<https://mspp.gouv.ht/>]. Accessed 18 January, 2021.

[6] Ministry of Education. [<http://menfp.gouv.ht/#/home>]. Accessed 18 January, 2021.

## 4.1.2 Facilities capacity

### 4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 71

2013

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 Haiti has the capacity to isolate patients with highly communicable diseases in a patient isolation room/unit located within the country. The Justinian University Hospital, the largest hospital in Haiti's second-largest city, opened a new pediatric unit in 2018 which includes isolation rooms for contagious diseases such as tuberculosis [1, 2]. In addition, the Mirebelais University Hospital, which serves Central Haiti including the capital area, was rebuilt after the 2010 earthquake (reopened in 2013) with help from non-government organisation Partners in Health with 11 isolation rooms for

contagious diseases. During the Covid-19 pandemic, positive cases were put in Mirebelais' isolation ward [3, 4]. Furthermore, in response to a cholera outbreak from 2010 on, the Ministry of Public Health and Population (MSPP) established several patient isolation facilities in 2012-13 [5]. However, there is no evidence that any of these is indeed an advanced isolation facility for highly contagious diseases.

- [1] Haiti Press Network. 18 April 2018. "Haiti-health: Inauguration of the new Pediatric unit at the Justinian University Hospital (Haiti-Santé : Inauguration de la nouvelle Unité pédiatrique à l'hôpital Justinien du Cap Haïtien)". [<http://hpnhaiti.com/nouvelles/index.php/societe/53-sante/3602-haiti-sante-inauguration-de-la-nouvelle-unite-pediatrique-a-l-hopital-justinien-du-cap-haitien>]. Accessed 20 January, 2021.
- [2] Ville du Cap Haitien. 2020. "Health Organisation of Cap Haitien (Organisation de la Santé au Cap Haïtien) 1890-2020". [<https://villeducaphaitien.com/vivre-au-cap/35-vivre-au-cap/174-organisation-de-la-sant%C3%A9-au-cap-ha%C3%Aftien-1890-%E2%80%932020-lita-b%C3%A9liard>]. Accessed 20 January, 2021.
- [3] Partners in Health. N.d. "Hôpital Universitaire de Mirebalais." [<https://www.pih.org/pages/Mirebalais>]. Accessed 20 November, 2021.
- [4] Partners in Health. 27 March, 2020. "University Hospital Cares for Haiti's First Covid-19 Patients". [<https://www.pih.org/article/university-hospital-cares-haitis-first-covid-19-patients>]. Accessed 20 January, 2021.
- [5] Ministry of Public Health and Population (MSPP). 2013. "Major achievements of the MSPP 2012-2013 (Grandes réalisations MSPP 2012-2013)". [<https://mspp.gouv.ht/site/downloads/Grandes%20R%C3%A9alisations%20MSPP%202013.pdf>]. Accessed 20 January, 2021.

#### 4.1.2c

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

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years nor 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. The Mirebelais University Hospital, which serves Central Haiti, has 11 isolation rooms. During the Covid-19 pandemic, positive cases were placed in these isolation units. However, these isolation facilities were already in place in 2013 when the hospital was rebuilt and there is no evidence of expansion of these units since then [1, 2]. In addition, although the Justinian University Hospital, the largest hospital in Haiti's second-largest city, opened a new pediatric unit in 2018 which includes isolation rooms, these facilities are for infectious diseases such as tuberculosis and there is no evidence that their capacity to isolate during an infectious disease outbreak has been expanded in the past two years [3, 4]. Furthermore, there is no evidence of either criteria on the websites of the Ministry of Public Health and Population, the Ministry of Interior, nor on the government's main portal [5, 6, 7]. The National Emergency Operations Center does not have a website.

- [1] Partners in Health. N.d. "Hôpital Universitaire de Mirebalais." [<https://www.pih.org/pages/Mirebalais>]. Accessed 24 April, 2021.
- [2] Partners in Health. 27 March, 2020. "University Hospital Cares for Haiti's First Covid-19 Patients". [<https://www.pih.org/article/university-hospital-cares-haitis-first-covid-19-patients>]. Accessed 24 April, 2021.

- [3] Haiti Press Network. 18 April 2018. "Haiti-health: Inauguration of the new Pediatric unit at the Justinian University Hospital (Haiti-Santé : Inauguration de la nouvelle Unité pédiatrique à l'hôpital Justinien du Cap Haïtien)". [<http://hpnhaiti.com/nouvelles/index.php/societe/53-sante/3602-haiti-sante-inauguration-de-la-nouvelle-unite-pediatrique-a-l-hopital-justinien-du-cap-haitien>]. Accessed 24 April, 2021.
- [4] Ville du Cap Haitien. 2020. "Health Organisation of Cap Haitien (Organisation de la Santé au Cap Haïtien) 1890-2020". [<https://villeducaphaitien.com/vivre-au-cap/35-vivre-au-cap/174-organisation-de-la-sant%C3%A9-au-cap-ha%C3%Aftien-1890-%E2%80%93-2020-lita-b%C3%A9liard>]. Accessed 24 April, 2021.
- [5] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 24 April, 2021.
- [6] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 24 April, 2021.
- [7] General Secretariat of the Council of Ministers. Official site [<http://www.sgcm.gouv.ht>]. Accessed 24 April, 2021.

## 4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

### 4.2.1 Routine health care and laboratory system supply

#### 4.2.1a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti has national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies and medical supplies (e.g. equipment, PPE) for routine needs. The national laboratories policy published in March 2018 states that laboratory supply chains are not regulated by the government, so supply issues are not overseen by the public authorities. There are private local suppliers but they do not require prior approval by the Ministry of Public Health and Population (MSPP) to supply public laboratories. Laboratories mainly receive supplies from international donors. The policy calls for more regulation of laboratory supplies and for central purchasing for public and public-private laboratories and notes that "the lack of a national policy for laboratory supplies constitutes a handicap in the development of a more harmonious and ambitious national laboratory system" [1]. Furthermore, there is no evidence of such a national procurement protocol on the websites of the MSPP, the Ministry of Agriculture, the National Public Health Laboratory nor in the document repository of the central government. [2, 3, 4, 5]

- [1] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DEL). March 2018. "Haiti national laboratories policy (Politique nationale des laboratoires d'Haiti)". [<http://mspp.gouv.ht/site/downloads/MSPP%20Politique%20Nationale%20des%20Laboratoires%20d%20Haiti%20juin%202018.pdf>]. Accessed 18 January, 2021.
- [2] Ministry of Public Health and Population of Haiti (MSPP). Official site. [<https://www.mspp.gouv.ht/>]. Accessed 18 January, 2021.
- [3] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR). [<http://agriculture.gouv.ht/view/01/>]. Accessed 18 January, 2021.
- [4] National Public Health Laboratory. Official site. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 18 January, 2021.

[5] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>]. Accessed 18 January, 2021.

## 4.2.2 Stockpiling for emergencies

### 4.2.2a

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. The 2014 'National pharmaceutical policy' states that the government undertakes to guarantee supply of medications during emergencies, but does not provide any details on how this will be done [1]. Haiti's central pharmaceutical store, known as PROMESS (Program on Essential Medicine and Supplies), which was established in 1992 and is a Pan-American Health Organization (PAHO) entity, houses and distributes pharmaceutical and non-pharmaceutical medical supplies, like rubber gloves and masks. However, there is no evidence that it has a stockpile of medical supplies for national use during a public health emergency. For example, after the 2010 earthquake and ensuing cholera outbreak, most of the supplies came through emergency international donations [2]. In addition, although the country's Preparation and Response Plan to the Coronavirus (March 10, 2020) includes a strategy to review the supply chain for the storage and distribution of medical supplies, there is no evidence that such a review took place nor that it led to the creation of such a stockpile [3]. This lack of such a stockpile had been highlighted during the Covid-19 pandemic when international organizations such as the Pan American Health Organization (PAHO) warned that a lack of PPE were forcing hospitals to close and contaminating health care workers [4]. Furthermore, there is no evidence of a stockpile of medical supplies which includes MCMs on the websites of the Ministry of Public Health and Population, the National Public Health Laboratory (LNHP) nor on the one of the Ministry of Defense [5, 6, 7]. The National Emergency Operations Center does not have a website.

[1] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 20 January, 2021.

