

Burundi

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

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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 evidence that Burundi has a national AMR plan for the surveillance, detection and reporting of priority antimicrobial resistance (AMR) pathogens.

Burundi completed a Global Database for the Tripartite Antimicrobial Resistance (AMR) Country Self-assessment Survey (TrACSS) for 2019/2020 which states that an AMR plan does exist, however, this is not corroborated by any other sources. [1] No evidence of previous self-assessments were found on the Global Database for AMR. [1] The World Health Organisation's library of national action plans does not contain a plan for Burundi. [2] There is no further publicly available evidence of an AMR plan from the websites of Ministry of Public Health or the INSP, and the website for the Ministry of the Agriculture and Livestock was not accessible at the time of research. [3, 4,5]

According to the Joint External Evaluation (JEE) of IHR Core Capacities of the Republic of Burundi, conducted in March 2018, the country did not have a national AMR plan. The JEE does, however, state that there is a guide for AMR surveillance which was last updated in 2013. [6] This guide specifies the laboratories designated for the detection of AMR only in Mycobacterium tuberculosis: laboratories of the National Institute of Public Health (INSP), the Kamenge University Hospital Center, Kamenge Military Hospital, Prince Regent Charles Hospital and Prince Louis Rwagasore Clinic. It does not elaborate on whether surveillance, detection, and reporting are included. [6]

[1] Global Database for Antimicrobial Resistance Country Self Assessment. [<https://amrcountryprogress.org/>]. Accessed 27 October 2020.

[2] World Health Organisation (WHO). Library of national action plans. Antimicrobial resistance. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en>]. Accessed 27 October 2020.

[3] Ministry of Public Health (Le Ministre de la Santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted accessed 27 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/>]. Accessed 27 October 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 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: 1

There is publicly available evidence that Burundi has a national laboratory/laboratory system, which tests for one of the priority AMR pathogens. According to the Joint External Evaluation (JEE) of IHR Core Capacities of Burundi, conducted in March 2018, the country's laboratory system is capable of testing AMR in tuberculosis only. The JEE states that although Burundi's national laboratory system does not have capacity for the detection of AMR, there is a guide for AMR surveillance which specifies the laboratories designated for the detection of AMR only in *Mycobacterium tuberculosis*. [1] There is no additional publicly available evidence about capacity for testing priority AMR pathogens from the website of the Ministry of Public Health and the website for Ministry of Agriculture and Livestock was not accessible at the time of research. [2] The World Health Organisation (WHO) Library of national action plans does not contain an AMR plan for Burundi. [3] The website of the National Public Health Institute (INSP) also does not provide any further evidence. [4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[3] World Health Organisation (WHO). Library of national action plans. Antimicrobial resistance. 2019. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en>]. Accessed 27 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). 2019. [<https://insp.bi/direction-des-laboratoires/>]. Accessed 27 October 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 evidence that Burundi's government conducts environmental detection or surveillance activities (e.g., in soil, waterways) for antimicrobial residues or AMR organisms. The Ministry of Water, Environment and Urban Planning (Ministère de l'Eau, de l'Environnement, de l'Aménagement du Territoire et de l'Urbanisme) does not have a website. There is no publicly available evidence from the website of Ministry of Public Health and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [1] Burundi completed a Global Database for the Tripartite Antimicrobial Resistance (AMR) Country Self-assessment Survey (TrACSS) for 2019/2020, but it does not show evidence that Burundi's government is capable of conducting environmental detection or surveillance activities. [2] The World Health Organisation's (WHO) Library of national action plans does not contain an AMR plan for Burundi. [3] There is no evidence of the government conducting any detection or surveillance activities for antimicrobial residues or AMR organisms from the 2018 Joint External Evaluation (JEE) for Burundi. [4]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[2] Global Database for Antimicrobial Resistance Country Self Assessment. [<https://amrcountryprogress.org/>]. Accessed 27 October 2020.

[3] World Health Organisation (WHO). Library of national action plans. Antimicrobial resistance. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en>]. Accessed 27 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 0

There is insufficient evidence to suggest that Burundi has a regulation in place requiring prescriptions for antibiotic use for humans. Decree No 100/150 from 30 September 1980 is a pharmaceutical regulation and elaborates on prescriptions specifically stating that pharmacies are only allowed to prepare and distribute prescription medications to individuals with a prescription from an authorized doctor. There is no mention, however, of the requirement of prescriptions for the type of medications, including antibiotics. [1] A World Health Organization (WHO) Drug Information article published in 2016, compared legislations around medicines in the East African Community (EAC). The Decree No 100/150 is mentioned in the article but no other evidence in the study suggests that there is a regulation in place requiring prescriptions for antibiotic use. [2] According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, the country has "a list of medicinal products with mandatory medical prescription (prescription necessary for the use of antibiotics in humans and animals)" and a "National Committee for the Monitoring of consumption of antimicrobials" that are meant to oversee consumption of antibiotics, however no evidence in the report was found of legislations that specifically regulate antibiotic use through prescriptions. [3] The list of prescription-only medicines is not publicly available on the website of the Ministry of Public Health and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4,5] The Pharmaceutical Country Profile for Burundi which was published in 2011 by the Ministry of Public Health in collaboration with WHO noted that antibiotics are sometimes sold without a prescription in the country. [6] Furthermore, according to a study conducted in 2017 titled, Evaluation of the Regulation of Antibiotics Consumption in Bujumbura, Burundi, as well as an article published a year later in 2018, on the use of antibiotics in Tanzania and Burundi, Burundi has some of the highest recorded use of antibiotics, next to Tanzania, and recommendations were made to develop a policy that could help to limit antibiotic use. [7,8] The Department of Pharmaceutical Medicine and Laboratories (Direction de la pharmacie du médicaments et des laboratoires (DMPL)) and the National Committee do not have websites and no further or more updated evidence was found.

[1] Decree No 100/150 of 30 September 1980. [https://www.unodc.org/res/cld/document/bdi/dec-100-150_html/DECRET_No_100.pdf]. Accessed 27 October 2020.

[2] World Health Organization (WHO) Drug Information. 2016. "Comparison of medicines legislation in the East African Community". [<https://apps.who.int/iris/bitstream/handle/10665/331006/DI304-567-576-eng.pdf>]. Accessed 27 October 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

- [4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.
- [5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 27 October 2020.
- [6] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (PROFIL PHARMACEUTIQUE DU PAYS)". [<http://apps.who.int/medicinedocs/documents/s19099fr/s19099fr.pdf>]. Accessed 27 October 2020.
- [7] Journal of Pharmacy and Pharmacology. 2017. "Evaluation of the Regulation of Antibiotics Consumption in Bujumbura, Burundi". [<https://pdfs.semanticscholar.org/Obd2/100c94f247d150c000908fa88bb366974fe3.pdf>]. Accessed 27 October 2020.
- [8] RegionWeek. November 2018. "Burundi and Tanzania in top antibiotics consumers in Africa - WHO". [<https://regionweek.com/burundi-tanzania-top-antibiotics-consumers-w-h-o/>]. Accessed 27 October 2020.

1.1.2b

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

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

Current Year Score: 0

There is no evidence to suggest that Burundi has a regulation in place requiring prescriptions for antibiotic use for animals. Decree No 100/150 from 30 September 1980 is a pharmaceutical regulation and elaborates on prescriptions specifically stating that pharmacies are only allowed to prepare and distribute prescription medications to individuals with a prescription from an authorized doctor, this includes veterinarians. As well, pharmacies dispensing antibiotics for veterinary use have been identified and the country has a law governing the use of antimicrobials in animal health. The law itself, however, is not publicly available via the website of the Ministry of Public Health, the Food and Agriculture Organization database and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [1,2,3,4] A World Health Organization (WHO) Drug Information article published in 2016, compared legislations around medicines in the East African Community (EAC). The Decree No 100/150 is mentioned in the article but no other evidence in the study suggests that there is a regulation in place requiring prescriptions for antibiotic use for animals. [5] According to the 2018 Joint External Evaluation (JEE) for Burundi, the country has "a list of medicinal products with mandatory medical prescription (prescription necessary for the use of antibiotics in humans and animals)" and a "National Committee for the Monitoring of consumption of antimicrobials" that are meant to oversee consumption of antibiotics, however no evidence in the report was found of legislations that specifically regulate antibiotic use for animals through prescriptions. [6] The list of prescription-only medicines is not publicly available on the website of the Ministry of Public Health and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3] The Pharmaceutical Country Profile for Burundi which was published in 2011 by the Ministry of Public Health in collaboration with WHO noted that antibiotics are sometimes sold without a prescription in the country. [7] Furthermore, according to a study conducted in 2017 titled, Evaluation of the Regulation of Antibiotics Consumption in Bujumbura, Burundi, as well as an article published a year later in 2018, on the use of antibiotics in Tanzania and Burundi, Burundi has some of the highest recorded use of antibiotics, next to Tanzania, and recommendations were made to develop a policy that could help to limit antibiotic use. [8,9] There was no mention of antibiotic use for animals in either article. The Department of Pharmaceutical Medicine and Laboratories (Direction de la pharmacie du médicaments et des laboratoires (DMPL)) and the National Committee do not have websites.

[1] Decree No 100/150 of 30 September 1980. [https://www.unodc.org/res/cld/document/bdi/dec-100-150_html/DECRET_No_100.pdf]. Accessed 27 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

- [3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 27 October 2020.
- [4] The Food and Agriculture Organization of the United Nations (FAO). "FAOLEX Database.Burundi - Country Profiles". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=BDI>]. Accessed 27 October 2020.
- [5] World Health Organization (WHO) Drug Information. 2016. "Comparison of medicines legislation in the East African Community". [<https://apps.who.int/iris/bitstream/handle/10665/331006/DI304-567-576-eng.pdf>]. Accessed 27 October 2020.
- [6] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.
- [7] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (PROFIL PHARMACEUTIQUE DU PAYS)". [<http://apps.who.int/medicinedocs/documents/s19099fr/s19099fr.pdf>]. Accessed 27 October 2020.
- [8] Journal of Pharmacy and Pharmacology. 2017. "Evaluation of the Regulation of Antibiotics Consumption in Bujumbura, Burundi". [<https://pdfs.semanticscholar.org/0bd2/100c94f247d150c000908fa88bb366974fe3.pdf>]. Accessed 27 October 2020.
- [9] RegionWeek. November 2018. "Burundi and Tanzania in top antibiotics consumers in Africa - WHO". [<https://regionweek.com/burundi-tanzania-top-antibiotics-consumers-w-h-o/>]. Accessed 27 October 2020.

1.2 ZOOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has a national law, plan, or equivalent strategy document, on zoonotic disease. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is no zoonotic disease management policy in Burundi, except for bird flu, which is a contingency plan. The report also states that the Ministry of Agriculture and Livestock has established a list of 6 zoonotic diseases which are a risk to public health: rabies, tuberculosis, toxoplasmosis, brucellosis, anthrax and avian influenza. However, the JEE states that the list has not been prioritised by the relevant governmental stakeholders. The contingency plan for bird flu (Plan de contingence de la grippe aviaire (octobre 2013)) was not found and the website for the Ministry of Agriculture and Livestock was also not accessible at the time of research. [1,2] Finally, the report notes that the country has zoonotic surveillance committees composed of representatives of human health, animal health and the community, but they are not functional as a result of lack of funds. [1] There is no publicly available evidence of a zoonotic disease strategy via the website of the Ministry of Public Health, a One Health strategy approach was not found to be in place according to the Centers for Disease Control and Prevention (CDC) and no other evidence of a strategy was found through a media search. [3,4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[2] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 27 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[4] Centers for Disease Control and Prevention (CDC). "One Health". [<https://www.cdc.gov/onehealth/index.html>]. Accessed 27 October 2020.

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. There is no mention of a plan or equivalent strategy that would address risk identification and reduction for spillover events in the 2018 Joint External Evaluation (JEE) report for Burundi. [1] There is no publicly available evidence of relevant strategies on the website for the Ministry of Public Health and the website of the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3] No other articles or studies were found that would suggest that Burundi has a plan or strategy to address risks in the case of zoonotic disease spillover events.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

1.2.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has national plans, guidelines or laws that account for the surveillance and control of multiple zoonotic pathogens. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is no zoonotic disease management policy or surveillance and control of multiple zoonotic disease in Burundi, except a contingency plan for bird flu. The JEE notes that the Provincial Directorate of Agriculture and Livestock takes the census of the domestic animal population regularly, however the report does not provide details on whether surveillance goes beyond census taking. Furthermore, the country has zoonotic surveillance committees composed of representatives of human health, animal health and the community but they are not functional as a result of lack of funds. [1] There is no publicly available evidence of strategies that account for the surveillance and control of multiple zoonotic pathogens of public health concern from the website of the Ministry of Public Health and the website of the Ministry of Agriculture and Livestock was

not accessible at the time of research, and no evidence was found of a One Health strategy approach via the Centers for Disease Control and Prevention (CDC) website. [2,3,4] No other updated or relevant evidence was found.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 27 October 2020.

[4] Centers for Disease Control and Prevention (CDC). "One Health". [<https://www.cdc.gov/onehealth/index.html>]. Accessed 27 October 2020.

1.2.1d

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has a department, agency, or similar unit dedicated to zoonotic diseases that functions across ministries. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is no zoonotic disease management or surveillance policy in Burundi. The country has zoonotic surveillance committees composed of representatives of human health, animal health and the community, but they are not functional as a result of lack of funds. The report states that the Provincial Directorate of Agriculture and Livestock has the responsibility to maintain the census of domestic animals, but no further evidence was found to suggest that the Directorate is the dedicated unit for zoonotic diseases in Burundi. The census of wildlife is provided by the Ministry of the Environment, but the JEE notes that there is lack of partnership and information exchange between the Ministries of Public Health, Agriculture and Livestock and the Environment. [1] There is no publicly available evidence from the website of Ministry of Public Health and the website of the Ministry of Agriculture and Livestock, which also includes the Provincial Directorate of Agriculture was not accessible at the time of research. [2,3] The Ministry of Water, Environment and Urban Planning (Ministère de l'Eau, de l'environnement, de l'Aménagement du territoire et de l'Urbanisme) does not have a website.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Accessed 27 October 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Burundi has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. Evidence shows there is a passive system of surveillance but not that a mechanism is in place to ensure reports are made to a government agency.

For example, Article 7 of the law relating to the sanitation police for domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles) states that animals affected, suspected of being affected or dead from a disease considered transmissible must be declared. However, the law does not specify a formal mechanism in place that should be used to report the declaration to a government agency. It does provide a list of possible transmissible animal diseases in Article 4, and says that owners or persons caring for an animal suffering from a suspected disease must declare it to the nearest local veterinary service. However, it is unclear whether the veterinary service shares the declaration with a government agency or how the veterinary should attend to the declaration. Further, there is no information about how the agency responsible would be notified under this law - whether that is verbal, written, or through a database. [1]

The 2018 Joint External Evaluation for Burundi also notes that the country does not have a plan or measures in place to encourage the notification of zoonoses and scores this surveillance system a '1' for its limited capacity. [2] There is no further available evidence from the website of Ministry of Public Health and the website of the Ministry of Agriculture and Livestock was not accessible at the time of research. [3]

[1] President's Office. 24 December 2009. "Law relating to the sanitation police for the domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles)". [<http://extwprlegs1.fao.org/docs/pdf/bur112094.pdf>]. Accessed 27 October 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has laws or guidelines safeguarding the confidentiality of information generated through animal health surveillance activities. There is no publicly available evidence on the website of the Ministry of Public Health for guidelines safeguarding the confidentiality of information generated through animal health surveillance activities, and the

website of the Ministry of Agriculture and Livestock was not accessible at the time of research. [1,2] Furthermore, the Joint External Evaluation for Burundi of IHR Core Capacities of Burundi, conducted in 2018 does not make mention of laws or guidelines on safeguarding surveillance information confidentiality. [3] There is no law relating to general data privacy listed on the United Nations Conference on Trade and Development (UNCTAD) data protection legislation database. [4] Finally, the law relating to the sanitation police for domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles) does not contain any information on safeguarding the confidentiality of information generated through animal health surveillance activities. [5]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[2] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Élevage). [<http://www.minagrie.gov.bi/>]. Accessed 27 October 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 2020.

[4] United Nations Conference on Trade and Development (UNCTAD). "Data Protection and Privacy Legislation Worldwide". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 27 October 2020.

[5] President's Office. 24 December 2009. "Law relating to the sanitation police for the domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles)". [<http://extwprlegs1.fao.org/docs/pdf/bur112094.pdf>]. Accessed 27 October 2020.

1.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi conducts surveillance of zoonotic disease in wildlife. Evidence shows there is a passive system of surveillance. Article 7 of the law relating to the sanitation police for domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles) states that animals affected, suspected of being affected or dead from a disease considered transmissible must be declared. However, the law does not specify a formal mechanism in place that should be used to survey the potential diseases. It does provide a list of possible transmissible animal diseases in Article 4, and says that owners or persons caring for an animal suffering from a suspected disease must declare it to the nearest local veterinary service. No details are available to describe the actual surveillance mechanism in place to make the declaration. [1] There is no publicly available evidence from the website of the Ministry of Public Health and the website of the Ministry of Agriculture and Livestock was not accessible at the time of research. [2] The Joint External Evaluation (JEE) for Burundi, conducted in March 2018 notes that the Ministry of the Environment is responsible for maintaining a census of wildlife, but it is not clear whether any surveillance of zoonotic disease in wildlife has been carried out by the ministry. [3] The Ministry of Water, Environment and Urban Planning (Ministère de l'Eau, de l'Environnement, de l'Aménagement du Territoire et de l'Urbanisme) does not have a website.

