

# Mozambique

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

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

### 1.1 ANTIMICROBIAL RESISTANCE (AMR)

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

##### 1.1.1a

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has a national AMR plan for the surveillance, detection and reporting of priority AMR pathogens. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), in page 9, "Mozambique does not yet have a comprehensive national plan for controlling antimicrobial resistance (AMR) that specifically addresses the detection and reporting of priority pathogens and encourages antimicrobial stewardship". [1] The Ministry of Health has a Strategic Plan for the Health Sector 2014-2019, which was published in 2013, but there is just a one mention of AMR in page 61, which calls for the National Institute of Health to improve sentinel posts for the study of AMR in relation to leprosy in the seven provinces that are most affected by it. [2] There is no plan for AMR surveillance in the website for the National Institute of Health. [3] Mozambique is not listed in the WHO's Library of national action plans for antimicrobial resistance. [4] Mozambique is not mentioned in the WHO's Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR) report of 2018. [5] The Ministry of Agriculture website has no evidence that Mozambique has an AMR plan. [6]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 2 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 2 September 2020.

[3] National Institute of Health. "Publications (Publicações)". [<https://www.ins.gov.mz/publicacoes>]. Accessed 2 September 2020.

[4] World Health Organization. "Antimicrobial resistance: Library of national action plans". [<https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 2 September 2020.

[5] World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health. July 2018. "Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR)". [<https://www.who.int/antimicrobial-resistance/publications/Analysis-report-of-AMR-country-se/en/>]. Accessed 2 September 2020.

[6] Ministry of Agriculture and Food Security. "Animal Health (Sanidade animal)". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 2 September 2020.

##### 1.1.1b

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

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

**Current Year Score: 1**

Mozambique has a national laboratory system, which tests for tuberculosis (other priority AMR pathogens are not included). According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 9, "The National Institute of Health (INS) has established sentinel surveillance sites for detecting antimicrobial resistance at central and some provincial hospitals." [1] In page 11 of JEE 2016, "There are designated sentinel surveillance sites for meningitis and enteric diseases (including cholera) with a well implemented referral system of the samples. There is also a passive surveillance for TB resistance." [1] Page 29 of JEE 2016 states that the surveillance system includes four syndromic diseases: febrile syndrome, respiratory syndrome, diarrheal syndrome, and meningitis. [1] Mozambique has eight national laboratories, each dedicated to a specific area: molecular virology, viral isolation, serology, cellular immunology, tuberculosis, microbiology, medical entomology, and molecular parasitology. [2] The Laboratory of Tuberculosis has the capability of testing for mycobacterium tuberculosis through the Genotype MTBDrPlus technique. [3] Mozambique is not listed in the WHO's Library of national action plans for antimicrobial resistance. [4] Mozambique is not mentioned in the WHO's Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR) report. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 2 September 2020.

[2] National Institute of Health. "Laboratory: Technological platforms (Laboratório: Plataformas tecnológicas)". [https://www.ins.gov.mz/index.php/laboratorios]. Accessed 2 September 2020.

[3] National Institute of Health. "Tuberculosis Laboratories (Laboratórios de Tuberculose)". [https://www.ins.gov.mz/laboratorios\_de\_tuberculose]. Accessed 2 September 2020.

[4] World Health Organization. "Antimicrobial resistance: Library of national action plans". [https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 2 September 2020.

[5] World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health. July 2018. "Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR)". [https://www.who.int/antimicrobial-resistance/publications/Analysis-report-of-AMR-country-se/en/]. Accessed 2 September 2020.

**1.1.1c**

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Mozambique conducts detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms. It is unclear whether or not Mozambique's Ministry of Coordination of Environmental Affairs (MICOA), the government's environmental agency, conducts detection or surveillance activities in soil or waterways, etc for antimicrobial residues or AMR organisms nor that there are government agencies in Mozambique that conduct these activities. According to WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), Mozambique does not have an AMR plan and its laboratory and sentinel surveillance system only covers tuberculosis among the priority pathogens. There are no mentions of MICOA or any other government environmental agency that conducts detection or surveillance activities in soil or waterways etc. [1] Mozambique is not listed in the WHO's Library of national action plans for antimicrobial resistance. [2] Mozambique is not mentioned in the WHO's "Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR)" report of 2018. [3] The website for Mozambique's Ministry of Coordination of Environmental Affairs (MICOA) was offline when attempted to access it. [4] No

information on the issue was available at the website of the Ministry of Health. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 2 September 2020.

[2] World Health Organization. "Antimicrobial resistance: Library of national action plans".

[https://www.who.int/antimicrobial-resistance/national-action-plans/library/en/]. Accessed 2 September 2020.

[3] World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health. July 2018. "Monitoring Global Progress On Addressing Antimicrobial Resistance (AMR)".

[https://www.who.int/antimicrobial-resistance/publications/Analysis-report-of-AMR-country-se/en/]. Accessed 2 September 2020.

[4] Ministry of Coordination of Environmental Action. [http://www.micoa.gov.mz/]. Accessed 2 September 2020.

[5] Ministry of Health. "Strategic Plans (Planos Estratégicos)". [http://www.misau.gov.mz/index.php/planos-estrategicos]. Accessed 2 September 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**

Mozambique has laws that regulate prescriptions for antibiotics for human use, but there is evidence of gaps in enforcement. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 12, "Drug laws regulate prescriptions and sales of antibiotics to people" and "The National Drug Formulary guides health professionals on prescribing all medicines." [1] The National Drug Formulary was developed in 2007 and has a comprehensive list of medications and prescriptions guide for medical professionals for human use. [2] The JEE 2016, however, also notes in page 12: "Inconsistent and weak implementation and enforcement of existing drug law. For instance, private pharmacies frequently dispense antibiotics without a medical prescription, and antibiotics are available in the marketplace." [1] Furthermore, a report of 2017 by the Municipal Council of Maputo, the capital city of Mozambique, addresses the issue of the informal sale of medications, including antibiotics, in the municipality, indicating that medications are being sold illegally without prescriptions. [3] DW, a media outlet, reported on 20 March 2020 that there is an illegal market for medications in Mozambique, where prices are lower than in formal pharmacies. The sale of medications, including antibiotics, in those markets do not require the customer to present a prescription for any medication. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 2 September 2020.

[2] Ministry of Health. 2007. "National Form of Medications (Formulário Nacional de Medicamentos)".

[http://www.arm.co.mz/wp-content/uploads/2017/01/Formul%C3%A1rio-Nacional-de-Medicamentos-2007.pdf]. Accessed 2 September 2020.

[3] Municipal Council of Maputo. 30 March 2017. "Informal sale of medications in the city of Maputo, causes and consequences to public health (Venda informal de medicamentos na cidade de Maputo, causas e consequências para a saúde pública)". [https://www.medicusmundimozambique.org/files/2018/02/Venda\_Med\_Maputo.pdf]. Accessed 3 September 2020.

[4] Jequete, Bernardo. DW. 20 March 2020. "The danger of the illicit market of medications in Mozambique (O perigo do mercado ilícito de medicamentos em Moçambique)". [https://www.dw.com/pt-002/o-perigo-do-mercado-il%C3%ADcito-de-

medicamentos-em-mo%C3%A7ambique/a-52860346]. Accessed 3 September 2020.

### 1.1.2b

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has regulation in place requiring prescriptions for antibiotic use for animals. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 12, "Drug laws regulate prescriptions and sales of antibiotics to people" and "The National Drug Formulary guides health professionals on prescribing all medicines." [1] The National Drug Formulary was developed in 2007 and has a comprehensive list of medications and prescriptions guide for medical professionals for human use. There is no evidence that there exists legislation or regulation in place requiring prescriptions for antibiotic use for animals in the Ministry of Health. [2] The JEE 2016 notes in page 11 that, "National surveillance is needed for antimicrobial resistance in the animal health sector and a national veterinary medicines control or authorization system should be established." [1] This indicates that there no veterinary medicines control, including regulation on prescription. Furthermore, the JEE 2016 also notes in page 12: "Laws regulating use of drugs in animal health are inadequate." [1] According to the Ministry of Agriculture, there are vaccination campaigns against some key animal diseases, such as rabies and foot-and-mouth disease; however, no regulation was found on prescriptions for animals. The sale of veterinary medications is regulated by the National Veterinary Directorate (DINAV); however, details on the commercialization and control of antibiotics for animal use are not provided. [3] No evidence of a national legislation or regulation requiring prescriptions for antibiotic use for animals was found in the Ministry of Health website. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 3 September 2020.

[2] Ministry of Health. "Formulário Nacional de Medicamentos". 2007. [http://www.arm.co.mz/wp-content/uploads/2017/01/Formul%C3%A1rio-Nacional-de-Medicamentos-2007.pdf]. Accessed 3 September 2020.

[3] Ministry of Agriculture and Food Security. "Sanidade animal". [https://www.agricultura.gov.mz/pecuaria/sanidade-animal/]. Accessed 3 September 2020.

[4] Ministry of Health. "Leis". [http://www.misau.gov.mz/index.php/leis]. Accessed 3 September 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**

Mozambique has a national law on zoonotic diseases. The Regulation on Animal Health, Decree number 26 of 2009, deals with—among other things—zoonotic diseases. The Regulation gives the Ministry of Agriculture and Food Security the competence to create complementary regulation on the issue and its objective is to establish norms for the epidemiological surveillance and control of animal diseases in Mozambique. Zoonotic diseases are specifically called out in the text. [1] However, it must be noted that according to OIE PVS report of 2015, while the legislation exists, its implementation is

ineffective. It notes in page 12 that the veterinary services in Mozambique are aware of the gaps and inconsistencies with the legislations, but "it was not able to bring the legislation into compliance with such standards". [2] Nevertheless, it must be noted that, according to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 13, "There is no One Health policy, plan, or Memorandum of Understanding (MoU) in place, but pilot initiatives (surveillance and research) are underway. There is also no joint task force or committee for systematic coordination of prevention, control, and response for priority zoonotic disease. This is exacerbated by inadequate communication and collaboration between the human and animal health services". [3] However, in page 15, "Mozambique has an approved strategy for inter-institutional and coordinated response for rabies, for the period 2010-2015." [3] The campaign included public outreach for people to vaccinate their cats and dogs, the collection of strays, and vaccinations for the public. [4] In 2019, Mozambique experienced an outbreak of foot-and-mouth disease. There are reports that the government vaccinated 450,000 animals against foot-and-mouth disease, but it was a challenge to control the spread of the disease owing to the lack of monitoring and control. There were no mentions of any legislation, plans or equivalent strategy document against the disease in any report. [5,6,7] There are reports from August 2020 that the government is initiating a campaign for vaccination against foot-and-mouth disease in risk areas. Reports claim that the government will invest US\$2mn in vaccines that will cover 450,000 animals. [8]

[1] Council of Ministers. Decree number 26 of 17 August 2009. "Regulation on Animal Health (Regulamento de Sanidade Animal)". [[http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto\\_26\\_2009\\_sanidade\\_animal.pdf](http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto_26_2009_sanidade_animal.pdf)]. Accessed 3 September 2020.

[2] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.

[3] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[4] Portal de Angola. 20 August 2014. "Mozambique: Rabies kill in Maputo (Moçambique: Raiva mata em Maputo)". [<https://www.portaldeangola.com/2014/08/20/mocambique-raiva-mata-em-maputo/#:~:text=Em%202010%2C%20o%20Governo%20mo%C3%A7ambicano,incid%C3%A7%C3%A3o%20da%20raiva%20no%20pa%C3%ADs.>]. Accessed 3 September 2020.

[5] Observador. 12 August 2019. "Mozambique vaccinates 450,000 animals against foot-and-mouth disease (Moçambique vacina 450 mil animais contra febre aftosa)". [<https://observador.pt/2019/08/12/mocambique-vacina-450-mil-animais-contra-febre-aftosa/>]. Accessed 3 September 2020.

[6] Government of Mozambique. No publication date. "Second phase of vaccination of cattle against foot-and-mouth disease is launched (Arranca II fase de vacinação de gado contra febre aftosa)". [<https://www.portaldogoverno.gov.mz/por/Imprensa/Noticias/Arranca-II-fase-de-vacinacao-de-gado-contra-febre-aftosa>]. Accessed 3 September 2020.

[7] Government of Mozambique. No publication date. "Outbreak of foot-and-mouth disease is still under control (Surto de febre aftosa ainda está sob controlo)". [<https://www.portaldogoverno.gov.mz/por/Imprensa/Noticias/Surto-de-febre-aftosa-ainda-esta-sob-controlo>]. Accessed 3 September 2020.

[8] CM Jornal. 20 August 2020. "Mozambique spends 1.6 million euros to buy vaccines against foot-and-mouth disease (Moçambique desembolsa 1,6 milhões de euros na compra de vacinas contra febre aftosa)". [<https://www.cmjornal.pt/mundo/africa/detalhe/mocambique-desembolsa-16-milhoes-de-euros-na-compra-de-vacinas-contra-febre-aftosa>]. Accessed 3 September 2020.

### 1.2.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique's national legislation, plans or equivalent strategy documents on zoonotic diseases includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans.

While Sections II and III of the Regulation on Animal Health, Decree number 26 of 2009 includes risk mitigation strategies, risk reduction for spillover events are not included. Section II is dedicated to the identification of three types of areas: the free zone (where there are no suspected cases of zoonoses), the suspect zone (where there are suspect cases of zoonoses) and the infected zone (where there are confirmed cases of zoonoses). The Regulation imposes specific measures for each of the three zones, in order to mitigate risks. Section III of the Regulation is about the control and eradication of the zoonotic diseases. Neither sections addresses risk reductions for spillovers. [1]

No evidence has been found for spillover risk reduction strategies such as sanitary or testing measures at markets where wild or live animals are bought or sold, efforts designed to preserve boundaries between humans and wildlife, and protection measures for people who in contact with wild animals. Law 20 of 1 October 1997, in its article 13, outlines the framework for conservation and biodiversity preservation areas. However, there are no mentions in the law any relation to those areas with risk reduction zoonotic spillover events. [2] Chapter V of the Regulation on Animal Health (Decree number 26 of 2009) addresses wild animals and the diseases they may introduce to humans and domesticized animals. It endows the Veterinary Authority to guarantee the protection of humans against those risks, but it does not specify measures. [1] There are no mentions of inspections or testing of wild or live animals in markets in the same regulation. [1] No other evidence was found in the websites of the Ministry of Health, the National Institute of Health, the Ministry of Agriculture and Food Security, and the Ministry of Land, Environment and Rural Development. [3][4][5][6]

[1] Council of Ministers. Decree number 26 of 17 August 2009. "Regulation on Animal Health (Regulamento de Sanidade Animal)". [[http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto\\_26\\_2009\\_sanidade\\_animal.pdf](http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto_26_2009_sanidade_animal.pdf)]. Accessed 5 September 2020.

[2] Government of Mozambique. Law number 20 of 1 October 2020. [<http://www.anamm.org.mz/index.php/gestao-de-conhecimento/legislacao/lei-20-1997-lei-do-ambiente>]. Accessed 14 April 2021.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 14 April 2021.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 14 April 2021.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 14 April 2021.

[6] Ministry of Land, Environment and Rural Development. [<http://www.mitader.gov.mz/>]. Accessed 14 April 2021.

### 1.2.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**



There is insufficient evidence that Mozambique has a national plan, guideline or law that account for the surveillance and control of multiple zoonotic pathogens of public health concern. The Regulation on Animal Health (Decree no. 26 of 2009) specifically mentions zoonotic diseases and epidemiological surveillance; however, it does not specify diseases in the document. The Regulation gives the Ministry of Agriculture and Food Security the competence to create complementary regulation on the issue and its objective is to establish norms for the epidemiological surveillance and control of animal diseases in Mozambique. [1] The OIE in its PVS report of 2015 notes in page 27 that Mozambique needs to take more action in creating surveillance mechanisms for zoonotic diseases. "A related problem is the lack of a formal disease surveillance system to detect outbreaks of animal disease as early as possible." [2] Furthermore, according to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 13, "There is no One Health policy, plan, or Memorandum of Understanding (MoU) in place, but pilot initiatives (surveillance and research) are underway. There is also no joint task force or committee for systematic coordination of prevention, control, and response for priority zoonotic disease. This is exacerbated by inadequate communication and collaboration between the human and animal health services." [3] The JEE 2016 in page 20 also states that Mozambique has developed an Institutional Biosafety Regulation at National Institute of Health and for the Central Veterinary Laboratory (DCA/IIAM); however, no evidence of the regulation has been found at the websites of the National Institute of Health, and no evidence has been found for the existence of a Central Veterinary Laboratory. [3,4] There is the National Directorate of Veterinary Sciences under the Ministry of Agriculture and Food Security, but no plans, guidelines or laws that account for the surveillance and control of multiple zoonotic pathogens of public concern were found. [5] However, in page 15 of JEE 2016, "Mozambique has an approved strategy for inter-institutional and coordinated response for rabies, for the period 2010-2015." [3] The campaign included public outreach for people to vaccinate their cats and dogs, the collection of strays, and vaccinations for the public. [6] According to the JEE 2016 in page 14, "The Ministry of Agriculture has a laboratory for diagnosis of zoonotic diseases in animals, although with limited capacity. Current testing focuses on five diseases: rabies, brucellosis, Rift Valley Fever, tuberculosis, and influenza." [3] There is no further evidence in the websites of the Ministry of Health or the Ministry of Agriculture. [7,8]

[1] Council of Ministers. Decree number 26 of 17 August 2009. "Regulation on Animal Health (Regulamento de Sanidade Animal)". [[http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto\\_26\\_2009\\_sanidade\\_animal.pdf](http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto_26_2009_sanidade_animal.pdf)]. Accessed 3 September 2020.

[2] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.

[3] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.

[5] Ministry of Agriculture and Food Security. "Direção Nacional de Veterinária". [<http://www.masa.gov.mz/institucional/ministerio/estrutura-organica/direccao-nacional-de-veterinaria/>]. Accessed 3 September 2020.

[6] Portal de Angola. 20 August 2014. "Mozambique: Rabies kill in Maputo (Moçambique: Raiva mata em Maputo)". [<https://www.portaldeangola.com/2014/08/20/mocambique-raiva-mata-em-maputo/#:~:text=Em%202010%2C%20o%20Governo%20mo%C3%A7ambicano,incid%C3%Aancia%20da%20raiva%20no%20pa%C3%ADs.>]. Accessed 3 September 2020.

[7] Ministry of Health. "Leis". [<http://www.misau.gov.mz/index.php/leis>]. Accessed 3 September 2020.

[8] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 2020.

### 1.2.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that there is a department, agency or similar unit dedicated to zoonotic disease that functions across ministries. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), "The focal point for zoonotic diseases within National Directorate for Public Health (DNSP) was appointed in 2016." [1; page 14] However, there is insufficient evidence for the existence of this departments in the Ministry of Health, according to its website. In the organizational chart, there is no National Directorate for Public Health (DNSP), but a National Directorate for the Control of Diseases and Epidemics is mentioned. [2] No other references or mentions of the National Directorate for the Control of Diseases and Epidemics was found in any other source. There is a document that cites the DNSP in a programme to fight against tuberculosis. [3] No documents were found linking the DNSP with zoonotic diseases besides the JEE 2016. According to the OIE PVS report of 2015, Mozambique has the National Veterinary Directorate (DINAV), which functions in the Ministry of Agriculture and Food Security. The DINAV has specific departments that deal with zoonotic diseases, such as the Department of Disease Prevention and Control and the Veterinary Public Health Department. However, there is no evidence that the DINAV nor its departments functions across ministries. [4] There is no further evidence of another agency besides the mentioned DINAV in the Ministry of Agriculture and Food Security. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Ministry of Health. 11 September 2018. "Organigrama Aprovado". [<https://www.misau.gov.mz/index.php/2-uncategorised/46-organigrama-aprovado>]. Accessed 3 September 2020.

[3] Ministry of Health. June 2017. "Encontro Conjunto de Parceiros do MISAU/PEPFAR Moçambique". [[https://mz.usembassy.gov/wp-content/uploads/sites/182/2017/06/Direccao-Estrategica-do-MISAU\\_PNCT.pdf](https://mz.usembassy.gov/wp-content/uploads/sites/182/2017/06/Direccao-Estrategica-do-MISAU_PNCT.pdf)]. Accessed 3 September 2020.

[4] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.

[5] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 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 evidence of a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. The 2015 OIE PVS report states that "there is no formal disease surveillance system or communication protocol to enable early detection and control and reporting of animal disease occurrences". [1] According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), however, there is some efficient reporting to WHO, OIE and FAO. In page 34 of JEE 2016, "IHR national focal point is operational, has

been trained, and has been granted full responsibility for notifying WHO of public health events of international concern. OIE focal point has been designated and veterinary services reports to OIE using the World Animal Health Information System." [2] The direct reporting by livestock owners to government agencies or international agencies is not documented. Indeed, the JEE 2016 in page 35 also mentions that "Weak coordination among relevant sectors. Reporting mechanisms are not systematically followed by relevant sectors. [...] There is no specific SOPs for reporting on a potential PHEIC [Procedures concerning public health emergencies of international concern] to WHO." [2] The website for the Ministry of Agriculture and Food Security does not provide a link or contact for livestock owners to report diseases in Mozambique. [3] There is no evidence of a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency in the website of the Ministry of Health. [4]

[1] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report".

