

Niger

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

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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 publicly available evidence that Niger has a national antimicrobial residues (AMR) plan for the surveillance, detection, and reporting of priority AMR pathogens. According to a 2018 World Health Organisation (WHO) report, monitoring global progress on AMR, Niger is currently developing a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens [1]. Moreover, Niger is not listed in the WHO Library of national action plans as having an AMR plan [2]. Finally, there is no further evidence via the Ministry of Public Health or in the Ministry of Agriculture and Livestock in this regard [3,4]. Moreover, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger's capacities for the surveillance, detection, and reporting of priority AMR pathogens are non-existent. The JEE emphasizes the need to elaborate a national AMR plan [5,6]. According to the PVS Assessment for Niger of the World Organisation for Animal Health (OIE) published in 2019, Niger has a national AMR plan that was developed in coordination with the Ministry of Public Health, Livestock, and Environment. However, this plan is not publicly available [7]. Finally, according to news published on September 24, 2019 in a local newspaper, a press release was issued by the Ministry of Public Health, announcing the publication of a national AMR plan; however, neither the press release nor the AMR plan could be found [8].

[1] World Health Organization (WHO), Food and Agriculture Organisation of the United Nations (FAO). "Monitoring Global Progress on Addressing Antimicrobial Resistance". [<http://www.fao.org/3/ca0486en/CA0486EN.pdf>]. Accessed August 2020.

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

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[4] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[5] World Health Organisation (WHO). "JEE Mission Reports". [<https://www.who.int/ihr/procedures/mission-reports-africa/en/>]. Accessed August 2020.

[6] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[7] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

[8] Medias 24. 2019. "A National Strategy to Fight Against Antimicrobial Resistance". [<https://www.medias24.com/une-strategie-nationale-de-lutte-contre-la-resistance-aux-antimicrobiens-4532.html>]. Accessed August 2020.

1.1.1b

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

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

Current Year Score: 1

There is publicly available evidence that Niger can test for priority antimicrobial residues (AMR) pathogens, such as mycobacterium tuberculosis, Salmonella spp., Shigella spp, E. coli and S. pneumonia, but not for all 7+1 priority pathogens. There is publicly available evidence that Niger can test for mycobacterium tuberculosis in the Tuberculosis National Reference Laboratory, and for Salmonella spp., Shigella spp, E. coli and S. pneumonia in the Medical and Health Research Centre [1,2,3]. Finally, a more recent source from May 2018 provides evidence that Niger can test for S. pneumonia, but its testing capacity is reduced, as it is limited to the scope of the Rapid Access Enlargement Initiative (RACE) programme, implemented from 2013 to 2018, which aimed to prevent mortality among 230,000 children in four districts [4]. Further evidence could not be found via the Ministry of Public Health, in Niger Statistics documents, in public hospitals, the National Hospital of Niamey, in the National Hospital of Lamorde, or in the Ministry of Agriculture and Livestock [5,6,7,8,9]. The country is not listed in the World Health Organization's (WHO) Library of National Action Plans as having an AMR plan [10]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has laboratories that are capable of detecting AMR pathogens, although the specific list of AMR pathogens detected was not provided in the JEE [11].

[1] Ministry of Public Health. 2015. "National Programme to Fight Tuberculosis". [<http://www.sante.gouv.ne/projets-et-programmes/programmeme-national-de-lutte-contre-la-tuberculose/>]. Accessed August 2020.

[2] CERMES. [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[3] World Health Organization (WHO). 1993. "Prescription of Antibiotics in Three Countries in West Africa—Mauritania, Niger, and Senegal—Research Series, No. 09". [<http://apps.who.int/medicinedocs/fr/d/Jh2964f/#Jh2964f>]. Accessed August 2020.

[4] World Health Organization (WHO). May 2018. "Summative Evaluation of the WHO Rapid Access Enlargement Initiative (RACE)" [https://www.who.int/about/evaluation/race_eval_countrybriefs_v3_fr.pdf]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] Ministry of Public Health of Niger. February 2016. "Health Services Readiness Assessment Report with SARA and DQR Tools". [https://www.who.int/healthinfo/systems/SARA_NER_2015_Report.pdf?ua=1]. Accessed August 2020.

[7] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[8] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

[9] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

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

[11] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the government conducts detection or surveillance activities (e.g., in soil, waterways, etc.) for antimicrobial residues (AMR) or AMR organisms. According to a 2018 World Health Organization (WHO) report on global progress on AMR, Niger is currently developing a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens [1]. However, there is currently no information available on the content of this strategy. Moreover, according to the WHO AMR self-assessment questionnaire, the environmental sector is not actively involved in the development and implementation of a National AMR Action Plan. [2] Finally, there is no further evidence via the Ministry of Public Health or the WHO Library of National Action Plans [3,4]. Niger has a Ministry of Environment, but its website was not working for the period consulted (August 2020). Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is a need to conduct surveillance activities for antimicrobial residues or AMR organisms at all levels [5].

[1] World Health Organization (WHO), Food and Agriculture Organisation of the United Nations (FAO). 2018. "Monitoring Global Progress on Addressing Antimicrobial Resistance". [<http://www.fao.org/3/ca0486en/CA0486EN.pdf>]. Accessed August 2020.

[2] World Health Organization (WHO), Food and Agriculture Organisation of the United Nations (FAO). 2017. "Global Database for Antimicrobial Resistance Country Self Assessment". [<https://amrcountryprogress.org/>]. Accessed August 2020.

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

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

[5] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 1

There is publicly available evidence that Niger has national legislation or regulation in place requiring prescriptions for antibiotic use for humans. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the existence of a law regulating all antibiotic prescriptions [1]. However, there is evidence of gaps in enforcement. Ordinance No. 97-002 of January 10, 1997 requires prescriptions for specific types of antibiotics; however, the type of antibiotics that require prescriptions is not mentioned [2]. There is no further evidence available on the list of medications requiring prescriptions either via the Ministry of Public Health website or the ministry's One Health-RISC document, which is a document that presents a program for strengthening communities and human and animal health services in the health risk management linked to crises and disasters in Niger [3,4]. According to scientific papers and newspapers, the illegal antibiotic market is extremely popular in Niger [5,6].

[1] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Government of Niger. Ordinance No. 97-002 of January 10, 1997. "Concerning Pharmaceutical Legislation".

[<http://www.synphani.org/pdf/texte.pdf>]. Accessed August 2020.

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[4] Ministry of Public Health. September 2018. "One Health-RISC". [<http://www.sante.gouv.ne/programme-de-renforcement-des-communautes-et-des-services-de-sante-humaine-et-animale-dans-la-gestion-des-risques-sanitaires-lies->

aux-crisis-et-catastrophes-au-niger-one-health-risc/]. Accessed August 2020.

[5] Ministry of National Education. 2005. "Antibiotics in the Street in Niamey". [http://remed.org/wp-content/uploads/2016/09/M_I-These-marche-illicite-niamey-2005.pdf]. Accessed August 2020.

[6] Niamey.com. 2019. "The Trafficking of Fake Antibiotics: An Illegal, Deadly and Badly Sanctioned Phenomenon in Niger". [<http://news.aniamey.com/h/93686.html>]. Accessed August 2020.

1.1.2b

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

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

Current Year Score: 1

There is publicly available evidence that Niger has national legislation or regulation in place requiring prescriptions for antibiotic use for animals. However, there is evidence of gaps in enforcement. Article 27 of Decree No. 2011-617 of November 25, 2011 stipulates that all antibiotics for animals require prescriptions [1]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the existence of a law regulating all antibiotic prescriptions and includes animal health [2]. However, according to the World Organization for Animal Health (OIE), Performance of Veterinary Services (PVS) Assessment for Niger of 2019, there are evident gaps in enforcement and regulation is not applied [3].

[1] Republic of Niger. Decree No. 2011-617/PRN/MEL of November 25, 2011. "Regulating the Veterinary Pharmacy". [<https://www.csan-niger.com/wp-content/uploads/2017/12/Decret-Reglementant-Pharmacie-Veterinaire.pdf>]. Accessed August 2020.

[2] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[3] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

1.2 ZONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is insufficient evidence that Niger has a national law, plan, or equivalent strategy document that addresses zoonotic diseases; however, Niger has a national response plan for avian influenza and a Strategy for Sustainable Development of Livestock. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger does not have a comprehensive plan to address and control zoonotic diseases. However, it does have a national response plan for avian influenza [1]. Further, Niger has a Strategy for Sustainable Development of Livestock, with an axis focusing on animal health, with the following objectives listed (among others): "to fight against animal diseases; implement a surveillance and control system for animal diseases; develop joint programmes to combat human and animal tuberculosis, rabies and brucellosis." Moreover, one of the main priorities is to fight main zoonotic diseases that pose risks to human health [2]. Moreover, the World Organization for Animal Health (OIE), Performance of Veterinary Services (PVS) Gap analysis states that several

programs are in place for zoonotic diseases control, such as the rabies vaccination programme and a program for tuberculosis and brucellosis detection [3]. Finally, according to the PVS Assessment for Niger of the World Organization for Animal Health (OIE) published in 2019, Niger should develop action plans on a yearly basis to deal with priority zoonotic diseases [4].

[1] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock".

[<http://www.elevage.gouv.ne/IMG/pdf/plan-d-action-2013-2015.pdf>]. Accessed August 2020.

[3] World Organization for Animal Health (OIE) PVS Gap Analysis. February 2012. "Niger".

[http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/PVS_GapAnalysis_Rapport-Niger.pdf].

Accessed August 2020.

[4] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf].

Accessed August 2020.

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that there is national legislation, plans, or equivalent strategy document(s) that includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. According to the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organization for Animal Health (OIE) published in 2019, collaboration with the Ministry of Public Health and the Ministry of Livestock is very weak concerning zoonotic diseases [1]. Neither the Strategy for Sustainable Development of Livestock nor the national response plan for avian influenza include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans [2,3]. There is no further evidence in the Ministry of Public Health, in the Ministry of Livestock, or in the Ministry of Agriculture [4,5,6].

[1] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf].

Accessed August 2020.

[2] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock (Stratégie de Développement Durable de l'Élevage)". [<http://www.elevage.gouv.ne/IMG/pdf/plan-d-action-2013-2015.pdf>]. Accessed August 2020.

[3] Republic of Niger. 2007. "National Response Plan to Prevent and Fight Avian Influenza in Niger 2007-2010 (Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger 2007-2010)".

[<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] Ministry of Livestock (Ministère de l'élevage). [<http://www.elevage.gouv.ne/>]. Accessed August 2020.

[6] Ministry of Agriculture (Ministère de l'agriculture). [<http://www.agriculture.gouv.ne/>]. Accessed August 2020.

1.2.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient publicly available evidence that Niger has national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern. According to the World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Gap Analysis, there are several programs in place for zoonotic diseases control. Although the rabies vaccination program only focuses on vaccination, there is evidence that the tuberculosis and brucellosis programs cover surveillance, as one of the main objectives is to conduct 2,000 tests for the detection of brucellosis and 500 for tuberculosis per year [1]. There is no further evidence in the Joint External Evaluation (JEE) for Niger, conducted in July 2018 [2]. There is only evidence of one national plan to fight avian flu [3]. There is no further evidence available via the Strategy for Sustainable Development of Livestock (2013–2015) or its 2013–2035 counterpart, or via the Ministry of Public Health [4,5,6]. Niger has a Ministry of Agriculture, but its website was unavailable during the period consulted (August 2020). Finally, the Directorate of Animal Health, under the General Direction of Veterinary Services, is in charge of implementing strategies to improve animal health, as well as collecting and analyzing zoonotic data. Although these activities are explicitly under its mandate, it is not evident that this unit is responsible for the implementation of strategies to address zoonotic diseases [7].

[1] World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Gap Analysis. February 2012. "Niger". [http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/PVS_GapAnalysis_Rapport-Niger.pdf]. Accessed August 2020.

[2] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[3] Republic of Niger. September 2007. "National Emergency Plan to Prevent and Fight Avian flu in Niger 2007-2010 (Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger 2007-2010)". [<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020..

[4] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock 2013-2015 (Stratégie de Développement Durable de l'élevage)". [<http://www.elevage.gouv.ne/IMG/pdf/plan-d-action-2013-2015.pdf>]. Accessed August 2020.

[5] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock 2013–2035 (Stratégie de Développement Durable de l'élevage)". [<http://www.elevage.gouv.ne/IMG/pdf/sddel-2.pdf>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[7] Ministry of Livestock. "The Director of Animal Health (Directeur de la Santé Animale)". [<http://www.elevage.gouv.ne/spip.php?mot16>]. Accessed August 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 publicly available evidence that Niger has a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. Although the Joint External Evaluation (JEE) for Niger, conducted in July 2018, states that there is capacity from the three ministries to respond jointly to health emergencies, zoonoses have been managed in

Niger almost independently by the Ministry of Public Health, the Ministry of Livestock, and the Ministry of Environment and Sustainable Development [1]. However, in September 2017, Niger launched a One Health program to effectively manage health risks during crisis [2]. The One Health concept is "an approach to the design and implementation of programs, policies, legislation, and research in which multiple sectors communicate and work together to achieve better public health outcomes. It is particularly relevant for the control of zoonoses (such as flu, rabies and Rift Valley Fever)" [3]. Nevertheless, there is currently insufficient evidence to confirm that the country's One Health-RISC program (Program for Strengthening Communities and Human and Animal Health Services in the Health Risk Management Linked to Crises and Disasters in Niger) has already produced results and that an agency has been created. Indeed, there is no evidence of such results in the Ministry of Public Health or in the Ministry of Agriculture and Livestock [4,5]. Finally, according to the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organization for Animal Health (OIE) published in 2019, there is a National Committee to manage epidemics [6].

[1] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Ministry of Public Health of Niger. September 2018. "One Health-RISC". [<http://www.sante.gouv.ne/programme-de-renforcement-des-communautes-et-des-services-de-sante-humaine-et-animale-dans-la-gestion-des-risques-sanitaires-lies-aux-crises-et-catastrophes-au-niger-one-health-risc>]. Accessed August 2020.

[3] World Health Organization (WHO). "One Health". [<https://www.who.int/features/qa/one-health/en/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.

[6] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. There is no evidence available via a government report, "National Information on Disaster Prevention and Management in Niger," in a scientific paper about cases of rift valley fever, in the "National Emergency Plan to Prevent and Fight Avian Flu," in the Ministry of Livestock's Communication Strategy, in the One Health-RISC document (Program for Strengthening Communities and Human and Animal Health Services in the Health Risk Management Linked to Crises and Disasters in Niger), via the Ministry of Public Health, in the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organization for Animal Health (OIE) published in 2019 or in the Ministry of Agriculture and Livestock. [1,2,3,4,5,6,7,8]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, makes no mention of this matter [9].

[1] Republic of Niger. " National Information on Disaster Prevention and Management in Niger".

[<http://www.elevage.gouv.ne/IMG/pdf/niger-report.pdf>]. Accessed August 2020.

- [2] Health Sciences and Diseases. June 2017. "Epidemiological, Clinical and Evolutionary Aspects of Complicated Cases of Rift Valley Fever in the Health District of Tchintabaraden, Niger ". [<https://www.alima-ngo.org/uploads/eb2321d2045746102c30ca302b1159a5.pdf>]. Accessed August 2020.
- [3] Republic of Niger. September 2007. "National Emergency Plan to Prevent and fight Avian flu in Niger 2007–2010". [<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020.
- [4] Republic of Niger. "Ministry of Livestock's Three-Year Operational Communication Strategy and Plan". [http://www.elevage.gouv.ne/IMG/pdf/strategie_de_communication.pdf]. Accessed August 2020.
- [5] Ministry of Public Health of Niger. September 2018. " One Health-RISC". [<http://www.sante.gouv.ne/programme-de-renforcement-des-communautes-et-des-services-de-sante-humaine-et-animale-dans-la-gestion-des-risques-sanitaires-lies-aux-crisis-et-catastrophes-au-niger-one-health-risc>]. Accessed August 2020.
- [6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [7] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [8] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). In 2017, Niger adopted a general data privacy law, but there is no specific mention of surveillance of owned livestock [1]. This may be partially related to the lack of evidence of a voluntary or mandatory mechanism for disease reporting to the government. No further evidence could be found via the Ministry of Public Health, the World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Assessment, in the government's "Strategy for Sustainable Development of Livestock," or the Ministry of Agriculture and Livestock [2,3,4,5]. Further, the Joint External Evaluation (JEE) for Niger, conducted in July 2018, makes no mention of this matter [6].

- [1] Official Journal of the Republic of Niger. Law No. 2017-28. "Related to the Protection of Personal Data". [<https://www.afapdp.org/wp-content/uploads/2017/02/Loi-n%C2%B02017-28-du-03-mai-2017.pdf>]. Accessed August 2020.
- [2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [3] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [4] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock". [<http://www.elevage.gouv.ne/IMG/pdf/plan-d-action-2013-2015.pdf>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 available evidence that demonstrates that Niger conducts surveillance of zoonotic disease in wildlife. The Performance of Veterinary Services (PVS) Assessment for Niger of the World Organization for Animal Health (OIE) published in 2019 indicates that surveillance of zoonotic diseases in wildlife has punctually been conducted, for example, during rift valley epidemics or avian flu. There is also evidence of 20 wildlife observation posts; however, it is not specified which diseases are under surveillance [1]. According to the government's Strategy for Sustainable Development of Livestock (2013–2035), Niger has limited capacity to conduct epidemiological surveillance in livestock. There is no mention of wildlife [2]. No further evidence could be found via the Directorate for Surveillance and Response to Epidemics, whose description page, under the Ministry of Public Health, is blank [3]. There is no further evidence via the Ministry of Public Health, in a document to manage health crisis, in national plans to fight epidemics such as rift valley fever or Avian Flu or in the Ministry of Agriculture and Livestock [4,5,6,7,8]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, makes no mention of this matter [9].

[1] World Organization for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf].

Accessed August 2020.

[2] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock 2013-2035 (Stratégie de Développement Durable de l'élevage)". [<http://www.elevage.gouv.ne/IMG/pdf/sddel-2.pdf>]. Accessed August 2020.

[3] Ministry of Public Health of Niger. "Directorate for Surveillance and Response to Epidemics (Direction de la surveillance et de la riposte aux épidémies)". [<http://www.sante.gouv.ne/les-directions-nationales/direction-de-la-surveillance-et-de-la-reposte-aux-epidemies/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] Republic of Niger. "National information on disaster prevention and management in Niger (Informations nationales sur la Prévention et la gestion des catastrophes au Niger)". [<http://www.elevage.gouv.ne/IMG/pdf/niger-report.pdf>]. Accessed August 2020.