[1] Republic of Burundi. President's Office. 24 December 2009. "Law relating to the sanitation police for the domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles)". [<http://extwprlegs1.fao.org/docs/pdf/bur112094.pdf>]. Accessed 27 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 27 October 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 27 October 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: 0.48

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 16.66

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has a national plan on zoonotic disease or legislation which include mechanisms for working with the private sector in controlling or responding to zoonoses. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is no zoonotic disease management policy in Burundi, except for bird flu, which is a contingency plan and it does not mention collaboration with the private sector. The JEE report also states that the Ministry of Agriculture and Livestock has established a list of 6 zoonotic disease which are a risk to public health: rabies, tuberculosis, toxoplasmosis, brucellosis, anthrax and avian influenza. However, apparently the list has not been prioritised by the relevant governmental stakeholders. It also notes that the country has zoonotic surveillance committees composed of representatives of human health, animal health and the community, but they are not functional as a result of lack of funds and it is unclear whether these would include the private sector or not. The JEE also states that the country lacks a formal plan or legislation for controlling and responding to zoonoses in general. [1] The law relating to the sanitation police for domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles) states that animals affected, suspected of being affected or dead from a disease considered transmissible must be declared but does not provide any details as to whether the private sector is involved in some capacity in controlling or responding to zoonoses. [2] There is no publicly available evidence via the website of the Ministry of Public Health and the National Public Health Institute (INSP), and Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4,5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Republic of Burundi. President's Office. 24 December 2009. "Law relating to the sanitation police for the domestic animals, wild animals, fish and bees (Loi n° 1/28 du 24 décembre 2009 relative à la police sanitaire des animaux domestiques, sauvages, aquacoles et abeilles)". [<http://extwprlegs1.fao.org/docs/pdf/bur112094.pdf>]. Accessed 28 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Accessed 28 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 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 evidence that Burundi has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed. The 2018 Joint External Evaluation (JEE) for Burundi expressly

states that the country lacks an inventory of especially dangerous pathogens, along with their classification, at the national level and recommends that "the country should classify the pathogens, toxins and other dangerous substances and identify and equip any containment structures (storage, handling)". [1] There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a comprehensive legislation framework to address biosecurity requirements such as physical containment, operation practices and failure reporting system and/or cybersecurity of facilities. The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, recommends that Burundi should establish a legal framework related to biosecurity and identify and equip any containment structures like storage and handling of dangerous pathogens and toxins. [1] There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to

date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has an agency responsible for biosecurity, nor does it have biosecurity legislation. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, Burundi does not have a legal and regulatory framework for biosecurity and recommends that Burundi should establish a legal framework related to biosecurity and identify and equip any containment structures like storage and handling of dangerous pathogens and toxins. [1] There is no evidence of biosecurity legislation or any agency responsible for biosecurity related issues via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

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[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

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[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that shows that Burundi has taken any action to consolidate its inventories of dangerous pathogens into a minimum number of facilities. The 2018 Joint External Evaluation (JEE) for Burundi expressly states that the country lacks an inventory of especially dangerous pathogens, along with their classification, at the national level and there is no record of sites harbouring dangerous pathogens and toxins. It recommends that "the country should classify the pathogens, toxins and other dangerous substances and identify and equip any containment structures (storage, handling)".

[1] There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

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[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

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[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.1e

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax or Ebola. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, Burundi has the capability to conduct diagnostic tests that do not require culturing a live pathogen. It also notes that the National Public Health Institute (INSP) and the Kamenge University Hospital Centre are only capable of testing for cholera, malaria, meningitis and measles. [1] There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

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[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

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[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

1.3.2 Biosecurity training and practices

1.3.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi requires biosecurity training, using a standardised, 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. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, the country had not yet developed biosecurity legislation or implemented requirements for biosecurity training. The country has insufficient resources (financial and staff) on biosecurity trainings and there is no common teaching program. However, the JEE notes that there are trained personnel in the nine laboratories involved in the quality process and training sessions exist in a few additional laboratories. [1] There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

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[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

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[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is no evidence that Burundi has regulations or licensing conditions that 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. No evidence of this is found in the 2018 Joint External Evaluation of Burundi, which reports that there are no national biosecurity legislations in place. [1] The websites of the Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute do not have any information about background checks for personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

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[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [https://www.mdnac.bi/]. Accessed 28 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [http://mesrs.gov.bi/]. Accessed 28 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [https://insp.bi/direction-des-laboratoires/]. Accessed 28 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [http://www.minagrie.gov.bi/]. Attempted access on 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [https://bwc-ecbm.unog.ch/state/burundi]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/]. Accessed 28 October 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 publicly available information that Burundi has national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B). According to the Monthly Bulletin of the World Health Organisation (WHO) representative office in Burundi (Bulletin Mensuel du Bureau de la Representation de l'OMS au Burundi) which was published in February 2019, there was a simulation exercise conducted on 22 February to "assess sampling capacities, packaging, transport and examination of laboratory samples". [1] Although the country received the training by WHO, no evidence was found on a national regulation on the safe and secure transport of infectious substances in the 2018 Joint External Evaluation of Burundi, or on the Ministry of Public Health, and Ministry of Defence websites. And the Ministry of Agriculture and Livestock and Ministry of Transport websites were not accessible at the time of research. [2,3,4,5,6] There is also no evidence on the website of the National Public Health Institute (Institut national de santé publique (INSP)). [7] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [8] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [9]

[1] World Health Organisation (WHO). February 2019. " The Sentinel (La Sentinelle) ".

[https://www.afro.who.int/sites/default/files/2019-03/Sentinelle%20n%C2%B0%204%20_Fevrier-2019.pdf]. Accessed 17 November 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[4] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[6] Ministry of Transport (Le Ministère de Transport, des Travaux Publics et de l'Equipement). [<http://www.officedesroutes.bi/index.php/nos-partenaires/mttppe>]. Attempted access on 17 November 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[8] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[9] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has legislation or other guidance to oversee the cross-border transfer and end-user screening of especially dangerous materials with pandemic potential. There is no mention of such legislation in the 2018 Joint External Evaluation (JEE) for Burundi. [1] The 2012 Civil Aviation Code of Burundi (Code de l'Aviation Civile du Burundi), in Article 25, provides for the transportation of dangerous goods and instructs the relevant authorities to impose technical instructions and authorisations for the safe transportation of dangerous goods. [2] However, there is no mention of dangerous pathogens, toxins and pathogens with pandemic potential in this law. There is no further publicly available evidence via the websites of Ministry of Public Health, Ministry of Defence, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4,5,6,7] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [8] And the VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [9]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Civil Aviation Authority of Burundi (Autorité de l'aviation civile du Burundi). " Civil Aviation Code of Burundi-2012 (Code de l'Aviation Civile du Burundi)". [http://www.aacb.bi/IMG/pdf/code_de_l_aviation_civile_du_burundi-2.pdf]. Accessed 28 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[4] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[5] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[7] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[8] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[9] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the country has a national biosafety legislation and/or regulations in place. There is no mention of such a legislation either on the website of the Ministry of Public Health or the National Public Health Institute (INSP) of Burundi. The website of the Ministry of Agriculture and Livestock was not accessible at the time of research. [1,2,3] The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country lacks legislation regarding biosafety. [4] Although the country has a National Biomedical Waste Management Plan (Plan de gestion des déchets médicaux) which outlines the different stages of management of the waste generated by health care activities, this plan does not include any provisions for biosafety and has a limited application in practice. [5] Moreover, the country has a National Policy on Medical Biology Laboratories (Politique nationale des laboratoires de biologie médicale au Burundi) published by Ministry of Health in 2014, which noted the lack of biosafety regulations for the management of national laboratories. [6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[2] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[5] Ministry of Public Health and AIDS Control. February 2012. "Biomedical Waste Management Plan (Plan de gestion des déchets médicaux)".

[<http://documents.worldbank.org/curated/en/981221468242949666/pdf/E307900BI00FR0Health0sector0development.pdf>]. Accessed 28 October 2020.

[6] Ministry of Public Health and AIDS Control. June 2014. "National Policy on Medical Biology Laboratories (Politique nationale des laboratoires de biologie médicale au Burundi)".

[http://www.minisante.bi/documents/politique_national_lab.pdf]. Accessed 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Burundi has an established agency responsible for the enforcement of biosafety legislation and regulations and there is also no evidence of biosafety legislation. There is no mention of such an agency on the websites of the Ministry of Public Health or the National Public Health Institute (INSP) of Burundi. The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [1,2,3] The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country lacks legislation regarding biosafety. [4] Although the country has a National Biomedical Waste Management Plan (Plan de gestion des déchets médicaux) which outlines the different stages of management of the waste generated by health care activities, this plan does not include any provisions for biosafety and has limited application in practice. [5] The country's National Policy on Medical Biology Laboratories (Politique nationale des laboratoires de biologie médicale au Burundi) published by Ministry of Health in 2014 also noted the lack of biosafety regulations for the management of national laboratories. [6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [7] And the VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [8]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[2] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[5] Ministry of Public Health and AIDS Control. February 2012. " Biomedical Waste Management Plan (Plan de gestion des déchets médicaux)".

[<http://documents.worldbank.org/curated/en/981221468242949666/pdf/E307900BI00FR0Health0sector0development.pdf>] . Accessed 28 October 2020.

[6] Ministry of Public Health and AIDS Control. June 2014. "National Policy on Medical Biology Laboratories (Politique nationale des laboratoires de biologie médicale au Burundi)".

[http://www.minisante.bi/documents/politique_national_lab.pdf]. Accessed 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi 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. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is an absence of a common teaching program and qualified trainers in biosafety, and there are insufficient resources (financial and staff) available for biosafety training. Nonetheless, it notes that one person is certified for biological risk management for health and trained personnel in biosafety are involved in the quality process in the 9 laboratories. [1] There is no further publicly available information via the websites of Ministry of Public Health, Ministry of Higher Education and Scientific Research and the National Public Health Institute, and the Ministry of Agriculture and Livestock website was not accessible at the time of research. [2,3,4,5] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [6] The VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[6] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwcecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[7] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 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 evidence that Burundi has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. According to the 2018 Joint External Evaluation (JEE) for Burundi, the country lacks a legal framework regarding biosecurity and a pathogen monitoring system. [1] There is no indication that the situation has changed since the JEE, and no further evidence related to dual-use research in Burundi has been found via the websites of the Ministry of Public Health and Ministry of National Defence. The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3,4] There is also no publicly available evidence via the websites of the Ministry of Higher Education and Scientific Research and the National Public Health Institute (INSP). [5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [6] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/politiques-et-strategies]. Accessed 28 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [https://www.mdnc.bi/]. Accessed 28 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [http://www.minagrie.gov.bi/]. Attempted access on 28 October 2020.

[5] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [http://mesrs.gov.bi/]. Accessed 28 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [https://insp.bi/direction-des-laboratoires/]. Accessed 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [https://bwc-ecbm.unog.ch/state/burundi]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/]. Accessed 28 October 2020.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a national policy that oversees dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. According to the 2018 Joint External Evaluation (JEE) for Burundi, the country lacks a legal framework regarding biosecurity and a pathogen monitoring system. [1] There is no indication that the situation has changed since the JEE, and no further evidence related to dual-use research in Burundi has been found via the websites of the Ministry of Public Health and Ministry of National Defence. The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3,4] There is also no publicly available evidence via the websites of the Ministry of Higher Education and Scientific Research and the National Public Health Institute (INSP). [5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [6] The VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[5] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has an agency responsible for the oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. According to the 2018 Joint External Evaluation (JEE) for Burundi, the country lacks a legal framework regarding biosecurity and a pathogen monitoring system. [1] There is no indication that the situation has changed since the JEE, and no further evidence related to dual-use research in Burundi has been found via the websites of the Ministry of Public Health and Ministry of National Defence. The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3,4] There is also no publicly available evidence via the websites of the Ministry of Higher Education and Scientific Research and the National Public Health Institute (INSP). [5,6] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [6] The VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [7]

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[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnc.bi/>]. Accessed 28 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[5] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[7] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[8] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has implemented a requirement for screening synthesised DNA before it is sold. Burundi's National Biosecurity Framework (Cadre National de Biosécurité) addresses the issue of transfer, safe handling and use of genetically modified organisms and living modified organisms. [1] The country also has a draft on security of biotechnology (LOI 2006 SUR LA SECURITE EN BIOTECHNOLOGIE) which in articles 9 and 10 establishes that "no person may engage in the importation, transfer, use, dissemination or placing on the market of a genetically modified organism or a derived product of genetically modified organism without prior informed consent or without the explicit written authorisation of the Ministry of

Environment". [2] None of these documents expressly require for reading the genetic code and screening it before allowing its sale. There is no publicly available evidence via the websites of Ministry of Transport, Ministry of Public Health, and Ministry of Defence. And the Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4,5,6] There is also no additional evidence on the website of the National Public Health Institute (Institut national de santé publique (INSP))and the Ministry of Higher Education and Scientific Research. [7, 8] As a state party to the Biological Weapons Convention, Burundi is required to submit annual reports on biological research to the United Nations Office at Geneva (UNOG) to comply with six Confidence-Building Measures (CBM). However, Burundi has not submitted any CBM reports to date. [9] The VERTIC Biological Weapons Convention (BWC) Legislation Database does not list any documents for Burundi has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [10]

[1] Republic of Burundi. Ministry of the Development of the Territory, Tourism, and the Environment (Ministere de l'amenagement du territoire, du tourisme et de l'environnement). November 2006. "National Biosecurity Framework (Cadre National de Biosécurité)". [<https://www.yumpu.com/fr/document/read/24471514/cadre-national-de-biosecurite-au-burundi-uneq>]. Accessed 28 October 2020.

[2] President's Office. 2006. "Law on security of biotechnology (LOI 2006 SUR LA SECURITE EN BIOTECHNOLOGIE)". [<file:///Users/guest1/Downloads/projet%20de%20loi%20biosecurite.pdf>]. Accessed 28 October 2020.

[3] Ministry of Transport (Le Ministère de Transport, des Travaux Publics et de l'Equipement). [<http://www.officedesroutes.bi/index.php/nos-partenaires/mttpe>]. Accessed 28 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[5] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 28 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 28 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

[8] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 28 October 2020.

[9] United Nations Office at Geneva (UNOG). BWC Electronic Confidence Building Measures Portal. Burundi. [<https://bwc-ecbm.unog.ch/state/burundi>]. Accessed 28 October 2020.

[10] Vertic Database. "Burundi". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/b/>]. Accessed 28 October 2020.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 1

2019

World Health Organization

1.6.1b

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

Yes = 1, No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is no evidence that Burundi's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, the National Institute of Public Health (INSP) and the Kamenge University Hospital Centre are able to conduct tests for cholera, malaria, meningococcal meningitis and measles. The report also states that Burundi has agreements with external laboratories for the testing of haemorrhagic fevers and acute flaccid paralysis. In all, this does not account for at least 5 of the 10 WHO-defined core tests. [1] There is no available evidence on the common core tests as well as four country-specific tests via the websites of Ministry of Public Health and Burundi's National Public Health Institute (INSP). [2, 3] There is no evidence of a non-government laboratory that conducts testing on these websites as well.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des->

laboratoires/]. Accessed 29 October 2020.

2.1.1b

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

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

Current Year Score: 0

There is no evidence that Burundi has a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing.

According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, there is a contingency plan that exists for the bird flu (Plan de contingence de la grippe aviaire (octobre 2013)), however no publically available evidence of the plan was found to determine its contents. [1] Burundi has developed national contingency plans to manage emergencies that were published in 2012 and then again in 2013 (Plan de Contingence National de Gestion des Urgences), however neither of the plans mention testing during a public health emergency and state that their aims are "a management tool for disaster preparedness and response". [2,3] There was another plan developed in 2013 that covered years 2013-2016 called the Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi), however, it also makes no mention of reinforcing or basic testing capacity during public health emergencies. [4]

In August 2020, a harmonized national contingency plan for emergency management was validated and "aims to alleviate suffering communities affected by disasters and improve the living conditions of vulnerable people". The plan does not yet seem to be readily available for public use, as it was not found through a general search and no indication suggests that it will address testing during public health emergencies. [5] No evidence of a COVID-19 contingency plan was found. No further information was available on the website for the Ministry of Public Health or Burundi's National Public Health Institute (INSP) and the Ministry of Agriculture and Livestock website was unavailable at the time of research. [6,7,8]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 29 October 2020.

[2] Republic of Burundi. 2012. "National Contingency Plan for the Management of Emergencies (Plan de Contingence National de Gestion des Urgences)". [http://www.presidence.gov.bi/wp-content/uploads/2017/04/plan-de-contingence-nationale-de-gestion-des-urgences.pdf]. Accessed 29 October 2020.

[3] Republic of Burundi. 2013. "National Contingency Plan for the Management of Emergencies (Plan de Contingence National de Gestion des Urgences)". [https://www.ifrc.org/docs/IDRL/Plan%20de%20contingence%20harmonis%C3%A9.pdf]. Accessed 29 October 2020.

[4] Republic of Burundi. August 2013. "Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [https://www.cadri.net/sites/default/files/BURUNDI-Plan-d-Action-National-en-RRC.pdf]. Accessed 29 October 2020.

[5] Burundian Press Agency (ABP) (Agence Burundaise de Presse). August 2020. "Validation of the emergency management contingency plan (Validation du plan de contingence de gestion des urgences)". [<http://abpinfos.com/validation-du-plan-de-contingence-de-gestion-des-urgences>]. Accessed 29 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[8] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi's national reference laboratories are accredited according to local or international standards. Although the country has the National Institute of Public Health (INSP) and the University Hospital of Kamenge which serve as the country's reference laboratories, according to the 2018 Joint External Evaluation (JEE) for Burundi, these laboratories are not capable of conducting at least 5 of the 10 WHO-defined core tests and can only test for cholera, malaria, meningococcal meningitis and measles. [1] There is no publicly available evidence of accreditation via the websites of the Ministry of Public Health, and the National Public Health Institute (Institut national de santé publique (INSP)). The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3,4] However, INSP's website notes that the INSP laboratory, which is a National Reference Laboratory in Public Health performs most analyses according to a quality assurance system (ISO 15189). [4] The University Hospital of Kamenge (Centre hospitalo-universitaire de Kamenge) does not have a website. The Burundian Bureau of Standardization and Quality Control inspection, mentions being technically competent in testing and certification services "in accordance with relevant international standards such as ISO / IEC 17020, ISO / IEC 17021, ISO / IEC 17025 and ISO / IEC Guide 65 or their latest revisions" but then states that the "Bureau should as far as possible pursue international recognition through the appropriate accreditation for these services". There is no indication that the Bureau has received or has made efforts to receive accreditation. [5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

[5] Burundian Bureau of Standardization and Quality Control. "Quality". [<https://bbnburundi.org/en/qualite/>]. Accessed 29 October 2020.

2.1.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no definite evidence that Burundi's national reference laboratories are subject to external quality assurance review. According to the 2018 Joint External Evaluation (JEE) for Burundi, some laboratories have been certified by Burundi's National Public Health Institute (INSP) for measles, also some laboratories participate in the external quality programme (EQC) in bacteriology, virology, haematology, parasitology and serology. However, the country lacks any indicators to measure changes in the quality of analyses. [1] Burundi scored 2 (limited capacity) in section D.1.4 of JEE, which means "National quality standards have been developed but there is no system for verifying their implementation". [2] The JEE further notes that only 0.008% of public laboratories participate in the external quality control programmes, but it does not name them. It cannot be confirmed which laboratories are participating in these programmes via the websites of Ministry of Public Health, and Burundi's National Public Health Institute (INSP). The website for the Ministry of Agriculture and Livestock was not accessible at the time. [3,4,5] The Burundian Bureau of Standardization and Quality Control inspection, also promotes the "activities of standardization, metrology Quality Assurance and Testing in Burundi, to support the economic development, quality inspections of the goods and the Environmental Protection" and lists a number of laboratories with which the Bureau works. Although it provides quality control support, there is no mention on its website of being subject to external quality assurance review. [6] Finally, an April 2020, World Bank assessment of Burundi's preparedness and response capacities with regards to COVID-19, states that although Burundi's primary nine laboratories have "achieved improvements in terms of quality, with eight out of nine satellite laboratories achieving three stars status and above (out of five), there is still a need for continuous support to these laboratories, in order to sustain their achievements and proceed further to achieve international gold standard ISO15189 accreditation". [7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] World Health Organisation (WHO). 2016. "The Joint External Evaluation Tool - International Health Regulations (2005)". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 29 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

[6] Burundian Bureau of Standardization and Quality Control. "Quality". [<https://bbnburundi.org/en/qualite/>]. Accessed 29 October 2020.

