

Tanzania

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

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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 evidence that Tanzania has a national antimicrobial resistance (AMR) plan for the surveillance, detection and reporting of priority AMR pathogens, however there is no evidence that it is a corresponding AMR plan for both Tanzania and Zanzibar, and although there is evidence of efforts to develop an AMR plan for Zanzibar, there is no publically evidence of a draft or finalized version of such a document.

The Tanzania plan is called "The National Action Plan on Anti Microbial Resistance (2017-2022)". [1] Objective 3 of the plan addresses both AMR surveillance and reporting by seeking to establish a national surveillance protocol through standard operating procedures and develop a multisector AMR surveillance reporting and information sharing system in human, animals, plants and environment health. Objective 4 of the plan addresses AMR detection by outlining strategic interventions such as designating laboratories for AMR testing, capacity building for those laboratories, strengthening the supply chain system to support AMR surveillance in these laboratories as well as strengthening quality assurance for them. [1]

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of Tanzania-Zanzibar, conducted in April 2017, reported that "national plans for (i) detection and reporting of priority AMR pathogens and (ii) surveillance of infections caused by priority AMR pathogens have been drafted and are awaiting signature by the relevant government official(s)".

It further reported that the Ministry of Health and Ministry of Agriculture of Zanzibar had agreed to draft a national action plan to combat AMR. [2]

In 2018, the Food and Agriculture Organization (FAO) committed to supporting Zanzibar to develop a national AMR plan, however no evidence of progress on the development of this plan was found. [3,4]

Furthermore, a review of the World Health Organization Library of National Action Plans, the websites of the Ministry of Health and Ministry of Agriculture, Natural Resources, Livestock and Fisheries as well as media reports in Zanzibar does not provide evidence of progress on such a plan. [5,6,7]

[1] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 4 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of International Health Regulations (IHR) core capacities of Tanzania-Zanzibar - Mission report: April 2017."

[<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 4

December 2020.

[3] Food and Agriculture Organization (FAO) Tanzania. March 2018. "FAO supportx Zanzibar to address antimicrobial resistance in animal health, environment". [<http://www.fao.org/tanzania/news/detail-events/zh/c/1109624/>]. Accessed 4 December 2020.

[4] Food and Agriculture Organization (FAO). August 2019. "FAO recruits National Consultant/Antimicrobial Resistance (AMR)". [<https://concoursn.com/fao-recruits-01-national-consultant-antimicrobial-resistance-amr/>]. Accessed 4 December 2020.

[5] World Health Organization (WHO). "Library of National Action Plans". [<https://www.who.int/drugresistance/action-plans/library/en/>]. Accessed 4 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health, Social Welfare, Gender and Children Zanzibar. [<https://mohz.go.tz/eng/>]. Accessed 4 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<http://www.kilimoznz.go.tz/index.php>]. Accessed 4 December 2020.

1.1.1b

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

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

Current Year Score: 0

There is insufficient evidence that the United Republic of Tanzania and Tanzania-Zanzibar have national laboratory/laboratory systems, which test for priority antimicrobial resistance (AMR) pathogens. The Joint External Evaluation of the International Health Regulations (IHR) Core Capabilities of the United Republic of Tanzania, conducted in February 2016, notes that mainland Tanzania has a functional public health laboratory network with a high quality National Health Laboratory Quality Assurance and Training Centre (NHL-QATC). However, it also recommends that "a systematic approach to surveillance of resistance patterns to common pathogens in humans needs to be developed" and that there was "no process for systematically collecting data on the prevalence of antibiotic resistance in common pathogens". [1] The AMR national plan also mentions that the NHL-QATC "is capable of conducting 7 of 10 priority testing areas: Bacteriology, virology, serology, parasitology, biochemistry, hematology and molecular, including sequencing". [2] The Joint External Evaluation of the IHR Core Capabilities of Tanzania-Zanzibar, conducted in April 2017, notes that laboratories have some capacity (human and equipment) for detection and reporting of AMR, but it does not list out what pathogens are tested. The report also notes that "There is no specific report about AMR produced routinely but information on this topic is available within a general unpublished report of both the human and animal health sectors. However, Zanzibar does not currently conduct surveillance for antimicrobial resistance". [3] No further evidence is found from a review of Tanzania's National AMR Plan, from Tanzania's Ministry of Health and Ministry of Agriculture websites or from Zanzibar's Ministry of Health and Ministry of Agriculture websites. [4,5,6,7,8,9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 4 December 2020.

[2] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 11 January 2021.

[3] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 4 December 2020.

- [4] World Health Organization (WHO). "Library of National Action Plans". [<https://www.who.int/drugresistance/action-plans/library/en/>]. Accessed 4 December 2020.
- [5] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 4 December 2020.
- [6] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 4 December 2020.
- [7] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 4 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 9 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 9 December 2020.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence of either Tanzania or Tanzania-Zanzibar conducting detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or antimicrobial resistance (AMR) organisms.

Neither the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of Tanzania conducted in February 2016 nor the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar conducted in April 2017 make mention of environmental surveillance for residues or organisms. [1,2]

Tanzania's national AMR plan, the 'National Action Plan on Antimicrobial Resistance 2017-2022', aims to establish an antimicrobial residue testing program as part of its broader objective of establishing a national surveillance system for antimicrobial resistance. [3] However, no evidence of such a program being developed was found from the websites of Tanzania's Ministry of Health and Ministry of Agriculture, or from the National Environment Management Council (a federal body mandated with overseeing environmental issues). [4,5,6]

Similarly, no evidence of detection or surveillance activities for antimicrobial residues or organisms was found via the websites of Tanzania-Zanzibar's Ministry of Health and Ministry of Agriculture. [7,8]

Tanzania-Zanzibar's Ministry of Lands, Water, Energy, and Environment does not seem to have an online presence.

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017". [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[3] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 11 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 11 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 11 December 2020.

[6] United Republic of Tanzania. National Environment Management Council. [<http://www.nemc.or.tz/>]. Accessed 11 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 11 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 11 December 2020.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 1

There is evidence that Tanzania as well as Tanzania-Zanzibar both have national legislations or regulations in place requiring prescriptions for antibiotic use for humans, however for both locations, the restrictions are not always enforced.

Tanzania has a standard treatment guideline and essential medicine list published by the (then) Ministry of Health and Social Welfare which provides health practitioners with standardized guidance in making decisions about appropriate health care including treatments of various diseases and prescription of medication including antibiotic use for humans. [1]

It also has "The Food, Drugs and Cosmetics Act 2003" that prohibits the sale and administering of prescription drugs including antibiotics without a prescription. [2]

However, a Horumpende et al. (2018) report states that in Tanzania, antibiotics are classified as prescription only drugs, but sale and dispensing of antibiotics without prescription is common. [3]

As well, the Joint External Evaluation of the International Health Regulations (IHR) for Tanzania, conducted in February 2016, states that "Antibiotics can be purchased widely without prescription, and regulation of public sector pharmacies through the Pharmacy Council of Tanzania is difficult and poorly resourced". [4]

While no evidence of national regulations was found via the Tanzania-Zanzibar Ministries of Health and of Agriculture, the Joint External Evaluation of the IHR for Tanzania-Zanzibar, conducted in April 2017, confirms that prescriptions are required for the purchase of antibiotics for humans, however also states that the requirements are "not strictly enforced". [5,6,7]

[1] United Republic of Tanzania. May 2013. "Standard Treatment Guideline and Essential Medicine List - Ministry of Health and Social Welfare-4th Edition". [https://www.who.int/selection_medicines/country_lists/Tanzania_STG_052013.pdf]. Accessed 11 December 2020.

[2] United Republic of Tanzania. 2003. "The Tanzania, Food Drugs and Cosmetics Act (TFDCA). [http://www.vertic.org/media/National%20Legislation/Tanzania/TZ_Food_Drugs_and_Cosmetics_Act.pdf]. Accessed 11 December 2020.

[3] Horumpende P. G, Sonda T. B, van Zwetselaar M, Antony M.L, Tenu F.F., and Mwanziva C.E. November 2018. "Prescription and non-prescription antibiotic dispensing practices in part I and part II pharmacies in Moshi Municipality, Kilimanjaro Region in Tanzania: A simulated clients approach". [<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0207465>]. Accessed 11 December 2020.

[4] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 11 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 11 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

1.1.2b

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

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

Current Year Score: 0

There is no publicly available evidence of national legislation or regulation requiring prescriptions for antibiotic use for animals in Tanzania as well as in Tanzania-Zanzibar.

Tanzania's national antimicrobial resistance (AMR) plan, the 'National Action Plan on Antimicrobial Resistance 2017-2022', aims to establish antimicrobial stewardship programs for both the human and animal health sectors including developing a system on the use of standard prescriptions, but the website of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the website of the Ministry of Agriculture do not provide any evidence that this objective has taken the form of legislation/regulations [1,2,3].

According to the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, there are high levels of inappropriate use of antibiotics in the human and animal health sectors. [4] That being said, the Animal Diseases Act, 2003, which provides for control and prevention of animal diseases in Tanzania states that "no person shall test, register or use animal pesticides or animal chemicals for disease control in the country without a written permission of the Director in respect of that particular animal pesticide or animal chemical" [5]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, confirms that prescriptions are required for the purchase of antibiotics for humans, but does not make mention of requirements for animals. [6]

No evidence of national legislation requiring prescriptions for antibiotic use in animals is found from the websites of Tanzania-Zanzibar's Ministry of Health and the Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [7,8]

[1] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 11 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 11 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 11 December 2020.

[4] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[5] United Republic of Tanzania. 2003. "The Animal Diseases Act 2003". [<http://extwprlegs1.fao.org/docs/pdf/tan53026.pdf>]. Accessed 11 December 2020.

[6] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 11 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimozn.go.tz/>]. Accessed 11 December 2020.

1.2 ZOO NOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Tanzania and Tanzania-Zanzibar have national legislations, plans, or equivalent strategy documents on zoonotic disease. The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes that the United Republic of Tanzania One Health Strategic Plan (2015-2020) will facilitate the process of integrating the One Health approach in public health, animal health, wildlife/ecosystem health. [1] Although the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, states that "there is no overarching strategic plan, national policy or contingency plan that applies to all priority zoonotic diseases", the One Health Strategic Plan document states that it considers both mainland Tanzania and Tanzania-Zanzibar, as it mentions Zanzibar in the country profile and administrative structure section. [2,3] Its goals include: "strengthen preparedness planning and improve the ability to respond to zoonotic disease outbreak at all levels (community, District, Regional and National)", "Improve the health of human, animal and environment through evidence-based research", and "provide functional and quality integrated human and animal health systems, at all levels, to reduce the burden of zoonotic diseases". To justify these goals, the plan recognizes and describes the relatedness of human, animal, and environmental health and the importance of transdisciplinary efforts. [3]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[3] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2020)".

[http://www.tzdp.org.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 11 December 2020.

1.2.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of national legislations, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans for Tanzania or for Tanzania-Zanzibar.

Neither the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of Tanzania conducted in February 2016 nor the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar conducted in April 2017 make mention of such legislations. [1,2]

Studies have been conducted that have used spillover events in Tanzania, but none of the studies found referenced a national legislation or equivalent for the country. [3,4,5]

No other evidence of such a legislation was found from the websites of Tanzania's Ministry of Health and Ministry of Agriculture, or from the National Environment Management Council (a federal body mandated with overseeing environmental issues). [6,7,8] Similarly, no evidence of a legislation or a strategy was found via the websites of Tanzania-Zanzibar's Ministry of Health and Ministry of Agriculture. [9,10] Tanzania-Zanzibar's Ministry of Lands, Water, Energy, and Environment does not seem to have an online presence.

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[3] Koch, L.K., Cunze, S., Kochmann, J. et al. August 2020. "Bats as putative Zaire ebolavirus reservoir hosts and their habitat suitability in Africa". [<https://www.nature.com/articles/s41598-020-71226-0#citeas>]. Accessed 11 December 2020.

[4] Pernet, O., Schneider, B., Beaty, S. et al. November 2014. "Evidence for henipavirus spillover into human populations in Africa". [<https://www.nature.com/articles/ncomms6342>]. Accessed 11 December 2020.

[5] National Public Radio (NPR). October 2012. "When Infections 'Spillover'".

[<https://www.npr.org/2012/10/19/163245528/when-infections-spillover>]. Accessed 11 December 2020.

[6] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 11 December 2020.

[7] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 11 December 2020.

[8] United Republic of Tanzania. National Environment Management Council. [<http://www.nemc.or.tz/>]. Accessed 11 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 11 December 2020.

[10] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 11 December 2020.

1.2.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is evidence of the existence of surveillance systems for the zoonotic diseases in both Tanzania and Tanzania-Zanzibar, however there is no evidence of adequate and current national legislations, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern in either location.

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, reports that "surveillance systems are in place to detect and report on priority zoonotic diseases in both the human and animals sectors (including wildlife)". [1] However, it reports that control plans are in place for only two zoonotic diseases (Rift Valley fever and avian influenza) suggesting that the systems are inadequate.

Tanzania's Ministry of Health and Ministry of Agriculture do not provide evidence of any other plans. [2,3]

Furthermore, Tanzania's 'One Health Strategic Plan 2015-2020', a whole-of-government guiding document aimed at creating coordination between different stakeholders to respond to zoonotic diseases, proposes a comprehensive surveillance system for the zoonotic diseases identified to be of greatest concern, but it does not outline control plans for these diseases. [4]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes the lack of an overall surveillance plan. [5] In this regard, it states that "the implementation of surveillance for zoonotic diseases of public health importance during an outbreak occurs on an ad hoc basis. The national plans for avian influenza and Rift Valley fever are too old for surveillance implementation".

Evidence of updated plans or plans for other zoonotic diseases is not found via the websites of Tanzania-Zanzibar's Ministry of Health or Ministry of Agriculture. [6,7]

There is no evidence of legislation or plans which cover surveillance and control for multiple diseases in Tanzania's 2016 World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Follow-Up Mission Report. [8]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 11 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 11 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 11 December 2020.

[4] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2020)".

[http://www.tzdp.org.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 11 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 11 December 2020.

- [6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 11 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 11 December 2020.
- [8] World Organisation for Animal Health (OIE). July 2016. "OIE PVS Evaluation Follow-Up Mission Report: Tanzania". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/OIE_PVS_Follow-up_report_Tanzania__final_01.pdf]. Accessed 11 December 2020.

1.2.1d

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

Yes = 1 , No = 0

Current Year Score: 1

Tanzania has a department dedicated to zoonotic disease that functions across ministries called the One Health Coordinating Unit (OHCU), which is housed within the Disaster Management Department of the Prime Minister's Office.

The One Health Strategic Plan 2015-2020 aims at establishing a cost-effective and efficient OHCU involving 80% of stakeholders by July 2016. [1] At the time of the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the Republic of Tanzania, conducted in 2016, the OHCU had not yet been staffed and did not as of yet have a physical office. [2]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, calls for the island to "establish a national one-health coordination unit" of its own. [3] However, there is evidence that mainland Tanzania's OHCU was formally launched on 13th February 2018, with the involvement of ministers from both mainland Tanzania and Tanzania-Zanzibar, indicating that this OHCU may serve both regions. [4]

The inter-ministerial organization and functions of the OHCU are outlined in the One Health Strategic Plan, which also states that the funding responsibilities of the unit are to be shared between ministries. [1] No evidence of a separate OHCU for Tanzania-Zanzibar was yet found on the websites of the Ministry of Health or Ministry of Agriculture. [5,6] No additional evidence was available via Tanzania's Ministry of Health, Ministry of Agriculture, and Ministry of Livestock and Fisheries Development websites. [7,8,9]

- [1] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2010)". [http://www.tzdpd.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 18 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [3] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [4] Afrique One Alliance. 14 February 2018. "Tanzania launches its One Health Coordination Desk and National One Health Strategic Plan". [<http://afriqueoneaspire.org/activities/tanzania-launches-its-one-health-coordination-desk-and-national-one-health-strategic-plan/>]. Accessed 18 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

- [6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.
- [7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.
- [8] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.
- [9] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 18 December 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tanzania and Tanzania-Zanzibar have national mechanisms (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency.

Most recently, a multi-sectoral coordinating mechanism (MCM) was put into place to strengthen Tanzania's "capacity to prevent, detect early and respond to health events". There is no evidence, however that this includes mechanisms for owners of livestock to conduct and report on disease surveillance. [1]

Tanzania also has a 'National Livestock Policy 2006', aimed at stimulating development in the livestock industry in order to increase rural and national income, improve food security and environmental conservation does not include a requirement that livestock owners must report diseases. [2] No evidence is found from the country's Ministry of Health, Ministry of Agriculture, and Ministry of Livestock and Fisheries Development. [3,4,5]

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of Tanzania, conducted in February 2016, notes that "disease reporting is obligatory for both human and animal health sectors with daily, weekly and monthly reports received at the national level for priority zoonotic diseases". No mechanism is mentioned, however, and no evidence was found through a general web search. [6]

No evidence of a mechanism for livestock disease reporting was found for Tanzania-Zanzibar, via the Ministry of Health and Ministry of Agriculture. [7,8]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that "there is a cadre of livestock field officers and laboratory technologists for zoonotic diseases surveillance implementation", but no mechanism is outlined. [9]

There is no evidence of such a mechanism in Tanzania's 2016 World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Follow-Up Mission Report. [10]

[1] Kitua, A.Y., Scribner, S., Rasmuson, M. et al. November 2019. "Building a functional national One Health platform: the case of Tanzania". [<https://onehealthoutlook.biomedcentral.com/articles/10.1186/s42522-019-0003-0#citeas>]. Accessed 18

December 2020.

- [2] United Republic of Tanzania. "National Livestock Policy 2006". [https://www.tnrf.org/files/E-INFO_National_Livetock_Policy_Final_as_per_Cabinet_Dec-2006.pdf] Accessed 18 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.
- [4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.
- [5] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 18 December 2020.
- [6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.
- [9] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [10] World Organisation for Animal Health (OIE). July 2016. "OIE PVS Evaluation Follow-Up Mission Report: Tanzania". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/OIE_PVS_Follow-up_report_Tanzania__final_01.pdf]. Accessed 18 December 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tanzania and Tanzania-Zanzibar have laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners).

A multi-sectoral coordinating mechanism (MCM) was put into place to strengthen Tanzania's "capacity to prevent, detect early and respond to health events", however, there is no evidence that laws or guidelines accompany the MCM to safeguard the confidentiality of information. [1]

Tanzania's 'National Livestock Policy 2006', aimed at stimulating development in the livestock industry in order to increase rural and national income, improve food security and environmental conservation does not address confidentiality of surveillance data. [2]

No evidence is found from the country's Ministry of Health, Ministry of Agriculture, and Ministry of Livestock and Fisheries Development. [3,4,5]

Tanzania has a general privacy and data protection bill which has not been passed into law yet. [6]

Finally, no evidence of guidelines to safeguard the confidentiality of information generated through surveillance activities for

animals was found for Tanzania-Zanzibar, via its Ministry of Health or Ministry of Agriculture websites. [7,8]

There is no evidence of such protections Tanzania's 2016 World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Follow-Up Mission Report. [9]

There is no mention of such laws or guidelines in the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of Tanzania, conducted in February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [10,11]

- [1] Kitua, A.Y., Scribner, S., Rasmuson, M. et al. November 2019. "Building a functional national One Health platform: the case of Tanzania". [<https://onehealthoutlook.biomedcentral.com/articles/10.1186/s42522-019-0003-0#citeas>]. Accessed 18 December 2020.
- [2] United Republic of Tanzania. "National Livestock Policy 2006". [https://www.tnrf.org/files/E-INFO_National_Livestock_Policy_Final_as_per_Cabinet_Dec-2006.pdf] Accessed 18 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.
- [4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.
- [5] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 18 December 2020.
- [6] United Nations Conference Trade and Development. "Data Protection and Privacy Legislation Worldwide - United Republic of Tanzania". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 18 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.
- [9] World Organisation for Animal Health (OIE). July 2016. "OIE PVS Evaluation Follow-Up Mission Report: Tanzania". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/OIE_PVS_Follow-up_report_Tanzania__final_01.pdf]. Accessed 18 December 2020.
- [10] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [11] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

1.2.2c

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Tanzania and Tanzania-Zanzibar conduct surveillance of zoonotic disease in wildlife, though information on the regularity of surveillance is lacking from publicly available sources.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania,

conducted in February 2016, notes that "surveillance systems are in place to detect and report on priority zoonotic diseases in both the human and animals sectors (including wildlife)". [1]

There is also evidence of surveillance of zoonotic disease in wildlife in Tanzania-Zanzibar. The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, states that "the Ministry of Agriculture, Livestock and Fisheries and Natural Resources is charged with the containment of zoonotic diseases in livestock and wild life". [2]

The One Health Strategy 2015-2020, which applies to Tanzania as well as to Tanzania-Zanzibar, outlines the incidence of diseases among wildlife. For example, it states that 24% of buffaloes in wildlife in the Serengeti ecosystem and 17% of wildebeest are seropositive for brucellosis.

It also notes the existence of surveillance activity among wildlife, but calls for increased coordination between the human, animal and wildlife sectors. [3]

The website of the Ministry of Natural Resources and Tourism--responsible for wildlife--and the Wildlife Conservation Act 2009 does not provide any additional evidence. [4,5] However, the Tanzania Wildlife Management Authority and the Tanzania Wildlife Research Institute, both parastatal authorities under the Ministry of Natural Resources and Tourism, liaise with each other to investigate and respond in a timely manner to outbreaks of diseases in wildlife. Their activities extend to wildlife all over the country. [6,7]

No additional evidence of surveillance of zoonotic disease in wildlife was found via Tanzania's Ministry of Health, Ministry of Agriculture, and Ministry of Livestock websites, nor via Tanzania-Zanzibar's Ministry of Health or Ministry of Agriculture websites. [8,9,10,11,12]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[3] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2010)". [http://www.tzdp.org.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Natural Resources and Tourism. [<http://www.mnrt.go.tz/>]. Accessed 18 December 2020.

[5] United Republic of Tanzania. 2009. "The Wildlife Conservation Act 2009". [<http://extwprlegs1.fao.org/docs/pdf/tan97858.pdf>]. Accessed 18 December 2020.