[6] Health Sciences and Diseases. June 2017. "Epidemiological, Clinical and Evolutionary Aspects of Complicated Cases of Rift Valley Fever in the Health District of Tchintabaraden, Niger". [<https://www.alima-ngo.org/uploads/eb2321d2045746102c30ca302b1159a5.pdf>]. Accessed August 2020.

[7] Republic of Niger. September 2007. "National Emergency Plan to Prevent and fight Avian flu in Niger 2007–2010 (Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger 2007-2010)". [<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020.

[8] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.

[9] World Health Organization (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

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

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Niger 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. One of the main recommendations of the World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Gap Analysis, published in 2012, is to implement mechanisms to more actively involve the private sector in the control or response to zoonoses; currently, only private organizations participate in official vaccination campaigns [1]. Indeed, according to the PVS Assessment of 2019, the private sector is not involved in any disease control or response activity; formally, it is only involved in vaccination [2]. Moreover, in the Ministry of Livestock's Strategy for the Sustainable Development of Livestock (2013–2035), one of the main objectives is to establish a sustainable partnership between the public and private sectors to control or respond to zoonoses [3]. Further, in the annual report for Niger produced by the World Health Organization (WHO), the weak participation of the private sector is also mentioned [4]. There is no additional evidence of private-sector involvement

in the government report, "National Information on Disaster Prevention and Management in Niger," via the Ministry of Public Health or the Ministry of Agriculture and Livestock [5,6,7]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is low participation by private actors [8].

- [1] World Organisation for Animal Health (OIE) PVS Gap Analysis. February 2012. "Niger".
[http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/PVS_GapAnalysis_Rapport-Niger.pdf]. Accessed August 2020.
- [2] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".
[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [3] Ministry of Livestock. May 2013. "Strategy for Sustainable Development of Livestock 2013–2035".
[<http://www.elevage.gouv.ne/IMG/pdf/sddel-2.pdf>]. Accessed August 2020.
- [4] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".
[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.
- [5] Republic of Niger. "National Information on Disaster Prevention and Management in Niger".
[<http://www.elevage.gouv.ne/IMG/pdf/niger-report.pdf>]. Accessed August 2020.
- [6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [7] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [8] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of these facilities. In 2003, Niger enforced the Cartagena Protocol on Biosafety. In 2005, it presented a National Biosafety Framework. Nevertheless, both mainly focus on genetically modified organisms (GMOs) [1,2]. There is no further evidence of such a record via the Ministry of Public Health or in the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database. Niger has not submitted any BWC Confidence Building Measures reports [3,4,5]. Niger has a Ministry of Agriculture and Livestock, but no evidence could be found [6]. The website of the Ministry of Defence was unavailable. Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no legal framework for biosafety and biosecurity in Niger. Moreover, the JEE recommends that the country "establish and periodically update a registry of pathogens, dangerous toxins and other substances and ensure their surveillance at all levels" [7].

- [1] Republic of Niger. January 2005. "National Biosafety Framework".
[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] Swissaid. January 2017. "Critical study of the legal framework and political devices about seeds in Niger".
[https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] Verification Research, Training, and Information Centre (VERTIC). "BWC Legislation Database".
[<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.
- [5] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [6] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [7] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has in place legislation and/or regulations related to biosecurity that 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. In 2003, Niger enforced the Cartagena Protocol on Biosafety. In 2005, it presented a National Biosafety Framework. Nevertheless, these mainly focus on genetically modified organisms (GMOs) [1,2]. There is no further evidence of such legislation via the Ministry of Public Health, in the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database, in the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures a reporting mechanism set by the United Nations (UN) Biological Weapons Convention [3,4,5,6]. Further, no evidence could be found on the website of the Ministry of Agriculture and Livestock, and the Ministry of Research was inoperative during the period consulted (August 2020) [7,8]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no legal framework for biosafety and biosecurity in Niger [9]. Finally, according to the Performance of Veterinary Services (PVS) Assessment of 2019, biosecurity measures in the national laboratories are non-existent or rather limited [10].

- [1] Republic of Niger. January 2005. "National Biosafety Framework".
[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] Swissaid. January 2017. "Critical Study of the Legal Framework and Political Devices about Seeds in Niger".
[https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] Verification Research, Training, and Information Centre (VERTIC). "BWC Legislation Database".
[<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.
- [5] CERMES. [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [6] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [7] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[8] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

[9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[10] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

1.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations, and there is no biosecurity legislation to be enforced. In 2003, Niger enforced the Cartagena Protocol on Biosafety. In 2005, it presented a National Biosafety Framework. Nevertheless, these mainly focus on genetically modified organisms (GMOs) [1,2]. There is no further evidence of such legislation via the Ministry of Public Health, in the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database, in the Niger Medical and Health Research Centre (CERMES; the national laboratory), or a the Confidence Building Measures reporting mechanism established by the United Nations (UN) Biological Weapons Convention [3,4,5,6]. There is no further evidence in the Ministry of Agriculture and Livestock [7]. The websites for the Ministry of Defence and Ministry of Research were inoperative during the period consulted (August 2020) [8,9]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no legal framework for biosafety and biosecurity in Niger [10].

[1] Republic of Niger. January 2005. "National Biosafety Framework".

[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.

[2] Swissaid. January 2017. "Critical Study of the Legal Framework and Political Devices about Seeds in Niger".

[https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

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

[<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.

[5] CERMES. [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[6] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.

[7] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[8] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

[9] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.

[10] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. Further, there is no evidence of such an inventory in the Ministry of Public Health, the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database, the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures reporting mechanism established by the United Nations (UN) Biological Weapons Convention [1,2,3,4]. There is no further evidence in the Ministry of Agriculture and Livestock [5]. Further, the websites of the Ministry of Research and Ministry of Defence were both unavailable during the period consulted (August 2020) [6,7]. Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has not taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities [8].

[1] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

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

[<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[4] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.

[5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[6] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

[7] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.

[8] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.3.1e

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has in-country capacity to conduct polymerase chain reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen. The National Plan to fight Ebola does not mention any PCR-based diagnostic [1]. Moreover, there is publicly available evidence that Niger does not have the capacity to detect Ebola, as a sampling procedure document states that in case of suspected Ebola infection, the blood sample must be sent to the National Research Centre of Lyon, France, or the Pasteur Institute in Dakar, Senegal [2]. There is no further evidence available via the Ministry of Public Health or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [3,4]. There is no further evidence in the Ministry of Agriculture and Livestock either [5]. The link to the Ministry of Defence website was broken during the research period (August 2020). Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has in-country capacity to conduct PCR-based diagnostic testing, but

it is not specified that it has this capacity for anthrax and/or Ebola [6].

- [1] Republic of Niger. October 2014. "National Ebola Preparedness and Response Plan". [<https://www.medbox.org/plan-national-de-preparation-et-de-reponse-a-lepidemie-de-la-maladie-a-virus-ebola-niger/download.pdf>]. Accessed August 2020
- [2] CERMES. "Sampling procedure and sending of blood samples in case of suspected Ebola infection". [<https://www.medbox.org/procedure-de-prelevement-et-denvoi-dun-echantillon-sanguin-a-ipd-pour-suspicion-dinfection-a-virus-ebola/download.pdf>]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] Niger Medical and Health Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available evidence that Niger requires biosecurity training, using a 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. Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology and biosecurity, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. According to the Performance of Veterinary Services (PVS) Assessment of 2019, employees of the Department of Diagnostics, Epidemiological Investigations, and Veterinary Research benefited from almost 10 training courses in 2018 on diagnostic methods, biosecurity, bioinformatics/statistics, and inter-laboratory tests. However, there is no evidence that these trainings were conducted using a standardised, required approach and that regional laboratories benefited from these opportunities [2]. There is no further evidence available via the Ministry of Public Health or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [3,4]. There is no further evidence in the Ministry of Agriculture and Livestock [5]. The websites of the Ministry of Defence and Ministry of Research were both unavailable during the research period (August 2020) [6,7]. Further, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no biosecurity training for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [8]. Finally, there is no further evidence in the Verification Research, Training, and Information Centre (VERTIC) database and Niger has not submitted any Confidence Building Measures (CBM) report [9,10].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

- [4] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.
- [7] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [8] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [9] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.
- [10] Confidence Building Measures (CBM). "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed October 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is no publicly available evidence that there are regulations or licensing conditions specifying 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. Further, Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology and biosecurity, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health, the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [2,3,4]. There is also no further evidence in the Ministry of Agriculture and Livestock [5]. The websites of the Ministry of Defence and Ministry of Research were both unavailable during this time. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, makes no mention on this matter [6]. Niger has not submitted any Confidence Building Measures (CBM) report [7].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [3] Verification Research, Training, and Information Centre (VERTIC). "BWC Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.
- [4] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [7] Confidence Building Measures (CBM). "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed October 2020.

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has national regulations on the safe and secure transport of infectious substances (Categories A and B). In 2015, the World Health Organisation (WHO) offered a workshop for the secure transport of infectious substances in Niger; however, there is no evidence of national regulation [1]. In 2014, an activity report that evaluated the quality of medical biology services in Niger listed the lack of training and regulation for secure transport of infectious substances as a main challenge [2]. In the Niger Drivers Guide, there is only one mention related to dangerous material, which refers to the obligation to regulate the maximum weight and speed of trucks transporting dangerous material [3]. Moreover, according to Niger's Management Plan for Dangerous Waste (2017), there is no specific procedure for the management, collection, transport, storage, and treatment of waste produced by health institutions [4]. In this same document, a reference is made to Decree No. 70-98 /MTP/T/MU of March 27, 1970, which relates to the transport by road of infected and dangerous goods. Nevertheless, this decree could not be found anywhere on the website of the Ministry of Public Health [5]. Nevertheless, according to Decree No. 2010-733/PCSTD/MTT/A of November 10, 2010, the infectious material category appears to be constrained to putrescible agents; there is no evidence that this may also apply to epidemic diseases [6]. In the Waste Management Plan for Health Care in Niger, there is no reference to secure transport of infectious substances [7]. Finally, according to the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organisation for Animal Health (OIE) published in 2019, the transport of samples to a laboratory depends on the availability of means of transport (public transport, service, or private vehicle) [8]. There is no further evidence available via a World Health Organisation (WHO) document on Ebola preparedness or in the Confidence Building Measures (CBM) reporting mechanism established by the United Nations (UN) Biological Weapons Convention [9,10]. Niger has a Ministry of Agriculture, but its website was unavailable during the period consulted (August 2020); the website of the Ministry of Defence was also unavailable during the period consulted [11,12]. Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is a need to develop guidelines for the safe and secure transport of infectious substances [13]. There is no further evidence in the Verification Research, Training, and Information Centre (VERTIC) database [14].

[1] World Health Organisation (WHO). February 2015. "Ebola Control: Training Workshop for Health Workers on the Safe Transport of Infectious Substances in Niamey (Lutte contre Ebola: Clôture atelier de formation des agents de santé sur le transport sécurisé des matières infectieuses à Niamey)". [<https://afro.who.int/fr/news/lutte-contre-ebola-cloture-atelier-de-formation-des-agents-de-sante-sur-le-transport-secureise>]. Accessed August 2020.

[2] Ministry of Public Health of Niger. "Activity Report 2014 (Rapport d'activité 2014)". [http://www.globe-network.org/sites/default/files/fr/ressources/conferences/annexe_5_bilan_des_activites_niger.pdf]. Accessed August 2020.

[3] Borderless. November 2016. "Niger Drivers Guide". [http://www.borderlesswa.com/sites/default/files/ressources/aug18/Niger%20Drivers%20Guide%20FRENCH-v2_0.pdf]. Accessed August 2020.

[4] Republic of Niger. December 2017. "Management Plan for Dangerous Waste". [<http://documents.worldbank.org/curated/en/995731520537562250/pdf/SFG4135-V4-EA-FRENCH-P161163-PUBLIC-Disclosed-3-8-2017.pdf>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] Republic of Niger. Decree No. 2010-733/PCSTD/MTT/A of November 10th 2010. "Determining the Conditions for Land Transport of Strategic Products and Access Conditions to Mining and Hydrocarbon Sites (Déterminant les conditions de

- transport par voie terrestre des produits stratégiques et les conditions d'accès aux sites miniers et d'hydrocarbures)". [<http://documents.worldbank.org/curated/en/995731520537562250/pdf/SFG4135-V4-EA-FRENCH-P161163-PUBLIC-Discovered-3-8-2017.pdf>]. Accessed August 2020.
- [7] Ministry of Public Health of Niger. January 2015. "Waste Management Plan from Health Care in Niger". [<http://documents.worldbank.org/curated/en/304851468004163808/pdf/E47910FRENCHOP00Box391417B00PUBLIC0.pdf>]. Accessed August 2020.
- [8] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [9] World Health Organisation (WHO). December 2014. "Ebola Virus Disease Preparedness Team (équipe de renforcement de la préparation à la maladie à virus Ebola)". [https://apps.who.int/iris/bitstream/handle/10665/152643/WHO_EVD_PCV_Niger_15_fre.pdf;jsessionid=CFFED97188F25E11255BD78489934268?sequence=1]. Accessed August 2020.
- [10] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [11] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.
- [12] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [13] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [14] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has 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. Although there is evidence that the air navigation dangerous goods regulations oversee the secure transport of disease samples, and provides details on the appropriate packaging to be used and the responsibilities of the sender, there is no evidence of end-user screening. Infectious samples are listed as dangerous material. The national civil aviation agency follows the technical instructions of the International Civil Aviation Organisation (ICAO) [1]. The ICAO restricts certain exports/imports from the country, such as liquids that emit toxic vapours, explosives, and certain infectious diseases or chemical weapons. No further specifications could be found. To be transported, the listed substances require prior approval of the government [2]. Finally, Niger follows International Air Transport Association (IATA) 650 Regulations for the transport of infectious samples, which incorporate the ICAO provisions; however, there is no evidence of national legislation, regulation, or other guidance in place [2]. There is no further evidence available via the Ministry of Public Health, the Ministry of Agriculture and Livestock, or in the Confidence Building Measures (CBM) reporting mechanism established by the UN Biological Weapons Convention [3,4,5]. The websites for the Ministry of Defence, Trade, and Ministry of Research were inoperative during the period consulted (October 2020) [6,7]. There is no further evidence in the Verification Research,

Training, and Information Centre (VERTIC) database [8].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] SwissAid. January 2017. "Critical Study of the Legal Framework and Political Devices about Seeds in Niger (étude critique du cadre juridique et des dispositifs politiques sur les semences au Niger)". [https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.
- [5] VERTIC. "BWC Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.
- [6] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed October 2020.
- [7] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed October 2020.
- [8] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has in place national biosafety legislation and/or regulations. In 2003, Niger enforced the Cartagena Protocol on Biosafety. In 2005, it presented a National Biosafety Framework. These mainly focus on genetically modified organisms (GMOs) [1,2]. There is no further evidence of such legislation via the Ministry of Public Health, in the VERTIC Biological Weapons Convention (BWC) Legislation Database, in the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBM) reporting mechanism established by the UN Biological Weapons Convention [3,4,5,6]. There is no further evidence in the Ministry of Agriculture and Livestock [7]. Further, the websites for the Ministry of Defence and Ministry of Research were inoperative during the period consulted (August 2020) [8,9]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no legal framework for biosafety and biosecurity in Niger [10].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] SwissAid. January 2017. "Critical Study of the Legal Framework and Political Devices about Seeds in Niger". [https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] VERTIC. "BWC Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.

- [5] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [6] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [7] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [8] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [9] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.
- [10] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has in place national biosafety legislation and/or regulations and, therefore, there is no evidence of an agency to enforce these legislations/regulations. In 2003, Niger enforced the Cartagena Protocol on Biosafety. In 2005, it presented a National Biosafety Framework. However, these mainly focus on genetically modified organisms (GMOs) [1,2]. There is no further evidence of such legislation via the Ministry of Public Health, in the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database, in the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBM) reporting mechanism established by the UN Biological Weapons Convention [3,4,5,6]. There is no further evidence in the Ministry of Agriculture and Livestock [7]. The websites for the Ministry of Defence and Ministry of Research were inoperative during the period consulted (August 2020) [8,9]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no legal framework for biosafety and biosecurity in Niger [10].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] SwissAid. January 2017. "Critical Study of the Legal Framework and Political Devices about Seeds in Niger". [https://www.sosfaim.lu/wp-content/uploads/2017/04/Etude_critique_cadre_juridique_sur_les_semences_Niger_DEFsmall.pdf]. Accessed August 2020.
- [3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [4] Verification Research, Training, and Information Centre (VERTIC). "BWC Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.
- [5] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [6] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [7] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [8] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [9] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.
- [10] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available evidence that Niger requires biosafety training, using a standardized, 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. Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology and biosecurity, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [2,3]. There is no further evidence in the Ministry of Agriculture and Livestock [4]. Similarly, the websites of the Ministry of Defence and Ministry of Research were both unavailable during this time (August 2020) [5,6]. Finally, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no biosecurity training for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential [7]. There is no further evidence in the Verification Research, Training, and Information Centre (VERTIC) database and Niger has not submitted any Confidence Building Measures (CBM) report [8,9].

[1] Republic of Niger. January 2005. "National Biosafety Framework".

[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[4] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.

[5] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.

[6] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

[7] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[8] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

[9] Confidence Building Measures (CBM). "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed October 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger 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. Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology, biosecurity, or biosafety, and Niger has only three specialized biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health, the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBM) reporting mechanism established by the UN Biological Weapons Convention [2,3,4]. There is no further evidence in the Ministry of Agriculture and Livestock. The websites of the Ministry of Defence and Ministry of Research were both unavailable during the research period (August 2020) [5,6,7]. There is no further evidence in the Verification Research, Training, and Information Centre (VERTIC) database [8].

[1] Republic of Niger. January 2005. "National Biosafety Framework".

[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[4] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.

[5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[6] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.

[7] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020

[8] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology, biosecurity, or biosafety, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health, the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBM) reporting mechanism set by the United Nations (UN) Biological Weapons Convention [2,3,4]. There is no further evidence in the Ministry of Agriculture and Livestock. The websites of the Ministry of Defence and Ministry of Research were both unavailable during this time [5,6,7]. There is no further evidence in the Verification Research, Training, and Information Centre (VERTIC) database [8].

[1] Republic of Niger. January 2005. "National Biosafety Framework".

[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.