[7] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Burundi has a nationwide specimen transport system in place. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, the country has Standard Operating Procedures (SOPs) in place for the collection, packaging, storage and transport of specimens to national laboratories under surveillance. It specifically states that "Local transport of samples is provided by health personnel. In 80% of districts, there is a system for the secure transfer of samples to national laboratories, capable of performing advanced diagnostic tests in the context of diseases under surveillance". Local transport of specimens is provided by 4-5 people who were trained in secure transfer of infectious specimens and are in turn responsible for training their colleagues. The country has a sample transfer system for measles and acute flaccid paralysis. JEE also recommends that the country needs "to strengthen the system of secure transport of specimen at all levels of the health pyramid by integrating the veterinary system". [1] The country scored a 4 (having sufficient capacity) in section D.1.2 of JEE, stating that the "System is in place to transport specimens to national laboratories from at least 80% of intermediate level/districts within the country for advanced diagnostics". [2] The Ministry of Public Health has recently made efforts to strengthen the specimen transportation system. In June 2020 and in response to the COVID-19 pandemic, the World Health Organization (WHO) and the National Public Health Institute (INSP) led training sessions for laboratory assistants on the collection, safe transport and analysis of samples suspected of COVID-19. [3] No additional evidence was available on the websites of the Ministry of Public Health, and Burundi's INSP. The website for the Ministry of Agriculture and Livestock was not accessible at the time. [4,5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] World Health Organisation (WHO). 2016. "The Joint External Evaluation Tool - International Health Regulations (2005)". [https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 29 October 2020.

[3] IWACU - Les voix du Burundi. June 2020. "WHO-INSP: training sessions for laboratory assistance in the secure management of COVID-19 samples (OMS-INSP: sessions de formation des laborantins en gestion sécurisée des échantillons de la covid-19)". [<https://www.iwacu-burundi.org/oms-insp-sessions-de-formation-des-laborantins-en-gestion-securisee-des-echantillons-de-la-covid-19/>]. Accessed 29 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[5] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[6] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no evidence to suggest that Burundi has in place a system to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. There is no mention of such a system in the 2018 Joint External Evaluation report for Burundi. [1] And no evidence was found on the websites for the Ministry of Public Health or The National Public Health Institute (Institut national de santé publique (INSP)). [2,3] The website for the Ministry of Agriculture was not accessible at the time of research. [4] The World Bank COVID-19 preparedness and response assessment also makes no mention of such a system being in place. [5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[5] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

Current Year Score: 0

There is insufficient evidence that Burundi is conducting ongoing event-based surveillance and analysis for infectious disease. According to the Joint External Evaluation for Burundi, conducted in March 2018, Burundi conducts a minimum level of event-based surveillance. The JEE further notes that "real-time event-based monitoring is in nascent stages and only takes place implicitly, without relying on indicators or procedures" and recommends that the country should set up an interoperable, interconnected, real-time event-based reporting system. [1] The websites of the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi do not provide any additional

information on event-based surveillance and analysis for infectious disease in Burundi. [2,3] The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4] No other evidence could be found.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that Burundi has reported a potential public health emergency of international concern (PHEIC) to the World Health Organisation (WHO) within the last year.

In May 2020, Burundi declared a measles outbreak which has been increasing since November 2019. According to the WHO statement, "This outbreak initially started in a refugee transit camp (Centre de transit de Cishemere, Cibitoke Health district), whose inhabitants had arrived from measles-affected provinces of the Democratic Republic of Congo". Previous to this, the last outbreak declared to the WHO was for Cholera in 2004. [1,2] Evidence suggests that COVID-19 pandemic was not declared a state of emergency by the Burundian government and it was not reported to WHO as a PHEIC. [2,3] No additional evidence was available on the Ministry of Public Health website. [4]

[1] World Health Organisation (WHO). "Disease Outbreak News (DONs) - Measles Burundi". [<https://www.who.int/csr/don/06-may-2020-measles-burundi/en/>]. Accessed 29 October 2020.

[2] World Health Organization (WHO). "Disease Outbreak News (DONs)". [<https://www.who.int/csr/don/archive/country/bdi/en/>]. Accessed 29 October 2020.

[3] GardaWorld. April 2020. "Burundi: First COVID-19 cases confirmed March 31 /update 3". [<https://www.garda.com/crisis24/news-alerts/328041/burundi-first-covid-19-cases-confirmed-march-31-update-3>]. Accessed 29 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi operates a full-fledged electronic reporting surveillance system at both the national and sub-national level, though limited capacity to do so exists. The 2018 Joint External Evaluation (JEE) for Burundi notes this limited capacity, stating that notifiable diseases by the District Health Information software Human Health Software (DHIS2) in human health and World Animal Health Information System (WAHIS) for the animal health and wildlife are being used. However, using paper and telephone notification is still widespread (especially at subnational level) which causes problems in archiving and processing the data. In practice, notification reports are transmitted from the peripheral level (45 health districts spread out of 129 communes in the country) to the intermediate level (17 provincial health offices), then they will be relayed to national level. Private sector (hospitals and laboratories) are not integrated to this surveillance system. One of the recommendations for priority actions for Burundi is to put in place an interoperable, interconnected, electronic real-time reporting system.[1] The websites of the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) have no additional information on an electronic reporting surveillance system. [2,3]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

2.3.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi operates a full-fledged electronic reporting surveillance system which collects ongoing/real time laboratory data, though limited capacity to do so exists. According to the 2018 Joint External Evaluation (JEE) for Burundi, a real-time monitoring system exists in national level for collecting information and feedback and the data can be validated at each level of the health pyramid. However, there is insufficient surveillance at the subnational level and paper notification still is being used in some health districts, causing problems in archiving and processing the data. In practice, notification reports are transmitted from the peripheral level (45 health districts spread out of 129 communes in the country) to the intermediate level (17 provincial health offices), then they will be relayed into national level. However, only part of the country's laboratories participates in the surveillance system and private sector (hospitals and laboratories) are not integrated into this surveillance system. One of the recommendations for priority actions for Burundi is to put in place an interoperable, interconnected, electronic real-time reporting system, which implies the lack of ability to collect ongoing/real time laboratory data in Burundi. [1] No more evidence has been found on the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)). [2,3]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 28 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 28 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 28 October 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 0

There is no publicly available evidence that electronic health records (EHRs) are commonly used in Burundi. According to the 2015 country report on e-health by the World Health Organisation (WHO) African Region, primary, secondary and tertiary care facilities, laboratory information systems, pathology information systems, the automatic vaccination alerting system and pharmacy information systems lack the use of EHRs. Only electronic medical billing systems currently are using EHRs. [1] A 2017 study on Burundi's national e-health architecture reinforces this idea stating that the system being "donor driven [means an] unequal distribution of hardware equipment over health administration components and health facilities. Internet connectivity was problematic and few health oriented business applications had found their way to the Burundian health system. Paper based instruments remained predominant in Burundi's health administration". [2] There is no evidence that the situation has changed since the report or the study were published based on a review of the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [3,4] There is also no mention of EHRs in Burundi's 2018 Joint External Evaluation report. [5]

[1] World Health Organisation (WHO). African Region Office. 2015. "Atlas of eHealth country profiles".

[https://apps.who.int/iris/bitstream/handle/10665/204523/9789241565219_eng.pdf?sequence=1]. Accessed 29 October 2020.

[2] Verbeke, Frank & Kaze, Sandrine & Ajeneza, Larissa & Nkurunziza, Lambert & Sindatuma, Gervais & Hassan, Asmini & Bastelaere, Stefaan & Mugisho, Etienne. 2017. "Implementing Burundi's national e-health enterprise architecture: past, present and future". [https://www.researchgate.net/publication/322293499_Implementing_Burundi's_national_e-health_enterprise_architecture_past_present_and_future]. Accessed 29 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

2.4.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi's national public health system has access to electronic health records (EHR) of individuals in its country. According to the 2015 country report on e-health by the World Health Organisation (WHO) African Region, primary, secondary and tertiary care facilities, laboratory information systems, pathology information systems, the automatic vaccination alerting system and pharmacy information systems lack the use of EHRs. Only electronic medical billing systems currently are using EHRs. [1] A 2017 study on Burundi's national e-health architecture reinforces this idea stating that the system being "donor driven [means an] unequal distribution of hardware equipment over health administration components and health facilities. Internet connectivity was problematic and few health oriented business applications had found their way to the Burundian health system. Paper based instruments remained predominant in Burundi's health administration". [2] There is no further evidence on the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [3,4] There is also no mention of EHRs in Burundi's 2018 Joint External Evaluation report. [5]

[1] World Health Organisation (WHO). African Region Office. 2015. "Atlas of eHealth country profiles". [https://apps.who.int/iris/bitstream/handle/10665/204523/9789241565219_eng.pdf?sequence=1]. Accessed 29 October 2020.

[2] Verbeke, Frank & Kaze, Sandrine & Ajeneza, Larissa & Nkurunziza, Lambert & Sindatuma, Gervais & Hassan, Asmini & Bastelaere, Stefaan & Mugisho, Etienne. 2017. "Implementing Burundi's national e-health enterprise architecture: past, present and future". [https://www.researchgate.net/publication/322293499_Implementing_Burundi's_national_e-health_enterprise_architecture_past_present_and_future]. Accessed 29 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of data standards to ensure data is comparable because electronic health records are not in use in Burundi. According to the 2015 country report on e-health by the World Health Organisation (WHO) African Region, primary, secondary and tertiary care facilities, laboratory information systems, pathology information systems, the automatic vaccination alerting system and pharmacy information systems lack the use of EHRs. Only electronic medical billing systems currently are using EHRs. [1] A 2017 study on Burundi's national e-health architecture reinforces this idea stating that the system being "donor driven [means an] unequal distribution of hardware equipment over health administration components and health facilities. Internet connectivity was problematic and few health oriented business applications had found their way to the Burundian health system. Paper based instruments remained predominant in Burundi's health administration". [2] There is no evidence that the situation has changed since the report or the study were published based on a review of the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé

publique (INSP)) of Burundi. [3,4] There is also no mention of EHRs in Burundi's 2018 Joint External Evaluation report. [5]

[1] World Health Organisation (WHO). African Region Office. 2015. "Atlas of eHealth country profiles". [https://apps.who.int/iris/bitstream/handle/10665/204523/9789241565219_eng.pdf?sequence=1]. Accessed 29 October 2020.

[2] Verbeke, Frank & Kaze, Sandrine & Ajeneza, Larissa & Nkurunziza, Lambert & Sindatuma, Gervais & Hassan, Asmini & Bastelaere, Stefaan & Mugisho, Etienne. 2017. "Implementing Burundi's national e-health enterprise architecture: past, present and future". [https://www.researchgate.net/publication/322293499_Implementing_Burundi's_national_e-health_enterprise_architecture_past_present_and_future]. Accessed 29 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/politiques-et-strategies]. Accessed 29 October 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [https://insp.bi/direction-des-laboratoires/]. Accessed 29 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 29 October 2020.

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

2.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence to suggest that there are established mechanisms at the relevant ministries for the sharing of data relevant to animal, human and wildlife surveillance in Burundi. According to the 2018 Joint External Evaluation (JEE) for Burundi, sharing of information exists between human and animal health sectors during crises, but the country lacks partnerships and established mechanisms to exchange information between the Ministry of Public Health, Ministry of Agriculture and Livestock and the Ministry of Water, Environment and Urban Planning. The country does not have a formal "One Health" approach and the JEE recommends that the country "should establish an interministerial committee using the One Health approach". [1] There is no further publicly available evidence via the websites of the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [2,3] The Ministry of Water, Environment and Urban Planning (Ministère de l'Eau, de l'Environnement, de l'Aménagement du Territoire et de l'Urbanisme) does not have a website. And the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 29 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/politiques-et-strategies]. Accessed 29 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [https://insp.bi/direction-des-

laboratoires/]. Accessed 29 October 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 29 October 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Burundi makes de-identified health surveillance data on disease outbreaks publicly available.

Burundi does not appear to make de-identified health surveillance data on disease outbreaks publicly available via reports on the website of the Ministry of Public Health. Even with regards to COVID-19, updates on recent numbers of cases and deaths are not shared at a regular frequency, on a daily, weekly, or even monthly basis. [1] There is no publicly available evidence from the National Public Health Institute (Institut national de sante publique (INSP)) of Burundi and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [2,3]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[2] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 30 October 2020.

2.4.3b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Burundi makes de-identified health surveillance data on COVID-19 publicly available via daily reports (or other format) on government websites (such as the Ministry of Health, Ministry of Agriculture, or similar). Burundi does not appear to make de-identified health surveillance data on COVID-19 publicly available via reports on the website of the Ministry of Public Health. Numbers of COVID-19 cases and deaths are not shared at a regular frequency, on a daily, weekly, or even monthly basis. Press releases have been shared and were last published on October 25th, and the one prior to that was September 27th. No specific COVID-19 page seems to exist. [1,2] In October 2020, Decree No.100 / 088 originally passed in April 2020, was revised establishing a committee to "Combat the Spread and Contamination of COVID-19 in Burundi" and states that it is the committees responsibility to "inform the population on the evolution of the pandemic in the country and in the world, and on the observed health challenges. [3] However there is no evidence on the website of the President of Burundi of such reports. There is no publicly available evidence from the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi and the website for the Ministry of Agriculture and Livestock

was not accessible at the time of research. [4,5]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control. "News". [http://minisante.bi/?page_id=3]. Accessed 30 October 2020.

[3] President of Burundi website. October 2020. "Decree No.100 / 088 of October 22, 2020 Revising Decree No100 / 059 of April 24, 2020, Establishing, Mandate, Composition and Operation of a Committee to Combat the Spread and Contamination of COVID-19 in Burundi (Décret n°100/088 du 22 Octobre 2020 portant Révision du Décret No100/059 du 24 Avril 2020 portant Création,Mandat,Composition et Fonctionnement d'un Comité chargé de Lutter contre la Propagation et la Contamination du COVID-19 au Burundi)". [<https://www.presidence.gov.bi/2020/10/26/decret-n100-088-du-22-octobre-2020-portant-revision-du-decret-no100-059-du-24-avril-2020-portant-creationmandatcomposition-et-fonctionnement-dun-comite-charge-de-lutter-contre-la-propagation/>]. Accessed 18 November 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>].

Attempted access on 30 October 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that Burundi has laws to safeguard the confidentiality of identifiable health information.

Burundi has a health sector law that was passed in May 2018 and imposes data protection provisions on the confidentiality of personal information called 'Law n° 1/012 of May 30, 2018 on the Code of Health Care and Health Services Provision in Burundi' (<<N1/012 du 30 mai 2018 Portant Code De l'offre des Soins et Services de Sante au Burundi>>. It states that "all patients have the right to decide the use of their medical information concerning them and the conditions in which they can be disseminated to third parties. Health agencies must guarantee the confidentiality of information that they hold on their patients even after their death. Compliance with medical confidentiality may be waived in the case provided for by law". [1]

This law, however, has not been listed on the United Nations Conference on Trade and Development (UNCTAD) data protection legislation database or on the African Law database (droit Afrique). [2, 3] And no data protection laws are mentioned in the 2018 Joint External Evaluation (JEE) for Burundi. [4] Article 25 of 2005 Law on the Legal Protection of Persons Infected by HIV / AIDS (Loi n° 1/018 du 12 mai 2005 portant protection juridique des personnes infectées par VIH/SIDA) requires that "data relating to a person who is infected by HIV are covered by professional secrecy" but does not directly refer to identifiable health information. [5] There is no further available evidence via the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [6, 7]

[1] Republic of Burundi. May 2018. "Law n° 1/012 of May 30, 2018 on the Code of Health Care and Health Services Provision in Burundi". [<https://www.assemblee.bi/IMG/pdf/N%C2%B012%20du%2030%20mai%202018.pdf>]. Accessed 30 October 2020.

[2] United Nations Conference on Trade and Development (UNCTAD). "Data Protection and Privacy Legislation Worldwide".

[https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 30 October 2020.

[3] African Law (Droit Afrique). "Burundi- Documentation". [<http://www.droit-afrique.com/pays/burundi/#documentation>]. Accessed 30 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[5] President's Office. 12 May 2005. "Law on the Legal Protection of Persons Infected by HIV / AIDS (Loi portant protection juridique des personnes infectées par VIH/SIDA)". [https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_126615.pdf]. Accessed 30 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has laws, regulations or guidelines that specifically safeguard the confidentiality of identifiable health information for individuals which include mention of protections from cyber attacks. The Country does not have a modern legislation on cyber security or a general data protection laws. However, Burundi has a health sector law that was passed in May 2018 and imposes data protection provisions on the confidentiality of personal information called 'Law n° 1/012 of May 30, 2018 on the Code of Health Care and Health Services Provision in Burundi' (<<N1/012 du 30 mai 2018 Portant Code De l'offre des Soins et Services de Sante au Burundi>>). It states that "all patients have the right to decide the use of their medical information concerning them and the conditions in which they can be disseminated to third parties. Health agencies must guarantee the confidentiality of information that they hold on their patients even after their death. Compliance with medical confidentiality may be waived in the case provided for by law". [1]. No cyber security-related laws have been listed on the United Nations Conference on Trade and Development (UNCTAD) data protection legislation database or on the African Law database (droit Afrique). [2, 3] And no such laws are mentioned in the 2018 Joint External Evaluation (JEE) for Burundi. [4] Article 25 of 2005 Law on the Legal Protection of Persons Infected by HIV / AIDS (Loi n° 1/018 du 12 mai 2005 portant protection juridique des personnes infectées par VIH/SIDA) requires that "data relating to a person who is infected by HIV are covered by professional secrecy" but does not directly refer to identifiable health information or cyber security. [5] There is no further available evidence via the websites of Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [6,7]

[1] Republic of Burundi. May 2018. "Law n° 1/012 of May 30, 2018 on the Code of Health Care and Health Services Provision in Burundi". [<https://www.assemblee.bi/IMG/pdf/N%C2%B012%20du%2030%20mai%202018.pdf>]. Accessed 30 October 2020.

[2] United Nations Conference on Trade and Development (UNCTAD). "Data Protection and Privacy Legislation Worldwide". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 30 October 2020.