[6] Tanzania Wildlife Management Authority. "Wildlife development". [<http://www.tawa.go.tz/conservation/wildlife-development/>]. Accessed 18 December 2020.

[7] Tanzania Wildlife Research Institute. [<http://tawiri.or.tz/>]. Accessed 18 December 2020.

[8] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[9] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[10] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 18 December 2020.

[11] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[12] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

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

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 1.3

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 8.05

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to suggest that Tanzania and Tanzania-Zanzibar have legislations or regulations in place for working with the private sector in controlling or responding to zoonoses.

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, and the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, both do not provide evidence of private sector participation. [1,2]

Tanzania's national plan on zoonotic disease, the One Health Strategic Plan 2015-2020, makes provisions for a one health steering committee, which would be responsible for overseeing the various bodies created as part of the One Health Strategy, and would comprise various stakeholders including ministries (mandatory participation), and--if needed--humanitarian organizations, faith-based organizations, and the private sector, among others. However, this requirement is prescriptive and does not clearly define a role for the private sector. [3]

No further evidence of legislation or regulations for working with the private sector in controlling or responding to zoonoses is found via Tanzania's Ministry of Health, Ministry of Agriculture, and Ministry of Livestock websites, nor via Tanzania-Zanzibar's Ministry of Health or Ministry of Agriculture websites. [4,5,6,7,8]

Tanzania's 2016 World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Follow-Up Mission Report also does not mention any plans for coordination with the private sector, but does state that "[p]artnerships between the DVS and private veterinarians could encourage the private sector to play an increased role: e.g. to perform additional vaccinations, disease reporting, and perhaps diagnostics under contract and/or with incentives from the government." [9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[3] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2020)".

[http://www.tzdp.gov.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[6] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvi.go.tz/>]. Accessed 18 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[9] World Organisation for Animal Health (OIE). July 2016. "OIE PVS Evaluation Follow-Up Mission Report: Tanzania".

[http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/OIE_PVS_Follow-up_report_Tanzania__final_01.pdf]. Accessed 18 December 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence to show that Tanzania and Tanzania-Zanzibar have records, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed.

No evidence as such is found from the websites of Tanzania's Ministry of Health, Ministry of Agriculture, Ministry of Livestock and Fisheries Development as well as the Ministry of Defence and National Service and Tanzania-Zanzibar's Ministry of Health and Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [1,2,3,4,5,6]

Furthermore, the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 and the Joint External Evaluation (JEE) of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, both do not provide evidence that the two regions have updated records of facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities.[7,8] However, Tanzania's JEE recommends mapping out current biosecurity capacity including sample storage. [7]

Tanzania has been a state party to the Biological Weapons Convention since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [9] And the Vertic's Biological Weapons Convention (BWC) Legislation Database does not show evidence that Tanzania or Tanzania-Zanzibar has in place a record, updated within the last 5 years, of facilities in which especially dangerous pathogens and toxins are stored. [10]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[7] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[9] United Republic of Tanzania. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 2020.

[10] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tanzania and Tanzania-Zanzibar 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.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes the lack of biosecurity legislation in the country and the need for it to be developed. [1] The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also states biosecurity legislation needs to be developed using the One Health approach, referring to available documentation from the mainland of the United Republic of Tanzania. [2]

No evidence of legislations or regulations is available from a review of the websites of the Ministry of Health, Ministry of Agriculture, and the Ministry of Defence for Tanzania nor from the websites of the Ministry of Health and Ministry of Agriculture of Tanzania-Zanzibar. [3,4,5,6,7]

A search of the VERTIC Biological Weapons Convention (BWC) Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar having a biosecurity law. [8] Tanzania has been a state party to the Biological Weapons Convention since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December

2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[8] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

[9] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 2020.

1.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tanzania and Tanzania-Zanzibar have an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes the lack of biosecurity legislation in the country and the need for it to be developed. [1] The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also states biosecurity legislation needs to be developed using the One Health approach, referring to available documentation from the mainland of the United Republic of Tanzania. [2]

No evidence of agencies responsible for the enforcement of biosecurity legislation is available from a review of Tanzania's Ministry of Health, Ministry of Agriculture, or Ministry of Defence websites, nor from Tanzania-Zanzibar's Ministry of Health or Ministry of Agriculture websites. [3,4,5,6,7]

A search of the VERTIC BWC Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar having a biosecurity law or agency. [8] Tanzania has been a state party to the Biological Weapons Convention since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[https://kilimoznz.go.tz/]. Accessed 18 December 2020.

[8] Vertic Database. "Tanzania". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/]. Accessed 18 December 2020.

[9] United Republic of Tanzania. Confidence Building Measures. [https://bwc-ecbm.unog.ch/state/tanzania-united-republic]. Accessed 18 December 2020.

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence to suggest that either Tanzania or Tanzania-Zanzibar has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 makes no mention of the consolidation of inventories of especially dangerous pathogens. [1]

No evidence is also found via the websites of Tanzania's Ministry of Health, Ministry of Agriculture, and the Ministry of Defence and National Service. [2,3,4]

As per the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar. conducted in April 2017, "dangerous pathogens and toxins need to be consolidated into a minimum number of identified facilities". It also states that the infrastructural needs to ensure the containment of dangerous pathogens have not yet been assessed thus a national inventory of such pathogens has not yet been compiled. [5]

There is no evidence via the websites of the Ministry of Health and Ministry of Agriculture of Tanzania-Zanzibar that any action has been taken since the completion of the JEE. [6,7]

A search of the VERTIC BWC Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar having taken action to consolidate inventories of especially dangerous pathogens and toxins into a minimum number of facilities. [8] Tanzania has been a state party to the Biological Weapons Convention since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 18 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/] Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [http://modans.go.tz/]. Accessed 18 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission

report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 18 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 18 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[https://kilimoznz.go.tz/]. Accessed 18 December 2020.

[8] Vertic Database. "Tanzania". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/]. Accessed 18 December 2020.

[9] United Republic of Tanzania. Confidence Building Measures. [https://bwc-ecbm.unog.ch/state/tanzania-united-republic]. Accessed 18 December 2020.

1.3.1e

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence to suggest in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen in both Tanzania and Tanzania-Zanzibar.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes that Tanzania's national health laboratory and quality assurance training centre (NHL-QATC) as well as the zonal/regional laboratories are capable of conducting PCR testing, but does not clarify whether this is specifically for Ebola or Anthrax. [1]

No evidence is found from the websites of the Ministry of Health, Ministry of Agriculture, or Ministry of Livestock for Tanzania. [2,3,4]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, states that PCR testing is employed at the two major laboratories in Zanzibar for tuberculosis, but there is no mention of this testing being available for Ebola or Anthrax. [5]

A review of the Tanzania-Zanzibar websites of the Ministry of Health and Ministry of Agriculture do not provide any supporting evidence. [6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 18 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/] Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [http://www.mifugouvuvu.go.tz/]. Accessed 18 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-

eng.pdf?sequence=1]. Accessed 18 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 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 does not exist evidence that either Tanzania or Tanzania-Zanzibar 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.

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes that biosafety training is more advanced than biosecurity training, and recommends that "biosecurity should be incorporated into training, both formal and in-service, with an overseeing body to implement and monitor". [1]

No further evidence of standardized training is found from a review of the One Health Strategic Plan 2015-2020, or from the Tanzania Ministry of Health, Ministry of Agriculture, or Ministry of Defence websites, as well as the VERTIC BWC Legislation Database. [2,3,4,5,6]

According to the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, there are critical gaps in the implementation of biosecurity principles, including the lack of personnel trained in bio-risk management and shipping of infectious substances. [7] It also notes that although laboratory personnel in Zanzibar have participated in some training sessions on biosecurity conducted in mainland Tanzania, there is absence of an official training programme as well as a curriculum. It recommends developing formal training plans in both biosecurity and biosafety. Evidence of progress in this area is not found via the Tanzania-Zanzibar websites of the Ministry of Health and Ministry of Agriculture. [8,9]

Tanzania has been a state party to the Biological Weapons Convention since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [10]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[2] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2010)". [http://www.tzdp.org.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 18 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.

[6] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[10] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 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 publicly available evidence to suggest that Tanzania and Tanzania-Zanzibar have regulations or licensing conditions that specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to the following checks: drug testing, background checks, and psychological or mental fitness checks.

Tanzania has no biosecurity law as noted in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016. [1]

A review of employment-related regulations in Tanzania does not provide evidence of requirements for checks. For example, Tanzania's Occupational Health and Safety Act 2003, the law that provides for the health safety and welfare of people at work does not mention that security and other personnel with access to especially dangerous pathogens are subject to checks. [2]

Similarly, the Employment and Labour Relations Act 2004 does not mention a requirement for checks. [3]

There is also no publicly available evidence from the Tanzania Ministry of Health, Ministry of Agriculture, and the Ministry of Defence and National Service. [4,5,6]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017 also notes the lack of a biosecurity law. [7]

No evidence of regulations or licensing conditions requiring checks for personnel working with dangerous biological substances is found from the Tanzania-Zanzibar websites of the Ministry of Health and Ministry of Agriculture. [8,9]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [10] And a search of the VERTIC BWC Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar having regulations or licensing conditions that specify that personnel with access to especially dangerous pathogens are subject to checks. [11]

- [1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [2] United Republic of Tanzania. 2003. "Occupational Health and Safety Act".
[https://www.osha.go.tz/storage/publications/LawsRegulations/The%20Occupational%20Health%20and%20Safety%20Act,%202003_1.pdf]. Accessed 18 December 2020.
- [3] United Republic of Tanzania. 2004. "Employment and Labor Relations Act".
[<https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/68319/104204/F-894240970/TZA68319.pdf>]. Accessed 18 December 2020.
- [4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.
- [4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.
- [5] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.
- [7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.
- [10] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 2020.
- [11] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available information that the United Republic of Tanzania has national regulations on the safe and secure transport of infectious substances (Categories A and B).

Although Tanzania has a law on the transportation of radioactive materials, the Packaging and Transportation of Radioactive Material Act 2011 which regulates the transportation of radioactive and nuclear materials, it does not make provisions on the

safe and secure transport of infectious substances. [1]

A further check of the VERTIC BWC Legislation Database and the repository of laws listed on the website of the Law Reform Commission of Tanzania does not provide evidence of national regulations on the safe and secure transport of infectious substances, particularly categories A and B. [2,3]

The Tanzania Ministry of Health, Ministry of Agriculture, Ministry of Defence and the Ministry of Works, Transport and Communication do not provide publicly available evidence of such regulations. [4,5,6,7]

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, also provides no evidence of such. [8]

For Tanzania-Zanzibar as well, no evidence was found via the websites of the Ministry of Health and Ministry of Agriculture or from the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [9,10,11]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted as of December 2020. [12]

[1] United Republic of Tanzania. "Packaging and Transportation of Radioactive Material Regulation 2011".

[<http://extwprlegs1.fao.org/docs/pdf/tan153767.pdf>]. Accessed 18 December 2020.

[2] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

[3] Law Reform Commission of Tanzania. Laws of Tanzania from 2002-2017. [<http://www.lrc.tz/laws-of-tanzania/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.

[7] United Republic of Tanzania. Ministry of Works, Transport and Communication. [<http://www.mwtc.go.tz/>]. Accessed 18 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[11] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 2020.

[12] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 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 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 Packaging and Transportation of Radioactive Material Act 2011 which regulates the transportation of radioactive and nuclear materials, does not make provisions on the cross-border transfer and end-user screening of dangerous biological substances. [1]

A further check of the VERTIC Biological Weapons Convention (BWC) Legislation Database and the repository of laws listed on the website of the Law Reform Commission of Tanzania does not provide evidence of national regulations on the safe and secure transport of infectious substances, particularly categories A and B. [2,3]

The Ministry of Health, Ministry of Agriculture, Ministry of Defence, the Ministry of Works, Transport and Communication and the Ministry of Industry and Trade for Tanzania do not provide publicly available evidence of such regulations. There is no mention of such regulations in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016. [4,5,6,7,8,9]

Neither is there evidence available on the Tanzania-Zanzibar websites for the Ministry of Health, Ministry of Agriculture or in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [10,11,12]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted as of December 2020. [13]

[1] United Republic of Tanzania. "Packaging and Transportation of Radioactive Material Regulation 2011".

[<http://extwprlegs1.fao.org/docs/pdf/tan153767.pdf>]. Accessed 18 December 2020.

[2] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 18 December 2020.

[3] Law Reform Commission of Tanzania. Laws of Tanzania from 2002-2017. [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 18 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 18 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 18 December 2020.

[6] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 18 December 2020.

[7] United Republic of Tanzania. Ministry of Works, Transport and Communication. [<http://www.mwtc.go.tz/>]. Accessed 18 December 2020.

[8] United Republic of Tanzania. Ministry of Industry and Trade. [<http://mit.go.tz/>]. Accessed 18 December 2020.

[9] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core

capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[10] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 18 December 2020.

[11] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 18 December 2020.

[12] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 18 December 2020.

[13] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 18 December 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have in place national biosafety legislation and/or regulations.

Although Tanzania does not have overarching biosafety legislation, the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes that "laboratory biosafety manuals, [standard operating procedures] SOPs, Good Laboratory Practice Guidelines, and personal protection equipment are in place". [1]

A further check of the VERTIC BWC Legislation Database and the repository of laws listed on the website of the Law Reform Commission of Tanzania does not provide evidence of biosafety legislation or regulations. [2,3]

The Tanzania Ministry of Health, Ministry of Agriculture, Ministry of Defence and National Service, Ministry of Works, Transport and Communication and the Ministry of Industry and Trade do not provide publicly available evidence of such regulations. [4,5,6,7,8]

That notwithstanding, the country has a regulation titled "The Environmental Management Act (CPP 191)". This act only enshrines the import, export, deliberate release, confined use, contained use, transit and placing on the market of GMOs and their products. It does not touch specifically on the prevention of accidents that involve the release of harmful biological substances [9].

The Joint External Evaluation (JEE) of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes critical gaps in the implementation of biosafety principles including "absence of biosafety legislation/guidelines, oversight biosafety committees or biosafety officers, and limited or no personnel trained in bio-risk management and shipping of infectious substances". [10]

Evidence of the development of biosafety legislation since the JEE was conducted is not found on the websites of the health

and agriculture ministries. [11, 12]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [13]

- [1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [2] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.
- [3] Law Reform Commission of Tanzania. Laws of Tanzania from 2002-2017. [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 19 December 2020.
- [4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [6] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.
- [7] United Republic of Tanzania. Ministry of Works, Transport and Communication. [<http://www.mwtc.go.tz/>]. Accessed 18 December 2020.
- [8] United Republic of Tanzania. Ministry of Industry and Trade. [<http://mit.go.tz/>]. Accessed 19 December 2020.
- [9] United Republic of Tanzania. 2004. "The Environmental Management Act."
[http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=82138&p_country=TZA&p_count=270]. Accessed 19 December 2020.
- [10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [11] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [12] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [13] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Tanzania and Tanzania-Zanzibar have biosafety legislation and regulations or established agencies responsible for their enforcement.

Although Tanzania does not have overarching biosafety legislation, the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes that "laboratory biosafety manuals, [standard operating procedures] SOPs, Good Laboratory Practice Guidelines, and personal protection equipment are in place". [1]

A further check of the VERTIC BWC Legislation Database and the repository of laws listed on the website of the Law Reform Commission of Tanzania does not provide evidence of biosafety legislation/regulations. [2,3]

The Ministry of Health, Community Development, Gender, Elderly and Children, Ministry of Agriculture, Ministry of Defence and National Service, Ministry of Works, Transport and Communication and the Ministry of Industry and Trade do not provide publicly available evidence of such regulations. [4,5,6,7,8]

However, the country does have a regulation titled "The Environmental Management Act (CPP 191)", which enshrines the import, export, deliberate release, confined use, contained use, transit and placing on the market of GMOs and their products. It does not touch specifically on the prevention of accidents that involve the release of harmful biological substances or an agency to overlook biosafety. [9]

The Joint External Evaluation (JEE) of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes critical gaps in the implementation of biosafety principles including "absence of biosafety legislation/guidelines, oversight biosafety committees or biosafety officers, and limited or no personnel trained in bio-risk management and shipping of infectious substances". [10]

Evidence of the development of biosafety legislation since the JEE was conducted is not found on the websites Ministry of Health and Ministry of Agriculture. [11,12]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [13]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[2] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.

[3] Law Reform Commission of Tanzania. Laws of Tanzania from 2002-2017. [<http://www.lrc.tz/laws-of-tanzania/>]. Accessed 19 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.

[6] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.

[7] United Republic of Tanzania. Ministry of Works, Transport and Communication. [<http://www.mwtc.go.tz/>]. Accessed 18 December 2020.

[8] United Republic of Tanzania. Ministry of Industry and Trade. [<http://mit.go.tz/>]. Accessed 19 December 2020.

[9] United Republic of Tanzania. 2004. "The Environmental Management Act.

[http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=82138&p_country=TZA&p_count=270]. Accessed 19 December 2020.

[10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

- [11] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [12] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [13] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.

1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar 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.

According to the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, biosafety training is a fairly developed area in Tanzania, with training in biosafety being fairly advanced as opposed to biosecurity training. In this regard, it states that "laboratory personnel are trained to diverse levels of proficiency: certificate (two years), diploma, advanced diploma and degree". [1] However, it does not mention the existence of a standardized biosafety training, such as through a common curriculum.

No further evidence on this is found on the websites of the Ministry of Health, Ministry of Agriculture, or Ministry of Defence. [2,3,4] The Environmental Management Act (CPA 191) enshrines the import, export, deliberate release, confined use, contained use, transit and placing on the market of GMOs and their products. However, it does not touch specifically on the prevention of accidents that involve the release of harmful biological substances, or training in biosafety practices. [5]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also does not mention 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. It recommends capacity building of laboratory personnel for biosafety and biosecurity for all biosafety levels, which should include training of trainers". [6] No evidence of progress on this is found via the websites of the Ministry of Health or Ministry of Agriculture. [7,8]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [9] And a search of the VERTIC BWC Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar requiring biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program. [10]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19

December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.

[5] United Republic of Tanzania. 2004. "The Environmental Management Act.

[http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=82138&p_country=TZA&p_count=270]. Accessed 19 December 2020.

[6] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.

[9] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.

[10] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Tanzania and Tanzania-Zanzibar have 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.

No evidence of this is found from a review of the websites of the Ministry of Health, Ministry of Agriculture, and Ministry of Defence and National Service as well as the National Institute of Medical Research and the Tanzania Commission for Science and Technology (COSTECH), a parastatal organization responsible for promoting research and development (R&D) in the country. [1,2,3,4,5]

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, and the VERTIC BWC Legislation Database do not provide evidence of such an assessment either. [6,7]

Finally, no evidence of an assessment to determine whether ongoing research is occurring on especially dangerous

pathogens, toxins, pathogens with pandemic potential, and/or other dual use research is found for Tanzania-Zanzibar through a review of the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar as well as the health and agriculture ministries. [8,9,10]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted as of December 2020. [11]

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.
- [4] National Institute of Medical Research. [<http://www.nimr.or.tz/>]. Accessed 19 December 2020.
- [5] Tanzania Commission for Science and Technology (COSTECH). [<http://www.costech.or.tz/>]. Accessed 19 December 2020.
- [6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [7] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [10] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [11] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have in place national policies requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential.

No evidence is found via the websites of the Ministry of Health, the Ministry of Agriculture and the Ministry of Defence and National Service. No evidence is also found from a review of the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania. [1,2,3,4]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also does not mention a dual use research policy or an agency for its oversight. [5] Finally, no evidence is found from Tanzania-Zanzibar's Ministry of

Health and Ministry of Agriculture websites. [6,7]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted as of December 2020. [8]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.

[3] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.

[4] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.

[8] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have in place agencies responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research.

No evidence is found to suggest that the websites of the Ministry of Health, the Ministry of Agriculture and the Ministry of Defence and National Service as well as the National Institute of Medical Research and the Tanzania Commission for Science and Technology (COSTECH) have oversight of dual-use research. [1,2,3,4,5]

No evidence is also found from a review of the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania. [6]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also does not mention a dual use research policy or an agency for its oversight. [7]

Finally, no evidence was found from Tanzania-Zanzibar's Ministry of Health and Ministry of Agriculture websites. [8,9]

Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [10] And a search of the VERTIC BWC Legislation database does not provide any evidence of Tanzania or Tanzania-Zanzibar having in place agencies responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. [11]

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.
- [4] National Institute of Medical Research. [<http://www.nimr.or.tz/>]. Accessed 19 December 2020.
- [5] Tanzania Commission for Science and Technology (COSTECH). [<http://www.costech.or.tz/>]. Accessed 19 December 2020.
- [6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [10] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 2020.
- [11] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized Deoxyribonucleic acid (DNA) before it is sold in Tanzania and Tanzania-Zanzibar.

Tanzania's Environmental Management Act (CPP 191)" only enshrines the import, export, deliberate release, confined use, contained use, transit and placing on the market of genetically modified organisms (GMOs) and their products. [1] It does not address synthesized DNA.

There is also no evidence of regulations requiring the screening of synthesized DNA before it is sold on the websites of the Tanzania Ministry of Health, Ministry of Agriculture, Ministry of Defence and the Ministry of Works, Transport and

Communication. [2,3,4,5]

No evidence is also found from a review of the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania. [6] The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also does not mention a legislation, regulation, policy, or other guidance, requiring the screening of synthesized Deoxyribonucleic acid (DNA) before it is sold. [7]

The VERTIC BWC Legislation Database does not list any law addressing synthesized DNA. [8,9] No corresponding evidence is found on the websites of the Ministry of Health or Ministry of Agriculture for Tanzania-Zanzibar. [10] Tanzania has been a state party to the Biological Weapons Convention (BWC) since August 2019 and is required to submit annual reports on biological research, however, there is no evidence that any reports have been submitted to date. [11]

[1] United Republic of Tanzania. 2004. "The Environmental Management Act.

[http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=82138&p_country=TZA&p_count=270]. Accessed 19 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.

[5] United Republic of Tanzania. Ministry of Works, Transport and Communication. [<http://www.mwtc.go.tz/>]. Accessed 19 December 2020.

[6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[8] Vertic Database. "Tanzania". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/t/>]. Accessed 19 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

[10] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.