- [2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [3] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [4] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.
- [7] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [8] Verification Research, Training, and Information Centre (VERTIC). [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

1.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. Niger does not have any institution that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology, biosecurity or biosafety, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health, the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBM) reporting mechanism established by the United Nations (UN) Biological Weapons Convention [2,3,4]. There is no further evidence in the Ministry of Agriculture and Livestock. The websites of the Ministry of Defence and Ministry of Research were both unavailable during this time [5,6,7]. There is no further evidence in the Vertic database [8].

- [1] Republic of Niger. January 2005. "National Biosafety Framework". [https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.
- [2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [3] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [4] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.
- [5] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [6] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.
- [7] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.
- [8] VERTIC. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. Accessed October 2020.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has national legislation, regulation, policy, or other guidance that requires the screening of synthesised DNA before it is sold. There is no institution in Niger that currently conducts research in genetics for recombinant DNA and genetically modified organisms (GMOs). Moreover, public institutions have limited knowledge in biotechnology and biosecurity, and Niger has only three specialised biotechnologists and no biosecurity specialist [1]. There is no further evidence available via the Ministry of Public Health, the Verification Research, Training, and Information Centre (VERTIC) Biological Weapons Convention (BWC) Legislation Database, in the Niger Medical and Health Research Centre (CERMES; the national laboratory), or in the Confidence Building Measures (CBMs) reporting mechanism established by the United Nations (UN) Biological Weapons Convention [2,3,4,5]. There is no further evidence in the Ministry of Agriculture and Livestock. The websites of the Ministry of Defence and Ministry of Research were both unavailable during this time [6,7,8].

[1] Republic of Niger. January 2005. "National Biosafety Framework".

[https://unep.ch/biosafety/old_site/development/Countryreports/NENBFrep.pdf]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] VERTIC. "BWC Legislation Database". [<http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/bwc-legislation-database/introduction.php>]. Accessed August 2020.

[4] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[5] United Nations Biological Weapons Convention. "Niger". [<https://bwc-ecbm.unog.ch/state/niger>]. Accessed August 2020.

[6] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[7] Ministry of Defence. [<http://www.defense.gouv.ne/index.php/mentions-legales/25-ministere/minister>]. Accessed August 2020.

[8] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 0

2019

World Health Organization

1.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 2

There is publicly available evidence that the national laboratory system has the capacity to conduct diagnostic tests for at least five of the ten core tests defined by the World Health Organization (WHO). The Medical and Health Research Centre (CERMES) is considered the national reference laboratory that is in charge of co-ordinating the national laboratory system. There is evidence that the national laboratory system can perform the microscopy test for mycobacterium tuberculosis; the rapid diagnostic testing for plasmodium spp. (malaria); the serology test for HIV; the polymerase chain reaction (PCR) testing for Influenza virus (flu); the virus culture for poliovirus (polio) and bacterial culture for Salmonella enteritidis serotype Typhi (typhoid) [1,2,3,4,5]. Moreover, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has defined the four country-specific tests: meningitis, rift valley fever, measles, and yellow fever. However, it is not specified that the country has the capacity to conduct these diagnostic tests apart from the confirmation that CERMES can produce rapid diagnostic testing for meningitis [6].

[1] Boyer. September 2014. "The Medical and Health Research Centre (CERMES) of Niamey, Niger".

[https://www.researchgate.net/publication/267874720_The_centre_for_medical_research_and_health_in_Niamey_Niger_The_New_CERMES]. Accessed August 2020.

[2] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.

[3] Republic of Niger. "National Report on the Progress of the UNGASS, STI/HIV/AIDS Commitment Statement".

[http://www.unaids.org/sites/default/files/country/documents/niger_2008_country_progress_report_fr.pdf]. Accessed August 2020

[4] Boubacar Ma, Nassara H, et al. 2015. "Influenza sentinel surveillance among patients with Influenza-like-illness and severe acute respiratory illness within the framework of the national reference laboratory, Niger, 2009–2013".

[<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133178>]. Accessed August 2020.

[5] World Organisation for Animal Health (OIE). "PVS Gap Analysis. February 2012. Niger".

[http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/PVS_GapAnalysis_Rapport-Niger.pdf]. Accessed August 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

2.1.1b

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

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

Current Year Score: 0

There is no publicly available evidence of a national plan, strategy, or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. The disease specific plans for COVID-19 and one for influenza do not consider testing for novel pathogens, scaling capacity, and defining goals for testing [1,2]. There is no evidence of a national public health emergency response plan in place that addresses planning for multiple communicable diseases with pandemic potential. In addition, there is no further evidence available via the Medical and Health Research Centre (CERMES), the Ministry of Public Health of Niger, or in the Joint External Evaluation (JEE) for Niger [3,4,5].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] Republic of Niger. September 2007. "National Emergency Plan to Prevent and Fight Avian Flu in Niger, 2007–2010 (Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger 2007-2010)".

[<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the Medical and Health Research Centre (CERMES; the national laboratory) is accredited. There is no evidence available via CERMES itself or the Ministry of Public Health [1,2]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is no plan in place for the quality assurance of laboratories [3]. Finally, according to the World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS)

Assessment of 2019, currently, none of the national laboratories are accredited with ISO 17025 [4].

[1] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[4] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf].

Accessed August 2020.

2.1.2b

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that the national laboratory is subjected to external quality assurance review. According to scientific papers, the external quality assurance of tests conducted in the Medical and Health Research Centre (CERMES) is done collectively by the World Health Organisation (WHO) Collaborating Centres, the Pasteur Institute, and the Norwegian Institute of Public Health [1,2]. Moreover, Niger is a member of the regional laboratory network, RESAOLAB. Through this network, CERMES, which is the reference facility, benefits from external quality assurance reviews [3]. However, the Joint External Evaluation (JEE) for Niger, conducted in July 2018, notes that, "although the country has conducted an external evaluation of the laboratory quality, there is no a comprehensive plan on quality assurance of the laboratories". The JEE also states that for programmes such as meningitis, cholera, gastroenteritis, influenza, HIV, and tuberculosis, reference laboratories participate in an external quality assessment programme through the WHO [4]. There is no further evidence available via CERMES, the Ministry of Public Health, the United States (US) Centres for Disease Control and Prevention, the Pasteur Institute, the Norwegian Institute of Public Health, or the WHO Collaborative Centres [5,6,7,8,9,10].

[1] Boisier P, et al. "Epidemiological Patterns of Meningococcal Meningitis in Niger in 2003 and 2004: Under the Threat of N. meningitidis Serogroup W13". [<https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-3156.2005.01394.x>]. Accessed August 2020.

[2] Sidikou F, et al. "Emergence of Epidemic Neisseria Meningitidis Serogroup C in Niger, 2015: An Analysis of National Surveillance Data". [<http://europepmc.org/articles/pmc5737706>]. Accessed August 2020.

[3] RESAOLAB. 2015. [<http://resaolab.globe-network.org/sites/default/files/documents/public/resaolab/plaquette-resaolab-2015.pdf>]. Accessed August 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[5] Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[7] Centres for Disease Control and Prevention. [<https://www.cdc.gov/about/default.htm>]. Accessed August 2020.

[8] Institut Pasteur. "The Institut Pasteur International Network ". [<https://www.pasteur.fr/en/institut-pasteur/institut-pasteur-throughout-world/institut-pasteur-international-network>]. Accessed August 2020.

[9] Norwegian Institute of Public Health. [<https://www.fhi.no/en/>]. Accessed August 2020.

[10] Institut Pasteur. "WHO Collaborative Centres". [<https://www.pasteur.fr/fr/sante-publique/ccoms/meningites-bacteriennes>]. Accessed August 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient publicly available evidence that Niger has a nationwide specimen transport system. Although the Joint External Evaluation (JEE) for Niger, conducted in July 2018, states that there is transport of samples from the peripheral to the regional levels and to the national reference laboratories, it notes that this "has not yet been formalised by written procedures," and that use of the system is weak due to financial constraints. This transport system is funded by partners [1]. There is also evidence of a system in place through the West African Laboratory Network (RESAOLAB) network financed by the Mériex Foundation. This system is pre-paid by this foundation and secure transport is ensured by Bioport [2]. Bioport is a non-profit organisation offering logistic services to solidarity entities. It is in charge of organising transport and stock management, and ensuring quality control and packaging of infectious samples. [3] According to a paper from 2017, a rapid transport system was implemented by "the Directorate of Surveillance and Response to Epidemics (DSRE) in collaboration with private human traffic transportation mechanism to forward specimen to DSRE then to the Medical and Health Research Centre (CERMES) within 36 hours". [4] No further details on this system could be found via the Ministry of Public Health or CERMES [5,6]. However, the JEE scores Niger as a 2 for section D.1.2, which stands for "System for the Transfer and Transport of Samples", which indicates that a "system is in place to transport specimens to national laboratories from less than 50% of intermediate level/districts in country for advanced diagnostics" [1,7]. There is no further evidence provided by the Ministry of Agriculture and Livestock [8]. Finally, according to the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organisation for Animal Health (OIE) published in 2019, the transport of samples to a laboratory depends on the availability of means of transport (public transport, service or private vehicle) [9].

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Mériex Foundation. September 2014. "Ebola Epidemic : Mériex Foundation Strengthens West African Healthcare Systems with RESAOLAB". [<https://www.fondation-merieux.org/en/news/ebola-epidemic-fondation-merieux-strengthens-west-african-healthcare-systems-with-resaolab/>]. Accessed August 2020.

[3] Bioport Association. "Our Mission, Our Goals". [<http://www.bioport-logistique.com/>]. Accessed August 2020.

[4] Manzo M, et al. July 2017. "Cholera in Niger Republic: An Analysis of National Surveillance Data, 1991–2015".

[https://www.researchgate.net/publication/318667191_Cholera_in_Niger_Republic_An_Analysis_of_National_Surveillance_Data_1991_-_2015]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[7] World Health Organisation (WHO). 2016. "Joint External Evaluation Tool".

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

[8] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

[9] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no publicly available evidence of 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. Further, there is no such evidence via the Medical and Health Research Center (CERMES), the Ministry of Public Health, the US Centres for Disease Control and Prevention, the Pasteur Institute, the Norwegian Institute of Public Health, or the World Health Organization (WHO) Collaborative Centres [1,2,3,4,5,6]. In 2020, Niger issued its plan to prevent and fight the coronavirus disease; however, there is no evidence of 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 [7]. In addition, there is no such evidence in the National Emergency Plan to Prevent and Fight Avian Flu in Niger in the period 2007–2010 [8].

[1] Niger Medical and Health Research Center (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] Centres for Disease Control and Prevention. [<https://www.cdc.gov/about/default.htm>]. Accessed August 2020.

[4] Institut Pasteur. "The Institut Pasteur International Network ". [<https://www.pasteur.fr/en/institut-pasteur/institut-pasteur-throughout-world/institut-pasteur-international-network>]. Accessed August 2020.

[5] Norwegian Institute of Public Health. [<https://www.fhi.no/en/>]. Accessed August 2020.

[6] Institut Pasteur. "WHO Collaborative Centres". [<https://www.pasteur.fr/fr/sante-publique/ccoms/meningites-bacteriennes>]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[8] Republic of Niger. September 2007. "National Emergency Plan to Prevent and Fight Avian Flu in Niger, 2007-2010".

[<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 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 publicly available evidence that the country is conducting ongoing event-based surveillance. Moreover, there is no evidence that the data is being analysed on a daily basis. There is only evidence that from 2006 to 2009, a pilot project implemented local systems for early warning and emergency response at the community level. Although it may work as an event-based surveillance system, there is no further evidence to confirm this. The system functions through vulnerability-

monitoring observatories, which collect data on diseases reported by members of the community. Since 2010, this system has been replicated across Niger, with 9% of the pastoral regions covered by this surveillance system and 67% of agricultural lands [1]. There is no further evidence in the "National Mechanism for Prevention and Management of Food Crises" report or in a document related to the re-organization of the national mechanism for prevention and management of food crisis [2,3]. There is no further evidence available via the Medical and Health Research Centre (CERMES) or the Ministry of Public Health of Niger [4,5]. In addition, there is no further evidence provided by the Ministry of Agriculture and Livestock [6]. The Joint External Evaluation (JEE) for Niger confirms the absence of ongoing event-based surveillance and there is no mention of such a system in place in the World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Assessment of 2019 or in the Preparation Plan and Response to Novel Coronavirus of 2020 [7,8,9].

- [1] Issoufou B, et al. January 2015. "Local Early Warning and Emergency Response Systems: Motivation and Demanding Partnership". [<https://www.ajol.info/index.php/jab/article/view/113560>]. Accessed August 2020.
- [2] Republic of Niger. "National Mechanism for Prevention and Management of Food Crises". [<http://www.dnpgcca.ne/index.php>]. Accessed August 2020.
- [3] Republic of Niger. Order No. 0183 of 17 October 2017. "Related to the Reorganisation of the National Mechanism for Prevention and Management of Food Crisis". [http://www.dnpgcca.ne/images/doc_dec2017/Arrete_reorganisation%2017Oct2017DNPGCA.pdf]. Accessed August 2020.
- [4] CERMES. [<http://www.cermes.net/>]. Accessed August 2020.
- [5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [6] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.
- [7] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [8] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.
- [9] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus". [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger reported a potential PHEIC to the WHO within the past two years.

The most recent potential PHEIC reported to the WHO took place on July 15, 2018, when Niger reported an outbreak of cholera that was still ongoing in November 2018. As of October 1, 2018, 3692 cases with 68 deaths have been reported [1]. However, this happened more than two years prior to the time of research.

On August 30, 2016, Niger also reported an outbreak of Rift Valley Fever that appears to have ended on November 24, 2018. From August 8–November 21, 266 suspected human cases including 32 deaths were reported [2]. There is no evidence that Niger reported COVID-19 to the World Health Organization (WHO) [3].

[1] World Health Organisation (WHO). "Cholera in Niger". [<http://www.who.int/csr/don/05-october-2018-cholera-niger/en/>]. Accessed August 2020.

[2] World Health Organisation (WHO), November 2016, "Rift Valley Fever in Niger". [<http://www.who.int/csr/don/24-november-2016-rift-valley-fever-niger/en/>]. Accessed August 2020.

[3] World Health Organisation (WHO). Disease Outbreak News. [<https://www.who.int/csr/don/archive/country/ner/en/>]. Accessed April 2021.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that Niger operates an electronic reporting surveillance system at both the national and sub-national levels. The surveillance system is centralized through the National Health Information System (SNIS). The surveillance system is fed with data from different units, such as the rapid intervention teams, which can quickly intervene in case of an emergency; the Directorate for Surveillance and Response to Epidemics, which is responsible for the preparation and response to epidemics and other health events; and the epidemiological surveillance centres at the district level [1]. One of the strengths of this system is that it is computerized at all levels [2,3]. All data collected by the different units is uploaded monthly on the SNIS platform [3]. However, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, the electronic reporting surveillance system is only in place for certain diseases, such as polio, measles, meningitis, yellow fever, and neonatal tetanus. The JEE also states that "there is a need for an interoperable, interconnected, and multisectoral electronic system" [4]. There is no further evidence available via the National Mechanism for Prevention and Management of Food Crises website, the national reference laboratory, or the Ministry of Public Health [5,6,7]. The Directorate for Surveillance and Response to Epidemics could not be consulted, as it does not have its own website and its description page, under the Ministry of Public Health, is blank.

[1] World Health Organisation (WHO). December 2014. "Ebola Virus Disease Preparedness Team". [https://apps.who.int/iris/bitstream/handle/10665/152643/WHO_EVD_PCV_Niger_15_fre.pdf;jsessionid=CFFED97188F25E11255BD78489934268?sequence=1]. Accessed August 2020.

[2] Ministry of Public Health of Niger. "National System of Health Information". [<https://snis.cermes.net/index.php/2017/11/27/bonjour-tout-le-monde/>]. Accessed August 2020.

[3] Ministry of Public Health of Niger. "National System of Health Information Strategic Plan 2013-2022". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Niger/plan_strategique_snis_niger_vers_finale_v01_03_oct12.pdf]. Accessed August 2020.

[4] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[5] Republic of Niger. "National Mechanism for Prevention and Management of Food Crises". [<http://www.dnpgcca.ne/index.php>]. Accessed August 2020.

[6] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[7] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 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 publicly available evidence that this system collects ongoing/real time laboratory data. The National Health Information System (SNIS) is manually fed with data from different units, such as the rapid intervention teams , which can quickly intervene in case of an emergency; the Directorate for Surveillance and Response to Epidemics, which is responsible for the preparation and response to epidemics and other health events; and the epidemiological surveillance centres at the district level. Nevertheless, once this data is uploaded to the SNIS platform, it is automatically analyzed and processed [1]. No further evidence could be found via the National Mechanism for Prevention and Management of Food Crises, the Medical and Health Research Centre (CERMES), or the Ministry of Public Health [2,3,4]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the absence of a system that collects ongoing/real time laboratory data [5]. There is no mention of such a system in place in the World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Assessment of 2019 or in the Preparation Plan and Response to the Novel Coronavirus of 2020 [6,7].

[1] Ministry of Public Health of Niger. October 2012. "National System of Health Information Strategic Plan 2013–2022". [http://www.nationalplanningcycles.org/sites/default/files/country_docs/Niger/plan_strategique_snis_niger_vers_finale_v01_03_oct12.pdf]. Accessed August 2020.

[2] Republic of Niger. "National Mechanism for Prevention and Management of Food Crises". [<http://www.dnpgcca.ne/index.php>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[6] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus". [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 0

There is no publicly available evidence that electronic health records (EHRs) are commonly in use. In a scientific paper that analyzes the use of EHRs in Africa, Niger does not seem to have such records [1]. Moreover, according to a document issued in 2015 by the West African Laboratory Network (RESAOLAB), a regional laboratories network that counts Niger as one of the seven member countries, most laboratories do not have a computer system to process EHRs. Most of the medical information on patients is collected on paper, which increases the risk of errors and complicates the compilation and treatment of health data [2]. In 2015, RESAOLAB implemented a Laboratory Information System (LIS) in the main laboratories

through the open-source software LabBook. According to RESAOLAB, this system would enable the automatic collection of health data through EHRs [2]. There is no evidence available via CERMES or in the Ministry of Public Health that this system has been implemented [3,4]. There is no further evidence in the Preparation Plan and Response to the Novel Coronavirus of 2020 [5].

[1] Akanbi O. et al. September 2014. "Use of Electronic Health Records in sub-Saharan Africa: Progress and Challenges".