[3] African Law (Droit Afrique). " Burundi- Documentation". [<http://www.droit-afrique.com/pays/burundi/#documentation>]. Accessed 30 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[5] President's Office. 12 May 2005. " Law on the Legal Protection of Persons Infected by HIV / AIDS (Loi portant protection juridique des personnes infectées par VIH/SIDA)". [https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_126615.pdf]. Accessed 30 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is insufficient evidence that Burundi has made a public commitment to share surveillance data during a public health emergency with other countries in the region, for one or more diseases.

The country is a member of the East African Community Integrated Disease Surveillance and Response Network (EAIDSNet) which was created to improve Integrated Disease Surveillance & Response (IDSR) data quality and use in the region and strengthen laboratory network and cross border surveillance, preparedness, investigation and collaboration. [1,2] However, no evidence was found that Burundi has expressly made a commitment to share surveillance data during public health emergencies with member states.

In 2004, Burundi signed a cooperation protocol with the Democratic Republic of Congo, Kenya, Uganda and the United Republic of Tanzania with support of the World Health Organisation (WHO) Regional Office for Africa. The aim of this protocol was to scale up cross-border activities in disease surveillance, holding emergency meetings when epidemics occur and sharing epidemiological information through bulletins and newsletters. However, there is no evidence of any agreement to continue to share data during an ongoing emergency. [3] No updated information has been found on this protocol from a broad online search.

There is no mention of sharing surveillance data with other countries in the 2018 Joint External Evaluation (JEE) for Burundi. [4] The websites of the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) provide no further evidence of commitments by the Government of Burundi to share surveillance data during a public health emergency with other countries in the region. [5,6]

[1] The East African Community. "East African Integrated Disease Surveillance Network".

[<https://www.eac.int/health/disease-prevention/east-african-integrated-disease-surveillance-network>]. Accessed 30 October

2020.

[2] Maurice Ope, Stanley Sonoiya, James Kariuki, Leonard E.G Mboera, Ramana N.V Gandham, Miriam Schneidman & Mwihaki Kimura. January 2017. "Regional Initiatives in Support of Surveillance in East Africa: The East Africa Integrated Disease Surveillance Network (EAIDSNet) Experience, Emerging Health Threats".

[<https://www.tandfonline.com/doi/full/10.3402/ehth.v6i0.19948>]. Accessed 30 October 2020.

[3] World Health Organisation (WHO). Department of Communicable Disease Surveillance and Response. 31 May-2 June 2004. "Report of a cross-border intercountry meeting on disease surveillance and response in the Great Lakes region".

[https://www.who.int/csr/resources/publications/surveillance/WHO_CDS_CSR_LYO_2004_16.pdf]. Accessed 30 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)".

[<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[5] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is insufficient evidence to suggest that Burundi has a national system in place to provide support at the sub-national level (e.g. training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency.

There is evidence that the government has led initiatives during COVID-19 to conduct contract tracing but no evidence suggests that the system provides support to prepare for future public health emergencies, or that there is specific support extended to sub-national units. In May 2020, following the COVID-19 outbreak, Burundi initiated contact tracing efforts "on its own" according to a news article that then stated that "WHO [World Health Organization] said it was once asked to train local health workers in Burundi in identifying cases and contact tracing, and stands ready to do so again if requested", suggesting that there may be a point when the Burundian government no longer has the capacity to lead the efforts on its own. [1] Corresponding evidence has been found that the Ministry of Public Health has deployed teams from Fight against AIDS (MSPLS) project to aid local health authorities with contact tracing efforts, but nothing to suggest what kind of aid has been provided. [2]

Throughout the last few months since the first case of COVID-19 was detected, there have been various reports of contact tracing by the government. [3] No evidence was found, however, that a system has existed previously. Although not regularly

shared, the press releases published by the Ministry of Public Health do make mention of contact cases that are being traced but do not indicate whether implementing contact tracing approaches is part of a larger system. [4]

The 2018 Joint External Evaluation report for Burundi also makes no mention of having a contact tracing system in place that can be expanded in the event of a public health emergency. [5] Neither do the websites for the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [6,7]

- [1] The New Humanitarian. May 2020. "Coronavirus response takes backseat as election looms in Burundi". [<https://www.thenewhumanitarian.org/feature/2020/05/12/Burundi-coronavirus-elections-floods-violence>]. Accessed 30 October 2020.
- [2] OCHA Burundi. April 2020. "BURUNDI : COVID-19 Flash Update No. 1" [https://reliefweb.int/sites/reliefweb.int/files/resources/covid-19_flash_update_burundi_14042020_en.pdf]
- [3] AfricaNews. April 2020. "Coronavirus - Burundi : Communiqué de presse du Ministère de la Santé Publique et de la lutte contre le sida sur le suivi des actions de prévention et de riposte face au COVID-19". [<https://fr.africanews.com/2020/04/11/coronavirus-burundi-communique-de-presse-du-ministere-de-la-sante-publique-et-de-la-lutte-contre-le-sida-sur-le-suivi-des-actions-de-prevention-et-de-riposte-face-au-covid-19/>]. Accessed 30 October 2020.
- [4] Government of Burundi. "July 7, 2020 Presse Release". [<http://minisante.bi/wp-content/uploads/communiqu%C3%A9-du-3-juillet.pdf>]. Accessed 30 October 2020.
- [5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.
- [6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.
- [7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

2.5.1b

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

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

Current Year Score: 0

No evidence was found that Burundi provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention. The 2018 Joint External Evaluation report for Burundi makes no mention of wraparound services. [1] And no evidence was found of such a system on the websites for the Ministry of Public Health and the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi. [2,3]

- [1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.
- [2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

2.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports (or other format) on government websites (such as the Ministry of Health, or similar). Burundi has shared press releases that provide some basic information and numbers on COVID-19 cases and deaths but they are not shared on a daily basis and seem to be published sporadically. The last ones shared were on October 25th, and the one prior to that was September 27th. No specific COVID-19 page seems to exist. [1,2] In October 2020, Decree No.100 / 088 originally passed in April 2020, was revised establishing a committee to "Combat the Spread and Contamination of COVID-19 in Burundi" and states that it is the committees responsibility to "inform the population on the evolution of the pandemic in the country and in the world, and on the observed health challenges. [3] However there is no evidence on the website of the President of Burundi of daily reports that provide information on contact tracing efforts and contact tracing is not specifically mentioned in the Decree No. 100/088. There is no further publicly available evidence from the Ministry of Public Health or the National Public Health Institute (Institut national de santé publique (INSP)) of Burundi and the website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4,5]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control. "News". [http://minisante.bi/?page_id=3]. Accessed 30 October 2020.

[3] President of Burundi website. October 2020. "Decree No.100 / 088 of October 22, 2020 Revising Decree No100 / 059 of April 24, 2020, Establishing, Mandate, Composition and Operation of a Committee to Combat the Spread and Contamination of COVID-19 in Burundi (Décret n°100/088 du 22 Octobre 2020 portant Révision du Décret No100/059 du 24 Avril 2020 portant Création,Mandat,Composition et Fonctionnement d'un Comité chargé de Lutter contre la Propagation et la Contamination du COVID-19 au Burundi)". [<https://www.presidence.gov.bi/2020/10/26/decret-n100-088-du-22-octobre-2020-portant-revision-du-decret-no100-059-du-24-avril-2020-portant-creationmandatcomposition-et-fonctionnement-dun-comite-charge-de-lutter-contre-la-propagation/>]. Accessed 18 November 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 30 October 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no evidence of 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.

The 2018 Joint External Evaluation report for Burundi specifically states that there is a "lack of memorandums of understanding [MOU] between human and animal health authorities and authorities in charge of national and local security". The report also scores the section "Public health and safety authorities (for example, services responsible for law enforcement, border control and customs) liaise during a suspected or confirmed biological event" a '1' meaning no capacity is in place. [1]

In response to COVID-19, in October 2020, Decree No.100 / 088 originally passed in April 2020, was revised establishing a committee to "Combat the Spread and Contamination of COVID-19 in Burundi" and lists the members of the committee. Although the committee includes the public health system, there is no evidence that it also includes border control authorities and there is no mention that international travelers are monitored. [2] No other evidence was found of an agreement between the public health system and the border control authorities with regards to COVID-19 including working together to conduct contact tracing. No further evidence is available via the websites for the Ministry of Public Health or The National Public Health Institute (Institut national de santé publique (INSP)). [3,4] The website for the Ministry of Agriculture was not accessible at the time of research. [5] The World Bank COVID-19 preparedness and response assessment also makes no mention of such agreements being in place. [6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[2] President of Burundi website. October 2020. "Decree No.100 / 088 of October 22, 2020 Revising Decree No100 / 059 of April 24, 2020, Establishing, Mandate, Composition and Operation of a Committee to Combat the Spread and Contamination of COVID-19 in Burundi (Décret n°100/088 du 22 Octobre 2020 portant Révision du Décret No100/059 du 24 Avril 2020 portant Création, Mandat, Composition et Fonctionnement d'un Comité chargé de Lutter contre la Propagation et la Contamination du COVID-19 au Burundi)". [<https://www.presidence.gov.bi/2020/10/26/decret-n100-088-du-22-octobre-2020-portant-revision-du-decret-no100-059-du-24-avril-2020-portant-creationmandatcomposition-et-fonctionnement-dun-comite-charge-de-lutter-contre-la-propagation/>]. Accessed 20 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 1 November 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[6] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that an epidemiology training program (such as FETP) is available in country or resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP). According to the Joint External Evaluation of Burundi, conducted in March 2018, the country does not have a field epidemiology training programme in the human health (FETP) and animal health (FETPV) sectors and lacks the local training in veterinary medicine and field epidemiology. However, a master's degree course in epidemiology was opened in January 2018 with the support of the Belgian Technical Cooperation to strengthen the capacity in public paramedical schools. [1] TEPHINET states that Burundi is an affiliate of its network, and AFENET has named Burundi as one of the Countries of Operation, but there is no evidence of the provision of any training programme in Burundi or availability of training programmes for Burundians outside the country on either of the network websites or through a general media search. [2,3] There is no evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programmes via the websites of the Ministry of Public Health, TEPHINET, AFENET and CDC. [3,4,5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 1 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). January 2020. "Measles Epidemic in a Highly Vaccinated Population". [https://www.tephinet.org/tephinet-learning-center/tephinet-library/measles-epidemic-in-a-highly-vaccinated-population]. Accessed 1 November 2020.

[3] African Network of Epidemiology Field (AFENET). "The Network". [http://www.afenet.net/index.php/about-us/who-we-are/who-we-are-2]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/politiques-et-strategies]. Accessed 1 November 2020.

[5] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). " Member Programs ". [https://www.tephinet.org/training-programs]. Accessed 1 November 2020.

[6] Centres for Disease Control and Prevention. " Field Epidemiology Training Program (FETP) ". [https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm]. Accessed 1 November 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that the country has field epidemiology training programs explicitly inclusive of animal health professionals or a specific animal health field epidemiology training program offered (such as FETPV). According to the Joint External Evaluation of Burundi, conducted in March 2018, the country does not have a field epidemiology training programme in human health (FETP) and animal health sector ((FETPV) and lacks the local training in veterinary medicine and field epidemiology. However, a masters degree course in epidemiology was opened in January 2018 with the support of the Belgian Technical Cooperation to strengthen the capacity in public paramedical schools. [1] TEPHINET states that Burundi is an affiliate of its network, and AFENET has named Burundi as one of the Countries of Operation, but there is no evidence of the provision of any types of training programme, including in the animal health field, in Burundi or availability of training programmes for Burundians outside the country on either of the network websites or through a general media search. [2,3] There is no evidence of animal health epidemiology training programmes in Burundi via the websites of the Ministry of Public Health, TEPHINET, AFENET and CDC. [3,4,5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 1 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). January 2020. "Measles Epidemic in a Highly Vaccinated Population". [https://www.tephinet.org/tephinet-learning-center/tephinet-library/measles-epidemic-in-a-highly-vaccinated-population]. Accessed 1 November 2020.

[3] African Network of Epidemiology Field (AFENET). "The Network". [http://www.afenet.net/index.php/about-us/who-we-are/who-we-are-2]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/politiques-et-strategies]. Accessed 1 November 2020.

[5] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). " Member Programs ". [https://www.tephinet.org/training-programs]. Accessed 1 November 2020.

[6] Centres for Disease Control and Prevention. " Field Epidemiology Training Program (FETP) ". [https://www.cdc.gov/globalhealth/healthprotection/fetp/index.htm]. Accessed 1 November 2020.

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is evidence that Burundi has a national public health emergency response plan which addresses planning for multiple communicable diseases with epidemic or pandemic potential, however the plan does not seem to be available for public access.

In August 2020, a harmonized national contingency plan for emergency management was validated and "aims to alleviate suffering communities affected by disasters and improve the living conditions of vulnerable people". However, the plan was not found through a general media search. An article published in August 2020, that announced its validation stated that "Six major risks are assessed by the criteria of probability of occurrence and impact. These are the health risks with epidemic and pandemic potential including COVID-19, cholera, malaria and Ebola virus disease as well as the risk of flooding". [1]

Evidence was also found of general emergency response plans and action plans, however there is no indication that they cover public health emergencies. There are two national contingency plans to manage emergencies that were published in 2012 and then again in 2013 (Plan de Contingence National de Gestion des Urgences), however neither of the plans specifically mention public health emergencies and only state that their aims are "a management tool for disaster preparedness and response". [2,3] Another plan called the Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi 2013-2016 (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi) exists, but there is no mention that it address public health emergencies. [4]

The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies and that "the authorities have not undertaken a mapping of risks and resources as a preliminary step which is essential to the development of such a plan". [5] No further information was available on the website for the Ministry of Public Health or Burundi's National Public Health Institute (INSP) and the Ministry of Agriculture and Livestock website was unavailable at the time of research. [6,7]

[1] Agence Burundaise de Presse (ABP). August 2020. "Validation du plan de contingence de gestion des urgences". [<http://abpinfos.com/validation-du-plan-de-contingence-de-gestion-des-urgences>]. Accessed 29 October 2020.

[2] Republic of Burundi. 2012. "National Contingency Plan for the Management of Emergencies (Plan de Contingence National de Gestion des Urgences)". [<http://www.presidence.gov.bi/wp-content/uploads/2017/04/plan-de-contingence-nationale-de-gestion-des-urgences.pdf>]. Accessed 29 October 2020.

[3] Republic of Burundi. 2013. "National Contingency Plan for the Management of Emergencies (Plan de Contingence

National de Gestion des Urgences)". [<https://www.ifrc.org/docs/IDRL/Plan%20de%20contingence%20harmonis%C3%A9.pdf>]. Accessed 29 October 2020.

[4] Republic of Burundi. August 2013. "Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [<https://www.cadri.net/sites/default/files/BURUNDI-Plan-d-Action-National-en-RRC.pdf>]. Accessed 29 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

3.1.1b

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

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

Current Year Score: 0

There is no evidence that Burundi has a national public health emergency response plan therefore no plan has been updated within the last three years. The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies and that "the authorities have not undertaken a mapping of risks and resources as a preliminary step which is essential to the development of such a plan". The JEE also notes that Burundi is in the process of setting up an emergency operations center with the support of the World Health Organization (WHO) and other partners. [1] No evidence was found of an established emergency management agency as of yet.

Burundi does seem to have general emergency response plans and action plans, however there is no indication that they cover public health emergencies. There are two national contingency plans to manage emergencies that were published in 2012 and then again in 2013 (Plan de Contingence National de Gestion des Urgences), however neither of the plans specifically mention public health emergencies and only state that their aims are "a management tool for disaster preparedness and response". [2,3] There was another plan developed in 2013 that covered years 2013-2016 called the Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi), however, it also makes no mention of being relevant during public health emergencies. [4]

In August 2020, a harmonized national contingency plan for emergency management was validated and "aims to alleviate suffering communities affected by disasters and improve the living conditions of vulnerable people". The plan does not yet seem to be available for public use, as it was not found through a general search and no indication suggests that it is meant to be used specifically during public health emergencies. [5] No further information was available on the website for the Ministry of Public Health or Burundi's National Public Health Institute (INSP) and the Ministry of Agriculture and Livestock website was unavailable at the time of research. [6,7]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)".

[<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Republic of Burundi. 2012. "National Contingency Plan for the Management of Emergencies (Plan de Contingence Nationale de Gestion des Urgences)". [<http://www.presidence.gov.bi/wp-content/uploads/2017/04/plan-de-contingence-nationale-de-gestion-des-urgences.pdf>]. Accessed 29 October 2020.

[3] Republic of Burundi. 2013. "National Contingency Plan for the Management of Emergencies (Plan de Contingence Nationale de Gestion des Urgences)". [<https://www.ifrc.org/docs/IDRL/Plan%20de%20contingence%20harmonis%C3%A9.pdf>]. Accessed 29 October 2020.

[4] Republic of Burundi. August 2013. "Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [<https://www.cadri.net/sites/default/files/BURUNDI-Plan-d-Action-National-en-RRC.pdf>]. Accessed 29 October 2020.