[2] Pan American Health Organization (PAHO). "PROMESS Continues Distribution of Pharmaceuticals, Medical Supplies in Haiti." 2010. [[https://www.paho.org/hq/index.php?option=com\\_content&view=article&id=2443:2010-promess-continues-distribution-pharmaceuticals-medical-supplies-haiti&Itemid=1926&lang=en](https://www.paho.org/hq/index.php?option=com_content&view=article&id=2443:2010-promess-continues-distribution-pharmaceuticals-medical-supplies-haiti&Itemid=1926&lang=en)]. Accessed 20 January, 2021.

[3] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 20 January, 2021.

[4] Haiti Libre. 04 April, 2020. "Haiti - Covid-19 : Shortage of Personal Protective Equipment, a major concern".

[<https://www.haitilibre.com/en/news-30478-haiti-covid-19-shortage-of-personal-protective-equipment-a-major-concern.html>]. Accessed 20 January, 2021.

[5] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 20 January, 2021.

[6] National Public Health Laboratory of Haiti. Official Site. [[https://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=30](https://mspp.gouv.ht/newsite/_direction/index.php?IDDir=30)].

Accessed 20 January, 2021.

[7] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 20 January, 2021.

#### 4.2.2b

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The country's National Public Health Laboratory (LNSP) is responsible for storing and distributing laboratory supplies such as reagents. However, there is no evidence on their website that they have a stockpile of laboratory supplies for national use during a public health emergency [1]. This lack of such a stockpile has been noted in recent years, such as in an October 2017 report by the the American Journal of Tropical Medicine and Hygiene which reported that a major decrease in stocks of reagents for testing was due to an internal restructuring at the LNSP [2]. Furthermore, although Haiti's Preparation and Response Plan to the Coronavirus (March 10, 2020) calls for "assuring that the LNSP has enough supplies of reagents and other laboratory resources" during this public health emergency, there is no evidence of such a stockpile [3]. In fact, in January of 2021, GHESKIO, a research and treatment facility in Haiti, reported a temporary disruption in testing as the LNSP had run out of reagents [4]. In addition there is no evidence of such a stockpile on the websites of the Ministry of Public Health and Population (MSPP) or the one of the Ministry of Defense [5, 6]. The National Emergency Operations Center does not have a website.

[1] National Public Health Laboratory (LNSP). Official site. [[https://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=30](https://mspp.gouv.ht/newsite/_direction/index.php?IDDir=30)]. Accessed 20 January, 2021.

[2] American Journal of Tropical Medicine and Hygiene. 10 October, 2017. Jean-Louis Frantz et al. "Building and Rebuilding: The National Public Health Laboratory Systems and Services Before and After the Earthquake and Cholera Epidemic, Haiti, 2009-2015". [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5676632/>]. Accessed 20 January, 2021.

[3] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 20 January, 2021.

[4]. Vant Bèf Info. 9 January, 2021. "Haiti-Coronavirus: Temporary rupture in supply of reagents for Covid-19 tests (Haïti-Coronavirus: Rupture momentanée d'approvisionnement en réactifs pour les test de covid-19).

[<https://vantbefinfo.com/haiti-coronavirus-rupture-momentanee-dapprovisionnement-en-reactifs-pour-les-test-de-covid-19/>]. Accessed 20 January, 2021.

[5] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 20 January, 2021.

[6] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 20 January, 2021.

#### 4.2.2c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Haiti conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency as there is no evidence that the country has such a stockpile. The 2014 'National pharmaceutical policy' states that the government undertakes to guarantee supply of medications during emergencies, but does not provide any details on how this will be done [1]. Haiti's central pharmaceutical store, known as PROMESS (Program on Essential Medicine and Supplies), which was established in 1992 and is a Pan-American Health Organization (PAHO) entity, houses and distributes pharmaceutical and non-pharmaceutical medical supplies, like rubber gloves and masks. However, there is no evidence that it has a stockpile of medical supplies for national use during a public health emergency nor that it conducts an annual review of what it has in stock. For example, after the 2010 earthquake and ensuing cholera outbreak, most of the supplies came through emergency international donations [2]. In addition, although the country's Preparation and Response Plan to the Coronavirus (March 10, 2020) includes a strategy to review the supply chain for the storage and distribution of essential medicines, there is no evidence that such a review took place nor that it led to the creating of such a stockpile [3]. Furthermore, there is no evidence that Haiti has a stockpile for use during a public health emergency nor that it conducts or requires an annual review of what it has in stock on the websites of the Ministry of Public Health and Population, the National Public Health Laboratory (LNSP), the Ministry of Interior, nor on the one of the Ministry of Defense [4, 5, 6, 7]. The National Emergency Operations Center does not have a website.

[1] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed April 24, 2021.

[2] Pan American Health Organization (PAHO). "PROMESS Continues Distribution of Pharmaceuticals, Medical Supplies in Haiti." 2010. [[https://www.paho.org/hq/index.php?option=com\\_content&view=article&id=2443:2010-promess-continues-distribution-pharmaceuticals-medical-supplies-haiti&Itemid=1926&lang=en](https://www.paho.org/hq/index.php?option=com_content&view=article&id=2443:2010-promess-continues-distribution-pharmaceuticals-medical-supplies-haiti&Itemid=1926&lang=en)]. Accessed 24 April, 2021.

[3] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 24 April, 2021.

[4] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 24 April, 2021.

[5] National Public Health Laboratory of Haiti. Official Site. [[https://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=30](https://mspp.gouv.ht/newsite/_direction/index.php?IDDir=30)].

Accessed 24 April, 2021.

[6] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 24 April, 2021.

[7] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 24 April, 2021.

## 4.2.3 Manufacturing and procurement for emergencies

### 4.2.3a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is insufficient evidence that Haiti has a plan or 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 nor that it has a plan or mechanism to procure medical supplies for national use during a public health emergency. In the country's Preparation and Response Plan to the Coronavirus (March 10, 2020, the Ministry of Public Health and Population (MSPP) announced a strategy to "assess the capacity of the local market to meet the increased demand for medical and other essential supplies" [1]. However, although there is evidence that seven local manufacturing companies were reopened to produce medical supplies such as masks and protective equipment, there is no mention that this was part of an agreement but rather an initiative organized by companies or by NGOs [2, 3]. Regarding procurement, Haiti has an entity called the "Program on Essential Medicine and Supplies' (PROMESS), established in 1992 and which serves as a central procurement agency not only for pharmaceutical supplies but also for non-pharmaceutical ones such as rubber gloves and masks. However, PROMESS is run by the Pan-American Health Organization (PAHO) and there is no evidence that it has a plan or mechanism in place to procure medical supplies during a public health emergency [4]. In addition, there is no evidence of either type of plan, agreement or mechanism on the MSPP's website nor on the one of the Ministry of Defense [5, 6]. The National Emergency Operations Center does not have a website.

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 20 January, 2021.

[2] Fibre to Fashion. 04 April, 2020. "Haiti making masks to fight COVID-19 pandemic".

[<https://www.fibre2fashion.com/news/apparel-news/haiti-making-masks-to-fight-covid-19-pandemic-266244-newsdetails.htm>]. Accessed 20 January, 2021.

[3] Hospital Albert Schweitzer HAS). 03 April, 2020. "Teaming Up to Fight COVID-19 in Haiti".

[<https://hashaiti.org/stories/blog/teaming-up-to-fight-covid-19-in-haiti/>]. Accessed 20 January, 2021.

[4] Pan-American Health Organisation (PAHO) and World Health Organisation (WHO) Regional Office for the Americas..

"PROMESS". [[https://www.paho.org/hai/index.php?option=com\\_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en](https://www.paho.org/hai/index.php?option=com_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en)]. Accessed 20 January, 2021.

[5] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 20 January, 2021.

[6] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 20 January, 2021.

#### 4.2.3b

Does the country meet one of the following criteria?

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

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti either has plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency nor that it has a plan or mechanism to procure laboratory supplies for national use during a public health emergency. Part of the reason for this lack of plan regarding a leverage in domestic manufacturing is that there is no available evidence that Haiti can domestically produce laboratory supplies such as reagents. The only mention of Haiti being able to manufacture reagents dates back to 2001 when a Pan American Health Organization (PAHO) study on Haiti notes that "only a few reagents, such as strains for TB control,

were prepared locally" [1]. Regarding the procurement of laboratory supplies for use during a public health emergency, according to an August 31, 2020 update on the Covid-19 situation in Haiti, the UN Office for the Coordination of Humanitarian Affairs reported that the Ministry of Public Health and Population (MSPP) was working, with the support of the PAHO/WHO, to strengthen its central and regional laboratory capacities which included the procurement of reagents and other necessary materials [2]. However, there is no evidence of a plan, agreement or mechanism to either leverage domestic manufacturing or to procure laboratory supplies during a public health emergency on the MSPP's website nor on the one of the Ministry of Defense [3, 4]. In addition, a lack of reagents during the Covid-19 pandemic was highlighted in a June 8, 2020 article by the Miami Herald in which the U.S. Agency for International Development said that while it has given about \$13.2 million in Covid-19 assistance to Haiti, "to date, USAID funds have not been used to procure reagents for Covid-19" [5].