[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4167769/>]. Accessed August 2020.

[2] RESAOLAB. 2015. [<http://resaolab.globe-network.org/sites/default/files/documents/public/resaolab/plaquette-resaolab-2015.pdf>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

2.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the national public health system has access to the electronic health records (EHR) of individuals [1,2]. Niger's national public health system is provided by the Ministry of Health. It encompasses three levels of health care: a central level, constituted by three national hospitals and thirteen specialized national hospitals; a regional level, represented by six regional hospital centres; and a district level, with its 33 district hospitals and 853 integrated health centres. Niger also has 32 private clinical centres and 4 private hospitals [3]. There is no further evidence that the national public health system has access to the EHRs of individuals in the research center for medicine, science, and health (CERMES) in the Ministry of Public Health or in the Preparation Plan and Response to Novel Coronavirus of 2020 [4,5,6].

[1] Akanbi O, et al. September 2014. "Use of Electronic Health Records in sub-Saharan Africa: Progress and Challenges".

[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4167769/>]. Accessed August 2020.

[2] RESAOLAB. 2015. [<http://resaolab.globe-network.org/sites/default/files/documents/public/resaolab/plaquette-resaolab-2015.pdf>]. Accessed August 2020.

[3] Ministry of Public Health of Niger. October 2012. "National System of Health Information Strategic Plan 2013–2022 (Plan stratégique du Système National d'information sanitaire)".

[http://www.nationalplanningcycles.org/sites/default/files/country_docs/Niger/plan_strategique_snis_niger_vers_finale_v01_03_oct12.pdf]. Accessed August 2020.

[4] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that electronic health records (EHR) of individuals are comparable according to data standards since EHR are not commonly in use [1,2]. In the World Health Organization's (WHO) annual report of 2018, the fragmentation of health data is identified as a major challenge that needs to be solved within the national information system [3]. The WHO annual report of 2019 indicates that the WHO is supporting the government with the elaboration of a national e-health strategy [4]. No further information is available via the research center for medicine, science, and health (CERMES) or the Ministry of Public Health [5,6].

[1] Akanbi O, et al. "Use of Electronic Health Records in sub-Saharan Africa: Progress and Challenges".

[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4167769/>]. Accessed August 2020.

[2] RESAOLAB. 2015. [<http://resaolab.globe-network.org/sites/default/files/documents/public/resaolab/plaquette-resaolab-2015.pdf>]. Accessed August 2020.

[3] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel202018_21JUN2019.pdf]. Accessed August 2020.

[4] World Health Organisation (WHO). "Annual Report 2019 Niger (Rapport Annuel 2019)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed October 2020.

[5] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 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 publicly available evidence of established mechanisms in the relevant ministries responsible for animal, human, and wildlife surveillance to share data, such as through mosquito surveillance, brucellosis surveillance, etc. Niger launched the One Health RISC program (Program for strengthening communities and human and animal health services in the health risk management linked to crises and disasters in Niger) to effectively manage health risks in times of crisis in September 2017, with the objective of sharing data among multiple sectors and encouraging them to work together to achieve better public health outcomes [1,2]. Nevertheless, there is currently insufficient evidence to confirm that the program has been put into practice or an agency created. The One-Health RISC program was developed under the one-health concept, which is an approach to the design and implementation of programs, policies, legislation, and research in which multiple sectors communicate and work together. It is particularly relevant for the control of zoonoses (such as flu, rabies, and Rift Valley Fever) [2]. However, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, a collaborative network is in place at the level of human and animal laboratories, although the weakness of this collaboration is also mentioned. An insufficient level of information sharing between the animal health and human health sectors is also observed [3]. Finally, according to the Performance of Veterinary Services (PVS) Assessment for Niger of the World Organisation for

Animal Health (OIE) published in 2019, although there is, in principle, a collaboration between the Ministry of Environment and the Ministry of Public Health for dealing with avian flu, this collaboration has not been formalized. In addition, the collaboration for zoonotic diseases is weak [4]. There is no further evidence of such an agency via the Ministry of Public Health, Ministry of Livestock, the Medical and Health Research Centre (CERMES), the National Hospital of Niamey, or the National Hospital of Lamorde [5,6,7,8,9].

[1] Ministry of Public Health of Niger. September 2018. "One Health-RISC ". [<http://www.sante.gouv.ne/programme-de-renforcement-des-communautes-et-des-services-de-sante-humaine-et-animale-dans-la-gestion-des-risques-sanitaires-lies-aux-crises-et-catastrophes-au-niger-one-health-risc>]. Accessed August 2020.

[2] World Health Organisation (WHO). "One Health". [<https://www.who.int/features/qa/one-health/en/>]. Accessed August 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[4] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] Ministry of Livestock. [http://www.elevage.gouv.ne/spip.php?site_sip0]. Accessed August 2020.

[7] CERMES. [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[8] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[9] Ministry of Public Health of Niger. " National Hospital of Lamorde ". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites. Indeed, Niger shares on a daily basis statistics concerning the coronavirus disease via two government Facebook pages: Coronavirus Niger and the Ministry of Public Health [1,2]. In addition, information is provided on a daily basis on a new governmental website called "Coronavirus Niger" that de-identifies health surveillance data [3]. However, there is no evidence that data is regularly updated. Indeed, the Directorate of Surveillance and Epidemics Management, under the Ministry of Health, publishes information on disease outbreaks and provides information such as the number of cases of particular disease outbreaks, deaths, etc. Prior to the COVID-19 pandemic, there is evidence only of the cholera outbreak of 2018 being covered via a single report [4]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, a database is in place that regroups the weekly surveillance reports on the 22 notifiable diseases. Moreover, an epidemiological bulletin on meningitis is published every quarter. However, these reports are not publicly available. [5] There is no further evidence in the Ministry of Public Health, the Medical and Health Research Centre (CERMES), the National Hospital of Niamey, or the National Hospital of Lamorde [6,7,8,9].

- [1] Facebook. "Ministry of Public Health". [https://www.facebook.com/Ministre-de-la-SantA9-113068917008393/hc_ref=ARRFG6f6eYAZUJ2z1FoH5Xb6vqEflcb2bsJO7nQORo8_0fs4Y9174-L-4oWrDAb67ZQ&fref=nf&__tn__=kC-R]. Accessed August 2020.
- [2] Facebook. "Coronavirus Niger". [https://www.facebook.com/coronavirus.niger/?ref=py_c]. Accessed August 2020.
- [3] Republic of Niger. "Covid 19". [<https://coronavirus.ne/>]. Accessed August 2020.
- [4] Ministry of Public Health. 2018 "Situation Report: Cholera". [https://www.sante.gouvne.org/download/sitrep_cholera_n44/#]. Accessed August 2020.
- [5] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [6] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.
- [7] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.
- [8] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.
- [9] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 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

There is publicly available evidence that Niger makes de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc), available via daily reports (or other formats), on government websites. Indeed, Niger shares on a daily basis statistics regarding the coronavirus disease via two government Facebook pages, Coronavirus Niger and the Ministry of Public Health [1,2]. In addition, information on a daily basis can be found in a new government website "Coronavirus Niger" (<https://coronavirus.ne/>) that de-identified health surveillance data [3].

[1] Facebook. "Ministry of Public Health". [https://www.facebook.com/Ministre-de-la-SantA9-113068917008393/?hc_ref=ARRFG6f6eYAZUJ2z1FoH5Xb6vqEflcb2bsJO7nQORo8_0fs4Y9174-L-4oWrDAb67ZQ&fref=nf&__tn__=kC-R]. Accessed August 2020.

[2] Facebook. "Coronavirus Niger". [https://www.facebook.com/coronavirus.niger/?ref=py_c]. Accessed August 2020.

[3] Republic of Niger. "Covid 19". [<https://coronavirus.ne/>]. Accessed August 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that Niger has laws or guidelines that safeguard the confidentiality of identifiable health information for individuals, like that generated through health surveillance activities. Although Niger does not have specific legislation that protects personal health information, it has a general data privacy law, which specifies the protection of

health and biometric data in Article 7 [1].

[1] Official Journal of the Republic of Niger. Law No. 2017-28 of May 2017. "Related to the Protection of Personal Data". [https://www.afapdp.org/wp-content/uploads/2017/02/Loi-n%C2%B02017-28-du-03-mai-2017.pdf]. Accessed August 2020.

2.4.4b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that laws, regulations, or guidelines safeguarding the confidentiality of identifiable health information for individuals, like that generated through health surveillance activities, include the mention of protection from cyber attacks [1]. Nevertheless, there may be references to cybercrime soon, as in 2018, Niger ratified a convention on cybercrime, the main objective of which "is to pursue a common criminal policy aimed at the protection of society against cybercrime, especially by adopting appropriate legislation and fostering international co-operation" [2,3]. There is no further evidence available via CERMES or the Ministry of Public Health [4,5].

[1] Official Journal of the Republic of Niger. Law No. 2017-28. "Related to the Protection of Personal Data". [https://www.afapdp.org/wp-content/uploads/2017/02/Loi-n%C2%B02017-28-du-03-mai-2017.pdf]. Accessed August 2020.

[2] ECOWAS. September 2017. "Press Release of the Niger Delegation". [https://rm.coe.int/-3148-3-2-3-nigeria-ecowas-o-3-auc-moctar-yedaly-pdf/16807486bb]. Accessed August 2020.

[3] Council of Europe. "Convention on Cybercrime". [https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/185]. Accessed August 2020.

[4] Niger Medical and Health Research Centre (CERMES). [http://www.cermes.net/]. Accessed August 2020.

[5] Ministry of Public Health. [http://www.sante.gouv.ne/]. Accessed August 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: 1

There is publicly available evidence that Niger has in place a co-operative agreement to share surveillance data during a public health emergency with other countries in the region, but for one disease only (cholera).

Niger was a signatory to the Abuja Commitment in 2010, which compels it to share information on cross-border public health issues with the World Health Organization (WHO) and sub-regional health organizations to enable joint planning, coordination, and timely response to disease outbreaks [1]. Under the Abuja Commitment, in 2016 and again in 2018, Niger participated in developing roadmaps for sub-regional collaboration and information-sharing on cholera in the Chad Basin area; moreover, it is one of the countries that has implemented the regional strategy for cholera in Western and Central

Africa, which involves strengthening cross-border collaboration in terms of surveillance and response to cholera epidemics among the countries of the Lake Chad Basin [2,3].

The cooperative agreements in place are intended for more than one disease. Niger is part of the third phase of the Regional Disease Surveillance Systems Enhancement Project for West Africa. Within this project, the main objectives are to collaborate in disease surveillance and epidemic preparedness, with the commitment to share data for more than one disease. One of the main pillars refers to the need for sharing surveillance data through systems that are interoperable across different health systems as well as ensuring cross-border co-ordination in case of a human public health emergency. Finally, this project aims at the timely reporting of human public health emergencies [4].

Moreover, Niger is a member of the West African Laboratory Network (RESOLAB). This network, through its West Africa Regional Disease Surveillance (WARDS) project, implemented, among the 15 member countries, "a system for epidemiological surveillance that is able to rapidly transmit reliable data to health authorities. This system must rely on laboratory data that is collected even from remote regions." A specific disease is not mentioned, but this network aims to share data for more than one disease [5].

Niger, as a member of the Economic Community of West African States (ECOWAS), also joined, in 2015, the Regional Centre for Disease Surveillance and Control (ECOWAS/RCDC). The RCDC aims at the establishment of a network for the surveillance of epidemics [6]. Its primary mission is to share health information in real time in the case of a regional or national health emergency. This exchange of information will be achieved through a network of information exchange in areas such as virology, bacteriology, parasitology, and immunology [7]. The RCDC was officially inaugurated in February 2018, but there is no evidence that operations have begun [8].

No further evidence could be found via the Niger Medical and Health Research Centre (CERMES, the national laboratory), the Ministry of Public Health, Niger's Joint External Evaluation (JEE) or the Preparation Plan and Response to the Novel Coronavirus [9,10,11].

[1] Health Ministers of Benin, Cameroon, Central African Republic, Chad, Equatorial Guinea, Niger and Nigeria. 18 Oct 2010. "Abuja Commitment on Public Health Issues."

[[https://plateformecholera.info/attachments/article/317/Abuja%20Commitment%202010%20\(EN\).pdf](https://plateformecholera.info/attachments/article/317/Abuja%20Commitment%202010%20(EN).pdf)]. Accessed 27 September 2020.

[2] The West and Central Africa Cholera Platform. 2018. "Lake Chad Basin—The Cross-border Meeting of Ndjamen (June 2018)." [<https://plateformecholera.info/index.php/coordination/workshop/542-lake-chad-basin-the-cross-border-meeting-of-ndjamena-june-2018>]. Accessed 27 September 2020.

[3] The West and Central Africa Cholera Platform. May 2017. "Overview of the Strategy to Control and Prevent Cholera in West and Central Africa: The "Shield and Sword" Concept."

[https://www.plateformecholera.info/attachments/category/99/BrochureStrategieBCP202017__may2017.pdf]. Accessed 27 September 2020.

[4] World Bank. "Third Phase of Regional Disease Surveillance Systems Enhancement Project for West Africa".

[<http://projects.banquemondiale.org/P161163/?lang=fr&tab=overview>]. Accessed August 2020.

[5] Mérieux Foundation. November 2015. "3rd RESAOLAB International Steering Committee in Niamey".

[<http://www.fondation-merieuxusa.org/3rd-RESAOLAB-International>]. Accessed August 2020.

[6] Nigeria Centre for Disease Control. September 2016. "ECOWAS Regional Centre for Disease Surveillance and Disease Control Kicks off in Abuja, Nigeria". [<https://ncdc.gov.ng/news/49/ecowas-regional-Centre-for-surveillance-and-disease-control-kicks-off-in-abuja,-nigeria>]. Accessed August 2020.

[7] ECOWAS/RCDC. 2015. "Specific Terms of Reference". [https://epietalumni.net/wp-content/uploads/2016/03/RCDC_372272_ToR.pdf]. Accessed August 2020.

[8] ECOWAS. "ECOWAS Regional Centre for Surveillance and Disease Control Opens Doors". [<http://www.wahooas.org/web-oas/en/mediatheque/articles/ecowas-regional-Centre-surveillance-and-disease-control-opens-doors>]. Accessed August 2020.

[9] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[10] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[11] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[12] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no publicly available evidence that Niger has a national system in place to provide support at the sub-national level (e.g., training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency. Such a system could not be found in the Preparation Plan and Response to Novel Coronavirus, the Medical and Health Research Centre (CERMES), or the Ministry of Public Health [1,2,3].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 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 publicly available evidence that Niger provides wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention.

There is no such evidence in the Preparation Plan and Response to the Novel Coronavirus, the Medical and Health Research Centre (CERMES), or the Ministry of Public Health [1,2,3].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] Niger Medical and Health Research Centre (CERMES). [http://www.cermes.net/]. Accessed August 2020.

[3] Ministry of Public Health. [http://www.sante.gouv.ne/]. Accessed August 2020.

2.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the country makes de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar). No such evidence could be found in the two government Facebook pages Coronavirus Niger and the Ministry of Public Health, on the new government website, "Coronavirus Niger," or on the website of the Medical and Health Research Centre (CERMES) [1,2,3,4].

[1] Facebook. "Ministry of Public Health". [https://www.facebook.com/Minist%C3%A8re-de-la-Sant%C3%A9-113068917008393/?hc_ref=ARRFG6f6eYAZUJ2z1FoH5Xb6vqEflcb2bsJO7nQORo8_ofs4Y9174-L-4oWrDAb67ZQ&fref=nf&__tn__=kC-R]. Accessed August 2020.

[2] Facebook. "Coronavirus Niger". [https://www.facebook.com/coronavirus.niger/?ref=py_c]. Accessed August 2020.

[3] Republic of Niger. "Covid 19". [https://coronavirus.ne/]. Accessed August 2020.

[4] Niger Medical and Health Research Centre (CERMES). [http://www.cermes.net/]. Accessed August 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no publicly available evidence that Niger has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of an active or future public health emergency. Niger's Preparation Plan and Response to the Novel Coronavirus is included among the activities to implement the development of a management plan for public health emergencies at points of entry; there is no evidence of an existent joint plan or cooperative agreement between the

public health system and border control authorities [1]. Niger has a health police with presence on borders; among its functions are to ensure health surveillance and control at the borders, and to control and coordinate the activities of the Brigades and Border Control Posts. However, there is no evidence of a joint plan or cooperative agreement between the system and the authorities [2]. Finally, according to the Joint External Evaluation (JEE) for Niger of 2018, there is insufficient collaboration between the public health system and border control authorities [3]. There is no further evidence in the Medical and Health Research Centre (CERMES) or the Ministry of Public Health [4,5].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] Ministry of Public Health. 2008. "Collection of Health Legislation (Recueil de législation sanitaire)".

[<http://www.hcme.gouv.ne/index.php/documents/category/2-textes-et-lois?download=51:recueil-des-textes-sante-2008-niger>]. Accessed August 2020.

[3] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[4] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is no publicly available evidence that Niger has applied epidemiology training programs (like the field epidemiology training program (FETP)) within the country. Nevertheless, Niger has an FETP available at the regional level through the West Africa Field Epidemiology Training Program. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, the West African Health Organization (OAAS) provided funds to send Niger's citizens to Burkina Faso to participate in the FETP. The OAAS is a specialized institution of the Economic Community of West African States (ECOWAS) [1]. Since 2010, an FETP program based in Burkina Faso has offered the citizens of Niger the possibility to follow this FETP at the Ouagadougou University [2]. However, except for the JEE, there is no further evidence that resources are provided by the government to send citizens to Burkina Faso to participate in programs like this FETP. In a call for applications from the Ouagadougou University, the cost of the program is mentioned, but there is no reference made to the possibility that part of the cost may be paid by the country of origin [3]. There is no further evidence available via the Medical and Health Research Centre (CERMES) (Niger's national laboratory) or the Ministry of Public Health [4,5].

- [1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [2] TEPHINET. "Burkina Faso Field Epidemiology Training Program". [<https://www.tephinet.org/training-programs/burkina-faso-field-epidemiology-training-program>]. Accessed August 2020.
- [3] Ouagadougou University. "Call for Applications". [<http://www.univ-ouaga.bf/spip.php?article712>]. Accessed August 2020.
- [4] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/>]. Accessed August 2020.
- [5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is no publicly available evidence that the field epidemiology training program (FETP) includes animal health professionals, as Niger does not have an FETP available in the country. Nevertheless, there is evidence that the West Africa Field Epidemiology Training Program, which is the regional program available to Niger citizens also trains professionals in animal health [1]. To date, eight veterinary professionals have graduated from this program [2]. Due to the limited number of graduate veterinarians, a preference is given to this group in the selection process [3]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, one Niger veterinary professional has graduated from the program [4].