[5] Agence Burundaise de Presse (ABP). August 2020. "Validation du plan de contingence de gestion des urgences". [<http://abpinfos.com/validation-du-plan-de-contingence-de-gestion-des-urgences>]. Accessed 29 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

3.1.1c

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

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

Current Year Score: 0

There is no evidence that Burundi has a national public health emergency response plan therefore it does not include considerations for pediatric and/or other vulnerable populations. The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies and that "the authorities have not undertaken a mapping of risks and resources as a preliminary step which is essential to the development of such a plan". The JEE also notes that Burundi is in the process of setting up an emergency operations center with the support of the World Health Organization (WHO) and other partners. [1] No evidence was found of an established emergency management agency as of yet. Burundi does seem to have general emergency response plans and action plans, however there is no indication that they cover public health emergencies. There are two national contingency plans to manage emergencies that were published in 2012 and then again in 2013 (Plan de Contingence Nationale de Gestion des Urgences), however neither of the plans specifically mention public health emergencies and only state that their aims are "a management tool for disaster preparedness and response". [2,3] There was another plan developed in 2013 that covered years 2013-2016 called the Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi), however, it also makes no mention of being relevant during public health emergencies. [4] In August 2020, a harmonized national contingency plan for emergency management was validated and "aims to alleviate suffering communities affected by disasters and improve the living conditions of vulnerable people". The plan does not yet seem to be available for public use, as it was not found through a general search and no indication suggests that it is meant to be used specifically during public health emergencies. [5] No further information was available on the website for the Ministry of Public Health or Burundi's National Public Health Institute (INSP) and the Ministry of Agriculture and Livestock website was unavailable at the time of research. [6,7]

- [1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.
- [2] Republic of Burundi. 2012. "National Contingency Plan for the Management of Emergencies (Plan de Contingence Nationale de Gestion des Urgences)". [<http://www.presidence.gov.bi/wp-content/uploads/2017/04/plan-de-contingence-nationale-de-gestion-des-urgences.pdf>]. Accessed 29 October 2020.
- [3] Republic of Burundi. 2013. "National Contingency Plan for the Management of Emergencies (Plan de Contingence Nationale de Gestion des Urgences)". [<https://www.ifrc.org/docs/IDRL/Plan%20de%20contingence%20harmonis%C3%A9.pdf>]. Accessed 29 October 2020.
- [4] Republic of Burundi. August 2013. "Action Plan for National Capacity Building for the Reduction of Risks, Preparation, and Response in Emergencies in Burundi (Plan d'Action pour le Renforcement des Capacités Nationales pour la Réduction des Risques, la Préparation et la Réponse aux Urgences au Burundi)". [<https://www.cadri.net/sites/default/files/BURUNDI-Plan-d-Action-National-en-RRR.pdf>]. Accessed 29 October 2020.
- [5] Agence Burundaise de Presse (ABP). August 2020. "Validation du plan de contingence de gestion des urgences". [<http://abpinfos.com/validation-du-plan-de-contingence-de-gestion-des-urgences>]. Accessed 29 October 2020.
- [6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.
- [7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

3.1.1d

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

Yes = 1 , No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a mechanism for engaging with the private sector to assist with the outbreak emergency preparedness and response. No such mechanism is mentioned in the 2018 Joint External Evaluation for Burundi. [1] The JEE expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies and that "the authorities have not undertaken a mapping of risks and resources as a preliminary step which is essential to the development of such a plan". [1] The Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Plan d'action pour le renforcement des

capacités nationales pour la réduction des risques, la préparation et la réponse aux urgences au Burundi) which was published by Burundian Government in 2013 noted the marginal role of private sector in emergency relief situations. [2] Burundi does not have an emergency management agency and no more additional information was found via the website of Ministry of Public Health. [3] The World Bank report on Burundi's COVID-19 preparedness and response capacities does not mention of any efforts being made that engage the private sector. [4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [<https://tinyurl.com/yy6c3eol>]. Accessed 30 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[4] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 0

There is no evidence that Burundi has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic.

No evidence of such a plan was available on the websites for the Ministry of Public Health or Burundi's National Public Health Institute (INSP). [1,2] There is no mention of a plan or guidelines in place to implement NPIs in the 2018 Joint External Evaluation report for Burundi. [3]

With regards to the COVID-19 pandemic, the World Bank's COVID-19 report on Burundi's response and preparedness capacity states that Burundi has implemented NPIs, however, there is no mention that this is following a plan or guidelines that are in place to address general epidemic or pandemic emergencies. [4] In October 2020, Decree No.100 / 088 originally passed in April 2020, was revised establishing a committee to "Combat the Spread and Contamination of COVID-19 in Burundi". The decree, however, makes no mention of NPIs and does not outline when NPIs should be implemented. [5]

There is no mention of such a plan or guidelines in place in Burundi's Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi) or its National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015). [6,7]

Burundi's current president since June 2020, Evariste Ndayishimiye, announced a new approach and campaign towards addressing the pandemic. The Health Minister stated that with this new campaign, the government is "working to provide access to screening for those people who could not in the past". He continued to say that "there were enough supplies, testing kits and masks, and that all the necessary precautions were being taken". [8,9] In August 2020, a harmonized national contingency plan for emergency management was validated and "aims to alleviate suffering communities affected by disasters and improve the living conditions of vulnerable people". No details were found on the contents of the plan and it does not seem to be available for public use. [10] No other evidence was found of precautions or resources available to broadly respond to a pandemic.

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[2] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

[3] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[5] President of Burundi website. October 2020. "Decree No.100 / 088 of October 22, 2020 Revising Decree No100 / 059 of April 24, 2020, Establishing, Mandate, Composition and Operation of a Committee to Combat the Spread and Contamination of COVID-19 in Burundi (Décret n°100/088 du 22 Octobre 2020 portant Révision du Décret No100/059 du 24 Avril 2020 portant Création, Mandat, Composition et Fonctionnement d'un Comité chargé de Lutter contre la Propagation et la Contamination du COVID-19 au Burundi)". [<https://www.presidence.gov.bi/2020/10/26/decret-n100-088-du-22-octobre-2020-portant-revision-du-decret-no100-059-du-24-avril-2020-portant-creationmandatcomposition-et-fonctionnement-dun-comite-charge-de-lutter-contre-la-propagation/>]. Accessed 20 November 2020.

[6] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacités Nationales pour la Réduction des Risques, la Préparation et la Réponse aux Urgences au Burundi)". [<https://tinyurl.com/yy6c3eol>]. Accessed 30 October 2020.

[7] Burundi Biodiversity. "National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015)". [<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 1 November 2020.

[8] Aljazeera. July 2020. "Burundi's new coronavirus policy: Mass testing in Bujumbura city".

[<https://www.aljazeera.com/news/2020/7/7/burundis-new-coronavirus-policy-mass-testing-in-bujumbura-city>]. Accessed 1 November 2020.

[9] ReliefWeb. July 2020. "Burundi Revised humanitarian response Coronavirus disease 2019 (COVID-19) May-December 2020". [<https://reliefweb.int/report/burundi/burundi-revised-humanitarian-response-coronavirus-disease-2019-covid-19-may-december>]. Accessed 1 November 2020.

[10] Agence Burundaise de Presse (ABP). August 2020. "Validation du plan de contingence de gestion des urgences". [<http://abpinfos.com/validation-du-plan-de-contingence-de-gestion-des-urgences>]. Accessed 29 October 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

There is no evidence that Burundi has activated its national emergency response plan for an infectious disease outbreak in the past year, since Burundi does not have an emergency response plan, but there is evidence that the country has completed a national-level biological threat-focused exercise (either with World Health Organization (WHO) or separately) in the past year.

The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies and that "the authorities have not undertaken a mapping of risks and resources as a preliminary step which is essential to the development of such a plan". The JEE also notes that Burundi is in the process of setting up an emergency operations center with the support of the WHO and other partners. [1] No evidence was found of an established emergency management agency as of yet.

Burundi does seem to have general emergency response plans and action plans, however there is no indication that they cover public health emergencies. No evidence was found of a COVID-19 contingency plan. There are two national contingency plans to manage emergencies that were published in 2012 and then again in 2013 (Plan de Contingence National de Gestion des Urgences), however neither of the plans specifically mention public health emergencies and only state that their aims are "a management tool for disaster preparedness and response". [2,3] Neither of the plans were activated in response to an infectious disease outbreak in the past year.

Although, the WHO lists no national-level biological threat-focused exercises on its website, ReliefWeb and WHO Africa have published announcements in December 2019 about an exercise between seventeen African countries, including Burundi which tested its readiness of Public Health Emergency Operations Centers. [4,5,6] This exercise was to be held for 2 days and "followed by a regional-level debriefing session and a post-exercise report on each country's PHEOC readiness and capabilities". [5,6] No other reports on the exercise were found.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 29 October 2020.

[2] Republic of Burundi. 2012. "National Contingency Plan for the Management of Emergencies (Plan de Contingence National de Gestion des Urgences)". [<http://www.presidence.gov.bi/wp-content/uploads/2017/04/plan-de-contingence-nationale-de-gestion-des-urgences.pdf>]. Accessed 29 October 2020.

[3] Republic of Burundi. 2013. "National Contingency Plan for the Management of Emergencies (Plan de Contingence

National de Gestion des Urgences)". [<https://www.ifrc.org/docs/IDRL/Plan%20de%20contingence%20harmonis%C3%A9.pdf>]. Accessed 29 October 2020.

[4] World Health Organization (WHO). "Health Security Calendar". [https://extranet.who.int/sph/calendar/2020?1&type=All&field_region_tid=All&country_tid=215]. Accessed 1 November 2020.

[5] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.

[6] World Health Organization (WHO) Africa. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://www.afro.who.int/news/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 20 November 2020.

3.2.1b

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

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

Current Year Score: 0

There is no evidence that the country in the past year has identified a list of gaps and best practices in response (either through an infectious disease response of a biological-threat focused exercise) and developed a plan to improve response capabilities. The country participated in a biological-threat focused exercise was in December 2019, along with sixteen other African countries. The exercise would test its readiness of Public Health Emergency Operations Centers over two days and after which the participating countries would have a post-exercise report on their gaps and best practices. [1] However, no evidence was found that a plan to improve response capabilities was developed following this exercise. Further, on the Disease Outbreak News section of the World Health Organization (WHO) website, a measles outbreak was reported in May 2020, however no evidence was found to suggest that there was a follow-up report or plan to improve response capabilities. [2] No other after-action reviews were recorded on the WHO website and no other evidence was found on the website for the Ministry of Public Health. [3,4]

[1] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.

[2] World Health Organization (WHO). "Measles - Burundi". [<https://www.who.int/csr/don/06-may-2020-measles-burundi/en/>]. Accessed 31 October 2020.

[3] World Health Organization (WHO). "Health Security Calendar". [https://extranet.who.int/sph/calendar/2020?1&type=All&field_region_tid=All&country_tid=215]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has, in the past year, undergone a national-level biological threat-focused exercise that has included private sector representatives. The only national-level biological threat-focused exercise found was one conducted in December 2019 between seventeen African countries, including Burundi which tested its readiness of Public Health Emergency Operations Centers. [1] No evidence was found that this exercise included the private sector. No other national-level biological threat-focused exercise was recorded on the disease outbreak news World Health Organization (WHO) website and no other evidence was found on the website for the Ministry of Public Health. [3,4]

[1] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.

[2] World Health Organization (WHO). "Health Security Calendar". [https://extranet.who.int/sph/calendar/2020?1&type=All&field_region_tid=All&country_tid=215]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Burundi has an Emergency Operations Center (EOC) in place. According to a World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center. [1] However, no evidence was found to suggest that the establishment of the EOC has been completed. Several other sources confirm the fact that the EOC has yet to be finalized, including an article that discusses Burundi's preparation capacity for public health emergencies, from 2018, and a ReliefWeb report from July 2020. [2,3] A simulation exercise, however, was conducted in December 2019 between seventeen African countries' EOCs and Burundi was included. [4] According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, Burundi is in the process of setting up an EOC with the support of the World Health Organization (WHO) and other partners, and training of two officials from the Ministry of Public Health took place in 2017. The JEE also recommends that Burundi should "establish an emergency operations center with multisectoral, trained and functional emergency response teams". [5] Despite COVID-19, the EOC does not seem to have been finalized as no evidence of it was found on the

website of the Ministry of Public Health, the National Public Health Institute (Institut national de santé publique (INSP)) or from a broader media search. [6,7]

- [1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.
- [2] BurundiEco. July 2018. "A tool for prevention, preparedness, mitigation and response to emergencies (Un outil de prévention, de préparation, d'atténuation et de réponse aux urgences)". [<https://burundi-eco.com/un-outil-de-prevention-de-preparation-dattenuation-et-de-reponse-aux-urgences/#.X5yhCYhKg2w>]. Accessed 30 October 2020.
- [3] ReliefWeb. July 2020. "2020 Humanitarian Reponse Plan Addendum (Addendum au plan de reponse humanitaire 2020 - Burundi)". [https://reliefweb.int/sites/reliefweb.int/files/resources/hrp_2020-bdi_addendum-fr_v0.7.pdf]. Accessed 30 October 2020.
- [4] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.
- [5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.
- [6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.
- [7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

3.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi yet has in place an Emergency Operations Center (EOC), therefore no evidence exists that its EOC is required to conduct a drill for a public health emergency scenario at least once per year or that they conduct a drill at least once per year.

According to a World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center. [1] However, no evidence was found to suggest that the establishment of the EOC has been complete. The report also mentions that along with establishing the EOC, will be the organization of simulation exercises, however there is also no evidence that these have begun or that they occur on an annual basis. Several other sources confirm the fact that the EOC has yet to be finalized, including an article that discusses Burundi's preparation capacity for public health emergencies, from 2018, and a ReliefWeb report from July 2020. [2,3]

A simulation exercise was conducted in December 2019, however, between seventeen African countries' EOCs and Burundi was included. [4] Again, no evidence was found that these are intended to occur on an annual basis. According to the Joint

External Evaluation (JEE) for Burundi, conducted in March 2018, Burundi is in the process of setting up an EOC with the support of the World Health Organization (WHO) and other partners, and training of two officials from the Ministry of Public Health took place in 2017. The JEE also recommends that Burundi should "establish an emergency operations center with multisectoral, trained and functional emergency response teams". [4] There is no mention of conducting drills for a public health emergency. No further evidence was available on the websites of the Ministry of Public Health, the National Public Health Institute (Institut national de santé publique (INSP)) or from a broader media search. [5,6]

[1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project".

[<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[2] BurundiEco. July 2018. "A tool for prevention, preparedness, mitigation and response to emergencies (Un outil de prévention, de préparation, d'atténuation et de réponse aux urgences)". [<https://burundi-eco.com/un-outil-de-prevention-de-preparation-dattenuation-et-de-reponse-aux-urgences/#.X5yhCYhKg2w>]. Accessed 30 October 2020.

[3] ReliefWeb. July 2020. "2020 Humanitarian Reponse Plan Addendum (Addendum au plan de reponse humanitaire 2020 - Burundi)". [https://reliefweb.int/sites/reliefweb.int/files/resources/hrp_2020-bdi_addendum-fr_v0.7.pdf]. Accessed 30 October 2020.

[4] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[6] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 29 October 2020.

[7] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 29 October 2020.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi yet has in place an Emergency Operations Center (EOC) and therefore no public evidence to show that it 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. According to a World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center. [1] However, no evidence was found to suggest that the establishment of the EOC has been complete and therefore no evidence was found that it had conducted a coordinated emergency response within 120 minutes of the identification of a public health emergency. Several other sources confirm the fact that the EOC has yet to be finalized, including an article that discusses Burundi's preparation capacity for public health emergencies, from 2018, and a ReliefWeb report from July 2020. [2,3] According to the Joint External Evaluation (JEE) for

Burundi, conducted in March 2018, Burundi is in the process of setting up an EOC with the support of the World Health Organization (WHO) and other partners, and training of two officials from the Ministry of Public Health took place in 2017. The JEE also recommends that Burundi should "establish an emergency operations center with multisectoral, trained and functional emergency response teams". There is no mention of being able to conduct a response within 120 minutes of the identification of a public health emergency. [4] No further evidence was available on the websites of the Ministry of Public Health, the National Public Health Institute (Institut national de santé publique (INSP)) or from a broader media search. [5,6]

[1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project".

[<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[2] BurundiEco. July 2018. "A tool for prevention, preparedness, mitigation and response to emergencies (Un outil de prévention, de préparation, d'atténuation et de réponse aux urgences)". [<https://burundi-eco.com/un-outil-de-prevention-de-preparation-dattenuation-et-de-reponse-aux-urgences/#.X5yhCYhKg2w>]. Accessed 30 October 2020.

[3] ReliefWeb. July 2020. "2020 Humanitarian Reponse Plan Addendum (Addendum au plan de reponse humanitaire 2020 - Burundi)". [https://reliefweb.int/sites/reliefweb.int/files/resources/hrp_2020-bdi_addendum-fr_v0.7.pdf]. Accessed 30 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[5] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that Burundi's public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack) and there is no evidence of 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). The 2018 Joint External Evaluation (JEE) for Burundi states that although the country has the National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Stratégie Nationale de prévention des risques de gestion des Catastrophes et Plan

d'Action) which created a national platform for the risk prevention and management of disasters under the authority of the Ministry of Public Security, the collaboration between the public health authorities and national security authorities remains insufficient as result of lack of any MOUs, joint training programs for public health staff and national security authorities and the lack of any standard operating procedures or joint simulation exercise. [1] There is no other evidence available via the websites for the Ministry of Public Health or The National Public Health Institute (Institut national de santé publique (INSP)). [2,3] The World Bank COVID-19 preparedness and response assessment also makes no mention of such agreements being in place. [4] A national-level biological threat-focused exercise was conducted in December 2019 between seventeen African countries, including Burundi, and tested its readiness of Public Health Emergency Operations Centers. One of the aims was to "define linkages with national emergency management authorities", however no further details on what was included in this part of the exercise was found, and no further details on the Burundi-specific exercise were available. [5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/direction-des-laboratoires/>]. Accessed 30 October 2020.

[4] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[5] ReliefWeb. December 2019. "Seventeen African Countries Conducting Exercise to Test Readiness of Public Health Emergency Operations Centres". [<https://reliefweb.int/report/world/seventeen-african-countries-conducting-exercise-test-readiness-public-health-emergency>]. Accessed 1 November 2020.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a risk communication plan or an public health response strategy outlining how messages will reach populations and sectors with different communication needs. The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, expressly states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies. However, it notes that the country has an "Information, Education and Communication Service (service d'Information, Education et Communication (IEC)) within the Ministry of Health which is responsible for communication about risk through the dissemination of messages at peripheral and local levels". However, the IEC lacks a sufficient budget dedicated to risk communication. Furthermore, Burundi also has a comprehensive plan for communication with the media. However, this plan is not publicly available. The country also has a spokesperson from the Ministry of Health, responsible for communication and a functional website and there are also functional emergency

numbers. [1] Burundi's National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Strategie Nationale de Prevention des Risques et de Gestion des Catastrophes et Plan d'Action National 2012-2015) does not contain any information outlining how messages will reach populations during public health emergencies. [2] There is no publicly available evidence via the website of the Ministry of Public Health and no additional evidence of a communication plan that details how messages will reach populations with different communication needs was found. [3]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Republic of Burundi. "The National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Strategie Nationale de Prevention des Risques et de Gestion des Catastrophes et Plan d'Action National 2012-2015)". [<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 30 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to suggest that Burundi has a risk communication plan for use during a public health emergency. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, "Burundi does not have a multi-hazard and multisectoral communication plan, which is essential to timely and appropriate mobilisation and coordination in the case of public health emergencies". However, the JEE notes that Burundi has put in place structures and initiatives to manage the process of risk communication within the Ministry of Public Health by creating a multisectoral committee to ensure the coordination of the interventions and risk communication through the dissemination of messages at the peripheral and local levels. The country does not have an emergency management agency. [1] The multisectoral committee does not have an online presence. There is also no available evidence of the committee or the risk communication plan via the website of the Ministry of Public Health. [2] Burundi has the National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Stratégie Nationale de prévention des risqueste de gestion des Catastrophes et Plan d'Action 2012-2015), but this plan does not include public health emergencies. [3]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] Republic of Burundi. 2012. "The National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Stratégie Nationale nationale de prévention des risqueste de gestion des Catastrophes et Plan d'Action 2012-2015)". [Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed on 30 October 2020.