[1] Pan American Health Organization (PAHO). 2001. Haiti Country Health Profile.

[<https://www.paho.org/English/sha/prflhai.htm>]. Accessed 21 January, 2021.

[2] UN Office for the Coordination of Humanitarian Affairs (OCHA). Haiti - Covid-19 Flash Update No 8. 31 August 2020.

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200902\\_flash\\_update\\_no\\_8\\_covid-19\\_-\\_ocha\\_haiti\\_-\\_en.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/20200902_flash_update_no_8_covid-19_-_ocha_haiti_-_en.pdf)]. Accessed 21 January, 2021.

[3] Ministry of Public Health and Population of Haiti (MSPP). Official site. [<https://www.mspp.gouv.ht/>]. Accessed 21 January, 2021.

[4] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 21 January, 2021.

[5] Miami Herald. 8 June, 2020. Jacqueline Charles. "As the coronavirus accelerates in Haiti, top doctor says no need to test". [<https://www.miamiherald.com/news/nation-world/world/americas/haiti/article243336146.html>]. Accessed 21 January, 2021.

## 4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

#### 4.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. The 2014 'National pharmaceutical policy' states that the government undertakes to guarantee supply of medications during emergencies, but does not provide any details on how this will be done [1]. A draft law has been tabled on "regulating the production, distribution, the conditions of import and export, storage and consumption of medicines". However, it does not mention how medications should be dispensed in an emergency, nor is there evidence that this law has been adopted [2]. Haiti's central pharmaceutical store, known as PROMESS (Program on Essential Medicine and Supplies), which was established in 1992 and is a Pan-American Health Organization (PAHO) entity, procures, stores and distributes pharmaceutical and non-pharmaceutical supplies [3]. After the 2010 earthquake and the ensuing cholera outbreak, medications were provided by PROMESS to the Ministry of Public Health and Population (MSPP) and departmental (i.e. regional) supply centres (CDAI) to distribute [4]. However, there is no evidence of an agreement between Haiti and PROMESS specifically regarding the dispensing of MCM during a public health emergency [3]. In addition, there is no evidence of a plan for dispensing MCMs during a public health emergency in the country's National Plan for the Elimination of Cholera in Haiti, 2013-2022 nor in Haiti's Preparation and Response Plan to

the Coronavirus of March 10, 2020 [5, 6]. Moreover, there is no evidence of such a plan or program on the websites of the MSPP, the Directorate of Pharmacy, Medications and Traditional Medicine, the Ministry of Interior nor on the one for the Ministry of Defense [7, 8, 9, 10].

[1] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 22 January, 2021.

[2] Government of Haiti. 2013. "Draft law regulating the production, distribution, the conditions of import and export, storage and consumption of medicines (Projet de loi réglementant la production, la distribution, les conditions d'importation et d'exportation, le stockage et la consommation des médicaments)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-Loi-reglementant-la-production-la-distribution-les-conditions-d%E2%80%99importation-et-d%E2%80%99exportation-le-stockage-et-la-consommation-des-m%C3%A9dicaments.pdf>].

Accessed 22 January, 2021.

[3] Pan-American Health Organisation (PAHO) and World Health Organisation (WHO) Regional Office for the Americas. 2018. "PROMESS". [[https://www.paho.org/hai/index.php?option=com\\_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en](https://www.paho.org/hai/index.php?option=com_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en)]. Accessed 22 January, 2021.

[4] Pan-American Health Organization (PAHO). PROMESS -Program for Essential Medicine and Supplies. Haiti - PANO/WHO Technical Cooperation 2010-2011.

[[https://www.paho.org/disasters/index.php?option=com\\_docman&view=download&category\\_slug=fact-sheets&alias=2073-promess-program-for-essential-medicines-and-supplies&Itemid=1179&lang=en](https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=fact-sheets&alias=2073-promess-program-for-essential-medicines-and-supplies&Itemid=1179&lang=en)]. Accessed 22 January, 2021.

[5] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 22 January, 2021.

[6] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official website. [<https://mspp.gouv.ht/>]. Accessed 22 January, 2021.

[8] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. Official website. [[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=29](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=29)]. Accessed 22 January, 2021.

[9] Ministry of the Interior and Territorial Collectives. 2018. "Directorate of Civil Protection (Direction de la Protection Civile)". [<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 22 January, 2021.

[10] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 22 January, 2021.

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

#### 4.3.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti has a public plan in place to receive health personnel from other countries to respond to a public health emergency. Although Haiti has plans in place for receiving and coordinating with health personnel from other countries to respond to emergencies, including (but not specific to) public health emergencies, there is no evidence of detailed plans regarding the deployment of such personnel. The 2001 'National emergency response plan' (last updated in September of 2009) assigns a role to an International Cooperation Support Group in engaging with international

organizations offering assistance. It also outlines procedures for receiving international support and assigns responsibilities to ministries related to ensuring that foreign personnel and equipment can enter the country during an emergency [1]. The 2017 'National contingency plan' outlines systems for receiving support from the international community, which would apply during a public health emergency. It states that a technical operations cell, composed of representatives of the international humanitarian organizations supporting disaster response, should be formed within the national emergency operations centre (EOC) to improve coordination, meaning that international partners are involved in decisions on deploying domestic and international medical personnel [2]. An organogram of the humanitarian coordination architecture published in 2017 shows that international organizations are deeply integrated into Haiti's emergency response framework [3]. Furthermore, although the country's Preparation and Response Plan to the Coronavirus (March 10, 2020) does not mention a plan to receive health personnel from other countries, it mentions working with international NGOs which has been evident during the pandemic with the presence on the ground of groups such as "Médecins sans Frontières" [4, 5]. Moreover, there is no evidence of such a plan regarding the deployment of foreign medical personnel during an emergency on the websites of the Ministry of Public Health and Population, the Directorate of Civil Protection nor on the one of the Ministry of Defense [6, 7, 8].

[1] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 22 January 2021.

[2] Ministry of the Interior, Directorate of Civil Protection. August 2017. "National contingency plan (Plan de contingence national)".

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan\\_de\\_contingence\\_national\\_15\\_aout\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_de_contingence_national_15_aout_2017.pdf)]. Accessed 21 January 2021.

[3] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 5 July 2017. "Humanitarian coordination architecture."

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/coordination\\_architecture\\_juin\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/coordination_architecture_juin_2017.pdf)]. Accessed 22 January, 2021.

[4] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021.

[5] Médecins sans Frontières: 18 May, 2020. "MSF opens a COVID-19 treatment centre in Haiti". [<https://www.msf.org/msf-opens-covid-19-treatment-centre-haiti>]. Accessed 22 January, 2021.

[6] Ministry of Public Health and Population (MSPP). Official website. [<https://mspp.gouv.ht/>]. Accessed 22 January, 2021.

[7] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 22 January, 2021.

[8] Ministry of Defense. Official site. [<https://www.md.gouv.ht/>]. Accessed 22 January, 2021.

## 4.4 HEALTHCARE ACCESS

### 4.4.1 Access to healthcare

#### 4.4.1a

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

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

**Current Year Score: 3**

2020

World Policy Analysis Center

#### 4.4.1b

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

Input number

**Current Year Score: 41.6**

2017

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: 58.79**

2017

WHO Global Health Expenditure database

### 4.4.2 Paid medical leave

#### 4.4.2a

**Are workers guaranteed paid sick leave?**

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

**Current Year Score: 2**

2020

World Policy Analysis Center

### 4.4.3 Healthcare worker access to healthcare

#### 4.4.3a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has issued legislation, a policy or a public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health

emergency as there is no available evidence that the country has a national public health emergency response plan. The general national emergency response plan (last updated in 2009) does not contain a commitment to provide prioritized treatment to healthcare workers, nor is there evidence of this in the most recent national contingency plan, the 2012-2022 health masterplan or in the 2013-2018 surveillance plan [1, 2, 3, 4]. In addition, there is no mention of such a commitment in Haiti's two disease specific plans, the one for Cholera (2013-2022) nor in the one for Covid-19 (March 2020) [5, 6]. Moreover, there is no evidence of such a commitment on the websites of the Ministry of Health, its Directorate for Epidemiology, Laboratories and Research, the Directorate of Civil Protection, nor on the central government's document repository [7, 8, 9, 10]. Furthermore, it should be noted that during the Covid-19 pandemic some healthcare workers refused to come into work, stating they did not have the necessary protective gear and were worried they would be contaminated and not taken care of [11].