- [1] TEPHINET. "Burkina Faso Field Epidemiology Training Program". [<https://www.tephinet.org/training-programs/burkina-faso-field-epidemiology-training-program>]. Accessed August 2020.
- [2] Tephinet. "FETP Updates". December 2017. [https://www.tephinet.org/sites/tephinet/files/content/attachment/2018-08-10/FETP%20Updates_Oct-Dec2017_TEPHINET.pdf]. Accessed August 2020.
- [3] Ouagadougou University. "Call for Applications". [<http://www.univ-ouaga.bf/spip.php?article712>]. Accessed August 2020.
- [4] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is no publicly available evidence that Niger has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential. However, there is evidence of disease-specific plans in place. Niger has a National Action Plan for Crisis management, but it does not specifically address multiple communicable diseases [1]. In July 2017, the Ministry for Humanitarian Action and Crises Management announced the drafting of a National Action Plan for Crises Management, which would be submitted to the government in November 2017 and adopted at the end of December 2017 [2,3]. There is no publicly available evidence via the Ministry of Health, the Ministry for Humanitarian Action and Crises Management or the World Health Organisation (WHO) that this plan has been enforced [4,5,6]. According to Law No. 2017-876, Niger has emergency organization plans to address major emergency events, but none of these strategies are publicly available [7]. According to the Hyogo Framework for Action and the country's Joint External Evaluation (JEE), Niger has a National Action Plan for Health Emergencies [8,9]. However, this plan could not be found via the Ministry of Health, the Ministry for Humanitarian Action and Crises Management, or within the Operational Centre of Prevention and Crisis Management [4,5,10]. However, there is evidence of disease-specific plans in place. Indeed, Niger has a National Response Plan to Prevent and Fight Avian Influenza and a Preparation Plan and Response to the Novel Coronavirus [11,12].

[1] Ministry for Humanitarian Action and Crises Management. July 2017. "Launching the Development Process For National Policy". [<http://mahgc.ne/lancement-du-processus-delaboration-de-la-politique-nationale/>]. Accessed August 2020.

[2] Government of Niger. "Capacity Building Action Plan for Disaster Risk Reduction, Emergency Preparedness and Response, 2015-2018". [<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed February 2019.

[3] Niamey. "Niger will adopt a national disaster management policy (Le Niger adoptera une Politique nationale de gestion des catastrophes)". [<http://news.aniamey.com/h/81311.html>]. Accessed August 2020.

[4] The Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] World Health Organisation (WHO). "Niger". [<http://www.who.int/countries/ner/en/>]. Accessed August 2020.

[7] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans) (Déterminant les conditions d'élaboration des plans d'organisation des secours (Plans ORSEC))". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.

[8] Hyogo Framework for Action. 2014. "Niger".

[https://www.preventionweb.net/files/38953_NER_NationalHFAprogress_2013-15.pdf]. Accessed August 2020.

- [9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [10] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.
- [11] Republic of Niger. 2007. "National Response Plan to Prevent and Fight Avian Influenza in Niger 2007-2010".
[<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 2020.
- [12] Ministry of Public Health. 2020. "Preparation plan and Response to novel coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".
[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that Niger has an overarching plan in place that addresses planning for multiple communicable diseases with pandemic potential that has been updated within the past three years. Niger has a National Action Plan for Crisis management, but this does not specifically address multiple communicable diseases [1]. In July 2017, the Ministry for Humanitarian Action and Crises Management announced the drafting of a National Action Plan for Crises Management, which would be submitted to the government in November 2017 and adopted at the end of December 2017 [2,3]. There is no publicly available evidence via the Ministry of Health, the Ministry for Humanitarian Action and Crises Management, or the World Health Organization (WHO) that this plan has been enforced [4,5,6]. According to Law No. 2017-876, Niger has emergency organization plans to address major emergency events, but none of these strategies are publicly available [7]. According to the Hyogo Framework for Action and the country's Joint External Evaluation (JEE), Niger has a National Action Plan for Health Emergencies [8,9]. However, this plan could not be found via the Ministry of Health, the Ministry for Humanitarian Action and Crises Management, or within the Operational Centre of Prevention and Crisis Management [4,5,10].

- [1] Ministry for Humanitarian Action and Crises Management. July 2017. "Launching the Development Process For National Policy". [<http://mahgc.ne/lancement-du-processus-delaboration-de-la-politique-nationale/>]. Accessed August 2020.
- [2] Government of Niger. "Capacity Building Action Plan for Disaster Risk Reduction, Emergency Preparedness and Response, 2015-2018". [<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed February 2019.
- [3] Niamey. "Niger Will Adopt a National Disaster Management Policy (Le Niger adoptera une Politique nationale de gestion des catastrophes)". [<http://news.aniamey.com/h/81311.html>]. Accessed August 2020.
- [4] The Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.
- [5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.
- [6] World Health Organisation (WHO). "Niger". [<http://www.who.int/countries/ner/en/>]. Accessed August 2020.
- [7] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans)". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.
- [8] Hyogo Framework for Action. 2014. "Niger".
[https://www.preventionweb.net/files/38953_NER_NationalHFAprogress_2013-15.pdf]. Accessed August 2020.
- [9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[10] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 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 Niger has an overarching plan in place that addresses planning for multiple communicable diseases with pandemic potential and, therefore, no evidence of a plan that includes considerations for pediatric or vulnerable populations [1,2]. On the Ministry of Public health website there is a project entitled "Disability Inclusive In Emergency Response." Nevertheless, it is not a national plan, as it is limited to the Diffa region (Sayam refugee camp and Assaga, Boudoum, Gagam, Gagamari, and Guidan Kaji). Moreover, there is no mention of explicit mechanisms to include vulnerable populations and this plan has not been enforced [3]. According to the Hyogo Framework for Action, differential vulnerability is not taken into account in emergency preparedness plans [4]. There is no further evidence available via the Ministry for Humanitarian Action and Crises Management, the World Health Organization (WHO), the Operational Centre of Prevention and Crisis Management or the country's Joint External Evaluation (JEE) [5,6,7,8].

[1] The Ministry for Humanitarian Action and Crises Management. July 2017. "Launching the Development Process For National Policy". [<http://mahgc.ne/lancement-du-processus-delaboration-de-la-politique-nationale/>]. Accessed August 2020.

[2] Niamey. August 2017. "Niger will Adopt a National Disaster Management Policy (Le Niger adoptera une Politique nationale de gestion des catastrophes)". [<http://news.aniamey.com/h/81311.html>]. Accessed August 2020.

[3] The Ministry of Public Health. October 2018. "Disability Inclusive In Emergency Response". [<http://www.sante.gouv.ne/disability-inclusive-in-emergency-response/>]. Accessed August 2020.

[4] Hyogo Framework for Action. 2014. "Niger". [https://www.preventionweb.net/files/38953_NER_NationalHFAprogres_2013-15.pdf]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] World Health Organisation (WHO). "Niger". [<http://www.who.int/countries/ner/en/>]. Accessed August 2020.

[7] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[8] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available evidence that Niger has specific mechanisms for engaging with the private sector to assist with outbreak emergency preparedness and response. According to Articles 16 and 17 of Law No. 2017-06 of March 31, 2017, "private institutions and other private operators, have to contribute to civil protection activities in the event of a national disaster, the Ministry in charge of civil protection co-ordinates State actions. It also mobilises the private sector that is required to contribute to emergency actions and relief" [1]. The private sector is under the authority in charge of the management of relief operations [1]. Nevertheless, there is no evidence of an MoU, an established agreement, or a strategy document within an emergency plan or other evidence of a pre-established plan. There is no such evidence available via the Niger National Multi-risk Contingency Plan (2013) or the National Plan of Action for Capacity Development in Disaster Risk Reduction [2,3]. Moreover, in practice, "there is weak co-operation and involvement with the private sector", according to a 2011 Ministry of Public Health document entitled "Compact-Niger" [4]. There is no further evidence available via the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the Operational Centre of Prevention and Crisis Management, the World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) Assessment for Niger in 2019 or the Preparation Plan and Response to the Novel Coronavirus of 2020 [5,6,7,8,9].

[1] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection". [<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[2] Republic of Niger. 2013. "Niger National Multi-risk Contingency Plan 2013 (Plan national de contingence multi risque Niger 2013)". [<http://www.ne.undp.org/content/dam/niger/docs/Publications/UNDP-NE-PLAN-NATIONAL-CONTINGENCE2013.pdf>]. Accessed August 2020.

[3] Republic of Niger. "National Plan of Action for Capacity Development in Disaster Risk Reduction". [<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed August 2020.

[4] Ministry of Public Health. "Compact-Niger". [https://www.uhc2030.org/fileadmin/uploads/ihp/Documents/Country_Pages/Niger/Niger_Compact_2011.pdf]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[7] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[8] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger". [https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

[9] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 1

There is publicly available evidence that Niger has a policy, plan, and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for one disease. Recently, Niger published the Preparation Plan and Response to the Novel Coronavirus of 2020, where some NPIs are mentioned, such as social distancing, hand hygiene, cancellation of mass gatherings, and the closure of schools. However, the plan does not include language that says the plan can be used for other diseases [1].

No evidence could be found in the Niger National Multi-risk Contingency Plan (2013), the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the Operational Centre of Prevention and Crisis Management, the World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Assessment for Niger of 2019, or the National Response Plan to Prevent and Fight Avian Influenza [2,3,4,5,6,7].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] Republic of Niger. 2013. "Niger National Multi-risk Contingency Plan 2013 (Plan national de contingence multi risque Niger 2013)". [<http://www.ne.undp.org/content/dam/niger/docs/Publications/UNDP-NE-PLAN-NATIONAL-CONTINGENCE2013.pdf>]. Accessed August 2020.

[3] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[6] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".

[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

[7] Republic of Niger. 2007. "National Response Plan to Prevent and Fight Avian Influenza in Niger 2007–2010 (Plan National d'Urgence de Prévention et Lutte contre la Grippe Aviaire au Niger 2007–2010)".

[<http://extwprlegs1.fao.org/docs/pdf/ner165765.pdf>]. Accessed August 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 publicly available evidence that the country has activated its national emergency response plan for an infectious disease outbreak in the past year. However, there is no evidence that the country has completed a national-level biological threat-focused exercise (either with the World Health Organization (WHO) or separately) in the past year.

In 2020, Niger has published its Preparation Plan and Response to the Novel Coronavirus [1]. According to a WHO report from July 2020, the COVID plan represents the activation of the emergency response [2]. The December 14–15, 2015, Niger conducted a full-scale/field exercises (FSX) for the Ebola disease virus; it is the newest biological threat-focused exercise conducted [3]. No further information could be found via the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, or the Operational Centre of Prevention and Crisis Management [4,5,6].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] WHO. July 2020 "The 4 Months of the COVID-19 Response (Les 4 mois de la Réponse COVID-19)".

[https://www.afro.who.int/sites/default/files/2020-07/OMS%20Niger_4%20mois%20r%C3%A9ponse%20COVID-19.pdf]. Accessed October 2020.

[3] WHO. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[6] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

3.2.1b

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

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

Current Year Score: 0

There is no evidence that the country in the past year has undergone an exercise to identify a list of gaps and best practices through either an after-action review (post-emergency response) or a biological threat-focused IHR exercise with the World Health Organization (WHO). Niger conducted an after action-review (AAR) for Rift Valley fever with the WHO from November 20–24, 2017 [1]. No further details about this review could be provided, as no additional information or report is provided by the WHO. No further information could be found in the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health or the Operational Centre of Prevention and Crisis Management [2,3,4]. In addition, December 14–15, 2015, Niger conducted a full-scale/field exercises (FSX) for the Ebola disease virus; it is the latest biological threat-focused exercise conducted [5]. However, there is no evidence of a plan to improve response capabilities.

[1] World Health Organisation (WHO). "Niger". [<https://extranet.who.int/sph/country/231>]. Accessed August 2020.

[2] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[3] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[4] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[5] WHO. "Simulation Exercise". [<https://extranet.who.int/sph/simulation-exercise>]. Accessed August 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the country in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives. Although there is publicly available evidence that the country has activated its national emergency response plan for an infectious disease outbreak in the past year, there is no evidence that the country has completed a national-level biological threat-focused exercise (either with World Health Organization (WHO) or separately) in the past year. December 14–15, 2015, Niger conducted a full-scale/field exercises (FSX) for the ebola disease virus; it is the latest biological threat-focused exercise conducted [1]. Niger also conducted an after action-review (AAR) for Rift Valley fever with the WHO from November 20–24, 2017 [2]. No further details about this review could be provided, as no additional information or report is provided by the WHO. However, none of these exercises mention private sector representatives. No further information could be found via the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, or the Operational Centre of Prevention and Crisis Management [3,4,5].

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

[2] World Health Organisation (WHO). "Niger". [<https://extranet.who.int/sph/country/231>]. Accessed August 2020.

[3] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Niger has in place an emergency operations centre (EOC) that includes health-related emergencies. Under the General Directorate of Civil Protection, there is an Operational Centre for Prevention and Crisis Management. Its mission is to supervise emergency actions and help the competent authority in decision-making during

emergencies. It is responsible for "reducing the initial response time by detecting crisis warning signs, strengthening the capacity to anticipate, assessing the crisis, promoting physical availability and interoperability with other relevant entities, and optimising the quality and speed of information to meet the requirements of the authorities." The centre has decentralized structures at the regional level [1]. However, according to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is currently no Public Health Emergency Operations Centre (PHEOC) in the country, although its development has already begun. Niger scores 1 on the indicator for an EOC that indicates insufficient evidence for an EOC that looks after health-related emergencies [2]. Finally, an EOC is not mentioned in the Preparation Plan and Response to the Novel Coronavirus of 2020 [3].

[1] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[3] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus (COVID-19))".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

3.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the Emergency Operations Centre (EOC) is required to conduct a drill at least once per year and no evidence that they conduct a drill annually. No such evidence is available via the Ministry of the Interior, the Ministry of Health, in the Sendai Framework, in national legislation or within the Joint External Evaluation (JEE) report for Niger [1,2,3,4,5,6].

[1] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[3] Hyogo Framework for Action. 2014. "Niger".

[https://www.preventionweb.net/files/38953_NER_NationalHFAprogress_2013-15.pdf]. Accessed August 2020.

[4] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection (Déterminant les principes fondamentaux de l'organisation de la protection civile)".

[<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[5] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans) (Déterminant les conditions d'élaboration des plans d'organisation des secours (Plans ORSEC))". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available evidence that the Emergency Operations Centre (EOC) can conduct, or has conducted within the last year, a co-ordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. There is no evidence available via the Interior Ministry, the Ministry of Health, the Sendai Framework, national legislation, or the country's Joint External Evaluation (JEE) [1,2,3,4,5,6].

[1] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[3] Hyogo Framework for Action. 2014. "Niger".

[https://www.preventionweb.net/files/38953_NER_NationalHFAprogres_2013-15.pdf]. Accessed August 2020.

[4] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection (Déterminant les principes fondamentaux de l'organisation de la protection civile)".

[<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[5] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans) (Déterminant les conditions d'élaboration des plans d'organisation des secours (Plans ORSEC))". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available 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). Moreover, there is no publicly available evidence

that Niger has standard operating procedures, guidelines, memorandum 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). Law No. 2017-06 determines the fundamental principles for the organization of civil protection and states that conventions exist between public health and civil security authorities to respond to emergencies. Nevertheless, there is no specific evidence that deliberate biological events are included [1]. Further evidence of co-ordination between the public health and security authorities can be found in Law No. 2017-876, which determines the conditions for the implementation of emergency organization plans (ORSEC plans) to address major emergency events. Article 7 states that, when an ORSEC Plan is implemented, the Ministry of Civil Protection collaborates with the Ministry of Humanitarian Action and Crisis Management. Nevertheless, there is no specific evidence that deliberate biological events are included [2]. Under the Ministry of Civil Protection, there is a cell that provides medical emergency aid services, but there is no specific mention of a potential deliberate biological event [3]. No further evidence could be found via the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the Operational Centre of Prevention and Crisis Management, or in an emergency planning document [4,5,6,7]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, there is evidence that public health and national security authorities collaborate when they face a public health emergency. However, no standard operating procedures, guidelines, MoUs or other agreements are in place. It is mostly an informal and ad-hoc collaboration [8].

[1] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection (Déterminant les principes fondamentaux de l'organisation de la protection civile)."

[<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[2] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans) (Déterminant les conditions d'élaboration des plans d'organisation des secours (Plans ORSEC))". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.

[3] General Directorate of Civil Protection. [http://gfol1.matazankai-niger.org/download/presentation_du_groupement_national_des_sapeurs_pompiers_du_Niger_et_de_la_direction_generale_de_la_protection_civile_ws1005121369.pdf]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[6] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[7] Republic of Niger. 2013. "Niger National Multi-risk Contingency Plan 2013 (Plan national de contingence multi risque Niger 2013)". [<http://www.ne.undp.org/content/dam/niger/docs/Publications/UNDP-NE-PLAN-NATIONAL-CONTINGENCE2013.pdf>]. Accessed August 2020.

[8] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has a strategy (or other legislation, regulation, or strategy document used to guide national public health response) that outlines how messages will reach populations and sectors with different communication needs (e.g., different languages, location within country, media reach, etc.). In the Hyogo Framework for Action, different communication needs are not mentioned and there is no evidence that messages are varied according to the community targeted [1]. Moreover, although Niger has a plan to support vulnerable populations, it specifically refers to food and nutrition emergencies, with communication strategies that focus on the promotion of better nutrition practices [2]. The communication strategy documents of the United Nations Development Program (UNDP) and the government do not mention different communication needs being addressed [3,4]. Nevertheless, it appears that different channels of communication exist, as these have been used in the past to relay information related to public health and vaccination campaigns. A governmental document lists the existence of administrative authorities that support all governmental health actions; chief villagers, who contribute with dialogue in their communities; religious leaders; and community networks. Nevertheless, it appears that these channels are supported by informal agreements that do not follow a formal communication strategy. [5] According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has the capacity to disseminate information in local languages. However, there is no mention of the existence of a strategy that outlines how messages will reach populations and sectors with different communications needs [6]. Finally, in 2020, Niger published its Preparation Plan and Response to the Novel Coronavirus, although it mentions a few activities regarding risk communication, there is no risk communication strategy available [7].