[[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[3] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

### 1.2.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that there are legislation or regulations that safeguard the confidentiality of information generated through surveillance activities for animal owners in Mozambique. However, the Constitution of Mozambique in its Article 17 guarantees privacy, including through electronic media. [1,2] The website for the Ministry of Agriculture and Food Security does not provide a link or contact for livestock owners to report diseases in Mozambique nor is there legislation that specifically and explicitly safeguard the confidentiality of information generated through surveillance activities for animals of owners. [3] The OIE PVS report of 2015 provides no evidence that Mozambique has any laws or guidelines that safeguard the confidentiality of information generated through surveillance activities of animals. [4] The Regulation on Animal Health makes no mention of confidentiality of information. [5] There are no mentions of the issue in the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016). [6]

[1] Government of Mozambique. Constitution of 2004. [<http://www.portaldogoverno.gov.mz/por/Media/Files/Constituicao-da-Republica-PDF>]. Accessed 3 September 2020.

[2] Daniel, Guilherme. July 2017. "Opinião Jurídica: Protecção de dados pessoais". Exame Moçambique. [[https://www.vda.pt/xms/files/v1/Noticias/2017/Artigo\\_Guilherme\\_Danie\\_l\\_-\\_Opinio JURIDICA\\_1o\\_artigo\\_-\\_Exame\\_Mocambique.pdf](https://www.vda.pt/xms/files/v1/Noticias/2017/Artigo_Guilherme_Danie_l_-_Opinio JURIDICA_1o_artigo_-_Exame_Mocambique.pdf)]. Accessed 3 September 2020.

[3] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 2020.

[4] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report".

[[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)].

Accessed 3 September 2020.

[5] Council of Ministers. Decree number 26 of 17 August 2009. "Regulation on Animal Health (Regulamento de Sanidade Animal)". [[http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto\\_26\\_2009\\_sanidade\\_animal.pdf](http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto_26_2009_sanidade_animal.pdf)]. Accessed 3 September 2020.

[6] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

### 1.2.2c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique conducts surveillance of zoonotic disease in wildlife (e.g. wild animals, insects, other disease vectors, etc.). According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 11, "the surveillance sentinel sites do not cover animal testing, however, therefore increased communication is needed between human and animal sectors." [1] The JEE 2016, however, notes in page 14 that "The Ministry of Agriculture has a laboratory for diagnosis of zoonotic diseases in animals, although with limited capacity. Current testing focuses on five diseases: rabies, brucellosis, Rift Valley Fever, tuberculosis, and influenza." [1] There is no specific mention of wildlife testing and surveillance in the Ministry of Agriculture website. [2] According to the OIE PVS report of 2015, the National Veterinary Directorate has a department dedicated to wildlife diseases. However, there is no evidence that it conducts surveillance of zoonotic diseases in wildlife. [3] The Regulation on Animal Health of 2009, while it covers wildlife in the document, it does not mention surveillance. [4] No evidence was found in the Ministry of Health website. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 2020.

[3] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.

[4] Council of Ministers. Decree number 26 of 17 August 2009. "Regulation on Animal Health (Regulamento de Sanidade Animal)". [[http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto\\_26\\_2009\\_sanidade\\_animal.pdf](http://www.masa.gov.mz/wp-content/uploads/2018/01/Decreto_26_2009_sanidade_animal.pdf)]. Accessed 3 September 2020.

[5] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 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: 1.26**

2018

OIE WAHIS database

### 1.2.4b

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

Input number

**Current Year Score: 18.83**

2018

OIE WAHIS database

## 1.2.5 Private sector and zoonotic

### 1.2.5a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has a national plan on zoonotic disease or other legislation, regulation or plan that includes mechanisms for working with the private sector in controlling or responding to zoonoses. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 13, "There is no One Health policy, plan, or Memorandum of Understanding (MoU) in place, but pilot initiatives (surveillance and research) are underway. There is also no joint task force or committee for systematic coordination of prevention, control, and response for priority zoonotic disease." [1] The website for the National Institute of Health was not accessible at the time of the research. [2] The website for the Ministry of Agriculture and Food Security does not provide any information on mechanisms to work with the private sector in controlling or responding to zoonoses. [3] The OIE PVS report of 2015 provides no evidence that Mozambique has a mechanism to work with the private sector in controlling or responding to zoonoses. [4] No evidence was found in the Ministry of Health website. [5]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [3] Ministry of Agriculture and Food Security. "Sanidade animal". [<https://www.agricultura.gov.mz/pecuaria/sanidade-animal/>]. Accessed 3 September 2020.
- [4] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 3 September 2020.
- [5] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

## 1.3 BIOSECURITY

### 1.3.1 Whole-of- government biosecurity systems

#### 1.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) report in page 20 lists recommendations that relate to creating records and inventory for pathogens in health facilities. "A national inventory of dangerous biological pathogens and toxins should be conducted. There is a need to identify and further consolidate a small number of facilities with the capacity to hold, store, and manage dangerous biological pathogens and toxins. Maintenance of a stockpile of biosafety personal protection equipment and measures is needed." [1] The Ministry of Defense website was offline at the time of research. [2] No further evidence was found in the websites of the Ministry of Health or the National Institute of Health. [3,4] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [5] In the VERTIC database, the only relevant regulation listed is the Regulation on Residue Management (Decree 13 of 15 July 2006). The document outlines procedures on how to deal with dangerous pathogens and toxins; however, there are no mentions of maintaining a record of facilities where those substances are stored or processed. The regulation covers the issue to the extent that facilities that intend to store those substances must be licenced and there should be a directory of those licenced facilities. [6,7].

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [5] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [6] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 8 October 2020.

2020.

[7] Council of Ministers. Decree 13 of 15 July 2006.

[[https://www.vertic.org/media/National%20Legislation/Mozambique/MZ\\_Regulamento\\_sobre\\_a\\_Gestao\\_de\\_Residuos.pdf](https://www.vertic.org/media/National%20Legislation/Mozambique/MZ_Regulamento_sobre_a_Gestao_de_Residuos.pdf)]. Accessed 8 October 2020.

### 1.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20, "A whole-of-government, national biosafety and biosecurity system is not fully in place to ensure that especially dangerous biological pathogens and toxins are identified, held, secured, and monitored in a minimal number of facilities according to best practices." [1] However, the JEE 2016 in page 20 also notes that there is "legislation and policy on genetically modified organisms (GMOs), animal health, and management of bio-medical waste, and existence of the Institutional Biosafety Committee." [1] There is evidence that Mozambique is working on creating guidelines on biosecurity alongside the National Institute of Health of Portugal and the Center for Disease Control and Prevention (CDC) of the US. In January and February 2018, representatives from the National Institute of Health of Portugal visited Mozambique to evaluate its biosecurity infrastructure, capabilities and weaknesses. This visit came along with an invitation from the CDC and the Ministry of Health of Mozambique to help on the development of manual (or guidelines) for biosecurity. [2] In July 2019, the National Institute of Health of Portugal and the National Institute of Health of Mozambique signed a Protocol of Technical Cooperation, which aims to strengthen cooperation between both institutes in several health-related issues, including biosecurity. [3] The Ministry of Health, the Ministry of Defense, and the Ministry of Agriculture and Food Security do not have any information on existing legislation or regulations related to biosecurity in the context of dangerous pathogens and toxins. [4,5,6] Only information on genetically organisms (GMOs) was found, which used the term biosecurity. There is legislation that regulates the production, consumption, importation and exportation of GMO in Mozambique. [7] No relevant information was found in the VERTIC website. [8] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [9]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] National Institute of Health (Portugal). 9 February 2018. "Ricardo Jorge Institute supports the revision and implementation of biosecurity manual in Mozambique (Instituto Ricardo Jorge apoia revisão e implementação de manual de biossegurança em Moçambique)". [<http://www.insa.min-saude.pt/instituto-ricardo-jorge-em-mocambique-para-apoiar-na-revisao-e-implementacao-de-manual-de-biosseguranca/>]. Accessed 3 September 2020.

[3] A Enfermagem e as Leis. 4 July 2019. "Ricardo Jorge Institute and National Institute of Health of Mozambique establish protocol of technical cooperation (Instituto Ricardo Jorge e Instituto Nacional de Saúde de Moçambique estabelecem protocolo de cooperação técnica)". [<http://www.aenfermagemasleis.pt/2019/07/04/instituto-ricardo-jorge-e-instituto-nacional-de-saude-de-mocambique-estabelecem-protocolo-de-cooperacao-tecnica/>]. Accessed 3 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.

[7] Council of Ministers. Decree number 6 of 25 April 2007. "Regulation on Biosecurity Related to the Management of Genetically Modified Organisms (Regulamento Sobre a Bio-segurança Relativa à Gestão de Organismos Geneticamente Modificados)".

[[http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503\\_REFERENCE\\_FILE\\_ID:167705:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503_REFERENCE_FILE_ID:167705:NO)].

Accessed 3 September 2020.

[8] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.

[9] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>].

Accessed 3 September 2020.

### 1.3.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has an established agency responsible for the enforcement of biosecurity legislation and regulations, as no laws and regulations has been found. It has the Inter-Institutional Biosafety Group (GIIBS), as confirmed by the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20 and existing legislation; however, the GIIBS is focused on genetically modified organisms and not high-consequence biological agents and toxins. [1,2] According to JEE 2016 in page 20, "A whole-of-government, national biosafety and biosecurity system is not fully in place to ensure that especially dangerous biological pathogens and toxins are identified, held, secured, and monitored in a minimal number of facilities according to best practices." [1] No evidence of an established agency responsible for the enforcement of biosecurity legislation and regulations has been found in the websites for the Ministry of Health, National Institute of Health, Ministry of Defense, and Ministry of Agriculture and Food Security. [3,4,5,6] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [7] None of the documents available in the VERTIC database mentions a specific agency for the enforcement of biosecurity legislation and regulations. [8]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Council of Ministers. Decree number 6 of 25 April 2007. "Regulation on Biosecurity Related to the Management of Genetically Modified Organisms (Regulamento Sobre a Bio-segurança Relativa à Gestão de Organismos Geneticamente Modificados)".

[[http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503\\_REFERENCE\\_FILE\\_ID:167705:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503_REFERENCE_FILE_ID:167705:NO)].

Accessed 3 September 2020.

[3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.

[7] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>].

Accessed 3 September 2020.

[8] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

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



### 1.3.1d

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities, as there is no evidence that Mozambique maintains inventories. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20, one of the key areas that needs strengthening are the inventory system. "A national inventory of dangerous biological pathogens and toxins should be conducted. There is a need to identify and further consolidate a small number of facilities with the capacity to hold, store, and manage dangerous biological pathogens and toxins." [1] No evidence has been found in the websites for the Ministry of Health, National Institute of Health, Ministry of Defense and Ministry of Agriculture and Food Security. [2,3,4,5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No evidence was found in the VERTIC website. [7]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.

[4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.

[6] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.

[7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

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

### 1.3.1e

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is evidence that Mozambique has the capacity to conduct polymerase chain reaction (PCR)-based diagnostic testing; however, the evidence does not link with Ebola nor anthrax testing. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) notes in page 35 that "A table-top simulation in 2015 assessed the country's preparedness for the Ebola epidemic and adjust the response plan accordingly." [1] In addition, the JEE 2016 notes in page 45 that "Exercises were conducted by the Ministry of Health during Ebola preparedness activities, with inter-sectoral collaboration with security authorities. There are no standard operating procedures in place for joint risk assessment but events of public health and security significance are discussed at regular or extraordinary meetings of government structures at all levels." [1] Furthermore, the JEE 2016 in page 26 also confirms that Mozambique has PCR capabilities: "SOPs [standard operating procedures] have been developed for HIV [human immunodeficiency virus] serology and PCR, Xpert MTB/RIF assay, TB [tuberculosis] smear microscopy, and malaria tests, and have been rolled out nationally." [1] However, the reference of PCR-based diagnostic testing is not connected to Ebola or anthrax in Mozambique in the JEE 2016. Other studies

have been found confirming the existence of PCR-based diagnostic testing in Mozambique, such as "Polymerase chain reaction (PCR) detection of the predominant microcystin-producing genotype of cyanobacteria in Mozambican lakes" by Pedro et al of 2011, and "Frequency of Pathogenic Paediatric Bacterial Meningitis in Mozambique: The Critical Role of Multiplex Real-Time Polymerase Chain Reaction to Estimate the Burden of Disease" by Nhantumbo et al of 2015. [2,3] No studies have been found connecting PCR-based diagnostic testing with Ebola or anthrax. The website of the Ministry of Defense was offline at the time of research. [4] No evidence has been found at the websites for the Ministry of Health, Ministry of Agriculture and Food Security and the National Institute of Health. [5,6,7] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [8]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Pedro, O et al. 2011. "Polymerase chain reaction (PCR) detection of the predominant microcystin-producing genotype of cyanobacteria in Mozambican lakes". African Journal of Biotechnology, Vol 10, No 83. [<https://www.ajol.info/index.php/ajb/article/view/99045>]. Accessed 3 September 2020.
- [3] Nhantumbo, A.A. et al. 22 September 2015. "Frequency of Pathogenic Paediatric Bacterial Meningitis in Mozambique: The Critical Role of Multiplex Real-Time Polymerase Chain Reaction to Estimate the Burden of Disease." PLoS One, 10 [9]. [<https://www.ncbi.nlm.nih.gov/pubmed/26393933>]. Accessed 3 September 2020.
- [4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [5] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [7] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [8] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.

## 1.3.2 Biosecurity training and practices

### 1.3.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Mozambique require biosecurity training, using standardised, required approach, such as through a common curriculum or a train-the-trainer programme, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 21 recommends the following actions, indicating that there are no required biosecurity training for professions: "National curriculum on biosafety and biosecurity training in academic and professional institutions, as well as the development and implementation of train-the-trainer programmes in biosafety and biosecurity, should be established. A national needs assessment for biosecurity and biosafety training should be conducted to facilitate adequate planning to strengthen capacity. The training of all technicians in biosecurity issues, in all facilities housing or working with dangerous pathogens is needed. Availability of consistent funds to implement biosafety and biosecurity training should be prioritized. Maintain adequate documentation for all staff regarding previous training in biosafety and biosecurity, to ensure that necessary refresher training is provided in a timely manner for staff working with dangerous pathogens." [1] However, there is evidence that training courses in biosecurity exist, but there are no indication that they are required. In the same text, the JEE 2016 notes in page 20 that "There is some institutional capability to provide

biosafety and biosecurity training. Biosafety and biosecurity topics are incorporated into existing undergraduate and graduate training programmes such as FELTP." [1] Mozambique has established the field epidemiology and laboratory training programme (FELTP). "The program was established in 2010, with the objective of strengthening capacity in applied epidemiology and laboratory management, so that events of public health importance can be detected and investigated in a timely and effective manner. The program is in its seventh year, having successfully trained 36 health professionals in the advanced course." [2] However, there is no evidence that this training programme is required for all biosecurity personnel. The website of the Ministry of Defense was offline at the time of research. [3] No evidence of required training courses have been found in the websites of the Ministry of Health, Ministry of Agriculture and Food Security, or the National Institute of Health. [4,5,6] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [7] No relevant information was found in the VERTIC website. [8]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Baltazar, Cynthia Semá et al. 2017. "Mozambique field epidemiology and laboratory training program: a pathway for strengthening human resources in applied epidemiology." *Pan African Medical Journal*, 27:233. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5622808/>]. Accessed 3 September 2020.
- [3] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [6] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [7] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [8] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.

### 1.3.3 Personnel vetting: regulating access to sensitive locations

#### 1.3.3a

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has regulations or licensing conditions that specify that security and other personnel with access to especially dangerous pathogens, toxins or biological materials with pandemic potential are subject to drug testing, background checks, and psychological or mental fitness checks. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) makes no mentions of those checks in the text. [1] The website of the Ministry of Defense was offline at the time of research. [2] There is no evidence of any of those checks in the websites for the Ministry of Health, National Institute of Health, Ministry of Agriculture and Food Security, or the National Institute of Health. [3,4,5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No relevant information was found in the VERTIC website. [7]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [4] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [5] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [6] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.

### 1.3.4 Transportation security

#### 1.3.4a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has publicly available information on national regulations on the safe and secure transport of infectious substances. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 48, "In line with WHO and IATA guidelines, some institutions such as the National Institute of Health (INS) have existing agreements (e.g. Skynet) for the transportation of emergency medications and laboratory specimens." [1] However, in page 48 of JEE 2016, "There is no formalized national plan, or stockpile with budget, exists for rapid deployment of medical countermeasures or non-medical commodities. There is no formal system or standard procedures in place for sending or receiving medical countermeasures or non-medical commodities from outside of Mozambique." [1] The JEE 2016 in page 25 evaluated Mozambique's transportation of infectious substances to be adequate, but no national regulations are publicly available. "The system for transport of specimens is adequate and mainly used for confirmation of outbreaks." [1] As mentioned in the JEE 2016, the Skynet agreement was confirmed and it is an agreement with the company Skynet, a third-party vendor, to transport admission exams for prospective public servants to provinces across Mozambique, except in Gaza and the Science and Health Institute in Maputo. [2] The Report of Developed Activities in 2018 of the National Program for the Control of Tuberculosis (published in June 2019) mentions that there are weaknesses in the public health system in regards to transportation of samples. There are no mentions of any regulations in the document. [3] There are no mentions in any document of safe and secure transport of infectious substances, Categories A and B. The website of the Ministry of Defense was offline at the time of research. [4] No evidence of national regulations have been found in the websites of the Ministry of Transport and Communication, Ministry of Agriculture and Food Security, and the National Institute of Health. [5,6,7] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [8] No relevant information was found in the VERTIC website. [9]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Ministry of Health. "Relatório Anual 2014". 2015. [<http://www.misau.gov.mz/index.php/relatorios-orhs?download=126:relatorio-anual-drh-2014>]. Accessed in January 2019.
- [3] Ministry of Health. June 2019. "National Program for the Control of Tuberculosis: Report of Developed Activities in 2018 (Programa Nacional de Controlo da Tuberculose: Relatório das Actividades Desenvolvidas durante o ano 2018)".

[<https://www.misau.gov.mz/index.php/relatorios-anuais-pnct>]. Accessed 3 September 2020.

[4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[5] Ministry of Transportation and Communication. "Legislação e documentos".

[<http://www.mtc.gov.mz/index.php/legislacao-e-documentos/documentos-e-relatorios>]. Accessed 3 September 2020.

[6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.

[7] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.

[8] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>].

Accessed 3 September 2020.

[9] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.

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

#### 1.3.5a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has a 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 WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) makes no reference to any cross-border transfer control and end-user screening of such pathogens. [1] The website for Mozambique's customs office provides no information on the cross-border transfer control and end-user screening of such pathogens. [2] The Report of Developed Activities in 2018 of the National Program for the Control of Tuberculosis (published in June 2019) mentions that one of the prospective aims for the government is to introduce a system for shipping and transport of samples. This indicates that there is currently no system in place. [3] The website of the Ministry of Defense was offline at the time of research. [4] No evidence of any legislation, regulation or guidance has been found in the websites of the Ministry of Health, Ministry of Industry and Commerce, Ministry of Agriculture and Food Security, or National Institute of Health. [5,6,7,8] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [9] The VERTIC website has regulation on customs clearance through "Regulamento do Desembaraço Aduaneiro" (ministerial diploma number 262 of 22 December 2004); however, the document does not include any provision for biological substances. [10,11]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Government Portal. "Alfândegas". [<http://www.portaldogoverno.gov.mz/por/Cidadao/Servicos/Alfandegas>]. Accessed 3 September 2020.

[3] Ministry of Health. June 2019. "National Program for the Control of Tuberculosis: Report of Developed Activities in 2018 (Programa Nacional de Controlo da Tuberculose: Relatório das Actividades Desenvolvidas durante o ano 2018)".

[<https://www.misau.gov.mz/index.php/relatorios-anuais-pnct>]. Accessed 3 September 2020.

[4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[5] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

[6] Ministry of Industry and Commerce. "Comércio Externo". [<http://www.mic.gov.mz/por/Comercio-Externo>]. Accessed 3 September 2020.