[11] Biological Weapons Convention. Confidence Building Measures. [<https://bwc-ecbm.unog.ch/state/tanzania-united-republic>]. Accessed 19 December 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: 0

2019

World Health Organization

1.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is insufficient evidence to suggest that Tanzania and Tanzania-Zanzibar's national laboratory systems have the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests.

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, states that the National Health Laboratory and Quality Assurance Training Centre (NHL-QATC) and four zonal reference laboratories together are capable of conducting testing for priority areas including bacteriology, virology, serology, polymerase chain reaction (PCR) testing and rapid diagnostic testing. [1] However, it does not specify what diseases can be tested for via these testing methods.

The website of NHL-QATC provides evidence of PCR testing for Influenza, serology for HIV and rapid diagnostic testing for malaria, but does not provide evidence of the other tests. [2,3,4]

A recent study conducted in 2019 confirms Tanzania's ability to perform rapid diagnostic tests for malaria. [5]

The websites of the Tanzania Ministry of Health, Community Development, Gender, Elderly and Children and the National Institute of Medical Research do not provide any further evidence. [5,6]

Similarly, the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Zanzibar's laboratory system is capable of conducting tests including microscopy, bacteriology, parasitology, serology and PCR testing, but the diseases tested for are not mentioned. [7] No confirmatory evidence is available via the websites of the health and agriculture ministries. [8,9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[2] National health laboratory and quality assurance training centre (NHL-QATC). "Emerging & Re Emerging".

[<http://nhlqatc.go.tz/index.php/en/2014-11-04-06-58-07/emerging-re-emerging>]. Accessed 19 December 2020.

[3] National health laboratory and quality assurance training centre (NHL-QATC). "Serology".

[<http://nhlqatc.go.tz/index.php/en/2014-11-04-06-58-07/serology>]. Accessed 19 December 2020.

[4] National health laboratory and quality assurance training centre (NHL-QATC). "Parasitology".

[<http://nhlqatc.go.tz/index.php/en/2014-11-04-06-58-07/parasitology>]. Accessed 19 December 2020.

[5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[6] National Institute of Medical Research. [<http://www.nimr.or.tz/>]. Accessed 19 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.

2.1.1b

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

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

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have 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 of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, makes no mention of testing during public health emergencies and ranks its indicator "National multi-hazard public health emergency preparedness and response plan is developed and implemented" a '1' meaning no capacity. [1]

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of Tanzania, conducted in February 2016, ranks the same indicator a '2' meaning having minimal capacity. It states that "Tanzania currently has disease-specific preparedness and response plans for Rift Valley fever, influenza, Ebola and cholera, that have been implemented" but does not mention whether testing is included.[2]

The regional Rift Valley fever plan was not found, however, at the time of its release, the Food and Agriculture Organization (FAO) reported that "Keeping a close eye on an outbreak means testing samples regularly and in a timely manner. The plan includes setting up regional laboratories to act as a reference point for diagnosing the virus, as well as developing capacity for diagnosis at national level". No further details could be found on the types of tests available. [3]

No evidence of the influenza plan was found. [4] And no further evidence could be found of other disease-specific plans for Tanzania. With regards to COVID-19, no evidence of a plan was found, instead reports suggest that the government has generally denied the pandemic's impact on the country. [5,6]

No further evidence was found on the websites of the Tanzania Ministry of Health and the Ministry of Agriculture, or on the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture. [7,8,9,10] And the Tanzania Emergency Response and Preparedness Plan (TEPRP) shows no evidence of including such testing and the Zanzibar Emergency Preparedness and Response Plan (ZEPRP) was not publically available. [11]

[1] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 22 December 2020.

[2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 22 December 2020.

[3] Food and Agriculture Organization (FAO). September 2018. "East Africa sets out regional plan to fight Rift Valley fever". [http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1152309/]. Accessed 22 December 2020.

[4] World Health Organization (WHO). "Influenza Plan - United Republic of Tanzania". [https://extranet.who.int/sph/influenza-plan-united-republic-tanzania]. Accessed 22 December 2020.

[5] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent". [https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418]. Accessed 22 December 2020.

[6] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania". [https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590]. Accessed 22 December 2020.

[7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 22 December 2020.

[8] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/] Accessed 22 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 22 December 2020.

[10] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [https://kilimoznz.go.tz/]. Accessed 22 December 2020.

[11] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TEPRP)". [https://bit.ly/2EKb14B]. Accessed 22 December 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Tanzania and Tanzania-Zanzibar's national laboratory that serves as a reference facility is accredited (e.g., International Organization for Standardization [ISO] 15189:2003, U.S. Clinical Laboratory Improvement Amendments [CLIA]).

The National Health Laboratory and Quality Assurance Training Centre (NHL-QATC) serves as the country's reference facility (for Tanzania as well as Tanzania-Zanzibar) and has ISO 15189 international accreditation for laboratory competency and quality. It was accredited by Southern African Development Community Accreditation Services (SADCAS) in 2014. This is reported by the Tanzania Ministry of Health as well as the Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania, conducted in February 2016. [1,2,3]

According to the Joint external evaluation of IHR core capacities of Tanzania-Zanzibar, conducted in April 2017, the pathology laboratory at the Mnazi Mmoja Referral Hospital (PLMMH) is the most advanced laboratory facility available in Tanzania-Zanzibar, which has testing capabilities including microbiology, clinical chemistry, haematology, blood transfusion, parasitology and serology and PCR testing for tuberculosis. [4] PLMMH is also SADCAS accredited with ISO 15189 accreditation. [5]

[1] United Republic of Tanzania. Ministry of Health Community Development, Gender, Elderly and Children. National Health Laboratory and Quality Assurance Training Centre (NHL-QATC). [<http://nhlqatc.go.tz/index.php/ar/quality-assurance>]. Accessed 19 December 2020.

[2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[3] Pathology Laboratory Mnazi Mmoja Hospital. 2016. "Certificate of Accreditation". [https://www.sadcas.org/sites/default/files/schedule_of_accreditation/Pathology%20Laboratory%20Mnazi%20Mmoja%20Hospital%20Cert%20%26%20SoA%20-%20MED%20015%20%28August%202017%29.pdf]. Accessed 19 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[5] Pathology Laboratory Mnazi Mmoja Hospital. 2016. "Certificate of Accreditation". [https://www.sadcas.org/sites/default/files/schedule_of_accreditation/Pathology%20Laboratory%20Mnazi%20Mmoja%20Hospital%20Cert%20%26%20SoA%20-%20MED%20015%20%28August%202017%29.pdf]. Accessed 19 December 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 that Tanzania and Tanzania-Zanzibar's national reference laboratories are subject to external quality assurance (EQA) review.

The National Health Laboratory and Quality Assurance Training Centre (NHL-QATC) undergoes EQA as part of its ISO 15189 international accreditation for laboratory competency and quality. It was accredited by Southern African Development Community Accreditation Services (SADCAS) in 2014 according to the Ministry of Health [1]

The Mnazi Mmoja Referral Hospital (PLMMH), which serves as Zanzibar's main reference facility at the national level is also SADCAS accredited and undergoes EQA as part of its ISO 15189 accreditation. [2] The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of Tanzania-Zanzibar, conducted in April 2017, states that "at least two laboratories in human health and one veterinary laboratory participate actively in external quality assurance programmes on a regular basis", however, it does not specify which ones. [3] The Joint External Evaluation (JEE) of the IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016 does not mention EQA. [4]

[1] United Republic of Tanzania. Ministry of Health Community Development, Gender, Elderly and Children. National Health Laboratory and Quality Assurance Training Centre (NHL-QATC). [<http://nhlqatc.go.tz/index.php/ar/quality-assurance>]. Accessed 19 December 2020.

[2] Pathology Laboratory Mnazi Mmoja Hospital. 2016. "Certificate of Accreditation".

[https://www.sadcas.org/sites/default/files/schedule_of_accreditation/Pathology%20Laboratory%20Mnazi%20Mmoja%20Hospital%20Cert%20%26%20SoA%20-%20MED%20015%20%28August%202017%29.pdf]. Accessed 19 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 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 insufficient evidence suggesting that both Tanzania and Tanzania-Zanzibar have nationwide specimen transport systems.

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, states that laboratories in mainland Tanzania have developed standard operating procedures for specimen management and transport via the express mail service (EMS) which is supported by the Ministry of Health, Community Development, Gender, Elderly and Children and its partners. [1]

It, however, recommends that the country should "improve the timeliness of sample transport, including strengthening the

capacity of laboratories in the regions and exploring additional collaboration with private transport companies". Tanzania's Ministry of Health and Ministry of Agriculture and the national public health laboratory do not provide further evidence of a comprehensive nationwide specimen transport system. [2,3,4]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar" reports that a specimen transportation system is in existence with couriers available to transport samples from field sites to laboratories on both the Pemba and Unguja island and also to the mainland laboratories for confirmation. [5] However, evidence to confirm that the system is nationwide does not exist via the Tanzania-Zanzibar Ministry of Health website. [6]

Tanzania and Tanzania-Zanzibar score a 2 and 1, respectively, on D.1.2 (Specimen referral and transport system). A score of 1 indicates no system in place, and a score of 2 corresponds to "less than 50% of intermediate level/districts". [1,5]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 19 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[http://www.mcdgc.go.tz/]. Accessed 19 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/]. Accessed 19 December 2020.

[4] National Health Laboratory Quality Assurance and Training Centre (NHLQATC). [http://nhlqatc.go.tz/nhl/index.php/ar/]. Accessed 19 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 19 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 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 for Tanzania or Tanzania-Zanzibar to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak.

There is no evidence of such a plan or any mention of authorizing laboratories in the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 or in the Joint External Evaluation of the IHR Core Capacities for Tanzania-Zanzibar, conducted in April 2017. [1,2]

There is no other evidence of authorizing or licensing laboratories to supplement the national public health laboratory system capacity on the websites of the Tanzania Ministry of Health or the Ministry of Agriculture. [3,4]

Neither is there evidence of authorizing laboratories on the websites of the Tanzania-Zanzibar Ministry of Health and

Ministry of Agriculture. [5,6] No other evidence was found of such a plan through a general media search.

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 21 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 21 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 21 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/]. Accessed 21 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [http://www.mohz.go.tz/index.html]. Accessed 21 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [https://kilimoznz.go.tz/]. Accessed 21 December 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 no evidence suggesting that Tanzania and Tanzania-Zanzibar are conducting ongoing event-based surveillance and analysis for infectious disease.

Tanzania's One Health Strategic Plan 2015-2020 does not provide evidence of this capacity being in place. [1]

The Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes the absence of event-based surveillance and recommends establishing "robust Integrated Disease Surveillance and Response (IDSR) systems including event-based surveillance everywhere". [2]

While there is no evidence that a comprehensive system has been established since the JEE, there has been collaboration between the Ministry of Health, the United States Centre for Disease Control and Amref Health Africa (a health NGO) to strengthen community based surveillance in Tanzania through training of volunteers, indicating that progress is being made in this area. [3] Beyond this collaboration, a study was conducted looking into the use of mobile technology to promote detection and reporting of health events in Tanzania. The study was able to "present opportunities to strengthen community event-based surveillance using mobile-based solutions". [4]

No further evidence is found via the Ministry of Health and Ministry of Agriculture for Tanzania. [5,6] The Joint External

Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, also notes that "both indicator-based and event-based surveillance are still suboptimal, with below average performance indicators like weekly timeliness and completeness of reports." It recommends developing an event-based surveillance system that includes a community-based surveillance component. [7] The Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture websites do not provide further evidence. [8,9]

- [1] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2010)".
[http://www.tzdp.org.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 19 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [3] Amref Health Africa. "How can communities work together to stop outbreaks?". [<https://amrefusa.org/what-we-do/expanding-disease-protection/>]. Accessed 19 December 2020.
- [4] Calvin Sindato, Leonard E. G. Mboera, Eric Beda, Mpoki Mwabukusi, and Esron D. Karimuribo. November 2020. "Community Health Workers and Disease Surveillance in Tanzania: Promoting the Use of Mobile Technologies in Detecting and Reporting Health Events". [<https://www.liebertpub.com/doi/abs/10.1089/hs.2019.0096>]. Accessed 19 December 2020.
- [5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [6] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 19 December 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 Tanzania has reported a potential public health emergency of international concern (PHEIC) to the World Health Organization (WHO) within the last two years.

According to a WHO disease outbreak report, in September 2019, cases of undiagnosed febrile illness were unofficially reported. [1] No other evidence of PHEIC was found via the websites of the Tanzania Ministry of Health or the Tanzania-Zanzibar Ministry of Health or a general media search. [2,3]

- [1] World Health Organization (WHO). September 2019. "Cases of Undiagnosed Febrile Illness - United Republic of Tanzania". [<https://www.who.int/csr/don/21-september-2019-undiag-febrile-illness-tanzania/en/>]. Accessed 21 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[3] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is some evidence that the government of Tanzania operates an electronic reporting surveillance system at the national and sub-national level, however there is no evidence of such a system for Tanzania-Zanzibar.

While the Joint External Evaluation (JEE) of IHR Core Capacities of the United Republic of Tanzania was being conducted in 2016, an indicator-based surveillance system was being implemented throughout the country under the Integrated Disease Surveillance and Response (IDSR) guidelines. The electronic-IDSR (e-IDSR) was initiated in phases and rode on the already established DHIS2 system, which was in place in 10 of 25 zones.

The JEE, however, recommended that "coverage of e-surveillance should be scaled up to include the entire country". [1]

A presentation by Tanzanian Ministry of Health officials at the 5th Annual Global Digital Health Forum in December 2018 reported that the e-IDSR system had achieved 96.8% countrywide, having been implemented in 7182 out of 7419 health facilities in Tanzania. [2]

There is also evidence of assessments to look at ways to expand electronic reporting surveillance system: A "cross-sectional study was conducted in the Kilosa, Morogoro Urban, Ngorongoro, and Ulanga districts of Tanzania to investigate the practices of community health workers (CHWs) related to disease surveillance functions and to establish their needs and technology capacities". Opportunities for improvement were identified in the study, but so far no evidence was found of activities to address those. [3]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes there is the need to develop and implement an e-IDSR for real-time surveillance in Zanzibar. [4] No evidence of progress in this area is found via the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture, or through a search of media reports. [5,6] No additional evidence was found on the websites of the Tanzania Ministry of Health and Ministry of Agriculture. [7,8]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[2] The 5th Annual Global Digital Health Forum 10th - 11th Dec 2018, Washington DC. "Electronic Integrated Disease Surveillance and Response eIDSR implementation in Tanzania". (Presentation).

[https://www.researchgate.net/publication/339480382_Electronic_Integrated_Disease_Surveillance_and_Response_eIDSR_implementation_in_Tanzania]. Accessed 19 December 2020.

[3] Calvin Sindato, Leonard E. G. Mboera, Eric Beda, Mpoki Mwabukusi, and Esron D. Karimuribo. November 2020.

"Community Health Workers and Disease Surveillance in Tanzania: Promoting the Use of Mobile Technologies in Detecting and Reporting Health Events". [<https://www.liebertpub.com/doi/abs/10.1089/hs.2019.0096>]. Accessed 19 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission

report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 19 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [https://kilimoznz.go.tz/]. Accessed 19 December 2020.

[7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 19 December 2020.

[8] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/]. Accessed 19 December 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 some evidence that the government of Tanzania operates an electronic reporting surveillance system at the national and sub-national level, and is characterized by real-time surveillance, however there is no evidence of such a system for Tanzania-Zanzibar.

While the Joint External Evaluation (JEE) of IHR Core Capacities of the United Republic of Tanzania was being conducted in 2016, an indicator-based surveillance system was being implemented throughout the country under the Integrated Disease Surveillance and Response (IDSR) guidelines. The electronic-IDSR (e-IDSR) was initiated in phases and rode on the already established DHIS2 system, which was in place in 10 of 25 zones. The JEE, however, recommended that "coverage of e-surveillance should be scaled up to include the entire country". [1]

A presentation by Tanzanian Ministry of Health officials at the 5th Annual Global Digital Health Forum in December 2018 reported that the e-IDSR system had achieved 96.8% countrywide, having been implemented in 7182 out of 7419 health facilities in Tanzania. The system is said to be able to collect real-time surveillance data. [2]

There is also evidence of assessments to look at ways to expand electronic reporting surveillance system: A "cross-sectional study was conducted in the Kilosa, Morogoro Urban, Ngorongoro, and Ulanga districts of Tanzania to investigate the practices of community health workers (CHWs) related to disease surveillance functions and to establish their needs and technology capacities". Opportunities for improvement were identified in the study, but so far no evidence was found of activities to address those. [3]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes there is the need to develop and implement an e-IDSR for real-time surveillance in Zanzibar. [4] No evidence of progress in this area is found via the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture, or through a search of media reports. [5,6] No additional evidence was found on the websites of the Tanzania Ministry of Health and Ministry of Agriculture. [7,8]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 19 December 2020.

[2] The 5th Annual Global Digital Health Forum 10th - 11th Dec 2018, Washington DC. "Electronic Integrated Disease Surveillance and Response eIDSR implementation in Tanzania". (Presentation).

[https://www.researchgate.net/publication/339480382_Electronic_Integrated_Disease_Surveillance_and_Response_eIDSR_implementation_in_Tanzania]. Accessed 19 December 2020.

[3] Calvin Sindato, Leonard E. G. Mboera, Eric Beda, Mpoki Mwabukusi, and Esron D. Karimuribo. November 2020.

"Community Health Workers and Disease Surveillance in Tanzania: Promoting the Use of Mobile Technologies in Detecting and Reporting Health Events". [<https://www.liebertpub.com/doi/abs/10.1089/hs.2019.0096>]. Accessed 19 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimozn.go.tz/>]. Accessed 19 December 2020.

[7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[8] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 1

There is evidence showing electronic health records are in use in some facilities in Tanzania, however there is no evidence that they are commonly in use.

A draft version of the Tanzania E-Health Strategy 2012-2018 aimed at establishing e-health systems by 2018 to "enhance planning, managing, and delivering health services". [1]

A 2018 study "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Centre, Tanzania" reported that in Tanzania, a number of hospitals such as Arusha Lutheran Medical Centre, Hydrom Hospital, Makiungu Hospital, St. Elisabeth Hospital, Muhimbili National Hospital, Bugando Hospital, Benjamini Mkapa Hospital, and Kilimanjaro Christian Medical Centre (KCMC) (all on the mainland and not Zanzibar) are among hospitals that have adopted and implemented electronic medical records systems. [2]

It does not mention country-wide implementation of electronic health records, and neither does it mention the use of electronic health records in Zanzibar.

The Ministry of Health and the National health laboratory and quality assurance training centre (NHL-QATC) in Tanzania do not provide evidence on the use of these records. [3,4] Finally, no evidence is found via the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture. [5,6] There is no mention of electronic health records in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in

February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [7,8]

- [1] United Republic of Tanzania. 2012. "Tanzania E-Health Strategy 2012-2018".
[https://www.who.int/goe/policies/countries/tza_ehealth.pdf]. Accessed 19 December 2020.
- [2] Mtebe, J. S. and Nkaka, R. 2018. Journal of Health Informatics in Developing Countries. "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Center, Tanzania".
[https://www.researchgate.net/publication/327426594_Assessing_Electronic_Medical_Record_System_Implementation_at_Kilimanjaro_Christian_Medical_Center_Tanzania]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [4] National health laboratory and quality assurance training centre (NHL-QATC). [<http://nhlqatc.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [7] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 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 evidence showing electronic health records are in use in some facilities in mainland Tanzania, however there is no evidence that they are commonly in use and there no evidence that they can be accessed by the national health system.

A draft version of the Tanzania E-Health Strategy 2012-2018 aimed at establishing e-health systems by 2018 to "enhance planning, managing, and delivering health services". [1]

A 2018 study "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Centre, Tanzania" reported that in Tanzania, a number of hospitals such as Arusha Lutheran Medical Centre, Hydrom Hospital, Makiungu Hospital, St. Elisabeth Hospital, Muhimbili National Hospital, Bugando Hospital, Benjamini Mkapa Hospital, and Kilimanjaro Christian Medical Centre (KCMC) (all on the mainland and not Zanzibar) are among hospitals that have adopted and implemented electronic medical records systems. [2]

It does not mention country-wide implementation of electronic health records, and neither does it mention the use of electronic health records in Zanzibar.

The Ministry of Health and the National health laboratory and quality assurance training centre (NHL-QATC) in Tanzania do not provide evidence on the use of these records or whether the national public health system has access to the limited records that are in existence. [3,4] Finally, no evidence is found via the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture. [5,6]

There is no mention of electronic health records in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [7,8]

- [1] United Republic of Tanzania. 2012. "Tanzania E-Health Strategy 2012-2018".
[https://www.who.int/goe/policies/countries/tza_ehealth.pdf]. Accessed 19 December 2020.
- [2] Mtebe, J. S. and Nkaka, R. 2018. Journal of Health Informatics in Developing Countries. "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Center, Tanzania".
[https://www.researchgate.net/publication/327426594_Assessing_Electronic_Medical_Record_System_Implementation_at_Kilimanjaro_Christian_Medical_Center_Tanzania]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [4] National health laboratory and quality assurance training centre (NHL-QATC). [<http://nhlqatc.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [7] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 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 evidence showing electronic health records are in use in some facilities in Tanzania, however there is insufficient evidence to show the use of data standards to ensure data is comparable (e.g., ISO standards).

A draft version of the Tanzania E-Health Strategy 2012-2018 aimed at establishing e-health systems by 2018 to "enhance planning, managing, and delivering health services". As a strategic objective, the strategy also mentions "Establish[ing] eHealth standards, rules, and protocols for information exchange and protection", but no evidence was found of any progress. [1]

A 2018 study "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Centre, Tanzania" reported that in Tanzania, a number of hospitals such as Arusha Lutheran Medical Centre, Hydom Hospital, Makiungu Hospital, St. Elisabeth Hospital, Muhimbili National Hospital, Bugando Hospital, Benjamini Mkapa Hospital, and Kilimanjaro Christian Medical Centre (KCMC) (all on the mainland and not Zanzibar) are among hospitals that have adopted and implemented electronic medical records systems. [2] It does not mention country-wide implementation of electronic health records, or the use of data standards, and does not mention the use of electronic health records in Zanzibar.