[1] Hyogo Framework for Action. 2014. "Niger".

[https://www.preventionweb.net/files/38953_NER_NationalHFAProgress_2013-15.pdf]. Accessed August 2020.

[2] National Device for Prevention and Management of Food Crises. January 2018. "Support Plan for Vulnerable Populations 2018 (Plan de soutien aux populations vulnérables 2018)". [<https://www.csan-niger.com/wp-content/uploads/2018/06/Plan-de-soutien-aux-populations-vuln%C3%A9rables-2018.pdf>]. Accessed August 2020.

[3] United Nations Development Plan Niger. "Final Evaluation of the Achievement of the Country Programme's Impact in the Field of Crisis Prevention and Recovery [2009–2013] (Evaluation finale de la réalisation des effets du Programme Pays dans le domaine de la Prévention des crises et relèvement (2009–2013))". [http://www.grefco.net/wp-content/Rapport-_gestion-crisis-catastrophes_Niger_PNUD.pdf]. Accessed August 2020.

[4] Republic of Niger. March 2015. "Capacity Building Action Plan for Disaster Risk Reduction, Emergency Preparedness and Response, 2015-2018 (Plan d'action de renforcement des capacités pour la réduction des risques de catastrophe, la préparation et la réponse aux urgences, 2015–2018)". [<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed February 2019.

[5] Ministry of Public Health. August 2011. "Strategic Integrated Communications Plan".

[http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/niger/plan_strategique_com_20111.pdf]. Accessed August 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that Niger has 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. Niger has an National Action Plan for Crisis management, but it does not specifically address public health emergencies [1]. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger does not have a risk communication plan that is specifically intended for use during a public health emergency or a multisectoral communication team [2]. Law No. 2017-876 does contain some information on communication when emergency organisation plans are implemented. Nevertheless, this does not specifically refer to public health emergencies [3]. No further evidence could be found via the Ministry of Public Health, the Ministry for Humanitarian Action and Crises Management, or in a national report on crisis management [4,5,6]. Finally, in 2020, Niger published its Preparation Plan and Response to Novel Coronavirus, although it mentions some activities to conduct regarding risk communication, there is no risk communication strategy available to use during a public health emergency; in addition, the COVID plan strategy is not framed in a manner that suggests that it would be valid for other emergencies. It is only mentioned that a robust communication plan has been developed and that mobile telephone operators have been involved in broadcasting as well as private and community radio stations. In addition, communication materials have been developed and are in the process of being distributed [7].

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Republic of Niger. March 2015. "Capacity Building Action Plan for Disaster Risk Reduction, Emergency Preparedness, and Response, 2015–2018 (Plan d'action de renforcement des capacités pour la réduction des risques de catastrophe, la préparation et la réponse aux urgences, 2015–2018)". [<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed February 2019.

[3] Republic of Niger. Law No. 2017-876 of 11 November 2017. "Determining the Conditions for the Implementation of Emergency Organisation Plans (ORSEC Plans) (Déterminant les conditions d'élaboration des plans d'organisation des secours (Plans ORSEC))". [http://www.protectioncivile.ne/wp-content/uploads/2018/10/DECRET_2017-876_Plan_ORSEC1.pdf]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management.

[6] Republic of Niger. "National Information on Disaster Prevention and Management in Niger (Informations nationales sur la Prévention et la gestion des catastrophes au Niger)". [<http://www.elevage.gouv.ne/IMG/pdf/niger-report.pdf>]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that Niger designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. There is no such evidence in the Ministry of Public Health, the Ministry for Humanitarian Action and Crises Management, or in a national report on crisis management [1,2,3]. However, the Preparation Plan and Response to the Novel Coronavirus designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. Indeed, in this strategy, the Governmental Communication Unit and the Communication Commission of the Technical Crisis Committee are designated as the primary spokesagencies during a public health emergency. It is also specified that the Ministry of Public Health is the only unit authorized to communicate on the management of the coronavirus epidemic [4].

[1] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[2] Ministry for Humanitarian Action and Crises Management.

[3] Republic of Niger. "National Information on Disaster Prevention and Management in Niger (Informations nationales sur la Prévention et la gestion des catastrophes au Niger)". [<http://www.elevage.gouv.ne/IMG/pdf/niger-report.pdf>]. Accessed August 2020.

[4] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 1

There is publicly available 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. However, the public health system shares information only during active emergencies, but does not

regularly utilize online media platforms (social media, website updates, etc.) to inform the public about public health emergencies. Both the Facebook and Twitter pages of the Government of Niger share information via media platforms and combat rumors/misinformation/disinformation [1,2]. However, both the Facebook and Twitter page were created in March 2020, at the beginning of the COVID-19 epidemic. Niger shares, on a daily basis, statistics concerning the coronavirus disease via two governmental Facebook pages: Coronavirus Niger Although, the website of the Ministry of Public Health actively shares messages concerning the COVID-19 epidemic, there is no evidence that it has been regularly used during active emergencies. Before the COVID-19 crisis, there is evidence that it was used once in 2018 to provide information on a cholera situation [3].

[1] Facebook page. 2020. "Ministry of Public Health".

[https://www.facebook.com/113068917008393/photos/a.114090640239554/124716285843656/?type=3&eid=ARCDtAKAEJsBJcuhKwRvTaiexYs65oFMc3jgfmPxjs42QMHvnsO3PzokxrevTfhx7L84OiDfWTTcXoca&__tn__=EEHH-RJ]. Accessed August 2020.

[2] Twitter.2020. "Ministry of Pubilc Health". [<https://twitter.com/minsanteniger?lang=es>]. Accessed August 2020.

[3] Ministry of Public Health. "Situation Report: Cholera". [https://www.sante.gouvne.org/download/sitrep_cholera_n44/#]. Accessed August 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no publicly available evidence that senior leaders (president or ministers) in Niger have shared misinformation or disinformation on infectious diseases in the past two years. There is no such evidence in the main outlets of the country or on the website of the Ministry of Public Health [1,2,3].

[1] Niamey.com. [<http://news.aniamey.com/>]. Accessed August 2020.

[2] Niger Inter. [<https://nigerinter.com/>]. Accessed August 2020.

[3] Ministry of Public Health. [<https://www.sante.gouvne.org/>]. Accessed August 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: 5.25

2019

International Telecommunication Union (ITU)

3.6.2 Mobile subscribers

3.6.2a

Mobile-cellular telephone subscriptions per 100 inhabitants

Input number

Current Year Score: 40.64

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: 20.0

2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 6

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 1

There is no publicly available evidence that in the past year, the country has issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g., medicines, oxygen, medical supplies, personal

protective equipment (PPE)) due to an infectious disease outbreak. Further, there is no evidence available via the World Health Organization (WHO), the Ministry of Public Health, the Ministry of Foreign Affairs, in the main outlets of the country, or in the Ministry of Agriculture and Livestock [1,2,3,4,5,6].

[1] World Health Organisation (WHO). "Emergencies Preparedness, Response". [<http://www.who.int/csr/don/en/>]. Accessed August 2020.

[2] Ministry of Public Health. [<https://www.sante.gouvne.org/>]. Accessed August 2020.

[3] Ministry of Foreign Affairs. [<http://www.diplomatie.gouv.ne/>]. Accessed August 2020.

[4] Niamey.com. [<http://news.aniamey.com/>]. Accessed August 2020.

[5] Niger Inter. [<https://nigerinter.com/>]. Accessed August 2020.

[6] Ministry of Agriculture and Livestock (Ministèuml;re de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.

3.7.1b

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

Yes = 0 , No = 1

Current Year Score: 1

There is no publicly available evidence that Niger has issued in the past year, 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. There is no evidence available via the World Health Organization (WHO), the Ministry of Public Health, the Ministry of Foreign Affairs, in the main outlets of the country or in the Ministry of Agriculture and Livestock [1,2,3,4,5,6].

[1] World Health Organisation (WHO). "Emergencies Preparedness, Response". [<http://www.who.int/csr/don/en/>]. Accessed August 2020.

[2] Ministry of Public Health. [<https://www.sante.gouvne.org/>]. Accessed August 2020.

[3] Ministry of Foreign Affairs. [<http://www.diplomatie.gouv.ne/>]. Accessed August 2020.

[4] Niamey.com. [<http://news.aniamey.com/>]. Accessed August 2020.

[5] Niger Inter. [<https://nigerinter.com/>]. Accessed August 2020.

[6] Ministry of Agriculture and Livestock (Ministèumlre de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 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 publicly available evidence that in the past year, the country implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. On March 2020, Niger completely closed its terrestrial and aerial frontiers to passengers due to the coronavirus outbreak [1]. There is no evidence that the ban was conducted with international support in the World Health Organization (WHO) Disease Outbreak

News, the Ministry of Public Health, and the Ministry of Foreign Affairs [2,3,4]. Niger has a Ministry of Transport, the website of which was not accessible during the research period (October 2020).

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] World Health Organisation (WHO). "Emergencies Preparedness, Response". [<http://www.who.int/csr/don/en/>]. Accessed August 2020.

[3] Ministry of Public Health. [<https://www.sante.gouv.ne/>]. Accessed August 2020.

[4] Ministry of Foreign Affairs. [<http://www.diplomatie.gouv.ne/>]. Accessed August 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: 4.33

2016

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 26.95

2016

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

There is evidence that Niger has a public workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings. The newest public workforce strategy was published in 2011 and covers the period from 2011 to 2020. It describes a strategic plan to address public workforce shortages. In this document, the size of gaps is identified. In 2010, Niger had a ratio of doctor/population of 1/41,200, while the World Health Organization (WHO) recommended a ratio of 1/10,000. The nurse/population ratio was 1/15,660, while the WHO recommended a ratio of 1/5,000. The 2011 workforce strategy report also projects the size of shortages and needs in 2020 [1]. There is no further evidence of a newer public workforce strategy via the Ministry of Public Health, the Human Resources Directorate, the Ministry of Labor, or the Ministry of Education [2,3,4,5]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the existence of the 2011–2020 public workforce strategy [6].

[1] Ministry of Public Health. 2010. "Human Resources Health Plan 2011-2020".

[http://www.who.int/workforcealliance/countries/Niger_HRHPlan_2011_2020_draft_Fr.pdf]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[3] Human Resources Directorate. [<http://www.sante.gouv.ne/les-directions-nationales/direction-des-ressources-humaines/>]. Accessed August 2020.

[4] Ministry of Employment, Labour and Social Security. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/164-28-ministere-de-l-emploi-du-travail-et-de-la-securite-sociale>]. Accessed August 2020.

[5] Ministry of Education. [<http://www.men.ne/>]. Accessed August 2020.

[6] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 39

2017

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 Niger has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation facility located within the country. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, two isolation units are in place, one located in the reference general hospital (CERMES) and the other in Lazaret, a centre for the management of possible Ebola cases. However, the JEE provides no further information on the capacity of these isolation units [1]. Furthermore, there was no mention of these isolation facilities via CERMES. Further research could not be conducted about the Lazaret Centre, as it does not have an official website [2]. There is no further evidence available via the General Directorate of Civil Protection, the Ministry for Humanitarian Action and Crisis Management, the Ministry of Public Health, the National Hospital of Niamey, or the National Hospital of Lamorde [3,4,5,6,7]. In 2020, Niger published a Preparation Plan and Response to the Novel Coronavirus and, although it mentions the need to implement isolation units, it is unclear whether the government already has biocontainment patient care units and/or patient isolation facilities [8].

[1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[2] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[3] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[6] Ministry of Public Health of Niger. "National Hospital of Niamey ". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[7] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

4.1.2c

Does the country meet one of the following criteria?

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

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years or 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. Such evidence is not available in the Ministry of Health, in the World Health Organization's (WHO) Joint External Evaluation (JEE) report for Niger, conducted in July 2018, in the Ministry for Humanitarian Action and Crises Management or the Operational Centre of Prevention and Crisis Management [1,2,3,4].

[1] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed April 2021.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed April 2021.

[3] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed April 2021.

[4] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed April

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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: 2

There is publicly available evidence that Niger has a national procurement protocol in place that can be utilised by the Ministry of Health and Ministry of Agriculture for the acquisition of laboratory needs (such as equipment, re-agents, and media) and medical supplies (e.g., equipment and personal protective equipment (PPE)) for routine needs. A Directorate of National Procurement is in place, which is responsible for the acquisition of all types of materials as well as the preparation of annual budgets and tenders [1]. There is evidence that this Directorate can be used for the acquisition of laboratory needs by the Ministry of Health, as the Lamorde National Hospital has used it to acquire equipment for oxygen production (April 2018) and material for the anesthesia-emergency-resuscitation unit (February 2018) [2]. There is also evidence that the directorate can be used for the acquisition of laboratory needs by the Ministry of Agriculture: the Central Supply of Inputs and Agricultural Materials has used it to acquire hardware (March 2018) and storage pallets (April 2018) [3]. Finally, in 2018, the Ministry of Finance published an audit of public contracts and delegations of public service, which indicates that the acquisition of medical supplies (antibiotics and devices used in emergency medicine) were purchased through the Directorate of National Procurement [4].

[1] Ministry of Livestock. "Directorate of National Procurement". [<http://www.elevage.gouv.ne/spip.php?mot26>]. Accessed August 2020.

[2] Platform for National Procurement. "Lamorde National Hospital 2018". [http://www.marchespublics.ne/index.php?option=com_plandepassation&page=2&idautorite=824&year=2018&idtype=4&Itemid=105]. Accessed August 2020

[3] Platform for National Procurement. "Central Supply of Inputs and Agricultural Equipment (Centrale d'Approvisionnement en Intrants et Matériels Agricoles)".

[http://www.marchespublics.ne/index.php?option=com_plandepassation&page=2&idautorite=864&year=2018&idtype=4&Itemid=105]. Accessed August 2020.

[4] Republic of Niger. 2018 "Audit of public contracts and delegations of public service". [<http://www.arp-niger.org/workspace/uploads/documentation/rapport-synthese-arp-niger-2018.pdf>]. Accessed August 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: 2

There is publicly available evidence that Niger maintains a stockpile of medical supplies (e.g., MCMs, medicines, vaccines, medical equipment, personal protective equipment (PPE)) for national use during a public health emergency. According to the Joint External Evaluation (JEE) for Niger, conducted in July 2018, Niger has a stockpile of medical supplies, such as equipment and PPE, for emergency response as well as medical countermeasures for national use during a public health emergency, such as medicines/drugs, vaccines, and/or diagnostics, which includes essential medicines [1]. The medical supplies are available at the Department of Surveillance and Response to Epidemics (DSRE) at the Ministry of Public Health [1]. Further details were not available as the webpage is blank [2]. Although the National Office of Pharmaceutical and Chemical Products of Niger is in charge of the distribution of countermeasures, further details were not available on its webpage [3]. In the Preparation Plan and Response to the Novel Coronavirus of 2020, there is no mention of a stockpile of medical supplies [4]. There is no further evidence in this regard in the General Directorate of Civil Protection, the health ministry's Urgency Medical Aid Section, the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the National Hospital of Niamey, or the National Hospital of Lamorde [5,6,7,8,9,10].

- [1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [2] Ministry of Public Health of Niger. "Directorate for Surveillance and Response to Epidemics (Direction de la surveillance et de la riposte aux épidémies)". [<http://www.sante.gouv.ne/les-directions-nationales/direction-de-la-surveillance-et-de-la-reposte-aux-epidemies/>]. Accessed August 2020.
- [3] National Office of Pharmaceutical and Chemical Products of Niger. 2015. [<http://www.msp.ne/index.php/onppc/254-office-national-des-produits-pharmaceutiques-et-chimiques>]. Accessed August 2020.
- [4] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)". [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.
- [5] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed October 2020.
- [6] Ministry of Public Health. "SAMU Niger". [<http://www.msp.ne/index.php/samu-niger>]. Accessed August 2020.
- [7] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed October 2020.
- [8] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed October 2020.
- [9] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed October 2020.
- [10] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed October 2020.

4.2.2b

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

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

Current Year Score: 0

There is no publicly available evidence that Niger maintains a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. The National Office of Pharmaceutical and Chemical Products of Niger is in charge of the distribution of reagents nationwide. However, on its webpage there is no evidence that this unit maintains a stockpile [1]. Neither the Joint External Evaluation (JEE) for Niger, conducted in July 2018, nor the Preparation Plan and

Response to the Novel Coronavirus of 2020 mention a stockpile of laboratory supplies [2,3]. In a report of the Ministry of Public Health published in 2006, it is stated that the National Office of Pharmaceutical and Chemical Products maintains a stockpile of products; however, it is not stated if it includes laboratory supplies [4]. There is no further evidence of such a stockpile in the General Directorate of Civil Protection, the health ministry's Urgency Medical Aid Section, the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the National Hospital of Niamey, or the National Hospital of Lamorde [5,6,7,8,9,10].

- [1] National Office of Pharmaceutical and Chemical Products of Niger. 2015. [<http://www.msp.ne/index.php/onppc/254-office-national-des-produits-pharmaceutiques-et-chimiques>]. Accessed August 2020.
- [2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [3] Ministry of Public Health. 2020. "Preparation plan and Response to novel coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)". [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.
- [4] Ministry of Public Health. 2006 "RH Supplies". [https://www.rhsupplies.org/uploads/tx_rhscpublications/MOH_RHCS%20situation%20analysis_Niger_2006_FR.pdf]. Accessed August 2020.
- [5] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.
- [6] Ministry of Public Health. "SAMU Niger". [<http://www.msp.ne/index.php/samu-niger>]. Accessed August 2020.
- [7] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.
- [8] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.
- [9] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.
- [10] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available 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. Such evidence is not available in the Ministry of Health, in the World Health Organization's (WHO) Joint External Evaluation (JEE) report for Niger conducted in July 2018, in the Ministry for Humanitarian Action and Crises Management, the Operational Centre of Prevention and Crisis Management, or the Nigerien Pharmaceutical Company (SONAFAR) that manufactures antibiotics [1,2,3,4,2]. The Ministry of Defense does not have its own website.

- [1] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed April 2021.
- [2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed April 2021.
- [3] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed April 2021.
- [4] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed April 2021.

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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 neither publicly available evidence that Niger has 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, nor that Niger has a plan/mechanism to procure medical supplies for national use during a public health emergency.