- [7] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [8] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [9] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [10] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.
- [11] Ministry of Planning and Finance. Ministerial diploma number 262 of 22 December 2004 on Regulations of Customs Clearance. [[http://www.vertic.org/media/National%20Legislation/Mozambique/MZ\\_Regulamento\\_do\\_Desembaraco\\_Aduaneiro.pdf](http://www.vertic.org/media/National%20Legislation/Mozambique/MZ_Regulamento_do_Desembaraco_Aduaneiro.pdf)]. Accessed 3 September 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 Mozambique has in place national biosafety legislation or regulation that deals with harmful biological substances. Mozambique has legislation on some aspect of biosafety, such genetically-modified organisms (GMOs), but there are no legislation or regulation on biosafety in regards to harmful biological substances. [1] According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 19, "Mozambique has a biological risk management system, laws related to biosafety and biosecurity issues, such as biomedical waste, animal health, and genetically modified organisms. Mozambique also has a National Biosafety Authority, and national guidelines for biosafety. However, a whole-of-government, national biosafety and biosecurity system is not fully in place - national biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are not completely in place." [2] The website of the Ministry of Defense was offline at the time of research. [3] No evidence of any legislation, regulation or guidance has been found in the websites of the Ministry of Health, Ministry of Defense, Ministry of Industry and Commerce, Ministry of Agriculture and Food Security, or National Institute of Health. [4,5,6,7] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [8] According to the VERTIC website, Mozambique has regulations on biosafety for biowaste through Decree number 8 of 18 February 2003. [9] The legislation focuses solely on the procedures and precautions necessary for safety when dealing with biowaste; and does not deal with biosafety in all aspects. [10]

- [1] Council of Ministers. Decree number 71 of 28 November 2014. "Regulation on Biosafety Relating to the Management of Genetically Modified Organisms (Regulamento sobre Bio-Segurança Relativa à Gestão de Organismos Genéticamente Modificados)". [<https://www.lexlink.eu/FileGet.aspx?FileId=49143>]. Accessed 3 September 2020.
- [2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [3] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [5] Ministry of Industry and Commerce. "Comércio Externo". [<http://www.mic.gov.mz/por/Comercio-Externo>]. Accessed 3 September 2020.

- [6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [7] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.
- [8] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [9] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 2020.
- [10] Government of Mozambique. Decree number 8 of 18 February 2003. "Regulations about Biowaste Management (Regulamento sobre a gestão de lixos bio-médicos)". [[http://www.vertic.org/media/National%20Legislation/Mozambique/MZ\\_Regulamento\\_Gestao\\_de\\_Lixos\\_Bio-Medicos.pdf](http://www.vertic.org/media/National%20Legislation/Mozambique/MZ_Regulamento_Gestao_de_Lixos_Bio-Medicos.pdf)]. Accessed 3 September 2020.

### 1.4.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has an established agency responsible for the enforcement of biosafety legislation and regulations, as no laws and regulations has been found. It has the Inter-Institutional Biosafety Group (GIIBS), as confirmed by the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20 and existing legislation; however, the GIIBS is focused on genetically modified organisms and not high-consequence biological agents and toxins. [1,2] According to JEE 2016 in page 20, "A whole-of-government, national biosafety and biosecurity system is not fully in place to ensure that especially dangerous biological pathogens and toxins are identified, held, secured, and monitored in a minimal number of facilities according to best practices." [1] The website of the Ministry of Defense was offline at the time of research. [3] No evidence of an established agency responsible for the enforcement of biosafety legislation and regulations has been found in the websites for the Ministry of Health and Ministry of Agriculture and Food Security. [4,5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No relevant information was found in the VERTIC website. [7]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.
- [2] Council of Ministers. Decree number 6 of 25 April 2007. "Regulation on Biosecurity Related to the Management of Genetically Modified Organisms (Regulamento Sobre a Bio-segurança Relativa à Gestão de Organismos Geneticamente Modificados)". [[http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503\\_REFERENCE\\_FILE\\_ID:167705:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:503:800090828415::NO:503:P503_REFERENCE_FILE_ID:167705:NO)]. Accessed 3 September 2020.
- [3] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.
- [4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.
- [5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.
- [6] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.
- [7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 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 Mozambique require biosafety training, using standardised, required approach, such as through a common curriculum or a train-the-trainer programme, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 21 recommends the following actions, indicating that there are no required biosecurity training for professions: "National curriculum on biosafety and biosecurity training in academic and professional institutions, as well as the development and implementation of train-the-trainer programmes in biosafety and biosecurity, should be established. A national needs assessment for biosecurity and biosafety training should be conducted to facilitate adequate planning to strengthen capacity. The training of all technicians in biosecurity issues, in all facilities housing or working with dangerous pathogens is needed. Availability of consistent funds to implement biosafety and biosecurity training should be prioritized. Maintain adequate documentation for all staff regarding previous training in biosafety and biosecurity, to ensure that necessary refresher training is provided in a timely manner for staff working with dangerous pathogens." [1] However, there is evidence that training courses in biosecurity exist, but there are no indication that they are required. In the same text, the JEE 2016 in page 20 notes that "There is some institutional capability to provide biosafety and biosecurity training. Biosafety and biosecurity topics are incorporated into existing undergraduate and graduate training programmes such as FELTP." [1] Mozambique has established the field epidemiology and laboratory training programme (FELTP). "The program was established in 2010, with the objective of strengthening capacity in applied epidemiology and laboratory management, so that events of public health importance can be detected and investigated in a timely and effective manner." [2] However, there is no evidence that this training program is required for all personnel. There is a report that in May 2020 the National Institute of Health trained staff of the National Institute of Statistics on prevention and personal protection measures against the new coronavirus COVID-19. The training was conducted to prepare the staff during the collection of data for the 2020 edition of the Survey on Household Finances (Inquérito aos Orçamentos Familiares—IOF). There is no evidence that this training will be a regular event or that it will be applied to other diseases. [3] The website of the Ministry of Defense was offline at the time of research. [4] No evidence of required training courses have been found in the websites of the Ministry of Health, Ministry of Agriculture and Food Security, or the National Institute of Health. [5,6,7] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [8] No relevant information was found in the VERTIC website. [9]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 3 September 2020.

[2] Baltazar, Cynthia Semá et al. "Mozambique field epidemiology and laboratory training program: a pathway for strengthening human resources in applied epidemiology." *Pan African Medical Journal*, 27:233, 2017. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5622808/>]. Accessed 3 September 2020.

[3] O País. 21 May 2020. "INS trains INE researchers on Biosafety and Bioprotection (INS capacita inquiridores do INE em Biossegurança e Bioprotecção)". [<http://opais.sapo.mz/ins-capacita-inquiridores-do-ine-em-biosseguranca-e-bioprotecacao>]. Accessed 3 September 2020.

[4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 3 September 2020.

[5] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 3 September 2020.

[6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 3 September 2020.



[7] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 3 September 2020.

[8] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 3 September 2020.

[9] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 3 September 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 the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual use research. No evidence of an assessment of ongoing research has been found in the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), Ministry of Health, Ministry of Agriculture and Food Security, or National Institute of Health. [1,2,3,4] The website of the Ministry of Defense was offline at the time of research. [5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No relevant information was found in the VERTIC website. [7]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 4 September 2020.

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

[7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 4 September 2020.

#### 1.5.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence of a legislation or regulation requiring oversight of dual-use research in Mozambique. No evidence of a national policy requiring oversight of dual-use research has been found in the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), Ministry of Health, Ministry of Agriculture and Food Security, or National Institute of Health. [1,2,3,4] The website of the Ministry of Defense was offline at the time of research. [5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No relevant information was found in the VERTIC website. [7]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.
- [4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.
- [5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 4 September 2020.
- [6] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 4 September 2020.
- [7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 4 September 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 Mozambique has an agency specifically responsible for overseeing research of especially dangerous pathogens. However, Mozambique has an agency responsible for health research. The agency is not specialized only on dangerous pathogens, pathogens with pandemic potential, or other dual use research. The National Institute of Health's (INS) Department of Research is responsible for coordinating, managing and monitoring research conducted by the INS, and for coordinating the establishment of the national programme for health research. [1] No evidence of an agency responsible for oversight of research especially dangerous pathogens has been found in the JEE 2016, Ministry of Health, or Ministry of Agriculture and Food Security. [2,3,4] The website of the Ministry of Defense was offline at the time of research. [5] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [6] No relevant information was found in the VERTIC website. [7]

- [1] National Institute of Health. "Department of Research (Departamento de Pesquisa)". [[https://www.ins.gov.mz/dep\\_pesquisa](https://www.ins.gov.mz/dep_pesquisa)]. Accessed 4 September 2020.
- [2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [4] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.
- [5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 4 September 2020.
- [6] United Nations. "Confidence Building Measures: Mozambique". [<https://bwc-ecbm.unog.ch/state/mozambique>]. Accessed 4 September 2020.
- [7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 4 September 2020.

2020.

## 1.5.2 Screening guidance for providers of genetic material

### 1.5.2a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence of national legislation, regulation, policy or other guidance requiring the screening of synthesized DNA before it is sold in Mozambique. Mozambique has a national law on the biosecurity of genetically-modified organisms (GMOs), but there are no mentions of synthetic DNA, epidemiology, pathogens, or recombinant DNA. The law is focused on crops and products. [1] No evidence of such a law exists in the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), Ministry of Health, Ministry of Defense, Ministry of Agriculture and Food Security, or National Institute of Health. [2,3,4,5] The website of the Ministry of Defense was offline at the time of research. [6] Mozambique has not submitted Confidence Building Measures under the Biological Weapons Convention. [7] No relevant information was found in the VERTIC website. [8]

[1] Council of Ministers. Decree number 71 of 28 November 2014. "Regulation on Biosafety Relating to the Management of Genetically Modified Organisms (Regulamento sobre Bio-Segurança Relativa à Gestão de Organismos Genéticamente Modificados)". [<https://www.lexlink.eu/FileGet.aspx?FileId=49143>]. Accessed 3 September 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[4] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.

[5] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

[6] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 4 September 2020.

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

[8] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/>]. Accessed 4 September 2020.

## 1.6 IMMUNIZATION

### 1.6.1 Vaccination rates

#### 1.6.1a

**Immunization rate (measles/MCV2)**

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

**Current Year Score: 1**

2019

World Health Organization

### 1.6.1b

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

Yes = 1, No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

### 2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

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

##### 2.1.1a

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

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

Current Year Score: 0

The National Institute of Health has the capacity to conduct diagnostic tests for 3 out of the 10 WHO-defined core tests: serology for HIV, microscopy for mycobacterium tuberculosis (tuberculosis/TB), and rapid diagnostic testing for plasmodium spp. (malaria). [1][2][3] Those tests are carried out from the laboratories of the National Institute of Health. There is no evidence that the country has publicly defined the four country-specific tests, based on research of the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016, "World Health Organization Model List of Essential in Vitro Diagnostics" report of 2018, "Second WHO Model List of Essential in Vitro Diagnostics" report of 2019, OIE's "Veterinary Legislation Support Programme: Republic of Mozambique: Veterinary Legislation Identification Mission Report" of 2015, and the Ministry of Health's "Strategic Plan for the Health Sector 2014-2019". [4,5,6,7,8] No further evidence was found at the website of the Ministry of Health. [9]

[1] National Institute of Health. "Serology Laboratory (Laboratório de Serologia)". [https://www.ins.gov.mz/laboratorio\_de\_serologia]. Accessed 4 September 2020.

[2] National Institute of Health. "Tuberculosis Laboratory (Laboratório de Tuberculose)". [https://www.ins.gov.mz/laboratorios\_de\_tuberculose]. Accessed 4 September 2020.

[3] National Institute of Health. "Molecular Parasitology Laboratory (Laboratório de Parasitologia Molecular)". [https://www.ins.gov.mz/index.php/laboratorio\_de\_parasitologia\_molecular]. Accessed 4 September 2020.

- [4] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [5] World Health Organization. November 2018. "World Health Organization Model List of Essential In Vitro Diagnostics". [[https://www.who.int/medical\\_devices/diagnostics/WHO\\_EDL\\_2018.pdf?ua=1](https://www.who.int/medical_devices/diagnostics/WHO_EDL_2018.pdf?ua=1)]. Accessed 4 September 2020.
- [6] World Health Organization. 2019. "Second WHO Model List of Essential in Vitro Diagnostics". [[https://www.who.int/medical\\_devices/publications/Standalone\\_document\\_v8.pdf?ua=1](https://www.who.int/medical_devices/publications/Standalone_document_v8.pdf?ua=1)]. Accessed 4 September 2020.
- [7] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 4 September 2020.
- [8] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.
- [9] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

### 2.1.1b

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

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

**Current Year Score: 0**

There is insufficient evidence that Mozambique has a 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 COVID-19 Outbreak Preparation and Response Plan of 2020 does not have any considerations for novel pathogens (other than COVID-19), it does not mention any scaling capacity and it does not define goals for testing. [1] The Strategic Plan for the Health Sector PESS 2014-2019 does not consider testing for novel pathogens, scaling capacity and it does not define goals for testing. The Strategic Plan has one strategic objective on page 66 that states that it is an objective to develop the technical capacity to conduct surveillance of health determinants, including the testing for emerging infectious diseases. This indicates that there is some consideration of novel pathogens, but Mozambique does not have the capacity to conduct them yet. [2] No other evidence was found in the websites of the Ministry of Health or of the Ministry of Agriculture and Food Security. [3,4]

[1] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contingencia>]. Accessed 5 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 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**

Mozambique's national laboratories that serve as reference facilities are accredited. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016), the Ministry of Health has adopted the Strengthening Laboratory Management Toward Accreditation (SLMTA) and created the National Quality Improvement and Accreditation Programme. In page 27 of JEE 2016, "The [Ministry of Health] created a national quality improvement and accreditation program responsible for the implementation of the management of the SLMTA program. Starting with six laboratories in 2011, the programme has since enrolled 25 laboratories and blood banks". [1] The National Reference Laboratory of Tuberculosis achieved ISO 15189 accreditation in 2014. The Cellular Immunology Laboratory received ISO 15189 accreditation in July 2016. [2] Besides those two clinical laboratories, the National Food and Water also has ISO accreditation. [1] Official sources of the Government of Mozambique confirms that the National TB Reference Laboratory has the ISO 15189 accreditation; although the source was not accessible at the time of research in this iteration of the study. [3]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] U.S. Embassy in Mozambique. Facebook post. 17 July 2016. [<https://www.facebook.com/U.S.EmbassyMozambique/posts/10154307087911948/>]. Accessed 4 September 2020.

[3] Government of Mozambique. "Tuberculosis Laboratory has International Certification (Laboratório de Tuberculose tem Certificação Internacional)". [<http://www.portaldogoverno.gov.mz/por/Imprensa/Noticias/Laboratorio-de-Tuberculose-tem-Certificacao-Internacional>]. Accessed 4 September 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**

Mozambique's laboratories that serve as reference facilities are subject to external quality assurance review. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 25, "The reference laboratories participate in international external quality assurance programmes in various pathogens and some are certified and/or accredited. The national external quality assurance programme is fully functional and covers some pathogens." [1] The National Institute of Health (INS) confirms this information. "The National Programme External Quality Assurance's (PNAEQ) activities include: i) Proficiency Testing, ii) Blind Re-observation, and iii) Supervision visits and technical support to laboratories. For proficiency testing, the PNAEQ periodically sends coded sample panels to the various testing sites for blind testing. The results obtained by the testing sites are then sent to the INS for evaluation. For blind re-observation, each testing site selects and randomly sends samples to the INS for independent evaluation. Each site participating in this Programme receives a confidential individual report on its proficiency." [2] "ISO 15189 certification requires external quality assurance reviews." which applies for the National TB Reference Laboratory. [3] The National TB Reference Laboratory of the National Institute of Health (INS) has ISO 15189 certification. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] National Institute of Health (Mozambique). "Directorate of Public Health Laboratories (Direcção de Laboratórios de Saúde Pública)". [[https://www.ins.gov.mz/rede\\_laboratorios](https://www.ins.gov.mz/rede_laboratorios)]. Accessed 4 September 2020.

[3] World Health Organisation. "Content Sheet 10-1: Overview of External Quality Assessment (EQA)". [[http://www.who.int/ihr/training/laboratory\\_quality/10\\_b\\_eqa\\_contents.pdf](http://www.who.int/ihr/training/laboratory_quality/10_b_eqa_contents.pdf)]. Accessed 4 September 2020.

[4] Government of Mozambique. "TB Laboratory has International Certification (Laboratório de Tuberculose tem Certificação Internacional)". [<https://www.portaldogoverno.gov.mz/por/Imprensa/Noticias/Laboratorio-de-Tuberculose-tem-Certificacao-Internacional>]. Accessed 8 October 2020.

## 2.2 LABORATORY SUPPLY CHAINS

### 2.2.1 Specimen referral and transport system

#### 2.2.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

Mozambique has a specimen transport system from the site of collection to a laboratory for testing; however, there is insufficient evidence that the system is for the national level. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 25, "The system for transport of specimens is adequate and mainly used for confirmation of outbreaks." [1] In the same document, the JEE notes in page 26 that "Specimen referral and transport systems are notably stronger for large, vertically funded disease programs such as HIV, TB, and malaria." [1] Mozambique scored 3 in question D.1.2 on specimen referral and transportation system in the JEE 2016, which means that the "system is in place to transport specimens to national laboratories from 50- 80% of intermediate level/districts within the country for advanced diagnostics"; therefore, there is insufficient evidence that the system covers the entire country. [1] The Report of Developed Activities in 2018 of the National Program for the Control of Tuberculosis (published in June 2019) mentions that there are weaknesses in the public health system in regards to transportation of samples, especially between districts. There are no mentions of any regulations in the document. [2] The National Reference Laboratory of Tuberculosis (LNRT) has issued a manual on how to manage specimen, including its transportation; however, there is insufficient evidence that it is for the national level as that is not explicitly mentioned. [3] There is no additional information available on the website of the Ministry of Health and the Ministry of Agriculture and Food Security. [4,5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. June 2019. "National Program for the Control of Tuberculosis: Report of Developed Activities in 2018 (Programa Nacional de Controlo da Tuberculose: Relatório das Atividades Desenvolvidas durante o ano 2018)". [<https://www.misau.gov.mz/index.php/relatorios-anuais-pnct>]. Accessed 4 September 2020.

[3] National Institute of Health. June 2017. "Sample Collecting Guide: National Reference Laboratory of Tuberculosis (Manual de colheitas: Laboratório Nacional de Referência da Tuberculose)". [[http://gard-cplp.ihmt.unl.pt/Documentos/Paises/Mocambique/Manual\\_de\\_Colheita\\_tuberculose\\_2017\\_Mocambique.pdf](http://gard-cplp.ihmt.unl.pt/Documentos/Paises/Mocambique/Manual_de_Colheita_tuberculose_2017_Mocambique.pdf)]. Accessed 4 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 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 insufficient evidence that there is 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. Law 4 of 14 January 1998 and Law 12 of 8 September 2017 establish the process to license pharmaceutical laboratories, but there are no mentions of diagnostics laboratories in neither documents. There are no mentions of special procedure for laboratory licensing in the case of a public health emergency in neither documents. [1] There is no additional information available on the website of the Ministry of Health, the Ministry of Agriculture and Food Security, and the National Institute of Health. [2,3,4] The Strategic Plan for the Health Sector PESS 2014-2019 makes no mentions of special procedure for laboratory licensing in the case of a public health emergency. [5] There is no evidence that there is a newer version of the Strategic Plan for the Health Sector. The COVID-19 Outbreak Preparation and Response Plan of 2020 makes no mentions of special procedure for laboratory licensing in the case of a public health emergency. [6] No specific law or regulation was found on the licencing of diagnostics laboratories.

[1] Government of Mozambique. Law 4 of 14 January 1998. [<http://www.arm.co.mz/wp-content/uploads/2016/10/Lei-4-98-de-14-de-Janeiro-Lei-do-Medicamento.pdf>]. Accessed 8 October 2020.

[2] Government of Mozambique. Law 12 of 8 September 2017. [<https://www.misau.gov.mz/index.php/farmacia-legislacao?download=417:lei-12-2017-medicamentos-e-outros-produtos>]. Accessed 8 October 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[5] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 8 October 2020.

[6] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 8 October 2020.

## 2.3 REAL-TIME SURVEILLANCE AND REPORTING

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

#### 2.3.1a

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

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

**Current Year Score: 0**

There is no evidence that Mozambique is conducting ongoing event-based surveillance and analysis for infectious disease. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 30, "Indicator based surveillance is well established in Mozambique, however, event-based surveillance, including community based surveillance, for both human and animal health sectors are weak or absent." [1] Furthermore, the same document in page 31 asserts that "Event based surveillance is not in place. Log book to record unusual events or rumours of outbreaks does not exist at health facilities, and there is a lack of capacity for early analysis of surveillance data at district level for action." [1] There is no evidence in the websites of the Ministry of Health, Ministry of Agriculture and Food Security and the National Institute of Health. [2,3,4]



- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.
- [4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

### 2.3.1b

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is available evidence that Mozambique reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years.