Another study was previously conducted in October 2013 on the improving data collection and integration of electronic healthcare records in Tanzania. [3] Conclusions show that there was a benefit of having these systems in place, however, no further progress on establishing them was found. There is no mention of electronic health records or the use of data standards in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [4,5]

And no evidence was found from the websites of the Tanzania Ministry of Health and Ministry of Agriculture or from the websites of the Tanzania-Zanzibar Ministry of Health and Ministry of Agriculture. [6,7,8,9]

- [1] United Republic of Tanzania. 2012. "Tanzania E-Health Strategy 2012-2018".
[https://www.who.int/goe/policies/countries/tza_ehealth.pdf]. Accessed 22 December 2020.
- [2] Mtebe, J. S. and Nkaka, R. 2018. Journal of Health Informatics in Developing Countries. "Assessing Electronic Medical Record System Implementation at Kilimanjaro Christian Medical Center, Tanzania".
[https://www.researchgate.net/publication/327426594_Assessing_Electronic_Medical_Record_System_Implementation_at_Kilimanjaro_Christian_Medical_Center_Tanzania]. Accessed 22 December 2020.
- [3] Ndume, Vitalis & Nkansah-Gyekye, Yaw & Ko, Jesuk. October 2013. "Improving data collection and integration of electronic healthcare records in Tanzania".
[https://www.researchgate.net/publication/261164467_Improving_data_collection_and_integration_of_electronic_healthcare_records_in_Tanzania]. Accessed 22 December 2020.
- [4] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [6] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.
- [7] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 22 December 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 established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data in Tanzania and Tanzania-Zanzibar.

The Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, notes the lack of a process of sharing laboratory reports between public health and animal health laboratories. It further states that "surveillance systems for animal and human health sectors are not linked or interoperable. Linkages between these surveillance systems will ensure that information gets shared in real time." [1]

A mechanism for regular data sharing may be developed in the near future, considering that the One Health Coordination Unit was launched, which will function inter-ministerially to foster a One Health approach. [2,3]

No evidence of mechanisms for sharing of surveillance data was found via the Ministry of Health, Ministry of Agriculture or Ministry of Livestock for Tanzania. [4,5,6]

The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, recommends implementing a database/software to "manage and coordinate joint animal-human surveillance for both epidemiology units and laboratory use, with linkages internationally". It also recommends establishing its own National One Health Coordination Unit. [7]

A review of the websites of the Ministry of Health and Ministry of Agriculture as well as media reports does not provide evidence of progress in these areas. [8,9]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[2] Afrique One Alliance. 14 February 2018. "Tanzania launches its One Health Coordination Desk and National One Health Strategic Plan". [<http://afriqueoneaspire.org/activities/tanzania-launches-its-one-health-coordination-desk-and-national-one-health-strategic-plan/>]. Accessed 22 December 2020.

[3] United Republic of Tanzania. 2015. "One Health Strategic Plan" (2015-2020)".

[http://www.tzdpd.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/FINAL_URT_One_Health_Strategy_Plan_20151021.pdf]. Accessed 22 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.

[6] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 22 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimoznz.go.tz/>]. Accessed 22 December 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 Tanzania and Tanzania-Zanzibar 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) at least on a weekly basis.

A review of publications, reports and other documents on the websites of the Ministry of Health, Community Development, Gender, Elderly and Children, the Ministry of Agriculture, and the Ministry of Livestock do not provide evidence of such data being published. [1,2,3] No evidence is also found from a review of the website of the National Institute of Medical Research. [4] For Tanzania-Zanzibar as well, the websites of the Ministry of Health and Ministry of Agriculture do not provide evidence of de-identified health surveillance data on disease outbreaks being made available. [5,6]

With regards to COVID-19, there is a page on the website of the Ministry of Health that shares press releases but the last one published was in July 2020. No other statistics regarding number of cases or other data related to the virus is available. [7]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[http://www.mcdgc.go.tz/]. Accessed 22 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [http://www.kilimo.go.tz/index.php/en/] Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [http://www.mifugouvuvu.go.tz/]. Accessed 22 December 2020.

[4] National Institute of Medical Research. [http://www.nimr.or.tz/#]. Accessed 22 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 22 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [https://kilimoznz.go.tz/]. Accessed 22 December 2020.

[7] United Republic of Tanzania. Ministry of Health. "COVID-19 Info". [https://www.moh.go.tz/en/covid-19-info]. Accessed 22 December 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 Tanzania and Tanzania-Zanzibar make de-identified health surveillance data on COVID-19 publicly available via daily reports (or other format) on government websites (such as the Ministry of Health, Ministry of Agriculture, or similar).

A review of publications, reports and other documents on the websites of the Ministry of Health, Community Development, Gender, Elderly and Children, the Ministry of Agriculture, and the Ministry of Livestock do not provide evidence of such data

being published. [1,2,3]

No evidence is also found from a review of the website of the National Institute of Medical Research. [4]

For Tanzania-Zanzibar as well, the websites of the Ministry of Health and Ministry of Agriculture do not provide evidence of de-identified health surveillance data on disease outbreaks being made available. [5,6]

With regards to COVID-19, there is a page on the website of the Ministry of Health that shares press releases and other information but the last one published (as of December 2020) was in July. No other statistics regarding number of cases or other data related to the virus is available. [7]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 22 December 2020.

[4] National Institute of Medical Research. [<http://www.nimr.or.tz/#>]. Accessed 22 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimozn.go.tz/>]. Accessed 22 December 2020.

[7] United Republic of Tanzania. Ministry of Health. "COVID-19 Info". [<https://www.moh.go.tz/en/covid-19-info>]. Accessed 22 December 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available information suggesting that Tanzania and Tanzania-Zanzibar have laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities.

The website for the Ministry of Constitutional and Legal affairs was not accessible at the time of research. No evidence is found from a review of the websites of the Ministry of Health, Community Development, Gender, Elderly and Children, Ministry of Agriculture, National Health Laboratory Quality Assurance and Training Centre (NHLQATC) as well as the repository of laws listed on the website of the Law Reform Commission of Tanzania. [1,2,3,4,5]

Tanzania has not enacted a privacy and data protection law. The bill is still in the draft stage. [6] No evidence for Tanzania-Zanzibar is found via the websites of the Ministry of Health and Ministry of Agriculture. [7,8] There is no mention of such regulations in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-

Zanzibar, conducted in April 2017. [9,10]

- [1] Ministry of Constitutional and Legal Affairs. [<http://sheria.go.tz/>]. Accessed 19 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [4] National Health Laboratory Quality Assurance and Training Centre (NHLQATC). [<http://nhlqatc.go.tz/nhl/index.php/ar/>]. Accessed 19 December 2020.
- [5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 19 December 2020.
- [6] United Nations Conference Trade and Development. "Data Protection and Privacy Legislation Worldwide - United Republic of Tanzania". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 19 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [9] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 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 publicly available information suggesting that Tanzania and Tanzania-Zanzibar have laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, including mention of protections from cyber attacks.

The website for the Ministry of Constitutional and Legal affairs was not accessible at the time of research. No evidence is found from a review of the websites of the Ministry of Health, Community Development, Gender, Elderly and Children, Ministry of Agriculture, National Health Laboratory Quality Assurance and Training Centre (NHLQATC) as well as the repository of laws listed on the website of the Law Reform Commission of Tanzania. [1,2,3,4,5]

Tanzania has not enacted a privacy and data protection law. The bill is still in the draft stage. [6] The country also has the Cybercrimes Act of 2015, but it does not specifically mention health data. [7] No evidence for Tanzania-Zanzibar is found via the websites of the Ministry of Health and Ministry of Agriculture. [8,9] There is no mention of such regulations in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in

April 2017. [10,11]

- [1] Ministry of Constitutional and Legal Affairs. [<http://sheria.go.tz/>]. Accessed 19 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 19 December 2020.
- [4] National Health Laboratory Quality Assurance and Training Centre (NHLQATC). [<http://nhlqatc.go.tz/nhl/index.php/ar/>]. Accessed 19 December 2020.
- [5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 19 December 2020.
- [6] United Nations Conference Trade and Development. "Data Protection and Privacy Legislation Worldwide - United Republic of Tanzania". [https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx]. Accessed 19 December 2020.
- [7] United Republic of Tanzania. 2015. "Cybercrimes Act of 2015". [https://rsf.org/sites/default/files/the_cyber_crime_act_2015.pdf] Accessed 19 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 19 December 2020.
- [10] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [11] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 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

Although there is some evidence that Tanzania and Tanzania-Zanzibar share surveillance data with other countries in the region, there is no evidence that the government has made a commitment via public statements, legislation and/or a cooperative agreement to share surveillance data for either one or more diseases during a public health emergency with other countries in the region.

Both regions are a part of the East African Community (EAC), a regional cooperative group of six members states aimed at strengthening capacities in various critical areas including disease control and prevention. [1,2]
As part of this initiative, the East African Integrated Disease Surveillance Network (EAIDSNet) has been established, which among others, has the following objectives: "promote exchange and dissemination of appropriate information on Integrated Disease Surveillance and other disease control activities; strengthen capacity for implementing integrated disease

surveillance and control activities; and ensure continuous exchange of expertise and best practices for integrated disease surveillance and control". [1] The webpages of the EAC, however, do not mention data sharing during public health emergencies.

No further evidence is found via the Joint External Evaluations of IHR Capacities of both Tanzania and Tanzania-Zanzibar (conducted in February 2016 and April 2017, respectively), or the Ministry of Health and Ministry of Agriculture for the two countries nor the national public health laboratory in Tanzania. [3,4,5,6,7,8,9]

[1] East African Community (EAC). "Disease Prevention and Control Unit". [<https://www.eac.int/health/disease-prevention>]. Accessed 22 December 2020.

[2] East African Community (EAC). "EAC Partner States". [<https://www.eac.int/eac-partner-states>]. Accessed 22 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017". [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[6] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 2020.

[9] National Health Laboratory Quality Assurance and Training Centre (NHLQATC). Official website. [<http://nhlqatc.go.tz/nhl/index.php/ar/>]. Accessed 22 December 2020

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is insufficient evidence that Tanzania's national system is able 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. In 2019, there were efforts to improve Ebola preparedness for the country and includes training of health specialists in contact tracing, but does not mention any ability to expand it in the event of a public health emergency or to provide support to regions. [1,2] With regards to COVID-19, there is evidence that 500 community health volunteers were

trained to increase capacity having to do with contact tracing, however, again, no actual system was found to be provided, including any specific support to sub-national units. [3] No other evidence of such a system was found on the Tanzania and the Tanzania-Zanzibar Ministry of Health websites or through a general media search. [4,5]

[1] Prevent Epidemics. October 2018. "Scaling Up Ebola Preparedness: Tanzania Trains Frontline Health Care Workers". [<https://preventepidemics.org/stories/scaling-up-ebola-preparedness-tanzania-trains-frontline-health-care-workers/>]. Accessed 22 December 2020.

[2] World Health Organization. July 2018. "Tanzania launches training for national rapid response teams with focus on Ebola". [<https://www.afro.who.int/news/tanzania-launches-training-national-rapid-response-teams-focus-ebola>]. Accessed 22 December 2020.

[3] World Health Organization. July 2020. "Zanzibar improves capacity to detect health threats". [<https://www.afro.who.int/news/zanzibar-improves-capacity-detect-health-threats>]. Accessed 22 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

2.5.1b

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

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

Current Year Score: 0

No evidence was found that Tanzania can 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. The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, as well as the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017 make no mention of wraparound services. [1,2] And no evidence was found of such a system on the websites for the Ministry of Health for Tanzania or for Tanzania-Zanzibar or from the National Health Laboratory and Quality Assurance Training Centre (NHL-QATC). [3,4,5]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[2] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[4] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[5] National health laboratory and quality assurance training centre (NHL-QATC). [<http://nhlqatc.go.tz/index.php/en/>]. Accessed 11 January 2021.

2.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar 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).

A review of publications, reports and other documents on the websites of the Ministry of Health, Community Development, Gender, Elderly and Children, the Ministry of Agriculture, and the Ministry of Livestock do not provide evidence of such data being published. [1,2,3]

No evidence is also found from a review of the website of the National Institute of Medical Research. [4]

For Tanzania-Zanzibar as well, the websites of the Ministry of Health and Ministry of Agriculture do not provide evidence of de-identified health surveillance data on disease outbreaks being made available. [5,6]

There is a page on the website of the Ministry of Health that shares press releases on COVID-19 and other information but the last one published was in July and they do not seem to cover contact tracing efforts. No other relevant statistics related to the virus is available. [7]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 22 December 2020.

[4] National Institute of Medical Research. [<http://www.nimr.or.tz/#>]. Accessed 22 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 2020.

[7] United Republic of Tanzania. Ministry of Health. "COVID-19 Info". [<https://www.moh.go.tz/en/covid-19-info>]. Accessed 22 December 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no evidence of a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency. The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, scores the section 'Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event' a '2' meaning limited capacity. The report goes on to give examples of ways the two are linked: "The [Ministry of Health] has undertaken a simulation exercise together with law enforcement"; "The Tanzania Emergency Preparedness and Response Plan states working with the law enforcement sub-sector although the roles of law enforcement are not clearly articulated"; "Protocols for collaboration with law enforcement exist (although these are not formal memorandums of understanding)". However, the protocols were not found on the Ministry of Health and Ministry of Agriculture websites or through a general media search and no other evidence was found of specific plans or agreements that formally link the two sectors. [1,2,3] The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, scores the same section a '1' meaning the region has no capacity and states that "a mechanism needs to be established for sharing regular information, reports, newsletters and bulletins between the public health sector and security authorities". [4] No further information was found on the Tanzania-Zanzibar websites of the Ministry of Health and Ministry of Agriculture. [5,6] No other evidence was found of actions made to strengthen country capacity to trace contacts of international travelers during a public health emergency after the COVID-19 pandemic was announced, especially as the government has mostly denied it's impact on the country. [7,8]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 22 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 2020.

[7] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent".

[<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>]. Accessed 22 December 2020.

[8] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania".

[<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 22 December 2020.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is evidence that Tanzania has an applied epidemiology training program (such as FETP) available in country, however there is no evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP).

According to the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, a Field Epidemiology & Laboratory Training Program (FELTP) owned by the Ministry of Health in collaboration with African Field Epidemiology Network was established in 2008. It is now well established with 72 master's in science and 350 graduates.

The programme is available in the country under Muhimbili University of Allied Health Services (MUHAS). [1,2]

The Joint External Evaluation of IHR Core Capabilities of the United Republic of Tanzania-Zanzibar notes, "The United Republic of Tanzania has a well-established FETP with approximately 100 graduates, who have both clinical and laboratory backgrounds". [3]

There is no additional evidence from the Ministry of Health and Ministry of Agriculture for Tanzania or from those for Tanzania-Zanzibar that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs. [4,5,6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[2] Field Epidemiology and Laboratory Training Program (FELTP). [<https://tzfeltp.net/>]. Accessed 20 December 2020.

[3] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 20 December 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: 1

There is evidence that Tanzania and Tanzania-Zanzibar have field epidemiology training programmes in place, which are inclusive of animal health professionals.

According to the Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, at the time of the exercise, the country's Field Epidemiology & Laboratory Training Program (FELTP) was training its first veterinarian since the programme had been established in 2008.

Additionally, the JEE noted that Tanzania had a two-year applied epidemiology postgraduate course in veterinary health, although short-term and immediate-term training was lacking. [1] On the website of the FELTP, there is also specific reference to veterinary programs in its posted course schedule. [2]

The Joint External Evaluation of IHR Core Capacities of the United Republic of Tanzania-Zanzibar, conducted a year after the Tanzania JEE notes, "the United Republic of Tanzania has a well-established FETP with approximately 100 graduates, who have both clinical and laboratory backgrounds". It further states in 2015, the programme introduced "a tiered training approach and now also offers short-term frontline epidemiology courses for in-service mid-level managers that has taken into consideration the One Health approach and so includes both human and animal health experts". The report states that although the current FETP does not admit veterinarians for the advanced epidemiology course, Sokoine University of Agriculture offers a similar training programme specifically for veterinarians." [3]

Additionally, in 2018, the FAO and the Institute for Infectious Animal Diseases (IIAD) at Texas A&M AgriLife Research launched the In-Service Applied Veterinary Epidemiology (ISAVET) program in 14 countries, including Tanzania. [4,5] The program is a four-month frontline field epidemiology program to train veterinary field epidemiologists. [6]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[2] Field Epidemiology and Laboratory Training Program (FELTP). [<https://tzfeltp.net/>]. Accessed 20 December 2020.

[3] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[4] Food and Agriculture Organisation (FAO) of the United Nations. October 2018. "New training for veterinarians in 14 African countries to help combat infectious diseases." [<http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1161401>]. Accessed 20 December 2020.

[4] Institute for Infectious Animal Diseases. "Frontline ISAVET." [<https://iiad.tamu.edu/frontline-isavet>]. Accessed 20 December 2020.

[5] Food and Agriculture Organisation (FAO) of the United Nations. October 2019. "First FAO ISAVET training programme held

in Uganda." [http://www.fao.org/resilience/news-events/detail/en/c/1171750]. Accessed 20 December 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: 1

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have national public health emergency response plans in place which address planning for multiple communicable diseases with pandemic potential. The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss planning for public health emergencies. [1] The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, mentions that a draft public health emergency response plan has been developed, but the draft plan is not available via the websites of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the Ministry of Defence and National Service. [2,3,4] No evidence is found via the documentation available on the website of the Law Reform Commission of Tanzania. [5] Similar to TEPRP, Tanzania's Disaster Management Act of 2015 discusses emergency situations broadly, without touching upon public health situations. [6] Tanzania does have a National Action Plan for Health Security (2017-2021), which emphasizes the fact that public health emergencies are still a burden for the country and that there are gaps in its ability to prevent, detect and respond to them. The plan, however, discusses ways in which a public health emergency response plan will be developed and includes action items to do so, but is not a response plan itself. [7] The Joint External Evaluation of IHR

Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Tanzania-Zanzibar has its own emergency preparedness and response plan, the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). This plan, however, is not available via the websites of the Ministry of Health or through a broader search. [8,9] The JEE, notes that while the "ZEPRP has a section that covers health issues, neither the IHR core capacities nor Points of Entry (PoE) is covered. In order to develop a comprehensive structure for the preparedness at all levels, the ZEPRP needs to be updated to also address public health risks and emergencies using an all-hazard approach to meet IHR core capacities". [8]

- [1] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TEPRP)". [https://bit.ly/2EKb14B]. Accessed 19 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 19 December 2020.
- [4] United Republic of Tanzania. Ministry of Defence and National Service. [http://modans.go.tz/]. Accessed 19 December 2020.
- [5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [http://www.lrc.tz/laws-of-tanzania/]. Accessed 19 December 2020.
- [6] United Republic of Tanzania. 2015. "The Disaster Management Act 2015". [http://extwprlegs1.fao.org/docs/pdf/tan154205.pdf]. Accessed 19 December 2020.
- [7] United Republic of Tanzania. 2017. "National Action Plan for Health Security (2017-2021)". [https://extranet.who.int/sph/sites/default/files/document-library/document/NAP_Final_12092017.pdf]. Accessed 12 January 2021.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 2020.

3.1.1b

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

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

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have national public health emergency response plans in place which address planning for multiple communicable diseases with pandemic potential, and therefore no evidence that it has been updated in the past 3 years. The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss planning for public health emergencies. [1] The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, mentions that a draft public health emergency response plan has been developed, but the draft plan is not available via the websites of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the Ministry of Defence and National Service. [2,3,4] No evidence is found via the documentation available on the website of the Law Reform Commission of Tanzania. [5] Similar to TEPRP, Tanzania's Disaster Management Act of 2015 discusses emergency situations broadly, without touching upon public health situations. [6] Tanzania does have a National Action Plan for Health Security (2017-2021), which emphasizes the fact that public health

emergencies are still a burden for the country and that there are gaps in its ability to prevent, detect and respond to them. The plan, however, discusses ways in which a public health emergency response plan will be developed and includes action items to do so, but is not a response plan itself. [7] The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Tanzania-Zanzibar has its own emergency preparedness and response plan, the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). This plan, however, is not available via the websites of the Ministry of Health or through a broader search. [8,9] The JEE, notes that while the "ZEPRP has a section that covers health issues, neither the IHR core capacities nor Points of Entry (PoE) is covered. In order to develop a comprehensive structure for the preparedness at all levels, the ZEPRP needs to be updated to also address public health risks and emergencies using an all-hazard approach to meet IHR core capacities". [8]

- [1] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)". [<https://bit.ly/2EKb14B>]. Accessed 19 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.
- [5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 19 December 2020.
- [6] United Republic of Tanzania. 2015. "The Disaster Management Act 2015". [<http://extwprlegs1.fao.org/docs/pdf/tan154205.pdf>]. Accessed 19 December 2020.
- [7] United Republic of Tanzania. 2017. "National Action Plan for Health Security (2017-2021)". [https://extranet.who.int/sph/sites/default/files/document-library/document/NAP_Final_12092017.pdf]. Accessed 12 January 2021.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

3.1.1c

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

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

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have national public health emergency response plans in place which address planning for multiple communicable diseases with pandemic potential, and therefore no evidence that it includes considerations for pediatric and/or other vulnerable populations. The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss planning for public health emergencies. [1] The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, mentions that a draft public health emergency response plan has been developed, but the draft plan is not available via the websites of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the Ministry of Defence and National

Service. [2,3,4] No evidence is found via the documentation available on the website of the Law Reform Commission of Tanzania. [5] Similar to TEPRP, Tanzania's Disaster Management Act of 2015 discusses emergency situations broadly, without touching upon public health situations. [6] Tanzania does have a National Action Plan for Health Security (2017-2021), which emphasizes the fact that public health emergencies are still a burden for the country and that there are gaps in its ability to prevent, detect and respond to them. The plan, however, discusses ways in which a public health emergency response plan will be developed and includes action items to do so, but is not a response plan itself. [7] The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Tanzania-Zanzibar has its own emergency preparedness and response plan, the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). This plan, however, is not available via the websites of the Ministry of Health or through a broader search. [8,9] The JEE, notes that while the "ZEPRP has a section that covers health issues, neither the IHR core capacities nor Points of Entry (PoE) is covered. In order to develop a comprehensive structure for the preparedness at all levels, the ZEPRP needs to be updated to also address public health risks and emergencies using an all-hazard approach to meet IHR core capacities". [8]

- [1] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)". [<https://bit.ly/2EKb14B>]. Accessed 19 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.
- [4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.
- [5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [<http://www.lrct.go.tz/laws-of-tanzania/>]. Accessed 19 December 2020.
- [6] United Republic of Tanzania. 2015. "The Disaster Management Act 2015". [<http://extwprlegs1.fao.org/docs/pdf/tan154205.pdf>]. Accessed 19 December 2020.
- [7] United Republic of Tanzania. 2017. "National Action Plan for Health Security (2017-2021)". [https://extranet.who.int/sph/sites/default/files/document-library/document/NAP_Final_12092017.pdf]. Accessed 12 January 2021.
- [8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 19 December 2020.
- [9] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 19 December 2020.