[1] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 22 January, 2021.

[2] Ministry of the Interior, Directorate of Civil Protection. August 2017. "National contingency plan (Plan de contingence national)".

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan\\_de\\_contingence\\_national\\_15\\_aout\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_de_contingence_national_15_aout_2017.pdf)]. Accessed 22 January, 2021.

[3] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 22 January, 2021.

[4] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 22 January, 2021.

[5] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021.

[6] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 22 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 22 January, 2021.

[8] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 22 January, 2021.

[9] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 22 January, 2021.

[10] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>].

Accessed 22 January, 2021.

[11] Voice of America (VOA). Sandra Lemaire. "Haiti Doctors Flee State-run Hospital to Avoid Coronavirus Infection".

[<https://www.voanews.com/science-health/coronavirus-outbreak/haiti-doctors-flee-state-run-hospital-avoid-coronavirus>]. Accessed 22 January, 2021.

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

### 4.5.1 Communication with healthcare workers

#### 4.5.1a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a system for public health officials and healthcare workers to communicate during a public health emergency. The country's Preparation and Response Plan to the Coronavirus of March 10, 2020, mentions a strategy to "collaborate with regional and sub-regional health authorities in the exchange of information on the spread of the epidemic and carry out joint actions on infection prevention and control". However, there is no specific mention of communication with healthcare workers [1]. Furthermore, there is no evidence of such a system in the general national emergency response plan (last updated in 2009), the most recent national contingency plan, the 2012-2022 health masterplan, the 2013-2018 surveillance plan nor in the 2013-2021 national response plan to Cholera [2, 3, 4, 5, 6]. In addition, there is no evidence of a system in place for public health officials and healthcare workers to communicate during a public health emergency on the websites of the Ministry of Public Health and Population (MSPP), its Directorate for Epidemiology, Laboratories and Research, the Directorate of Civil Protection, nor on the central government's document repository [7, 8, 9, 10].

[1] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021.

[2] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 22 January, 2021.

[3] Ministry of the Interior, Directorate of Civil Protection. August 2017. "National contingency plan (Plan de contingence national)".

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan\\_de\\_contingence\\_national\\_15\\_aout\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_de_contingence_national_15_aout_2017.pdf)]. Accessed 22 January, 2021.

[4] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 22 January, 2021.

[5] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DEL). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DEL%202013-2018.pdf>]. Accessed 22 January, 2021.

[6] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 22 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 22 January, 2021.

[8] Directorate for Epidemiology, Laboratories and Research (DEL). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 22 January, 2021.

[9] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 22 January, 2021.

[10] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgc.m.gouv.ht/lois/>]. Accessed 22 January, 2021.

#### 4.5.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has a system for public health officials and healthcare workers to communicate during a public health emergency, hence there is no evidence that this would encompass healthcare workers in both the public and private sector. The country's Preparation and Response Plan to the Coronavirus of March 10, 2020, mentions a strategy to "collaborate with regional and sub-regional health authorities in the exchange of information on the spread of the epidemic and carry out joint actions on infection prevention and control". However, there is no specific mention of communication with healthcare workers, either public or private [1]. Furthermore, there is no evidence of such a system in the general national emergency response plan (last updated in 2009), the most recent national contingency plan, the 2012-2022 health masterplan, the 2013-2018 surveillance plan nor in the 2013-2021 national response plan to Cholera [2, 3, 4, 5, 6]. In addition, there is no evidence of a system in place for public health officials and healthcare workers (either public or private) to communicate during a public health emergency on the websites of the Ministry of Public Health and Population (MSPP), its Directorate for Epidemiology, Laboratories and Research, the Directorate of Civil Protection, nor on the central government's document repository [7, 8, 9, 10].

[1] Ministry of Public Health and Population (MSPP). "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021.

[2] Government of Haiti. 2001. "National emergency response plan (Plan national de réponse aux urgences)".

[[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 22 January, 2021.

[3] Ministry of the Interior, Directorate of Civil Protection. August 2017. "National contingency plan (Plan de contingence national)".

[[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan\\_de\\_contingence\\_national\\_15\\_aout\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_de_contingence_national_15_aout_2017.pdf)]. Accessed 22 January, 2021.

[4] Ministry of Public Health and Population (MSPP). 2013. "Health masterplan 2012-2022 (Plan directeur de santé 2012-2022)". [<http://mspp.gouv.ht/site/downloads/Plan%20Directeur%20de%20Sante%202012%202022%20version%20web.pdf>]. Accessed 22 January, 2021.

[5] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 22 January, 2021.

[6] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 22 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 22 January, 2021.

[8] Directorate for Epidemiology, Laboratories and Research (DELR). Official site.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]. Accessed 22 January, 2021.

[9] Ministry of the Interior and Territorial Collectives. "Directorate of Civil Protection (Direction de la Protection Civile)".

[<http://www.mict.gouv.ht/direction-de-la-protection-civile/>]. Accessed 22 January, 2021.

[10] General Secretariat of the Council of Ministers. "Documents (Documentation)." [<http://www.sgcm.gouv.ht/lois/>]. Accessed 22 January, 2021.

## 4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

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

#### 4.6.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti's public health system is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities. Although the Ministry of Public Health and Population (MSPP) with the support of PAHO and the WHO, has held training programs on how to monitor and prevent nosocomial infections (the most recent in April of 2019), there is no evidence that this has led to a system to monitor and track the numbers of HCAs [1]. This lack of a HCAI monitoring system was also noted in the 2013-2018 Strategic plan for reinforcing epidemiological surveillance in Haiti which had suggested that in the absence of such a system to use the number of HCAI confirmed by laboratories each year as a performance indicator [2]. Furthermore, there is no evidence of such a system on the website of the MSPP nor on the one of the National Public Health Laboratory [3, 4]. In addition, the poor sanitary conditions of some of Haiti's healthcare facilities was criticized in a September 2019 article in the newspaper "Le Nouvelliste" which blamed the budget cuts in healthcare that dropped between 2004 et 2018 from 16,6% to 3,9%, for leaving many hospitals without the necessary sanitary and sterilization equipment to limit the number of HCAs [5].

[1] Pan-American Health Organization (PAHO) Facebook page. 3 April, 2019. Haiti - Prevention and Control of Nosocomial Diseases (Prevention et controle des infections Nosocomiales).

[<https://www.facebook.com/OPSOMSHaiti/posts/2308216802533112>]. Accessed 23 January, 2021.

[2] Ministry of Public Health and Population (MSPP), Directorate of Epidemiology, Laboratories and Research (DELR). 2013. "Strategic plan for reinforcing epidemiological surveillance in Haiti, 2013-2018 (Plan stratégique pour le renforcement de la surveillance épidémiologique en Haiti)". [<http://mspp.gouv.ht/site/downloads/Plan%20strategique%20DELR%202013-2018.pdf>]. Accessed 23 January, 2021.

[3] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 23 January, 2021.

[4] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 23 January, 2021.

[5] Le Nouvelliste. Fils-Lien Ely Thélot, PhD. 19 September, 2019. "Haiti between its dead and its sick (Haïti, entre ses morts et ses malades)". [<https://lenouvelliste.com/article/206872/haiti-entre-ses-morts-et-ses-malades>]. Accessed 23 January, 2021.

## 4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

### 4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

#### 4.7.1a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient available evidence that Haiti has a national requirement for ethical review, from either an ethics committee or via Institutional Review Board approval, before beginning a clinical trial. The Directorate of Epidemiology, Laboratories and Research under the Ministry of Public Health and Population (MSPP) is responsible for validating studies, ensuring that they comply with ethical norms and for producing approval procedures for research involving human subjects. However, there is no information on research ethics or approval procedures on the DELR's website [1]. In 1999, a bio-ethics committee was created under the MSPP, charged with giving opinions on ethical/moral problems arising from research in biology, medicine and health, which could affect individuals, groups of people or society as a whole [2]. The committee published procedures for ethical review of studies in 2014 but there is no further information provided [3]. In addition, there is no evidence of such a national requirement for ethical review before beginning a clinical trial on the websites of the MSPP, the National Public Health Laboratory nor on the one for the Ministry of Education (which is also responsible for research)[4, 5, 6].

