

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

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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: 2

Sri Lanka does have a national AMR plan for the surveillance, detection and reporting of priority AMR pathogens. The "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022" was developed in 2017 and will run up until at least 2022. [1] This plan is in line with the WHO Global Action Plan on AMR and has been developed around 5 key strategies which "cover all aspects in combating AMR involving human, animal, agriculture, fisheries and environment sectors." [1] The five key strategies are to: 1) Improve awareness and understanding of antimicrobial resistance through effective communication, education and training; 2) Strengthen the knowledge and evidence base through surveillance and research; 3) Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures; 4) Optimise use of antimicrobial medicines in human and animal health; and 5) Develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions. [1] According to their second strategy, they aim to "build laboratory capacity to produce high quality microbiological data for patient management and support surveillance activities in both human and animal sectors [since] good quality laboratories are the essence in ensuring accurate, reliable and rapid test results on which the rational prescribing decisions and appropriate measures for the prevention and control of infections are taken. Building laboratory capacity is a must in generating good quality data for surveillance." [1] Furthermore, within 2 years of the plan's implementation they aim to "introduce laboratory facilities to detect antimicrobials in food of animal origin [and to] empower identified leading laboratories for detection of antimicrobial residues in food of animal origin." [1] Within 5 years, they aim to "develop monitoring/surveillance system to detect antimicrobials in animal originated food [and to] improve laboratory facilities (accredited laboratories) for analysis and certification of animal originated food products for domestic and export market." [1] Lastly, "NAP-IST [National Action Plan Implementation strengthening team] will oversee implementation and report progress to NAC-AMR [National Advisory Committee on Antimicrobial Resistance]. Monitoring and evaluation will be supported by a monitoring and evaluation plan." [1]

[1] Democratic Socialist Republic of Sri Lanka. "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022". 2017. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 13 November 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

Sri Lanka has a national laboratory system which tests for some priority AMR pathogens. According to the WHO Joint External Evaluation for Sri Lanka, conducted in June 2017, the country has more than 60 microbiology labs which can conduct AMR surveillance (with varying levels of capability). The report states that the country conducts AMR surveillance, but does not specify the pathogens tested for. It does however mention that the system should be expanded to include pathogens such as "Salmonella, E.coli, and S. aureus." The section on AMR also notes that as a strength, the country has specialised reference laboratories for gonorrhoea and tuberculosis. [1] No public evidence of specific tests can be found on their Ministry of Health, Ministry of Agriculture or Medical Research Institute websites. [2,3,4] The "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022" does mention that the country is conducting AMR testing, but does not mention the pathogens for which the country is capable of testing.[5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>]. Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020.[<http://www.mri.gov.lk/>]. Accessed 13 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022". 2017. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 13 November 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 not enough evidence that Sri Lanka conducts detection or surveillance activities (e.g. in soil, waterways, etc.) for antimicrobial residues or AMR organisms. According to the country's "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022", the capacity to identify the pathogens to species level and detection of resistance mechanisms are limited in Sri Lanka. The strategy document notes that in two years from the strategy launch, a goal is to "review research on antimicrobials used in aquatic environments and its impacts and incorporate in the national programme on AMR". [1] In addition, their Central Environmental Authority has no policy or initiative relating to the surveillance or detection of antimicrobial residues or AMR organisms. [2] Lastly, no evidence of such detection or surveillance activities are available in the WHO Joint External Evaluation for Sri Lanka, conducted in June 2017, their Ministry of Health or Ministry of Agriculture websites. [3,4,5]

[1] Democratic Socialist Republic of Sri Lanka. "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022". 2017. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 13 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Central Environmental Authority. "Services". 2020. [<http://www.cea.lk/web/en/services>]. Accessed 13 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. [<http://www.agrimin.gov.lk/web/index.php/en>]. Accessed 13 November 2020