3.1.1d

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

Yes = 1 , No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response.

The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss planning for public health emergencies. [1] The plan, however, makes provisions for seeking the private sector's assistance depending on the extent of disruption, and calls for drawing upon "agreements and understandings with private sector, other countries and international humanitarian organizations" to "supplement local resources should an emergency exhaust the capabilities of the Government of Tanzania". [1]

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, mentions that a draft public health emergency response plan has been developed, but the draft plan is not available via the websites of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the Ministry of Defence and National Service. [2,3,4] No evidence is found via the documentation available on the website of the Law Reform Commission of Tanzania. [5] Similar to TEPRP, Tanzania's Disaster Management Act of 2015 discusses emergency situations broadly, without touching upon public health situations. [6]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Tanzania-Zanzibar has its own emergency preparedness and response plan, the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). This plan, however, is not available via the websites of the Ministry of Health or through a broader search. [7,8] The JEE, notes that while the "ZEPRP has a section that covers health issues, neither the IHR core capacities nor Points of Entry (PoE) is covered. In order to develop a comprehensive structure for the preparedness at all levels, the ZEPRP needs to be updated to also address public health risks and emergencies using an all-hazard approach to meet IHR core capacities". [7]

[1] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TEPRP)". [<https://bit.ly/2EKb14B>]. Accessed 19 December 2020.

[2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 19 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 19 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 19 December 2020.

[5] Law Reform Commission of Tanzania. "Laws of Tanzania from 2002-2017". [<http://www.lrc.tz/laws-of-tanzania/>]. Accessed 19 December 2020.

[6] United Republic of Tanzania. 2015. "The Disaster Management Act 2015". [<http://extwprlegs1.fao.org/docs/pdf/tan154205.pdf>]. Accessed 19 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 19 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 0

There is no evidence that Tanzania or Tanzania-Zanzibar have a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic. No evidence of such a plan is available via the Ministry of Health websites for Tanzania or Tanzania-Zanzibar. [1,2] There is no mention of such a plan in either the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 or in the Joint External Evaluation of the IHR Core Capacities for Tanzania-Zanzibar, conducted in April 2017. [3,4] No other evidence of an NPI plan was found through a general media search.

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[http://www.mcdgc.go.tz/]. Accessed 21 December 2020.

[2] Revolutionary Government of Zanzibar. Ministry of Health. [http://www.mohz.go.tz/index.html]. Accessed 21 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 21 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 21 December 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

There is no evidence that Tanzania and Tanzania-Zanzibar have national public health emergency response plans and therefore no evidence that it has been activated for an infectious disease outbreak in the past year. There is evidence, however, that Tanzania has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year.

The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss planning for public health emergencies. [1] The Joint External Evaluation of IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016, mentions that a draft public health emergency response plan has been developed, but the draft plan is not available via the websites of the Ministry of Health, Community Development, Gender, Elderly and Children as well as the Ministry of Defence and National Service. [2,3,4]

Tanzania does have a National Action Plan for Health Security (2017-2021), which emphasizes the fact that public health emergencies are still a burden for the country and that there are gaps in its ability to prevent, detect and respond to them. The plan, however, discusses ways in which a public health emergency response plan will be developed and includes action items to do so, but is not a response plan itself. [5] Tanzania conducted Ebola simulation exercises in July and August 2019, which aimed to "test plans and organisation for response to an Ebola outbreak at the district level". [6,7]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that Tanzania-Zanzibar has its own emergency preparedness and response plan, the Zanzibar Emergency Preparedness and Response Plan (ZEPRP). This plan, however, is not available via the websites of the Ministry of Health or through a broader search. [8,9] The JEE, notes that while the "ZEPRP has a section that covers health issues, neither the IHR core capacities nor Points of Entry (PoE) is covered. In order to develop a comprehensive structure for the preparedness at all levels, the ZEPRP needs to be updated to also address public health risks and emergencies using an all-hazard approach to meet IHR core capacities". [8] With regards to COVID-19, no national plan was found. Instead there were reports of the government denying the claim that COVID-19 was affecting the Tanzanian population and as early as May 2020, the president announced that the country was "coronavirus free". This suggests that the government felt no need to develop and have a COVID-19 response plan. [10]

[1] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)".

[https://bit.ly/2EKb14B]. Accessed 20 December 2020.

[2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[http://www.mcdgc.go.tz/]. Accessed 20 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [http://modans.go.tz/]. Accessed 20 December 2020.

[5] United Republic of Tanzania. 2017. "National Action Plan for Health Security (2017-2021)".

[https://extranet.who.int/sph/sites/default/files/document-library/document/NAP_Final_12092017.pdf]. Accessed 12 January 2021.

[6] World Health Organization (WHO). "Simulation Exercise - Tanzania". [https://extranet.who.int/sph/simulation-exercise?region=All&country=241]. Accessed 12 January 2021.

[7] World Health Organization (WHO). September 2019. "Ebola simulation drills in Tanzania trade worry for calm at border

entry points". [https://www.afro.who.int/news/ebola-simulation-drills-tanzania-trade-worry-calm-border-entry-points-0]. Accessed 20 December 2020.

[8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 20 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 20 December 2020.

[10] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent". [https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418]. Accessed 20 December 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 Tanzania and Tanzania-Zanzibar have undergone an exercise to identify a list of gaps and best practices through either an after action review (post emergency response) or a biological threat-focused International Health Regulations (IHR) exercise with the World Health Organization (WHO).

Evidence from the WHO only indicates that Tanzania underwent an after-action review from 14 August 2017 to 18 August 2017 with the objective of assessing the country's response to the Cholera outbreak. There is no such review conducted in the past year, and no planned review is listed. [1] Since the WHO's definition of Tanzania's scope includes Zanzibar, this applies to Tanzania-Zanzibar as well. [2]

The WHO does report that Tanzania was involved in a cross-border simulation exercise intended to "assess and further enhance multi-sectorial outbreak preparedness and response in the EAC region under a multi-sectorial One Health approach", however there is no evidence that a list of gaps or best practices were recorded post-exercise. [3]

Tanzania also conducted simulation exercises in September 2019 to conduct Ebola simulation drills, however, again no evidence is available of after action reviews following these exercises. [4] No further evidence is found via Tanzania's Ministry of Health or Ministry of Defence websites or from Tanzania-Zanzibar's Ministry of Health website. [5,6,7]

[1] World Health Organization (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) - After Action Review". [https://extranet.who.int/sph/after-action-review]. Accessed 20 December 2020.

[2] World Health Organization (WHO). Country page. [https://www.afro.who.int/countries/united-republic-tanzania]. Accessed 20 December 2020.

[3] World Health Organization (WHO). "Health Security Calendar". [https://extranet.who.int/sph/calendar/2019?1&type=All&field_region_tid=All&country_tid=241]. Accessed 20 December 2020.

[4] World Health Organization (WHO). September 2019. "Ebola simulation drills in Tanzania trade worry for calm at border entry points". [https://www.afro.who.int/news/ebola-simulation-drills-tanzania-trade-worry-calm-border-entry-points-0]. Accessed 20 December 2020.

[5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[6] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 20 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<http://www.mohz.go.tz/index.html>]. Accessed 20 December 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 Tanzania has undergone a national-level biological threat-focused exercise that has included private sector representatives.

The only simulation exercises recorded for the past year were a World Health Organization (WHO) cross-border simulation exercise intended to "assess and further enhance multi-sectorial outbreak preparedness and response in the EAC region under a multi-sectorial One Health approach", as well as an Ebola simulation drills, however no evidence exists of private sector involvement in either of the exercises. [1,2]

No further evidence of such involvement was available on the Tanzania's Ministry of Health or Ministry of Defence websites or from Tanzania-Zanzibar's Ministry of Health website. [3,4,5]

[1] World Health Organization (WHO). "Health Security Calendar".

[https://extranet.who.int/sph/calendar/2019?1&type=All&field_region_tid=All&country_tid=241]. Accessed 20 December 2020.

[2] World Health Organization (WHO). September 2019. "Ebola simulation drills in Tanzania trade worry for calm at border entry points". [<https://www.afro.who.int/news/ebola-simulation-drills-tanzania-trade-worry-calm-border-entry-points-0>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 20 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<http://www.mohz.go.tz/index.html>]. Accessed 20 December 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

Although there is evidence that Tanzania has a public health emergency response centre (PHEOC), there is insufficient evidence to indicate whether Tanzania-Zanzibar also has an EOC to meet its needs. There is insufficient evidence that Tanzania-Zanzibar has made progress in fully operationalizing its emergency response centre (EOC).

According to the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania's PHEOC was established in the wake of the cholera outbreak five months prior to the JEE, and developed "into a recognized resource and reference point for health agencies and several other sectors" in a relatively short period of time. [1]

A workshop bringing together representatives from EOCs across East Africa (The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop) was held in July-August 2017, indicating that the EOC was still functional at that time. [2]

There is also no evidence of standard operating procedures (SOPs) or legislation related to the PHEOC via the Ministry of Legal and Constitutional Affairs. [3]

With regards to Tanzania-Zanzibar, its Joint External Evaluation of the IHR Core Capacities conducted in April 2017, noted that while the region has a disaster management EOC expected to address all potential hazards, it is not fully functional and an EOC specific to public health emergencies do not yet exist. It recommended that the EOC should be more formally developed, including having a physical location for operations, SOPs, staff etc. [4]

A review of Tanzania-Zanzibar's Ministry of Health as well as a broader search does not provide further evidence on how far progress has been made in this area. [5]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 20 December 2020.

[2] World Health Organisation (WHO). August 2017. "The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop kicks off in Tanzania". [https://www.afro.who.int/fr/node/8372]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Constitutional and Legal Affairs. [http://sheria.go.tz/]. Accessed 20 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 20 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 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 evidence that Tanzania has a public health emergency response centre (PHEOC), however there is insufficient evidence to indicate whether Tanzania-Zanzibar has made progress in fully operationalizing its emergency response centre (EOC) and there also does not exist evidence of whether the EOCs are required to conduct a drill every year. According to the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania's PHEOC was established in the wake of the cholera outbreak five months prior to the JEE, and developed "into a recognized resource and reference point for health agencies and several other sectors" in a relatively short period of time. [1] A workshop bringing together representatives from EOCs across East Africa (The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop) was held in July-August 2017, indicating that the EOC was still functional at that time. However, there is no mention of drills or their frequency. [2] There is also no evidence of standard operating procedures (SOPs) or legislation related to the PHEOC via the Ministry of Legal and Constitutional Affairs. [3] With regards to Tanzania-Zanzibar, its Joint External Evaluation of the IHR Core Capacities conducted in April 2017, noted that while the region has a disaster management EOC expected to address all potential hazards, it is not fully functional and an EOC specific to public health emergencies does not yet exist. It recommended that the EOC should be more formally developed, including having a physical location for operations, SOPs, staff etc. [4] A review of Tanzania-Zanzibar's Ministry of Health as well as a broader search does not provide further evidence on how far progress has been made in this area, including whether a requirement of annual drills has been instituted. [5]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 20 December 2020.

[2] World Health Organisation (WHO). August 2017. "The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop kicks off in Tanzania". [https://www.afro.who.int/fr/node/8372]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Constitutional and Legal Affairs. [http://sheria.go.tz/]. Accessed 20 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 20 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 19 December 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 evidence that Tanzania has a public health emergency response centre (PHEOC), however there is insufficient evidence to indicate whether Tanzania-Zanzibar has made progress in fully operationalizing its emergency response centre (EOC) and there also does not exist evidence of whether the EOCs have conducted within the last year, a coordinated emergency response activated within 120 minutes of the identification of the public health emergency/scenario.

There is evidence, however, of a emergency response exercise conducted in the last year. According to the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania's PHEOC was established in the wake of the cholera outbreak five months prior to the JEE, and

developed "into a recognized resource and reference point for health agencies and several other sectors" in a relatively short period of time. [1]

A workshop bringing together representatives from EOCs across East Africa (The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop) was held in July-August 2017, indicating that the EOC was still functional at that time. [2]

There is evidence that in 2019, two simulation exercises occurred: one as a cross-border exercise with Kenya, and another in September to conduct Ebola simulation drills. [3,4]

With regards to Tanzania-Zanzibar, its Joint External Evaluation of the IHR Core Capacities conducted in April 2017, noted that while the region has a disaster management EOC expected to address all potential hazards, it is not fully functional and an EOC specific to public health emergencies do not yet exist. It recommended that the EOC should be more formally developed, including having a physical location for operations, SOPs, staff etc. [5]

A review of Tanzania-Zanzibar's Ministry of Health as well as a broader search does not provide further evidence on how far progress has been made in this area, including information on whether a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario has or can be conducted. [6]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[2] World Health Organisation (WHO). August 2017. "The East African Regional Public Health Emergency Operations Centre and Incident Management Training Workshop kicks off in Tanzania". [<https://www.afro.who.int/fr/node/8372>]. Accessed 20 December 2020.

[3] World Health Organization (WHO). September 2019. "Ebola simulation drills in Tanzania trade worry for calm at border entry points". [<https://www.afro.who.int/news/ebola-simulation-drills-tanzania-trade-worry-calm-border-entry-points-0>]. Accessed 20 December 2020.

[4] ReliefWeb. June 2019. "Cross-border Field Simulation Exercise comes to a close". [<https://reliefweb.int/report/united-republic-tanzania/cross-border-field-simulation-exercise-comes-close>]. Accessed 20 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 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 insufficient evidence that the public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack), and there is no evidence that there exist 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).

According to the World Health Organization (WHO), Tanzania was involved in a cross-border simulation exercise intended to "assess and further enhance multi-sectorial outbreak preparedness and response in the [East African Community] EAC region under a multi-sectorial One Health approach". Since the WHO's definition of Tanzania's scope includes Zanzibar, this applies to Tanzania-Zanzibar as well. There is mention that all stakeholders who are related to public health emergencies were included but they do not list the sectors or participants. [1,2] Tanzania also conducted simulation exercises in September 2019 to conduct Ebola simulation drills but here as well, there was no mention of participants of the exercise. [3]

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, scores the section 'Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event' a '2' meaning limited capacity.

The report goes on to give examples of ways the two are linked: "The [Ministry of Health] has undertaken a simulation exercise together with law enforcement" (but does not provide further details); "The Tanzania Emergency Preparedness and Response Plan states working with the law enforcement sub-sector although the roles of law enforcement are not clearly articulated"; "Protocols for collaboration with law enforcement exist (although these are not formal memorandums of understanding)". However, the protocols were not found on the Ministry of Health and Ministry of Agriculture websites or through a general media search and no other evidence was found of specific plans or agreements that formally link the two sectors. [4,5,6]

The Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, scores the same section a '1' meaning the region has no capacity. [7] No further information was found on the Tanzania-Zanzibar websites of the Ministry of Health and Ministry of Agriculture. [8,9]

[1] World Health Organization (WHO). "Health Security Calendar".

[https://extranet.who.int/sph/calendar/2019?1&type=All&field_region_tid=All&country_tid=241]. Accessed 22 December 2020.

[2] World Health Organization (WHO). Country page. [<https://www.afro.who.int/countries/united-republic-tanzania>] Accessed 22 December 2020.

[3] World Health Organization (WHO). September 2019. "Ebola simulation drills in Tanzania trade worry for calm at border entry points". [<https://www.afro.who.int/news/ebola-simulation-drills-tanzania-trade-worry-calm-border-entry-points-0>]. Accessed 22 December 2020.

[4] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[6] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 22 December

2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 22 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 22 December 2020.

[9] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [https://kilimoznz.go.tz/]. Accessed 22 December 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 evidence that both Tanzania and Tanzania-Zanzibar have in place risk communication plans however they were either not available or they do not specifically address public health emergencies and therefore are not relevant when considering whether they outline how messages will reach populations and sectors with different communications needs (eg different languages, location within the country, media reach).

According to the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania does have a national multi-hazard risk communication plan in place, the Tanzania Disaster Communication Strategy (TDCS) 2012, which "outlines the organization, operational concepts, responsibilities and procedures for emergency communication". [1] The country also has disease specific risk communication plans such as for Ebola and Avian Influenza. [1] No further evidence of the multi-hazard plan is available via the websites of the Ministry of Health and Ministry of Agriculture for Tanzania. [2,3]

While there is no evidence that Tanzania-Zanzibar has a risk communication plan intended specifically for public health emergencies, the region does have a multi-hazard risk communication plan, the Zanzibar Disaster Communication Strategy 2011, which "outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency communications requirements", with public health emergencies included within the scope of the document. [4] However, as the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017 notes, the strategy includes "all kind of disasters and there is no specific organized communication structure for public health emergency operations". [5] Nonetheless, the plan establishes an Emergency Communication Centre (ECC) which will receive instructions from the Director of Public health to disseminate information when emergency situations arise and also states that the Department of Preventive and Public Health Services would be involved in the communication. [4]

No further information was found on the Tanzania-Zanzibar websites for the Ministry of Health and Ministry of Agriculture. [6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.

[4] The Revolutionary Government of Zanzibar. 2011. "Zanzibar Disaster Communication Strategy ZDCZ". [https://www.preventionweb.net/files/54663_zanzibardisastercommunicationstrate.pdf]. Accessed 20 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 20 December 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: 1

There is evidence that both Tanzania and Tanzania-Zanzibar have in place risk communication plans that can be used or are intended specifically to address public health emergencies.

According to the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania does have a national multi-hazard risk communication plan in place, the Tanzania Disaster Communication Strategy (TDCS) 2012, which "outlines the organization, operational concepts, responsibilities and procedures for emergency communication". [1] The country also has disease specific risk communication plans such as for Ebola and Avian Influenza. [1] No further evidence of the multi-hazard plan is available via the websites of the Ministry of Health and Ministry of Agriculture for Tanzania. [2,3]

Tanzania-Zanzibar has a multi-hazard risk communication plan, the Zanzibar Disaster Communication Strategy 2011, which "outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency communications requirements", with public health emergencies included within the scope of the document. [4] However, as the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017 notes, the strategy includes "all kind of disasters and there is no specific organized communication structure for public health emergency operations". [5] Nonetheless, the plan establishes an Emergency Communication Centre (ECC) which will receive instructions from the Director of Public health to disseminate information when emergency situations arise and also states that the Department of Preventive and Public Health Services would be involved in the communication. [4]

No further information was found on the Tanzania-Zanzibar websites for the Ministry of Health and Ministry of Agriculture. [6,7]

- [1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.
- [3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.
- [4] The Revolutionary Government of Zanzibar. 2011. "Zanzibar Disaster Communication Strategy ZDCZ".
[https://www.preventionweb.net/files/54663_zanzibardisastercommunicationstrate.pdf]. Accessed 20 December 2020.
- [5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 20 December 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 evidence that both Tanzania and Tanzania-Zanzibar have in place risk communication plans however they were either not available or they do not specifically address public health emergencies, therefore, they do not designate or there is no evidence of a specific position within the government to serve as the primary spokesperson to the public during a public health emergency.

According to the Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania does have a national multi-hazard risk communication plan in place, the Tanzania Disaster Communication Strategy (TDCS) 2012, which "outlines the organization, operational concepts, responsibilities and procedures for emergency communication". [1] The country also has disease specific risk communication plans such as for Ebola and Avian Influenza. [1] No further evidence of the multi-hazard plan is available via the websites of the Ministry of Health and Ministry of Agriculture for Tanzania. [2,3]

While there is no evidence that Tanzania-Zanzibar has a risk communication plan intended specifically for public health emergencies, the region does have a multi-hazard risk communication plan, the Zanzibar Disaster Communication Strategy 2011, which "outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency communications requirements", with public health emergencies included within the scope of the document. [4] However, as the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017 notes, the strategy includes "all kind of disasters and there is no specific organized communication structure for public health emergency operations". [5] Nonetheless, the plan establishes an Emergency Communication Centre (ECC) which will receive instructions from the Director of Public health to disseminate information when emergency situations arise and also states that the Department of Preventive and Public Health Services would be involved in the communication. [4]

No further information was found on the Tanzania-Zanzibar websites for the Ministry of Health and Ministry of Agriculture. [6,7]

- [1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.
- [3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.
- [4] The Revolutionary Government of Zanzibar. 2011. "Zanzibar Disaster Communication Strategy ZDCZ".
[https://www.preventionweb.net/files/54663_zanzibardisastercommunicationstrate.pdf]. Accessed 20 December 2020.
- [5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 2020.
- [7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.
[<https://kilimoznz.go.tz/>]. Accessed 20 December 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: 0

There is no evidence that Tanzania or Tanzania-Zanzibar's public health systems have actively shared messages via online media platforms (eg social media, website) to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation. A review of publications, reports and other documents on the websites of the Tanzania Ministry of Health, Community Development, Gender, Elderly and Children, the Ministry of Agriculture, and the Ministry of Livestock do not provide evidence of such data being published. [1,2,3] No evidence was found via the website of the National Institute of Medical Research. [4] For Tanzania-Zanzibar as well, the websites of the Ministry of Health and Ministry of Agriculture do not provide evidence of public health concerns being made available. [5,6] There is a page on the Tanzania-Zanzibar Ministry of Health that specifically shares press releases on COVID-19, however that last one published was in July 2020. No other statistics regarding number of cases or other data related to the virus is available. [7] The Joint External Evaluation (JEE) of the IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016, reports that the government uses both traditional and new media such as social media for disseminating messages. It notes that weekly press statements and updates were released during the cholera outbreak. [8] However, no evidence of a Ministry of Health Facebook page exists and the Ministry of Health twitter page was created in 2012 but no posts have yet been made. [9] The Tanzania Ministry of Agriculture's last post on Facebook was in 2016 to change its photo. No other posts have been made. [10] The Joint External Evaluation (JEE) of the IHR Core Capacities of Tanzania-Zanzibar does not provide evidence of whether

and what types of media platforms are used. [11] No evidence of a Tanzania-Zanzibar Ministry of Health or Ministry of Agriculture Facebook page was found. There does seem to exist a Twitter page for the Ministry of Health, which has provided COVID-19 updates in terms of where to get tests or get treated if an individual begins to show signs of the virus but there are no further details provided. [12] No further evidence is available to show that Tanzania shares information about on going public health concerns beyond sharing promotional messages on media platforms . And no other online forum such as portals, or bulletins were found.