3.5.1c

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

Yes = 1, No = 0

Current Year Score: 1

Despite there not being a formal risk communication plan, there is evidence of a designated position within the government to serve as the primary spokesperson to the public during a public health emergency. The Joint External Evaluation (JEE) for Burundi, conducted in March 2018, states that the country does not have a national multi-hazard plan for preparedness and response to public health emergencies. However, it notes that there exists "a spokesperson at the Ministry of Health, responsible for communication". [1] No further details were available in the report to indicate who this person is or what position they have within the Ministry. Burundi's National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Strategie Nationale de Prevention des Risques et de Gestion des Catastrophes et Plan d'Action National 2012-2015) does not contain any information outlining communication or a spokesperson during public health emergencies. [2] There is no publicly available evidence via the website of the Ministry of Public Health, however, with regards to COVID-19 and recent announcements made on the website of the Ministry of Public Health, it is the Minister, Dr Thaddée NDIKUMANA, who seems to be the only person providing information and updates. There is no specific evidence to suggest that he is the designated person, however. [3,4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Republic of Burundi. "The National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Strategie Nationale de Prevention des Risques et de Gestion des Catastrophes et Plan d'Action National 2012-2015)". [<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 30 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). October 2020. "Press conference by the Minister of Public Health and the Fight against AIDS on the achievements of the first quarter 2020-2021 and the prospects for the second quarter (Conférence de Presse du Ministre de la Santé Publique et de la Lutte contre le Sida sur les réalisations du premier trimestre 2020-2021 et les perspectives du deuxième trimestre)". [<http://minisante.bi/?p=821>]. Accessed 30 October 2020.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 1

There is evidence to suggest that, in the last year, Burundi's public health system has actively shared messages via online media platforms (eg social media, website) to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation, however messages via these platforms are not frequent or daily. According to the Joint External Evaluation (JEE) for Burundi, conducted in March 2018, the country has a global communication plan for proactive media engagement and dissemination of messages on social networks as part of health promotion. In some regions, local radio broadcasts messages in local languages. The national radio covers the entire country. [1] The Burundian President and the Government of Burundi have Twitter accounts, however they are used sporadically to share information on public health issues. [2,3] The Ministry of Public Health uses its website, and has a Facebook page to provide periodic COVID-19 updates or other public health information. Numbers of COVID-19 cases and deaths are not shared at a regular frequency, on a daily, weekly, or even monthly basis. Press releases have been shared and were last published on October 25th, and the one prior to that was September 27th. No specific COVID-19 page exists on the Ministry of Public Health website. [4,5] The Ministry of Agriculture and Livestock's website was inaccessible at the time of research, however it also has a Twitter and Facebook accounts. [6,7,8] There is very irregular evidence that the authorities use these social media platforms to inform the public about public health emergencies.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[2] Twitter. [<https://twitter.com/BurundiGov>]. Accessed 1 November 2020.

[3] Twitter. [<https://twitter.com/BdiPresidence>]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[5] Facebook. Ministry of Public Health. [<https://www.facebook.com/Minist%C3%A8re-de-la-sant%C3%A9-Publique-et-de-la-lutte-contre-le-sida-Burundi-1907262205963702/>]. Accessed 1 November 2020.

[6] Facebook. Ministry of Agriculture and Livestock [<https://www.facebook.com/pages/category/Government-Organization/Minist%C3%A8re-de-l'Environnement-de-l'Agriculture-et-de-l'Elevage-415538168654494/>]. Accessed 1 November 2020.

[7] Twitter. Ministry of Agriculture and Livestock. [<https://twitter.com/BMineagrie>]. Accessed 1 November 2020.

[8] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>].

Attempted access on 29 October 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 0

There is evidence that that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases (in the past two years). According to the 2018 Joint External Evaluation (JEE) report for Burundi, the country has a system of "Regular monitoring of rumors and false information and taking them into account to improve

broadcast messages". [1] There is evidence that misinformation has come from the government regarding the COVID-19 pandemic, where according to Human Rights Watch, President Pierre Nkurunziza's spokesperson recently said "Burundi is an exception because it is a country that has put God first." when speaking about the country's exposure to the virus. There are also reports that authorities "have failed to ensure adequate food, health care, hygiene, and sanitation in some locations" and have failed to "communicate fact-based information on how severe, contagious, and challenging this virus is, under Burundi's usual denial and deflection approach to crisis management, ignores painful lessons learned elsewhere about the outbreak". [2] Additionally, rumors were shared about the reason for the passing of the late president, stating that he had passed due to COVID-19. Government officials, however, have denied these statements saying he died of heart failure. [3] It is still unclear which is true. No other misinformation on infectious diseases shared by senior leaders could be found, however, through a general media search.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[2] Human Rights Watch. March 2020. "Burundi: Any COVID-19 Cover-Up Will Put Lives at Risk". [<https://www.hrw.org/news/2020/03/31/burundi-any-covid-19-cover-will-put-lives-risk>]. Accessed 1 November 2020.

[3] Council on Foreign Relations. June 2020. "Pierre Nkurunziza's Death and the Future of Burundi". [<https://www.cfr.org/blog/pierre-nkurunzizas-death-and-future-burundi>]. Accessed 1 November 2020.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 2.66

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: 57.62

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

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

Input number

Current Year Score: 11.0

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: 8.0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Burundi has, in the past year, issued a restriction, without international/bilateral support, on the export/import of medical goods (eg: medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. WorldAware which describes the general response for Burundi makes no mention of restrictions on the export/import of medical goods. [1] The World Bank COVID-19 preparedness and response plan, explains that the Government of Burundi "decided to (i) quarantine, since March 6, 2020, all passengers from affected countries; (ii) suspend all international flights from March 21, 2020, except flights related to goods transport, sanitary evacuation, humanitarian and diplomatic actions; (iii) suspend all international official missions; and (iv) suspend, since March 19, 2020, the granting of entry visas to Burundi". [2] There are no further details describing the kinds of goods that have not been suspended in the report. There is no evidence of such a restriction on the website of the Ministry of Public Health or other news outlets. The Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4] There is no announcement of such a restriction on the World Health Organisation (WHO) Disease Outbreak News and World Organisation for Animal Health (OIE) Weekly disease information websites. [5,6]

[1] WorldAware. April 2020. "COVID-19 Alert: Burundi Extends International Flight Suspension at BJM Airport Indefinitely as of April 19". [<https://www.worldaware.com/covid-19-alert-burundi-extends-international-flight-suspension-bjm-airport-indefinitely-april-19>]. Accessed 1 November 2020.

[2] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[5] World Health Organisation (WHO). Emergencies preparedness, response. "Disease Outbreak News". [<https://www.who.int/csr/don/en/>]. Accessed 1 November 2020.

[4] World Organisation for Animal Health (OIE). WAHIS Interface. "Weekly Disease Information". [https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 1 November 2020.

3.7.1b

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Burundi has issued a restriction, in the last year, without international/bilateral support, on the export/import of non-medical goods (eg: food, textiles, etc) due to an infectious disease outbreak. WorldAware which describes the general response for Burundi makes no mention of restrictions on the export/import of non-medical goods. [1] The World Bank COVID-19 preparedness and response plan, explains that the Government of Burundi "decided to (i) quarantine, since March 6, 2020, all passengers from affected countries; (ii) suspend all international flights from March 21, 2020, except flights related to goods transport, sanitary evacuation, humanitarian and diplomatic actions; (iii) suspend all international official missions; and (iv) suspend, since March 19, 2020, the granting of entry visas to Burundi". [2] There are no further details describing the kinds of goods that have not been suspended in the report. There is no evidence of such a restriction on the website of the Ministry of Public Health or other news outlets. The Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4] There is no announcement of such a restriction on the World Health Organisation (WHO) Disease Outbreak News and World Organisation for Animal Health (OIE) Weekly disease information websites. [5,6]

[1] WorldAware. April 2020. "COVID-19 Alert: Burundi Extends International Flight Suspension at BJM Airport Indefinitely as of April 19". [<https://www.worldaware.com/covid-19-alert-burundi-extends-international-flight-suspension-bjm-airport-indefinitely-april-19>]. Accessed 1 November 2020.

[2] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[5] World Health Organisation (WHO). Emergencies preparedness, response. "Disease Outbreak News". [<https://www.who.int/csr/don/en/>]. Accessed 1 November 2020.

[4] World Organisation for Animal Health (OIE).WAHIS Interface. "Weekly Disease Information".
[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 1 November 2020.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0, No = 1

Current Year Score: 0

There is evidence that in the past year, Burundi has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. According to WorldAware which describes the international flight suspension in Burundi, as well as the World Bank COVID-19 preparedness and response plan, to mitigate risks, the Government of Burundi "decided to (i) quarantine, since March 6, 2020, all passengers from affected countries; (ii) suspend all international flights from March 21, 2020, except flights related to goods transport, sanitary evacuation, humanitarian and diplomatic actions; (iii) suspend all international official missions; and (iv) suspend, since March 19, 2020, the granting of entry visas to Burundi". [1,2] There is no evidence of such a restriction on the website of the Ministry of Public Health or other news outlets. The Ministry of Agriculture and Livestock website was not accessible at the time of research. [3,4] There is no announcement of such a restriction on the World Health Organisation (WHO) Disease Outbreak News and World Organisation for Animal Health (OIE) Weekly disease information websites. [5,6]

[1] WorldAware. April 2020. "COVID-19 Alert: Burundi Extends International Flight Suspension at BJM Airport Indefinitely as of April 19". [<https://www.worldaware.com/covid-19-alert-burundi-extends-international-flight-suspension-bjm-airport-indefinitely-april-19>]. Accessed 1 November 2020.

[2] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[5] World Health Organisation (WHO). Emergencies preparedness, response. "Disease Outbreak News". [<https://www.who.int/csr/don/en/>]. Accessed 1 November 2020.

[4] World Organisation for Animal Health (OIE).WAHIS Interface. "Weekly Disease Information".
[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 1 November 2020.

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 10.01

2017

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 85.26

2017

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 evidence that Burundi has in the last five years, updated its public workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings. There is no publicly available evidence of such a strategy via the websites of Ministry of Public Health, Ministry of Higher Education and Scientific Research and Ministry of Public Service, Labor and Employment. [1,2,3] The Profile of Human Resources (HR) on Health (profil Ressources Humaines en santé) published by the Ministry of Public Health, which has information on the size of the workforce and shortages was last updated on 2011. [4] According to the 2018 Joint External Evaluation (JEE) for Burundi, the country is preparing to develop a new Strategic HR Development Plan (Plan stratégique de développement des RH) that will cover the period 2019-2023. [5] At the time of research, this plan was still not publically available as no evidence was found.

- [1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.
- [2] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 30 October 2020.
- [3] Ministry of Ministry of Public Service, Labor and Employment (Ministère de la Fonction Publique, du Travail et de l'Emploi). [<http://www.ministereftss.gov.bi/>]. Accessed 30 October 2020.
- [4] Ministry of Public Health and AIDS Control. January 2012. "The Profile of Human Resources (HR) on Health (profil Ressources Humaines en santé)". [http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/burundi/profil_rh_vf_22_janvier_2012_1.pdf]. Accessed 30 October 2020.
- [5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 79

2014

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 Burundi has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility located within the country. The 2018 Joint External Evaluation (JEE) for Burundi, states that tertiary hospitals in Burundi have isolation units, but does not note their capabilities for treating patients with highly communicable diseases [1] However, there is some evidence that the country has taken steps to address suspected Ebola cases. The Prince Regent Charles Hospital (l'Hôpital Prince Régent Charles) for example, has an isolation centre for cholera cases which later developed for the management of cases of Ebola virus disease. [2] In 2016 the Burundi government in collaboration with UNICEF has set up Rukaramu Ebola isolation centre (centre d'isolement de Rukaramu). This isolation centre may also be used for the management and treatment of other health emergencies such as cholera epidemics. [3] However, there is no evidence that these facilities are designed to both isolate and safely treat suspected cases of highly communicable diseases. In October 2019, ReliefWeb shared an Ebola Preparedness overview for Burundi, which showed that Burundi only had 10% of the target capacity to isolate patients in the event that there was another Ebola outbreak. It specifically reported that there were no permanent isolation units established and functional; but that "29 temporary isolation units have been established at 24 border entry points and 5 hospitals". [4] A World Bank April

2020 report that describes Burundi's COVID-19 preparedness and response capacities, states that "there is no public health facility well equipped to treat COVID-19 cases and only one lab has capacity for COVID-19 testing in Burundi" and continues to outline some of the environmental risks which include, "isolation capacity in hospital ICUs, and laboratories". [5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

[2] Agence Burundaise de Presse (ABP). 2018. "BURUNDI PREPARES TO FACE EBOLA". [<http://abpinfos.com/burundi-prepares-to-deal-with-ebola>]. Accessed 31 October 2020.

[3] AGnews. 2016. "Burundi: EBOLA Isolation Center Rukaramu Now Available". [<https://burundi-agnews.org/santee/burundi-le-centre-disolement-ebola-de-rukaramu-desormais-disponible/>]. Accessed 31 October 2020.

[4] ReliefWeb. October 2019. "BURUNDI Ebola Preparedness Dashboard". [https://reliefweb.int/sites/reliefweb.int/files/resources/BDI_evd_preparedness_dashboard_Oct19.pdf]. Accessed 31 October 2020.

[5] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 31 October 2020.

4.1.2c

Does the country meet one of the following criteria?

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has demonstrated capacity to expand isolation capacity or has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

The 2018 Joint External Evaluation (JEE) for Burundi, states that tertiary hospitals in Burundi have isolation units, but does not note their capabilities for treating patients with highly communicable diseases [1] However, there is some evidence that the country has taken steps to address suspected Ebola cases. The Prince Regent Charles Hospital (l'Hôpital Prince Régent Charles) for example, has an isolation centre for cholera cases which later developed for the management of cases of Ebola virus disease. [2]

In 2016 the Burundi government in collaboration with UNICEF has set up Rukaramu Ebola isolation centre (centre d'isolement de Rukaramu). This isolation centre may also be used for the management and treatment of other health emergencies such as cholera epidemics. [3] However, there is no evidence that these facilities are designed to both isolate and safely treat suspected cases of highly communicable diseases. In October 2019, ReliefWeb shared an Ebola Preparedness overview for Burundi, which showed that Burundi only had 10% of the target capacity to isolate patients in the event that there was another Ebola outbreak. It specifically reported that there were no permanent isolation units established and functional; but that "29 temporary isolation units have been established at 24 border entry points and 5 hospitals". [4]

A World Bank April 2020 report that describes Burundi's COVID-19 preparedness and response capacities, states that "there

is no public health facility well equipped to treat COVID-19 cases and only one lab has capacity for COVID-19 testing in Burundi" and continues to outline some of the environmental risks which include, "isolation capacity in hospital ICUs, and laboratories". [5] No further information was found on Burundi's capacity to expand isolation capacity.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

[2] Agence Burundaise de Presse (ABP). 2018. "BURUNDI PREPARES TO FACE EBOLA". [<http://abpinfos.com/burundi-prepares-to-deal-with-ebola>]. Accessed 31 October 2020.

[3] AGnews. 2016. "Burundi: EBOLA Isolation Center Rukaramu Now Available". [<https://burundi-agnews.org/santee/burundi-le-centre-disolement-ebola-de-rukaramu-desormais-disponible/>]. Accessed 31 October 2020.

[4] ReliefWeb. October 2019. "BURUNDI Ebola Preparedness Dashboard". [https://reliefweb.int/sites/reliefweb.int/files/resources/BDI_evd_preparedness_dashboard_Oct19.pdf]. Accessed 31 October 2020.

[5] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Documents-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 31 October 2020.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 0

There is evidence to suggest that Burundi has a national procurement protocol in place, however there is insufficient evidence to suggest that it is utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (such as equipment, reagents and media) and medical supplies (equipment, PPE) for routine needs.

The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Directorate of Pharmacies, Drugs and Laboratories (DPML)) is regarded as the Pharmaceutical Regulatory Authority of Burundi which procures essential medicines, medical devices, laboratory products and laboratory equipments of Burundi through the Central Purchasing Office for Essential Medicines, Medical Devices, Laboratory Products and Laboratory Equipments of Burundi (Centrale d'Achat de Médicaments Essentiels, des Dispositifs Médicaux, de Produits et Matériels de Laboratoire du Burundi (CAMEBU)). CAMEBU procures the "country's medical needs through calls for tenders and examines all local and international offers. The legal deadline of the procurement procedure in theory is 120 days but most often reaches 8 months". [1]

No further evidence was found evidencing that the Ministry of Health and Agriculture can utilize this protocol to acquire laboratory items and medical equipment, and not just to issue tenders or hire staff. The website of the Ministry of Public Health does not include any additional information on laboratory or medical supply procurement protocol. [2] The website

for the Ministry of Agriculture and Livestock was not accessible at the time of research. DPML does not have a website. The 2018 Joint External Evaluation (JEE) for Burundi does not provide evidence with regards to laboratory or medical supply procurement protocols. [3]

[1] Government Action Observatory (Observatoire de l'Action Gouvernementale (O.A.G)). March 2014. "Analysis of the supply system in Burundi, distribution and management of the Medicine (Analyse du système d'approvisionnement, au Burundi de distribution et de gestion du médicament)".

[http://www.oag.bi/IMG/pdf/Systeme_d_approvisionnement_en_Medicaments_A6.pdf]. Accessed 1 November 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 0

There is no evidence to suggest that Burundi has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency.

The 2018 Joint External Evaluation (JEE) for Burundi expressly states that the country lacks a stockpile of medical supplies and any agreements with manufacturers or distributors to obtain medical supplies to cope with public health emergency. It also does not have any plan defining the procedures for sending, receiving and distribution of medical supplies for national use during a public health emergency. Furthermore, the JEE notes that the country does not have any regional or international agreements for the acquisition, sharing and distribution of medical supplies. [1]

The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Direction des Pharmacies, des Médicaments et des Laboratoires (DPML)) is considered as the pharmaceutical regulatory authority of Burundi and responsible for registration of authorisation of new medicines. However, DPML does not have a website. There is no further evidence available via the websites of Ministry of Public Health, Ministry of Defence and Ministry of Public Security. [2,3,4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnc.bi/>]. Accessed 30 October 2020.

[4] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30

October 2020.

