

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

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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 no evidence that Eritrea has a national antimicrobial resistance (AMR) plan for the surveillance, detection and reporting of priority AMR pathogens. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea has not yet developed a plan for antimicrobial resistance detection." [1] A post on the website of the Ministry of Information from February 2019 indicates that a plan may be in development, stating: "Pointing out the significance of the National Action Plan on Antimicrobial Resistance in ensuring the health of human and animals as well as in environmental conservation, Mr. Tesfai Gebreselasie, Minister of Water, Land and Environment, called for integrated effort in realizing the national action plan". [2] A November 2019 post on the website of the Ministry of Information said that the national action plan would be "launched ... at the end of the month." [3] However, there is no evidence that this plan, if it was launched, is available online. No other information is shared via the Ministry of Information website that indicates what stage of development this plan may be in, though the National Action Plan for Health Security 2017-2021, published in June 2017, also states that development of an AMR plan should be achieved in 2019. [4] The World Health Organization (WHO) Global Database for Antimicrobial Resistance Country Self Assessments does not report any information for Eritrea. [5] The World Health Organization (WHO)'s library of national action plans does not contain a plan for Eritrea. [6] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture have an online presence. There is no evidence of a national public health institute in Eritrea, and laboratories in the national system do not have an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 24 October 2020.

[2] Ministry of Information. 28 February 2019. "Workshop on Antimicrobial Resistance". [<https://shabait.com/amp/2019/02/28/workshop-on-antimicrobial-resistance/>]. Accessed 24 October 2020.

[3] Ministry of Information. 16 November 2019. "Raising Awareness about Antimicrobial Resistance". [<https://shabait.com/2019/11/16/raising-awareness-about-antimicrobial-resistance/>]. Accessed 24 October 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 24 October 2020.

[5] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 24 October 2020.

[6] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 24 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: 0

There is no public evidence that Eritrea has a national laboratory or laboratory system that tests for priority antimicrobial resistant (AMR) pathogens. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrean laboratories have the capacity to detect AMR pathogens recommended by the World Health Organization (WHO) Global Action Plan on Antimicrobial Resistance, but that "testing and reporting does not follow a systematic mechanism". [1] There is no information shared via a public website by the government of Eritrea on the capacities of national laboratories, including about the ability to test for specific pathogens. The World Health Organization (WHO) Global Database for Antimicrobial Resistance Country Self Assessments does not report any information for Eritrea. [2] The WHO library of national action plans does not contain a plan for Eritrea. [3] A November 2019 post on the website of the Ministry of Information said that a national action plan would be "launched ... at the end of the month." [4] However, there is no evidence that this plan, if it was launched, is available online. Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of a national public health institute in Eritrea, and laboratories in the national system do not have an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 24 October 2020.

[2] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 24 October 2020.

[3] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 24 October 2020.

[4] Ministry of Information. 16 November 2019. "Raising Awareness about Antimicrobial Resistance". [<https://shabait.com/2019/11/16/raising-awareness-about-antimicrobial-resistance/>]. Accessed 24 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 there is an Eritrean government agency that conducts detection or surveillance activities for antimicrobial resistant (AMR) organisms or antimicrobial residues in the environment. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any relevant information. [1] There is no evidence that Eritrea has a national antimicrobial resistance (AMR) plan for the surveillance, detection, and reporting of priority AMR pathogens. The JEE states that "Eritrea has not yet developed a plan for antimicrobial resistance detection." [1] A post on the website of the Ministry of Information dated 28 February 2019 indicates that a plan may be in development, stating: "Pointing out the significance of the National Action Plan on Antimicrobial Resistance in ensuring the health of human and animals as well as in environmental conservation, Mr. Tesfai Gebreselasie, Minister of Water, Land and Environment, called for integrated effort in realizing the national action plan". [2] A November 2019 post on the website of the Ministry of Information said that a national action plan would be "launched ... at the end of the month." [3] However, there is no evidence that this plan, if it was launched, is available online. No other information is shared via the Ministry of Information website that indicates what stage of development this plan may be in. The National Action Plan for Health Security 2017-2021, published in June 2017,

states that development of an AMR plan should be achieved in 2019, but does not contain any other relevant information. [4] Eritrea has a National Pharmacovigilance Centre (NPVC), but it does not have a presence online. [5] The World Health Organization (WHO) Global Database for Antimicrobial Resistance Country Self Assessments does not report any information for Eritrea. [5] The World Health Organization (WHO)'s library of national action plans does not contain a plan for Eritrea. [6] Neither Eritrea's Ministry of Land, Water, and the Environment; Ministry of Health; nor Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

- [1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 24 October 2020.
- [2] Ministry of Information. 28 February 2019. "Workshop on Antimicrobial Resistance". [<http://www.shabait.com/news/local-news/28085-workshop-on-antimicrobial-resistance>]. Accessed 24 October 2020.
- [3] Ministry of Information. 16 November 2019. "Raising Awareness about Antimicrobial Resistance". [<https://shabait.com/2019/11/16/raising-awareness-about-antimicrobial-resistance/>]. Accessed 24 October 2020.
- [4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 24 October 2020.
- [5] TesfaNews. 4 October 2017. "Eritrea: National Pharmacovigilance Center (NPVC)". [<https://www.tesfanews.net/national-pharmacovigilance-center-npvc/>]. Accessed 24 October 2020.
- [6] World Health Organization (WHO). "Global Database for Antimicrobial Resistance Country Self Assessments". [<http://amrcountryprogress.org/>]. Accessed 7 February 2019.
- [5] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 24 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 no evidence of national legislation in place requiring prescriptions for antibiotic use for humans. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, although there are "efforts to ensure rational use of antimicrobial drugs", antibiotics are still purchased without prescription in both the human and animal health sectors. [1] Neither the Eritrean National Medicines Policy, a 2010 document, nor the Eritrean National List of Medicines, a 2010 document, contains information indication that there is a legal prohibition of the sale of antibiotics without prescription. [2,3] An update National List of Medicines was reportedly under develop in 2015, but a new document does not appear to be available online. [4] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [5] The World Health Organization (WHO)'s library of national action plans does not contain a plan for Eritrea. [6] A November 2019 post on the website of the Ministry of Information said that a national action plan would be "launched ... at the end of the month." [7] Further, a 2020 study on antibiotic use in Eritrea, published in an academic journal, notes that Eritrea has developed a national action plan to combat antimicrobial resistance, and a medicine schedules guide in 2019. However, there is no evidence that either this plan, if it was launched, or a medicines schedule is available online. Further, the academic study notes that prescriptions of antibiotics without a prescription continues to be widespread. [8] The Ministry of Health does not have an online presence. There is no evidence of relevant media reports or academic studies.

- [1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.
- [2] Ministry of Health. 2010. "Eritrean National Medicines Policy". [https://www.who.int/selection_medicines/country_lists/eri_nmp_2010.pdf]. Accessed 26 October 2020.
- [3] Ministry of Health. 2010. "Eritrean National List of Medicines, 5th Edition". [https://www.who.int/selection_medicines/country_lists/eri_eml_2010.pdf]. Accessed 26 October 2020.
- [4] World Health Organization (WHO). 21 May 2015. "Sixth Essential National List of Medicines (ENLM) Review Consensus Workshop was kicked off". [<https://www.afro.who.int/news/sixth-essential-national-list-medicines-enlm-review-consensus-workshop-was-kicked>]. Accessed 26 October 2020.
- [5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.
- [6] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 26 October 2020.
- [7] Ministry of Information. 16 November 2019. "Raising Awareness about Antimicrobial Resistance". [<https://shabait.com/2019/11/16/raising-awareness-about-antimicrobial-resistance/>]. Accessed 24 October 2020.
- [8] Merhawi Bahta et al. 24 January 2020. "Dispensing of antibiotics without prescription and associated factors in drug retail outlets of Eritrea: A simulated client method". Plos One. [<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0228013>]. Accessed 26 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 of national legislation in place requiring prescriptions for antibiotic use for animals. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, although there are "efforts to ensure rational use of antimicrobial drugs", antibiotics are still purchased without a prescription in both the human and animal health sectors. [1] Neither the Eritrean National Medicines Policy, a 2010 document, nor the Eritrean National List of Medicines, a 2010 document, contains information indicating that there is a legal prohibition of the sale of antibiotics without prescription. [2,3] An updated National List of Medicines was reportedly under development in 2015, but a new document does not appear to be available online. [4] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [5] The World Health Organization (WHO)'s library of national action plans does not contain a plan for Eritrea. [6] A November 2019 post on the website of the Ministry of Information said that a national action plan would be "launched ... at the end of the month." [7] Further, a 2020 study on antibiotic use in Eritrea, published in an academic journal, notes that Eritrea has developed a national action plan to combat antimicrobial resistance, and a medicine schedules guide in 2019. However, there is no evidence that either this plan, if it was launched, or a medicines schedule is available online. Further, the academic study notes that prescriptions of antibiotics without a prescription continues to be widespread. (The study does not distinguish between animal and human prescriptions, though appears to focus on the latter.) [8] The Ministry of Health does not have an online presence. There is no evidence of relevant media reports or academic studies.

- [1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.
- [2] Ministry of Health. 2010. "Eritrean National Medicines Policy". [https://www.who.int/selection_medicines/country_lists/eri_nmp_2010.pdf]. Accessed 26 October 2020.
- [3] Ministry of Health. 2010. "Eritrean National List of Medicines, 5th Edition".

[https://www.who.int/selection_medicines/country_lists/eri_eml_2010.pdf]. Accessed 26 October 2020.

[4] World Health Organization (WHO). 21 May 2015. "Sixth Essential National List of Medicines (ENLM) Review Consensus Workshop was kicked off". [<https://www.afro.who.int/news/sixth-essential-national-list-medicines-enlm-review-consensus-workshop-was-kicked>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[6] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 26 October 2020.

[7] Ministry of Information. 16 November 2019. "Raising Awareness about Antimicrobial Resistance".

[<https://shabait.com/2019/11/16/raising-awareness-about-antimicrobial-resistance/>]. Accessed 24 October 2020.

[8] Merhawi Bahta et al. 24 January 2020. "Dispensing of antibiotics without prescription and associated factors in drug retail outlets of Eritrea: A simulated client method". Plos One.

[<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0228013>]. Accessed 26 October 2020.