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.
- [2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 22 December 2020.
- [3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 22 December 2020.
- [4] National Institute of Medical Research. [<http://www.nimr.or.tz/#>]. Accessed 22 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 2020.
- [7] United Republic of Tanzania. Ministry of Health. "COVID-19 Info". [<https://www.moh.go.tz/en/covid-19-info>]. Accessed 22 December 2020.
- [8] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [9] Twitter. Ministry of Health. [<https://twitter.com/afyatz?lang=en>]. Accessed 22 December 2020.
- [10] Facebook. Ministry of Agriculture. [<https://www.facebook.com/Ministry-of-Agriculture-Livestock-and-Fisheries-Tanzania-488987667973094/>]. Accessed 22 December 2020.
- [11] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [12] Twitter. Ministry of Health Tanzania-Zanzibar. [<https://twitter.com/mohznz?lang=en>]. Accessed 22 December 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 0

There is evidence to suggest that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases (in the past two years). Most recently, with regards to COVID-19, there have been claims that the president has said that hot steam over 100 degrees "can disintegrate and kill the virus", which was proven to not be true. [1] The president has also made false claims about COVID-19 and its impacts within Tanzania where he has downplayed the true number of virus deaths in the country. In May 2020, it was presumed the number of cases was close to seven times the number that the president was claiming there were. [2,3,4] More recently, President Magufuli made claims that "God has removed the coronavirus from Tanzania", and in August 2020, he declared the country virus-free and encouraged tourists to come back. Knowing how to respond to these claims has been confusing and outsiders have been skeptical. News and data about the virus is scarce where "under this COVID-denial rule, access to information about COVID-19 has become an elite

privilege", making it difficult for institutions like the World Health Organization (WHO) to share the country's infection rates publicly. [5,6]

- [1] British Broadcasting Channel (BBC). April 2020. "Coronavirus: What misinformation has spread in Africa?". [https://www.bbc.com/news/world-africa-51710617]. Accessed 22 December 2020.
- [2] Aljazeera. May 2020. "Tanzania COVID-19 lab head suspended as president questions data". [https://www.aljazeera.com/news/2020/5/5/tanzania-covid-19-lab-head-suspended-as-president-questions-data]. Accessed 22 December 2020.
- [3] The Guardian. May 2020. "Tanzania's president shrugs off Covid-19 risk after sending fruit for 'tests'". [https://www.theguardian.com/global-development/2020/may/19/tanzanias-president-shrugs-off-covid-19-risk-after-sending-fruit-for-tests]. Accessed 22 December 2020.
- [4] National Public Radio (NPR). May 2020. "Tanzania's President Blames Fake Positive Tests in the Spike in Coronavirus Cases". [https://www.npr.org/2020/05/11/854115407/tanzanias-president-blames-fake-positive-tests-in-the-spike-in-coronavirus-cases]. Accessed 13 January 2020.
- [5] Tufts. September 2020. "Tanzania's Layered COVID Denialism". [https://sites.tufts.edu/reinventingpeace/2020/09/11/tanzanias-layered-covid-denialism/]. Accessed 13 January 2020.
- [6] The New York Times. August 2020. "Tanzania's President Says Country Is Virus Free. Others Warn of Disaster". [https://www.nytimes.com/2020/08/04/world/africa/tanzanias-coronavirus-president.html]. Accessed 13 January 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: 25

2019

International Telecommunication Union (ITU)

3.6.2 Mobile subscribers

3.6.2a

Mobile-cellular telephone subscriptions per 100 inhabitants

Input number

Current Year Score: 82.21

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: 12

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: 15.0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Tanzania has issued a restriction, without international/bilateral support, on the export/import of medical goods (eg: medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. According to a World Health Organization disease outbreak report, in September 2019, cases of undiagnosed febrile illness were unofficially reported, however no reports were made of restricting the movement of medical goods. [1] No other evidence of public health emergencies of international concern (PHEIC) was found via the websites of the Tanzania Ministry of Health or the Tanzania-Zanzibar Ministry of Health or a general media search where medical goods may have been restricted. [2,3]

[1] World Health Organization (WHO). September 2019. "Cases of Undiagnosed Febrile Illness - United Republic of Tanzania". [<https://www.who.int/csr/don/21-september-2019-undiag-febrile-illness-tanzania/en/>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[3] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 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 Tanzania has issued a restriction, without international/bilateral support, on the export/import of non-medical goods (eg: food, textiles, etc) due to an infectious disease outbreak. According to a World Health Organization disease outbreak report, in September 2019, cases of undiagnosed febrile illness were unofficially reported, however no reports were made of restricting the movement of non-medical goods. [1] No other evidence of public health emergencies of international concern (PHEIC) was found via the websites of the Tanzania Ministry of Health or the Tanzania-Zanzibar Ministry of Health or a general media search where medical goods may have been restricted. [2,3]

[1] World Health Organization (WHO). September 2019. "Cases of Undiagnosed Febrile Illness - United Republic of Tanzania". [<https://www.who.int/csr/don/21-september-2019-undiag-febrile-illness-tanzania/en/>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[3] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 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: 1

There is no evidence that Tanzania has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. In response to COVID-19, Tanzania's president imposed travel restrictions in April 2020. Travel in this case was limited and protocols were put in place, such as having to quarantine for 14 days upon arrival, but it was not banned all together. He was then quick to lift the restrictions due to his denial of the virus. [1,2,3,4,5] No other travel bans were found. According to a World Health Organization disease outbreak report, in September 2019, cases of undiagnosed febrile illness were unofficially reported, however no reports were made of restricting travel movements. [6] No other evidence of public health emergencies of international concern (PHEIC) was found or subsequent travel restrictions via the websites of the Tanzania Ministry of Health or the Tanzania-Zanzibar Ministry of Health or a general media search. [7,8,9,10]

[1] Chatham House. May 2020. "Tanzania Evades COVID-19 Lockdown, but Restrictions Persist".

[<https://www.chathamhouse.org/2020/05/tanzania-evades-covid-19-lockdown-restrictions-persist>]. Accessed 22 December 2020.

[2] Reuter's. May 2020. "Tanzania's Magufuli plans to lift coronavirus restrictions". [<https://www.reuters.com/article/us-health-coronavirus-tanzania/tanzanias-magufuli-plans-to-lift-coronavirus-restrictions-idUSKBN22TOP0>]. Accessed 22 December 2020.

[3] United Republic of Tanzania. Ministry of Health. "Travel Advisory No. 1 of 23 March, 2020".

[<https://www.moh.go.tz/en/education-clips?download=425:travel-advisory-no-1-of-23-march,-2020>]. Accessed 13 January 2020.

- [4] United Republic of Tanzania. Ministry of Health. "Travel Advisory No. 2 of 4th April, 2020".
[<https://www.moh.go.tz/en/announcements?download=446:travel-advisory-no-2-of-4th-april,-2020>]. Accessed 13 January 2020.
- [5] United Republic of Tanzania. Ministry of Health. "Travel Advisory Third Edition_Eng Version_18May2020_edited".
[<https://www.moh.go.tz/en/announcements?download=446:travel-advisory-no-2-of-4th-april,-2020>]. Accessed 13 January 2020.
- [6] World Health Organization (WHO). September 2019. "Cases of Undiagnosed Febrile Illness - United Republic of Tanzania".
[<https://www.who.int/csr/don/21-september-2019-undiag-febrile-illness-tanzania/en/>]. Accessed 22 December 2020.
- [7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.
- [8] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.
- [9] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent".
[<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>].
Accessed 22 December 2020.
- [10] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania".
[<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 22 December 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: 1.4

2016

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 58.43

2017

WHO; national sources

4.1.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is evidence that Tanzania as well as Tanzania-Zanzibar have health workforce strategies in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings, however neither have been updated in the past five years.

Tanzania-Zanzibar's strategy does not seem to be publicly available as it was not found through a general web search.

Tanzania's Human Resources for Health and Social Welfare Strategic Plan 2014-2019 was developed to guide the health sector in "proper planning, development, management and effective utilization of human resources". [1]

The strategy identifies sectors in healthcare as well as geographical areas where there is a shortage of workforce and also discusses strategies to overcome them. While the strategy aims to achieve its objectives by 2019, there is no evidence of an update on progress made through the websites of the Ministry of Health, Ministry of Labour and Ministry of Education.

[2,3,4]

The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, also mentions a Human Resource for Health Strategy 2015-2020; however, no evidence of the plan was found. [5]

According to the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, Tanzania-Zanzibar has a draft public workforce strategy called Human Resource for Health Strategic Plan, 2013/14-2017/18 and goes further to add that this plan places emphasis on clinical/medical services workforce with little mention on public health workforce. [6] This plan is also not publicly available via the Ministry of Health and a broader search. [7]

[1] United Republic of Tanzania. 2014. "Human Resources for Health and Social Welfare Strategic Plan the Plan 2014-2019". [https://www.jica.go.jp/project/tanzania/006/materials/ku57pq00001x6jyl-att/HRHSP_2014-2019.pdf]. Accessed 20 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Prime Minister's Office - Labour, Youth, Employment and Persons with Disability. [<http://www.kazi.go.tz/#>]. Accessed 20 December 2020.

[4] The United Republic of Tanzania. Ministry of Education, Science and Technology. [<http://www.moe.go.tz/en/>]. Accessed 20 December 2020.

[5] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[6] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39->

eng.pdf?sequence=1]. Accessed 20 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [https://mohz.go.tz/eng/]. Accessed 20 December 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 70

2010

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 no publicly available evidence that Tanzania and Tanzania-Zanzibar have the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility.

No evidence is found via the Tanzania Ministry of Health, Community Development, Gender, Elderly and Children. [1] Muhimbili National Hospital, which is the largest hospital in Tanzania as well as the Aga Khan hospital—another large multispeciality facility—offer no evidence of isolation capacities among their services. [2,3]

The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss isolation or biocontainment capacities. [4]

In case of Tanzania-Zanzibar, no evidence is found via the country's Ministry of Health and the website of Tasakhtaa Global Hospital, one of its largest hospitals. [5,6] The Mnazi Mmoja Hospital does not have a website. With regards to COVID-19, it is unclear whether quarantine centers have been more formally established to account for the virus. The government has generally denied the pandemic's impact on the country. [7,8]

There are suggestions of government facilities and the mention of a quarantine center called Kidimni Center, however it is only mentioned through one source and all other sources do not specify the quarantine options and make statements such as: "If you show symptoms of COVID-19 on arrival, you may be required to quarantine at a government-designated facility at your own expense". [9,10,11]

The Joint External Evaluation (JEE) of IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016 states "There is a patient isolation (holding) unit with no beds at Julius Nyerere International Airport. However, as the new terminal building is currently under construction, and a designated room for patient isolation will be available soon. " [12]

And, the Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of Tanzania-Zanzibar, conducted in April 2017, makes mention of a possible quarantine center stating that "isolation units at tertiary hospitals are available but the capacity is very limited" and gives the section 'Healthcare associated infection (HCAI) prevention and control programmes' a score of '1' meaning the country has no capacity. [13] No further information is available.

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.
- [2] Muhimbili National Hospital. [<http://www.mnh.or.tz/>]. Accessed 21 December 2020.
- [3] Aga Khan Hospital. [<http://www.agakhanhospitals.org/DarEsSalaam>]. Accessed 21 December 2020.
- [4] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)". [<https://bit.ly/2EKb14B>]. Accessed 21 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.
- [6] Tasakhtaa Global Hospital. Official website. [<http://tasakhtaahospital.co.tz/emergencies.html>] Accessed 21 December 2020.
- [7] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent". [<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>]. Accessed 21 December 2020.
- [8] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania". [<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 21 December 2020.
- [9] AllAfrica. March 2020. "Tanzania: As COVID-19 Fight Intensifies - Zanzibar Bans Flights". [<https://allafrica.com/stories/202003210066.html>]. Accessed 21 December 2020.
- [10] PML Daily. April 2020. "COVID-19 CRISIS: Tanzania suspends international flights due to coronavirus, inbound travelers to be quarantined at own expense". [<https://www.pmldaily.com/news/2020/04/tanzania-suspends-international-flights-due-to-covid-19-inbound-travelers-to-be-quarantined-at-own-expense.html>]. Accessed 21 December 2020.
- [11] TravelBans. October 2020. "Tanzania Travel Restrictions". [<https://travelbans.org/africa/tanzania/>]. Accessed 21 December 2020.
- [12] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.
- [13] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

4.1.2c

Does the country meet one of the following criteria?

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Tanzania or Tanzania-Zanzibar have demonstrated the capacity to expand isolation capacity in response to an infectious disease outbreak or 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.

No evidence is found via the Tanzania Ministry of Health, Community Development, Gender, Elderly and Children. [1] Muhimbili National Hospital, which is the largest hospital in Tanzania as well as the Aga Khan hospital—another large multispeciality facility—offer no evidence of isolation capacities among their services. [2,3] The Tanzania Emergency Response and Preparedness Plan (TEPRP) implemented in March 2012 discusses planning for emergencies broadly, including epidemics in the scope of the term "emergencies". This planning includes outlining how health services will be mobilized, but the plan does not specifically discuss isolation or biocontainment capacities. [4]

In case of Tanzania-Zanzibar, no evidence is found via the country's Ministry of Health and the website of Tasakhtaa Global Hospital, one of its largest hospitals. [5,6] The Mnazi Mmoja Hospital does not have a website. With regards to COVID-19, it is unclear whether quarantine centers have been more formally established to account for the virus. The government has generally denied the pandemic's impact on the country. [7,8] There are suggestions of government facilities and the mention of a quarantine center called Kidimni Center, however it is only mentioned through one source and all other sources do not specify the quarantine options and make statements such as: "If you show symptoms of COVID-19 on arrival, you may be required to quarantine at a government-designated facility at your own expense". [9,10,11]

The Joint External Evaluation (JEE) of IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016 states "There is a patient isolation (holding) unit with no beds at Julius Nyerere International Airport. However, as the new terminal building is currently under construction, and a designated room for patient isolation will be available soon." [12] The Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of Tanzania-Zanzibar, conducted in April 2017, makes mention of a possible quarantine center stating that "isolation units at tertiary hospitals are available but the capacity is very limited" and gives the section 'Healthcare associated infection (HCAI) prevention and control programmes' a score of '1' meaning the country has no capacity. [13] No further information is available.

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[2] Muhimbili National Hospital. [<http://www.mnh.or.tz/>]. Accessed 21 December 2020.

[3] Aga Khan Hospital. [<http://www.agakhanhospitals.org/DarEsSalaam>]. Accessed 21 December 2020.

[4] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TEPRP)".

[<https://bit.ly/2EKb14B>]. Accessed 21 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[6] Tasakhtaa Global Hospital. Official website. [<http://tasakhtaahospital.co.tz/emergencies.html>] Accessed 21 December 2020.

[7] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent".

[<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>].

Accessed 21 December 2020.

[8] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania".

[<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 21 December 2020.

[9] AllAfrica. March 2020. "Tanzania: As COVID-19 Fight Intensifies - Zanzibar Bans Flights".

[<https://allafrica.com/stories/202003210066.html>]. Accessed 21 December 2020.

[10] PML Daily. April 2020. "COVID-19 CRISIS: Tanzania suspends international flights due to coronavirus, inbound travelers to be quarantined at own expense". [<https://www.pmldaily.com/news/2020/04/tanzania-suspends-international-flights-due-to-covid-19-inbound-travelers-to-be-quarantined-at-own-expense.html>]. Accessed 21 December 2020.

[11] TravelBans. October 2020. "Tanzania Travel Restrictions". [<https://travelbans.org/africa/tanzania/>]. Accessed 21 December 2020.

[12] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania – Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[13] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar – Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 0

There is evidence that Tanzania has a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (such as equipment, reagents and media) and medical supplies (equipment, PPE) for routine needs, however there is no evidence that Tanzania-Zanzibar has such a protocol.

Public procurement in Tanzania is regulated by the Public Procurement Act 2011 which provides for the standards of equity and the duties of procuring entities. This act expressly applies to all types of public procurement. [1]

There is also the Public Procurement Regulations 2013, a subsidiary legislation which spells out the basic principles for undertaking or approving procurement and disposal of public assets and specifically discusses procuring medical supplies. [2]

The Public Procurement Regulatory Authority (PPRA) is charged with overseeing these regulations and it runs a tenders portal as well as a national e-procurement system, from which both laboratory and medical supplies can be purchased. These systems also include the Tanzanian Ministry of Health and Ministry of Agriculture in their list of procuring entities. [3,4,5] The website of the PPRA also has a comprehensive set of standard tendering documents for procurement of health sector goods as well as 'procurement charts' that explain each step in the procurement process. [6,7]

Although the Tanzania-Zanzibar government's Public Procurement And Disposal of Public Assets Act 2016 calls for the establishment of a central procurement authority, no evidence of this having been achieved is found from a review of the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, or the Ministry of Health and Ministry of Agriculture. [8,9,10,11]

[1] United Republic of Tanzania. 2011. "Public Procurement Act 2011".

[https://www.ppra.go.tz/phocadownload/attachments/Act/Public_Procurement_Act_2011.pdf]. Accessed 22 December 2020.

[2] United Republic of Tanzania. 2013. "Public Procurement Act Regulations 2013".

[<https://www.ppra.go.tz/phocadownload/attachments/Regulations/regulations2013.pdf>]. Accessed 22 December 2020.

[3] United Republic of Tanzania. Public Procurement Regulatory Authority. "PPRA Tenders Portal".

[<http://tenders.ppra.go.tz/>]. Accessed 22 December 2020.

[4] United Republic of Tanzania. Public Procurement Regulatory Authority. Tanzania National e-Procurement System. [<https://www.taneps.go.tz/epps/home.do>] Accessed 22 December 2020.

[5] United Republic of Tanzania. Public Procurement Regulatory Authority. "A list of procuring entities". [file:///C:/Users/camil/Downloads/TANePS_Pilot_PEs.pdf]. Accessed 22 December 2020.

[6] United Republic of Tanzania. Public Procurement Regulatory Authority. "Health sector". [<https://www.ppra.go.tz/index.php/enewsletters/2012-11-29-09-10-09/2012-11-29-09-11-19/health-sector>]. Accessed 22 December 2020.

[7] United Republic of Tanzania. Public Procurement Regulatory Authority. "Procurement Charts". [<https://www.ppra.go.tz/index.php/procurement-charts>]. Accessed 22 December 2020.

[8] Revolutionary Government of Zanzibar. "Public Procurement And Disposal of Public Assets Act 2016". [http://www.zanzibarassembly.go.tz/act_2016/act_11.pdf]. Accessed 22 December 2020.

[9] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020

[10] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[11] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 0

There is some evidence that Tanzania has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. However, there is no evidence that Tanzania-Zanzibar maintains a stockpile of medical supplies for national use during a public health emergency or that it has agreements in place with manufacturers or distributors to procure them.

According to the Joint external evaluation of IHR core capacities of Tanzania, conducted in February 2016, the Medical Stores Department maintains framework agreements with different suppliers for emergencies. The report also states that Tanzania's medical supplies, such as "medical countermeasures capacities are limited. Although some emergency stockpiles exist, planning is based on re-distribution of items in stock". [1]

No evidence of the agreements were found either via the websites of the Ministry of Health, the East African Community (EAC) and the Southern African Development Community (SADC). [2,3,4]

In case of Tanzania-Zanzibar, the Joint external evaluation of IHR core capacities of Tanzania-Zanzibar notes the absence of a national medical stockpile. It recommends establishing "a small stockpile for priority essential emergency supplies and medicines for public health emergency response and make prior contractual arrangements with suppliers/manufacturers that will enable Zanzibar to quickly get more essential supplies during public health emergencies". The report also states, however, that its Central Medical Stores (CMS) "can be used to receive and distribute medical countermeasures in times of emergency", however there is no mention of expedited process to procure or produce MCMs. It also notes several gaps in

capacities. For example, there are inadequate funds for procurement of medical supplies such as MCMs for public health emergencies and also no list of priority MCMs for stockpiling.[5] Evidence of progress in this area is not found via the website of the Ministry of Health or the Food and Drug Agency. [6,7]

- [1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.
- [3] East African Community (EAC). [<https://www.eac.int/>]. Accessed 22 December 2020.
- [4] South African Development Community (SADC). [<https://www.sadc.int/>]. Accessed 22 December 2020.
- [5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.
- [7] Zanzibar Food and Drugs Agency. [<https://zfda.go.tz/>]. Accessed 22 December 2020.

4.2.2b

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

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

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, does not mention stockpiles of laboratory supplies and only states that "there is no local capacity for production of antibiotics, vaccines, laboratory supplies and equipment". [1] The Joint external evaluation of IHR core capacities of Tanzania, conducted in February 2016 states that "Tanzanian dedicated stockpiles for emergency situations are very limited" and also does not mention any stockpiles being available for laboratory supplies. [2] No other evidence of laboratory stockpiles were found on the websites for the Tanzania and Tanzania-Zanzibar Ministry of Health webpages. [3,4]

- [1] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".
[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.
[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.
- [4] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 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 Tanzania and Tanzania-Zanzibar conduct or require an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency.