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has a national legislation or regulation in place requiring prescriptions for antibiotic use for humans. Sri Lanka outlines the need for such a regulation in its Ministry of Health's "National Strategic Framework For Development of Health Services 2016 - 2025" in which it says that there is a need to develop and "implement [an] institutional antibiotic policy." [1] Furthermore, in their draft bill called "The Proposed New National Medicinal Drug, Devices and Cosmetic Authority", there are guidelines for prescriptions and how professionals should prescribe drugs such as the directive that prescriptions "should contain generic name of a medicinal drug." [2] However, the prescription guidelines are generic and do not specify instructions for antibiotics. In addition, their "Empirical and Prophylactic Use of Antimicrobials National Guidelines 2016" makes no mention of regulations for prescriptions but rather outlines dosages and treatment protocol using common antimicrobials along with guidelines on use of antimicrobials for health institutions. [3] The country's "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022", notes that it follows the "standard traffic light system" for categorisation of antimicrobials in a hospital setting. In Sri Lankan hospitals, antimicrobials fall in the Red category, which indicates that they are "considered suitable for a consultant or specialist, usually within a secondary or tertiary care services, to initiate and continue prescribing". [4,5] No further evidence is found on their Ministry of Health or National Medicines Regulatory Authority websites [6,7]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "National Strategic Framework For Development of Health Services 2016 - 2025". 2016. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/HMP2016-2025/National%20%20Strategic%20%20Framework%20%20.pdf]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka Ministry of Health. "The Proposed New National Medicinal Drug, Devices and Cosmetic Authority Draft Bill". February 2014. (http://www.health.gov.lk/enWeb/Pub_Opi/NDDCCA%2028.2.2014-%20amendment.pdf). Accessed 13 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health, Nutrition and Indigenous Medicine. "Empirical and Prophylactic Use of Antimicrobials National Guidelines 2016". 2016. [<http://slmicrobiology.net/download/National-Antibiotic-Guidelines-2016-Web.pdf>]. Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022". 2017. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>] Accessed 13 November 2020

[5] National Health Service. "Traffic Light Classification". [http://www.derbyshiremedicinesmanagement.nhs.uk/full_traffic_light_classification]. Accessed 13 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Health. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020.

[7] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Medicines Regulatory Authority. 'Legislation'. [https://www.nmra.gov.lk/index.php?option=com_content&view=article&id=263&Itemid=190&lang=en]. Accessed 13 November 2020

1.1.2b

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has a national legislation or regulation in place requiring prescriptions for antibiotic use for animals. Although Sri Lanka outlines the need for such a regulation in its Ministry of Health's "National Strategic Framework For Development of Health Services 2016 - 2025" in which it says that there is a need to develop and "implement [an] institutional antibiotic policy." [1] Furthermore, in their draft bill called "The Proposed New National Medicinal Drug, Devises and Cosmetic Authority", there are guidelines for prescriptions and how professionals should prescribe drugs such as the directive that prescriptions "should contain generic name of a medicinal drug." [2] However, the prescription guidelines are generic and do not specify instructions for antibiotics. According to their definition the word prescription pertains to both humans and animals. [2] In addition, their "Empirical and Prophylactic Use of Antimicrobials National Guidelines 2016" makes no mention of regulations for prescriptions but rather outlines dosage and treatment protocol using common antimicrobials along with guidelines on use of antimicrobials for health institutions. [3] Furthermore, their Ministry of Agriculture does not seem to have any additional information on requiring prescriptions for antibiotic use for animals. [4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "National Strategic Framework For Development of Health Services 2016 - 2025". 2016. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/HMP2016-2025/National%20%20Strategic%20%20Framework%20%20.pdf]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "The Proposed New National Medicinal Drug, Devises and Cosmetic Authority Draft Bill". February 2014. [http://www.health.gov.lk/enWeb/Pub_Opi/NDDCCA%2028.2.2014-%20amendment.pdf]. Accessed 13 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health, Nutrition and Indigenous Medicine. "Empirical and Prophylactic Use of Antimicrobials National Guidelines 2016". 2016. [http://slmicrobiology.net/download/National-Antibiotic-Guidelines-2016-Web.pdf]. Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020 [http://www.agrimin.gov.lk/web/index.php/en]. Accessed 13 November 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: 0

There is no evidence that Sri Lanka has a national law, plan, or equivalent strategy document, on zoonotic disease. According to the June 2017 WHO Joint External Evaluation for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval". The JEE report also indicates that disease-specific plans may not be in place, as it

recommends that the country "design, implement and annually evaluate zoonotic disease control plans for rabies, brucellosis, tuberculosis and leptospirosis, among others" as a priority action. [1] Neither Sri Lanka's Ministry of Health nor Ministry of Agriculture websites have any policies addressing zoonotic diseases. [2,3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>]. Accessed 13 November 2020