1.2 ZOO NOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Eritrea has a national plan on zoonotic disease. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, "there is no structured joint planning, information sharing and response to zoonotic events". The JEE states that there is a National Ebola Epidemic Preparedness and Response Plan 2014, and a National Avian Flu Response Plan 2006. [1] However, it does not appear that these plans are shared via a publicly available website. The National Action Plan for Health Security 2017-2021 does not contain a national plan for zoonotic disease, though it does state the goal of attaining better zoonotic disease surveillance and "One Health coordination structures ... for joint response to zoonotic events". [2] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [3] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that a strategy exists or is being drafted. [4] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 Eritrea has national legislation, plans or equivalent strategy documents which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, "there is no structured joint planning, information sharing and response to zoonotic events". The JEE states that there is a National Ebola Epidemic Preparedness and Response Plan 2014, and a National Avian Flu Response Plan 2006. [1] However, it does not appear that these plans are shared via a publicly available website. The National Action Plan for Health Security 2017-2021 does not contain a national plan for zoonotic disease, though it does state the goal of attaining better zoonotic disease surveillance and "One Health coordination structures ... for joint response to zoonotic events". [2] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [3] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that a strategy exists or is being drafted. [4] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 Eritrea has national plans that account for the surveillance and control of multiple zoonotic pathogens of public health concern. Although the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the country "conducts surveillance of zoonotic diseases with a main focus on tuberculosis, brucellosis, anthrax, rabies, hydatidosis and cystercercosis", it describes surveillance as "predominately passive". Further, "there is no structured joint planning, information sharing and response to zoonotic events". There is no mention of a national plan or guideline. The JEE states that there is a National Ebola Epidemic Preparedness and Response Plan 2014, and a National Avian Flu Response Plan 2006. [1] However, it does not appear that these plans are shared via a publicly available website. The National Action Plan for Health Security 2017-2021 does not contain a national plan for zoonotic disease, though it does state the goal of attaining better zoonotic disease surveillance and "One Health coordination structures ... for joint response to

zoonotic events". [2] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [3] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that a strategy exists or is being drafted. [4] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 there is an Eritrean department, agency, or similar unit dedicated zoonotic disease that functions across ministries. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "collaboration between animal and human health sectors is only ad hoc and not based on any defined policies and guidelines". There is no mention of any kind of unit that functions across ministries. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, states that Eritrea plans to improve "coordination structures" and "mechanisms for joint response", but does not indicate which if any such measures have been achieved. [2] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 not enough public evidence to confirm that Eritrea has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. According to the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "members of the community report incidences of disease or unusual events in animals to the district veterinary clinics". Veterinarians in these clinics then visit the community "to collect information and specimens for testing at the national laboratory". The JEE goes on to note that the Ministry of Health Integrated Disease Surveillance and Response "unit collects weekly and monthly reports from over 250 health facilities across the country with more than 80% timeliness and 90% completeness"—but it is unclear if these actions are coordinated to reports by livestock owners. Further, the JEE states that "reporting is compulsory for all animal and human diseases" and that these reports "are compiled and submitted to the national level with further reporting to regional and international bodies". But the JEE does not explain how these reports are compiled and submitted, or what government agency is involved. The JEE also mentions that Eritrea "conducts surveillance of zoonotic diseases with a main focus on tuberculosis, brucellosis, anthrax, rabies, hydatidosis and cystercercosis". However, the JEE does not describe a national mechanism for livestock owners to use; the only measure described is physically visiting clinics. Further, the JEE states that "the One Health approach has not been fully embraced in the country". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain relevant information. [2] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 Eritrea has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals. The Eritrean constitution protects privacy in general, including with a statement that says every person is protected from violations of the "privacy of his correspondence, communication or other property". However, there is nothing more specific that would rise to the level of specifically protection information gathered through surveillance activities. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions that Eritrea "conducts surveillance of zoonotic diseases with a main focus on tuberculosis, brucellosis, anthrax, rabies, hydatidosis and cystercercosis", but does not contain information about the confidentiality of information generated through such activities. Further, the JEE states that "the One Health approach has not been fully embraced in the country". [2] No relevant laws can be found on databases such as the Food and Agriculture Organization of the United Nations (FAO). [3] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] Government of Eritrea. "Eritrea Constitution".

[https://www.vertic.org/media/National%20Legislation/Eritrea/ER_Constitution.pdf]. Accessed 26 October 2020.

[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country->

profiles/general-profile/en/?iso3=ERI]. Accessed 26 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 not enough publicly available evidence to conclude that Eritrea conducts surveillance of zoonotic disease in wildlife. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that among Eritrea's "strategies or plans" for responding to zoonotic disease, there is one that is geared toward responding to "zoonotic events" in wildlife. However, this plan is not shared via a public website by the government of Eritrea (or elsewhere), so it is not possible to confirm its contents, including whether or not it entails surveillance of wildlife. The JEE also mentions that Eritrea "conducts surveillance of zoonotic diseases with a main focus on tuberculosis, brucellosis, anthrax, rabies, hydatidosis and cystercercosis", but does not contain information about whether this surveillance extends to wildlife. Further, the JEE states that "the One Health approach has not been fully embraced in the country". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain relevant information. [2] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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: -

No data available

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Eritrea has a national plan on zoonotic disease, let alone one that includes mechanisms for working with the private sector. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "there is no structured joint planning, information sharing and response to zoonotic events", and makes no other mention of a plan or strategy on zoonotic diseases. [1] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [2] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that a strategy exists or is being drafted. [3] Neither Eritrea's Ministry of Health nor its Ministry of Agriculture has an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[[https://extranet.who.int/sph/sites/default/files/document-](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)

[library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)]. Accessed 26 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 Eritrea publicly shares an up-to-date record of facilities in which especially dangerous pathogens and toxins are stored or processed. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea is "starting the process to monitor and develop an updated record and inventory of pathogens within facilities that store or process dangerous pathogens and toxins". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that an inventory exists or is in the process of being compiled. [2] Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations list any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 Eritrea has in place legislation or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. As noted by the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that legislation exists or is in the process of being drafted, though it lists as an intended milestone the creation of a "national policy on biosafety and biosecurity" by 2019. [2] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations list any relevant laws or regulations. [3,4] A National Biosafety Framework from 2007 deals with biosafety only in the sense of regulating genetically modified organisms, and does not deal with biosafety or biosecurity in the sense of dangerous pathogens or toxins; additionally, as of 2020 it is no longer available online. [5] Neither the Ministry of Health; the

Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [6]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E".

[https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 October 2020.

[5] Convention on Biological Diversity. 2011. "Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety". [https://bch.cbd.int/database/record.shtml?documentid=102890]. Accessed 26 October 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 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 Eritrea has in place legislation or regulations related to biosecurity, or that it has designated any agency responsible for biosecurity. As noted by the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that legislation exists or is in the process of being drafted, though it lists as an intended milestone the creation of a "national policy on biosafety and biosecurity" by 2019. [2] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations list any relevant laws or regulations. [3,4] A National Biosafety Framework from 2007 deals with biosafety only in the sense of regulating genetically modified organisms, and does not deal with biosafety or biosecurity in the sense of dangerous pathogens or toxins; additionally, as of 2020 it is no longer available online. [5] Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [6]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-

library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 October 2020.

[5] Convention on Biological Diversity. 2011. "Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety". [https://bch.cbd.int/database/record.shtml?documentid=102890]. Accessed 26 October 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 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 Eritrea has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities, nor that that the country has such inventories. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea is "starting the process to monitor and develop an updated record and inventory of pathogens within facilities that store or process dangerous pathogens and toxins". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that an inventory exists or is in the process of being compiled. [2] Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 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 not enough publicly available evidence to confirm the existence in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax or Ebola. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the National Animal and Plant Health Laboratory (NAPHL) "has bacteriology, virology, serology, molecular biology (polymerase chain reaction (PCR)), parasitology and pathology sections". The JEE further states that anthrax is among the pathogens that the NAPHL can test for. However, the JEE does not explicitly say that PCR testing is available for anthrax. No information is given about Ebola testing abilities, except that specimens are sent to Kenya, South Africa, and Uganda for testing. [1] No other information on PCR testing capabilities is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the NAPHL has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 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 public evidence that Eritrea requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the National Health Laboratory (NHL) and the National Animal and Plant Health Laboratory (NAPHL) offer basic biosafety and biosecurity training to laboratory personnel, but does not mention a requirement. Further, the JEE states that "Eritrea has conducted a training needs assessment and identified gaps in biosafety and biosecurity training but has not yet implemented comprehensive training or a common training curriculum" and that there is a "general lack of awareness" of best practices in these fields. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, states that Eritrea intends to have trained 100% of "national and zonal reference labs ... on biosafety and biosecurity", but does not provide details about how this will be achieved (except through an expansion of the number of training programs available) or what the progress toward the goal may be. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the NAPHL has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of

the United Nations lists any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 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 public evidence that regulations or licensing conditions specify that security and other personnel in Eritrea 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. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "there is no formal policy/regulation related to biosafety and biosecurity in place" and that "implementation of biosafety procedures and guidelines" is "basic and limited". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not include relevant information. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the NAPHL has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

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[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 on Eritrean national regulations on the safe and secure transport of infectious substances (Categories A and B). There is no relevant information shared, via public websites, by the government of Eritrea. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "there exists an organized specimen transport system" but doesn't provide details on whether there are regulations that govern it. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not include relevant information. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Transport and Communications; Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the NAPHL has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

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[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 of a Eritrean national legislation, regulation, or other guidance in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, refers to the existence of "National Inspection and Quarantine Policy guidelines" but doesn't provide details on its contents as regards shipping dangerous pathogens and toxins. [1] The document does not appear to be shared via a public website. The National Action Plan for Health Security 2017-2021, published in June 2017, does not include relevant information. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Trade and Industry; Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 evidence of national biosafety legislation and/or regulations in Eritrea, except for a 2007 National Biosafety Framework, which deals only with genetically modified organisms, and does not deal with biosafety as it relates to dangerous pathogens or toxins; additionally, as of 2020 the framework is no longer available online. [1] As noted by the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place". [2] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that legislation exists or is in the process of being drafted, though it lists as an intended milestone the creation of a "national policy on biosafety and biosecurity" by 2019. [3] Neither the Verification Research, Training and

Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5] Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [6]

[1] Convention on Biological Diversity. 2011. "Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety". [<https://bch.cbd.int/database/record.shtml?documentid=102890>]. Accessed 26 October 2020.

[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E".

[<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 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 evidence of an established agency in Eritrea responsible for the enforcement of biosafety legislation and regulations. Further, there is no evidence of national biosafety legislation or regulations in Eritrea, except for a 2007 National Biosafety Framework, which deals only with genetically modified organisms, and does not deal with biosafety as it relates to dangerous pathogens or toxins; additionally, as of 2020 the framework is no longer available online. [1] As noted by the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place". [2] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any information suggesting that legislation exists or is in the process of being drafted, though it lists as an intended milestone the creation of a "national policy on biosafety and biosecurity" by 2019. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5] Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Education; the National Health Laboratory; or the National Agricultural and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [6]

[1] Convention on Biological Diversity. 2011. "Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety". [<https://bch.cbd.int/database/record.shtml?documentid=102890>]. Accessed 26 October 2020.

[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E".

[https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 October 2020.

[6] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 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 Eritrea requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the National Health Laboratory (NHL) and the National Animal and Plant Health Laboratory (NAPHL) offer basic biosafety and biosecurity training to laboratory personnel, but does not mention a requirement. Further, the JEE states that "Eritrea has conducted a training needs assessment and identified gaps in biosafety and biosecurity training but has not yet implemented comprehensive training or a common training curriculum" and that there is a "general lack of awareness" of best practices in these fields. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, states that Eritrea intends to have trained 100% of "national and zonal reference labs ... on biosafety and biosecurity", but does not provide details about how this will be achieved (except through an expansion of the number of training programs available) or what the progress toward the goal may be. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the NHL; nor the NAPHL has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 publicly available evidence that Eritrea has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, or other dual-use research. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place", and does not mention assessments of dual use research in the country. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media articles or academic studies. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [3] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [4,5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 October 2020.

[4] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[5] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 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 of a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, or pathogens with pandemic potential. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place", and does not mention assessments of dual use research in the country. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [3,4] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [<https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/>]. Accessed 26 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

[5] United Nations Office at Geneva. "Browse States Parties". [<https://bwc-ecbm.unog.ch/browse>]. Accessed 26 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 of an Eritrean agency specifically responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual use research. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place", and does not mention assessments of dual use research in the country. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [3,4] No other relevant information is

shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. Eritrea is not party to the Biological Weapons Convention, and therefore does not have Confidence Building Measure reports with information on this. [5]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E".

[https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 October 2020.

[5] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 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 of national legislation, regulation, policy, or other guidance, requiring the screening of synthesised DNA before it is sold. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, "there is no formal policy/regulation related to biosafety and biosecurity in place", and does not contain other relevant information. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] Neither the Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation database nor the FAOLEX database of the Food and Agriculture Organization of the United Nations lists any relevant laws or regulations. [3,4] There is no information about synthesised DNA sales in the 2007 National Biosafety Framework for Eritrea (which only deals with genetically modified organisms and not with dangerous pathogens). [5] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Transport and Communications; the Ministry of Defence; the Ministry of Education; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. Eritrea does not have a Ministry of Research. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media articles or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 26 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 October 2020.