4.2.2b

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

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

Current Year Score: 0

There is no evidence that Burundi has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The 2018 Joint External Evaluation (JEE) for Burundi makes no mention of stockpiles for laboratory supplies. [1] The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Directorate of Pharmacies, Drugs and Laboratories (DPML)) is regarded as the Pharmaceutical Regulatory Authority of Burundi which procure essential medicines, medical devices, laboratory products and laboratory equipments of Burundi through the Central Purchasing Office for Essential Medicines, Medical Devices, Laboratory Products and Laboratory Equipments of Burundi (Centrale d'Achat de Médicaments Essentiels, des Dispositifs Médicaux, de Produits et Matériels de Laboratoire du Burundi (CAMEBU)). However, there is no mention that DPML maintains a stockpile of laboratory supplies and DPML does not have an online presence. [2] The website of the Ministry of Public Health does not include any additional information on laboratory supply stockpiles. [3] The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4] There is no further evidence available via the websites of Ministry of Defence and Ministry of Public Security. [5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Government Action Observatory (Observatoire de l'Action Gouvernementale (O.A.G)). March 2014. "Analysis of the supply system in Burundi, distribution and management of the Medicine (Analyse du système d'approvisionnement, au Burundi de distribution et de gestion du médicament)".

[http://www.oag.bi/IMG/pdf/Systeme_d_approvisionnement_en_Medicaments_A6.pdf]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 1 November 2020.

[5] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 30 October 2020.

[6] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30 October 2020.

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence to suggest that Burundi conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency.

The 2018 Joint External Evaluation (JEE) for Burundi expressly states that the country lacks a stockpile of medical supplies and any agreements with manufacturers or distributors to obtain medical supplies to cope with public health emergency. And there is no mention of stockpiles for laboratory supplies or other types of stockpiles available. It also does not have any plan defining the procedures for sending, receiving and distribution of medical or laboratory supplies for national use during a public health emergency. Furthermore, the JEE notes that the country does not have any regional or international agreements for the acquisition, sharing and distribution of medical supplies. And there is no mention of an annual review of stockpiles. [1]

The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Directorate of Pharmacies, Drugs and Laboratories (DPML)) is regarded as the Pharmaceutical Regulatory Authority of Burundi which procures essential medicines, medical devices, laboratory products and laboratory equipments of Burundi through the Central Purchasing Office for Essential Medicines, Medical Devices, Laboratory Products and Laboratory Equipments of Burundi (Centrale d’Achat de Médicaments Essentiels, des Dispositifs Médicaux, de Produits et Matériels de Laboratoire du Burundi (CAMEBU)). However, there is no mention that DPML maintains a stockpiles or requires annual reviews of stockpiles. DPML does not have an online presence. There is no further evidence available via the websites of Ministry of Public Health, Ministry of Defence and Ministry of Public Security. [2,3,4]

[1] World Health Organisation (WHO). 2018. “Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)”. [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnc.bi/>]. Accessed 30 October 2020.

[4] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30 October 2020.

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no evidence that Burundi has a plan/agreement to leverage domestic manufacturing capacity to produce or to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency.

The 2018 Joint External Evaluation (JEE) for Burundi expressly states that the country lacks a stockpile of medical supplies and any agreements with manufacturers or distributors to obtain medical supplies to cope with public health emergency. It also does not have any plan defining the procedures for sending, receiving and distribution of medical supplies for national use during a public health emergency. Furthermore, the JEE notes that the country does not have any regional or international agreements for the acquisition, sharing and distribution of medical supplies. [1]

There is evidence that Burundi was the recipient, along with a number of other countries, of PPEs through funding with Gavi and UNICEF as part of COVID-19 response, however no plan/agreement to leverage capacity to procure or procure medical supplies is tied with this partnership. [2] The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Direction des Pharmacies, des Médicaments et des Laboratoires (DPML)) is considered as the pharmaceutical regulatory authority of Burundi and responsible for registration of authorisation of new medicines. However, DPML does not have a website. There is no further evidence available via the websites of Ministry of Public Health, Ministry of Defence and Ministry of Public Security. [3,4,5]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] UNICEF. April 2020. "COVID-19: Gavi and UNICEF to secure equipment and diagnostics for lower-income countries". [<https://www.unicef.org/press-releases/covid-19-gavi-and-unicef-secure-equipment-and-diagnostics-lower-income-countries>]. Accessed 20 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[4] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>]. Accessed 30 October 2020.

[5] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30 October 2020.

4.2.3b

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is no evidence that Burundi has a plan/agreement to leverage domestic manufacturing capacity to produce or to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The 2018 Joint External Evaluation (JEE) for Burundi makes no mention of producing or procuring laboratory supplies. [1] The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Directorate of Pharmacies, Drugs and Laboratories (DPML)) is regarded as the Pharmaceutical Regulatory Authority of Burundi which procure essential medicines, medical devices, laboratory products and laboratory equipments of Burundi through the Central Purchasing Office for Essential Medicines, Medical Devices, Laboratory Products and Laboratory Equipments of Burundi (Centrale d'Achat de Médicaments Essentiels, des Dispositifs Médicaux, de Produits et Matériels de Laboratoire du Burundi (CAMEBU)). However, there is no mention that DPML maintains can leverage procurement or production of laboratory supplies during a public health

emergency and DPML does not have an online presence. [2] The website of the Ministry of Public Health does not include any additional information on laboratory supplies. [3] The website for the Ministry of Agriculture and Livestock was not accessible at the time of research. [4] There is no further evidence available via the websites of Ministry of Defence and Ministry of Public Security. [5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Government Action Observatory (Observatoire de l'Action Gouvernementale (O.A.G)). March 2014. "Analysis of the supply system in Burundi, distribution and management of the Medicine (Analyse du système d'approvisionnement, au Burundi de distribution et de gestion du médicament)".

[http://www.oag.bi/IMG/pdf/Systeme_d_approvisionnement_en_Medicaments_A6.pdf]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 1 November 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>].

Attempted access on 1 November 2020.

[5] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>].

Accessed 30 October 2020.

[6] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30

October 2020.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. The 2018 Joint External Evaluation (JEE) for Burundi expressly states that the country lacks any plan defining the procedures for sending, receiving and distribution of medical countermeasures for national use during a public health emergency. [1] There is no additional evidence available via the websites of the Ministry of Public Health, Ministry of Defence and Ministry of Public Security. [2,3,4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[3] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdnac.bi/>].

Accessed 30 October 2020.

[4] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30 October 2020.

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

4.3.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has a plan outlining procedures for receiving health personnel from other countries during a public health emergency or that it is party to a regional agreement for deploying and receiving personnel. According to the 2018 Joint External Evaluation (JEE) for Burundi, the country does not have a procedure or policy in place to organize the country's active participation in international systems of sending and receiving human resources in the case of public health emergency. [1] There is no additional available evidence in either the Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi) or the National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015). [2,3] No evidence was available on the websites of Ministries of Public Health, Defence and Public Security. [4,5,6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[2] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [<https://tinyurl.com/yy6c3eol>]. Accessed 30 October 2020.

[3] Burundi Biodiversity. "National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015)". [<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[5] Ministry of National Defence (Ministère de la défense nationale et des anciens combattants). [<https://www.mdna.bi/>]. Accessed 30 October 2020.

[6] Ministry of Public Security (Ministère de la Sécurité Publique). [<http://www.securitepublique.gov.bi/>]. Accessed 30 October 2020.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 3

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 85.1

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: 15.07

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that the Burundian government has issued a legislation, a policy or a public statement committing to provide prioritised health care services to healthcare workers who become sick as a result of responding to a public health emergency. There is no publicly available evidence via the website of the Ministry of Public Health and the Joint External Evaluation (JEE) for Burundi conducted in March 2018. The JEE notes the absence of a public health emergency response plan. It also notes that there exist bonuses and allowances for healthcare workers, but there is no policy on priority accorded to healthcare workers in receiving treatment. [1,2] There is no such provision in the National Health Development Plan 2011-2015 (Plan national de développement sanitaire) or in the National Health Policy 2016-2025 (Politique Nationale de Sante). [3,4] No updated version of the National Health Development Plan was found.

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/politiques-et-strategies>]. Accessed 30 October 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control. 2011 - 2015. "National Health Development Plan (Plan national de développement sanitaire)". [<https://www.prb.org/wp-content/uploads/2020/06/Burundi-Plan-National-de-D%C3%A9veloppement-Sanitaire-2011-2015.pdf>]. Accessed 1 November 2020.

[4] Ministry of Public Health and AIDS Control. 2016 - 2025. "National Health Policy (Politique Nationale de Sante)".

[<http://minisante.bi/wp-content/uploads/politiques/Politique%20Nationale%20Sante%202016%202025%20VF%201052016.pdf>].

Accessed 17 November 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a system in place for public health officials and healthcare workers to communicate during a public health emergency.

There are no provisions regarding communications with healthcare workers during a public health emergency on the website of the Ministry of Public Health. [1] The Joint External Evaluation, conducted in March 2018 notes that Burundi is in the process of setting up an EOC with the support of the World Health Organization (WHO). However, the Ministry of Public Health has put in place structures and initiatives to manage communication during public health emergencies by creating an Information, Education and Communication (service d'Information, Education et Communication (IEC)) service responsible for social mobilisation and communication during public health emergencies. [2] IEC does not have an independent online presence.

Burundi has a Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi) and a National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015), but neither provide for a communication system between public health officials and healthcare workers, and do not include public health emergencies. [3,4]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 30 October 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 30 October 2020.

[3] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [<https://tinyurl.com/yy6c3eol>]. Accessed 30 October 2020.

[4] Burundi Biodiversity. "National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015)". [<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 1 November 2020.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system for public health officials and healthcare workers to communicate during an emergency which includes the private sector.

There are no provisions regarding communications with healthcare workers during a public health emergency on the website of the Ministry of Public Health. [1] The Joint External Evaluation, conducted in March 2018 notes that Burundi is in the process of setting up an EOC with the support of the World Health Organization (WHO). However, the Ministry of Public Health has put in place structures and initiatives to manage communication during public health emergencies by creating an Information, Education and Communication (service d'Information, Education et Communication (IEC)) service responsible for social mobilisation and communication during public health emergencies. IEC does not have an independent online presence and there is no evidence that public health officials can reach medical providers from both sectors. [2]

Burundi has an Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi) and a National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015), but neither provide for a communication system between public health officials and healthcare workers, and do not include public health emergencies. [3,4]

- [1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/actualites1]. Accessed 30 October 2020.
- [2] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 30 October 2020.
- [3] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, Preparedness and Response to Emergencies in Burundi 2013-2016 (Pour le Renforcement des Capacites Nationales pour la Reduction des Risques, la Preparation et la Reponse aux Urgences au Burundi)". [https://tinyurl.com/yy6c3eol]. Accessed 30 October 2020.
- [4] Burundi Biodiversity. "National Strategy and Action Plan for Risk Prevention and Disaster Management 2012-2015 (Stratégie nationale de prévention des risques et de gestion des catastrophes et plan d'action national 2012-2015)". [https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro]. Accessed 1 November 2020.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a national public health system monitoring for and tracking the number of health care associated infections that take place in healthcare facilities.

There is no publicly available evidence on the website of the Ministry of Public Health. [1] As per the World Health Organisation (WHO) Library of National Action Plans, Burundi does not have a national AMR plan. [2] According to the Joint External Evaluation for Burundi conducted in March 2018, the country does not have a national plan to fight healthcare-associated infections and there are no surveillance systems for risk group in hospitals. It notes that guidelines for the protection of health personnel are insufficient and the country suffers from the lack of training of health personnel in the fight against healthcare-associated infections. [3]

- [1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [http://www.minisante.bi/index.php/actualites1]. Accessed 31 October 2020.
- [2] World Health Organisation(WHO). "Library of national action plans". [http://www.who.int/drugresistance/action-plans/library/en/]. Accessed 1 November 2020.
- [3] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1]. Accessed 31 October 2020.

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has a national requirement for ethical review before beginning a clinical trial. According to the 2011 Pharmaceutical Country Profile for Burundi (profil pharmaceutique 2011 du Burundi) which was carried out by Ministry of Public Health in collaboration with the World Health Organisation (WHO), the country has legal provisions requiring authorization before beginning clinical trials, however, there are no additional laws requiring the approval of an ethics committee or an Institutional Review Board approval. The law requires the registration of clinical trials and only the Minister of Public Health is responsible to grant an authorization of clinical trials. [1] There is no updated or additional evidence available from the websites of Ministry of Public Health and Ministry of Higher Education and Scientific Research websites or the 2018 Joint External Evaluation (JEE) for Burundi. [2,3,4]

[1] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (Profil Pharmaceutique du Pays)".

[https://www.who.int/medicines/areas/coordination/Burundi_PSCPNarrativeQuestionnaire_FR_27072011.pdf?ua=1].

Accessed 31 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 31 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)".

[<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Burundi has an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. There is no evidence of such a process on the websites of the Ministry of Public Health and the Ministry of Higher Education, Scientific Research. [1,2] According to the 2011 Pharmaceutical Country Profile for Burundi (profil pharmaceutique 2011 du Burundi) which was carried out by the Ministry of Public Health in collaboration with the World Health Organisation (WHO), the country has legal provisions requiring authorization before

beginning clinical trials, however, there are no additional laws requiring the approval of an ethics committee or an Institutional Review Board approval. The law requires the registration of clinical trials and only the Minister of Public Health is responsible to grant an authorization of clinical trials. [3] The country's drug regulatory authority - the Department of Pharmacies, Drugs and Laboratories (Direction de la Pharmacie du Médicaments et des Laboratoires (DPML)) - within the Ministry of Public Health, does not have a website. No further information was provided in the 2018 Joint External Evaluation (JEE) report for Burundi. [4]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[2] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 31 October 2020.

[3] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (Profil Pharmaceutique du Pays)". [https://www.who.int/medicines/areas/coordination/Burundi_PSCPNarrativeQuestionnaire_FR_27072011.pdf?ua=1]. Accessed 31 October 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Burundi has a government agency responsible for approving new medical countermeasures (MCM) for humans. The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Direction des Pharmacies, des Médicaments et des Laboratoires (DPML)) is considered as the pharmaceutical regulatory authority of Burundi and responsible for registration of authorisation of new medicines. However, DPML does not have a website, and this cannot be verified. [1] According to section 5.2 of the 2011 Pharmaceutical Country Profile for Burundi (profil pharmaceutique 2011 du Burundi) which was carried out by Ministry of Public Health in collaboration with the World Health Organisation (WHO), the legal provisions do not require issuing a license for registration or marketing of pharmaceutical products in Burundi and there is no explicit, publicly available criteria for the assessment of applications for authorisation and approving any new pharmaceutical products. The provisions only impose the payment of a fee for issuing registration and marketing authorisations for medicinal products based of demands. [2] No additional evidence was found on the website for the Ministry of Public Health, Ministry of Higher Education and Scientific Research, and the 2018 Joint External Evaluation (JEE) for Burundi. [3,4,5]

[1] Government Action Observatory (Observatoire de l'Action Gouvernementale (O.A.G)). March 2014. "Analysis of the supply system in Burundi, distribution and management of the Medicine (Analyse du système d'approvisionnement, au Burundi de distribution et de gestion du médicament)". [http://www.oag.bi/IMG/pdf/Systeme_d_approvisionnement_en_Medicaments_A6.pdf]. Accessed 31 October 2020.

[2] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (Profil Pharmaceutique du Pays)".

[https://www.who.int/medicines/areas/coordination/Burundi_PSCPNarrativeQuestionnaire_FR_27072011.pdf?ua=1]. Accessed 31 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 31 October 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

4.7.2b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Burundi has an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies. The Department of Pharmacies, Drugs and Laboratories within the Ministry of Public Health (Direction des Pharmacies, des Médicaments et des Laboratoires (DPML)) is considered as the pharmaceutical regulatory authority of Burundi and responsible for registration of authorisation of new medicines. However, DPML does not have a website and there is no evidence available to suggest that there exists an expedited process for approving MCMs. [1,2] There is no further publicly available evidence via the websites of the Ministry of Public Health and the Ministry of Higher Education and Scientific Research. [3,4]

[1] Government Action Observatory (Observatoire de l'Action Gouvernementale (O.A.G)). March 2014. "Analysis of the supply system in Burundi, distribution and management of the Medicine (Analyse du système d'approvisionnement, au Burundi de distribution et de gestion du médicament)".

[http://www.oag.bi/IMG/pdf/Systeme_d_approvisionnement_en_Medicaments_A6.pdf]. Accessed 1 November 2020.

[2] Ministry of Public Health. World Health Organisation. 27 July 2011. "The Pharmaceutical Country Profile for Burundi (PROFIL PHARMACEUTIQUE DU PAYS)". [<http://apps.who.int/medicinedocs/documents/s19099fr/s19099fr.pdf>]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[4] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 31 October 2020.

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that pandemics are integrated into the national disaster risk reduction (DRR) strategy and there is no standalone DRR strategy for pandemics. According to the 2018 Joint External Evaluation for Burundi, it has the National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Stratégie Nationale de prévention des risques de gestion des Catastrophes et Plan d'Action 2012-2015). In this context, a national platform for risk prevention and management of disasters was created under the authority of the Ministry of Public Security in line with community and regional platforms, however, "in public health component the collaboration between the three sectors (the human health, animal health and public security) and legal norms and procedures are nonexistent". [1,2] There is no updated version of SNPRGC available at the time of research. Also, there exists the Action Plan for Strengthening National Capacities for Risk Reduction, emergency preparedness and response in Burundi (Plan d'action pour le renforcement des capacités nationales pour la réduction des risques, la préparation et la réponse aux urgences au Burundi 2013-2016), which noted the risk of epidemics and the necessity of strengthening national capacities in the field of risk reduction, emergency preparedness and response. [3] No additional information has been found from Ministry of Public Health's website or the 2018 Joint External Evaluation for Burundi. [4]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

[2] Republic of Burundi. "The National Strategy for Risk Prevention and Disaster Risk Management Action Plan (SNPRGC) (Strategie Nationale de Prevention des Risques et de Gestion des Catastrophes et Plan d'Action National 2012-2015)".

[<https://bi.chm-cbd.net/fr/documents/strat-natio-preven-risq-gest-catastro>]. Accessed 31 October 2020.

[3] Republic of Burundi. August 2013. "Action Plan for Strengthening National Capacities for Risk Reduction, emergency preparedness and response, 2013-2016".

[[https://www.ifrc.org/docs/IDRL/Plan%20d'Action%20National%20en%20RRC%20\(2013-2016\).pdf](https://www.ifrc.org/docs/IDRL/Plan%20d'Action%20National%20en%20RRC%20(2013-2016).pdf)]. Accessed 31 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 0

There is no evidence to suggest that Burundi has cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to public health emergencies.