Mozambique reported on 25 January 2019 to the WHO the outbreak of two genetically-linked circulating vaccine-derived poliovirus type 2 (cVDPV2) isolates. "The first one, was from an acute flaccid paralysis (AFP) case with onset of paralysis on 21 October 2018, a six-year old girl with no history of vaccination, and the second isolate was from a community contact of the first case, a child aged one-year old." [1]

Mozambique has also reported the outbreak of cholera on 19 February 2018. "On 27 October 2017, the Ministry of Health in Mozambique notified WHO of an outbreak of cholera. From 14 August 2017 through 11 February 2018, 1799 cases and one death (case fatality rate = 0.06%) of cholera were reported from the two provinces; Nampula (1580 cases) and Cabo Delgado (219 cases). Underreporting of the number of cases and deaths is likely. This outbreak has been confirmed by Rapid Diagnostic Tests and culture." [2] Prior to those episodes, the last available report via the Disease Outbreaks News was in March 2004, in regards to an outbreak of cholera. [3]

- [1] World Health Organization. Disease Outbreak News. 25 January 2019. "Circulating vaccine-derived poliovirus type 2 – Mozambique". [<https://www.who.int/csr/don/25-january-2019-polio-mozambique/en/>]. Accessed 4 September 2020.
- [2] World Health Organization. Disease Outbreak News. 19 February 2018. "Cholera – Mozambique". [<https://www.who.int/csr/don/19-february-2018-cholera-mozambique/en/>]. Accessed 4 September 2020.
- [3] World Health Organization. Disease Outbreak News. 23 March 2004. "Cholera – Mozambique". [[https://www.who.int/csr/don/2004\\_03\\_23/en/](https://www.who.int/csr/don/2004_03_23/en/)]. Accessed 4 September 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: 1**

There is evidence that the government operates an electronic reporting surveillance system at both the national and sub-national level. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 32, while paper-based surveillance system is used at the local level, at the provincial and national level, the system is electronic. "Paper-based surveillance is predominant in the country. Paper-based reports with aggregate

data from peripheral health units are entered into a computer database at district level, and then electronic aggregate reports are transmitted to the provincial level, aggregated there and then transmitted onward to Public Health Directorate at the National level at MISAU." [1] Furthermore, in page 29, "A mobile phone-based syndromic surveillance system is being piloted since December 2015 in Maputo province, and there is a plan to transition the paper-based reporting to electronic reporting in the future through the extension of this mobile BES (mBES)." [1] Meanwhile, the JEE 2016 in page 30 also notes that a priority action for Mozambique is to "Establish an electronic health reporting system involving all relevant sectors and gradually transition from paper-based to full-time electronic reporting." [1] The Ministry of Health has an electronic system called the Health Information System for Monitoring and Evaluation (SISMA), as it is presented in the website. [2] According to Jembi-MOASIS, an NGO specialized in information systems for the health sector in Mozambique, the has an electronic system called the Health Information System for Monitoring and Evaluation (SISMA), is an electronic system to collect information from across the country to feed into the research and analysis of public health policy. [3]

[1] World Health Organization. Disease Outbreak News. 25 January 2019. "Circulating vaccine-derived poliovirus type 2 - Mozambique". [<https://www.who.int/csr/don/25-january-2019-polio-mozambique/en/>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] Jembi-MOASIS. January 2014. "The New Monitoring and Evaluation System reaches the Implementation phase in Mozambique (O Novo Sistema de Monitoria e Avaliação chega à fase de Implementação em Moçambique)".

[<https://www.moasis.org.mz/o-novo-sistema-de-monitoria-e-avaliacao-chega-fase-de-implementacao-em-mocambique/>]. Accessed 4 September 2020.

### 2.3.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that the reporting surveillance system is in real-time, as at the local level is still paper-based, turning into electronic form only at the provincial level and the national level. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 29, " Data are mainly reported through a paper-based system at the health facility level and are entered into the aggregate reporting system Modulo Basico at the district and province level, and later sent to the national level for data analysis. Regular information is provided on a weekly basis from the central level down to the peripheral level." [1]. The Ministry of Health has an electronic system called the Health Information System for Monitoring and Evaluation (SISMA), which collects the data electronically; however, updated information on its functionality is not published in the website, as it is behind a firewall. [2] No information on the matter was found in the website of the National Institute of Health. [3]

[1] World Health Organization. Disease Outbreak News. 25 January 2019. "Circulating vaccine-derived poliovirus type 2 - Mozambique". [<https://www.who.int/csr/don/25-january-2019-polio-mozambique/en/>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

## 2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

### 2.4.1 Coverage and use of electronic health records

#### 2.4.1a

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

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

**Current Year Score: 0**

There is no evidence that electronic health records are commonly used in Mozambique. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 32, "Paper-based surveillance is predominant in the country. Paper-based reports with aggregate data from peripheral health units are entered into a computer database at district level, and then electronic aggregate reports are transmitted to the provincial level, aggregated there and then transmitted onward to Public Health Directorate at the National level at MISAU." [1] While surveillance reports and health records are not the same, this is indicative that health records in Mozambique are mostly paper-based as well. In addition, according to a 2016 study by the University of São Paulo (Brazil) on the Information System of Hospital Death Registrations (SIS-ROH) in Mozambique, only about 4% of all deaths per year was electronically registered, even though the system exists since 2008. [2] No evidence of an electronic health records system being commonly used was found in the website of Ministry of Health. [3] No information on the matter was found in the website of the National Institute of Health. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Mola, Edina da Rosa Durão. Universidade de São Paulo. 2016. "Quality assessment of the Hospital Death Registry Information System (SIS-ROH), Central Hospital of Beira, Mozambique (Avaliação da qualidade do Sistema de Informação de Registro de óbitos Hospitalares (SIS-ROH), Hospital Central da Beira, Moçambique)". [<https://www.teses.usp.br/teses/disponiveis/6/6132/tde-15032016-134408/publico/EdinaDaRosaDuraomola.pdf>]. Accessed 4 September 2020.

[3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

#### 2.4.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique's national health system has access to electronic health records of individuals. The national health system is comprised by the public sector, the for-profit private sector, the non-profit private sector, and community services. The National Health Service (SNS) is the public sector's health service and provides health services at the national level. "[1] There is no evidence that electronic health records are commonly used or that the public health system has access to electronic health records in Mozambique. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 32, "Paper-based surveillance is predominant in the country. Paper-based reports with aggregate data from peripheral health units are entered into a computer database at district level, and then electronic aggregate reports are transmitted to the provincial level, aggregated there and then

transmitted onward to Public Health Directorate at the National level at MISAU." [2] While surveillance reports and health records are not the same, this is indicative that health records in Mozambique are mostly paper-based as well; therefore, there are none or small amount of electronic health records to which the public health system can get access. In addition, according to a 2016 study by the University of São Paulo (Brazil) on the Information System of Hospital Death Registrations (SIS-ROH) in Mozambique, only about 4% of all deaths per year was electronically registered, even though the system exists since 2008. [3] No evidence of an electronic health records system being commonly used or that the public sector has access to electronic health records were found in the website of Ministry of Health or the National Institute of Health. [4][5]

[1] African Health Observatory. "Mozambique". [<https://www.afro.who.int/pt/countries/mozambique>]. Accessed 4 September 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[3] Mola, Edina da Rosa Durão. Universidade de São Paulo. 2016. "Quality assessment of the Hospital Death Registry Information System (SIS-ROH), Central Hospital of Beira, Mozambique (Avaliação da qualidade do Sistema de Informação de Registro de óbitos Hospitalares (SIS-ROH), Hospital Central da Beira, Moçambique)". [<https://www.teses.usp.br/teses/disponiveis/6/6132/tde-15032016-134408/publico/EdinaDaRosaDuraomola.pdf>]. Accessed 4 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[5] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

### 2.4.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that the electronic health records system has standards to ensure data comparability. The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) makes no mention that the existing health records system is standardised. [1] No evidence of an electronic health records system being used nor if it follows data standards was found in the website of Ministry of Health or the National Institute of Health. [2,3]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 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 relevant ministries responsible for animal, human and wildlife surveillance to share data in Mozambique. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 13, "A One Health approach for disease prevention, control, and response occurs mostly on an ad-hoc basis whenever there is a serious health threat posed by zoonotic disease. There is no One Health policy, plan, or Memorandum of Understanding (MoU) in place, but pilot initiatives (surveillance and research) are underway. There is also no joint task force or committee for systematic coordination of prevention, control, and response for priority zoonotic disease. This is exacerbated by inadequate communication and collaboration between the human and animal health services." [1] No evidence has been found of an inter-ministerial mechanism in the websites for the Ministry of Health, Ministry of Agriculture and Food Security and Ministry of Land, Environment and Rural Development. [2][3][4] Mozambique does not have an evaluation report listed in the World Organisation for Animal Health. [5] Mozambique does not have a surveillance system for wildlife health. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 11, "the surveillance sentinel sites do not cover animal testing, however, therefore increased communication is needed between human and animal sectors." [1] The JEE 2016, however, notes in page 14 that "The Ministry of Agriculture has a laboratory for diagnosis of zoonotic diseases in animals, although with limited capacity. Current testing focuses on five diseases: rabies, brucellosis, Rift Valley Fever, tuberculosis, and influenza." [1] There is no specific mention of wildlife testing and surveillance in the Ministry of Agriculture website. [3]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.

[4] Ministry of Land, Environment and Rural Development. [<http://www.mitader.gov.mz/>]. Accessed 4 September 2020.

[5] World Organisation for Animal Health. "OIE PVS Evaluation Reports". [<http://www.oie.int/solidarity/pvs-evaluations/pvs-evaluation-reports/>]. Accessed 4 September 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 insufficient evidence that Mozambique makes de-identified health surveillance data on disease outbreaks publicly available via government websites.

For the COVID-19 pandemic, the National Institute of Health (INS) provides daily reports on the number of confirmed cases, deaths, testing, quarantines, and recuperated person. [1] The INS also provides detailed weekly reports in its website. [2] However, it must be noted that the data and reports apply only to COVID-19. There is insufficient evidence that there are similar reports for other diseases.

Only one version of a Weekly Epidemiological Bulletin that covers diseases other than COVID-19 was found. It refers to the week from 27 May 2019 through 2 June 2019. The document claims it is refers to week 22 and it is publication number 9, indicating that there are other versions of the document being developed; however, other versions of the Weekly Epidemiological Bulletin or a website that stores over editions of the document were not found. [3] No recent publications of the Epidemiological Bulletin were found. The National Institute of Statistics (INE) supposedly stores government data

publications and reports. In a search through their website, there are indications that those bulletins exist as there are links; however, when they are clicked, they are empty—no document can be found. [4]

[1] National Institute of Health. "COVID-19". [<https://covid19.ins.gov.mz/>]. Accessed 4 September 2020.

[2] National Institute of Health. "Epidemiological analysis (Análise epidemiológica)". [<https://covid19.ins.gov.mz/documentos-em-pdf/sumario-epidemiologico/>]. Accessed 4 September 2020.

[3] Ministry of Health. "Mozambique: Response to Cyclone Idai — Weekly Epidemiological Bulletin: 27 May to 2 June 2019 (Moçambique: Resposta ao Ciclone Idai — Boletim Epidemiológico Semanal: 27 de Maio a 2 de Junho, 2019)". [[https://www.who.int/docs/default-source/documents/bulletin-idai-pt.pdf?sfvrsn=d2ef59c1\\_2](https://www.who.int/docs/default-source/documents/bulletin-idai-pt.pdf?sfvrsn=d2ef59c1_2)]. Accessed 4 September 2020.

[4] National Institute of Statistics. "Publication calendar (Calendário de Publicações)". [<http://www.ine.gov.mz/calendario-de-publicacoes/janeiro>]. Accessed 4 September 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: 1**

The Ministry of Health through the National Institute of Health (INS) makes de-identified COVID-19 surveillance data available on a daily basis at a dedicated website as well as the Ministry of Health website. The website is updated daily and it presents the number of people being tracked, the number of people who entered the country, the number of people tested, the number of people who tested negative, the number of people who tested positive, the number of people who have recuperated from the disease, the number of confirmed deaths, and the number of people in quarantine. The information is available at a dedicated website as well as on the Ministry of Health website. The last update, at the time of research, was from 5 September 2020 at 16:00 local time. [1,2]

[1] National Institute of Health. "COVID-19". [<https://covid19.ins.gov.mz/>]. Accessed 4 September 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

## 2.4.4 Ethical considerations during surveillance

### 2.4.4a

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

Yes = 1 , No = 0

**Current Year Score: 1**

Mozambique has ratified in July 2018 the African Union Convention on Cybersecurity, which includes articles that specifically deal with the health information of individuals. [1] Article 10 of the Convention specifically mentions, "Processing of personal data involving genetic information and health research". The document outlines some general practices and guidelines for personal data to be accessed, in order to safeguard their confidentiality. For examples, requests for data access must provide the purpose and the use of data, the identity of who is requesting the data, details on how the data will be processed, among other mechanisms to ensure transparency on how the data will be used. Article 10 also covers data involving offenses and convictions, biometric data, to name a few. [2] The Constitution of Mozambique in its Article 17 guarantees privacy, including

through electronic media. [3,4] No evidence was found that Article 17 of the Constitution was directly translated into a legislation or regulation. Furthermore, there are indications that there are laws on confidentiality of medical practice towards its patients, according to the law that institutes the Medical Order of Mozambique, per Article 14. Article 14 deals with the obligations of medical professionals, which include the "safeguarding of professional secrets", which from the context of the text is interpreted as maintaining patient confidentiality. [5] The Ministry of Health website does not provide any evidence that there are any laws, regulations or guidelines that specifically and explicitly safeguard the confidentiality of identifiable health information for individuals. [6] No information on the matter was found in the website of the National Institute of Health. [7]

[1] Observador. 24 July 2018. "Mozambican government approves resolution on cybersecurity (Governo moçambicano aprova resolução sobre Cibersegurança)". [<https://observador.pt/2018/07/24/governo-mocambicano-aprova-resolucao-sobre-ciberseguranca/>]. Accessed 4 September 2020.

[2] African Union. "African Union Convention on Cyber Security and Personal Data Protection". [<https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection>]. Accessed 4 September 2020.

[3] Government of Mozambique. Constitution of 2004. [[https://www.stj.pt/wp-content/uploads/2018/01/mocambique\\_constituicao.pdf](https://www.stj.pt/wp-content/uploads/2018/01/mocambique_constituicao.pdf)]. Accessed 4 September 2020.

[4] Daniel, Guilherme. July 2017. "Judicial Opinion: Protection of Personal Data (Opinião Jurídica: Protecção de dados pessoais)". Exame Moçambique. [[https://www.vda.pt/xms/files/v1/Noticias/2017/Artigo\\_Guilherme\\_Danie\\_I\\_-\\_Opinio\\_juridica\\_1o\\_artigo\\_-\\_Exame\\_Mocambique.pdf](https://www.vda.pt/xms/files/v1/Noticias/2017/Artigo_Guilherme_Danie_I_-_Opinio_juridica_1o_artigo_-_Exame_Mocambique.pdf)]. Accessed 4 September 2020.

[5] Assembly of the Republic. Law no. 3 of 2006 on Statute of the Medical Order of Mozambique. [[http://www.salcaldeira.com/index.php/pt/publicacoes/artigos/doc\\_download/246-lei-n-3-2006-estatuto-da-ordem-dos-medicos-de-mocambique](http://www.salcaldeira.com/index.php/pt/publicacoes/artigos/doc_download/246-lei-n-3-2006-estatuto-da-ordem-dos-medicos-de-mocambique)]. Accessed 4 September 2020.

[6] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[7] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 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: 1**

Mozambique has ratified in July 2018 the African Union Convention on Cybersecurity, which includes articles that specifically deal with the health information of individuals. [1] Article 10 of the Convention specifically mentions, "Processing of personal data involving genetic information and health research". The document outlines some general practices and guidelines for personal data to be accessed, in order to safeguard their confidentiality. For examples, requests for data access must provide the purpose and the use of data, the identity of who is requesting the data, details on how the data will be processed, among other mechanisms to ensure transparency on how the data will be used. Article 10 also covers data involving offenses and convictions, biometric data, to name a few. [2]

[1] Observador. 24 July 2018. "Mozambican government approves resolution on cybersecurity (Governo moçambicano aprova resolução sobre Cibersegurança)". [<https://observador.pt/2018/07/24/governo-mocambicano-aprova-resolucao-sobre-ciberseguranca/>]. Accessed 4 September 2020.

[2] African Union. "African Union Convention on Cyber Security and Personal Data Protection". [<https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection>]. Accessed 4 September 2020.

2020.

## 2.4.5 International data sharing

### 2.4.5a

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

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

**Current Year Score: 0**

There is insufficient evidence that the government of Mozambique has made a commitment via public statements, legislation, and/or a cooperative agreement to share surveillance data for multiple diseases during a public health emergency with other countries in the region.

Mozambique has committed to share health systems research and surveillance data during public health emergencies with the Southern African Development Community (SADC), which is comprised by 16 southern Africa states. Article 6 on Health Systems Research and Surveillance of the Protocol on Health in the Southern African Development Community of 1999 states: "Member States shall - a) share information on health systems research and surveillance and co-operate and assist each other in its dissemination; b) identify and conduct health systems research using, among others, the Essential Regional Health Research; and c) co-operate and assist each other in regional surveillance with respect to communicable and non-communicable diseases, and to develop a common set of indicators for these diseases". [1] However, it does not include explicit commitment to share surveillance data at times of emergency.

Furthermore, during the COVID-19 pandemic, on 29 May 2020, Mozambique was one of the 30 countries that have committed to share data, tools, knowledge and any other information with the objective of combatting the pandemic. [2] The coalition would launch the COVID-1 Technology Access Pool, "an initiative to make vaccines, tests, treatments and other health technologies to fight COVID-19 accessible to all. Voluntary and based on social solidarity, C-TAP aims to provide a one-stop shop for equitably sharing scientific knowledge, data and intellectual property." [3]

[1] Southern African Development Community (SADC). "Protocol on Health in the Southern African Development Community". 1999. [[https://www.sadc.int/files/7413/5292/8365/Protocol\\_on\\_Health1999.pdf](https://www.sadc.int/files/7413/5292/8365/Protocol_on_Health1999.pdf)]. Accessed 4 September 2020.

[2] CNN Brasil. 29 May 2020. "WHO launches coalition with 30 countries to share tools against Covid-19 (OMS lança coalizão com 30 países para compartilhar ferramentas contra a Covid-19)". [<https://www.cnnbrasil.com.br/saude/2020/05/29/oms-lanca-alianca-com-30-paises-para-compartilhar-ferramentas-contra-a-covid-19>]. Accessed 4 September 2020.

[3] World Health Organization. 30 July 2020. "Timeline of WHO's response to COVID-19". [<https://www.who.int/news-room/detail/29-06-2020-covidtimeline>]. Accessed 4 September 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 of a national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency.

The COVID-19 Outbreak Preparation and Response Plan includes a thorough plan for contact tracing, which includes budgets for four distinct scenarios (1. No reported cases; 2. Sporadic cases; 3. Localized cases; 4. Community transmission); however, there is no mention of sub-national level support for contact tracing nor is there specific mention of additional financial support from the federal government to sub-national governments to conduct contact tracing. Sub-national support in the COVID-19 plan is limited to activities, such as training medical teams, installing isolation centers and emergency operation centers in each province as well as strengthen their sample collecting capability — contact tracing is not an activity that received specific sub-national attention in the COVID-19 plan. Even so, there is no indication in the document that these procedures will be replicated for other public health emergencies. [1]

The Strategic Plan for the Health Sector PESS 2014-2019 also mentions contact tracing for a variety of diseases that are of concern for the government, such as HIV/AIDS and tuberculosis; however, there are no mentions of sub-national support. [2] There is no additional information available on the website of the Ministry of Health and the National Institute of Health. [3,4]

[1] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

### 2.5.1b

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

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

**Current Year Score: 0**

There is no evidence that Mozambique provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended. There is no additional information available on the website of the Ministry of Health and the National Institute of Health. [1,2]

[1] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[2] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

### 2.5.1c

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports on government websites. The Ministry of Health through the National Institute of Health (INS) makes some top-level de-identified COVID-19 surveillance data available on a daily basis at a dedicated website as well as the Ministry of Health website. The website is updated daily and it presents the number of people being tracked (contact tracing), the number of people who entered the country, the number of people tested, the number of people who tested negative, the number of people who tested positive, the number of people who have recuperated from the disease, the number of confirmed deaths, and the number of people in quarantine. The website however does not share the percentage of new cases from identified contacts, it just provides the total number of people who have been tracked. The information is available at a dedicated website as well as on the Ministry of Health website. The last update, at the time of research, was from 5 September 2020 at 16:00 local time. [1,2]

[1] National Institute of Health. "COVID-19". [<https://covid19.ins.gov.mz/>]. Accessed 4 September 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 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: 1**

There is sufficient evidence that there is a plan between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts but only in response to active public health emergencies.

The COVID-19 Outbreak Preparation and Response Plan of 2020 has a full chapter dedicated to outlining the cooperation between public health authorities and authorities in points of entry into the country. Chapter 4 provides a list of activities to be completed by public health authorities and authorities in point of entry to address the COVID-19 pandemic. The document also identifies the main points of entry into the country, and also provides instructions on how to conduct contact tracing with international travelers. However, it must be noted that this plan is seemingly applicable only to the COVID-19 pandemic. However, there are no indications that this will have effect on other public health emergencies. [1] No other evidence was found in the websites of the Ministry of Health, the National Migration Service (the border control authority in Mozambique), or the National Institute of Health. [2,3,4]

[1] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 8 October 2020.