[3] Verification Research, Training and Information Centre (VERTIC) Biological Weapons Convention Legislation. "E". [https://www.vertic.org/nuclear-and-other-radioactive-material/nuclear-security-legislation-database/e/]. Accessed 26 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI]. Accessed 26 October 2020.

[5] United Nations Office at Geneva. "Browse States Parties". [https://bwc-ecbm.unog.ch/browse]. Accessed 26 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: 1

There is evidence to confirm that Eritrea's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 core tests defined by the World Health Organization (WHO); however, the tests are not fully named. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the "national laboratory system is capable of conducting five or more of the ten core tests". The JEE states that the National Health Laboratory (NHL) has the ability to test for HIV, tuberculosis, plasmodium (malaria), salmonella, and local priority diseases such as measles, Staphylococcus aureus, E. coli, and Neisseria meningitis. The JEE does not state whether Eritrea has publicly defined country-specific tests; it only describes the latter four pathogens as being "causes of other local public health problems". The JEE does not specify what types of testing are available for these pathogens, and does not provide information on other WHO-defined core tests. [1] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of additional information in the media or in academic reports.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 26 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 Eritrea 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. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not describe the existence of such a plan. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] No other relevant information is shared by the government of Eritrea via a public website. Neither the Ministry of Health; the Ministry of Agriculture; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media articles or academic studies. The Ministry of Information has posted an article describing the country's response to the COVID-19 pandemic, including the types of testing that had been carried out as of October 2020. However, this post does not include a detailed strategy with information such as roles and responsibilities or how the country plans to expand testing. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 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 the national laboratory that serves as a reference facility for Eritrea is accredited. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the National Health Laboratory (NHL) and the National Animal and Plant Health Laboratory (NAPHL) serve as reference laboratories for the country. It does not indicate whether they are accredited, though it does say that the measles and tuberculosis laboratories of the NHL are "under the Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA) for ISO 15189". [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. 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: 1

There is evidence to confirm that there is a national laboratory that serves as a reference facility for Eritrea is subject to external quality assurance (EQA) review. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the National Health Laboratory (NHL), which is one of two national laboratories that serve as reference facilities, is participating in an EQA scheme with South Africa. Further, the JEE states that "The NHL participates in External Quality Assessment (EQA) schemes and also conducts EQAs for tuberculosis and malaria for the six zoba [subnational] laboratories, which in turn do EQAs for peripheral laboratories". It also mentions that there are two hospital laboratories participating in EQAs. However, the only reference laboratory described by the JEE that participates in an EQA is the NHL. The JEE does not provide any details about these EQA schemes. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. Accessed 29 October 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 , No = 0

Current Year Score: 0

There is evidence that Eritrea has a specimen transport system, but it is not clear that the system is nationwide. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the Ministry of Health has a mechanism for specimen transport that involves contracts with couriers. Further, it states that the Ministry of Agriculture has organized vehicles to transport specimens from local and regional clinics and laboratories to the National Animal and Plant Health Laboratory (NAPHL). The JEE also states that Eritrea has "an organized specimen transport system to transport specimens to national laboratories from 50--80% of intermediate level/districts within the country for advanced diagnostics." [1] However, it is not clear that this system covers the entire country. The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. Accessed 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 of a plan in place to rapidly authorize or license laboratories in Eritrea to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. There is also not enough publicly available evidence to determine Eritrea's framework or processes for licensing laboratories in general. No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO); or the NATLEX database of the International Labour Organization (ILO). [1,2] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions the existence of the Eritrean Pharmaceuticals Agency (PHARMECOR), but does not detail its responsibilities. [3] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [4] The Health Sector Strategic Development Plan (HSSDP) 2012-2016 mentions

the existence of a National Laboratory Quality Assurance Scheme and a National Medical Laboratory Strategic Plan, but neither of these are shared online. [5] The more recent HSSDP 2017-2021 does not mention these documents or any other relevant information. [6] There is no indication that the government's response to the COVID-19 pandemic has included a relevant plan. [7] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Agriculture; nor PHARMECOR has an online presence. Eritrea does not have a Ministry of Research. There is no evidence of relevant media reports or academic studies.

[1] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[2] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[3] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[5] Ministry of Health. 2011. "Health Sector Strategic Development Plan 2012-2016".

[<http://extwprlegs1.fao.org/docs/pdf/eri158238.pdf>]. Accessed 2 November 2020.

[6] Ministry of Health. November 2016. "Health Sector Strategic Development Plan II 2017-2021".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[7] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 October 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

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

= 1, No = 0

Current Year Score: 0

There is not enough publicly available evidence to confirm that Eritrea is conducting ongoing event-based surveillance (EBS) and analysis for infectious disease. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "event-based surveillance is conducted", but does not specify whether it is ongoing, or what body conducts it. [1] The National Action Plan for Health Security 2017-2021 (the NAPHS), published in June 2017, mentions the goal of strengthening EBS, but does not describe existing activities or provide any details about plans to improve current practices. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Agriculture; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. The Eritrean reports basic surveillance information about the COVID-19 pandemic in the country, but its reports do not include event-based surveillance and analysis

information. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. Accessed 29 October 2020.

[3] Ministry of Information. 30 October 2020. "Announcement from the Ministry of Health". [<https://shabait.com/2020/10/30/announcement-from-the-ministry-of-health-74/>]. Accessed 30 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: 0

There is no publicly available evidence that Eritrea has reported a potential public health emergency of international concern (PHEIC) to the World Health Organization (WHO) within the last two years. The WHO Disease Outbreak News site reports no recent outbreaks of reportable diseases. [1] No other information is shared via a public website by the Eritrean government. The Ministry of Health does not have an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports, WHO reports, or academic studies, including on the WHO country and regional websites. [2,3] The WHO confirms that the COVID-19 pandemic has reached Eritrea, confirming 461 cases and 0 deaths as of October 2020. However, the source of this COVID-19 data is not described, and it is unclear if it is the result of reporting by the Eritrean government. [4] Moreover, the first COVID-19 case in Eritrea was reported in March 2020, after COVID-19 had already been declared a PHEIC. [5]

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

[2] World Health Organization (WHO). "Eritrea". [<https://www.afro.who.int/countries/eritrea>]. Accessed 29 October 2020.

[3] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 29 October 2020.

[4] World Health Organization (WHO). "WHO Coronavirus Disease (COVID-19) Dashboard". [https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeIwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkbtUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE]. Accessed 29 October 2020.

[5] Obulutsa, George. "Angola, Eritrea, Uganda confirm first cases as coronavirus spreads in Africa". National Post. [<https://nationalpost.com/pmnh/health-pmnh/angola-eritrea-uganda-confirm-first-cases-as-coronavirus-spreads-in-africa>]. Accessed 28 April 2021.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that the Eritrean government operates an electronic reporting surveillance system at both the subnational and national level. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that

Eritrea only uses an Excel-based database that relies on flash disks to transmit data between the zonal and national levels, and gives Eritrea a score of only 2 for "interoperable, interconnected, electronic real-time reporting system". [1] A Ministry of Information news update from November 2018 (two years after the JEE) states that Eritrea adopted the District Health Information Software 2 (DHIS2) in 2017, and that it connects 342 health facilities across the country. However, the news update also states that "Eritrea's limited internet connectivity has meant that it has not been able to fully maximize its use of DHIS2. Currently, the work is conducted offline." It is thus unclear how or whether the system is currently integrated across the country. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/]. Accessed 29 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 insufficient public evidence to confirm that Eritrea's electronic reporting surveillance system collects real-time laboratory data. A Ministry of Information news update from November 2018 states that Eritrea adopted the District Health Information Software 2 (DHIS2) in 2017, and that it connects 342 health facilities across the country. However, the report does not specify whether these health facilities include laboratories. [2] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, at that time, Eritrea only used an Excel-based database that relies on flash disks to transmit data between the zonal and national levels. It does not mention whether this system was in use at laboratories. [1] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/]. Accessed 29 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 not enough publicly available evidence to confirm that electronic health records are commonly in use in Eritrea. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any directly relevant information. However, it does mention that "human and animal health surveillance systems are entirely paper based", suggesting that it is also unlikely that Eritrea is housing electronic health records for patients. [1] A Ministry of Information news update from November 2018 states that Eritrea adopted the District Health Information Software 2 (DHIS2) in 2017, and that it connects 342 health facilities across the country. However, the report states that "Eritrea's limited internet connectivity" means that it has not yet been able to take full advantage of DHIS2, and most work is still currently conducted offline. [2] Thus, there are not enough details to conclude that the introduction of DHIS2 in 2017 has yet led to the common use of electronic health records for individual patients. Further, the undeveloped state of Eritrea's Internet presence (with only one identifiable government website) suggests that, in general, electronic record keeping may not be common in the country. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. 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 insufficient evidence to confirm that Eritrea national public health system has access to electronic health records of individuals in their country. That, in turn, is because there is not enough publicly available evidence to confirm that electronic health records are commonly in use in Eritrea. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any directly relevant information. However, it does mention that "human and animal health surveillance systems are entirely paper based", suggesting that it is also unlikely that Eritrea is housing electronic health records for patients. [1] A Ministry of Information news update from November 2018 states that Eritrea adopted the District Health Information Software 2 (DHIS2) in 2017, and that it connects 342 health facilities across the country. However, the report states that "Eritrea's limited internet connectivity" means that it has not yet been able to take full advantage of DHIS2, and most work is still currently conducted offline. [2] Thus, there are not enough details to conclude that the introduction of DHIS2 in 2017 has yet led to the common use of electronic health records for individual patients. Further, the undeveloped state of Eritrea's Internet presence (with only one identifiable government website) suggests that, in general, electronic record keeping may not be common in the country. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. 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 insufficient evidence to confirm that patient health data used by Eritrea's national public health system is comparable or adheres to consistent standards. It is not clear which if any of the country's hospitals use electronic health records at all. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any directly relevant information. However, it does mention that "human and animal health surveillance systems are entirely paper based", suggesting that it is also unlikely that Eritrea is housing electronic health records for patients. [1] A Ministry of Information news update from November 2018 states that Eritrea adopted the District Health Information Software 2 (DHIS2) in 2017, and that it connects 342 health facilities across the country. However, the report states that "Eritrea's limited internet connectivity" means that it has not yet been able to take full advantage of DHIS2, and most work is still currently conducted offline. [2] Thus, there are not enough details to conclude that the introduction of DHIS2 in 2017 has yet led to the common use of electronic health records for individual patients. Further, the undeveloped state of Eritrea's Internet presence (with only one identifiable government website) suggests that, in general, electronic record keeping may not be common in the country. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea". [<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. 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 of mechanisms to share data between the relevant ministries responsible for animal, human and wildlife surveillance. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "there is no formal collaboration and information sharing between the human and animal health systems," though there is some ad hoc information sharing. [1] The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Agriculture; the Ministry of Land, Water and Environment; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant information shared under the auspices of a One Health working group or participating agency.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea".
[<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. Accessed 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 evidence that Eritrea makes de-identified health surveillance data on disease outbreaks publicly available on government websites. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. Neither the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, nor the National Action Plan for Health Security 2017-2021, published in June 2017, contains any relevant information. [1,2] The Eritrean government reports basic surveillance information about the COVID-19 pandemic in the country, though it is unclear how often this reporting is updated. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".
[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Information. 7 November 2018. "DHIS2: Improving Data Management and Health in Eritrea".
[<https://shabait.com/2018/11/07/dhis2-improving-data-management-and-health-in-eritrea/>]. Accessed 29 October 2020.