According to the Joint external evaluation of IHR core capacities of Tanzania, conducted in February 2016, the Medical Stores Department maintains framework agreements with different suppliers for emergencies. The report specifically states that "Tanzanian dedicated stockpiles for emergency situations are very limited". And no mention is made or evidence found that an annual review of stockpiles is required. [1] No other evidence was found via the websites of the Ministry of Health, the East African Community (EAC) and the Southern African Development Community (SADC). [2,3,4]

In case of Tanzania-Zanzibar, the Joint external evaluation of IHR core capacities of Tanzania-Zanzibar notes the absence of a national medical stockpile. It recommends establishing "a small stockpile for priority essential emergency supplies and medicines for public health emergency response and make prior contractual arrangements with suppliers/manufacturers that will enable Zanzibar to quickly get more essential supplies during public health emergencies". [5] Evidence of progress in this area is not found via the website of the Ministry of Health or the Food and Drug Agency. [6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania – Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 22 December 2020.

[3] East African Community (EAC). [<https://www.eac.int/>]. Accessed 22 December 2020.

[4] South African Development Community (SADC). [<https://www.sadc.int/>]. Accessed 22 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar – Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[7] Zanzibar Food and Drugs Agency. [<https://zfda.go.tz/>]. Accessed 22 December 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 that Tanzania and Tanzania-Zanzibar have a plan/agreement to leverage domestic manufacturing capacity to produce or to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency.

According to the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, there is evidence that procurement mechanisms exist for emergency situations. The report specifically states that "The Medical Stores Department, which is an autonomous department under the [Ministry of Health], has a well-recognized distribution network with nine regional hubs to serve health facilities within 24 hours (if the requested item is available at the hubs). Fast track mechanisms for emergency distribution and procurement exist within the Medical Stores Department." The report continues to state that Tanzania's medical supplies such as MCMs "capacities are limited. Although some emergency stockpiles exist, planning is based on re-distribution of items in stock. Purchases are made when there is a health emergency. A number of existing plans make reference to medical countermeasures. However, there are no clear standard operating procedures (SOPs) on sending and receiving medical countermeasures". [1] The Medical Stores Department's website further notes that it "procures its medicines and medical supplies direct from manufacturers instead of suppliers to ensure the improvement of medicines availability". [2] An actual procurement plan/agreement was not found on the website however, nor was one found through a general media search.

Although there is no evidence of a procurement plan or agreement, Tanzania has established procurement protocols. [3,4,5,6] The protocols however do not identify what, when, how, and from whom emergency supplies should be bought, nor do they address all legal and logistical aspects related to procurement during emergencies. The website of the Public Procurement Regulatory Authority (PPRA) has a comprehensive set of standard tendering documents for procurement of health sector goods as well as 'procurement charts' that explain each step in the procurement process but none of the processes are specific to leveraging domestic capacity. [7,8]

Although the Tanzania-Zanzibar government's Public Procurement And Disposal of Public Assets Act 2016 calls for the establishment of a central procurement authority, no evidence of this having been achieved and no evidence of a procurement plan is found from a review of the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, or the Ministry of Health and Ministry of Agriculture. [9,10,11,12] The JEE for Tanzania-Zanzibar does state that "There is a need to negotiate and sign agreements with manufacturers or suppliers for accessing/ procurement of medical supplies including vaccines during public health emergencies". [10]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 January 2021.

[2] Medical Stores Department. [<http://www.msd.go.tz/index.php/customer-care/transport-strategic-business-unit>]. Accessed 18 January 2021.

[3] United Republic of Tanzania. 2011. "Public Procurement Act 2011".

[https://www.ppra.go.tz/phocadownload/attachments/Act/Public_Procurement_Act_2011.pdf]. Accessed 22 December 2020.

[4] United Republic of Tanzania. 2013. "Public Procurement Act Regulations 2013".

[<https://www.ppra.go.tz/phocadownload/attachments/Regulations/regulations2013.pdf>]. Accessed 22 December 2020.

[5] United Republic of Tanzania. Public Procurement Regulatory Authority. "PPRA Tenders Portal".

[<http://tenders.ppra.go.tz/>]. Accessed 22 December 2020.

[6] United Republic of Tanzania. Public Procurement Regulatory Authority. Tanzania National e-Procurement System.

[<https://www.taneps.go.tz/epps/home.do>] Accessed 22 December 2020.

[7] United Republic of Tanzania. Public Procurement Regulatory Authority. "Health sector".

[<https://www.ppra.go.tz/index.php/enewsletters/2012-11-29-09-10-09/2012-11-29-09-11-19/health-sector>]. Accessed 22 December 2020.

[8] United Republic of Tanzania. Public Procurement Regulatory Authority. "Procurement Charts".

[<https://www.ppra.go.tz/index.php/procurement-charts>]. Accessed 22 December 2020.

[9] Revolutionary Government of Zanzibar. "Public Procurement And Disposal of Public Assets Act 2016".

[http://www.zanzibarassembly.go.tz/act_2016/act_11.pdf]. Accessed 22 December 2020.

[10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020

[11] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.

[12] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries.

[<https://kilimozn.go.tz/>]. Accessed 22 December 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 that Tanzania and Tanzania-Zanzibar have a plan/agreement to leverage domestic manufacturing capacity to produce and to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency. According to the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, there is evidence that procurement mechanisms exist for emergency situations. The report specifically states that "The Medical Stores Department, which is an autonomous department under the [Ministry of Health], has a well-recognized distribution network with nine regional hubs to serve health facilities within 24 hours (if the requested item is available at the hubs). Fast track mechanisms for emergency distribution and procurement exist within the Medical Stores Department." [1] The Medical Stores Department's website further notes that it "procures Medicines, Medical Supplies and Laboratory Reagent that have been approved or fully registered with Tanzania Medicine and Drugs Authority (TMDA)". [2] An actual procurement plan/agreement was not found on the website however, nor was one found through a general media search. Although there is no evidence of a procurement plan or agreement, Tanzania also has established procurement protocols. [3,4,5,6] The protocols however do not identify what, when, how, and from whom emergency supplies should be bought, nor do they address all legal and logistical aspects related to procurement during emergencies. The website of the Public Procurement Regulatory Authority (PPRA) also has a comprehensive set of standard tendering documents for procurement of health sector goods as well as 'procurement charts' that explain each step in the procurement process. [7,8] Although the Tanzania-Zanzibar government's Public Procurement And Disposal of Public Assets Act 2016 calls for the establishment of a central procurement authority, no evidence of this having been achieved is found from a review of the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, or the Ministry of Health and Ministry of Agriculture. [9,10,11,12]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 18 January 2021.

- [2] Medical Stores Department. [<http://www.msd.go.tz/index.php/customer-care/transport-strategic-business-unit>]. Accessed 18 January 2021.
- [3] United Republic of Tanzania. 2011. "Public Procurement Act 2011". [https://www.ppra.go.tz/phocadownload/attachments/Act/Public_Procurement_Act_2011.pdf]. Accessed 22 December 2020.
- [4] United Republic of Tanzania. 2013. "Public Procurement Act Regulations 2013". [<https://www.ppra.go.tz/phocadownload/attachments/Regulations/regulations2013.pdf>]. Accessed 22 December 2020.
- [5] United Republic of Tanzania. Public Procurement Regulatory Authority. "PPRA Tenders Portal". [<http://tenders.ppra.go.tz/>]. Accessed 22 December 2020.
- [6] United Republic of Tanzania. Public Procurement Regulatory Authority. Tanzania National e-Procurement System. [<https://www.taneps.go.tz/epps/home.do>]. Accessed 22 December 2020.
- [7] United Republic of Tanzania. Public Procurement Regulatory Authority. "Health sector". [<https://www.ppra.go.tz/index.php/enewsletters/2012-11-29-09-10-09/2012-11-29-09-11-19/health-sector>]. Accessed 22 December 2020.
- [8] United Republic of Tanzania. Public Procurement Regulatory Authority. "Procurement Charts". [<https://www.ppra.go.tz/index.php/procurement-charts>]. Accessed 22 December 2020.
- [9] Revolutionary Government of Zanzibar. "Public Procurement And Disposal of Public Assets Act 2016". [http://www.zanzibarassembly.go.tz/act_2016/act_11.pdf]. Accessed 22 December 2020.
- [10] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 22 December 2020.
- [11] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 22 December 2020.
- [12] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 22 December 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 Tanzania and Tanzania-Zanzibar have a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency.

According to the Joint External Evaluation (JEE) of IHR Core Capacities of the United Republic of Tanzania, conducted in February 2016, the Medical Stores Department, an autonomous department under the Ministry of Health has a distribution network of medical countermeasures with nine regional hubs to serve health facilities within 24 hours (if the requested item is available at the hubs). [1]

The department also has fast track mechanisms for emergency distribution and procurement. However, no information is available about a plan for dispensing. A formal plan outlining guidelines or standard operating procedures (SOPs) is not

available via the Ministry of Health and Ministry of Defence. [2,3]

As per the Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of Tanzania-Zanzibar, conducted in April 2017, although a "logistic system for distribution and tracking of medicines and related supplies is in place", it recommends "procedures/guidelines for procuring and distributing medical countermeasures during a public health emergency are required". [5]

No evidence of a plan for dispensing medical countermeasures for national use during a public health emergency is found via Tanzania-Zanzibar's Ministry of Health or the Zanzibar Food and Drug Agency. [6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[3] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 21 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[7] Zanzibar Food and Drugs Agency. Official Website. [<https://zfda.go.tz/>]. Accessed 21 December 2020.

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

4.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Tanzania and Tanzania-Zanzibar have a public plan in place to receive health personnel from other countries to respond to a public health emergency.

According to the Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, Tanzania does not have specific plans and standard operating procedures (SOPs) for deployment and receiving personal. It also does not have a policy that directly addresses regulatory and licensure concerns of receiving health personnel from an international source. [1]

No further evidence of a plan for receiving and deploying health personnel is found via the Ministry of Health, the Ministry of Defence, as well as the Tanzania Emergency Response and Preparedness Plan (TEPRP). [2,3,4]

In case of Tanzania-Zanzibar, the Joint External Evaluation (JEE) of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, notes that there is no system in place for sending and receiving health personnel during public health emergencies. It recommends developing "a framework for receiving and sending medical personnel during public health

emergencies as well as a deployment plan, including development of a briefing package before deployment". [5]

No evidence of progress in this area is found via Tanzania-Zanzibar's Ministry of Health or the Zanzibar Food and Drug Agency. [6,7]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)".

[<https://bit.ly/2EKb14B>]. Accessed 20 December 2020.

[4] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 20 December 2020.

[5] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 2020

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 2020.

[7] Zanzibar Food and Drugs Agency. [<https://zfda.go.tz/>] Accessed 20 December 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: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 63.5

2016

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: 25.14

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available information that the Tanzanian government has issued legislation, a policy or a public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency.

No evidence is found from a review of the websites of the Ministry of Health, Ministry of Constitutional and Legal Affairs, the Ministry of Agriculture as well as the National Action Plan for Health Security 2017-2021 and the Tanzania Emergency Response and Preparedness Plan (TEPRP). [1,2,3,4,5]

There is also no evidence of a policy or public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency in Tanzania-Zanzibar based on a review of the website of the Ministry of Health and World Health Organization (WHO) resources. [6,7]

There is also no mention of such a legislation in the Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 or in the Joint External Evaluation (JEE) of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [8,9]

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.
- [2] United Republic of Tanzania, Ministry of Constitutional and Legal Affairs. [<http://sheria.go.tz/>]. Accessed 20 December 2020.
- [3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.
- [4] World Health Organization (WHO). 2017. "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) - National Action Plan for Health Security. [https://extranet.who.int/sph/sites/default/files/document-library/document/NAP_Final_12092017.pdf]. Accessed 20 December 2020.
- [5] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)". [<https://bit.ly/2EKb14B>]. Accessed 20 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Health. [<http://www.mohz.go.tz/index.html>]. Accessed 20 December 2020.
- [7] World Health Organization (WHO). United Republic of Tanzania - country page. [<https://www.who.int/countries/tza/en/>]. Accessed 20 December 2020.
- [8] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.
- [9] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 20 December 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 available evidence to suggest there is a system in place for public health officials and healthcare workers to communicate during a public health emergency in Tanzania.

Tanzania's multi-hazard risk communication plan, the Tanzania Disaster Communication Strategy (TDCS) 2012, is not available online. The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, does not mention this plan as including a communication system between public health officials and healthcare workers. [1] No further evidence is available via the websites of the Ministry of Health and Ministry of Agriculture of Tanzania as well as the Tanzania Emergency Response and Preparedness Plan (TEPRP). [2,3,4]

While there is no evidence that Tanzania-Zanzibar has a risk communication plan intended specifically for public health emergencies, the region does have a multi-hazard risk communication plan, the Zanzibar Disaster Communication Strategy 2011, which "outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency

communications requirements", with public health emergencies included within the scope of the document. [5] This plan also does not address communication between public health officials and healthcare workers. No further evidence is found via Tanzania-Zanzibar's Ministry of Health. [6]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.

[4] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TEPRP)".

[<https://bit.ly/2EKb14B>]. Accessed 20 December 2020.

[5] The Revolutionary Government of Zanzibar. 2011. "Zanzibar Disaster Communication Strategy ZDCZ".

[https://www.preventionweb.net/files/54663_zanzibardisastercommunicationstrate.pdf]. Accessed 20 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 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 available evidence to suggest there is a system in place for public health officials and healthcare workers to communicate during a public health emergency and therefore it does not encompass healthcare workers in both the public and private sectors.

Tanzania's multi-hazard risk communication plan, the Tanzania Disaster Communication Strategy (TDCS) 2012, is not available online. The Joint External Evaluation of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, does not mention this plan as including a communication system between public health officials and healthcare workers. [1] No further evidence is available via the websites of the Ministry of Health and Ministry of Agriculture of Tanzania as well as the Tanzania Emergency Response and Preparedness Plan (TEPRP). [2,3,4]

While there is no evidence that Tanzania-Zanzibar has a risk communication plan intended specifically for public health emergencies, the region does have a multi-hazard risk communication plan, the Zanzibar Disaster Communication Strategy 2011, which "outlines the organization, operational concepts, responsibilities, and procedures to accomplish emergency communications requirements", with public health emergencies included within the scope of the document. [5] This plan also does not address communication between public health officials and healthcare workers. No further evidence is found via Tanzania-Zanzibar's Ministry of Health. [6]

[1] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016".

[<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 20 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 20 December 2020.

[3] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>]. Accessed 20 December 2020.

[4] United Republic of Tanzania. 2012. "Tanzania Emergency Preparedness and Response Plan (TPERP)".

[<https://bit.ly/2EKb14B>]. Accessed 20 December 2020.

[5] The Revolutionary Government of Zanzibar. 2011. "Zanzibar Disaster Communication Strategy ZDCZ".

[https://www.preventionweb.net/files/54663_zanzibardisastercommunicationstrate.pdf]. Accessed 20 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 20 December 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 insufficient evidence to determine whether the national public health system is monitoring for and tracking the number of health care associated infections (HCAIs) that take place in healthcare facilities.

One of the priority areas for action in Tanzania's national AMR plan, the national action plan on antimicrobial resistance 2017-2022 is infection prevention and control (IPC) in healthcare, as part of which the plan states that IPC programmes should be promoted. It, however, does not specify whether healthcare facilities are already monitoring and tracking HCAIs.

[1]

The Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, also mentions that a clear plan exists--along with numerous supporting policies and guidelines for infection prevention and control, but does not provide information on the existing situation. [2] No evidence is available via the country's health ministry. [3]

In case of Tanzania-Zanzibar, the Joint External Evaluation of IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, observes that "no national plan for health care-associated infection (HCAI) programmes is currently available, and Zanzibar does not have guidelines to protect health care workers from HCAI". [4] No evidence of development of HCAI programs is found via Tanzania-Zanzibar's Ministry of Health and WHO resources. [5,6]

[1] The United Republic Of Tanzania, Ministry Of Health Community Development Gender Elderly And Children. 2017. "The National Action Plan on Antimicrobial Resistance 2017-2022". [<https://www.afro.who.int/sites/default/files/2017-07/NATIONAL%20ACTION%20PLAN%20FNL%2010%20May%202017.pdf>]. Accessed 21 December 2020.

[2] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children.

[<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[4] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[6] World Health Organisation (WHO). United Republic of Tanzania country page. [<https://www.who.int/countries/tza/en/>]. Accessed 21 December 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

Although there is evidence of a national requirement for ethical review before beginning a clinical trial for Tanzania, there is insufficient evidence to suggest that such a requirement exists for Tanzania-Zanzibar.

In Tanzania, the National Institute for Medical Research (NIMR) is the governmental body responsible for oversight of ethics committees, and the Medical Research Coordination Committee (MRCC) serves as the NIMR's national health research coordinating body. [1] The MRCC is responsible for supervising health research in Tanzania. In turn, the MRCC delegates the registration, review, approval, and monitoring of research to the National Health Research Ethics Committee (NathREC). A specialized nine-member subcommittee, the Clinical Trials Sub-Committee, reviews all clinical trial protocols which meets monthly and reports to the NathREC. [1] There is no evidence from NathREC documentation, such as a guidelines document on the ethical aspects of health research published in 2009, that Zanzibar is included in its scope. [2]

In case of Tanzania-Zanzibar as well, there is evidence that a Medical Research Ethics Committee (ZAMREC) has been established to oversee ethics in medical research. [3] While guidelines around ZAMREC's mandate are not publicly available, there is evidence of academic studies involving clinical trials being approved by the ZAMREC. [4] There is no evidence of such a requirement via the Ministry of Health of Zanzibar. [5] No mention of an ethical review was made in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [6,7]

[1] U.S. Department of Health & Human Services. ClinRegs. Tanzania Clinical Trials Regulatory Authority Summary. [https://clinregs.niaid.nih.gov/country/tanzania#_top]. Accessed 21 December 2020.

[2] National Health Research Ethics Committee. 2009. "Guidelines Of Ethics For Health Research In Tanzania". [<https://clinregs.niaid.nih.gov/sites/default/files/documents/tanzania/G-EthicsHR.pdf>]. Accessed 21 December 2020.

[3] Revolutionary Government of Zanzibar. 2010. "The Zanzibar Strategy For Growth And Reduction Of Poverty: 2010-2015 (ZSGRP)". [http://www.tzdpd.or.tz/fileadmin/_migrated/content_uploads/MKUZA_II_FINAL_November_02.pdf]. Accessed 21 December 2020.

- [4] Good Clinical Practice Network. 2013. "Shoes for Kids on the Island of Pemba (SKIP): A Pragmatic, Cluster Randomised Controlled Trial to Test if Shoes Reduce Hookworm Infection and Transmission in School-aged Children on Pemba Island, Zanzibar: Study to Test Whether Shoes Protect Children Against Hookworm Infection on Pemba Island, Zanzibar". [https://ichgcp.net/clinical-trials-registry/NCT01869127]. Accessed 21 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [http://www.mohz.go.tz/index.html]. Accessed 21 December 2020.
- [6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 21 December 2020.
- [7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 21 December 2020.

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics in Tanzania and Tanzania-Zanzibar.

In Tanzania, the National Institute for Medical Research (NIMR) is the governmental body responsible for oversight of ethics committees, and the Medical Research Coordination Committee (MRCC) serves as the NIMR's national health research coordinating body. [1] The MRCC is responsible for supervising health research in Tanzania. In turn, the MRCC delegates the registration, review, approval, and monitoring of research to the National Health Research Ethics Committee (NathREC). A specialized nine-member subcommittee, the Clinical Trials Sub-Committee, reviews all clinical trial protocols which meets monthly and reports to the NathREC. [1] There is no evidence from NathREC documentation such as a guidelines document on the ethical aspects of health research published in 2009 that Zanzibar is included in its scope. [2]

In case of Tanzania-Zanzibar as well, there is evidence that a Medical Research Ethics Committee (ZAMREC) has been established to oversee ethics in medical research. [3] While guidelines around ZAMREC's mandate are not publicly available, there is evidence of academic studies involving clinical trials being approved by the ZAMREC. [4] However, there is no evidence via the above sources or the Tanzania Commission for Science and Technology (COSTECH) that NathREC or ZAMREC can approve clinical trials for unregistered countermeasures via an expedited process. [5]

No mention of an expedited process for approving clinical trials was made in the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, or in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [6,7]

[1] U.S. Department of Health & Human Services. ClinRegs. Tanzania Clinical Trials Regulatory Authority Summary. [https://clinregs.niaid.nih.gov/country/tanzania#_top]. Accessed 21 December 2020.

[2] National Health Research Ethics Committee. 2009. "Guidelines Of Ethics For Health Research In Tanzania". [https://clinregs.niaid.nih.gov/sites/default/files/documents/tanzania/G-EthicsHR.pdf]. Accessed 21 December 2020.

[3] Revolutionary Government of Zanzibar. 2010. "The Zanzibar Strategy For Growth And Reduction Of Poverty: 2010-2015

(ZSGRP)". [http://www.tzdp.gov.tz/fileadmin/_migrated/content_uploads/MKUZA_II_FINAL_November_02.pdf]. Accessed 21 December 2020.

[4] Good Clinical Practice Network. 2013. "Shoes for Kids on the Island of Pemba (SKIP): A Pragmatic, Cluster Randomised Controlled Trial to Test if Shoes Reduce Hookworm Infection and Transmission in School-aged Children on Pemba Island, Zanzibar: Study to Test Whether Shoes Protect Children Against Hookworm Infection on Pemba Island, Zanzibar". [<https://ichgcp.net/clinical-trials-registry/NCT01869127>]. Accessed 21 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<http://www.mohz.go.tz/index.html>]. Accessed 21 December 2020.

[6] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017". [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Tanzania and Tanzania-Zanzibar both have agencies responsible for approving new medical countermeasures (MCM) for humans. The Tanzania Food and Drugs Authority is the agency responsible for authorization of medicines and medical devices. The website has an extensive list of registered / approved medicines that can be accessed. [1] In Zanzibar, the equivalent authority is the Zanzibar Food and Drug Agency (ZFDA), but the website of this agency has no information. [2] A broader search provides evidence, though, that the ZFDA is responsible for approving medicines and medical devices. For example, a press release by Tanzania-Zanzibar's health ministry states that the "ZFDA has striven to reach its objectives for ensuring the safety and quality of food, drugs, cosmetics, medical devices and related products in Zanzibar. The core regulatory functions of the ZFDA includes product inspection, registration and quality control". [3] In April 2018, the ZFDA also rolled out a e-portal for all its regulation activities. [4]

[1] Tanzania Food and Drugs Authority. [<https://www.tmda.go.tz/>]. Accessed 21 December 2020.