[3] National Migration Service. [<https://www.senami.gov.mz/>]. Accessed 8 October 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 8 October 2020.

## 2.6 EPIDEMIOLOGY WORKFORCE

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

#### 2.6.1a

Does the country meet one of the following criteria?

- Applied epidemiology training program (such as FETP) is available in country

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

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

**Current Year Score: 1**

Applied epidemiology training programmes are available in Mozambique. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 14, "FELTP has been implemented in Mozambique since 2010, with a total of 24 graduates." [1]. The JEE 2016 also states in page 30 that "Development of a comprehensive regular training package on disease surveillance for health professionals through in-service training, supportive supervisions, technical meetings, and the Field Epidemiology & Laboratory Training Programme (FELTP) is conducted." [1] Furthermore, in page 34, "The country established the FELTP in 2010, to offer an advanced field epidemiology course coordinated by the National Institute of Health in partnership with University Eduardo Mondlane Faculty of Medicine, with technical and financial support from the US Centers for Disease Prevention and Control (CDC)." [1] The US Center for Disease Control and Prevention (CDC) confirms that FETP courses are made available in Mozambique, as of an article from 2016. [2] Job postings in websites such as DEVEX further provides evidence that the CDC is providing FETP courses in Mozambique. [3] There is also evidence that graduates of the Mozambique FETP are active and working in the area. "At the end February, 2020, seven graduates of the Mozambique FETP conducted a rapid assessment exercise at the main points of entry in five priority provinces in Mozambique to conduct rapid health assessment of the points of entry such airports and sea ports to evaluate their preparedness in regard to COVID-19 screening. The rapid Assessment activities included data quality, stability and flexibility of the surveillance systems." [4] No evidence has been found that the government send citizens to another country to participate in applied epidemiology training programmes, such as FETP. No information on the matter was found at the Ministry of Health or in the National Institute of Health. [5,6]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Center for Disease Control and Prevention (US). 27 June 2016. "CDC-Mozambique FETPs Combat Yellow Fever in Angola". [[https://www.cdc.gov/globalhealth/stories/fetp\\_combat\\_yellow\\_fever\\_angola.htm](https://www.cdc.gov/globalhealth/stories/fetp_combat_yellow_fever_angola.htm)]. Accessed 4 September 2020.

[3] DEVEX. "CDC-Mozambique: Resident Advisor (RA), Field Epidemiology Training Program (FETP)". [<https://www.devex.com/jobs/resident-advisor-field-epidemiology-training-program-fetp-540256>]. Accessed 4 September 2020.

[4] AFENET. 2020. "Mozambique Field Epidemiology Training Program (FETP) COVID-19 response activities". [<http://afenet.net/index.php/news/news/679-mozambique-field-epidemiology-training-program-fetp-covid-19-response->

activities]. Accessed 4 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[5] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

### 2.6.1b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that the field epidemiology training programmes include animal health professionals or that there are specific animal health field epidemiology training programmes offered. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 13, one of the key recommendations the WHO has for Mozambique is to "Include animal or wildlife health professionals in the Field Epidemiology and Laboratory Training Programme (FELTP) that currently only trains human health personnel." [1] According to the TEPHINET list of countries with FELTPV, Mozambique only has FELTP and no FELTPV. [2] According to the AFENET, Mozambique only has FELTP and no FELTPV. [3] No information on the matter was found at the Ministry of Health, the National Institute of Health or the Ministry of Agriculture and Food Safety. [4,5,6]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] TEPHINET. May 2019. "TEPHINET Member Programs".

[<https://www.tephinet.org/sites/tephinet/files/content/attachment/2019-05-10/TEPHINET%20Member%20Programs%20at%20a%20Glance.pdf>]. Accessed 4 September 2020.

[3] AFENET. "Mozambique FELTP". [<http://afenet.net/index.php/countries/mozambique>]. Accessed 4 September 2020.

[4] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[5] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

[6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 2020.

## 2.6.2 Epidemiology workforce capacity

### 2.6.2a

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

Yes = 1 , No = 0

**Current Year Score: 0**

2020

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

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

### 3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

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

##### 3.1.1a

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has a national public health emergency response plan. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 39, Mozambique is working on a plan but it is not yet finalised, as a priority recommended action by the WHO is to "Finalise the multi-hazard public health emergency preparedness and response plan. The plan should address both human and animal health sectors, consistent with a One Health approach, and should include monitoring and evaluation components." [1] The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [2] This indicates that there is no national public health emergency response plan. No information on the matter was found at the Ministry of Health, the National Institute of Health or the Ministry of Agriculture and Food Safety. [3,4,5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.

[3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 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 Mozambique has a national public health emergency response plan. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 39, Mozambique is working on a plan but it is not yet finalised, as a priority recommended action by the WHO is to "Finalise the multi-hazard public health emergency preparedness and response plan. The plan should address both human and animal health sectors, consistent with a One Health approach, and should include monitoring and evaluation components." [1] The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [2] This indicates that there is no national public health

emergency response plan. No information on the matter was found at the Ministry of Health, the National Institute of Health or the Ministry of Agriculture and Food Safety. [3][4][5]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.
- [5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 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 Mozambique has a national public health emergency response plan. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 39, Mozambique is working on a plan but it is not yet finalised, as a priority recommended action by the WHO is to "Finalise the multi-hazard public health emergency preparedness and response plan. The plan should address both human and animal health sectors, consistent with a One Health approach, and should include monitoring and evaluation components." [1] The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [2] This indicates that there is no national public health emergency response plan. No information on the matter was found at the Ministry of Health, the National Institute of Health or the Ministry of Agriculture and Food Safety. [3][4][5]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 2020.
- [5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 4 September 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 Mozambique has any specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 52, an area that needs strengthening is: "Mechanisms are needed to coordinate communication with the private sector, civil society, and other stakeholders from other sectors, before, during, and after emergencies and outbreaks." [1] No evidence has been found of any such mechanism in the websites of the Ministry of Health or the National Institute of Health. [2,3]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 4 September 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 insufficient evidence that Mozambique has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic, with specific criteria outlined for when NPIs are implemented.

The Strategic Plan for the Health Sector PESS 2014-2019 does not mention any NPI in the document. [1] The COVID-19 Outbreak Preparation and Response Plan of 2020 mentions quarantine measures once in the entire document and does not mention social isolation. It mentions isolation when it comes to suspected or confirmed cases of COVID-19; but there are no mentions of social isolation as a NPI to prevent the spread of the pandemic. [2]

No other evidence was found in the website of the Ministry of Health. [3] The National Institute of Health's website mentions quarantine and social isolation once in an article from 20 August 2020 informing that there were 20 confirmed deaths due to COVID-19. The article mentions that quarantine and social isolation are fundamental measures to stop the spread of the virus, but there are not details or specific criteria in the article. [4]

[1] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.

[2] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta

ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. "Mozambique sums 20 deaths from COVID-19 (Moçambique soma 20 mortes por COVID-19)". [<https://covid19.ins.gov.mz/mocambique-soma-20-mortes-por-covid-19/>]. Accessed 5 September 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 evidence that Mozambique activated a national emergency response plan for an infectious disease outbreak, but there is insufficient evidence that it has completed a national-level biological threat-focused exercise in the past year.

Mozambique has activated its COVID-19 Outbreak Preparation and Response Plan of 2020 in response to the COVID-19 pandemic. [1]

There is no evidence of a national health emergency response plan in Mozambique. On the national emergency response plan, according to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 39, Mozambique is working on a plan but it is not yet finalised, as a priority recommended action by the WHO is to "Finalise the multi-hazard public health emergency preparedness and response plan. The plan should address both human and animal health sectors, consistent with a One Health approach, and should include monitoring and evaluation components." [2]

The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [3] Mozambique has the Director Plan for Disaster Risk Reduction 2017-2030, which technically covers epidemics, as it defines disaster or calamity to include epidemics. However, there are no specific section or measures dedicated to public health emergencies. [4] The Director Plan for Disaster Risk Reduction 2017-2030 has been activated in 2019 when Cyclone Idai hit the country. [5]

There is evidence that Mozambique conducted such national-level biological threat-focused exercise in the past, but it was in 2014. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 47, "Exercises have been previously conducted in the context of pandemic influenza and Ebola preparedness, which partially addressed issues of medical countermeasures and health personnel deployment." [1] This is confirmed by the United States Africa Command, who has worked with the Government of Mozambique on a Pandemic and Natural Disaster Preparedness Programme in 2014. "The week-long exercise is structured to clarify the roles and responsibilities of civil and military authorities to respond to large-scale disasters. It also allows the Government of Mozambique to identify disaster management strengths, weaknesses and gaps." [6] However, neither of those two documents explicitly mention that



pandemics are integrated into the national risk reduction strategy.

[1] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [[https://covid19.ins.gov.mz/wp-content/uploads/2020/03/Plano-de-Mocambique-preparacao-e-resposta-ao-COVID-19\\_27032020.pdf](https://covid19.ins.gov.mz/wp-content/uploads/2020/03/Plano-de-Mocambique-preparacao-e-resposta-ao-COVID-19_27032020.pdf)]. Accessed 14 April 2021.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 2020.

[3] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[4] National Institute of Disaster Management (INGC). 17 October 2017. "Director Plan for Disaster Risk Reduction 2017-2030 (Plano Director Para a Redução do Risco de Desastres 2017-2030)". [<http://www.ingc.gov.mz/Documentacao>]. Accessed 5 September 2020.

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

[6] United States Africa Command. 1 August 2014. "Mozambique Unveils Pandemic and Disaster Preparedness Plans at USAFRICOM Sponsored Event". [<https://www.africom.mil/media-room/Article/23403/mozambique-unveils-pandemic-and-disaster-preparedness-plans-at-usafricom-sponsored-event>]. Accessed 5 September 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 insufficient evidence that Mozambique has undergone an exercise to identify a list of gaps and best practices through either an after-action review or a biological threat-focused IHR exercise with the WHO in the past year. The last after-action review by Mozambique was conducted in November 2019 but it was for the public health emergency caused by Cyclone Idai, and not an infectious disease or biological threat. It was a public health emergency owing to the impact of the cyclone on infrastructure that contaminated water and basic sanitation. Before that, the last after-action review by Mozambique was conducted in July 2017 on Cholera AAR. There are no planned exercises according to the after action review calendar. [1] No evidence of other after-action reviews have been found in the WHO country page, nor at the Ministry of Health, National Institute of Health or Ministry of Agriculture and Food Security. [2,3,4,5]

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

[2] World Health Organization. "Mozambique". [<https://extranet.who.int/sph/country/191>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 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 insufficient evidence that Mozambique has undergone national-level biological threat-focused exercise that has included private sector representatives in the past year. The last after-action review by Mozambique was conducted in November 2019 but it was for the public health emergency caused by Cyclone Idai, and not an infectious disease or biological threat. It was a public health emergency owing to the impact of the cyclone on infrastructure that contaminated water and basic sanitation. Before that, the last after-action review by Mozambique was conducted in July 2017 on Cholera AAR. There are no planned exercises according to the after action review calendar. [1] No evidence of other after-action reviews have been found in the WHO country page, nor at the Ministry of Health, National Institute of Health or Ministry of Agriculture and Food Security. [2,3,4,5] There is no further evidence on the WHO Simulation Exercise page. [6]

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

[2] World Health Organization. "Mozambique". [<https://extranet.who.int/sph/country/191>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[5] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 2020.

[6] World Health Organization (WHO). Simulation Exercise. [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 5 September 2020.

## 3.3 EMERGENCY RESPONSE OPERATION

### 3.3.1 Emergency response operation

#### 3.3.1a

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is sufficient evidence that Mozambique has an emergency operations centre that manages public health-related emergencies including pandemics. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 42, Mozambique has "established a national emergency operations centre (CENOE), a multisector coordination and decision-making structure that brings together representatives of institutions, organizations and groups of actors directly involved in response operations to natural disasters and other emergencies." [1] The CENOE is under the National Institute for Disaster Management (INGC) and it "mainly operates in natural disasters and emergencies where a national response is needed", according to JEE 2016 in page 42. [1,2] According to the 2006 document that establishes the CENOE and outlines its capabilities and responsibilities by the INGC, the CENOE operates in four areas, one of them being social services, which includes health services. It also notes that it would address issues of public health related to disasters or emergencies; however, there is no mention of being activated for a pandemic, epidemic, or disaster caused by a public health emergency. [3] On the other hand, during the COVID-19 pandemic, in practice, the government

activated CENOE to manage the public health emergency. The government activated 11 provincial CENOE's to help with the prevention, communication and mitigation of COVID-19. [4] In JEE 2016 page 42, "In order to better prepare and increase response capacity for public health emergencies, the [Ministry of Health] has drafted a plan for it to have an Operative Unit of Public Health Emergencies (UO-ESP)." [1] However, no evidence of the UO-ESP has been found in the websites of the Ministry of Health or the National Institute of Health. [5,6]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 4 September 2020.

[2] National Institute of Disaster Management. "National Emergency Operations Center (Centro Nacional Operativo de Emergência)". [http://www.ingc.gov.mz/Quem-Somos/Direccoes/Centro-Nacional-Operativo-de-Emergencia]. Accessed 4 September 2020.

[3] National Institute for Disaster Management. October 2006. "Establishment and Functions of the National Emergency Operations Center (Estabelecimento e Funcionamento do Centro Nacional Operativo de Emergência)". [https://www.preventionweb.net/files/16411\_cenoefinalaprovadopelocm.pdf]. Accessed 4 September 2020.

[4] Observador. 13 April 2020. "Covid-19: Mozambique reactivates emergency operational centers to respond to a possible spread (Covid-19: Moçambique reativa centros operativos de emergência para responder a eventual propagação)". [https://observador.pt/2020/04/13/covid-19-mocambique-reativa-centros-operativos-de-emergencia-para-responder-a-eventual-propagacao/]. Accessed 4 September 2020.

[5] Ministry of Health. [http://www.misau.gov.mz/]. Accessed 4 September 2020.

[6] National Institute of Health. [https://www.ins.gov.mz/]. Accessed 4 September 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**

Mozambique's national emergency operations centre (CENOE) conducts annual simulations; however, there is no evidence that it is required to conduct annual simulations nor that said simulations specifically include health-related emergencies.

According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 42, "CENOE conducts annual simulations, and have also had simulations with community participation which have helped to sensitize the communities on the need for prevention." [1] However, the same document also notes that the simulations are for general emergencies, not specifically for health-related emergencies including pandemics. An area that needs strengthening, according to JEE 2016 in page 40, is: "Capacity needs to be strengthened for preparedness and response to outbreaks and emergencies including simulation exercises for epidemiological incidents." [1]

There are no mentions of drills or exercises in the INGC website on CENOE nor in the 2006 document that establishes the CENOE and outlines its capabilities and responsibilities. [2,3] No references to simulation exercises have been found in the Ministry of Health or the National Institute of Health websites. [4,5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 4 September 2020.

[2] National Institute of Disaster Management. "National Emergency Operations Center (Centro Nacional Operativo de Emergência)". [http://www.ingc.gov.mz/Quem-Somos/Direccoes/Centro-Nacional-Operativo-de-Emergencia]. Accessed 4 September 2020.

[3] National Institute for Disaster Management. October 2006. "Establishment and Functions of the National Emergency Operations Center (Estabelecimento e Funcionamento do Centro Nacional Operativo de Emergência)".

[https://www.preventionweb.net/files/16411\_cenoefinalaprovadopelocm.pdf]. Accessed 4 September 2020.

[4] Ministry of Health. [http://www.misau.gov.mz/]. Accessed 4 September 2020.

[5] National Institute of Health. [https://www.ins.gov.mz/]. Accessed 4 September 2020.

### 3.3.1c

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no public evidence that the emergency operations centre can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency or scenario. While the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) affirms the importance of having the capability of responding to an emergency within 120 minutes, there is no evidence that Mozambique's national emergency operations centre (CENOE) is capable of doing so. The JEE 2016, however, does note in page 43 that CENOE should improve their procedures and develop supporting documents so that simulations and their outcomes can be better recorded. [1] There is no evidence in the Sendai Framework that Mozambique has that capability either. Documents available do not mention this capability. In a news article posted by the UN Office for Disaster Risk Reduction on 10 September 2019, it is noted that Mozambique aligned its Master Plan for Disaster Risk Reduction with the Sendai Framework for Disaster Risk Reduction, but there are no mentions of its capabilities including responding within 120 minutes of a public health emergency or scenario. [2] There is no evidence in WHO reports that Mozambique has that capability either. In the two most recent outbreaks, Circulating vaccine-derived poliovirus type 2 in January 2019 and Cholera in February 2018, there are no mention that Mozambique was able to provide emergency response within 120 minutes of the identification of the outbreak. [3][4] No further evidence was found at the website of the Ministry of Health. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 4 September 2020.

[2] United Nations Office for Disaster Risk Reduction. 10 September 2019. "Mozambique embraces Sendai Framework". [https://www.undrr.org/news/mozambique-embraces-sendai-framework]. Accessed 4 September 2020.

[3] World Health Organization. 25 January 2019. "Circulating vaccine-derived poliovirus type 2 - Mozambique". [https://www.who.int/csr/don/25-january-2019-polio-mozambique/en/]. Accessed 4 September 2020.

[4] World Health Organization. 19 February 2018. "Cholera - Mozambique". [https://www.who.int/csr/don/19-february-2018-cholera-mozambique/en/]. Accessed 4 September 2020.

[5] Ministry of Health. [http://www.misau.gov.mz/]. Accessed 4 September 2020.

## 3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

#### 3.4.1a

Does the country meet one of the following criteria?

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has carried out an exercise to respond to a potential deliberate biological attack, nor are there operating procedures, guidelines, MOUs or other agreements between public health and security authorities to respond to a potential deliberate biological event. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 45, "There are currently no written agreements between public health authorities and security authorities, or entities from other sectors, regarding linkages or collaboration between public health and security sectors and this happens on an ad hoc basis. A memorandum of understanding (MoU) is being finalized between Ministry of Health and security authorities on this issue." [1] No evidence of the MOU was found in neither the Ministry of Health nor in the Ministry of Defense websites. [2][3] No evidence of exercises to respond to a potential deliberate biological event in Mozambique was found in the website of the Ministry of Health. [2]The website of the Ministry of Defense was offline at the time of research. [3] The JEE 2016 also makes no mention of any such exercises. [1] No WHO report was found on the issue in the context of Mozambique. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 4 September 2020.

[4] World Health Organization. "Mozambique". [<https://www.who.int/countries/moz/en/>]. Accessed 4 September 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 insufficient evidence of a document that outlines how messages will reach population and sectors with different communication needs, as no strategy, legislation or regulation document was found on the issue of public health

emergencies. There is no evidence that Mozambique has a national public health emergency response plan. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 39, Mozambique is working on a plan but it is not yet finalised, as a priority recommended action by the WHO is to "Finalise the multi-hazard public health emergency preparedness and response plan. The plan should address both human and animal health sectors, consistent with a One Health approach, and should include monitoring and evaluation components." [1] The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [2] This indicates that there is no national public health emergency response plan. No further evidence was found at the website of the Ministry of Health. [3] However, a specific plan was created to combat the COVID-19 pandemic in March 2020. The COVID-19 Outbreak Preparation and Response Plan states that a communication plan must be established, suggesting that the plan itself will not serve as a communication plan. It notes that the communication plan should include information for people with special needs, but does not provide more detail or information on the matter. The Plan also notes that information will be divulged in Portuguese and other local languages. There is no indication that this plan was formulated to be used in for other public health emergencies other than the COVID-19 pandemic. [4]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.
- [2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.
- [3] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.
- [4] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 4 September 2020.

### 3.5.1 Risk communication planning

#### 3.5.1a

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is no evidence that Mozambique has in place a risk communication plan specifically intended for use during a public health emergency. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 40, Mozambique needs to strengthen "risk communication and public communication through establishment of a web site or information portal for risk communication, risk management, and emergency reports." [1] It further notes in page 41 that "Risk communication is inadequate and rarely done in a timely manner (i.e. within 24 hours); a website needs to be set up for this and to send out emergency reports." [1] However, also according to JEE 2016 in page 50, "The Ministry of Health has a strategy for greater media engagement, in which health professionals participate in disseminating key messages on issues relating to cholera and other diarrheal diseases through radio, television, public, and community. Collaboration has been established, for example, on the participation of professionals in the media that is within Corporate Social Responsibility so it is done for free." [1] But, no evidence of this strategy was found through desk research, nor can it be found in the Ministry of Health website. [2] The Strategic Plan for the Health Sector 2014-2019 of the Ministry of Health notes in page 136 that not having a national public health emergency response plan that is kept updated is a major risk. [3] There are some objectives in the plan that mention communication as a key objective, but they do not appear in the context of a public health emergency. [3] However, a specific plan was created to combat the COVID-19 pandemic in March

2020. The COVID-19 Outbreak Preparation and Response Plan states that a communication plan must be established, suggesting that the plan itself will not serve as a communication plan and a communication plan does not exist. There is no indication that this plan was formulated to be used in for other public health emergencies other than the COVID-19 pandemic. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 4 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 4 September 2020.