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans in Sri Lanka. Although Sri Lanka proposes to have strategies and activities on zoonotic diseases of public health importance and strengthening of zoonotic disease surveillance in its Ministry of Health's "National Strategic Framework For Development of Health Services 2016 - 2025", there is no mention of measures for risk identification and reduction for zoonotic disease spillover events from animals to humans.[1] According to the June 2017 WHO Joint External Evaluation for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval". The JEE report also indicates that disease-specific plans may not be in place, as it recommends that the country "design, implement and annually evaluate zoonotic disease control plans for rabies, brucellosis, tuberculosis and leptospirosis, among others" as a priority action. [2] Neither Sri Lanka's Ministry of Health nor Ministry of Agriculture websites have any policies addressing zoonotic diseases. [3,4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "National Strategic Framework For Development of Health Services 2016 - 2025". 2016. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/HMP2016-2025/National%20%20Strategic%20%20Framework%20%20.pdf]. Accessed 13 November 2020

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>]. Accessed 13 November 2020

1.2.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has national plans, guidelines, or laws that account for the surveillance and control of multiple zoonotic pathogens of public health concern. According to the June 2017 Joint External Evaluation (JEE) for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval". [1] The JEE report also indicates that disease-specific plans may not be in place, as it recommends that the country "design, implement and annually evaluate zoonotic disease control plans for rabies, brucellosis, tuberculosis and leptospirosis, among others" as a priority action. [1] There is evidence that plans may be under development, as there is a specific mention of diseases like Leptospirosis, Rabies, Filariasis, Leishmaniasis and Malaria within their "National Strategic Framework For Development of Health Services 2016 - 2025." The document calls for the prevention, surveillance and control of diseases and states that the country will take action to strengthen "zoonotic disease surveillance, outbreak investigation, enhance inter-sectoral collaboration, promote and conduct operational research related to zoonotic diseases." [2] Furthermore, neither Sri Lanka's Ministry of Health nor Ministry of Agriculture websites have any policies addressing zoonotic diseases. [3,4]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

[2] Sri Lanka Ministry of Health. "National Strategic Framework For Development of Health Services 2016 - 2025". 2016. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/HMP2016-2025/National%20%20Strategic%20%20Framework%20%20.pdf] Accessed 13 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/] Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>] Accessed 13 November 2020

1.2.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of Sri Lanka having a department, agency or similar unit dedicated to zoonotic disease that functions across ministries. According to the June 2017 WHO Joint External Evaluation for Sri Lanka, the country is making amendments on responsibilities of agencies handling zoonotic disease control. The report states: "Until recently, activities related to zoonotic diseases have been primarily the responsibility of the Ministry of Health, Nutrition and Indigenous Medicine. Now, the Department of Animal Health and Production has the mandate (but not the budgetary authority) to perform activities such as rabies vaccinations for dogs. The department has also requested the establishment of a Veterinary Public Health division, which would come under its management." [1] There is no evidence either under the Ministry of Health nor the Ministry of Agriculture that an agency responsible for zoonotic disease has yet been established that can function across ministries. [2,3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/] Accessed 13 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>]

Accessed 13 November 2020

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka 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 publicly available evidence of such a mechanism available on their Ministry of Health website and no such way of declaring or reporting on disease surveillance via forms or reporting it via any mechanism on their Ministry of Agriculture. [1,2] Furthermore, there is no evidence that Sri Lanka has a national law, plan, or equivalent strategy document, on zoonotic disease. According to the June 2017 WHO Joint External Evaluation for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval". [3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 13 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>] Accessed 13 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 13 November 2020

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of laws or guidelines that safeguard the confidentiality of information generated through surveillance activities for animals (for owners) in Sri Lanka. According to the June 2017 WHO Joint External Evaluation for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval". [1] Furthermore, there is no evidence that Sri Lanka has a national law, plan, or equivalent strategy document, on zoonotic disease. There is no publicly available evidence of such laws or guidelines available on their Ministry of Health website and no such way of declaring or reporting on disease surveillance via forms or reporting it via any mechanism on their Ministry of Agriculture or the Department of Animal Production and Health websites. [2,3,4]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. "Forms". 2020.