[3] Ministry of Information. 30 October 2020. "Announcement from the Ministry of Health".
<https://shabait.com/2020/10/30/announcement-from-the-ministry-of-health-74/>. Accessed 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 evidence that Eritrea makes 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. There is only evidence of one Eritrean government website, for the Ministry of Information. [1] A post on the ministry's website, described as an "Announcement from the Ministry of Health", provides a total number of confirmed cases in the country and the total number of recovered cases. It also reports a number of new cases identified as of the day of publication, but it is unclear if the report is comprehensive. The post does not indicate how frequently new data is reported. [2] There is no other evidence of COVID-19 surveillance data being reported on government websites.

[1] Ministry of Information. [<https://shabait.com/>]. Accessed 29 October 2020.

[2] Ministry of Information. 30 October 2020. "Announcement from the Ministry of Health".
<https://shabait.com/2020/10/30/announcement-from-the-ministry-of-health-74/>. Accessed 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: 0

There is no evidence that Eritrea has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities. The Eritrean constitution protects privacy in general, including with a statement that says every person is protected from violations of the "privacy of his correspondence, communication or other property". However, there is nothing more specific that would rise to the level of specifically protection information gathered through surveillance activities. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any relevant information. [2] No relevant laws can be found on databases such as the United Nations Conference on Trade and Development (UNCTAD) legislation database or the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [3,4] Neither the Ministry of Health nor the National Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant media reports or academic studies.

[1] Government of Eritrea. "Eritrea Constitution".

[https://www.vertic.org/media/National%20Legislation/Eritrea/ER_Constitution.pdf]. Accessed 29 October 2020.

[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 29 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 29 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 Eritrea has laws or guidelines that safeguard the confidentiality of health information for individuals, such as that generated through health surveillance activities, let alone such legislation that includes mention of protections from cyber attacks. The Eritrean constitution protects privacy in general, including with a statement that says every person is protected from violations of the "privacy of his correspondence, communication or other property". However, there is nothing more specific that would rise to the level of specifically protection information gathered through surveillance activities. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain any relevant information. [2] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [3,4] Neither the Ministry of Health nor the National Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of

relevant media reports or academic studies.

[1] Government of Eritrea. "Eritrea Constitution".

[https://www.vertic.org/media/National%20Legislation/Eritrea/ER_Constitution.pdf]. Accessed 29 October 2020.

[2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[3] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 29 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 29 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, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 0

There is no public evidence that the government of Eritrea has made a specific commitment to share surveillance data during a public health emergency with other countries in the region, whether for a single disease or multiple diseases. Neither the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, nor the National Action Plan for Health Security 2017-2021, published in June 2017, contains any relevant information. [1,2] Eritrea is a member of the regional animal health network (RAHN), which is an initiative of the Eastern Africa Epidemiology Regional Network (EAREN) and the Eastern Africa Regional Laboratory Network (EARLN). The RAHN brings together veterinary officers, epidemiologists, and laboratory professionals. RAHN has been holding meetings since its establishment in 2008, to promote information sharing on transboundary animal diseases (TADs) and zoonoses and to strengthen coordination and collaboration for effective and efficient prevention and control of these TADs and zoonoses in the region. However, it is not clear that membership in RAHN entails data sharing during public health emergencies. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] IGAD Center for Pastoral Areas and Livestock Development. "East Africa Regional Animal Health Networks."

[<https://icpald.org/projects-programs/rahn/>]. Accessed 29 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 no evidence that Eritrea 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, whether for active or future public health emergencies. Neither the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, nor the National Action Plan for Health Security 2017-2021, published in June 2017, contains any relevant information. [1,2] Posts on the government's website describing Eritrea's response to the COVID-19 pandemic mention the existing of "aggressive contact tracing", but do not provide details on what the country's contact tracing efforts entail. Moreover, there is no indication that this contact tracing is being conducted as part of a broader plan that could be applied to other public health emergencies. [3,4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

2.5.1b

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

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

Current Year Score: 0

There is no evidence that Eritrea 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. Neither the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, nor the National Action Plan for Health Security 2017-

2021, published in June 2017, contains any relevant information. [1,2] The JEE mentions the existence of "National Inspection and Quarantine Policy guidelines", but these are not shared online. [1] A post on the government's website describing Eritrea's response to the COVID-19 pandemic mentions the existence of certain economic support measures, but do not provide enough details to evaluate whom they target, or whether they specifically support those who are isolating. For instance, the government stated in October 2020 that "various Guidelines issued by the GOE [Government of Eritrea] have provisions against layoffs as well as for payment of continued salaries by the enterprises concerned for all their employees". The same post, however, states that "for obvious reasons, the Government could not allocate substantial budgetary appropriations" to assist "wage-earners in the private sector who have been affected by the temporary closure of relevant enterprises". The mentioned guidelines do not appear to be shared online. [3] An April 2020 report from the Torture Abolition Survivors and Support Coalition (TASSC) criticized Eritrea's economic support measures in response to the COVID-19 pandemic, saying that "the government has done nothing about providing people with food while they are under quarantine". [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

[4] The Torture Abolition Survivors and Support Coalition (TASSC). "Eritrea: The Coronavirus Pandemic under Dictatorship". [<https://www.tassc.org/news-blog/2020/4/20/eritrea-the-coronavirus-pandemic-under-dictatorship>]. Accessed 2 November 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 Eritrea 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. There is only evidence of one Eritrean government website, for the Ministry of Information. [1] A post on the ministry's website, described as an "Announcement from the Ministry of Health", provides a total number of confirmed cases in the country and the total number of recovered cases. It also reports a number of new cases identified as of the day of publication, but it is unclear if the report is comprehensive. The post does not indicate how frequently new data is reported, though it was updated daily during the research period. There is no information about contact tracing, though the sources of two new cases reported at the time of research were identified (as travelers returning from abroad). [2] There is no other evidence of COVID-19 surveillance data being reported on government websites.

[1] Ministry of Information. [<https://shabait.com/>]. Accessed 29 October 2020.

[2] Ministry of Information. 30 October 2020. "Announcement from the Ministry of Health".

<https://shabait.com/2020/10/30/announcement-from-the-ministry-of-health-74/>. Accessed 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 insufficient evidence to confirm that Eritrea has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency, whether for active or future public health emergencies. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea has successfully mapped out all relevant law enforcements (customs, border control, defence, police) that should be linked up with public health in the context of emergency preparedness and response. It goes on to note that memorandums of understanding (MOUs) "exist between public health and security authorities within the country". [1] However, the JEE does not describe the content of these MOUs as regards quarantining and contact tracing. The National Action Plan for Health Security 2017-2021, published in June 2017, does not contain any relevant information. [2] The Ministry of Information has posted an article describing the country's response to the COVID-19 pandemic, which describes the establishment of dozens of quarantine facilities in the country, mainly near border entry points. However, it does not describe any cooperative agreement between the public health system and border control authorities as regards quarantining or contact tracing. [3] No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO). [4] Neither Eritrea's Ministry of Health nor its Ministry of Foreign Affairs has an online presence. There is no evidence of a national public health institute in Eritrea, and laboratories in the national system do not have an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 October 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 October 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 26 October 2020.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

An applied epidemiology training programme is available in Eritrea. According to Joint External Evaluation report (JEE) for Eritrea, published in October 2016, there is a four-month applied field epidemiology offered at the Asmara College of Health Sciences (ACHS). There is also a basic epidemiology training programme offered as part of the ACHS Bachelor of Science course in Public Health, which is focused on infectious diseases. Additionally, the Ministry of Health and the World Health Organization organize a six-week short course in epidemiology. The JEE also states that "some staff have participated in a basic/intermediate course in field epidemiology training programme hosted in Kenya"; the program is not specified. Finally, the JEE notes that "some veterinarians participate in epidemiology training courses organized outside the country"; again, the programs are not specified. [1] There is no evidence that Eritrea participates in Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) or APHENET. [2,3] No other information is shared via a public website by the Eritrean government. The Ministry of Health does not have an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs". [<https://www.tephinet.org/training-programs>]. Accessed 2 November 2020.

[3] AFENET. [<http://www.afenet.net/>]. Accessed 2 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 not enough evidence to confirm that 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). There is limited evidence that at least one field epidemiology training programme in Eritrea has included animal health professionals, but it is not clear which program and what time. According to the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, notes that "some veterinarians participate in epidemiology training courses organized outside the country". However, the names of these programs and when the participation occurred (or whether it is ongoing) are not specified. [1] There is no evidence that Eritrea participates in Training Programs in Epidemiology and Public Health Interventions Network

(TEPHINET), AFENET, or the Food and Agriculture Organization of the United Nations' Field Epidemiology Programmes for Veterinarians (FETPV). [2,3,4] No other information is shared via a public website by the Eritrean government. The Ministry of Health does not have an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 2 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs".

[https://www.tephinet.org/training-programs]. Accessed 2 November 2020.

[3] AFENET. [http://www.afenet.net/]. Accessed 2 November 2020.

[4] Food and Agriculture Organization of the United Nations (FAO). "Technical Workshop on Curriculum Development for Field Epidemiology Programmes for Veterinarians".

[http://www.fao.org/ag/againfo/programmes/en/empres/news_260718.html]. Accessed 2 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: 0

Eritrea has at least a draft national public health emergency response plan; however, because it is not shared via a public website, it is not possible to review the plan and determine whether it is overarching, whether it has been implemented, or whether it addresses planning for multiple communicable diseases with pandemic potential. The Joint External Evaluation

report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. No details are provided in the JEE about its contents. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS); the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant information shared under the auspices of a One Health working group or participating agency. There is no evidence that Eritrea has published a preparedness and response plan in response to the COVID-19 pandemic. The most extensive related item published by the government is a webpage on the website of the Ministry of Information titled "Brief synopsis of policy considerations and precepts on COVID-19", which focuses on actions taken and does not amount to a plan. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 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

Eritrea has a national public health emergency response plan that was drafted in 2016; however, because it is not shared via a public website, it is not possible to review the plan and determine whether it is overarching, whether it has been implemented, or whether it addresses planning for multiple communicable diseases with pandemic potential. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. No details are provided in the JEE about its contents. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS); the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant information shared under the auspices of a One Health working group or participating agency.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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

Eritrea has at least a draft a national public health emergency response plan; however, because it is not shared via a public website, it is not possible to review the plan and determine whether it is overarching, or whether it includes considerations for paediatric and other vulnerable populations. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. No details are provided in the JEE about its contents. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS); the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant information shared under the auspices of a One Health working group or participating agency.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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 not enough publicly available evidence to determine whether Eritrea's emergency preparedness plans include mechanisms for working with the private sector to assist with outbreak emergency preparedness and response. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. But no details are provided in the JEE about its contents, and it is not available online. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does

not contain relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no evidence that Eritrea has a national public health institute. There is no evidence of relevant information shared under the auspices of a One Health working group or participating agency.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 1

There is evidence that Eritrea has a policy, plan, or guidelines in place to implement non-pharmaceutical interventions (NPIs) during the current COVID-19 pandemic, but not for other diseases. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. But no details are provided in the JEE about its contents, and it is not available online. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [2] According to posts on the Ministry of Information's website, Eritrea has implemented NPIs in response to the COVID-19 pandemic. For example, on 23 March 2020, the government banned "all public gatherings including sport, cultural and social events such as baptisms, weddings, church attendance, burials and other events that may bring more than ten people in contact". [3] A summary of actions to combat COVID-19 mentions the "closure of various businesses, especially in the service and hospitality sectors, and the ban on domestic public passenger transport". The summary also mentions the existence of a "central, two-track policy framework", presumably designed to respond to the COVID-19 pandemic. [4] There are also posts on the Ministry of Information website that indicate that NPIs have been implemented by sub-national authorities, such as the governor of the Southern region's call for social distancing in March 2020. [5] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2

November 2020.

[5] Ministry of Information. 2 April 2020. "Initiative to contain spread of corona virus".

[<https://shabait.com/2020/04/02/initiative-to-contain-spread-of-corona-virus/>]. Accessed 2 November 2020.