[3] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 4 September 2020.

[4] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 4 September 2020.

### 3.5.1c

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

Yes = 1 , No = 0

**Current Year Score: 1**

There is evidence that the communication plan or other document designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. In the COVID-19 Outbreak Preparation and Response Plan of 2020, on page 17, it notes that there will be a spokesperson for the national, provincial and district levels of government, but it does not designate a specific position within the government to hold that role. [1] There are no mentions of a spokesperson in the Strategic Plan for the Health Sector PESS 2014-2019. [2] No further evidence was found at the website of the Ministry of Health or the National Institute of Health. [3,4]

[1] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

## 3.5.2 Public communication

### 3.5.2a

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

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

**Current Year Score: 2**

There is sufficient evidence that Mozambique utilises media platforms to inform the public about public health emergencies. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 40, Mozambique needs to strengthen "risk communication and public communication through establishment of a web site or information portal for risk communication, risk management, and emergency reports." [1] It further notes in page 41 that "Risk communication is inadequate and rarely done in a timely manner (i.e. within 24 hours); a website needs to be set up for this and to send out emergency reports." [1] However, since the publication of the JEE 2016, there is evidence that the government has stepped up and set up social media accounts to communicate with the population; on the other hand, government websites, such as of the Ministry of Health and the National Institute of Health (INS), are often offline and, when accessible, information is not easily available, except for COVID-19 related news, where the website is functioning and information is easily accessible. [2,3,4] Social media accounts have been regular sources of public health information by the government. The National Institute of Health has a Facebook account and it has posted on issues related to public health regularly even before the COVID-19 pandemic. [5] There is evidence of posts on tuberculosis that dates back to 3 August 2017. The illustrative post on TB is about informing the population about the gravity of the disease and provides information on the steps the government has taken to combat the disease. There is no indication that the post was in reference to a public health emergency. [6] There is supposedly a page in the INS website that addresses issues regarding rumors, misinformation or disinformation (i.e. fake news); but, that page was offline or broken at the time of research. [7] There is one article, however, that shows that the Ministry of Health has addressed a case of disinformation. On 30 January 2020, the Ministry of Health dispelled the disinformation that there was a case of COVID-19 at that time. [8] The first confirmed case of COVID-19 in Mozambique occurred on 22 March 2020. [9]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 2020.

[2] Ministry of Health. [<http://www.misau.gov.mz/>]. Accessed 5 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[4] National Institute of Health. "COVID-19". [<https://covid19.ins.gov.mz/>]. Accessed 5 September 2020.

[5] National Institute of Health. Facebook account. [<https://www.facebook.com/ins.gov.mz>]. Accessed 5 September 2020.

[6] National Institute of Health. Facebook post. 3 August 2017. [<https://www.facebook.com/ins.gov.mz/posts/1419956008092520>]. Accessed 5 September 2020.

[7] National Institute of Health. "Fake News". [<https://covid19.ins.gov.mz/?s=fake>]. Accessed 5 September 2020.

[8] Jornal Visão. 30 January 2020. "Ministry of Health warns of fake news pointing out that there are cases of coronavirus in Mozambique (MISAU alerta sobre fake news apontando que há casos de coronavírus em Moçambique)".

[<https://jornalvisaomoz.com/misau-alerta-sobre-fake-news-apontando-que-ha-casos-de-coronavirus-em-mocambique/>]. Accessed 5 September 2020.

[9] DW. 22 March 2020. "Covid-19: Mozambique announces first case of the disease (Covid-19: Moçambique anuncia primeiro caso da doença)". [<https://www.dw.com/pt-002/covid-19-mo%C3%A7ambique-anuncia-primeiro-caso-da-doen%C3%A7a/a-52880196>]. Accessed 5 September 2020.

### 3.5.2b

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

No = 1, Yes = 0

**Current Year Score: 1**

There is insufficient evidence that senior leaders have shared misinformation or disinformation on infectious diseases in the past two years. No cases of disinformation or misinformation associated with Filipe Nyusi (president of Mozambique) or Armindo Tiago (minister of health) related to infectious diseases were found. There were alleged cases of fake news related



to issues other than infectious diseases in the past year. In 2019, a presidential election was held in the country, which spurred accusations of disinformation and misinformation. According to Fernando Lima, the president and journalist of Mediacoop, a media group, there is group of 40 political analysts associated with the Liberation Front of Mozambique (FRELIMO), the party in power, known to have disseminated disinformation or misinformation. There is no evidence that any of the disinformation or misinformation that was allegedly disseminated were related to infectious diseases. [1] In August 2019, Mozambique hosted the conference "Social networks, fake news, disinformation and cybersecurity in the context of democratic elections", organized by the Electoral Institute for Sustainable Democracy in Mozambique (EISA). [2] On 1 September 2020, President Filipe Nyusi claimed that it was disinformation the claim that the northern province of Cabo Delgado was closed to journalists. He noted that it is a warzone so there will be controlled and restricted movement in the area. [3] Given those examples, there is insufficient evidence that disinformation or misinformation being allegedly disseminated in the country is related to infectious diseases.

[1] Sapo Notícias. 10 July 2019. "Fake News: Mozambican context favors proliferation of misinformation (Fake News: Contexto moçambicano favorece proliferação da desinformação)". [<https://noticias.sapo.mz/actualidade/artigos/fake-news-contexto-mocambicano-favorece-proliferao-da-desinformacao>]. Accessed 5 September 2020.

[2] Global Voices. 8 August 2019. "In election year, Mozambique debates 'fake news' and its dangers (Em ano de eleições, Moçambique debate 'fake news' e seus perigos)". [<https://pt.globalvoices.org/2019/08/08/em-ano-de-eleicoes-mocambique-debate-fake-news-e-seus-perigos/>]. Accessed 5 September 2020.

[3] Club of Mozambique. 1 September 2020. "Mozambique: Cabo Delgado open to journalists, but it is a war zone – President". [<https://clubofmozambique.com/news/mozambique-cabo-delgado-open-to-journalists-but-it-is-a-war-zone-president-170294/>]. Accessed 5 September 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: 10**

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: 47.72**

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: 13

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: 11.0

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 insufficient evidence that Mozambique issued a restriction without international or bilateral support on the import or export of medical goods due to an infectious disease outbreak. No evidence was found at the websites of the Ministry of Health, the National Institute of Health, the Ministry of Agriculture and Food Security, or the Ministry of Foreign Affairs and Cooperation. [1,2,3,4]

[1] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[2] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[3] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 2020.

[4] Ministry of Foreign Affairs and Cooperation. [<http://www.minec.gov.mz/>]. Accessed 5 September 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: 0**

There is evidence that Mozambique has issued two restrictions, one of them without international or bilateral support, on the export and import of non-medical goods due to an infectious disease outbreak. During the COVID-19 pandemic, Mozambique restricted the exports of boere and mung beans to China and UAE, owing to the disease outbreak. It resumed exports on 21 July 2020. There is no indication that there was international or bilateral support for this export restriction. [1,2,3] The exact date of when the exports were restricted is not provided in any official source. In another case, on 1 September 2020, the Council of Ministers of Mozambique announced that it will restrict the imports of fish from Malawi owing to a disease outbreak that is killing fish in the area and could bring risks to Mozambique. The epidemiological surveillance authorities of Mozambique that it is a case of Epizootic Ulcerative Syndrome (EUS), and up to date Mozambique has not ever registered such a case in its territory. Mozambican authorities first heard about the EUS outbreak in Malawi on 7 August 2020. [4] The World Organization for Animal Health has reported this case of EUS in Malawi. [5]

[1] Observador. 21 July 2020. "Covid-19. Mozambique resumes beans exports to China and Dubai (Covid-19. Moçambique retoma exportação de feijões para China e Dubai)". [<https://observador.pt/2020/07/21/covid-19-mocambique-retoma-exportacao-de-feijoes-para-china-e-dubai/>]. Accessed 5 September 2020.

[2] Mundo ao Minuto. 21 July 2020. "Covid-19: Mozambique resumes beans exports to China and Dubai (Covid-19: Moçambique retoma exportação de feijões para China e Dubai)". [<https://www.noticiasominuto.com/mundo/1534566/covid-19-mocambique-retoma-exportacao-de-feijoes-para-china-e-dubai/>]. Accessed 5 September 2020.

[3] Southern Africa's Freight News. 24 July 2020. "Exports of Mozambican beans bounce back". [<https://www.freightnews.co.za/article/exports-mozambican-beans-bounce-back>]. Accessed 5 September 2020.

[4] Observador. 2 September 2020. "Mozambican government bans importing fish from Malawi (Governo moçambicano proíbe importação de peixe do Maláui)". [<https://observador.pt/2020/09/02/governo-mocambicano-proibe-importacao-de-peixe-do-malau/>]. Accessed 5 September 2020.

[5] World Organization for Animal Health. 24 July 2020. "Epizootic ulcerative syndrome, Malawi". [[https://www.oie.int/wahis\\_2/public/wahid.php/Reviewreport/Review?page\\_refer=MapFullEventReport&reportid=35110&nwlang=en](https://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=35110&nwlang=en)]. Accessed 5 September 2020.

## 3.7.2 Travel restrictions

### 3.7.2a

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

Yes = 0, No = 1

**Current Year Score: 0**

There is evidence that Mozambique has implemented a ban, without bilateral or international support, on travelers due to an infectious disease outbreak in the past year. On 12 May 2020, Mozambique suspended all international flights, lifting the ban on 31 May 2020, owing to the outbreak of the COVID-19 pandemic. Humanitarian flights were still allowed to enter Mozambique. Prior to the ban, flights into Mozambique were already scarce. Only Ethiopian Airlines flew into Mozambique prior to the ban, and even then it was only with two flights per week. There is no evidence that this action had international support. [1,2]

[1] DW. 12 May 2020. "COVID-19: Mozambique suspends international flights (Covid-19: Moçambique suspende voos internacionais)". [<https://www.dw.com/pt-002/covid-19-mo%C3%A7ambique-suspende-voos-internacionais/a-53418852>]. Accessed 5 September 2020.

[2] O País. 15 May 2020. "There are restrictions on international flights under the state of emergency (Há restrições de voos internacionais no âmbito da vigência do estado de emergência)". [<http://opais.sapo.mz/ha-restricoes-de-voos-internacionais-no-ambito-da-vigencia-do-estado-de-emergencia>]. Accessed 5 September 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: 8.38

2018

WHO; national sources

##### 4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 68.47

2018

WHO; national sources

##### 4.1.1c

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

Yes = 1, No = 0

Current Year Score: 1

Mozambique has the National Plan for the Development of Human Resources for the Health Sector 2016-2025. The plan provides an analysis of the situation of human resources for the health sector in Mozambique, identifies the key objectives and indicators which includes estimates and forecasts for the health sector labour market as well as strategies to develop and grow health workers in Mozambique. [1] The Plan explicitly mentions shortcomings of labour, notably in the field of surgical teams (instrumentalists and anaesthesiologists) on page 59. [1] Strategies include the retaining of health professional in the field, increase satisfaction in their work, and provide stronger legal and institutional support for health workers, as they are listed in the contents page. [1]

[1] Ministry of Health. "Plano Nacional para o Desenvolvimento de Recursos Humanos para a Saúde 2016-2025". November 2016. [<https://www.scribd.com/document/406721824/Fortalecimento-Dos-Sistemas-de-Saude>]. Accessed 5 September 2020.

## 4.1.2 Facilities capacity

### 4.1.2a

#### Hospital beds per 100,000 people

Input number

**Current Year Score: 70**

2011

WHO/World Bank; national sources

### 4.1.2b

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

Yes = 1 , No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care or patient isolation facility in the country.

During the COVID-19 pandemic, there were patients who were kept in isolation units within the country. As of 3 September 2020, there were a total of 18 patients in isolated units in Mozambique, one in Sofala and 17 in Maputo. [1] The total number of biocontainment patient care units and/or patient isolation room/units was not found. No details were found on the number of isolation units or if there are negative pressure rooms available in the country. The latest hospital data on the number of beds is for 2019, there were 0.7 hospital beds per 1,000 inhabitants in Mozambique. [2]

[1] National Institute of Health. 3 September 2020. "Registered one death and five patients under medical care due to COVID-19 (Registado um óbito e cinco pacientes internados devido à COVID-19)". [<https://covid19.ins.gov.mz/registado-um-obito-e-cinco-pacientes-internados-devido-a-covid-19/>]. Accessed 5 September 2020.

[2] Vio, F., Mudender, F. Centro de Integridade Pública. June 2020. "COVID 19 in Mozambique: a reflection on progression, and prevention and containment measures (COVID 19 em Moçambique: uma reflexão sobre a progressão, e as medidas de prevenção e contenção)". [<https://cipmoz.org/wp-content/uploads/2020/06/COVID-19-em-Moc%CC%A7ambique-1.pdf>].

Accessed 8 October 2020.

#### 4.1.2c

Does the country meet one of the following criteria?

- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?

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

Yes = 1, No = 0

**Current Year Score: 0**

There is insufficient evidence that Mozambique has demonstrated capacity to expand isolation capacity or that it has developed, updated or tests a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

During the COVID-19 pandemic, there were patients who were kept in isolation units within the country. As of 3 September 2020, there were a total of 18 patients in isolated units in Mozambique, one in Sofala and 17 in Maputo. [1] However, there is no evidence of the type and quality of those isolation facilities. It is unknown the number of units and beds in negative pressure rooms or any other necessary infrastructure to guarantee isolation and biocontainment. The total number of biocontainment patient care units and/or patient isolation room/units was not found. No details were found on the number of isolation units or if there are negative pressure rooms available in the country. The latest hospital data on the number of beds is for 2019, there were 0.7 hospital beds per 1,000 inhabitants in Mozambique. [2]

No evidence of any capacity to expand isolation capacity or of a plan to expand isolation capacity was found in the websites of the Ministry of Health, the National Institute of Health, or the National Institute of Disaster Management. [3][4][5] The WHO's Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique of 2016 states on page 42 that there is no evidence of procedures for isolation and referral in case of emergency operations. The same document also recommends in page 44 that "isolation facilities are needed for highly infectious patients, and the referral system for these patients needs to be clear for the entire country". There are no other references to plans or capacity to expand isolation facilities in the country in the JEE 2016. [6]

[1] National Institute of Health. 3 September 2020. "Registered one death and five patients under medical care due to COVID-19 (Registado um óbito e cinco pacientes internados devido à COVID-19)". [<https://covid19.ins.gov.mz/registado-um-obito-e-cinco-pacientes-internados-devido-a-covid-19/>]. Accessed 5 September 2020.

[2] Vio, F., Mudender, F. Centro de Integridade Pública. June 2020. "COVID 19 in Mozambique: a reflection on progression, and prevention and containment measures (COVID 19 em Moçambique: uma reflexão sobre a progressão, e as medidas de prevenção e contenção)". [<https://cipmoz.org/wp-content/uploads/2020/06/COVID-19-em-Moc%CC%A7ambique-1.pdf>]. Accessed 8 October 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 14 April 2021.

[4] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 14 April 2021.

[5] National Institute of Disaster Management. [<http://www.ingc.gov.mz/>]. Accessed 14 April 2021.

[6] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 14 April 2021.

## 4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

### 4.2.1 Routine health care and laboratory system supply

#### 4.2.1a

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

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

**Current Year Score: 1**

There is publicly available evidence suggesting that Mozambique has a national procurement protocol in place which can be utilized by the Ministry of Health but not the Ministry of Agriculture for the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) for routine needs.

Procurement protocol in Mozambique is regulated by Decree no. 5 of 2016, the Regulation of Contracting for Public Works, Supply of Goods and Services to the State, as well as the Strategic Plan for Pharmaceutical Logistics (PELF) for 2014-2019, the latter being specific to the Ministry of Health. [1,2] The full PELF was not found in any source, but there are other sources that analyse or mention the PELF. According to the Strategic Plan for the Health Sector PESS 2014-2019, the PELF would centralize health-related procurements and give more autonomy to the Center of Medications and Medical Goods (CMAM) and the Center of Supplies (CA), both entities under the Ministry of Health. [3] The objective of the CMAM is to guarantee routine supply of medical and laboratory goods for the country's public health system. [4] The Strategic Plan for the Health Sector PESS 2014-2019, on page 27, states that CMAM is responsible for the procurement of medications, and rapid tests and reagents for laboratories; meanwhile, the CA is responsible for the procurement of consumables, surgical materials, medical equipment, hospital furniture and vehicles. [3] The Ministry of Health and the Ministry of Agriculture and Food Security publish procurement requests in their respective websites. [5,6]

At the time of research, the latest public tender by the Ministry of Health, which was due 3 June 2020, included requests for surgical masks, surgical gloves, protection goggles, N95 masks, disposable aprons, PVC overalls with boots and gloves, gloves for non-sterilized procedures, medical coats, protection boots, cleaning gloves, face masks, disposable surgical scrubs, and disposable trays. [7]

[1] Council of Ministers. Decree number 5 of 8 March 2016. "Regulation on Public Works Contracting, Supply of Goods and Provision of Services to the State (Regulamento de Contratação de Empreitada de Obras Públicas, Fornecimento de Bens e Prestação de Serviços ao Estado)". [[http://www.ufsa.gov.mz/Docs/BR\\_28\\_I\\_SERIE\\_SUPLEMENTO\\_2016.pdf](http://www.ufsa.gov.mz/Docs/BR_28_I_SERIE_SUPLEMENTO_2016.pdf)]. Accessed 5 September 2020.

[2] Center of Public Integrity. November 2019. "Tracing logistics of medications in the province of Nampula (Rastreio da logística de medicamentos na província de Nampula)". [<https://cipmoz.org/wp-content/uploads/2019/11/Rastreio-1.pdf>]. Accessed 6 September 2020.

[3] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[4] Ministry of Health. June 2017. "Center of Medications and Medical Goods (Central de Medicamentos e Artigos Médicos)". [[https://mz.usembassy.gov/wp-content/uploads/sites/182/2017/06/Direccao-Estrategica-do-MISAU\\_CMAM.pdf](https://mz.usembassy.gov/wp-content/uploads/sites/182/2017/06/Direccao-Estrategica-do-MISAU_CMAM.pdf)]. Accessed 6 September 2020.

[5] Ministry of Health. "Public tenders highlights (Concursos em destaque)".

[<http://www.misau.gov.mz/index.php/concursos-em-destaques>]. Accessed 5 September 2020.

[6] Ministry of Agriculture and Food Security. "Public tenders (Concursos)". [<https://www.agricultura.gov.mz/concursos/>]. Accessed 5 September 2020.

[7] Ministry of Health. 2020. "Acquisition of personal protection equipment: Request for financial proposal (Aquisição de equipamento proteção individual: Pedido de proposta financeira)". [<https://www.misau.gov.mz/index.php/concursos-em-destaques?download=372:aquisicao-de-equipamento-protecao-individual-pedido-de-proposta-financeira>]. Accessed 6 September 2020.

## 4.2.2 Stockpiling for emergencies

### 4.2.2a

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

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

**Current Year Score: 0**

There is insufficient evidence that Mozambique has a stockpile of medical supplies, which includes for example medical countermeasures, medicines, vaccines, medical equipment and PPE, for national use during a public health emergency.

The Ministry of Health published the stockpile based on donations, including incoming and outgoing products, for the period from 14 July 2020 to 13 August 2020. However, the stockpile is specific to measures to mitigate and control the COVID-19 pandemic and it is based only on donations. There is no indication that the stockpile will be continued after the current public health emergency and be maintained for preparedness in the future. According to the document, Mozambique has disinfectant with alcohol, alcohol, hand sanitizer, surgical masks, face masks, N95 masks, protection jumpers, infrared thermometers, protection goggles, gloves, surgical gloves, nebulizers, shoe protectors, soap, protection caps, buckets, aprons, cabins to wash hands, plastic bags for biohazard waste, body thermometers with connection to computer, rubber boots, oxygen concentrator, catheter with needle, ventilators, back pulverizers, and detergent. [1]

While Mozambique currently has a stockpile, it must be noted that prior to the pandemic, there is insufficient evidence that there was a stockpile of medical supplies. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20, "Maintenance of a stockpile of biosafety personal protection equipment and measures is needed." Furthermore, in the same JEE 2016 document in page 47, "Mozambique has a limited capacity for medical countermeasures, and there is no emergency medical stockpile. There are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of medical countermeasures during an emergency. Despite this, the country has been able to import material during emergencies and institutions involved in emergency management and response are generally prompt and willing to collaborate when there is a request from upper levels of the government. WHO and the World Food Programme (WFP) also facilitate committees when an emergency arises, to coordinate medical countermeasures." [2]

The Director Plan for Disaster Risk Reduction 2017-2030 by the National Institute of Disaster Management (INGC) briefly mentions equipment and materials. It appears in the context of Objectives/Actions, such that one of the actions INGC plans to take is to "Identify the capacities of its professional technicians, the profile of human resources, equipment and materials so that INGC can best function as a coordinator and manager of risks associated with disasters in the country". [3]

[1] Ministry of Health. "IV - Reports of Donations COVID-19 for the period from 14 July 2020 to 13 August 2020 (IV - Relatórios das Doações COVID-19 no período De 14/07/2020 a 13/08/2020)". [<https://www.misau.gov.mz/index.php/covid->



19-relatorios-das-doacoes?download=561:iv-relatorios-das-doacoes-covid-19-no-periodo-de-14-07-2020-a-13-08-2020]. Accessed 5 September 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 5 September 2020.