[<http://www.agrimin.gov.lk/web/index.php/en/downloads/forms>]. Accessed 14 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Department of Animal Production and Health. 2020. [

<http://www.daph.gov.lk/web/index.php?lang=en>] Accessed 14 November 2020

1.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Sri Lanka conducts surveillance of zoonotic disease in wildlife although the zoonotic disease surveillance needs to be strengthened and improved. National Dengue Control Unit under the Ministry of Health conducts Dengue Vector Surveillance i.e mosquitoes; 'Dengue Vector Surveillance is an important and essential component of the Dengue Control Program. Information generated from Vector Surveillance guides the Vector Control Program and helps for early warning and epidemic forecasting.' [1] The "National Strategic Framework For Development of Health Services 2016 - 2025" mentions the prevalence of various zoonotic diseases like leptospirosis, dengue, rabies, leishmaniasis, malaria and filariasis and recommends 'strengthening of zoonotic disease surveillance' to control these diseases. [2] According to the June 2017 WHO Joint External Evaluation(JEE) for Sri Lanka, the country's "National strategy on zoonotic disease control requires finalization and approval" and there is no discussion of any wildlife surveillance within the JEE. [3] Furthermore, there is no evidence that Sri Lanka has a national law, plan, or equivalent strategy document, on zoonotic disease under the Ministry of Health or the Ministry of Agriculture.[4,5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Dengue Control Unit. 2020.

[<http://www.dengue.health.gov.lk/web/index.php/en/>]. Accessed 14 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "National Strategic Framework For Development of Health Services 2016 - 2025". 2016. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/HMP2016-2025/National%20%20Strategic%20%20Framework%20%20.pdf] Accessed 14 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020:

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020 [http://www.health.gov.lk/moh_final/english/] Accessed 14 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>]. Accessed 14 November 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: 11.25

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 5.72

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has mechanisms for working with the private sector in controlling or responding to zoonoses. Sri Lanka currently does not have an updated national plan on zoonotic diseases. According to the June 2017 WHO Joint External Evaluation report for Sri Lanka", the country is "updating its animal health legislation, which covers zoonotic diseases." [1] Its "Animal Diseases ACT, No. 59 of 1992" only mentions the involvement of the private sector in helping set up its Veterinary Drug Control Authority. [2] There is no other public evidence of such a mechanism available on its Ministry of Health, Ministry of Agriculture, or national Medical Research Institute website. [3,4,5] The JEE report notes that "strengthened collaboration with private veterinarians and the wildlife sector" is needed for zoonotic disease surveillance. [1]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Department of Animal Production and Health. "Acts and Regulations" [<http://www.daph.gov.lk/web/index.php?lang=en>]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020.[http://www.health.gov.lk/moh_final/english/]

Accessed 14 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020

[5] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020- [<http://www.mri.gov.lk/>] Accessed 14 November 2020

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has in place a record 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. According to the June 2017 Joint External Evaluation for Sri Lanka, "individual organizations and facilities that store or process dangerous pathogens—including the Medical Research Institute, the National Programme for Tuberculosis Control and Chest Diseases, the National STD/AIDS Control Programme and the Veterinary Research Institute—maintain up-to-date records and inventories of pathogens, but there is no national inventory for dangerous pathogens." [1] Furthermore, there is no evidence of any such records on their Ministry of Health, Ministry of Defence, Ministry of Agriculture or their Medical Research Institute websites. [2,3,4,5] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [6] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[7]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020.[http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020

[5] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 14 November 2020

[6] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020.

[7] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 2020

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. According to the June 2017 Joint External Evaluation for Sri Lanka, "pathogen control measures, including standards for physical containment and operational handling and containment failure reporting systems, should be strengthened." The report also states that the country "does not have comprehensive national biosafety and biosecurity legislation" but that guidelines are available. [1] However, no publicly available guidelines to this effect anywhere on their Ministry of Health, Ministry of Defence, Ministry of Agriculture or their Medical Research Institute websites. There is also no evidence that legislation has been passed since the JEE mission was conducted. [2,3,4,5] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [6] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[7]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020

[5] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020 [<http://www.mri.gov.lk/>]. Accessed 14 November 2020

[6] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020

[7] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 2020

1.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an established agency responsible for the enforcement of biosecurity legislation and regulations in Sri Lanka. Similarly, there is no evidence that Sri Lanka has in place legislation and/or regulations related to biosecurity. According to the June 2017 Joint External Evaluation for Sri Lanka, the country does not have comprehensive national biosafety and biosecurity legislation, although guidelines have been developed. [1] The report also notes that the Sri Lankan Medical Research Institute has a biosafety committee and biosafety policy document, but there is no mention of such a

committee or document on its website. [1,2] Furthermore, there is no evidence of any agencies or regulations covering biosecurity via the Ministry of Health, Ministry of Defence, or Ministry of Agriculture. [3,4,5] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [6] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[7]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 14 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020 [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020.