[6] Ministry of Information. 1 April 2020. "Guidelines from the High Level Task Force on COVID-19".

[<https://shabait.com/2020/04/01/guidelines-from-the-high-level-task-force-on-covid-19/>]. Accessed 2 November 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is no public evidence that, in the past year, Eritrea has activated their national emergency response plan for an infectious disease outbreak, nor that Eritrea has completed a national-level biological threat-focused exercise (either with WHO or separately). There is no mention of the existence of a national emergency response plan shared via a public website by the government of Eritrea. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. But no details are provided in the JEE about its contents, and it is not available online. Further, the JEE notes that while Eritrea is committed to the development of a public health emergency operations center (EOC), "the current approach to EOC is ad hoc and event driven". [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [2] The government's description of actions taken in response to the COVID-19 pandemic in 2020 does not include any mention of activation of an emergency response plan. [3] There is no evidence of simulation exercises for Eritrea listed on the World Health Organization (WHO) extranet list of simulation exercises, nor is there any evidence of an after action review for Eritrea listed by the WHO. [4,5] There is no evidence of a national-level biological threat-focused exercise shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Eritrea country profile; or in the WHO Regional Office for Africa website. [6,7,8] There is no evidence of relevant media reports or academic studies. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 October 2020.

[4] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 2

November 2020.

[5] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 2 November 2020.

[6] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Eritrea". [<https://extranet.who.int/sph/country-status/eritrea#aar>]. Accessed 2 November 2020.

[7] World Health Organization Regional Office for Afri. "Eritrea". [<https://www.who.int/countries/eri/>]. Accessed 2 November 2020.

[8] World Health Organization Regional Office for Africa. "Eritrea News". [<https://www.afro.who.int/countries/29/news?page=0>]. Accessed 2 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 Eritrea in the past year has undergone an exercise to identify a list of gaps and best practices and developed a plan to improve response capabilities. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, notes that the country conducted a polio simulation exercise in 2016. It otherwise repeatedly notes the need for such exercises to test Eritrea's public health emergency readiness. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, states that the country plans to conduct a simulation exercise once a year to test the NAPHS-defined systems, but there is no way to confirm using information on a publicly available website that this has taken place. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no evidence of such exercises shared via a public website by the World Health Organization (WHO), including through its list of after action reviews. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 2 November 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 Eritrea in the past year has undergone a national-level biological threat-focused exercise, let alone one that has included private sector representatives. There is no evidence of simulation exercises for Eritrea listed on the World Health Organization (WHO) extranet list of simulation exercises, nor is there any evidence of an after action review for Eritrea listed by the WHO. [1,2] There is no evidence of a national-level biological threat-focused exercise shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Eritrea country profile; or in the WHO Regional Office for Africa website. [3,4,5] There is no evidence of relevant media reports or academic studies. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 2 November 2020.

[2] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 2 November 2020.

[3] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Eritrea". [<https://extranet.who.int/sph/country-status/eritrea#aar>]. Accessed 2 November 2020.

[4] World Health Organization Regional Office for Afri. "Eritrea". [<https://www.who.int/countries/eri/>]. Accessed 2 November 2020.

[5] World Health Organization Regional Office for Africa. "Eritrea News". [<https://www.afro.who.int/countries/29/news?page=0>]. Accessed 2 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 no public evidence that Eritrea has a permanent national emergency operations centre (EOC). The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, although the government is committed to developing a public health emergency operations centre (PHEOC), none yet exists. Further, "the current approach to EOC is ad hoc and event driven". [1] The National Action Plan for Health Security 2017-2021 (the NAPHS), published in June 2017, states the intention of establishing a PHEOC at the national level by 2019, and making "procedures and plans" available for an EOC by the same year. However, there is no information about progress toward this goal. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 29 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 public evidence that Eritrea has a permanent national emergency operations centre (EOC), let alone one that conducts a drill once a year, or is required to conduct one. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, although the government is committed to developing a public health emergency operations centre (PHEOC), none yet exists. Further, "the current approach to EOC is ad hoc and event driven". [1] The National Action Plan for Health Security 2017-2021 (the NAPHS), published in June 2017, states the intention of establishing a PHEOC at the national level by 2019, and making "procedures and plans" available for an EOC by the same year. However, there is no information about progress toward this goal. The NAPHS also states that the country plans to conduct a simulation exercise once a year to test the NAPHS-defined systems, but there is no way to confirm this using information on a publicly available website that this has taken place. Further, it is unclear whether this goal is intended to apply to the PHEOC, or whether it is a requirement. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 26 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 public evidence that Eritrea has a permanent national emergency operations centre (EOC), let alone one that has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. There is no public evidence that Eritrea has a permanent national emergency operations centre (EOC). The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, although the government is committed to developing a public health emergency operations centre (PHEOC), none yet exists. Further, "the current approach to EOC is ad hoc and event driven". [1] The National Action Plan for Health Security 2017-2021 (the NAPHS), published in June 2017, states the intention of establishing a PHEOC at the national level by 2019, and making "procedures and plans" available for an EOC by the same year. However, there is no information about progress toward this goal. The NAPHS also states that the country plans to conduct a simulation exercise once a year to test the NAPHS-defined systems, but there is no way to confirm using information on a publicly available website that this has taken place. Further, it is unclear whether this goal is intended to apply to the PHEOC, or whether it is a requirement. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of

Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 29 October 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-

library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 26 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 public evidence that public health and national security authorities in Eritrea have carried out an exercise to respond to a potential deliberate biological event, nor that there are 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. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, notes that "MOUs or other agreements (i.e. protocol) exist between public health and security authorities within the country," but does not describe the contents of these MOUs. There is no evidence that these MOUs are shared online. Further, the JEE states that "Eritrea's current approach to managing situations such as disasters has been ad hoc, and often characterized by fire fighting". [1] The JEE awards Eritrea a score of 3 in the category "Linking public health and security authorities", indicating that an "MoU or other agreement/protocol, that includes at least roles, responsibilities, SOPs and information to be shared, exists between public health and security authorities within the country and has been formally accepted to address all hazards". [1,2] However, since such an MOU is not shared online, it is not possible to know its precise contents and determine whether it serves to respond to a potential deliberate biological event. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain relevant information. [3] There is no evidence of simulation exercises for Eritrea listed on the World Health Organization (WHO) extranet list of simulation exercises, nor is there any evidence of an after action review for Eritrea listed by the WHO. [4,5] There is no evidence of a relevant exercise shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Eritrea country profile; or in the WHO Regional Office for Africa website. [6,7,8] There is no evidence of relevant media reports or academic studies. No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

- [1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.
- [2] World Health Organization (WHO). 2018. "Joint External Evaluation Tool". [<https://extranet.who.int/sph/sites/default/files/document-library/document/9789241550222-eng.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.
- [4] World Health Organization. "Simulation Exercises". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 2 November 2020.
- [5] World Health Organization. "After Action Review". [<https://extranet.who.int/sph/after-action-review>]. Accessed 2 November 2020.
- [6] World Health Organization. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH): Eritrea". [<https://extranet.who.int/sph/country-status/eritrea#aar>]. Accessed 2 November 2020.
- [7] World Health Organization Regional Office for Afri. "Eritrea". [<https://www.who.int/countries/eri/>]. Accessed 2 November 2020.
- [8] World Health Organization Regional Office for Africa. "Eritrea News". [<https://www.afro.who.int/countries/29/news?page=0>]. Accessed 2 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 not enough public evidence to confirm that Eritrea has in place a risk communication plan that outlines how messages will reach populations and sectors with different communications needs (e.g. different languages, location within country, media reach, etc.) A September 2018 release from the Ministry of Information states that A National Risk Communication Plan (2018-2022) has been developed. But the release does not detail the contents of the plan, only saying that it covers disease outbreaks. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea's five-year strategic plan for 2012-2016 "acknowledges risk communication and multi-hazard components", but these have not been formalized or operationalized. [2] In any case, the strategic plan does not appear to be shared via a publicly available website. The JEE also emphasizes Eritrea's need to develop "an integrated multi-hazard risk communication plan and policy within a national preparedness and response framework", indicating that one does not currently exist. Additionally, the JEE states that "there is strong collaboration with the Ministry of Education, the national schools network and the Ministry of Information to develop, produce and disseminate information education and communication (IEC) through various channels (radio, televisions, newspapers)". However, the JEE states that these outlets are used more for health promotion and not for multi-hazard emergency preparedness and response. [2] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health

Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

- [1] Ministry of Information. 5 September 2018. "Communicating Risk as Part of Health Promotion Policy". [<https://shabait.com/2018/09/05/communicating-risk-as-part-of-health-promotion-policy/>]. Accessed 2 November 2020.
- [2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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 not enough public evidence to confirm that Eritrea has in place a risk communication plan that is specifically intended for use during a public health emergency. A September 2018 release from the Ministry of Information states that A National Risk Communication Plan (2018-2022) has been developed. But the release does not detail the contents of the plan, only saying that it covers disease outbreaks. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea's five-year strategic plan for 2012-2016 "acknowledges risk communication and multi-hazard components", but these have not been formalized or operationalized. [2] In any case, the strategic plan does not appear to be shared via a publicly available website. The JEE also emphasizes Eritrea's need to develop "an integrated multi-hazard risk communication plan and policy within a national preparedness and response framework", indicating that one does not currently exist. [2] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

- [1] Ministry of Information. 5 September 2018. "Communicating Risk as Part of Health Promotion Policy". [<https://shabait.com/2018/09/05/communicating-risk-as-part-of-health-promotion-policy/>]. Accessed 2 November 2020.
- [2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is not enough public evidence to confirm that Eritrea has in place a risk communication plan that is specifically intended for use during a public health emergency, let alone such a plan that designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. A September 2018 release from the Ministry of Information states that A National Risk Communication Plan (2018-2022) has been developed. But the release does not detail the contents of the plan, only saying that it covers disease outbreaks. [1] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea's five-year strategic plan for 2012-2016 "acknowledges risk communication and multi-hazard components", but these have not been formalized or operationalized. [2] In any case, the strategic plan does not appear to be shared via a publicly available website. The JEE also emphasizes Eritrea's need to develop "an integrated multi-hazard risk communication plan and policy within a national preparedness and response framework", indicating that one does not currently exist. Additionally, the JEE states that the Ministry of Health "has identified a national spokesperson for communicating to the public". But there are no details confirming that this spokesperson has been identified in a risk communication plan, or that the person is the primary spokesperson for the government during a public health emergency. [2] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

- [1] Ministry of Information. 5 September 2018. "Communicating Risk as Part of Health Promotion Policy". [<https://shabait.com/2018/09/05/communicating-risk-as-part-of-health-promotion-policy/>]. Accessed 2 November 2020.
- [2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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

In the past year, the Eritrean government has utilized online media platforms to inform the public about public health emergencies, but until the COVID-19 pandemic, did not regularly use such platforms to share information on health concerns. It also did not use the platforms to dispel rumors, misinformation or disinformation. The Ministry of Information, which hosts the government's sole website (shabait.com), also has a Facebook page, which has shared information about the COVID-19 pandemic. [1] Some posts contain detailed information about COVID-19 case counts and the government response to the pandemic. [2] The minister of information also has a Twitter account (unverified) which shares similar information, in addition to a variety of promotional material and posts on topics unrelated to public health. [3] There is no evidence that, before the COVID-19 pandemic, the abovementioned Twitter or Facebook accounts regularly shared public health

information. [4] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not contain information about the use of social media. Regarding communication more generally, it states that there is strong coordination between government entities to share information via radio, televisions, and newspapers, but that these outlets are used more for health promotion and not for multi-hazard emergency preparedness and response. [5] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [6] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. Neither the Ministry of Health nor any other Eritrean governmental body shares information about health emergencies via Facebook or Twitter.