[3] National Institute of Disaster Management (INGC). 17 October 2017. "Director Plan for Disaster Risk Reduction 2017-2030 (Plano Director Para a Redução do Risco de Desastres 2017-2030)". [http://www.ingc.gov.mz/Documentacao]. Accessed 5 September 2020.

#### 4.2.2b

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

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

**Current Year Score: 0**

There is insufficient evidence that Mozambique has a stockpile of laboratory supplies for national use during a public health emergency. The COVID-19 Outbreak Preparation and Response Plan mentions in Chapter 7 that there should be supply of laboratory supplies, such as reagents and consumables. However, there is no mention of stockpiling. [1] The Ministry of Health published the stockpile based on donations for the period from 14 July 2020 to 13 August 2020, which is the latest available period. There are no mentions of any laboratory supplies in the list. [2] In the previous list of donations stockpile that covers the period from 8 May 2020 through 10 June 2020, there was one laboratory supply in the list, QI Amp Viral RNA Mini kit 250, which is used to separate viral RNA from cell-free body fluids. [3] In another list of donations stockpile that covers the period prior to 8 May 2020, there were testing kits and extraction kits for sample transportation. [4] However, the WHO's Joint External Evaluation of IHR Core Capacities of 2016 (JEE2016) for Mozambique notes, on page 26, that "The stock management systems and equipment maintenance plans are not optimal. Laboratories frequently experience stock-outs of reagents and consumables, and equipment breakdowns. There are few government resources for laboratory systems, and support comes mostly from external donors." [4]

[1] Ministry of Health. "IV - Reports of Donations COVID-19 for the period from 14 July 2020 to 13 August 2020 (IV - Relatórios das Doações COVID-19 no período De 14/07/2020 a 13/08/2020)". [https://www.misau.gov.mz/index.php/covid-19-relatorios-das-doacoes?download=561:iv-relatorios-das-doacoes-covid-19-no-periodo-de-14-07-2020-a-13-08-2020]. Accessed 5 September 2020.

[2] Ministry of Health. "II - Reports of Donations COVID-19 for the period from 8 May 2020 to 10 June 2020 (II - Relatórios das Doações COVID-19 no período De 08/05/2020 a 10/06/2020)". [https://www.misau.gov.mz/index.php/covid-19-relatorios-das-doacoes?download=466:ii-relatorios-das-doacoes-covid-19-no-periodo-de-08-05-2020-a-10-06-2020]. Accessed 5 September 2020.

[3] Ministry of Health. "Reports of Donations COVID-19 up to 8 May 2020 (Relatórios das Doações COVID-19 Até 08.05.2020)". [https://www.misau.gov.mz/index.php/covid-19-relatorios-das-doacoes?download=351:relatorios-das-doacoes-covid-19-ate-08-05-2020]. Accessed 5 September 2020.

[4] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 6 September 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 insufficient evidence that Mozambique conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency.

The Ministry of Health published the stockpile based on donations, including incoming and outgoing products, for the period from 14 July 2020 to 13 August 2020. However, the stockpile is specific to measures to mitigate and control the COVID-19 pandemic and it is based only on donations. No evidence was found that the review of the stockpile will continue after the health emergency or if there is a requirement for it to be conducted in the future. [1]

While Mozambique currently has a stockpile, it must be noted that prior to the pandemic, there is insufficient evidence that there was a stockpile of medical supplies or that there were reviews of the state of its stockpile. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 20, "Maintenance of a stockpile of biosafety personal protection equipment and measures is needed." Furthermore, in the same JEE 2016 document in page 47, "Mozambique has a limited capacity for medical countermeasures, and there is no emergency medical stockpile. There are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of medical countermeasures during an emergency. Despite this, the country has been able to import material during emergencies and institutions involved in emergency management and response are generally prompt and willing to collaborate when there is a request from upper levels of the government. WHO and the World Food Programme (WFP) also facilitate committees when an emergency arises, to coordinate medical countermeasures." [2]

No evidence was found in the websites of the Ministry of Health or the National Institute for Disaster Management. [3,4] The website of the Ministry of Defense was offline at the time of research. [5]

[1] Ministry of Health. "IV - Reports of Donations COVID-19 for the period from 14 July 2020 to 13 August 2020 (IV - Relatórios das Doações COVID-19 no período De 14/07/2020 a 13/08/2020)". [<https://www.misau.gov.mz/index.php/covid-19-relatorios-das-doacoes?download=561:iv-relatorios-das-doacoes-covid-19-no-periodo-de-14-07-2020-a-13-08-2020>]. Accessed 5 September 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.

[4] National Institute of Disaster Management. [<http://www.ingc.gov.mz/>]. Accessed 6 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 6 September 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 Mozambique has a plan or agreement to leverage domestic manufacturing capacity to produce medical supplies, which include medical countermeasures (MCMs), medicines, vaccines, equipment, and PPE, for national use during a public health emergency.

There is also insufficient evidence that Mozambique has a plan or mechanism to procure medical supplies for national use during a public health emergency. There is no evidence that Mozambique has domestic manufacturing capacity to produce medical supplies. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 47, "Mozambique has a limited capacity for medical countermeasures, and there is no emergency medical stockpile. There are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of medical countermeasures during an emergency. Despite this, the country has been able to import material during emergencies and institutions involved in emergency management and response are generally prompt and willing to collaborate when there is a request from upper levels of the government. WHO and the World Food Programme (WFP) also facilitate committees when an emergency arises, to coordinate medical countermeasures." [1]

The Strategic Plan for the Health Sector PESS 2014-2019 does not mention any plan or mechanism to procure medical supplies during a public health emergency. It mentions procurement of medical supplies for routine use only. [2] The COVID-19 Outbreak Preparation and Response Plan of 2020 outlines in Chapter 10 a plan to procure medical supplies during the pandemic; however, there is no indication in the document that this plan can be applied to other public health emergencies. The plan is specific to the COVID-19 pandemic. [3] No further evidence was found in the website of the Ministry of Health. [4] The website of the Ministry of Defense was offline at the time of research. [5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". April 2016. [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed in January 2019.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 6 September 2020.

[3] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contingencia>]. Accessed 6 September 2020.

[4] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 6 September 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 Mozambique has a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency. There is also insufficient evidence that Mozambique has a plan or mechanism to procure laboratory supplies for national use during a public health emergency. There is no evidence that Mozambique has domestic manufacturing capacity to produce laboratory supplies. The Strategic Plan for the Health Sector PESS 2014-2019 does not mention any plan or mechanism to procure laboratory supplies during a public health emergency. It mentions procurement of laboratory supplies for routine use only. [1] The COVID-19 Outbreak Preparation and Response Plan of 2020 outlines in Chapter 10 a plan to procure laboratory supplies during the pandemic;

however, there is no indication in the document that this plan can be applied to other public health emergencies. The plan is specific to the COVID-19 pandemic. [2] No further evidence was found in the website of the Ministry of Health. [3] The website of the Ministry of Defense was offline at the time of research. [4]

[1] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 6 September 2020.

[2] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 6 September 2020.

[3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.

[4] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 6 September 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 Mozambique has a plan, program, or guidelines in place for dispensing medical countermeasures (MCMs) for national use during a public health emergency. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 47, "There are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of medical countermeasures during an emergency." [1] The Strategic Plan for the Health Sector PESS 2014-2019 does not mention any plan, program, or guideline for dispensing MCMs during a public health emergency. [2] The COVID-19 Outbreak Preparation and Response Plan of 2020 does not mention any plan, program, or guideline for dispensing MCMs. [3] No further evidence was found in the websites of the Ministry of Health. [4] The website of the Ministry of Defense was offline at the time of research. [5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 6 September 2020.

[2] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 6 September 2020.

[3] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 6 September 2020.

[4] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.

[5] Ministry of Defense. [<https://www.mdn.gov.mz/index.php>]. Accessed 6 September 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 Mozambique has a public plan in place to receive health personnel from other countries to respond to a public health emergency. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 47, " For health personnel deployment, formal procedures and human asset typing are also lacking, however, several recent examples of successfully receiving and sending technical experts to rapidly respond to public health emergencies demonstrate country capacity in this area. Exercises have been previously conducted in the context of pandemic influenza and Ebola preparedness, which partially addressed issues of medical countermeasures and health personnel deployment." [1] No evidence was found in the websites of the Ministry of Health or the National Institute for Disaster Management. [2,3] The website of the Ministry of Defense was offline at the time of research. [4]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique".

[https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf]. Accessed 5 September 2020.

[2] Ministry of Health. [https://www.misau.gov.mz/]. Accessed 5 September 2020.

[3] National Institute of Disaster Management. [http://www.ingc.gov.mz/]. Accessed 5 September 2020.

[4] Ministry of Defense. [https://www.mdn.gov.mz/index.php]. Accessed 5 September 2020.

## 4.4 HEALTHCARE ACCESS

### 4.4.1 Access to healthcare

#### 4.4.1a

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

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

**Current Year Score: 3**

2020

World Policy Analysis Center

#### 4.4.1b

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

Input number

**Current Year Score: 54.3**

2011

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: 4.57**

2017

WHO Global Health Expenditure database

## 4.4.2 Paid medical leave

### 4.4.2a

**Are workers guaranteed paid sick leave?**

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

**Current Year Score: 2**

2020

World Policy Analysis Center

## 4.4.3 Healthcare worker access to healthcare

### 4.4.3a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that there is any government-issued legislation, policy or public statement committing to provide prioritised health care services to healthcare workers who become sick as a result of responding to a public health emergency in Mozambique. According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 49, "There is no comprehensive national plan, nor are there standard operating procedures, for deployment of health personnel during an emergency; the system currently operates on informal agreements. The country has limited personnel that need further competency evaluation by tier, to facilitate deployment." [1] There are no specific mention of prioritising health care services for health personnel during times of crisis. No evidence was found in the websites for the Ministry of Health, the National Institute of Disaster Management, the Strategic Plan for the Health Sector 2014-2019 or the COVID-19 Outbreak Preparation and Response Plan. [2,3,4,5]

[1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[3] National Institute of Disaster Management. [<http://www.ingc.gov.mz/>]. Accessed 5 September 2020.

[4] Ministry of Health. 30 September 2013. "Strategic Plan for the Health Sector PESS 2014-2019 (Plano Estratégico do Sector da Saúde PESS 2014-2019)". [<http://www.misau.gov.mz/index.php/planos-estrategicos>]. Accessed 5 September 2020.

[5] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 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 insufficient evidence that Mozambique has a system in place for public health officials and healthcare workers to communicate during a public health emergency.

According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 50, "At the level of the Ministry of Health, there is a Department of Health Promotion that coordinates the actions of Information, Education and Communication for Health in close collaboration with the Department of Epidemiology, other related areas of the Ministry of Health and with partners, including WHO, UNICEF, other government institutions (Education, Public Works)." [1] The Ministry of Health confirms the existence of the Department of Health Promotion; however, its responsibilities and capabilities could not be confirmed. [2]

According to the COVID-19 Outbreak Preparation and Response Plan of 2020, there is a system in place for public health officials and healthcare workers to communicate during a public health emergency. In page 21 of the plan, it identifies as a preparation activity the "Review and testing of current communication system between health authorities in entry points and transport operators, and between health authorities in entry points [borders] and national health authorities". [3] However, there is no evidence that the communication system works in both directions.

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". April 2016. [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed in January 2019.

[2] Ministry of Health. 11 September 2018. "Organigrama Aprovado". [<https://www.misau.gov.mz/index.php/2-uncategorised/46-organigrama-aprovado>]. Accessed 5 September 2020.

[3] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 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 insufficient evidence that Mozambique has a system in place for public health officials and healthcare workers to communicate during a public health emergency with both the public and private sector.

According to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 50, "At the level of the Ministry of Health, there is a Department of Health Promotion that coordinates the actions of

Information, Education and Communication for Health in close collaboration with the Department of Epidemiology, other related areas of the Ministry of Health and with partners, including WHO, UNICEF, other government institutions (Education, Public Works)." It does not mention communication between public health officials and healthcare workers in the public or the private sector. [1]

The Ministry of Health confirms the existence of the Department of Health Promotion; however, its responsibilities and capabilities could not be confirmed. [2] The JEE 2016 also notes in page 51 that "Communication strategies that includes establishment of communication committee that interacts with journalists, leaders, students, religious activists and other community contributors is being explored to improve sharing of appropriate messages." [1]

Since the JEE 2016, Mozambique has developed the COVID-19 Outbreak Preparation and Response Plan, which includes more details on the public-private communication during a public health emergency. Chapter 9 of the COVID-19 plan clearly states as the first preparation activity to "Create/reactivate the Technical Group of Communication". According to the COVID-19 plan, the group includes all the ministries and government institutions, UN agencies and international organizations, public and private sector entities, social communications organs, civil society organizations (NGOs, religious organizations, associations, etc) at all levels. However, it does not mention communication between public health officials and healthcare workers in the public or the private sector. [3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". April 2016. [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed in January 2019.

[2] Ministry of Health. 11 September 2018. "Organigrama Aprovado". [<https://www.misa.gov.mz/index.php/2-uncategorised/46-organigrama-aprovado>]. Accessed 5 September 2020.

[3] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misa.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

## 4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

### 4.6.1 Healthcare associated infection (HCAI) prevention and control programs

#### 4.6.1a

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that Mozambique monitors or tracks the number of health care associated infections that take place in health care facilities.

There are no data available on the topic in the website of the National Institute of Health. [1] The Ministry of Health published on 14 May 2019 an article addressing the issue of health care associated infections (HCAI), indicating some top-level information as well as some measures to prevent HCAs. However, there is no indication that there is monitoring or tracking of those cases. [2]

The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) notes in page 9 that " There are approximately 300 health facilities (55 hospitals and 245 health centres) that are conducting at least



one basic component of the national Healthcare Associated Infections (HCAI) control program." [3] Furthermore, in page 11 of JEE 2016, "Since 2014, guidelines for prevention and control of HCAI are being implemented. [...] HCAI special components are also implemented in some facilities, such as prevention of infection related to the use of intra-vascular catheters; prevention of urinary infections related to the use of civets; prevention of health care associated pneumonia, and prevention of surgical wound infections." [3] But, the guidelines for prevention and control of HCAI have not been found after extensive research and there is no indication in the JEE 2016 that Mozambique has a surveillance system for HCAI.

[1] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[2] Ministry of Health. 19 May 2019. "Prevention and Control of Health Care Associated Infections (Prevenção e Controlo das Infecções Associadas aos Cuidados de Saúde)". [<https://telessaude.co.mz/2019/05/14/prevencao-e-controlo-das-infeccoes-associadas-aos-cuidados-de-saude/>]. Accessed 5 September 2020.

[3] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 2020.

## 4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

### 4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

#### 4.7.1a

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

Yes = 1, No = 0

**Current Year Score: 1**

There is a national requirement for ethical review before beginning a clinical trial in Mozambique. According to the National Institute of Health's presentation "The Past, the Present, and Perspectives" of 2011, in page 26, while there is no formal regulation for clinical trials, approval must be obtained from two organizations. First, one must obtain approval from the National Committee on Bioethics for Health, which is an independent organ nominated by the Ministry of Health. Second, one must obtain administrative approval from the Ministry of Health. For clinical trials with new products, the Ministry of Health further requires the participation of the Regulatory Authority of Drugs, Vaccines and other Biological Products. [1] No formal regulation on the matter was found in the Ministry of Health or National Institute of Health websites. The National Institute of Health's presentation "The Past, the Present, and Perspectives" of 2011 cited here is the only document that has any reference to clinical trial requirements. The document itself says: "Formal regulation for the realization of research in the health sector does not exist, but there are two levels for approvals (Não existe um regulamento formal para realização de pesquisa no Sector Saúde mas existem dois níveis de aprovação)". [1]

[1] National Institute of Health. March 2011. "National Institute of Health (INS): The Past, the Present, and Perspectives (Instituto Nacional de Saúde (INS): Passado, Situação Actual e Perspectivas)".

[[https://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2F1\\_CPLP%2FSaude%2FI-RN-RINSP%2FMo%2C3%A7ambique\\_CPLP\\_INS\\_BISSAU.pdf](https://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2F1_CPLP%2FSaude%2FI-RN-RINSP%2FMo%2C3%A7ambique_CPLP_INS_BISSAU.pdf)]. Accessed 5 September 2020.

#### 4.7.1b

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

Yes = 1, No = 0

**Current Year Score: 0**

There is no evidence that there is an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. According to the National Institute of Health, there is no formal regulation for clinical trials, despite requiring approval from the National Committee on Bioethics for Health and the Ministry of Health. [1] Mozambique does not have a Ministry of Research or equivalent. [2] The COVID-19 Outbreak Preparation and Response Plan of 2020 makes no mention of expedited process for approving clinical trials for unregistered medical countermeasures. [3] No further evidence was found at the website of the Ministry of Health. [4]

[1] National Institute of Health. March 2011. "National Institute of Health (INS): The Past, the Present, and Perspectives (Instituto Nacional de Saúde (INS): Passado, Situação Actual e Perspectivas)".

[[https://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2F1\\_CPLP%2FSaude%2FI-RN-RINSP%2FMo%C3%A7ambique\\_CPLP\\_INS\\_BISSAU.pdf](https://www.cplp.org/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2F1_CPLP%2FSaude%2FI-RN-RINSP%2FMo%C3%A7ambique_CPLP_INS_BISSAU.pdf)]. Accessed 5 September 2020.

[2] DW. 17 January 2020. "Mozambican president nominates new government (Presidente moçambicano nomeia novo governo)". [<https://www.dw.com/pt-002/presidente-mo%C3%A7ambicano-nomeia-novo-governo/a-52047001>]. Accessed 5 September 2020.

[3] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 2020.

[4] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 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**

The Regulatory Authority of Medication (ARM) is the government agency responsible for approving new medical countermeasures (MSMs) for humans. It was created by Law 12 of 8 September 2017 on medications, vaccines, and biological and health products. The ARM is an autonomous entity that is responsible for evaluating the quality, safety and effectiveness of medications that go to market, as well as promote patient safety and rational use of medications. It approves MCMs that go to the Mozambican market. [1,2]

[1] Government of Mozambique. Law 12 of 8 September 2017. [<https://www.misau.gov.mz/index.php/farmacia-legislacao?download=417:lei-12-2017-medicamentos-e-outros-produtos>]. Accessed 8 October 2020.

[2] World Health Organization. 27 March 2017. "Mozambique approves new Law on medicine, vaccines, biological and health products (Moçambique aprova nova Lei do medicamento, vacinas, produtos biológicos e de saúde)".

[<https://www.afro.who.int/pt/news/mocambique-aprova-nova-lei-do-medicamento-vacinas-produtos-biologicos-e-de-saude>]. Accessed 8 October 2020.

#### 4.7.2b

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence that there is an expedited process for approving medical countermeasures for human use during public health emergencies. The approval of medical countermeasures (MCMs) to enter the Mozambican market is given by the Regulatory Authority of Medication (ARM). According to Article 16 of Law 12 of 8 September 2017, only the Minister of Health can approve the import of emergency medications, even if it did not receive the necessary approvals yet in the country. The Law outlines specific circumstances when approval can be circumvented, one of which is if there is a public health emergency. [1] Previously this was not the case: according to the WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in page 47, "Mozambique has a limited capacity for medical countermeasures, and there is no emergency medical stockpile. There are no formalized plans or procedures with customs or regulatory authorities to facilitate the rapid importation and use of medical countermeasures during an emergency." [2]

[1] Government of Mozambique. Law 12 of 8 September 2017. [<https://www.misau.gov.mz/index.php/farmacia-legislacao?download=417:lei-12-2017-medicamentos-e-outros-produtos>]. Accessed 8 October 2020.

[2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 5 September 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 insufficient evidence that pandemics are integrated into Mozambique's risk reduction strategy. Mozambique has a Director Plan for Disaster Risk Reduction 2017-2030. As per its definition of "disaster" or "calamity" in page 17, epidemics are included in the definition; therefore, epidemics are included in the national risk reduction strategy. However, there are no further information, plans or details that pertain to epidemics or pandemics in the document. [1]

[1] National Institute of Disaster Management (INGC). 17 October 2017. "Director Plan for Disaster Risk Reduction 2017-2030 (Plano Director Para a Redução do Risco de Desastres 2017-2030)".