[1] Directorate of Epidemiology, Laboratories and Research. Official website.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]; in particular "Mission and responsibilities (Mission et responsabilités). [[http://mspp.gouv.ht/newsite/\\_direction/pagePresentation.php?IDDir=9&idpres=37](http://mspp.gouv.ht/newsite/_direction/pagePresentation.php?IDDir=9&idpres=37)]. Accessed 23 January, 2021.

[2] Government of Haiti. 1999. "Ministerial decision on the creation of a Provisional Committee for Bio-ethics and Protection of Persons (Décision ministérielle de creation d'un Comité Provisoire de Bio-éthique et de Protection des Personnes)". [[http://www.vertic.org/media/National%20Legislation/Haiti/HT\\_Loi\\_Comite\\_Bioethique.pdf](http://www.vertic.org/media/National%20Legislation/Haiti/HT_Loi_Comite_Bioethique.pdf)]. Accessed 23 January, 2021.

[3] National Bioethic Committee, Ministry of Public Health and Population. 2014. "Procedures of the National Bioethic Committee for approving research protocols (Procédures du Comité National de Bioéthique pour approbation de protocole de recherche)".

[<http://mspp.gouv.ht/site/downloads/CNB%20Procédures%20pour%20soumission%20de%20protocole%20de%20recherche%20pour%20avis%20Dec%202014.pdf>]. Accessed 23 January, 2021.

[4] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)". [<https://www.mspp.gouv.ht/documentation/>]. Accessed 23 January, 2021.

[5] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 23 January, 2021.

[6] Ministry of Education. Official site. [<https://menfp.gouv.ht/#/home>]. Accessed 23 January, 2021.

#### 4.7.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has an expedited process for approving clinical trials for unregistered medical countermeasures (MCMs) to treat ongoing pandemics. The Directorate of Epidemiology, Laboratories and Research under the Ministry of Public Health and Population (MSPP) is responsible for validating studies, ensuring that they comply with ethical norms and for producing approval procedures for research involving human subjects. However, there is no information on an expedited approvals process on DELR's website [1]. A National Bioethics Committee under the MSPP is responsible for ethical reviews of clinical trials. It published procedures for ethical reviews in 2014. These stated that three months should be allowed for ethical review but did not mention any expedited process for approving clinical trials for unregistered medical countermeasures (MCMs) to treat ongoing epidemics [2,3]. In addition, there is no mention of an expedited process in the country's national Cholera or Covid-19 response plans [4, 5]. Furthermore, no such evidence can be found on the websites of the MSPP, the National Public Health Laboratory nor on the one for the Ministry of Education (which is also responsible for research) [6, 7, 8].

[1] Directorate of Epidemiology, Laboratories and Research. Official website.

[[http://mspp.gouv.ht/newsite/\\_direction/index.php?IDDir=9](http://mspp.gouv.ht/newsite/_direction/index.php?IDDir=9)]; in particular "Mission and responsibilities (Mission et responsabilités). [[http://mspp.gouv.ht/newsite/\\_direction/pagePresentation.php?IDDir=9&idpres=37](http://mspp.gouv.ht/newsite/_direction/pagePresentation.php?IDDir=9&idpres=37)]. Accessed 23 January, 2021.

[2] Government of Haiti. 1999. "Ministerial decision on the creation of a Provisional Committee for Bio-ethics and Protection of Persons (Décision ministérielle de creation d'un Comité Provisoire de Bio-éthique et de Protection des Personnes)".

[[http://www.vertic.org/media/National%20Legislation/Haiti/HT\\_Loi\\_Comite\\_Bioethique.pdf](http://www.vertic.org/media/National%20Legislation/Haiti/HT_Loi_Comite_Bioethique.pdf)]. Accessed 23 January, 2021.

[3] National Bioethic Committee, Ministry of Public Health and Population. 2014. "Procedures of the National Bioethic Committee for approving research protocols (Procédures du Comité National de Bioéthique pour approbation de protocole de recherche)".

[<http://mspp.gouv.ht/site/downloads/CNB%20Procédures%20pour%20soumission%20de%20protocole%20de%20recherche%20pour%20avis%20Dec%202014.pdf>]. Accessed 23 January, 2021.

[4] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 23 January, 2021.

[5] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 23 January, 2021.

[6] Ministry of Public Health and Population of Haiti (MSPP). "Documentation Center (Centre de documentation)".

[<https://www.mspp.gouv.ht/documentation/>]. Accessed 23 January, 2021.

[7] National Public Health Laboratory. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=30](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=30)]. Accessed 23 January, 2021.

[8] Ministry of Education. Official site. [<https://menfp.gouv.ht/#/home>]. Accessed 23 January, 2021.

## 4.7.2 Regulatory process for approving medical countermeasures

### 4.7.2a

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

Yes = 1 , No = 0

**Current Year Score: 1**

Haiti's Directorate of Pharmacy, Medications and Traditional Medicine (DPM/MT) under the Ministry of Public Health and Population (MSPP) is responsible for approving new medical countermeasures (MCMs) for humans. The DPM/MT is assigned responsibility for approving medications in the 2005 law establishing the functions of the MSPP [1]. The 2014 pharmaceuticals policy confirms this role while noting weaknesses in the DPM/MT's ability to perform the role [2]. DPM/MT's website confirms its role in approving new medicines and imports, granting market authorizations [3]. A 2008 procedural document from DPM/MT clarifies that a medication is defined to include all forms of medicines, vaccines and disinfectants; and that DPM/MT must authorize any medical supplies coming onto the market [4]. The main source of essential medicines for the public health system is PROMESS (Program for Essential Medicines and Supply), an initiative run by the Pan-American Health Organization (PAHO) [3, 5]. DPM/MT grants approvals for PROMESS to import medications [3]. Health facilities in Haiti need permission from the health ministry to register with PROMESS, after which they can procure any items from its approved lists of essential medicines and supplies. Its list of supplies includes MCMs and some PPE but not a comprehensive list as would be required for dealing with highly contagious diseases [5].

[1] Government of Haiti. 2005. "Organic law [establishing the functions of the] MSPP (Loi organique du MSPP)".

[[https://mspp.gouv.ht/site/downloads/Loi\\_Organique.pdf](https://mspp.gouv.ht/site/downloads/Loi_Organique.pdf)]. Accessed 23 January, 2021.

[2] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)".

[<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 23 January, 2021.

[3] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. Official website. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=29](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=29)]. Accessed 23 January, 2021.

[4] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. "PROMESS". [[https://www.paho.org/hai/index.php?option=com\\_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en](https://www.paho.org/hai/index.php?option=com_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en)]. Accessed 23 January, 2021.

#### 4.7.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no publicly available evidence that Haiti has an expedited process for approving medical countermeasures (MCMs) for human use during public health emergencies. The Directorate of Pharmacy, Medications and Traditional Medicine (DPM/MT), under the Ministry of Public Health and Population (MSPP), is responsible for approving new medical countermeasures for humans [1, 2, 3, 4, 5]. There is no evidence of an expedited approval process from the law establishing the functions of the health ministry, the pharmaceutical policy, the DPM/MT's website, or its document describing the norms and procedures for approving new medical countermeasures [1, 2, 3, 4]. The main source of essential medicines for the public health system is PROMESS (Program for Essential Medicines and Supply), an initiative run by the Pan-American Health Organization (PAHO) [3, 5]. DPM/MT grants approvals for PROMESS to import medications. Health facilities in Haiti need permission from the MSPP to register with PROMESS, after which they can procure any items from its approved lists of essential medicines and supplies. However, there is no evidence from the PROMESS web pages of an expedited approvals process in an emergency [5]. A draft law has been tabled on the production, distribution and import of medicines, which would allow the health ministry to issue import licenses which deviate from normal procedures in the case of emergencies [6]. Furthermore, Haiti has no national public health emergency response plan, and expedited approvals of MCMs are not mentioned in its disease-specific response plans for Cholera and Covid-19 nor in its national emergency response plan (updated in 2009) or the latest national contingency plan for natural disasters (2017) [7, 8, 9, 10].