[6] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020

[7] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 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: 1

There is evidence that Sri Lanka has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. The June 2017 Joint External Evaluation for Sri Lanka states that "the country has identified facilities to store or process dangerous pathogens, consolidating dangerous pathogens into a minimum number of facilities [and that] the Veterinary Research Institute has been identified for the storage of pathogens in the animal health sector." [2] No details of this process are publicly available through the Veterinary Research Institute, Ministry of Defence, Ministry of Health, or Ministry of Agriculture website. [2,3,4,5] Furthermore, Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [6] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[7]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Livestock & Rural Community Development. "The Veterinary Research Institute".2020. [<http://www.vri.lk/home.php>]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/].

Accessed 14 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020.

[6] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020

[7] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 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 public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, in Sri Lanka. No evidence of any such capacity was found on their Ministry of Defence website, Ministry of Health website or Ministry of Agriculture website. [1,2,3] Furthermore, PCR testing for Ebola or Anthrax is not mentioned on their Medical Research Institute website which is Sri Lanka's national laboratory. [4] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention the country's ability to test for Ebola or anthrax. [5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020.[<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020.[<http://www.mri.gov.lk/>]. Accessed 14 November 2020

[5] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

1.3.2 Biosecurity training and practices

1.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of Sri Lanka offering 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. No evidence of any such training offered was found on their Ministry of Defence website, Ministry of Health website, and Ministry of Agriculture website. [1,2,3] The Joint

External Evaluation for Sri Lanka, conducted in June 2017, states that the country does not have a comprehensive common curriculum or a train-the-trainers programme in place. The report notes that while biosafety and biosecurity training is common at all facilities, it is primarily operated at the institutional level. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020

[6] VERTIC.'Srilanka'.<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/> Accessed 14 November 2020

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has regulations or licensing conditions which specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to the checks. No such checks are mentioned anywhere in their Ministry of Defence website, Ministry of Health website, and Ministry of Agriculture website. [1,2,3] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention licensing requirements for individuals but states that the laboratory licensing needs to be updated to include biosafety and biosecurity requirements. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 14 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 14 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 14 November 2020

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 14 November 2020.

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 14 November 2020.

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 2020

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of publicly available information on national regulations on the safe and secure transport of infectious substances (specifically including Category A and B substances) in Sri Lanka. According to the June 2017 Joint External Evaluation for Sri Lanka, specimen transport is currently conducted on an ad hoc basis; by informal transport through ambulances and other vehicles and that "there are no standardized procedures for how to package specimens safely and securely." [1] Furthermore, no such information on national regulations were found on Sri Lanka's Ministry of Defence, Ministry of Health, Ministry of Agriculture, Ministry of Transport or Medical Research Institute websites. [2,3,4,5,6] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [7] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[8]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2018. [<http://www.defence.lk/>]. Accessed 15 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Transport. [<http://www.transport.gov.lk/web/index.php?lang=en>]. Accessed 15 November 2020.

[6] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 15 November 2020

[7] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020

[8] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 14 November 2020

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national legislation or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential in Sri Lanka. No evidence of such a regulation or guidance can be found on their Ministry of Defence, Ministry of Health, Ministry of Agriculture and Ministry of Industries websites. [1,2,3,4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020 [<http://www.defence.lk/>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Industries. 2020. [<http://www.industry.gov.lk/web/>]. Accessed 15 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 2020

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has in place national biosafety legislation and/or regulations. There is no public evidence of laws which protect workers from accidental exposure to infectious substances on the Ministry of Health, Ministry of Agriculture or Medical Research Institute websites. [1,2,3] According to the June 2017 Joint External Evaluation for Sri Lanka, the country has not yet developed comprehensive biosafety and biosecurity regulations. However, the report notes that "a biosafety manual for medical laboratories provides laboratory staff in the public and private sectors with guidance, information and knowledge on biosafety and biosecurity". [4] The biosafety manual is not publicly available through the Ministry of Health, Ministry of Agriculture or Medical Research Institute websites. [1,2,3] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and

Information Centre (VERTIC) database.[6]

- [1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020
- [2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020
- [3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 15 November 2020
- [4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020
- [5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 15 2020
- [6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 2020

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an established agency responsible for the enforcement of biosafety legislation and regulations in Sri Lanka. According to the June 2017 Joint External Evaluation report for Sri Lanka, the country does not yet have comprehensive biosafety and biosecurity legislation in place, but there is a biosafety manual for laboratory staff, which includes "guidance, information and knowledge on biosafety and biosecurity". [1] The biosafety manual is not publicly available through the Ministry of Health, Ministry of Agriculture or Medical Research Institute websites. [2,3,4] According to the JEE report, The Medical Research Institute, however, does have an institutional biosafety committee. However, no detail on its enforcement capabilities is available via its website. [4] There is also no further evidence via the Ministry of Health or Ministry of Agriculture website. [2,3] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