[1] Facebook. "MOI Eritrea". [<https://www.facebook.com/moieritrea/>]. Accessed 2 November 2020.

[2] Facebook. 12 October 2020. "MOI Eritrea" status update.

[https://www.facebook.com/moieritrea/posts/982811972196610?__tn__=K-R]. Accessed 2 November 2020.

[3] Twitter. "@hawelti". [https://twitter.com/hawelti?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor]. Accessed 2 November 2020.

[4] Twitter. "@hawelti". All posts before May 2019. [[https://twitter.com/search?q=\(from%3Ahawelti\)%20until%3A2019-05-01%20since%3A2011-01-01&src=typed_query](https://twitter.com/search?q=(from%3Ahawelti)%20until%3A2019-05-01%20since%3A2011-01-01&src=typed_query)]. Accessed 2 November 2020.

[5] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[6] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. The president of Eritrea and the minister of information have Twitter accounts, but neither show evidence of sharing disinformation about infectious diseases. [1,2] The president's account content is private. [1] The minister of information's account does not share information about infectious diseases, except information about COVID-19. [2] There are no news media reports indicating that these or other channels have been used to share disinformation about infectious diseases.

[1] Twitter. "@POEritrea". [<https://twitter.com/poeritrea?lang=en>]. Accessed 2 November 2020.

[2] Twitter. "@hawelti". [https://twitter.com/hawelti?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor]. Accessed 2 November 2020.

[3] BBC News. "Eritrea". [<https://www.bbc.com/news/topics/cz4pr2gdgjt/eritrea>]. Accessed 2 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: 1.31

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: 20.36

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: 10.18

2018-2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 9.62

2018-2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that, in the past year, Eritrea has issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them [1]. The World Organisation for Animal Health's Weekly Disease Information portal does not list any events in Eritrea in the last year that prompted international movement restrictions of people, animals, or goods. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of Foreign Affairs has an online presence. There is no evidence of relevant media reports or academic studies. In the context of the global COVID-19 pandemic, international media reported that Eritrea had declined donations of medical goods from abroad. [3] The Eritrean government's description of its response to the COVID-19 pandemic does not mention any relevant bans. [4,5]

[1] World Health Organization (WHO). "Disease Outbreak News: Eritrea".

[<https://www.who.int/csr/don/archive/country/eri/en/>]. Accessed 29 October 2020.

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

[http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 10 March 2019.

[3] Zere, Abraham T. 3 May 2020. "Can Eritrea's government survive the coronavirus?".

[<https://www.aljazeera.com/opinions/2020/5/3/can-eritreas-government-survive-the-coronavirus/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

[5] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 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, in the past year, Eritrea has issued a restriction, without international/bilateral support, on the export/import of non-medical goods (e.g. food, textiles, etc) due to an infectious disease outbreak. The Disease Outbreak News of the World Health Organisation (WHO) does not list any such restrictions, or disease outbreaks that prompted them

[1]. The World Organisation for Animal Health's Weekly Disease Information portal does not list any events in Eritrea in the last year that prompted international movement restrictions of people, animals, or goods. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health, the Ministry of Agriculture, nor the Ministry of Foreign Affairs has an online presence. There is no evidence of relevant media reports or academic studies. In the context of the global COVID-19 pandemic, international media reported that Eritrea had declined donations of medical goods from abroad. However, there is no evidence that this amounted to a ban, nor did the rejection of donations include non-medical goods. [3] The Eritrean government's description of its response to the COVID-19 pandemic does not mention any relevant bans. [4,5]

[1] World Health Organization (WHO). "Disease Outbreak News: Eritrea".

[<https://www.who.int/csr/don/archive/country/eri/en/>]. Accessed 29 October 2020.

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

[http://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 2 November 2020.

[3] Zere, Abraham T. 3 May 2020. "Can Eritrea's government survive the coronavirus?".

[<https://www.aljazeera.com/opinions/2020/5/3/can-eritreas-government-survive-the-coronavirus/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

[5] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 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

In the past year, Eritrea has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. In March 2020, in response to the global COVID-19 pandemic, Eritrea banned all foreign travelers from the country, unless the travel was "extremely unavoidable". [1] There is no information shared by the government about what type of travel would be considered "extremely unavoidable". The Eritrean government's description of its response to the COVID-19 pandemic mentions the travel ban, but calls them "voluntary". As the ban was not only on foreigners arriving in the country but also on domestic travel and on Eritreans leaving the country, it is not clear whether all or part of the ban was "voluntary". [4,5] A page on the website of the U.S. embassy in Eritrea, last updated in September 2020, states that "land borders are closed for citizens of every country and there are no commercial flights into Eritrea", suggesting that the travel ban on foreigners is total and remains in effect. [4] However, other posts on the website of the Ministry of Information (the government's only public site) suggest that land borders remained open, at least at some point in summer 2020. [5] No other information on the ban is shared via a public website by the Eritrean government. Neither the Ministry of Health, nor the Ministry of Foreign Affairs has an online presence.

[1] Xinhua. "Eritrea restricts all travels except for "extremely unavoidable" purposes to contain COVID-19".

[http://www.xinhuanet.com/english/2020-03/16/c_138884563.htm]. Accessed 2 November 2020.

[2] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

[3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 November 2020.

[4] U.S. Embassy in Eritrea. [<https://er.usembassy.gov/covid-19-information/>]. Accessed 2 November 2020.

[5] Ministry of Information. 12 June 2020. "Statement". [<https://shabait.com/2020/06/12/statement-24/>]. Accessed 2 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: 6.28

2016

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 143.97

2018

WHO; national sources

4.1.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient publicly available evidence to confirm that Eritrea has a public 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. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that Eritrea takes the development of its public health workforce seriously, and gives Eritrea a score of "4" for its workforce strategy, indicating, according to the JEE Evaluation Tool, that "a public health workforce strategy has been drafted and implemented consistently; strategy is reviewed, tracked and reported on annually". [1,2] The JEE also reports that the Ministry of Health "is developing a 2016-2021 Public Health Workforce Strategy following the expiry of the last one in 2015". [1] However, neither of these documents appear to be shared via a publicly available website by the government of Eritrea or by other entities, so it is not possible to confirm their contents. The Second Health Sector Strategic Development Plan II 2017-2021; published in 2016, does not provide detailed information on workforce shortcomings, and does not include a strategy to address shortcomings, aside from stating that it is a government goal. [3] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information, except that it also mentions the need for "a workforce gap assessment" and plan for "comprehensive workforce development". [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Labour and Human Welfare; nor the Ministry of Education has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] World Health Organization. 2005. "Joint External Evaluation Tool".

[https://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf?sequence=1]. Accessed 2 November 2020.

[3] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 70

2011

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 to confirm that Eritrea has the capacity to isolate patients with highly communicable diseases in a patient isolation facility located within the country. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not clearly state whether or not Eritrea has isolation facilities that meet these standards, but does list as a recommendation that Eritrea "consider the establishment of permanent infection isolation facilities". This statement would seem to indicate that such facilities do not currently exist. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, repeats the same recommendation and does not contain additional relevant information. [2] Posts on the government's website describing Eritrea's response to the COVID-19 pandemic do not contain descriptions of patient isolation capabilities in the country. [3,4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Labour and Human Welfare; nor the Ministry of Education has an online presence. It does not appear that Eritrean hospitals have an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak".

[<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 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 insufficient evidence to show that Eritrea has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years, or that it has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not clearly state whether or not Eritrea has isolation facilities that meet these standards, but does list as a recommendation that Eritrea "consider the establishment of permanent infection isolation facilities". The JEE does not indicate whether there is a plan to expand such facilities. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, repeats the same recommendation and does not contain additional relevant information. [2] Posts on the government's website describing Eritrea's response to the COVID-19 pandemic do not contain descriptions of patient isolation capabilities in the country. [3,4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Labour and Human Welfare; nor the Ministry of Education has an online presence. It does not appear that Eritrean hospitals have an online presence. There is no evidence

of relevant media reports or academic studies.

- [1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.
- [2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017–2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak". [<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 November 2020.
- [4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 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 no public evidence that Eritrea has a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies and medical supplies for routine needs. The Second Health Sector Strategic Development Plan II 2017-2021, published in 2016, states that "the local procurements are handled by the General Services Division under the Department of Administration and Finance, while external procurements are handled by the Project Management Unit (PMU), PHARMECOR and Red Sea Corporation". However, the plan does not specify which types of procurements it is referring to, nor does it indicate what protocols are in place. [1] Neither the Joint External Evaluation report (JEE) for Eritrea, published in October 2016, nor the National Action Plan for Health Security 2017-2021, published in June 2017, contains any relevant information. [2,3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the National Health Laboratory; the Ministry of Agriculture; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute.

- [1] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021". [https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.
- [2] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.
- [3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document->

library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 2 November 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: 1

There is evidence that Eritrea has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency, but there is limited evidence about what the stockpile contains. There is evidence that Eritrea maintains a stockpile of medical countermeasures (MCMs) for national use during a public health emergency. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "a national stockpile of medical countermeasures is maintained by the Eritrean Pharmaceuticals Agency (PHARMECOR)". PHARMECOR also has "framework agreements" with different suppliers for emergency situations. The JEE does not provide detailed information about the contents of stockpiles, except to say that PHARMECOR's procurement includes "drugs and supplies" for emergencies. [1] However, aside from MCMs, there is insufficient evidence to show what other medical supplies Eritrea may stockpile, if any. The JEE notes that there are tax exemptions for donated personal protective equipment, but does not mention whether there is a stockpile of these items. Further, the JEE also states that, while the "stockpile system is laid out in the national epidemic response plan", the dedicated emergency stockpiles "are very limited and hence there is a need to build a system to ensure national stockpile holdings"; nowhere does the JEE specify which types of stockpiles it is referring to in these descriptions. The referenced national epidemic response plan, which the JEE says was published in 2016, is not available online. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 insufficient public evidence to confirm that Eritrea has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, describes the existence of a stockpile of medical countermeasures maintained by the the Eritrean Pharmaceuticals Agency (PHARMECOR), but does not mention whether there is a similar stockpile of laboratory equipment. The JEE notes that there are tax exemptions for some kinds of "disaster related equipment", but does not mention whether there is a stockpile of these items or whether that would include laboratory equipment. Further, the JEE also states that, while a "stockpile system is laid out in the national epidemic response plan", the dedicated emergency stockpiles "are very limited and hence there is a need to build a system to ensure national stockpile holdings"; nowhere does the JEE specify which types of stockpiles it is referring to in these descriptions. The referenced national epidemic response plan, which the JEE says was published in 2016, is not available online. Separately, the JEE also notes that "some equipment and reagents required to detect priority diseases at NAPHL [the National Animal and Plant Health Laboratory] need to be assessed, fixed and upgraded"; there is no mention of stockpiles in this context. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[[https://extranet.who.int/sph/sites/default/files/document-](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)

[library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 that Eritrea conducts or requires an annual review of a national stockpile to ensure the supply is sufficient for a public health emergency. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that "a national stockpile of medical countermeasures is maintained by the Eritrean Pharmaceuticals Agency (PHARMECOR)". PHARMECOR also has "framework agreements" with different suppliers for emergency situations. But the JEE does not provide information if there are annual reviews of this stockpile. [1] Aside from MCMs, there is insufficient evidence to show what other medical or laboratory supplies Eritrea may stockpile, if any. Further, there is no other evidence of annual reviews. The JEE also states that, while the "stockpile system is laid out in the national epidemic response plan", the dedicated emergency stockpiles "are very limited and hence there is a need to build a system to ensure national stockpile holdings"; nowhere does the JEE specify which types of stockpiles it is referring to in these descriptions. The referenced national epidemic response plan, which the JEE says was published in 2016, is not available online. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the

NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of such stockpiles. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 insufficient evidence to show that Eritrea has a plan or agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency, or that it has a plan or mechanism to procure medical supplies for national use during a public health emergency. There is evidence that Eritrea has a mechanism to ease the acquisition of certain medical supplies (e.g. equipment, PPE) for national use during a public health emergency, though there is insufficient evidence to confirm that these measures amount to a plan for procurement. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, notes that Eritrea has an "agreement for implementation of tax exemption for donated medicines, related medical supplies, personal protective equipment and other disaster related equipment". [1] However, the JEE does not name this agreement, and it is not available online, so it is not possible to know its specific provisions. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant plan. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 insufficient evidence to confirm that Eritrea has a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency, nor a plan to procure laboratory supplies for such use. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, notes that Eritrea has an "agreement for implementation of tax exemption for donated medicines, related medical supplies, personal protective equipment and other disaster related equipment". [1] However, the JEE does not name this agreement, and it is not available online, so it is not possible to know its specific provisions, including whether it applies to laboratory supplies. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [2] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant plan. [3]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that the Ministry of Health's Medical Stores Department has "a well-recognized distribution network", and that a medical countermeasures plan is incorporated into the "national epidemic response plan". [1] However, none of these materials is shared via a publicly available website, so it is not possible to verify if these plans include plans for distribution. Moreover, the JEE gives Eritrea a score of "2" for the indicator "System is in place for sending and receiving medical countermeasures during a public health emergency", which according to the JEE Evaluation Tool indicates only that "plans have been drafted". [1,2] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant plan. [4]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] World Health Organization (WHO). 2018. "Joint External Evaluation Tool". [<https://extranet.who.int/sph/sites/default/files/document-library/document/9789241550222-eng.pdf>]. Accessed 2 November 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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 public plan in place to receive health personnel from other countries to respond to a public health emergency. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that there are "no formal systems in place for sending or receiving medical countermeasure health personnel during a public health emergency from outside Eritrea". [1] Moreover, the JEE gives Eritrea a score of "2" for the indicator "System is in place for sending and receiving health personnel during a public health emergency", which according to the JEE Evaluation Tool indicates only that "plans have been drafted that outline [a] system". [1,2] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not contain additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Defence; other security agencies; nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant plan. [4]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] World Health Organization (WHO). 2018. "Joint External Evaluation Tool".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/9789241550222-eng.pdf>]. Accessed 2 November 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. 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: 2

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 34.1

2010

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: 35.04

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of legislation, policies, or public statements regarding prioritised health care services to healthcare workers, let alone those who become sick as a result of responding to a public health emergency. The Labour Proclamation of Eritrea, a 2001 law, does not contain relevant provisions. [1] No other relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO) or the NATLEX database of the International Labour Organization (ILO). [2,3] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant plan. [4] No other information is shared via a public website by the Eritrean government. The Ministry of Health does not have an online presence.

[1] Government of Eritrea. Proclamation No. 118 of 2001. "Labour Proclamation of 2001".

[<https://www.ilo.org/dyn/travail/docs/493/The%20Labour%20Proclamation%20of%20Eritrea%20No%20118%20of%202001.pdf>]. Accessed 2 November 2020.

[2] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[3] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 October 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Eritrea. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not mention any such system. The JEE does state "there is strong collaboration" between government agencies to "disseminate information education and communication (IEC) through various channels (radio, televisions, newspapers)". However, the JEE states that these outlets are used more for health promotion and not for multi-hazard emergency preparedness and response. The JEE also states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. [1] But this plan does not appear to be shared via a publicly available website, and it is not possible to determine what if any provisions it contains regarding communication during a public health emergency. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [2] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant system. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 October 2020.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Eritrea, let alone such a plan that encompasses healthcare workers in both the public and private sectors. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, does not mention any such system. The JEE does state "there is strong collaboration" between government agencies to "disseminate information education and communication (IEC) through various channels (radio, televisions, newspapers)". However, the JEE states that

these outlets are used more for health promotion and not for multi-hazard emergency preparedness and response. The JEE also states that "Eritrea drafted a national pandemic/epidemic preparedness and response plan" in 2016. [1] But this plan does not appear to be shared via a publicly available website, and it is not possible to determine what if any provisions it contains regarding communication during a public health emergency. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [2] There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant system. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 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 Eritrea's public health system monitors for and tracks the number of health care associated infections (HCAIs) that take place in healthcare facilities. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions that Eritrea has had an HCAI prevention and control programme in place since 2004, but does not provide any details about the programme, such as whether it monitors and tracks the number of HCAIs. [1] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [2] The World Health Organization (WHO)'s library of national action plans does not contain a plan for Eritrea. [3] There is no evidence of other relevant information shared via a public website by the WHO. No other information is shared via a public website by the Eritrean government. The Ministry of Health does not have an online presence. There is no evidence of a national public health institute in Eritrea, and laboratories in the national system do not have an online presence. There is no indication that the government's response to the COVID-19 pandemic has included relevant monitoring. [4]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<http://apps.who.int/iris/bitstream/handle/10665/254702/WHO-WHE-CPI-2017.12-eng.pdf;jsessionid=22F29E0564A7ED9580BC68D7234A2944?sequence=1>]. Accessed 28 April 2021.

[2] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[3] World Health Organization (WHO). "Library of National Action Plans". [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 2 November 2020.

[4] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 30 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 of a national requirement for ethical review before beginning a clinical trial in Eritrea. The National Medicines Policy states that "Clinical trials on medicines will be carried out in compliance with Good Clinical Practice Guidelines of the Ministry of Health and the WHO 'Model of items to be included in a clinical trial protocol'", but does not provide any other details on the process. [1] No other relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO) or the NATLEX database of the International Labour Organization (ILO). [2,3] A 2014 report on research ethics in Africa, hosted on the website of the Johns Hopkins School of Public Health, indicates an absence of research ethics committees in Eritrea. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Ministry of Education has an online presence. Eritrea does not have a Ministry of Research.

[1] Ministry of Health. 2020. "Eritrean National Medicines Policy".

[https://www.who.int/selection_medicines/country_lists/eri_nmp_2010.pdf?ua=1]. Accessed 2 November 2020.

[2] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[3] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[4] Mariana Kruger, Paul Ndebele, Lyn Horn (eds.). 2014. "Research Ethics in Africa: A Resource for Research Ethics Committees". Sun Press. [https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs/Research%20Ethics%20in%20Africa_bk.pdf]. Accessed 2 November 2020.

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. There is also no general evidence of a national requirement for ethical review before beginning a clinical trial in Eritrea. The National Medicines Policy states that "Clinical trials on medicines will be carried out in compliance with Good Clinical Practice Guidelines of the Ministry of Health and the WHO 'Model of items to be included in a clinical trial protocol'", but does not provide any other details on the process. [1] No other relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO) or the NATLEX database of the International Labour Organization (ILO). [2,3] A 2014 report on research ethics in Africa, hosted on the website of the Johns Hopkins School of Public Health, indicates an absence of research ethics committees in Eritrea. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Ministry of Education has an online presence. Eritrea does not have a Ministry of Research.

[1] Ministry of Health. 2020. "Eritrean National Medicines Policy".

[https://www.who.int/selection_medicines/country_lists/eri_nmp_2010.pdf?ua=1]. Accessed 2 November 2020.

[2] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[3] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[4] Mariana Kruger, Paul Ndebele, Lyn Horn (eds.). 2014. "Research Ethics in Africa: A Resource for Research Ethics Committees". Sun Press. [https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs/Research%20Ethics%20in%20Africa_bk.pdf]. Accessed 2 November 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 not enough publicly available information to determine whether Eritrea has a government agency responsible for approving new medical countermeasures for humans. No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO) or the NATLEX database of the International Labour Organization (ILO). [1,2] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions the existence of the Eritrean Pharmaceuticals Agency (PHARMECOR), but does not detail its responsibilities. [3] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Education; nor PHARMECOR has an online presence. Eritrea does not have a Ministry of Research. There is no evidence of relevant media reports or academic studies.

[1] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[2] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[3] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document->

library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 2 November 2020.

4.7.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. There is also not enough publicly available evidence to determine Eritrea's framework or processes for approving medical countermeasures in general. No relevant laws can be found on databases such as the FAOLEX database of the Food and Agriculture Organization of the United Nations (FAO); or the NATLEX database of the International Labour Organization (ILO). [1,2] The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions the existence of the Eritrean Pharmaceuticals Agency (PHARMECOR), but does not detail its responsibilities. [3] The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [4] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health; the Ministry of Education; nor PHARMECOR has an online presence. Eritrea does not have a Ministry of Research. There is no evidence of relevant media reports or academic studies.

[1] Food and Agriculture Organization of the United Nations (FAO). "FAOLEX: Eritrea". [<http://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=ERI>]. Accessed 2 November 2020.

[2] International Labour Organization. "NATLEX: Eritrea".

[https://www.ilo.org/dyn/natlex/country_profiles.nationalLaw?p_lang=en&p_country=ERI]. Accessed 2 November 2020.

[3] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[4] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[[https://extranet.who.int/sph/sites/default/files/document-](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)

[library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf](https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf)]. Accessed 2 November 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 Eritrea has a national risk reduction strategy, let alone one devoted to pandemics, or one that integrates pandemics. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, mentions the existence of a few plans that might conceivably contain related provisions, among them: the 2014 National Ebola Epidemic and Response Plan; the National MOH-MOA Joint Avian Influenza Preparedness and Response Plan, 2006; and the Draft national multi-hazard public health emergency preparedness and response plan, 2016. [1] None of these documents appear to be shared via a publicly available website, so it is not possible to confirm their contents. The Second Health Sector Strategic Development Plan II 2017-2021 states the goal of creating a "strategy and guideline on disaster preparedness and response". [2] But no such document appears to be publicly available. The National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, does not share additional relevant information. [3] No other information is shared via a public website by the Eritrean government. Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no evidence of a national public health institute in Eritrea, and laboratories in the national system do not have an online presence. There is no evidence of relevant media reports or academic studies.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021". [https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021". [<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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 that Eritrea has cross-border agreements with neighboring countries, or as part of a regional group, with regards to public health emergencies. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, in general, there is "no cross-border protocol/framework for surveillance and response". [1] There is no evidence that Eritrea participates in Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) or the African Field Epidemiology Network (AFENET), both of which coordinate the rapid cross-border transfer of personnel in public health emergencies. [2,3] Neither the Second Health Sector Strategic Development Plan II 2017-2021 nor the National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, shares additional relevant information. [4,5] Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no evidence of relevant media reports or academic studies, or of bilateral agreements with Eritrea's neighbours, Djibouti, Ethiopia, and Sudan. There is no indication that the government's response to the COVID-19 pandemic has included the establishment of a relevant protocol. [6]

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs".

[<https://www.tephinet.org/training-programs>]. Accessed 2 November 2020.

[3] AFENET. [<http://www.afenet.net/>]. Accessed 2 November 2020.

[4] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[5] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 2020.

[6] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19".

[<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 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 Eritrea has cross-border agreements with neighboring countries, or as part of a regional group, with regards to animal health emergencies. The Joint External Evaluation report (JEE) for Eritrea, published in October 2016, states that, in general, there is "no cross-border protocol/framework for surveillance and response". [1] There is no evidence that Eritrea participates in Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) or the African Field Epidemiology Network (AFENET), both of which coordinate the rapid cross-border transfer of personnel in public health emergencies. [2,3] Neither the Second Health Sector Strategic Development Plan II 2017-2021 nor the National Action Plan for Health Security 2017-2021 (NAPHS), published in June 2017, shares additional relevant information. [4,5] Neither the Ministry of Health nor the Public Health Emergency Coordination body (whose existence is mentioned in the NAPHS) has an online presence. There is no evidence of relevant media reports or academic studies, or of bilateral

agreements with Eritrea's neighbours, Djibouti, Ethiopia, and Sudan.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea".