- [1] Government of Haiti. 2005. "Organic law [establishing the functions of the] MSPP (Loi organique du MSPP)". [[https://mspp.gouv.ht/site/downloads/Loi\\_Organique.pdf](https://mspp.gouv.ht/site/downloads/Loi_Organique.pdf)]. Accessed 23 January, 2021.
- [2] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2014. "National pharmaceutical policy (Politique pharmaceutique nationale)". [<http://mspp.gouv.ht/site/downloads/PPN%20final%20mars%202015.pdf>]. Accessed 23 January, 2021.
- [3] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. Official website. [[http://mspp.gouv.ht/newsite/\\_direction/pageService.php?IDDir=29](http://mspp.gouv.ht/newsite/_direction/pageService.php?IDDir=29)]. Accessed 23 January, 2021.
- [4] Ministry of Public Health and Population (MSPP), Directorate of Pharmacy, Medications and Traditional Medicine. 2008. "Norms and procedures of the Directorate of Pharmacy, Medications and Traditional Medicine (Normes et procedures de la Direction de la Pharmacie, du Médicament et de la Médecine Traditionnelle)". [<https://mspp.gouv.ht/site/downloads/Normes%20et%20Procedures%20de%20la%20DPMMT.pdf>]. Accessed 23 January, 2021.
- [5] Pan-American Health Organization (PAHO) and World Health Organization (WHO) Regional Office for the Americas. "PROMESS". [[https://www.paho.org/hai/index.php?option=com\\_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en](https://www.paho.org/hai/index.php?option=com_content&view=article&id=7006:promess-programme-de-medicaments-essentiels&Itemid=230&lang=en)]. Accessed 23 January, 2021.
- [6] Government of Haiti. 2013. "Draft law regulating the production, distribution, the conditions of import and export, storage and consumption of medicines (Projet de loi réglementant la production, la distribution, les conditions d'importation et d'exportation, le stockage et la consommation des médicaments)". [<http://www.sgcm.gouv.ht/wp-content/uploads/2017/03/Projet-de-Loi-reglementant-la-production-la-distribution-les-conditions-d%E2%80%99importation-et-d%E2%80%99exportation-le-stockage-et-la-consommation-des-m%C3%A9dicaments.pdf>]. Accessed 23 January, 2021.
- [7] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra). [[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 22 January, 2021.
- [8] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020. [<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP%20au%20CoronaVirus.pdf>]. Accessed 22 January, 2021
- [9] Government of Haiti. 2001. "National emergency response plan (updated 2009) (Plan national de réponse aux urgences)". [[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 23 January, 2021.
- [10] Ministry of the Interior, Directorate of Civil Protection. August 2017. "National contingency plan (Plan de contingence national)". [[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan\\_de\\_contingence\\_national\\_15\\_aout\\_2017.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_de_contingence_national_15_aout_2017.pdf)]. Accessed 23 January, 2021.

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

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

#### 5.1.1 Official IHR reporting

##### 5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

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

##### 5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that epidemics and pandemics are integrated into Haiti's national risk reduction strategy nor that there is a standalone national disaster risk reduction strategy for epidemics and pandemics. The country does have a "National Disaster Risk Management Plan 2019 - 2030" which the Ministry of the Interior and Territorial Collectivities published in 2019. However there is no evidence that epidemics and pandemics are integrated into it [1]. Furthermore, Haiti has two risk reduction strategies, one for Cholera and the other for Covid-19 but they are disease-specific [2, 3]. In addition, there is no evidence of a standalone risk reduction strategy for epidemics and pandemics on the websites of the Ministry of the Interior, the "Knowledge Platform for Disaster Risk Reduction" (Preventweb), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), nor on the one of the Ministry of Public Health and Population (MSPP) [4, 5, 6, 7].

[1] Ministry of the Interior and Territorial Collectivities. 2019. National Disaster Risk Management Plan (Plan national de gestion des risques de désastre) 2019 - 2030.

[[https://www.preventionweb.net/files/72907\\_plannationaldegestiondesrisquesdeds.pdf](https://www.preventionweb.net/files/72907_plannationaldegestiondesrisquesdeds.pdf)]. Accessed 23 January, 2021.

[2] MSPP. National Plan for the Elimination of Cholera in Haiti 2013-2022 (Plan national d'élimination du choléra).

[[https://mspp.gouv.ht/site/downloads/Plan\\_elimination\\_du\\_cholera\\_2012\\_2022.pdf](https://mspp.gouv.ht/site/downloads/Plan_elimination_du_cholera_2012_2022.pdf)]. Accessed 23 January, 2021.

[3] Ministry of Public Health and Population (MSPP): "Preparation and Response Plan to the Coronavirus (Plan de Préparation et de Réponse du MSPP au Coronavirus)". March 2020.

[<https://mspp.gouv.ht/site/downloads/Plan%20de%20Pr%C3%A9paration%20et%20de%20R%C3%A9ponse%20du%20MSPP>]

%20au%20CoronaVirus.pdf]. Accessed 23 January, 2021.

[4] Ministry of the Interior and Territorial Collectivities. Official site. [<http://www.mict.gouv.ht/>].

[5] PreventionWeb. "Haiti: National policy, plans & statements." [<https://www.preventionweb.net/english/policies/?cid=74>]. Accessed 23 January, 2021.

[6] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). "Haiti: Emergency preparedness and response." [<https://www.humanitarianresponse.info/en/operations/haiti/preparedness>]. Accessed 23 January, 2021.

[7] Ministry of Public Health and Population (MSPP). Official site. [<https://mspp.gouv.ht/>]. Accessed 23 January, 2021.

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

### 5.2.1 Cross-border agreements

#### 5.2.1a

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

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

**Current Year Score: 2**

There is evidence that Haiti has a cross-border agreement with regard to public health emergencies through its membership of the Caribbean Public Health Agency (CARPHA) [1, 2]. CARPHA's website contains policy guidelines for regional surveillance, outlining a system for sharing surveillance data. During disease outbreaks, members should submit early alerts to CARPHA and after the event, they must submit outbreak investigation reports and there is evidence that this was being done during the Covid-19 pandemic [3, 4].

[1] Caribbean Public Health Agency (CARPHA). Official website. [<http://carpha.org/>]. Accessed 23 January, 2021.

[2] Caribbean Public Health Agency (CARPHA). June 2011. "Agreement establishing the Caribbean Public Health Agency (CARPHA)." [[https://carpha.org/Portals/0/Documents/CARPHA\\_IGA.pdf](https://carpha.org/Portals/0/Documents/CARPHA_IGA.pdf)]. Accessed 23 January, 2021.

[3] CARPHA regional guidelines for public health surveillance. [<https://carpha.org/THP/Regional-Guidelines-for-Response>]. Accessed 23 January, 2021.

[4] CARPHA. Coronavirus. Caribbean region dashboard. [<https://www.carpha.org/What-We-Do/Public-Health/Novel-Coronavirus>]. Accessed 23 January, 2021.

#### 5.2.1b

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

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

**Current Year Score: 2**

There is evidence that Haiti has cross-border protocols with regard to animal health emergencies. Haiti's veterinary services are part of the Caribbean Animal Health Network (CaribVET). It operates an early outbreak alert system, and has disease-specific groups which are encouraged to define regional emergency plans. Additionally, 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. [1].

[1] CaribVET. 2011. "Charter."

[[https://www.caribvet.net/content/download/4499/33474/version/1/file/CaribVET\\_CHARTER\\_FINAL\\_EN2011%28detailed%29.pdf](https://www.caribvet.net/content/download/4499/33474/version/1/file/CaribVET_CHARTER_FINAL_EN2011%28detailed%29.pdf)]. Accessed 23 January, 2021.

## 5.3 INTERNATIONAL COMMITMENTS

### 5.3.1 Participation in international agreements

#### 5.3.1a

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

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

**Current Year Score: 1**

2021

Biological Weapons Convention

#### 5.3.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

2021

Biological Weapons Convention

#### 5.3.1c

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

Yes = 1, No = 0

**Current Year Score: 1**

2021

Biological Weapons Convention

#### 5.3.1d

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

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

Current Year Score: 0

2021

Biological Weapons Convention

## 5.3.2 Voluntary memberships

### 5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

#### 5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

#### 5.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

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

### 5.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

### 5.4.2b

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

Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

## 5.5 FINANCING

### 5.5.1 National financing for epidemic preparedness

#### 5.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Haiti has allocated national funds to improve capacity to address epidemic threats within the past three years. In 2013, Haiti's government announced a \$2.2 billion plan for water and sanitation investments to eliminate cholera transmission over the next 10 years. However, the funding was expected to be attained through international donations and there is no evidence that this goal has been reached [1]. Furthermore, all funding to improve capacity to address either Haiti's cholera outbreak or the Covid-19 pandemic has come from international financing or donations from, for example, the UN, or the World Bank (2, 3). In addition, there is no evidence that Haiti has allocated national funds to improve capacity to address epidemic threats within the past three years on the websites of the Ministry of Public Health and Population (MSPP), the Ministry of Agriculture, the Ministry of Economy and Finance nor on the

government's main portal [4, 5, 6, 7].