[2] Zanzibar Food and Drug Agency (ZFDA). [<https://zfda.go.tz/>]. Accessed 21 December 2020.

[3] Zanzibar Food and Drug Agency (ZFDA). "Executive Director Statement". [<https://zfda.go.tz/ed-statement/>]. Accessed 21 December 2020.

[4] Trademark, East Africa. March 2018. "Zanzibar launches online food and drug regulatory services portal". [<https://www.trademarka.com/news/zanzibar-launches-online-food-and-drug-regulatory-services-portal/>]. Accessed 21 December 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. The Tanzania Food and Drugs Authority is the agency responsible for authorization of medicines and medical devices, among others, though medical countermeasures are not explicitly mentioned. [1] A review of the forms and regulations on the websites does not provide evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. No further evidence is available via the Tanzania Ministry of Health. [2] In Zanzibar, the equivalent authority is the Zanzibar Food and Drug Agency (ZFDA), but the website of this agency has no information. [3] A broader search provides evidence, though, that the ZFDA is responsible for approving medicines and medical devices. For example, a press release by Tanzania-Zanzibar's Ministry of Health states that the "ZFDA has striven to reach its objectives for ensuring the safety and quality of food, drugs, cosmetics, medical devices and related products in Zanzibar. The core regulatory functions of the ZFDA includes product inspection, registration and quality control". There is, however, no mention of an expedited process for approving countermeasures. [4] In April 2018, the ZFDA also rolled out a e-portal for all its regulation activities. [5]

[1] Tanzania Food and Drugs Authority. [<https://www.tmda.go.tz/>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[3] Zanzibar Food and Drug Agency (ZFDA). [<https://zfda.go.tz/>]. Accessed 21 December 2020.

[4] Zanzibar Food and Drug Agency (ZFDA). "Executive Director Statement". [<https://zfda.go.tz/ed-statement/>]. Accessed 21 December 2020.

[5] Trademark, East Africa. March 2018. "Zanzibar launches online food and drug regulatory services portal".

[<https://www.trademarka.com/news/zanzibar-launches-online-food-and-drug-regulatory-services-portal/>]. Accessed 21 December 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 evidence that Tanzania or Tanzania-Zanzibar have a national risk reduction strategy which has pandemics integrated into it; neither is there a standalone national disaster risk reduction strategy for pandemics.

No evidence of this is found from a review of the websites of the Tanzania Ministry of health and the Ministry of Defence. The East African Community (EAC), of which Tanzania is a member, has drafted a disaster risk reduction and management strategy in 2012 which has pandemics integrated into it. [1,2,3]
This strategy expired in 2016 and there is no evidence this strategy has been updated, followed through or implemented.

Tanzania-Zanzibar had a disaster management policy from 2011 that is today expired and no new policy was found. The island also has a disaster risk reduction act that was passed in 2015. Neither of these documents make specific mention of pandemics or public health emergencies. [4,5,6]

No other evidence was found of a risk reduction strategy with pandemics integrated into it or a standalone strategy for Tanzania-Zanzibar via the Ministry of Health website or a broader web search. [7] There is no mention of a risk reduction strategy that includes pandemics or a standalone strategy in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [8]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Defence and National Service. [<http://modans.go.tz/>]. Accessed 21 December 2020.

[3] East African Community. Draft National Disaster Risk Reduction Strategy. (2012-2016). [<https://bit.ly/2AljOXX>]. Accessed 21 December 2020.

[4] Revolutionary Government of Zanzibar. August 2011. "Zanzibar Disaster Management Policy". [https://www.preventionweb.net/files/54651_zanzibardisastermanagementpolicy.pdf]. Accessed 21 December 2021.

[5] Revolutionary Government of Zanzibar. 2015. "An Act to Establish Zanzibar Disaster Risk Reduction and Management Act 2015 and Other Matters Hereto". [https://www.preventionweb.net/files/54650_zanzibardrrdmact.pdf]. Accessed 21 December 2020.

[6] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<http://www.mohz.go.tz/index.html>]. Accessed 21 December 2020.

[8] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

eng.pdf?sequence=1]. Accessed 21 December 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: 1

There is evidence that Tanzania and Tanzania-Zanzibar have cross-border agreements, protocols or memorandum of understandings (MOUs) specifically dealing with public health emergency response, but there is evidence of gaps in implementation. Both regions are a part of the East African Community (EAC), a regional cooperative group of six members states aimed at strengthening capacities in various critical areas including disease control and prevention. [1,2,3] The United Republic of Tanzania (including Zanzibar) together with its neighbours in the EAC issued a joint communique at their 2018 EAC joint heads of state retreat. In the communique, members resolved to strengthen the network of medical reference laboratories and the regional rapid response system in order to protect the region from health threats including pandemics, bio-terrorism and common agents. [4] According to the World Health Organization (WHO), a cross-border framework was developed in 2019 in response to better preparation and response to a potential Ebola outbreak. [5] Tanzania's recent response to the COVID-19 pandemic however suggests that there are gaps in implementation, especially as the president has refused to acknowledge the true severity of the virus. Providing minimal opportunities for citizens to get tested and the inability to share statistics and information about the virus within the Tanzanian borders, goes against the EAC agreement to establish a "regional information exchange system for communicable and non-communicable diseases". [1,6] No additional evidence was found from the Ministry of Health or Ministry of Defence for Tanzania. [7,8] Although the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 notes that "there are some agreements with EAC, ECSA [East, Central and Southern African Health Community], and SADC [Southern African Development Community], they refer to rapid deployment and receiving rapid response teams". These documents are not publicly available. [3] There is no mention of cross-border agreements in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [9]

[1] East African Community (EAC). "Disease Prevention and Control Unit". [<https://www.eac.int/health/disease-prevention>]. Accessed 21 December 2020.

[2] East African Community (EAC). "EAC Partner States". [<https://www.eac.int/eac-partner-states>]. Accessed 21 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[4] East African Community. "2018 EAC Joint heads of State Retreat Communique". [https://www.scribd.com/document/372189203/Communique-2018-Joint-Eac-Heads-of-State-Retreat-on-Infrastructure-and-Health-Financing-and-Development#from_embed]. Accessed 21 December 2020.

[5] World Health Organization (WHO). October 2019. "Ten African countries endorse cross-border collaboration framework on Ebola outbreak preparedness and response". [<https://www.afro.who.int/news/ten-african-countries-endorse-cross->

border-collaboration-framework-ebola-outbreak-preparedness]. Accessed 21 December 2020.

[6] Center for Strategic & International Studies (CSIS). May 2020. "Implications of Tanzania's Bungled Response to COVID-19". [https://www.csis.org/analysis/implications-tanzanias-bungled-response-covid-19]. Accessed 19 January 2021.

[7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 21 December 2020.

[8] United Republic of Tanzania. Ministry of Defence and National Service. [http://modans.go.tz/]. Accessed 21 December 2020.

[9] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 21 December 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 publicly available evidence that Tanzania and Tanzania-Zanzibar have cross-border agreements, protocols or MOUs specifically dealing with animal health emergency response. Both regions are a part of the East African Community, a regional cooperative group of six members states aimed at strengthening capacities in various critical areas including disease control and prevention. [1,2,3] The United Republic of Tanzania (including Zanzibar) together with its neighbours in the East African Community (EAC) issued a joint communique at their 2018 EAC joint heads of state retreat. In the communique, members resolved to strengthen the network of medical reference laboratories and the regional rapid response system in order to protect the region from health threats including pandemics, bio-terrorism and common agents but nothing on animal health emergencies specifically. [4] No additional evidence was found from the Ministry of Health or Ministry of Defence for Tanzania. [5,6] Although the Joint External Evaluation (JEE) of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016 notes that "there are some agreements with EAC, ECSA [East, Central and Southern African], and SADC [Southern African Development Community], they refer to rapid deployment and receiving rapid response teams". These documents are not publicly available. [3] There is no mention of cross-border agreements in the Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017. [7]

[1] East African Community (EAC). "Disease Prevention and Control Unit". [https://www.eac.int/health/disease-prevention]. Accessed 21 December 2020.

[2] East African Community (EAC). "EAC Partner States". [https://www.eac.int/eac-partner-states]. Accessed 21 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1]. Accessed 21 December 2020.

[4] East African Community. "2018 EAC Joint heads of State Retreat Communique". [https://www.scribd.com/document/372189203/Communique-2018-Joint-Eac-Heads-of-State-Retreat-on-Infrastructure-and-Health-Financing-and-Development#from_embed]. Accessed 21 December 2020.

[5] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [http://www.mcdgc.go.tz/]. Accessed 21 December 2020.

[6] United Republic of Tanzania. Ministry of Defence and National Service. [http://modans.go.tz/]. Accessed 21 December 2020.

2020.

[7] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1]. Accessed 21 December 2020.

[8] Inter-African Bureau for Animal Resources. 1 February 2016. "SMP-AH facilitates signing of an agreement between Kenya and Tanzania for enhanced collaboration and cooperation in cross-border disease control". [http://www.au-ibar.org/smp-ah/887-smp-ah-facilitates-signing-of-an-agreement-between-kenya-and-tanzania-for-enhanced-collaboration-and-cooperation-in-cross-border-disease-control]. Accessed 21 December 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 1

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

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

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

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

Current Year Score: 1

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: 1

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 Tanzania and Tanzania-Zanzibar have allocated national funds to improve capacity to address epidemic threats within the past three years. A scan of press releases, statements, speeches and notices on the websites of

Tanzania's Ministry of Health, Ministry of Agriculture, Ministry of Livestock, and Ministry of Foreign Affairs do not provide evidence of such allocations. [1,2,3,4] There also does not exist evidence in case of Tanzania-Zanzibar via a review of its Ministry of Health and Ministry of Agriculture websites and media sources. [5,6] A 2016 review of contributions to the African Public Health Emergency Fund, a solidarity fund established by the WHO Regional Committee for Africa in 2012 showed that Tanzania had not contributed its expected donations to the fund. [7] With regards to statements about public health following the COVID-19 pandemic, there is evidence that the government has denied the claim that COVID-19 was affecting the Tanzanian population and as early as May 2020, the president announced that the country was "coronavirus free". Denying the impact that COVID-19 has had on the country has set the country back in terms of finding better ways of managing and funding the crisis. [8,9] No national budget priorities were found on the President's Official Website or on the Tanzania Government Portal. [10,11]

- [1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.
- [2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 21 December 2020.
- [3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 21 December 2020.
- [4] United Republic of Tanzania. Ministry of Foreign Affairs and East African Cooperation. [<http://www.foreign.go.tz/>]. Accessed 21 December 2020.
- [5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.
- [6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 21 December 2020.
- [7] World Health Organization (WHO) Regional Committee for Africa. 2016. "African Public Health Emergency Fund: The way forward". [<https://reliefweb.int/sites/reliefweb.int/files/resources/afr-rc66-15-en-0308.pdf>]. Accessed 21 December 2020.
- [8] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent". [<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>]. Accessed 21 December 2020.
- [9] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania". [<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 21 December 2020.
- [10] United Republic of Tanzania. "Government Portal". [<https://www.tanzania.go.tz/documents>]. Accessed 18 January 2021.
- [11] United Republic of Tanzania. "President's Official Website". [<https://www.ikulu.go.tz/index.php>]. Accessed 18 January 2021.

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

5.5.2a

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

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

Current Year Score: 0

2021

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 Tanzania can access in the face of a public health emergency.

As an International Development Association (IDA)-eligible borrowing country, Tanzania can borrow funds under the World Bank Pandemic Financing Facility. [1, 2] Tanzania is also eligible for emergency financing via the African Public Health Emergency Fund, which is a solidarity fund established by the WHO Regional Committee for Africa in 2012 with the aim of "providing catalytic resources for initiating timely responses to public health emergencies". [3]

[1] World Bank Group- International Development Association- Borrowing Countries.

[<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 21 December 2020.

[2] World Bank Pandemic Financing Facility. [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 21 December 2020.

[3] World Health Organization (WHO) Regional Committee for Africa. 2016. "African Public Health Emergency Fund: The way forward". [<https://reliefweb.int/sites/reliefweb.int/files/resources/afr-rc66-15-en-0308.pdf>]. Accessed 21 December 2020.

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

5.5.4a

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

- Support other countries to improve capacity to address epidemic threats by providing financing or support?

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

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

Current Year Score: 0

There is no evidence that senior leaders (president or ministers) in Tanzania and Tanzania-Zanzibar have made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support in the past three years or to improve their own domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity.

A scan of press releases, statements, speeches and notices on the websites of Tanzania's Ministry of Health, Ministry of Agriculture, Ministry of Livestock, and Ministry of Foreign Affairs does not provide evidence of such commitments. [1,2,3,4] There also does not exist evidence in case of Tanzania-Zanzibar via a review of its Ministry of Health and Ministry of Agriculture websites and media sources. [5,6]

A 2016 review of contributions to the African Public Health Emergency Fund, a solidarity fund established by the WHO Regional Committee for Africa in 2012 showed that Tanzania had not contributed its expected donations to the fund. [7]

With regards to statements about public health following the COVID-19 pandemic, there is evidence that the government has denied the claim that COVID-19 was affecting the Tanzanian population and as early as May 2020, the president announced that the country was "coronavirus free". Denying the impact that COVID-19 has had on the country has set the country back in terms of finding better ways of managing the crisis. [8,9]

[1] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[2] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 21 December 2020.

[3] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 21 December 2020.

[4] United Republic of Tanzania. Ministry of Foreign Affairs and East African Cooperation. [<http://www.foreign.go.tz/>]. Accessed 21 December 2020.

[5] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 21 December 2020.

[7] World Health Organization (WHO) Regional Committee for Africa. 2016. "African Public Health Emergency Fund: The way forward". [<https://reliefweb.int/sites/reliefweb.int/files/resources/afr-rc66-15-en-0308.pdf>]. Accessed 21 December 2020.

[8] DevEx. November 2020. "In Tanzania election, COVID-19 denialism an 'excuse to clamp down' on dissent". [<https://www.devex.com/news/in-tanzania-election-covid-19-denialism-an-excuse-to-clamp-down-on-dissent-98418>]. Accessed 21 December 2020.

[9] DevEx. July 2020. "Muddled messaging around COVID-19 complicates response in Tanzania". [<https://www.devex.com/news/muddled-messaging-around-covid-19-complicates-response-in-tanzania-97590>]. Accessed 21 December 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 exists evidence that Tanzania and Tanzania-Zanzibar have invested finances (from donors) to improve their own domestic capacity to address epidemic threats in the past three years. However, there is no evidence that they have provided other countries with financing or technical support to improve capacity to address epidemic threats.

As per the Global Health Security Funding Tracking Dashboard, from 2014 to 2020 Tanzania received \$4.94 USD Billion from donor countries to improve its own domestic capacity to detect, respond and address epidemic threats. [1] In particular, the government of Tanzania has received \$227.32 USD Million between 2014 and 2020 for a program called Measure Impact IV, which "strengthen capacity in developing countries to gather, interpret, and use data to improve health". [2,3]The country has also received \$18.6 USD Million from the World Health Organization (WHO) and includes support in, for example, technical assistance in enhancing surveillance and raising population immunity to the threshold needed to stop polio transmission in affected and at-risk areas. It has also received funding to implement key HIV interventions through "active engagement in policy dialogue, development of normative guidance and tools, dissemination of strategic information, and provision of technical support". [4,5]

There is no evidence that Tanzania and Tanzania-Zanzibar have provided other countries with financing or technical support to improve capacity to address epidemic threats, through a review of the Global Health Security Funding Tracking Dashboard and the Ministry of Health. [6, 7]

[1] Global Health Security Funding Tracking Dashboard. [<https://tracking.ghscosting.org/#analysis/TZ/r>]. Accessed 21 December 2020.

[2] Global Health Security Funding Tracking Dashboard. "United Republic of Tanzania". [<https://tracking.ghscosting.org/table/1076/recipient>]. Accessed 28 April 2021.

[3] Measure Evaluation. [<https://www.measureevaluation.org/>]. Accessed 28 April 2021.

[4] World Health Organization (WHO). United Republic of Tanzania. "Communicable Diseases". [<http://open.who.int/2018-19/country-category/TZA/01>]. Accessed 21 December 2020.

[5] World Health Organization. "Financial Flow". [<http://open.who.int/2018-19/country/TZA>]. Accessed 21 December 2020.

[6] Global Health Security Funding Tracking Dashboard. [<https://tracking.ghscosting.org/details/1076/funder>]. Accessed 07 May 2021.

[7] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 07 May 2021.

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 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 evidence in Tanzania and Tanzania-Zanzibar of a 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.

Both regions are a part of the East African Community, a regional cooperative group of six members states aimed at strengthening capacities in various critical areas including disease control and prevention. [1,2] As part of this initiative, the East African Integrated Disease Surveillance Network (EAIDSNet) has been established, which among others, has the following objectives: "promote exchange and dissemination of appropriate information on Integrated Disease Surveillance and other disease control activities; strengthen capacity for implementing integrated disease surveillance and control activities; and ensure continuous exchange of expertise and best practices for integrated disease surveillance and control". [1,2] While there is a provision for information sharing, it is not clear whether this includes either of genetic data, epidemiological data, clinical specimens, and/or isolated specimens.

No evidence is found via the Joint External Evaluation of the International Health Regulations (IHR) Core Capacities of the United Republic of Tanzania, conducted in February 2016, which only mentions that data generated through electronic surveillance is shared with the World Health Organization (WHO). [3] No further evidence is found via the Ministry of Health or Ministry of Agriculture websites. [4,5]. The Joint External Evaluation of the IHR Core Capacities of Tanzania-Zanzibar, conducted in April 2017, and Tanzania-Zanzibar's Ministry of Health and Ministry of Agriculture also do not provide evidence of this. [6,7,8]

[1] East African Community (EAC). "Disease Prevention and Control Unit". [<https://www.eac.int/health/disease-prevention>]. Accessed 21 December 2020.

[2] East African Community (EAC). "EAC Partner States". [<https://www.eac.int/eac-partner-states>]. Accessed 21 December 2020.

[3] World Health Organisation (WHO). 2016. "Joint external evaluation of International Health Regulations (IHR) core capacities of the United Republic of Tanzania - Mission report: February 2016". [<https://apps.who.int/iris/bitstream/handle/10665/254510/WHO-WHE-CPI-2017.7-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[4] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[5] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 21 December 2020.

[6] World Health Organisation (WHO). 2017. "Joint external evaluation of IHR core capacities of Tanzania-Zanzibar - Mission report: April 2017." [<https://apps.who.int/iris/bitstream/handle/10665/258696/WHO-WHE-CPI-REP-2017.39-eng.pdf?sequence=1>]. Accessed 21 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[8] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 21 December 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 Tanzania has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. There is no evidence via the World Health Organisation (WHO) or top international and local media outlets of any non-compliance in the past year by Tanzania. [1,2]

[1] World Health Organisation (WHO). "Virus sharing". [http://www.who.int/influenza/pip/virus_sharing/en/]. Accessed 20 December 2020.

[2] World Health Organisation (WHO). [<http://www.who.int>]. Accessed 20 December 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 Tanzania has not shared pandemic pathogen samples during an outbreak in the past two years.

There is no suggestion from the World Health Organisation (WHO) report on a cholera outbreak from 2018 or its report on cases of undiagnosed febrile illness from 2019 that Tanzania failed to share pandemic pathogen samples. [1,2]

There is no media reporting in the past two years to suggest that Tanzania has failed to share pathogen samples during an outbreak. And no reports that Tanzania has failed to share pathogens during the COVID-19 pandemic. No evidence was found via the Ministry of Health, Ministry of Agriculture, and Ministry of Livestock for Tanzania, and no evidence from the Ministry of Health and Ministry of Agriculture for Tanzania-Zanzibar. [3,4,5,6,7]

[1] World Health Organisation. January 2018. "Cholera - Tanzania". [<https://afro.who.int/health-topics/cholera/outbreak/12-january-2018-tanzania>]. Accessed 21 December 2020.

[2] World Health Organization. September 2019. "Cases of Undiagnosed Ferbile Illness - United Republic of Tanzania". [<https://www.who.int/csr/don/21-september-2019-undiag-febrile-illness-tanzania/en/>]. Accessed 21 December 2020.

[3] United Republic of Tanzania. Ministry of Health, Community Development, Gender, Elderly and Children. [<http://www.mcdgc.go.tz/>]. Accessed 21 December 2020.

[4] United Republic of Tanzania. Ministry of Agriculture. [<http://www.kilimo.go.tz/index.php/en/>] Accessed 21 December

2020.

[5] United Republic of Tanzania. Ministry of Livestock and Fisheries Development (MoLFD). [<http://www.mifugouvuvu.go.tz/>]. Accessed 21 December 2020.

[6] Revolutionary Government of Zanzibar. Ministry of Health. [<https://mohz.go.tz/eng/>]. Accessed 21 December 2020.

[7] Revolutionary Government of Zanzibar. Ministry of Agriculture, Natural Resources, Livestock and Fisheries. [<https://kilimoznz.go.tz/>]. Accessed 21 December 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: 1

2020

Economist Intelligence

6.1.1e

Country score on Corruption Perception Index (0-100, where 100=best)

Input number

Current Year Score: 38

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 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: 2

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 2

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

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

Input number

Current Year Score: 77.9

2015

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: 0.46

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: 15.9

2017

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 2

According to the International Labour Organization (ILOSTAT) database, the share of informal employment in 2014 was 90.8% and the World Bank reported it at 74%. [1,2]

[1] International Labor Organization (ILOSTAT). "Country Profiles". [<https://ilostat.ilo.org/data/country-profiles/>]. Accessed 20 December 2020.

[2] The World Bank. "Informal Employment (% total of non-agricultural employment)". [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=TZ>]. Accessed 21 December 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: 1

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.41

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

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

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

Current Year Score: 2

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 1

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 34.5

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -4.53

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: 65.02

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: 496.5

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 2.62

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 13.3

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 8.4

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 56.73

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 29.91

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: 48.3

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

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

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018

6.5.4b

Trust medical and health advice from medical workers

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

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018