In the Preparation Plan and Response to the Novel Coronavirus of 2020, it is mentioned that there is a need to obtain more medical supplies; however, there is no evidence of a plan/agreement to leverage domestic manufacturing capacity or a plan/mechanism to procure medical supplies for national use during a public health emergency [1]. There is no further evidence in the Joint External Evaluation (JEE) for Niger, conducted in July 2018, which specifies that there is neither a legal framework for sending and receiving medical supplies nor agreements with manufacturers or distributors for access to medical means during public health emergencies. With regard to MCMs, the Joint External Evaluation (JEE) indicates that there is a lack of agreement with manufacturers or distributors for access to medical means during public health emergencies and there is no legal framework for the sending and receiving of medical means and the deployment of medical equipment. However, the country is undertaking efforts for the local manufacture of medical means that can be used during public health emergencies. Further, the Nigerien Pharmaceutical Company (SONAFAR) manufactures antibiotics such as Cotrimoxazole, and the Niger Medical and Health Research Centre (CERMES) produces rapid diagnostic tests for meningitis [2]. In addition, there is no evidence of a specific plan or mechanism to procure medical countermeasures during a public health emergency in the National Office of Pharmaceutical and Chemical Products of Niger (ONPPC), which is in charge of the distribution of countermeasures and medical supplies and their storage nationwide. There is no evidence of such a plan/agreement [3]. Through this organization, Niger is a member of the African Association of Central Purchasing Centers for Essential Medicines (ACAME), which brings together 22 central purchasing offices from African countries. Its role is to contribute to improving the physical and financial accessibility of quality essential drugs to African populations. However, it faces serious operational difficulties [1].

Niger also has a Directorate of Infrastructure and Medical Equipment, whose main objective is to improve the acquisition of equipment, but no evidence of a strategic document to address PPE supply issues could be found [4]. Such evidence could not be found via the Ministry of Public Health, WHO reports, the Ministry of Foreign Affairs, the Ministry for Humanitarian Action and Crisis Management, Niger's National Multi-risk Contingency Plan (2013), the Operational Centre of Prevention and Crisis Management (Niger's EOC), or the Medical and Health Research Centre (CERMES; the national laboratory) [5,6,7,8,9,10,11]. The Ministry of Defence does not have its own website.

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_rep

onse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1]. Accessed August 2020.

[3] National Office of Pharmaceutical and Chemical Products of Niger. 2015. [http://www.msp.ne/index.php/onppc/254-office-national-des-produits-pharmaceutiques-et-chimiques]. Accessed August 2020.

[4] Ministry of Public Health. "Directorate of Infrastructure and Medical Equipment". [http://www.sante.gouv.ne/les-directions-nationales/direction-des-infrastructures-et-des-equipements-sanitaires/]. Accessed August 2020.

[5] Ministry of Public Health. [http://www.sante.gouv.ne/]. Accessed August 2020.

[6] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.

[7] Ministry of Foreign Affairs. [http://www.finances.gouv.ne/]. Accessed August 2020.

[8] Ministry for Humanitarian Action and Crisis Management. [http://mahgc.ne/]. Accessed August 2020.

[9] Niger. 2015 "National Plan of Action for Capacity Development in Disaster Risk Reduction".

[https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf]. Accessed August 2020.

[10] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[11] Niger Medical and Health Research Centre (CERMES). [http://www.cermes.net/sante-publique/]. Accessed August 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 neither publicly available evidence that Niger has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency nor that Niger has a plan/mechanism to procure laboratory supplies for national use during a public health emergency. In the Preparation Plan and Response to the Novel Coronavirus of 2020, it is mentioned that there is a need to obtain more laboratory supplies; however, there is no evidence of a plan/agreement to leverage domestic manufacturing capacity or a plan/mechanism to procure laboratory supplies for national use during a public health emergency [1]. There is no further evidence in the Joint External Evaluation (JEE) for Niger, conducted in July 2018 [2]. Further, the National Office of Pharmaceutical and Chemical Products of Niger is in charge of the distribution of reagents nationwide. However, there is no evidence of such a plan/agreement on its webpage [3]. Moreover, such evidence could not be found via the Ministry of Public Health, reports of the World Health Organization (WHO), the Ministry of Foreign Affairs, the Ministry for Humanitarian Action and Crisis Management, Niger's National Multi-risk Contingency Plan (2013), the Operational Centre of Prevention and Crisis Management (Niger's EOC), or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [4,5,6,7,8,9,10].

[1] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_rep_onse_covid_25_03_20_v3.pdf]. Accessed August 2020.

- [2] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger". [https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1]. Accessed August 2020.
- [3] National Office of Pharmaceutical and Chemical Products of Niger. 2015. [http://www.msp.ne/index.php/onppc/254-office-national-des-produits-pharmaceutiques-et-chimiques]. Accessed August 2020.
- [4] Ministry of Public Health. [http://www.sante.gouv.ne/]. Accessed August 2020.
- [5] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)". [https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.
- [6] Ministry of Foreign Affairs. [http://www.finances.gouv.ne/]. Accessed August 2020.
- [7] Ministry for Humanitarian Action and Crisis Management. [http://mahgc.ne/]. Accessed August 2020.
- [8] Niger. 2015 "National Plan of Action for Capacity Development in Disaster Risk Reduction". [https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf]. Accessed August 2020.
- [9] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.
- [10] Niger Medical and Health Research Centre (CERMES). [http://www.cermes.net/sante-publique/]. Accessed August 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 publicly available evidence that Niger has a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency (i.e., antibiotics, vaccines, therapeutics, and diagnostics). Further, there is no evidence available via the World Health Organization (WHO), the General Directorate of Civil Protection, the Urgent Medical Aid Section of the Ministry of Public Health, the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the National Hospital of Niamey, or the National Hospital of Lamorde [1,2,3,4,5,6,7]. Further, Niger has a Ministry of Defence, but the website is currently under construction [8]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms that Niger does not have a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency [9]. There is no further evidence in the Preparation Plan and Response to the Novel Coronavirus of 2020 [10].

[1] World Health Organisation (WHO). "Niger Pharmaceutical Sector Profile (Profil du secteur pharmaceutique du Niger)". [https://www.who.int/medicines/areas/coordination/Niger.pdf?ua=1]. Accessed August 2020.

[2] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[3] Ministry of Public Health. "SAMU Niger". [http://www.msp.ne/index.php/samu-niger]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crises Management. [http://mahgc.ne/]. Accessed August 2020.

[5]) Ministry of Public Health. [http://www.sante.gouv.ne/projets-et-programmes/]. Accessed August 2020.

[6] Ministry of Public Health. "National Hospital of Niamey". [http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey]. Accessed August 2020.

[7] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

[8] Ministry of Defence. [<http://www.defense.gouv.ne/>]. Accessed August 2020.

[9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.

[10] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that Niger has a plan in place to receive health personnel from other countries to respond to a public health emergency. Niger is a member state of the Economic Community of West African States (ECOWAS); under this agreement, the West African Health Organization has as its main objective "the protection of the health of the peoples of the sub-region through cooperation with one another for a collective and strategic combat against the health problems of the sub-region" [1]. This protocol, signed in 1987, states that member states have to provide active assistance in order to resolve a health emergency [2]. Nevertheless, there is no evidence that Niger facilitates the arrival and movement of foreign personnel during an emergency by providing visas and travel or designating an agency responsible for co-ordinating their travel. No evidence could be found via the General Directorate of Civil Protection, the Urgent Medical Aid Section, the Ministry for Humanitarian Action and Crises Management, the Ministry of Public Health, the National Hospital of Niamey, or the National Hospital of Lamorde [3,4,5,6,7,8]. Further, Niger has a Ministry of Defence, but the website is currently under construction [9]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms that there is no plan in place to receive health personnel from other countries to respond to a public health emergency [10].

[1] Economic Community of West African States. "Health". [<http://www.ecowas.int/life-in-the-community/325-2/>]. Accessed August 2020.

[2] West African Health Organisation. "About WAHO".

[http://wahooas.org/spip.php?page=rubriqueS&id_rubrique=24&lang=en]. Accessed August 2020.

[3] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[4] Ministry of Public Health. "SAMU Niger". [<http://www.msp.ne/index.php/samu-niger>]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[7] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[8] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

[9] Ministry of Defence. [<http://www.defense.gouv.ne/>]. Accessed August 2020.

[10] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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: 39.7

2015

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: 37.71

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

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the government has issued legislation, a policy, or a public statement committing to provide prioritized health care services to health care workers who become sick as a result of responding to a public health emergency. There is no such evidence available via the National Ebola preparedness and response plan either [1,2]. There is no further evidence available via Law No. 2012-45 on the Labour Code or Decree No. 2017-682, which regulates the Labour Code. The only reference to diseases contracted during professional activities mentions financial compensation to the victim [3,4]. There is no further evidence available via the Ministry for Humanitarian Action and Crisis Management, the Ministry of Public Health, or in the Preparation Plan and Response to the Novel Coronavirus of 2020 [5,6,7].

[1] Republic of Niger. October 2014. "National Ebola Preparedness and Response Plan (Plan national de preparation et de reponse a l'epidemie de la maladie a virus Ebola)". [<https://www.medbox.org/plan-national-de-preparation-et-de-reponse-a-lepidemie-de-la-maladie-a-virus-ebola-niger/download.pdf>]. Accessed August 2020.

[2] World Health Organisation (WHO). "Ebola: Niger is Preparing to Face It". [<https://afro.who.int/fr/news/fievre-hemorragique-virus-ebola-le-niger-se-prepare-pour-y-faire-face>]. Accessed August 2020.

[3] Ministry of Employment, Labour, and Social Protection. Decree No. 2017-682/PRN/MET/PS of August 10th 2017. "Concerning the Regulation of the Labour Code (Portant partie réglementaire du Code du Travail)".

[<https://www.ilo.org/dyn/natlex/docs/MONOGRAPH/105523/129048/F1791736746/NER-105523.pdf>]. Accessed August 2020.

[4] Ministry of Employment, Labour, and Social Protection. Law No. 2012-45 of September 25, 2012. "Concerning the Labour Code". [https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_127553.pdf]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to novel coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that a system is in place for public health officials and health care workers to communicate during a public health emergency. Nevertheless, there is evidence that public health officials and health care workers are co-ordinated under a single command unit.

No specific mention of communication channels is publicly available. No evidence could be found via the Ministry for Humanitarian Action and Crisis Management or the Ministry of Public Health [1,2]. According to the Preparation Plan and Response to the Novel Coronavirus of 2020, there is a One Health Multisectoral Crisis Technical Committee, chaired by the Secretary General of the Ministry of Public Health and composed of approximately 60 members. Within this committee, there are seven specialized national commissions, one related to communication. Its mission is to coordinate operational activities and be the interface for communication with the public. However, there is no evidence that this system enables public health officials and healthcare workers to communicate [3].

Law No. 2017-06 of March 31, 2017 states that the Operational Centre for Alerts and Crisis Management, under the Directorate of Civil Protection, is in charge of co-ordinating different sectors in case of an emergency, while the Urgency Medical Aid Section co-ordinates all medical rescue services. Moreover, according to Article 22, agreements exist between public health and civil security authorities to respond to emergencies [4,5].

[1] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[3] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[4] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection (Déterminant les principes fondamentaux de l'organisation de la protection civile)."

[<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[5] Ministry of Public Health. "SAMU Niger". [<http://www.msp.ne/index.php/samu-niger>]. Accessed August 2020.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that a system is in place for public health officials and health care workers to communicate during a public health emergency and that it encompasses health care workers in both the public and private sectors.

Although there is evidence (Law No. 2017-06 of March 31, 2017) that public health officials and health care workers are co-ordinated under a single command unit, there is no mention of the private sector [1]. Under the Directorate of Civil Protection, the Urgency Medical Aid Section coordinates all medical rescue services, and there is no mention of the private

sector [2]. Moreover, no specific mention of communication channels is publicly available. Further, no further evidence could be found via the Ministry for Humanitarian Action and Crisis Management, the Ministry of Public Health, or in the Preparation Plan and Response to the Novel Coronavirus of 2020 [3,4,5].

[1] Republic of Niger. Law No. 2017-06 of 31 March 2017. "Determining Fundamental Principles for the Organisation of Civil Protection (Déterminant les principes fondamentaux de l'organisation de la protection civile)." [<http://www.protectioncivile.ne/wp-content/uploads/2018/10/LOI-N%C2%B0-2017-006-du-31-mars-2017-d%C3%A9terminant-les-principes-fondamentaux-de-l%E2%80%99organisation-de-la-protection-civile.compressed-ilovepdf-compressed.pdf>]. Accessed August 2020.

[2] Ministry of Public Health. "SAMU Niger". [<http://www.msp.ne/index.php/samu-niger>]. Accessed August 2020.

[3] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_rep_onse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that the national public health system monitors or tracks the number of healthcare-associated infections (HCAIs) that take place in health care facilities. According to a document issued by the National Hospital of Niamey, the main hospital in Niger, there is a lack of surveillance capacity related to infection control and prevention [1]. Moreover, according to a scientific paper, no personnel in the National Hospital of Niamey are specifically dedicated to HCAIs [2]. Nevertheless, the World Health Organization (WHO) provides support to the Ministry of Public Health for the implementation of a national strategy to fight infections associated with health care infections and for the evaluation of infection control and prevention in the Niamey and Lamorde hospitals [3]. However, this national strategy is not publicly available or has not yet been implemented. There is no further evidence available via the Ministry of Public Health, the Medical and Health Research Centre (CERMES), the National Hospital of Niamey, the National Hospital of Lamorde, or the Health Development Plan 2017–2021 [4,5,6,7,8]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the weakness and the low capacity of health facilities to fight HCAIs [9].

[1] National Hospital of Niamey. "Situation Analysis of the Patient Safety (Analyse Situationnelle de la Sécurité des Patients)". [<http://www.geres.org/wp-content/uploads/2017/01/lome6NigerGERES12.pdf>]. Accessed August 2020.

[2] Alessandro E. "Preventing the Infection Risk in Hospital?". [<https://journals.openedition.org/anthropologiesante/835?lang=en>]. Accessed August 2020.

[3] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)". [https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August

2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[5] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[6] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[7] Ministry of Public Health of Niger. "National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 2020.

[8] Ministry of Public Health. J2016. "Health Development Plan 2017–2021 (Plan de Développement Sanitaire (2017-2021))". [https://www.who.int/pmnch/media/events/2014/nig_pds.pdf]. Accessed August 2020.

[9] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".

[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 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 publicly available evidence that Niger has a national requirement for ethical review before beginning a clinical trial. One of the missions of Niger's National Ethics Committee for Health Research (CCNE) is to protect the health and dignity of persons participating in health-related research. Although clinical trials are not specifically mentioned, Decree No. 2016-644/PRN/MSP stipulates that any health-related research that requires the participation of individuals, must submit an authorisation to the Ministry of Public Health, which will then consult the project with the CCNE [1]. According to the National Strategic Plan for Health Research in Niger 2013–2020, biomedical research intended to increase pharmaceutical knowledge is considered health-related research [2]. Further, there is evidence that the CCNE is currently in operation, as the methodologies of a few academic papers have been approved by the CCNE [3,4].

[1] Republic of Niger. Decree No. 2016-644/PRN/MSP. "Concerning the Creation, Mission, Composition and Function of the National Ethics Committee for Health Research". [<https://healthresearchweb.org/?action=download&file=ethiccommittee.pdf>]. Accessed August 2020.

[2] Republic of Niger. May 2013. "National Strategic Plan for Health Research 2013-2020 (Plan stratégique National de la Recherche en Santé, 2013–2020)". [https://healthresearchweb.org/?action=download&file=PLAN_STRATEGIQUE_RECERCHE_EN_SANTE_2013_2020adoptjuin.pdf]. Accessed August 2020.

[3] Boubacar Maonassara H., et al. 2015. "Influenza Sentinel Surveillance Among Patients with Influenza-like-illness and Severe Acute Respiratory Illness within the Framework of the National Reference Laboratory, Niger, 2009–2013". [<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133178>]. Accessed August 2020.

[4] Refani-Niger Study. 2018. "Overview of Trial and Results". [https://www.actionagainsthunger.org/sites/default/files/publications/REFANI_Niger_Update_final_8_2018.pdf]. Accessed August 2020.

August 2020.

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. Niger's National Ethics Committee for Health Research (CCNE) offers no reference to any expedited process [1]. No further evidence could be found via the National Strategic Plan for Health Research 2013–2020 or the Health Development Plan 2017–2021 [2,3]. There is no further evidence available via the Directorate of Infrastructure and Medical Equipment, the Ministry for Humanitarian Action and Crisis Management, the Ministry of Public Health, the Ministry of Labour, in labour laws or in the Operational Centre of Prevention and Crisis Management [4,5,6,7,8,9,10]. Niger has a Ministry of Research, but the ministry's website is currently not operational [11].

[1] Republic of Niger. Decree No. 2016-644/PRN/MSP. "Concerning the Creation, Mission, Composition and Function of the National Ethics Committee for Health Research". [<https://healthresearchweb.org/?action=download&file=ethiccommittee.pdf>]. Accessed August 2020.

[2] Republic of Niger. May 2013. "National Strategic Plan for Health Research, 2013–2020". [https://healthresearchweb.org/?action=download&file=PLAN_STRATEGIQUE_RECERCHE_EN_SANTE_2013_2020adoptjuin..pdf]. Accessed August 2020.

[3] Ministry of Public Health. 2016. "Health Development Plan 2017–2021". [https://www.who.int/pmnch/media/events/2014/nig_pds.pdf]. Accessed August 2020.

[4] Ministry of Public Health. "Directorate of Infrastructure and Medical Equipment". [<http://www.sante.gouv.ne/les-directions-nationales/direction-des-infrastructures-et-des-equipements-sanitaires/>]. Accessed August 2020.

[5] Ministry for Humanitarian Action and Crises Management. [<http://mahgc.ne/>]. Accessed August 2020.

[6] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[7] Ministry of Employment, Labour, and Social Security. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/164-28-ministere-de-l-emploi-du-travail-et-de-la-securite-sociale>]. Accessed August 2020.

[8] Ministry of Employment, Labour, and Social Protection. Decree No. 2017-682/PRN/MET/PS of August 10th 2017". [<https://www.ilo.org/dyn/natlex/docs/MONOGRAPH/105523/129048/F1791736746/NER-105523.pdf>]. Accessed August 2020.

[9] Ministry of Employment, Labour, and Social Protection. Law No. 2012-45 of September 25, 2012. "Concerning the Labour Code" [https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_127553.pdf]. Accessed August 2020.