[1] Pan American Health Organization (PAHO). 27 February, 2013. "Haitian government reveals \$2.2 billion blueprint for water and sanitation investments to eliminate cholera transmission over the next 10 years".

[[https://www.paho.org/hq/index.php?option=com\\_content&view=article&id=8337:2013-paho-who-calls-international-funding-new-haiti-cholera-plan&Itemid=135&lang=pt](https://www.paho.org/hq/index.php?option=com_content&view=article&id=8337:2013-paho-who-calls-international-funding-new-haiti-cholera-plan&Itemid=135&lang=pt)]. Accessed 25 January, 2021.

[2] Multi-Partnered Trust Fund Office. January, 2021. "UN Haiti Cholera Response Multi-Partner Trust Fund".

[<http://mptf.undp.org/factsheet/fund/CLH00>]. Accessed 25 January, 2021.

[3] World Bank. 2 April, 2020. "World Bank Approves US\$20 Million Grant to Support COVID-19 (Coronavirus) Response in Haiti". [<https://www.worldbank.org/en/news/press-release/2020/04/01/world-bank-approves-us20-million-grant-to-support-covid-19-response-in-haiti>]. Accessed 25 January, 2021.

[4] Ministry of Public Health and Population of Haiti (MSPP). Official site. [<https://www.mspp.gouv.ht>]. Accessed 25 January, 2021.

[5] Ministry of Agriculture of Natural Resources and Rural Development of Haiti (MARNDR).

[<http://agriculture.gouv.ht/view/01/>]. Accessed 25 January, 2021.

[6] Ministry of Economy and Finance. Official site. [<http://www.mef.gouv.ht/index.php?page=Accueil>]. Accessed 25 January, 2021.

[7] General Secretariat of the Council of Ministers. Official site. [<http://www.sgcm.gouv.ht>]. Accessed 25 January, 2021.

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

### 5.5.2a

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

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

**Current Year Score: 0**

2021

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

### 5.5.2b

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

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

**Current Year Score: 0**

2021

OIE PVS assessments

## 5.5.3 Financing for emergency response

### 5.5.3a

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

Yes = 1, No = 0

**Current Year Score: 1**

There is a publicly identified special emergency public financing mechanism from which Haiti can borrow if facing a public health emergency. Haiti is an International Development Association (IDA) eligible borrowing country and is therefore eligible for the World Bank pandemic financing facility [1]. This provides surge financing to low-income countries affected by a large-scale disease outbreak to prevent it from reaching pandemic proportions [2]. At the domestic level, the 2001 'Emergency response plan' (updated in 2009) states that the finance ministry has to identify and mobilize emergency funds in an emergency, but does not specify a particular domestic fund and lists external sources of emergency funds [3].

[1] International Development Association (IDA). "Borrowing countries." [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 25 January, 2021.

[2] World Bank. "Pandemic Emergency Financing Facility." [<https://www.worldbank.org/en/topic/pandemics/brief/fact-sheet-pandemic-emergency-financing-facility>]. Accessed 25 January, 2021.

[3] Government of Haiti. 2001 (Updated 2009). "National emergency response plan (Plan national de réponse aux urgences)". [[https://www.preventionweb.net/files/30709\\_788fr1.pdf](https://www.preventionweb.net/files/30709_788fr1.pdf)]. Accessed 25 January, 2021.

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

### 5.5.4a

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

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

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

**Current Year Score: 0**

There is no publicly available evidence that Haiti's senior leaders have, in the past three years, made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support. Nor is there sufficient evidence that they made a public statement to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. Although Haiti has received financial support in its response to the Covid-19 pandemic, this funding was announced by the international organizations such as the World Bank and the International Monetary Fund (IMF) and not by the government's senior leaders [1, 2]. Furthermore, there is no evidence of relevant statements on the websites of the Ministry of Public Health and Population or the Ministry of Foreign Affairs; from the Haiti pages of the Pan-American Health Organization (PAHO) or the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) [3, 4, 5, 6].

- [1] World Bank. 2 April, 2020. "World Bank Approves US\$20 Million Grant to Support COVID-19 (Coronavirus) Response in Haiti". [<https://www.worldbank.org/en/news/press-release/2020/04/01/world-bank-approves-us20-million-grant-to-support-covid-19-response-in-haiti>]. Accessed 25 January, 2021.
- [2] International Monetary Fund (IMF). 17 April, 2020. "IMF Executive Board Approves US\$111.6 Million Disbursement to Haiti to Address the Covid-19 Pandemic". [<https://www.imf.org/en/News/Articles/2020/04/17/pr20171-haiti-imf-executive-board-approves-us-111-6m-disbursement-address-covid19-pandemic>]. Accessed 25 January, 2021.
- [3] Ministry of Public Health and Population (MSPP). Official site. Accessed 25 January, 2021.
- [4] Ministry of Foreign Affairs. Official site. [<https://www.mae.gouv.ht/>]. Accessed 25 January, 2021.
- [5] Pan-American Health Organization (PAHO). N.d. "About PAHO/WHO in Haiti." [[https://www.paho.org/hai/index.php?option=com\\_content&view=article&id=24:sur-l-ops-oms-en-haiti&Itemid=122&lang=en](https://www.paho.org/hai/index.php?option=com_content&view=article&id=24:sur-l-ops-oms-en-haiti&Itemid=122&lang=en)]. Accessed 25 January, 2021.
- [6] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2021. "Haiti: Emergency preparedness and response." [<https://www.humanitarianresponse.info/en/operations/haiti/preparedness>]. Accessed 25 January, 2021.

### 5.5.4b

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

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

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

**Current Year Score: 1**

There is evidence that in the past three years, Haiti has invested finances from donors to improve its own domestic capacity to address epidemic threats; but not that it has invested finances or provided technical support to help other countries to improve their capacity to address epidemic threats. According to the Georgetown Global Health Security Tracking Dashboard, Haiti has received technical and financial support to improve its domestic capacity to address epidemic threats in each of the past three years. In 2018, \$166 million was disbursed, \$88 million in 2019 and \$119 million in 2020 (millions more were committed but not yet disbursed). Some of the biggest donors were the United States, the Global Fund to Fight Aids, Tuberculosis and Malaria and Canada among others and some of main areas of improvement were immunization, laboratories and response preparedness [1]. In addition, in April of 2020, the World Bank announced \$20 billion and the US government \$16 billion in aid for Haiti in its response to the Covid-19 pandemic [2, 3]. However, there is no evidence via the Georgetown tracker that Haiti contributed funds to other countries in the same period [1]. In 2018, Haiti requested and received renewed external support for capacity-building of its vaccination programme, under a programme run by international organisation Gavi. Gavi tracks the disbursement and impact of its financial support to Haiti and there is no suggestion on its website that disbursed funds are not being invested as intended [4, 5]. Furthermore, there is no evidence that Haiti has invested finances or provided technical support to help other countries to improve their capacity to address epidemic threats from the Ministry of Public Health and Population or the Ministry of Foreign Affairs; the United Nations Development Programme or the United Nations Office for the Coordination of Humanitarian Affairs (both of which UN offices provide Haiti with support for emergency response capacity); or the Haiti pages of the Pan-American Health Organization (part of the World Health Organization).[6, 7, 8, 9, 10].

- [1] Georgetown Global Health Security Funding Tracker. [<https://tracking.ghscosting.org/#/data>]. Accessed 25 January, 2021.
- [2] World Bank. 2 April, 2020. "World Bank Approves US\$20 Million Grant to Support COVID-19 (Coronavirus) Response in Haiti". [<https://www.worldbank.org/en/news/press-release/2020/04/01/world-bank-approves-us20-million-grant-to-support-covid-19-response-in-haiti>]. Accessed 25 January, 2021.
- [3] US Embassy in Haiti: "U.S. Provides Covid-19 Assistance to HAITI". [<https://ht.usembassy.gov/u-s-provides-covid-19->

assistance-to-haiti/]. Accessed 25 January, 2021.

[4] Pan-American Health Organisation (PAHO). 2018. "Positive outcomes on new funding proposal for GAVI Support in Haiti for the Period 18-22: 8.7 Million US \$ will go towards Strengthening Immunization in Haiti."