[[https://www.preventionweb.net/files/64564\\_planodirectorparareducaodoriscode.pdf](https://www.preventionweb.net/files/64564_planodirectorparareducaodoriscode.pdf)]. Accessed 5 September 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**

Mozambique has a regional protocol with regards to public health emergencies; however, there are some gaps in its implementation. Mozambique has signed in 1999 the Southern African Development Community (SADC) Protocol on Health that includes several health-related issues, including public health emergencies. Some evidence of gaps in implementation of the Protocol were found. The Protocol calls for cooperation among all signatory members in the realm of health related issues, including public health emergencies, such as facilitation of mechanisms across member states and promotion of laboratory research across borders. [1] The WHO's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" of 2016 (JEE 2016) in pages 48-49 notes that "Despite ratification of the SADC health agreement, no specific legal or regulatory processes and logistical plans are available to allow for rapid cross-border deployment and receipt of public health and medical personnel during emergencies. Therefore, such agreements should be formalized with neighbouring states within the SADC context." [2] There is evidence that the SADC coordinated efforts to control and monitor cross-border movements. It set up border and in-country testing centers and adopted guidelines on Harmonization and Facilitation of Cross Border Operations across the Region during the pandemic. [3,4] There are reports of border delays as some countries are still implementing the measures to comply with the guidelines. There are also delays with some border agencies offices closed, as enhanced safety and sanitary procedures, such as fumigation and disinfection, caused offices to closed their doors before providing service. There are no specific reports for Mozambique. Evidence of measures taken to rectify those gaps were not found. [5] There is a report of a cross-border agreement being successfully implemented that involves Mozambique. In July 2020, Mozambican miners returned to work in South Africa after the borders were first closed. They were screened at a cross-border Occupation Health Center run by the International Organization for Migration (IOM).

The IOM commended both countries for arranging the flow of people during the public health crisis. [6]

- [1] Southern African Development Community (SADC). 1999. "Protocol on Health in the Southern African Development Community". [[https://www.sadc.int/files/7413/5292/8365/Protocol\\_on\\_Health1999.pdf](https://www.sadc.int/files/7413/5292/8365/Protocol_on_Health1999.pdf)]. Accessed 6 September 2020.
- [2] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 6 September 2020.
- [3] Southern African Development Community (SADC). April 2020. "SADC Regional Response to COVID-19 Pandemic". [[https://www.sadc.int/files/9115/8697/9635/SADC\\_regional\\_response\\_to\\_COVID-19.pdf](https://www.sadc.int/files/9115/8697/9635/SADC_regional_response_to_COVID-19.pdf)]. Accessed 6 September 2020.
- [4] Southern African Development Community (SADC). 2020. "SADC Guidelines on Harmonisation and Facilitation of Cross Border Transport Operations across the Region During the COVID-19 Pandemic". [[https://www.sadc.int/files/8315/8626/0246/Final\\_SADC\\_Guidelines\\_on\\_Cross-Border\\_Transport\\_during\\_COVID19-Adopted\\_on\\_6\\_April\\_2020-ENGLISH.pdf](https://www.sadc.int/files/8315/8626/0246/Final_SADC_Guidelines_on_Cross-Border_Transport_during_COVID19-Adopted_on_6_April_2020-ENGLISH.pdf)]. Accessed 6 September 2020.
- [5] Southern African Development Community (SADC). August 2020. "SADC Regional Response to COVID-19 Pandemic: With focus on Health, Transport and Food Security Sectors — Bulletin No. 11". [[https://www.sadc.int/files/9715/9865/2361/COVID-19\\_11th\\_Report\\_EN\\_mail.pdf](https://www.sadc.int/files/9715/9865/2361/COVID-19_11th_Report_EN_mail.pdf)]. Accessed 6 September 2020.
- [6] International Organization for Migration. 17 July 2020. "Thousands of Mozambican Miners to Receive Health Checks, Return to South Africa". [<https://www.iom.int/news/thousands-mozambican-miners-receive-health-checks-return-south-africa>]. Accessed 6 September 2020.

### 5.2.1b

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

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

**Current Year Score: 0**

There is no evidence that Mozambique has any cross-border agreements, protocols or MOUs with neighbouring countries, or as part of a regional group, with regards to animal health emergencies. The Southern African Development Community (SADC) Protocol on Health does not include animal health emergencies. [1] The OIE notes in its Veterinary Legislation Identification Mission Report of October 2015 in page 16 that Mozambique lacks a "Declaration of Animal Disease Emergency or creation of an Animal Disease Emergency Fund". [2] The same source adds in page 16 that Mozambique does not have "Surveillance and control measures for diseases other than prescribed diseases, establishing regulatory programmes, establishing emergency preparedness and contingency plans, the financing of disease surveillance, prevention and control measures and measures to investigate and respond to emerging diseases." [2] No further information is available in the website of the Ministry of Health. [3]

- [1] Southern African Development Community (SADC). 1999. "Protocol on Health in the Southern African Development Community". [[https://www.sadc.int/files/7413/5292/8365/Protocol\\_on\\_Health1999.pdf](https://www.sadc.int/files/7413/5292/8365/Protocol_on_Health1999.pdf)]. Accessed 6 September 2020.
- [2] World Organization for Animal Health. October 2015. "Republic of Mozambique: Veterinary Legislation Identification Mission Report". [[http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/pdf/FinalReport\\_VLSP\\_mission\\_Mozambique.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/pdf/FinalReport_VLSP_mission_Mozambique.pdf)]. Accessed 6 September 2020.
- [3] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 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: 1

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: 0

2021

Biological Weapons Convention

#### 5.3.1d

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

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

Current Year Score: 1

2021

Biological Weapons Convention

## 5.3.2 Voluntary memberships

### 5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

#### 5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2021

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

#### 5.4.1b

Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?

Yes = 1 , No = 0

Current Year Score: 0

2021

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

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

### 5.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

### 5.4.2b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

## 5.5 FINANCING

### 5.5.1 National financing for epidemic preparedness

#### 5.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Mozambique has allocated national funds to improve capacity to address epidemic threats within the past three years. Mozambique's "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique" report of 2016 and the National Action Plan for Health Security does not allocate or describe specific funding from the national budget to address the identified gaps. [1,2] Mozambique has a "High-level summary and recommendations: Strategic Partnerships for Country Planning Workshop Post – JEE: The Development of Mozambique's 5-year National Action Plan for Health Security 11-13 October 2017" by the World Health Organization; however, this document does not allocate or describe specific funding from the national budget. [3] There have been reports that Mozambique does not spend enough on health, compared to its peers. According to a speech in August 2018 by the vice-president of the Catholic University of Mozambique, Armindo Tambo, Mozambique invest US\$79 per person on health, compared to US\$163 per person in the region. This value is for the entire health sector, and not just to address epidemic threats. [4] No reports were found on specific funds from the government being allocated to address epidemic threats in the websites of the Ministry of Health, or the Ministry of Agriculture and Food Security. [5,6] The websites of the government and the Ministry of Economy and Finance that would allegedly have information on the budget was offline at the time of research. [7,8] The National Budgets of 2017, 2018, 2019 and 2020 do not mention any allocation of national funds to improve capacity to address epidemic



threats. [9,10,11,12] Only the budgetary document of 2019 informs that funds are being allocated to the programs to combat HIV/AIDS, tuberculosis and malaria, but those funds are not coming from domestic sources, but rather from external sources (foreign aid). [11]

- [1] World Health Organization. April 2016. "Joint External Evaluation of IHR Core Capacities of the Republic of Mozambique". [<https://extranet.who.int/sph/sites/default/files/jeeta/WHO-WHE-CPI-2017.19-eng.pdf>]. Accessed 6 September 2020.
- [2] World Health Organization. October 2017. "NAPHS Mozambique - High Level Summary". [<https://extranet.who.int/sph/news/naphs-mozambique-high-level-summary>]. Accessed 6 September 2020.
- [3] World Health Organization. October 2017. "High-level summary and recommendations: Strategic Partnerships for Country Planning Workshop Post – JEE: The Development of Mozambique 's 5-year National Action Plan for Health Security 11-13 October 2017". [[https://extranet.who.int/sph/sites/default/files/donor\\_partner\\_landscape/Mozambique%20High%20Level%20Summary%20and%20Recommendations\\_Updated\\_Final.pdf](https://extranet.who.int/sph/sites/default/files/donor_partner_landscape/Mozambique%20High%20Level%20Summary%20and%20Recommendations_Updated_Final.pdf)]. Accessed 6 September 2020.
- [4] O País. 28 August 2018. "Country invests USD 79 per year in the health of each Mozambican (País investe por ano USD 79 na saúde de cada moçambicano)". [<http://opais.sapo.mz/pais-investe-por-ano-usd-79-na-saude-de-cada-mocambicano>]. Accessed 6 September 2020.
- [5] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.
- [6] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 6 September 2020.
- [7] Government of Mozambique. [<https://www.portaldogoverno.gov.mz/por/Imprensa/Noticias/Orcamento-do-Estado-mocambicano-avaliado-em-246-mil-milhoes-de-meticais>]. Accessed 6 September 2020.
- [8] Ministry of Economy and Finance. [[https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2020/802--178/file?force\\_download=1](https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2020/802--178/file?force_download=1)]. Accessed 6 September 2020.
- [9] Government of Mozambique. "Citizen Budget 2017 (Orçamento Cidadão 2017)". [[http://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao/orcamento-de-estado/oe-2017/-19/452--28/file?force\\_download=1](http://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao/orcamento-de-estado/oe-2017/-19/452--28/file?force_download=1)]. Accessed 8 October 2020.
- [10] Government of Mozambique. "State Budget for 2018 (Orçamento do Estado para 2018)". [<https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao/orcamento-de-estado/oe-2018/469--34/file>]. Accessed 8 October 2020.
- [11] Government of Mozambique. "State Budget for 2019 (Orçamento do Estado para 2019)". [[https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2019/556--59/file?force\\_download=1](https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2019/556--59/file?force_download=1)]. Accessed 8 October 2020.
- [12] Government of Mozambique. April 2020. "Proposed State Budget Law for 2020 (Proposta de Lei do Orçamento do Estado para 2020)". [[https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2020/802--178/file?force\\_download=1](https://www.mef.gov.mz/index.php/documentos/instrumentos-de-gestao-economica-e-social/orcamento-de-estado/oe-2020/802--178/file?force_download=1)]. Accessed 8 October 2020.

## 5.5.2 Financing under Joint External Evaluation (JEE) and Performance of Veterinary Services (PVS) reports and gap analyses

### 5.5.2a

**Does the Joint External Evaluation (JEE) report, National Action Plan for Health Security (NAPHS), and/or national GHSA roadmap allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?**

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

**Current Year Score: 0**

2021

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

### 5.5.2b

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

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

**Current Year Score: 0**

2021

OIE PVS assessments

## 5.5.3 Financing for emergency response

### 5.5.3a

**Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?**

Yes = 1 , No = 0

**Current Year Score: 1**

Mozambique is listed as an IDA eligible borrowing country and therefore is eligible for the World Bank pandemic financing facility. [1][2] According to the World Bank, "The Pandemic Emergency Financing Facility (PEF) is a mechanism developed by the World Bank together with the World Health Organization (WHO) and private sector partners to provide surge financing for response efforts to countries affected by a large-scale outbreak to prevent the outbreak from reaching pandemic proportions." [2]

[1] International Development Association. "Borrowing countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 5 September 2020.

[2] Pandemic Emergency Financing Facility. December 2017. "Pandemic Emergency Financing Facility (PEF): Operational Brief for Eligible Countries". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 5 September 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 insufficient evidence of public statements from senior leaders making commitments to improve domestic capacity (or the capacity of other countries) to address epidemics. On 6 August 2020, President Filipe Nyusi stated that he will work to expand health services and improve its quality, but there was no mention of improving the country's capacity to address epidemic threats, despite the context of the COVID-19 pandemic. [1] There is evidence, however, that investments are being made to address epidemic threats. The Minister of Health of Mozambique, Dr. Nazira Abdula, alongside the US ambassador to Mozambique, Dean Pittman, announced funds and resources to address the threat of the HIV/AIDS epidemic in Mozambique on 12 September 2017. [2] Furthermore, Mozambique has expanded financing and requested support to improve capacity, according to the funds committed to address epidemic threats. Mozambique has been committed US\$4.04bn for health security in the 2014-2020 period from donors; about US\$9.33bn has been disbursed. [3] However, there is no evidence that a Mozambique official, president or minister publicly committed to improving domestic capacity or to support other countries to improve capacity to address epidemic threats. [4]

[1] O País. 6 August 2020. "Nyusi recommends economic diversification in Manica (Nyusi recomenda diversificação económica a Manica)". [<http://opais.sapo.mz/nyusi-recomenda-diversificacao-economica-a-manica>]. Accessed 6 September 2020.

[2] US Embassy in Mozambique. 12 September 2017. "US and Mozambican governments renew partnership against HIV epidemic (Governos dos Estados Unidos e Moçambique renovam parceria contra epidemia do HIV)".

[<https://mz.usembassy.gov/pt/us-renews-partnership-mozambique-hiv-epidemic-pt/>]. Accessed 6 September 2020.

[3] Center for Global Health Science and Security of Georgetown University. "Global Health Security Funding Tracking Dashboard: Mozambique". [<https://tracking.ghscosting.org/#analysis/MZ/r>]. Accessed 6 September 2020.

[4] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 6 September 2020.

### 5.5.4b

**Is there evidence that the country has, in the past three years, either:**

**- Provided other countries with financing or technical support to improve capacity to address epidemic threats?**

**- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?**

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

**Current Year Score: 1**

There is evidence that Mozambique has invested finances to improve its own domestic capacity to address epidemic threats. There is no evidence that Mozambique has invested finances to support other countries to improve capacity to address epidemic threats in the past three years. Based on the evidence provided by the Global Health Security Funding Tracker, Mozambique is a net recipient of foreign aid. US\$4.04bn has been disbursed for health security out of US\$9.33bn committed for 2014-2020 from donors. This is for purposes including immunization and real-time surveillance. For example, within the past three years, the United States contributed approximately US\$1.7bn to Mozambique. [1] There is no evidence in the Ministry of Health that Mozambique has invested finances to support other countries to improve capacity to address epidemic threats in the past three years. [2]

[1] Center for Global Health Science and Security of Georgetown University. "Global Health Security Funding Tracking Dashboard: Mozambique". [<https://tracking.ghscosting.org/details/156/recipient>]. Accessed 5 September 2020.

[2] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

### 5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 1

2021

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

## 5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

#### 5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Mozambique has a plan or policy for sharing genetic data, epidemiological data, clinical specimens or isolated specimens with international organizations or other countries that goes beyond influenza. No evidence was found in the websites for the Ministry of Health, the Ministry of Agriculture, or the National Institute of Health. [2,3,4] The Ministry of Research does not exist in Mozambique. [5] There are no mentions of sharing genetic data in the most recent COVID-19 Outbreak Preparation and Response Plan of 2020. [6]

[1] Ministry of Health. [<https://www.misau.gov.mz/>]. Accessed 5 September 2020.

[2] Ministry of Agriculture and Food Security. [<https://www.agricultura.gov.mz/>]. Accessed 5 September 2020.

[3] National Institute of Health. [<https://www.ins.gov.mz/>]. Accessed 5 September 2020.

[4] DW. 17 January 2020. "Mozambican president nominates new government (Presidente moçambicano nomeia novo governo)". [<https://www.dw.com/pt-002/presidente-mo%C3%A7ambicano-nomeia-novo-governo/a-52047001>]. Accessed 5 September 2020.

[5] Ministry of Health. 27 March 2020. "COVID-19 Outbreak Preparation and Response Plan (Plano de Preparação e Resposta ao Surto do COVID-19)". [<https://www.misau.gov.mz/index.php/plano-de-contigencia>]. Accessed 5 September 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 evidence that the country has not shared samples in accordance with the PIP framework in the past two years. According to the 2014-2017 Pandemic Influenza Preparedness Framework by the World Health Organization (WHO), in page 50, "Mozambique has implemented a sentinel influenza surveillance system in Maputo City with two SARI surveillance sites and one ILI surveillance site to provide quality data. Surveillance staff were provided with training and supplies to facilitate their work in influenza case identification, specimen collection, and data reporting." [1] No evidence that Mozambique has not shared samples in accordance to the PIP framework was found in the February 2020 Biennial Progress Report of the PIP framework. [2] No further evidence was found in international or local news sources.

[1] World Health Organization. 2018. "Pandemic Influenza Preparedness Framework: Partnership Contribution High Level Implementation Plan I: Final Report 2014-2017". [<https://extranet.who.int/sph/sites/default/files/document-library/document/WHO-WHE-IHM-PIP-2018.3-eng.pdf>]. Accessed 5 September 2020.

[2] World Health Organization. February 2020. "Biennial Progress Report: 1 January 2018 – 31 December 2019". [<https://apps.who.int/iris/bitstream/handle/10665/332171/WHO-WHE-GIH-PIP-2020.1-eng.pdf?ua=1>]. Accessed 8 October 2020.

**5.6.1c**

**Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?**

Yes = 0 , No = 1

**Current Year Score: 1**

There is no evidence that the country has failed to share pandemic pathogen samples during an outbreak in the past two years. According to the WHO Disease Outbreak News, there have been two outbreaks in Mozambique in the past two years. The first case was of cholera in February 2018, and the second case was of Circulating vaccine-derived poliovirus type 2 in January 2019. [1,2] No further information was found in international or local media outlets and there is no evidence that Mozambique failed to share samples.

[1] World Health Organization. Disease Outbreak News. 19 February 2018. "Cholera - Mozambique".

[<https://www.who.int/csr/don/19-february-2018-cholera-mozambique/en/>]. Accessed 5 September 2020.

[2] World Health Organization. Disease Outbreak News. 25 January 2019. "Circulating vaccine-derived poliovirus type 2 - Mozambique". [<https://www.who.int/csr/don/25-january-2019-polio-mozambique/en/>]. Accessed 5 September 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: 2

2020

Economist Intelligence

##### 6.1.1b

Quality of bureaucracy (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 1

2020

Economist Intelligence

##### 6.1.1c

Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 1

2020

Economist Intelligence

##### 6.1.1d

Vested interests/cronyism (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 0

2020

Economist Intelligence

### 6.1.1e

Country score on Corruption Perception Index (0-100, where 100=best)

Input number

Current Year Score: 25

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: 1

2020

Economist Intelligence

## 6.1.2 Orderly transfers of power

### 6.1.2a

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 1

2021

Economist Intelligence

### 6.1.3 Risk of social unrest

#### 6.1.3a

**What is the risk of disruptive social unrest?**

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

**Current Year Score: 1**

2021

Economist Intelligence

### 6.1.4 Illicit activities by non-state actors

#### 6.1.4a

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

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

**Current Year Score: 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: 1**

2021

Economist Intelligence



## 6.1.5 Armed conflict

### 6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 2

2021

Economist Intelligence

## 6.1.6 Government territorial control

### 6.1.6a

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

Yes = 1, No = 0

Current Year Score: 0

2021

Economist Intelligence

## 6.1.7 International tensions

### 6.1.7a

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

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

Current Year Score: 3

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: 60.66

2017

United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO);  
The Economist Intelligence Unit

## 6.2.2 Gender equality

### 6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

**Current Year Score: 0.43**

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: 28.6**

2014

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 global map of the proportion of the informal sector in developing countries provided by the ILO, Mozambique has 95.7% of the population in the informal sector. [1] The World Bank indicates that in 2015 the rate of informal employment in Mozambique was 85%. That was the latest figure available. [2]

[1] International Labor Organization. "Statistics on the informal economy". [<https://ilostat.ilo.org/topics/informality/>]. Accessed 5 September 2020.

[2] World Bank. "Informal employment (% of total non-agricultural employment)". [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS>]. Accessed 5 September 2020.

### 6.2.3c

Coverage of social insurance programs (% of population)

Scored in quartiles (0-3, where 3=best)

**Current Year Score: 1**

2016, or latest available

World Bank; Economist Impact calculations

## 6.2.4 Public confidence in government

### 6.2.4a

**Level of confidence in public institutions**

Input number

**Current Year Score: 0**

2021

Economist Intelligence Democracy Index

## 6.2.5 Local media and reporting

### 6.2.5a

**Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?**

Input number

**Current Year Score: 1**

2021

Economist Intelligence Democracy Index

## 6.2.6 Inequality

### 6.2.6a

**Gini coefficient**

Scored 0-1, where 0=best

**Current Year Score: 0.54**

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: 2

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: 36.53

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: -2.79

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: 2

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: 60.16

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: 778.6

2019

WHO

### **6.5.1c**

Population ages 65 and above (% of total population)

Input number

Current Year Score: 2.88

2019

World Bank

### **6.5.1d**

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 14.4

2018

World Bank

### **6.5.1e**

Prevalence of obesity among adults

Input number

Current Year Score: 7.2

2016

WHO

## **6.5.2 Access to potable water and sanitation**

### **6.5.2a**

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 55.69

2017

UNICEF; Economist Impact

### 6.5.2b

**Percentage of homes with access to at least basic sanitation facilities**

Input number

**Current Year Score: 29.36**

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: 24.94**

2018

WHO Global Health Expenditure database

## 6.5.4 Trust in medical and health advice

### 6.5.4a

**Trust medical and health advice from the government**

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

**Current Year Score: 1**

2018

Wellcome Trust Global Monitor 2018

### 6.5.4b

**Trust medical and health advice from medical workers**

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

**Current Year Score: 1**

2018

Wellcome Trust Global Monitor 2018