The Joint External Evaluation for Burundi, conducted in March 2018, states that the country does not have any protocols or MOUs in place for cross-border collaboration in case of a public health emergency of international concern or any cross-border collaboration for public health emergency management. [1] However, Burundi is a partner state of East African Community (EAC) alongside with Kenya, Rwanda, South Sudan, United Republic of Tanzania and Uganda. Prevention and control of communicable and non-communicable diseases is one of the objectives of EAC. [2] In February 2018, Burundi and other members of EAC issued a joint communique at their 2018 EAC joint heads of state retreat. In the communique, members resolved to strengthen the network of medical reference laboratories and the regional rapid response system in order to protect the region from health threats including pandemics, bio-terrorism and common agents. [3]

In December 2019, a communication statement by the World Health Organization (WHO) announced that "The Democratic Republic of the Congo (DRC) and its nine neighbouring countries today [including Burundi], during a meeting of ministers, senior health and immigration officials and partners in Goma, endorsed a joint framework to strengthen cross-border collaboration on preparedness and response to Ebola virus and other disease outbreaks". [4] No evidence, however, was found of signed agreements of MoUs for these initiatives. No further evidence was available on the website of the Ministry of Public Health. [5] According to the World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national level and within certain districts as well as finalizing the Public Health Emergency Operations Center (EOC). To date, there is insufficient evidence to show that the EOC has been finalized and established however. [6]

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)".

[<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

[2] East African Community. "Disease Prevention and Control Unit". [<https://www.eac.int/health/disease-prevention>]. Accessed 1 November 2020.

[3] East African Community. "2018 EAC Joint heads of State Retreat Communique" [https://www.scribd.com/document/372189203/Communique-2018-Joint-Eac-Heads-of-State-Retreat-on-Infrastructure-and-Health-Financing-and-Development#from_embed]. Accessed 1 November 2020.

[4] World Health Organization (WHO). October 2019. "Ten African countries endorse cross-border collaboration framework on Ebola outbreak preparedness and response". [<https://www.afro.who.int/news/ten-african-countries-endorse-cross-border-collaboration-framework-ebola-outbreak-preparedness>]. Accessed 1 November 2020.

[5] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[6] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project". [<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

5.2.1b

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

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

Current Year Score: 0

There is no evidence that Burundi has cross-border agreements, protocols or MOUs with neighbouring countries, or as part of a regional group, with regards to animal health emergencies. The Joint External Evaluation for Burundi, conducted in March 2018, states that the country does not have any protocols or MOUs in place for cross-border collaboration in case of a public health emergency of international concern or any cross-border collaboration for public health emergency management. [1] There is no publicly available evidence via the website of the Ministry of Public Health and Burundi's International Agreement database section on the website of the Food and Agriculture Organisation of the United Nations (FAO). [2,3] Burundi is a partner state of East African Community (EAC) alongside with Kenya, Rwanda, South Sudan, United Republic of Tanzania and Uganda. Prevention and control of communicable and non-communicable is one of the objectives of EAC. [4] In February 2018, Burundi and other members of EAC issued a joint communique at their 2018 EAC joint heads of state retreat. In the communique, members resolved to strengthen the network of medical reference laboratories and the regional rapid response system in order to protect the region from health threats including pandemics, bio-terrorism and common agents but nothing on animal health emergencies specifically. [5] In December 2019, a communication statement by the World Health Organization (WHO) announced that "The Democratic Republic of the Congo (DRC) and its nine neighbouring countries today [including Burundi], during a meeting of ministers, senior health and immigration officials and partners in Goma, endorsed a joint framework to strengthen cross-border collaboration on preparedness and response to Ebola virus and other disease outbreaks". [6] No evidence, however, was found of signed agreements of MoUs for these initiatives and no details were provided to determine whether the disease outbreaks were pertinent to animals as well.

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation of IHR Core Capacities of the Republic of Burundi: Mission report 11-16 March 2018 (Evaluation externe conjointe des principales capacités RSI de la République du Burundi)". [<https://apps.who.int/iris/bitstream/handle/10665/273156/WHO-WHE-CPI-REP-2018.19-fre.pdf?sequence=1>]. Accessed 31 October 2020.

[2] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[3] Food and Agriculture Organisation of United Nation (FAO). FAOLEX Database. "Burundi - International agreements". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=BDI]. Accessed 1 November 2020.

[4] East African Community. "Disease Prevention and Control Unit". [https://www.eac.int/health/disease-prevention]. Accessed 1 November 2020.

[5] East African Community. "2018 EAC Joint heads of State Retreat Communique" [https://www.scribd.com/document/372189203/Communique-2018-Joint-Eac-Heads-of-State-Retreat-on-Infrastructure-and-Health-Financing-and-Development#from_embed]. Accessed 1 November 2020.

[6] World Health Organization (WHO). October 2019. "Ten African countries endorse cross-border collaboration framework on Ebola outbreak preparedness and response". [https://www.afro.who.int/news/ten-african-countries-endorse-cross-border-collaboration-framework-ebola-outbreak-preparedness]. Accessed 1 November 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 2

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: 1

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 insufficient evidence to suggest that Burundi has allocated national funds to improve capacity to address epidemic threats within the past three years. According to the World Bank report that describes Burundi's COVID-19 preparedness and

response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center (EOC). To date, there is insufficient evidence to show that the EOC has been finalized and established however. [1] No details are provided as to whether Burundi financed the initiative. According to The Global Fund Observer, in 2018, the Global Fund approved a malaria grant (\$36.7 million) and a TB/HIV grant (\$35.6 million) to Burundi on the funding requests submitted by the Burundi country coordinating mechanism (CCM) and the government also has made a commitment of \$16.8 million for the co-financing requirements for fighting against malaria in 2019. [2] There is no further available evidence from Ministry of Public Health and Ministry of Foreign Affairs websites. [3,4] United Nation and WHO press release pages do not provide any additional evidence. [5,6]

[1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project".

[<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[2] Garmaise. David. 6 February 2018. "Political instability, decreasing resources and a resurgent malaria epidemic: A challenging environment for Global Fund grants in Burundi". Independent Observer of Global Fund.

[http://www.aidspace.org/gfo_article/political-instability-decreasing-resources-and-resurgent-malaria-epidemic-challenging]. Accessed 1 November 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[4] Ministry of Foreign Affairs (Ministre des Affaires Etrangères). [<https://www.mae.gov.bi/>]. Accessed 1 November 2020.

[5] United Nation. "Meeting coverage and press Releases". [<https://www.un.org/press/en/search/content/burundi>].

Accessed 1 November 2020.

[6] World Health Organisation, Regional Office for Africa. [<https://www.afro.who.int/search/node?keys=burundi>]. Accessed 1 November 2020.

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence of a publicly identified special emergency public financing mechanism and funds which Burundi can access in the face of a public health emergency. Burundi is on the list of countries eligible for International Development Association (IDA) funding, and is therefore eligible for the World Bank's Pandemic Emergency Financing Facility which provides financing to low-income countries affected by a large-scale disease outbreak. [1,2] Burundi has also received funding from IDA to strengthen its national health system and update research in response to COVID-19. [3] Burundi is a member of the African Public Health Emergency Fund (APHEF or the Fund) which "was established by the Regional Committee in 2012 with the aim of providing catalytic resources for initiating timely responses to public health emergencies". APHEF funds contributed to the provision of emergency medical supplies and prevention of disease epidemics especially cholera and other diarrhoea diseases, malaria and acute respiratory infections in Burundi. The last fund was received in 2014. [4]

[1] International Development Association (IDA). "Borrowing countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 1 November 2020.

[2] Pandemic Emergency Financing. December 2017. "Pandemic Emergency Financing Facility. Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 1 November 2020.

[3] International Development Association (IDA). April 2020. "Burundi to Strengthen National Health System and Preparedness in the face of COVID- 19". [<https://www.worldbank.org/en/news/press-release/2020/04/14/burundi-to-strengthen-national-health-system-and-preparedness-in-the-face-of-covid-19>]. Accessed 17 November 2020.

[4] World Health Organisation (WHO). Regional Office for Africa. 21 August 2016. "The African Public Health Emergency Fund: The Way Forward (AFR/RC66/15)". [https://afro.who.int/sites/default/files/2017-07/afr-rc66-15-en-0710_0.pdf]. Accessed 1 November 2020.

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

5.5.4a

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

- Support other countries to improve capacity to address epidemic threats by providing financing or support?

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

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

Current Year Score: 0

There is no evidence that senior leaders (president or ministers) have made a public commitment to support other countries or to improve its own domestic capacity to address epidemic threats by providing or expanding financing or support in the past three years. According to a World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center (EOC), although it is still unclear whether the EOC has been totally established or not. [1] There is no evidence, however, of senior leaders making an announcement to strengthen the country's public health capacity or that these post-Ebola outbreak efforts were in line with any public commitment to do so. In 2018, the Global Fund approved a malaria grant (\$36.7 million) and a TB/HIV grant (\$35.6 million) to Burundi on the funding requests submitted by the Burundi country coordinating mechanism (CCM) and the government made a commitment of \$16.8 million for the co-financing requirements for fighting against malaria in 2019. [2] However, again, no evidence suggests that these efforts are in line with a public commitment to improve public health capacity and no announcement on the matter was made by a senior leader. Burundi has also received funding from IDA to strengthen its national health system and update research in response to COVID-19. Again, no public statements from senior leaders have been made with regards to strengthening the national health system as it relates to this. [3] There is no further available evidence from Ministry of Public Health and Ministry of Foreign Affairs websites. [4,5] United Nations and World Health Organization (WHO) press release pages do not provide any additional evidence. [6,7]

[1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project".

[<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[2] Garmaise. David. 6 February 2018. "Political instability, decreasing resources and a resurgent malaria epidemic: A challenging environment for Global Fund grants in Burundi". Independent Observer of Global Fund.

[http://www.aidspace.org/gfo_article/political-instability-decreasing-resources-and-resurgent-malaria-epidemic-challenging]. Accessed 1 November 2020.

[3] International Development Association (IDA). April 2020. "Burundi to Strengthen National Health System and Preparedness in the face of COVID- 19". [<https://www.worldbank.org/en/news/press-release/2020/04/14/burundi-to-strengthen-national-health-system-and-preparedness-in-the-face-of-covid-19>]. Accessed 17 November 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[5] Ministry of Foreign Affairs (Ministre des Affaires Etrangères). [<https://www.mae.gov.bi/>]. Accessed 1 November 2020.

[6] United Nation. "Meeting coverage and press Releases". [<https://www.un.org/press/en/search/content/burundi>].

Accessed 1 November 2020.

[7] World Health Organisation, Regional Office for Africa. [<https://www.afro.who.int/search/node?keys=burundi>]. Accessed 1 November 2020.

5.5.4b

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

- Provided other countries with financing or technical support to improve capacity to address epidemic threats?

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

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

Current Year Score: 1

There is evidence that Burundi has, in the past three years, requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. But there is no evidence that the country has provided other countries with financing or technical support to improve capacity to address epidemic threats.

According to a World Bank report that describes Burundi's COVID-19 preparedness and response capacities, in 2018, the Government of Burundi began preparing for a potential Ebola outbreak and began strengthening internal public health response capacities such as upgrading the national laboratory (INSP), establishing rapid intervention teams at both national and within certain districts as well as finalizing the Public Health Emergency Operations Center (EOC), although it is still unclear whether the EOC has been totally established or not. [1]

As well, according to The Global Fund Observer, in 2018, the Global Fund approved a malaria grant (\$36.7 million) and a TB/HIV grant (\$35.6 million) to Burundi on the funding requests submitted by the Burundi country coordinating mechanism (CCM) and the government also has made a commitment of \$16.8 million for the co-financing requirements for fighting against malaria in 2019. [2] The Georgetown Infectious Disease Atlas (GIDA) Global Health Security Tracker reports that Burundi has received 863.96M USD. For example, through the USAID funded multi-country program Measure Evaluation IV, countries, including Burundi, are supported to "strengthen their systems to generate high quality health information that is used for decision making at local, national, and global levels". [3,4]

No data is available, however, with regards to Burundi being a funder to support other countries' capacity to respond to public health emergencies. [3] There is no further available evidence from Ministry of Public Health and Ministry of Foreign Affairs websites. [5,6] United Nation and WHO press release pages do not provide any additional evidence. [7,8]

[1] The World Bank. April 2020. "Burundi COVID19 Preparedness and Response Project".

[<http://documents1.worldbank.org/curated/en/581521585906986734/pdf/Project-Information-Document-Burundi-COVID19-Preparedness-and-Response-Project-P173845.pdf>]. Accessed 30 October 2020.

[2] Garmaise. David. 6 February 2018. "Political instability, decreasing resources and a resurgent malaria epidemic: A challenging environment for Global Fund grants in Burundi". Independent Observer of Global Fund.

[http://www.aidspace.org/gfo_article/political-instability-decreasing-resources-and-resurgent-malaria-epidemic-challenging]. Accessed 1 November 2020.

[3] Georgetown Infectious Disease Atlas (GIDA) Global Health Security Tracker.

[<https://tracking.ghscosting.org/explore/map>]. Accessed 1 November 2020.

[4] Measure Evaluation. "The next phase of Measure Evaluation".

[<https://www.measureevaluation.org/resources/newsroom/news/the-next-phase-of-meval>] Accessed 3 May 2021.

[5] Ministry of Public Health and AIDS Control (Le Ministre de la sant Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[6] Ministry of Foreign Affairs (Ministre des Affaires Etrang res). [<https://www.mae.gov.bi/>]. Accessed 1 November 2020.

[7] United Nation. "Meeting coverage and press Releases". [<https://www.un.org/press/en/search/content/burundi>].

Accessed 1 November 2020.

[8] World Health Organisation, Regional Office for Africa. [<https://www.afro.who.int/search/node?keys=burundi>]. Accessed 1 November 2020.

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organisations and/or other countries that goes beyond influenza. There is no evidence of a plan or policy for sharing data and specimens on the websites of the Ministry of Public Health, and Ministry of Higher Education and Scientific Research. The Ministry of Agriculture and Livestock website was not accessible at the time of research. [1,2,3] There is no mention of such a plan or policy in the National Laboratory Strategic Plan 2015-2019 (Plan Stratégique National de Laboratoire), National Health Development Plan 2011 - 2015 (Plan national de développement sanitaire), or the Strategic Plan and Framework for Reinforcing Operations 2016-2020 (Plan Strategique et Cadre Operationnel de Renforcement), and no evidence was found via the website of National Public Health Institute (Institut national de santé publique (INSP)). [4,5,6,7]

[1] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida).

[<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

[2] Ministry of Higher Education and Scientific Research (Ministère de l'enseignement supérieur et de la recherche scientifique). [<http://mesrs.gov.bi/>]. Accessed 31 October 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'Agriculture et de l'Elevage). [<http://www.minagrie.gov.bi/>]. Attempted access on 31 October 2020.

[4] Ministry of Public Health and AIDS Control. June 2015. " National Laboratory Strategic Plan 2015-2019 (Plan Stratégique National de Laboratoire)". [http://www.minisante.bi/documents/plan_strategique_lab0.pdf]. Accessed 31 October 2020.

[5] Ministry of Public Health and AIDS Control. 2011. " National Health Development Plan 2011 - 2015 (Plan national de développement sanitaire) ". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Burundi/burundi_pnds_2011_-_2015_vf.pdf]. Accessed 31 October 2020.

[6] The National Public Health Institute (Institut national de santé publique (INSP)). [<https://insp.bi/>]. Accessed 31 October 2020.

[7] Republic of Burundi. "Strategic Plan and Framework for Reinforcing Operations 2016-2020 (Plan Strategique et Cadre

Operationnel de Renforcement)". [<https://insp.bi/wp-content/uploads/2018/05/2016-08-15-Plan-Strat%C3%A9gique-INSP-2016-2020-et-Cadre-op%C3%A9rationnel-de-renforcement.pdf>]. Accessed 31 October 2020.

5.6.1b

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

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Burundi has not shared influenza samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. No evidence was found via the website of the Ministry of Public Health, WHO news releases or other media reporting that suggests that Burundi has been non-compliant or that it has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework. [1,2,3,4]

[1] World Health Organization (WHO). "Measles - Burundi". [<https://www.who.int/csr/don/06-may-2020-measles-burundi/en/>]. Accessed 31 October 2020.

[2] World Health Organization (WHO). "Disease Outbreak News". [<https://www.who.int/csr/don/archive/country/bdi/en/>]. Accessed 31 October 2020.

[3] World Health Organisation (WHO). "News releases". [<http://www.who.int/news-room/releases>]. Accessed 31 October 2020.

[4] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

5.6.1c

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

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Burundi has not shared pandemic pathogen samples during an outbreak in the past two years. There is no evidence via the World Health Organization (WHO) disease outbreak website that pandemic pathogens samples were not shared after the declaration of a disease. [1] There is also no other evidence via a media search that Burundi has withheld pandemic pathogen samples following any other outbreak, including during the most recent COVID-19 pandemic. No other disease outbreaks were reported to the WHO within the past two years and no evidence via the website of the Ministry of Public Health, WHO news releases or other media reporting suggest that Burundi has failed to share a sample of a pandemic pathogen during an outbreak in the past two years. [2,3]

[1] World Health Organization (WHO). "Disease Outbreak News". [<https://www.who.int/csr/don/archive/country/bdi/en/>]. Accessed 31 October 2020.

[2] World Health Organisation (WHO). "News releases". [<http://www.who.int/news-room/releases>]. Accessed 31 October 2020.

[3] Ministry of Public Health and AIDS Control (Le Ministre de la santé Publique et de la lutte contre le Sida). [<http://www.minisante.bi/index.php/actualites1>]. Accessed 31 October 2020.

Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1b

Quality of bureaucracy (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 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: 19

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 0

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: 1

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: 2

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: 0

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

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

Input number

Current Year Score: 68.38

2017

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: 0.48

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: 31.1

2013

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 Labour Organization (ILOSTAT) database, the share of informal employment in 2014 was 98.3% and the World Bank reported it at 89% for the same year. [1,2] Additionally, a 2018 country diagnostic report by the World Bank titled, 'Republic of Burundi: Addressing Fragility and Demographic Challenges to Reduce Poverty and Boost Sustainable Growth', states that the country's informal economy comprises "9 out of 10 workers, offers relatively less stable jobs and lower earnings. The institutions and regulatory framework are insufficient to integrate the informal sector to the formal sector, and factors such as access to credit and energy continue constrain the business environment". [3] There is no evidence of more recent data available on employment in Burundi's informal economy.

[1] International Labor Organization (ILOSTAT). 2014. "Country Profiles". [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 31 October 2020.

[2] World Bank Group. 2014. "Informal Employment (% total of non-agricultural employment)". [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=BI>]. Accessed 31 October 2020.

[3] World Bank Group. June 15, 2018. Report No. 122549-BI. "Republic of Burundi: Addressing Fragility and Demographic Challenges to Reduce Poverty and Boost Sustainable Growth".

[<http://documents1.worldbank.org/curated/en/655671529960055982/pdf/Burundi-SCD-final-06212018.pdf>] Accessed November 4, 2020.

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: 0

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.39

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

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

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

Current Year Score: 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: 13.37

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: 3.34

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 61.25

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: 651.6

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 2.31

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 12.6

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 5.4

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: 60.83

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 45.82

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: 16.17

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: 2

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: 2

2018

Wellcome Trust Global Monitor 2018