[https://www.paho.org/hai/index.php?option=com\_content&view=article&id=7276:avis-positif-aux-propositions-de-soutien-gavi-en-haiti-pour-la-periode-18-22-8-7-million-us-renforceront-la-vaccination-en-haiti&Itemid=0&lang=en]. Accessed 25 January, 2021.

[5] Gavi. 2019. "Haiti." [https://www.gavi.org/country/haiti/]. Accessed 25 January, 2021.

[6] Ministry of Public Health and Population (MSPP). Official site. [https://mspp.gouv.ht/]. Accessed 25 January, 2021.

[7] Ministry of Foreign Affairs. 2019. Official site. [https://www.mae.gouv.ht/]. Accessed 25 January, 2021.

[8] UN Development Program (UNDP). 2018. "Haiti: Reduction of risk of disasters (Haiti: Réduction des risques de désastres)".

[http://www.ht.undp.org/content/haiti/fr/home/operations/projects/crisis\_prevention\_and\_recovery.html]. Accessed 25 January, 2021.

[9] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). "Haiti: Emergency preparedness and response." [https://www.humanitarianresponse.info/en/operations/haiti/preparedness]. Accessed 25 January, 2021.

[10] Pan-American Health Organization (PAHO). 2019. "Haiti: Latest news." [https://www.paho.org/hai/index.php?lang=en]. Accessed 25 January, 2021.

### 5.5.4c

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

Yes = 1 , No = 0

**Current Year Score: 1**

2021

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

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

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

#### 5.6.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Haiti has a publicly-available plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza. Haiti has committed to sharing some infectious disease-related data with other countries in the region through its membership of the Caribbean Public Health Agency (CARPHA) [1, 2]. During the Covid-19 Pandemic, CARPHA, on its dashboard page, released the number Covid-19 samples received, tested and reported as well as the number

of members participating in this. However, it does not state the names of the countries participating nor is there evidence that this is part of a publicly available plan for sharing genetic data [3]. Furthermore, there is no evidence of commitments to share such data with international organizations or other countries from the Ministry of Public Health and Population or the Ministry of Agriculture, Natural Resources and Rural Development, or from a wider online search [4, 5].

[1] Caribbean Public Health Agency (CARPHA). Official website. [<http://carpha.org/>]. Accessed 26 January, 2021.

[2] Caribbean Public Health Agency (CARPHA). June 2011. "Agreement establishing the Caribbean Public Health Agency (CARPHA)." [[https://carpha.org/Portals/0/Documents/CARPHA\\_IGA.pdf](https://carpha.org/Portals/0/Documents/CARPHA_IGA.pdf)]. Accessed 26 January, 2021.

[3] CARPHA. Coronavirus. Caribbean region dashboard. 2021. 17 January, 2021.

[<https://www.carpha.org/Portals/0/Images/LabDashboard.jpg>]. Accessed 26 January, 2021.

[4] Ministry of Public Health and Population (MSPP). Official website. [<https://mspp.gouv.ht/>]. Accessed 26 January, 2021.

[5] Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). Official website. [<http://agriculture.gouv.ht/view/01/>]. Accessed 26 January, 2021.

### 5.6.1b

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

Yes = 0 , No = 1

**Current Year Score: 1**

There is no publicly available evidence that Haiti has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years year [1]. Furthermore, there is no evidence on the website and press release pages of the World Health Organization (WHO) nor are there any media reports by the WHO of any non-compliance by the Haiti in the past two years [2, 3].

[1] World Health Organization (WHO). "Virus Sharing." [[http://www.who.int/influenza/pip/virus\\_sharing/en/](http://www.who.int/influenza/pip/virus_sharing/en/)]. Accessed 26 January, 2021.

[2] World Health Organization (WHO). [<http://www.who.int>]. Accessed 26 January, 2021.

[3] World Health Organization (WHO) newsroom. [<https://www.who.int/news-room>]. Accessed 26 January, 2021.

### 5.6.1c

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

Yes = 0 , No = 1

**Current Year Score: 1**

There is no publicly available evidence that Haiti has not shared pandemic pathogen samples, including for Covid-19, during an outbreak in the past two years [1]. Furthermore, there is no evidence on the website and press release pages of the World Health Organization (WHO) nor are there any media reports by the WHO of any non-compliance by Haiti in the past two years [2, 3].

[1] World Health Organization (WHO). "Virus Sharing." [[http://www.who.int/influenza/pip/virus\\_sharing/en/](http://www.who.int/influenza/pip/virus_sharing/en/)]. Accessed 26 January, 2021.

[2] World Health Organization (WHO). [<http://www.who.int>]. Accessed 26 January, 2021.

[3] World Health Organization (WHO) newsroom. [<https://www.who.int/news-room>]. Accessed 26 January, 2021.

## Category 6: Overall risk environment and vulnerability to biological threats

### 6.1 POLITICAL AND SECURITY RISK

#### 6.1.1 Government effectiveness

##### 6.1.1a

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

Input number

Current Year Score: 2

2020

Economist Intelligence

##### 6.1.1b

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

Input number

Current Year Score: 0

2020

Economist Intelligence

##### 6.1.1c

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

Input number

Current Year Score: 0

2020

Economist Intelligence

##### 6.1.1d

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

Input number

Current Year Score: 0

2020

Economist Intelligence

### 6.1.1e

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

Input number

Current Year Score: 18

2020

Transparency International

### 6.1.1f

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

Input number

Current Year Score: 0

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: 1**

2021

Economist Intelligence

### 6.1.4 Illicit activities by non-state actors

#### 6.1.4a

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

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

**Current Year Score: 3**

2021

Economist Intelligence

#### 6.1.4b

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

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

**Current Year Score: 4**

2020

UN Office of Drugs and Crime (UNODC)

#### 6.1.4c

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

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

**Current Year Score: 1**

2021

Economist Intelligence

## 6.1.5 Armed conflict

### 6.1.5a

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

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

Current Year Score: 3

2021

Economist Intelligence

## 6.1.6 Government territorial control

### 6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

## 6.1.7 International tensions

### 6.1.7a

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

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

Current Year Score: 2

2021

Economist Intelligence

## 6.2 SOCIO-ECONOMIC RESILIENCE

### 6.2.1 Literacy

#### 6.2.1a

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

Input number

**Current Year Score: 61.69**

2016

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: 0.38**

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: 8**

2012

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**

According to the International Labor Organization Statistics (ILOSTAT), Haiti's share of employment in the informal sector is 91.5%. The World Bank data website puts the country's share at 88%. Both reports are from 2012 which are the most recent ones available [1, 2].

[1] International Labor Organization Statistics (ILOSTAT), Statistics on the informal economy.  
[<https://ilostat.ilo.org/topics/informality/>]. Accessed 21 January, 2021.

[2] World Bank data: Informal employment (% of total non-agricultural employment) - Haiti.  
[<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=HT>]. Accessed 21 January, 2021.

### 6.2.3c

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

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

Current Year Score: 0

2016, or latest available

World Bank; Economist Impact calculations

## 6.2.4 Public confidence in government

### 6.2.4a

#### Level of confidence in public institutions

Input number

Current Year Score: 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: 1

2021

Economist Intelligence Democracy Index

## 6.2.6 Inequality

### 6.2.6a

#### Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.41

Latest available.

World Bank; Economist Impact calculations

## 6.3 INFRASTRUCTURE ADEQUACY

### 6.3.1 Adequacy of road network

#### 6.3.1a

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

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

Current Year Score: 0

2021

Economist Intelligence

### 6.3.2 Adequacy of airports

#### 6.3.2a

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

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

Current Year Score: 1

2021

Economist Intelligence

### 6.3.3 Adequacy of power network

#### 6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 0

2021

Economist Intelligence

## 6.4 ENVIRONMENTAL RISKS

### 6.4.1 Urbanization

#### 6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 56.19

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: -0.92

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: 63.66

2018

United Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA)  
World Factbook

#### 6.5.1b

Age-standardized NCD mortality rate (per 100 000 population)

Input number

Current Year Score: 837.3

2019

WHO

### **6.5.1c**

Population ages 65 and above (% of total population)

Input number

Current Year Score: 5.06

2019

World Bank

### **6.5.1d**

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 8.3

2018

World Bank

### **6.5.1e**

Prevalence of obesity among adults

Input number

Current Year Score: 22.7

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: 65.47

2017

UNICEF; Economist Impact

### 6.5.2b

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

Input number

**Current Year Score: 34.7**

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: 17.21**

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