[https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf]. Accessed 2 November 2020.

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). "Training Programs".

[https://www.tephinet.org/training-programs]. Accessed 2 November 2020.

[3] AFENET. [http://www.afenet.net/]. Accessed 2 November 2020.

[4] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[5] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf]. Accessed 2 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: 0

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 0

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 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: 1

2021

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

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

5.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Eritrea has allocated national funds to improve capacity to address epidemic threats within the past three years. Neither the President, the Ministry of Health nor the Ministry of Agriculture has an online presence. The Ministry of Information, which is the only identifiable government entity with an online presence, does not share information such as budget priorities or allocations via its publicly available website. [1] The government's description of its response to the COVID-19 pandemic does not include any description of the amount of money it has spent on that response. [2,3] There is no other evidence of relevant information in media reports or academic articles.

[1] Ministry of Information. [<http://www.shabait.com/>]. Accessed 2 November 2020.

[2] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.

[3] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak". [<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 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: 1

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the

World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?

Yes = 1, No = 0

Current Year Score: 1

There is a publicly identified special emergency public financing mechanism and funds which Eritrea can access in the face of a public health emergency. Eritrea is among the countries eligible to borrow from the World Bank's International Development Association (IDA). [1] As a qualified borrower from the IDA, Eritrea is also eligible to access funds from the World Bank's Pandemic Emergency Financing Facility (PEF). [2] Additionally, Eritrea is a member of the African Public Health Emergency Fund (APHEF), which mobilizes "financial resources and disburse them for interventions against priority disease outbreaks and other public health emergencies in Member States". The fund is financed by contributions from member states and from external donors. APHEF covers requests and proposals for assistance from member countries during outbreaks and public health emergencies. [3] It should be noted, however, that the World Health Organization has reported that contributions to the APHEF have been very low. [4] No other relevant information is shared via a publicly available website by the government of Eritrea. The Ministry of Health does not have an online presence.

[1] International Development Association. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 2 November 2020.

[2] Pandemic Emergency Financing Facility. December 2017. "Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 2 November 2020.

[3] African Health Observatory and the World Health Organization (WHO). "Framework Document for the African Public Health Emergency Fund". [<https://apps.who.int/iris/bitstream/handle/10665/1677/AFR-RC60-13.pdf?sequence=1&isAllowed=y>]. Accessed 2 November 2020.

[4] World Health Organization (WHO). 27 July 2016. "The African Public Health Emergency Fund: The Way Forward (AFR/RC66/15)". [<https://reliefweb.int/report/world/african-public-health-emergency-fund-way-forward-afrrc6615>]. Accessed 2 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 Eritrean leaders have made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support; or to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support. Neither the Ministry of Health; the Ministry of Foreign Affairs; the Ministry of Agriculture; the National Health Laboratory; nor the National Animal and Plant Health Laboratory has an online presence. There is no evidence that Eritrea has a national public health institute. The Ministry of Information, which is the only identifiable government entity with an online presence, does not share any relevant information via its publicly available website. [1] No other information is shared via a public website by the Eritrean

government. There is no evidence of relevant academic studies or reports from the World Health Organization (WHO) or the United Nations. There is no evidence of relevant reports from media outlets such as the BBC, the New York Times, Reuters, Agence France-Presse (AFP), the Associated Press, or Al Jazeera. [2,3,4,5,6,7] Eritrea does not have any privately owned media. [8] There is no relevant information shared on the WHO country page for Eritrea or the regional website for Africa. [9,10] The Eritrean government's description of its response to the COVID-19 pandemic does not mention any request or commitment for funding or support. [11,12]

- [1] Ministry of Information. [<http://www.shabait.com/>]. Accessed 2 November 2020.
- [2] BBC. [<https://www.bbc.com/>]. Accessed 2 November 2020.
- [3] New York Times. "Eritrea". [<https://www.nytimes.com/topic/destination/eritrea?8qa>]. Accessed 2 November 2020.
- [4] Reuters. [<https://www.reuters.com/>]. Accessed 2 November 2020.
- [5] Agence France-Presse (AFP). [<https://www.afp.com/en>]. Accessed 2 November 2020.
- [6] Associated Press. [<https://www.ap.org/en-us/>]. Accessed 2 November 2020.
- [7] Al Jazeera. "Eritrea News". [<https://www.aljazeera.com/topics/country/eritrea.html>]. Accessed 2 November 2020.
- [8] BBC. 24 July 2019. "Eritrea Profile - Media". [<https://www.bbc.com/news/world-africa-13349077>]. Accessed 2 November 2020.
- [9] World Health Organization (WHO). "Eritrea". [<https://www.afro.who.int/countries/eritrea>]. Accessed 29 October 2020.
- [3] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 29 October 2020.
- [11] Ministry of Information. 12 October 2020. "Eritrea: Brief synopsis of policy considerations and precepts on COVID-19". [<https://shabait.com/2020/10/12/eritrea-brief-synopsis-of-policy-considerations-and-precepts-on-covid-19/>]. Accessed 2 November 2020.
- [12] Ministry of Information. 25 March 2020. "Eritrea's Effort to Prevent COVID-19 Outbreak". [<https://shabait.com/2020/03/25/eritreas-effort-to-prevent-covid-19-outbreak/>]. Accessed 2 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 Eritrea has requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. But there is no evidence that Eritrea has provided other countries with financing or technical support to improve capacity to address epidemic threats. According to Talus Analytics' Global Health Security Funding Tracker dashboard, an estimated US\$197m was disbursed to Eritrea between 2017 and 2020, including US\$111m for International Health Regulations (IHR) capacity building funding. This included more than \$US90m for immunization campaigns, funded by organizations such as UNICEF (the United Nations Children's Fund), the World Health Organization (WHO), the Global Alliance for Vaccines and Immunization (GAVI), and the United Nations Food and Agriculture Organization (FAO). [1] Neither the Ministry of Health nor the Ministry of Foreign Affairs has an online presence. The Ministry of Information, which is the only identifiable government entity with an online presence, does not share any relevant information via its publicly available website. [2] No other information is shared via a public website by the Eritrean government. There is no evidence of relevant media reports, academic studies, or reports from the WHO or the United Nations. There is no relevant information shared on the WHO country page for Eritrea or the regional website for Africa. [3,4] There is no evidence that Eritrea has provided other countries with financing or technical support to improve capacity to

address epidemic threats.

[1] Global Health Security Funding Tracker. "Eritrea". [<https://tracking.ghscosting.org/details/70/recipient>]. Accessed 2 November 2020.

[2] Ministry of Information. [<http://www.shabait.com/>]. Accessed 2 November 2020.

[3] World Health Organization (WHO). "Eritrea". [<https://www.afro.who.int/countries/eritrea>]. Accessed 29 October 2020.

[4] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 29 October 2020.

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, or isolated specimens (biological materials) with international Organizations and/or other countries that goes beyond influenza. There is no mention of such data sharing in the Joint External Evaluation report (JEE) for Eritrea, published in October 2016; the National Action Plan for Health Security 2017-2021; or the Second Health Sector Strategic Development Plan II 2017-2021; published in 2016. [1,2,3] No other relevant information is shared via a public website by the government of Eritrea. Neither the Ministry of Health; the Ministry of Agriculture; nor the Ministry of Education has an online presence. Eritrea does not have a Ministry of Research.

[1] World Health Organization (WHO). October 2016. "Joint External Evaluation of IHR Core Capacities of State of Eritrea". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.12-eng.pdf>]. Accessed 2 November 2020.

[2] Ministry of Health. November 2016. "Second Health Sector Strategic Development Plan II 2017-2021".

[https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/eritrea/eritrea_hssdp_ii_2102_2017.pdf]. Accessed 2 November 2020.

[3] Ministry of Health. June 2017. "National Action Plan for Health Security 2017-2021".

[<https://extranet.who.int/sph/sites/default/files/document-library/document/Final%20NAPHS%20Eritrea%20Document%2018%20August%202017.pdf>]. Accessed 2 November 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 Eritrea has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past year. The latest External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution, published in 2016, does not refer to Eritrea not sharing samples, nor does it list Eritrea as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [1] There is no relevant information shared via a public website by the government of Eritrea. There have not been any reports of Eritrea not sharing samples in either national and international media, or in reports from the World Health Organisation WHO).

[1] World Health Organisation (WHO). 2016. "External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution—High-Level Implementation Plan 2013-2016".

[http://www.who.int/about/evaluation/pip_evaluation_report.pdf]. Accessed 2 November 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 Eritrea has not shared pandemic pathogen samples during an outbreak in the past two years, including samples related to the COVID-19 pandemic. There is no relevant information shared via the World Health Organization (WHO) Disease Outbreak News website. [1] Likewise, there is no relevant information shared via the WHO International Health Regulations Strategic Partnership Portal; in the WHO Eritrea country profile; in the WHO Regional Office for Africa website; or the WHO COVID-19 dashboard for Eritrea. [2,3,4,5] There is no evidence in media of a failure to share samples. There is no reference to sharing pandemic pathogen data on a publicly available website of the government of Eritrea.

[1] World Health Organization (WHO). "Disease Outbreak News: Eritrea".

[<https://www.who.int/csr/don/archive/country/eri/en/>]. Accessed 29 October 2020.

[2] World Health Organization (WHO). "Eritrea". [<https://www.afro.who.int/countries/eritrea>]. Accessed 29 October 2020.

[3] World Health Organization (WHO). "Regional Office for Africa". [<https://www.afro.who.int/>]. Accessed 29 October 2020.

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

[https://covid19.who.int/?gclid=CjwKCAjw0On8BRAGeiwAincsHDsiu3F_evEv5sAS03F77Qlpy_CkbtUzGKG8PN0UCpleR_MqmUXPghoCVpsQAvD_BwE]. Accessed 29 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: 21

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 0

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 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: 0

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 3

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 2

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: 3

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: 3

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: 1

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 0

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: 76.57

2018

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: 0.41

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: 19.16

2008-2018

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 1

There is little publicly available information on the size of the Eritrean informal economy. A March 2019 report submitted by Eritrea to the United Nations Convention on the Elimination of All Forms of Discrimination against Women states that in 2015-16, "out of the labor force in the working age population", employment in the informal sector is 31.5% for women and 27.3% for men. [1] Neither the World Bank nor other sources such as the International Monetary Fund reports employment or unemployment rates for Eritrea, but logically the labor force must be larger than the number of unemployed individuals. [2,3] Therefore, it can be inferred that the share of employment in the informal sector is in the range of 25-50%. Neither the ILOSTAT data explorer nor the World Bank report informal employment data for Eritrea. [4,5]

[1] United Nations. 5 March 2019. "Sixth periodic report submitted by Eritrea under article 18 of the Convention, due in 2019". [<https://digitallibrary.un.org/record/3808633?ln=en>]. Accessed 19 November 2020.

[2] World Bank. "Unemployment, total (% of total labor force) (national estimate) - Eritrea".

[<https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=ER>]. Accessed 2 November 2020.

[3] International Monetary Fund. "The State of Eritrea". [<https://www.imf.org/en/Countries/ERI#countrydata>]. Accessed 2 November 2020.

[4] International Labour Organization. "Country Profiles". ILOSTAT. [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 2 November 2020.

[5] World Bank. "Informal employment (% of total non-agricultural employment) - Eritrea". [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=ER>]. Accessed 2 November 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: -

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: 1

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 41.3

2020

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -0.31

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: 3

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: 65.94

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: 713.6

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 4.1

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 7.2

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 5

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: 59.7

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 26.25

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: 11.48

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

Share of population that trust medical and health advice from the government , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 1

2018

Wellcome Trust Global Monitor 2018

6.5.4b

Trust medical and health advice from medical workers

Share of population that trust medical and health advice from health professionals , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 1

2018

Wellcome Trust Global Monitor 2018