[10] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[11] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that Niger has a government agency that is responsible for approving new medical countermeasures for humans. The Pharmaceutical Regulatory Authority (PRA), under the Ministry of Public Health, regulates human drugs and vaccines. The PRA registers and authorises access to the market of medical countermeasures [1].

[1] World Health Organisation (WHO). "Niger Pharmaceutical Sector Profile (Profil du secteur pharmaceutique du Niger)". [<https://www.who.int/medicines/areas/coordination/Niger.pdf?ua=1>]. Accessed August 2020.

4.7.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger has an expedited process to approve medical countermeasures for human use during public health emergencies. Because the Pharmaceutical Regulatory Authority (PRA), which is responsible for regulating human drugs and vaccines, does not have its own website, the existence of an expedited process could not be confirmed. Moreover, there is no mention of an expedited process via the Ministry of Public Health or the National Strategic Plan for Health Research 2013–2020 [1,2]. Further, a 2011 World Health Organization (WHO) document indicates that Niger has initiated the implementation of an expedited review procedure for the registration of meningitis-A conjugate vaccine. Nevertheless, there is no further evidence of the current status of this measure [3]. Niger has a Ministry of Research, but the ministry's website is currently not operational [4].

[1] Republic of Niger. May 2013. "National Strategic Plan for Health Research 2013 –2020". [https://healthresearchweb.org/?action=download&file=PLAN_STRATEGIQUE_RECERCHE_EN_SANTE_2013_2020adoptjuin..pdf]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] World Health Organisation (WHO). 2011. "Procedure for the Expedited Review of Imported Prequalified Vaccines with View to Granting a Marketing Authorisation".

[https://extranet.who.int/prequal/sites/default/files/documents/Expedited_review_procedure.pdf]. Accessed August 2020.

[4] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that pandemics are integrated into the national risk reduction strategy or as a standalone national disaster risk reduction strategy for pandemics. The Niger national multi-risk contingency plan [2013] only covers migration, inundations, and locust threats, although there are references to epidemics as a consequence of these other threats [1]. Further, Niger published a National Plan of Action for Capacity Development in Disaster Risk Reduction, which was intended to provide a framework and recommendations prior to the elaboration of the National Risk Reduction Strategy. In this document, it is stated that epidemic risks must be taken into account in the overall strategy [2]. Nevertheless, there is no evidence that this National Risk Reduction Strategy has already been published. Finally, according to the Hyogo Framework for Action, a National Risk Reduction Strategy is still in development [3]. There is no further evidence available via the Ministry for Humanitarian Action and Crisis Management, the Ministry of Public Health, or the Operational Centre of Prevention and Crisis Management [4,5,6]. In 2020, Niger published a Preparation Plan and Response to the Novel coronavirus, but it mainly focuses on responding to an emergency rather than mitigating the impacts of risks [7].

[1] Republic of Niger. 2013. "Niger National Multi-risk Contingency Plan 2013 (Plan national de contingence multi risque Niger 2013)". [<http://www.ne.undp.org/content/dam/niger/docs/Publications/UNDP-NE-PLAN-NATIONAL-CONTINGENCE2013.pdf>]. Accessed August 2020.

[2] Republic of Niger. "National Plan of Action for Capacity Development in Disaster Risk Reduction".

[<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed August 2020.

[3] Hyogo Framework for Action. 2014. "Niger".

[https://www.preventionweb.net/files/38953_NER_NationalHFAprogress_2013-15.pdf]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/projets-et-programmes/>]. Accessed August 2020.

[6] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[7] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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: 2

There is publicly available evidence that Niger has cross-border agreements, protocols, or memorandums of understanding (MOUs) with neighboring countries, or as part of a regional group, with regard to public health emergencies; there is no evidence of gaps in implementation [1]. Indeed, Niger is part of the third phase of the Regional Disease Surveillance Systems Enhancement Project for West Africa. This regional project financed by the World Bank has a preparedness and emergency response component, which ensures national and regional efforts to respond effectively to human disease outbreaks. One of the main pillars refers to the "Preparedness and Emergency Response component, which intends to support national/regional efforts to enhance infectious disease outbreak preparedness and response capacity by improving local (community), national, and regional capacities to prepare for and respond effectively to animal and human disease outbreaks." No specific pandemics are mentioned in this plan [2]. Niger is also a member state of the Economic Community of West African States (ECOWAS). Under this agreement, the West African Health Organization has as its main objective "the protection of health of the peoples in the sub-region through co-operation with one another for a collective and strategic combat against the health problems of the sub-region." Nevertheless, there is no specific reference to public health emergencies [3]. The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the existence of collaboration frameworks with neighboring countries. It mentions a collaboration agreement between the G5 Sahel countries (Niger, Mali, Mauritania, Chad, and Burkina Faso) for the diagnosis and identification of highly pathogenic agents in case of suspicion of an epidemic or declaration of one [4]. Additional details on this collaboration agreement could not be found on the G5 Sahel website [5].

[1] CEDEAO. 2015. "Joint Annual Meeting Managers of National Health Information Systems (SNIS) and Integrated Disease Surveillance and Response (IDSR) with Technical and Financial Partners in the ECOWAS Region".

[<https://www.measureevaluation.org/resources/publications/ws-15-25-fr>]. Accessed August 2020.

[2] World Bank. "Third phase of Regional Disease Surveillance Systems Enhancement Project for West Africa".

[<http://projects.banquemondiale.org/P161163/?lang=fr&tab=overview>]. Accessed August 2020.

[3] Economic Community of West African States. "Health". [<http://www.ecowas.int/life-in-the-community/325-2/>]. Accessed August 2020.

- [4] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [5] G5 Sahel. [<https://www.g5sahel.org/index.php>]. Accessed August 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 insufficient publicly available evidence that Niger has cross-border agreements, protocols, or memorandums of understanding (MOUs) with neighboring countries, or as part of a regional group, with regard to animal health emergencies.

The Joint External Evaluation (JEE) for Niger, conducted in July 2018, confirms the existence of collaboration frameworks with neighboring countries. The JEE mentions a collaboration agreement between the G5 Sahel countries (Niger, Mali, Mauritania, Chad, and Burkina Faso) for the diagnosis and identification of highly pathogenic agents in case of suspicion or the declaration of an epidemic. However, it is not specified if it concerns animal health emergencies [1]. Additional details on this collaboration agreement could not be found on the G5 Sahel website [2]. Further, Niger is part of the third phase of the Regional Disease Surveillance Systems Enhancement Project for West Africa. This regional project, financed by the World Bank, has a preparedness and emergency response component, which co-ordinates national and regional efforts to effectively respond to animal disease outbreaks. This strategy enables the timely reporting of animal health emergencies in line with the World Organization for Animal Health (OIE) Terrestrial Animal Health Code. The strategy aims to strengthen and establish veterinary laboratories networks of high quality, both in the public and private sectors [3]. No specific pandemics are mentioned.

Finally, according to the OIE PVS Assessment of 2019, the veterinary services of Niger participate sporadically in international meetings; however, cross-border collaboration is practically nonexistent, except for pastoralism (agreements between Maradi and Katsina in Nigeria and response to/vaccination against anthrax) [4].

- [1] World Health Organisation (WHO). 2018. "Joint External Evaluation (JEE) for Niger".
[<https://apps.who.int/iris/bitstream/handle/10665/277166/WHO-WHE-CPI-2018.33-fre.pdf?ua=1>]. Accessed August 2020.
- [2] G5 Sahel. [<https://www.g5sahel.org/index.php>]. Accessed August 2020.
- [3] World Bank. "Third Phase of Regional Disease Surveillance Systems Enhancement Project for West Africa".
[<http://projects.banquemondiale.org/P161163/?lang=fr&tab=overview>]. Accessed August 2020.
- [4] World Organisation for Animal Health (OIE). 2019. "PVS Assessment for Niger".
[https://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/docs/pdf/20191014_PVS_FU_Niger_FINAL.pdf]. Accessed August 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

Does the county have signatory and ratification (or same legal effect) status to the Biological Weapons Convention?

Signed and ratified (or action having the same legal effect) = 2, Signed = 1, Non-compliant or not a member = 0

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 1

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

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

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

- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)

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

Current Year Score: 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: 1

2021

OIE PVS assessments

5.4.2b

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

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Niger invested national funds to improve its own domestic capacity to address epidemic threats in the past three years. There is no such evidence available via the Ministry of Public Health, reports of the World Health Organization, the Ministry of Foreign Affairs, the Ministry for Humanitarian Action and Crisis Management, Niger's National Multi-risk Contingency Plan (2013), the Operational Centre of Prevention and Crisis Management (Niger's EOC), the Niger Medical and Health Research Centre (CERMES; the national laboratory), or the Ministry of Agriculture and Livestock [1,2,3,4,5,6,7,8].

[1] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[2] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUIIN2019.pdf]. Accessed August 2020.

[3] Ministry of Foreign Affairs. [<http://www.finances.gouv.ne/>]. Accessed August 2020.

[4] Ministry for Humanitarian Action and Crisis Management. [<http://mahgc.ne/>]. Accessed August 2020.

[5] Niger. 2015 "National Plan of Action for Capacity Development in Disaster Risk Reduction".

[<https://www.cadri.net/sites/default/files/NIGER-Plan-d-Action-National-RRC-Draft.pdf>]. Accessed August 2020.

[6] Interior Ministry. "General Directorate of Civil Protection". [http://www.protectioncivile.ne/?page_id=665]. Accessed August 2020.

[7] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[8] Ministry of Agriculture and Livestock. [<http://www.cme-niger.com/>]. Accessed August 2020.

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 1

There is a publicly identified special emergency public financing mechanism and funds that 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). Niger is an IDA eligible borrowing country that is eligible for the World Bank pandemic financing facility [1,2]. From 2014 to 2020, Niger received US\$1.6 bn and disbursed US\$1.02 bn. The funders include, among others, the World Health Organization (WHO); United States of America; the Bill and Melinda Gates Foundation; and the Global Fund to Fight AIDS, Tuberculosis, and Malaria [3].

[1] IDA. "Borrowing Countries". [<https://ida.worldbank.org/about/borrowing-countries>]. Accessed August 2020.

[2] Pandemic Emergency Financing Facility (PEF). 2017. [<http://pubdocs.worldbank.org/en/119961516647620597/PEF->

Operational-Brief-Dec-2017.pdf]. Accessed August 2020.

[2] GHS Tracking Dashboard. "Niger". [https://tracking.ghscosting.org/details/164/recipient]. Accessed August 2020.

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?
- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

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

Current Year Score: 0

There is no publicly available evidence that senior leaders have made a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support in the past three years. There is evidence of an old commitment back in 2014, where Niger, as a member of the Economic Community of West African States (ECOWAS), contributed US\$200,000 to the regional solidarity fund to fight the Ebola epidemic then faced by the region [1]. However, there is no evidence of a more recent commitment via the Ministry of Public Health, the World Health Organization (WHO), or the Ministry of Foreign Affairs [2,3,4]. There is publicly available evidence that senior leaders have made a public commitment to improve their own domestic capacity to address epidemic threats by requesting support to improve capacity in the past three years. Indeed, there is evidence that Niger requested funding in 2020 to the International Monetary Fund (IMF) to support its Preparation Plan and Response to the Novel Coronavirus [5].

[1] Economic Community of West African States (ECOWAS). "Ebola". [http://www.ecowas.int/ebola/]. Accessed August 2020.

[2] Ministry of Public Health. [http://www.sante.gouv.ne/]. Accessed August 2020.

[3] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.

[4] Ministry of Foreign Affairs. [http://www.diplomatie.gouv.ne/]. Accessed August 2020.

[5] International Monetary Fund (IMF). 2020. "Niger".

[https://www.imf.org/~media/Files/Publications/CR/2020/French/1NERFA2020002.ashx]. Accessed August 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 no publicly available evidence that Niger has, in the past three years, provided other countries with financing or technical support to improve capacity to address epidemic threats. However, there is publicly available evidence that the country has requested financing or technical support from donors to improve the country's domestic capacity to address

epidemic threats. Niger last invested finances to support other countries in 2014, which as during that year's Ebola outbreak [1]. There is publicly available evidence that Niger has invested finances (from donors) to improve its own domestic capacity to address epidemic threats in the past three years. According to the Global Health Security Tracking Dashboard, from 2014 to 2020 Niger received US\$1.6 bn and disbursed US\$1.02 bn, the majority of which is for immunization. The funders include the World Health Organization (WHO); United States of America; Bill and Melinda Gates Foundation; The Global Fund to Fight AIDS, Tuberculosis, and Malaria, among others. [2] In addition, in 2020, Niger obtained financial resources from the International Monetary Fund and the World Bank after requesting it to fight the coronavirus epidemic [3,4]. There is no further evidence available via the Ministry of Public Health, the World Health Organization (WHO), or the Ministry of Foreign Affairs [5,6,7].

[1] Economic Community of West African States (ECOWAS). "Ebola". [<http://www.ecowas.int/ebola/>]. Accessed August 2020.

[2] GHS Tracking Dashboard. "Niger". [<https://tracking.ghscosting.org/details/164/recipient>]. Accessed August 2020.

[3] International Monetary Fund. 2020. "Niger".

[<https://www.imf.org/~media/Files/Publications/CR/2020/French/1NERFA2020002.ashx>]. Accessed August 2020.

[4] World Bank. 2020. "Niger to Receive \$13.95 Million for COVID-19 Response".

[<https://www.worldbank.org/en/news/press-release/2020/04/15/niger-to-receive-13-95-million-for-covid-19-response>]. Accessed August 2020.

[5] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[6] World Health Organisation (WHO). "Annual Report 2018 Niger (Rapport Annuel 2018)".

[https://www.afro.who.int/sites/default/files/2019-06/Rapport%20annuel%202018_21JUN2019.pdf]. Accessed August 2020.

[7] Ministry of Foreign Affairs. [<http://www.diplomatie.gouv.ne/>]. Accessed August 2020.

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that there is 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. There is no such evidence available via the Ministry of Public Health, the Niger Medical and Health Research Centre (CERMES; the national laboratory), and the Ministry of Agriculture and Livestock [1,2,3]. Niger has a Ministry of Research, but the ministry's website is not currently functional [4]. The Preparation Plan and Response to the Novel Coronavirus indicates that the supplies of laboratory equipment will be made through regional laboratories; whereas the quality control of samples will be ensured by the CERMES Laboratory, Dakar (Institut Pasteur) or other international laboratories [5]. However, there is not a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials).

[1] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[2] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[3] Ministry of Agriculture and Livestock (Ministère de l'agriculture et de l'élevage). [<http://www.cme-niger.com/>]. Accessed August 2020.

[4] Ministry of Research. [<http://www.gouv.ne/index.php/les-ministeres/liste-des-ministeres/96-13-ministere-de-l-enseignement-superieur-de-la-recherche-et-de-l-innovation>]. Accessed August 2020.

[5] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 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 publicly available evidence that Niger has not shared samples in accordance with the PIP framework in the past two years. According to the WHO, there is evidence that Niger as a member state of this PIP framework has participated in the activities within this PIP framework, such as the "National Pandemic Influenza Preparedness and Response Plans are updated in the context of all-hazards preparedness and global health security." There is no further evidence available via the World Health Organization (WHO) or top international and local media outlets [1]. No evidence could be found with regard to the share of COVID samples in the Ministry of Public Health or the Niger Medical and Health Research Centre (CERMES; the national laboratory) [2,3].

[1] World Health Organisation (WHO). 2020. "Niger". [<http://open.who.int/2020-21/country-programme/NER/14.003>]. Accessed August 2020.

[2] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[3] Niger Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 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 publicly available evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years. Niger has explicit agreements to share pandemic samples as part of the Institut Pasteur International Network [1,2]. There is no further evidence in the Preparation Plan and Response to the Novel Coronavirus [3]. Prior to the coronavirus outbreak, Niger reported an outbreak of cholera (November 2018) and an outbreak of Rift Valley Fever (November 2018). Further, there is no information concerning the share of pandemic pathogen samples in the Ministry of Public Health, the Medical and Health Research Centre (CERMES), the National Hospital of Niamey, or the National Hospital of Lamorde [4,5,6,7].

[1] Institute Pasteur. "The Institut Pasteur International Network ". [<https://www.pasteur.fr/en/institut-pasteur/institut-pasteur-throughout-world/institut-pasteur-international-network>]. Accessed August 2020.

[2] CERMES. "Sampling Procedure and Sending of Blood Samples in Case of Suspected Ebola Infection (Procédure de prélèvement et envoi d'un échantillon sanguin en cas de suspicion d'infection à virus Ebola)".

[<https://www.medbox.org/procedure-de-prelevement-et-denvoi-dun-echantillon-sanguin-a-ipd-pour-suspicion-dinfection-a-virus-ebola/download.pdf>]. Accessed August 2020.

[3] Ministry of Public Health. 2020. "Preparation Plan and Response to Novel Coronavirus (Plan de Préparation et Réponse au nouveau coronavirus)".

[https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/plan_preparation_reponse_covid_25_03_20_v3.pdf]. Accessed August 2020.

[4] Ministry of Public Health. [<http://www.sante.gouv.ne/>]. Accessed August 2020.

[5] The Medical and Health Research Centre (CERMES). [<http://www.cermes.net/sante-publique/>]. Accessed August 2020.

[6] Ministry of Public Health of Niger. "National Hospital of Niamey". [<http://www.msp.ne/index.php/hnn/325-presentation-hopital-national-de-niamey>]. Accessed August 2020.

[7] Ministry of Public Health of Niger. " National Hospital of Lamorde". [<http://www.msp.ne/index.php/hnl/336-presentation-hnl>]. Accessed August 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: 1

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 32

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: 0

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country?

4 = Very high, 3 = High, 2 = Moderate, 1 = Low, 0 = Very low

Current Year Score: 4

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

How high is the risk of organized criminal activity to the government or businesses in the country?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 0

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 0

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 1

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 35.05

2018

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

6.2.2 Gender equality

6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

Current Year Score: 0.35

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: 13.7

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 a report from the International Labour Office (ILO) of 2018, 77.3% of the total employed population works in the informal sector in Niger [1].

[1] International Labour Office (ILO). 2018. "Women and Men in the Informal Economy: A Statistical Picture". [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf]. Accessed August 2020.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 0

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

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

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.34

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 0

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 1

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 0

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 16.52

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -0.1

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 0

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 62.02

2018

United Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA)
World Factbook

6.5.1b

Age-standardized NCD mortality rate (per 100 000 population)

Input number

Current Year Score: 599.7

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 2.6

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 8.6

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 5.5

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 50.27

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 13.57

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: 25.89

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