- [1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020
- [2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020
- [3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020.
- [4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 15 November 2020.
- [5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020
- [6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 2020

1.4.2 Biosafety training and practices

1.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Sri Lanka requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. No evidence of any such training offered was found on the Ministry of Health, Ministry of Agriculture or Medical Research Institute website. [1,2,3] The Joint External Evaluation for Sri Lanka, conducted in June 2017, states that the country does not have a comprehensive common curriculum or a train-the-trainers programme in place. The report notes that while biosafety and biosecurity training is common at all facilities, it is primarily operated at the institutional level. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database. [6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 15 November 2020

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 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 Sri Lanka 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. No evidence of any such research was found on their Ministry of Defence website, Ministry of Health website, and Ministry of

Agriculture website. [1,2,3] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention dual-use research in the country. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020.

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 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 available evidence that Sri Lanka has a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, and/or pathogens with pandemic potential. No evidence of any such research was found on their Ministry of Defence website, Ministry of Health website, and Ministry of Agriculture website. [1,2,3] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention dual-use research in the country. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/english.asp>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020.

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>]

Accessed 15 November 2020

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. No evidence of any such agency was found on their Ministry of Defence, Ministry of Health and Ministry of Agriculture websites. [1,2,3] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention dual-use research in the country. [4] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [5] No evidence of a record was found on the Verification Research, Training and Information Centre (VERTIC) database.[6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020. [<http://www.defence.lk/>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020.[<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020.

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[5] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020.

[6] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 2020

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a national legislation, regulation, policy, or other guidance, requiring the screening of synthesized DNA before it is sold. No evidence of such a regulation or guidance can be found on their Ministry of Defence, Ministry of Health, Ministry of Agriculture, and Ministry of Industries websites [1,2,3,4] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, does not mention dual-use research in the country. [5] Sri Lanka has not submitted Confidence Building Measures since 1994, and access to the available report is restricted to the public. It is unknown if they contain information on this matter. [6] No evidence of a record was found on the Verification Research, Training and

Information Centre (VERTIC) database.[7]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. 2020 [<http://www.defence.lk/>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 15 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Industries.2020.[<http://www.industry.gov.lk/web/>]. Accessed 15 November 2020

[5] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[6] United Nations Office at Geneva. BWC Electronic Confidence Building Measures Portal. Sri Lanka. [<https://bwc-ecbm.unog.ch/state/sri-lanka>]. Accessed 15 November 2020.

[7] VERTIC.'Srilanka'. [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/s/>] Accessed 15 November 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: 2

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

Sri Lanka has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. According to the June 2017 Joint External Evaluation report for Sri Lanka, "Sri Lanka has national capability to perform all six IHR core tests, as well as two country-specific priority diseases (leptospirosis and dengue)." The six core tests are polymerase chain reaction (PCR) testing for Influenza virus (flu); virus culture for poliovirus (polio); serology for HIV; microscopy for mycobacterium tuberculosis (tuberculosis/TB); rapid diagnostic testing for plasmodium spp. (malaria); and bacterial culture for Salmonella enteritidis serotype Typhi (typhoid). [1] However, there is no evidence that these tests are available on their Medical Research Institute or Ministry of Health websites. [2,3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 15 November 2020

[2] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". [<http://www.mri.gov.lk/>]. Accessed 15 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. [http://www.health.gov.lk/moh_final/english/]. Accessed 15 November 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: 1

There is evidence of a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for scaling capacity and defining goals for testing, but not for testing of novel pathogens. In light of the present COVID-19 pandemic Sri Lanka has plans in place to scale testing and define goals for testing. Sri Lanka has shown capacity to scale up testing as evidenced in the Sri Lanka Preparedness and Response Plan, COVID 19, April 2020. The Medical Research Institute (MRI) was the only laboratory equipped for testing of COVID-19 at the beginning of the outbreak. By April 2020 there were 7 more hospitals and one university laboratory that had been upgraded and were conducting PCR

testing for COVID-19 diagnosis. The Ministry of Health (MoH) had the capacity to do 1200 PCR tests a day in April 2020 and had plans to expand the surveillance case definition, including systematic testing of asymptomatic 'close contacts' under home quarantine/ in the locked down villages. The plan was to cover 12000 'close contacts'. [1] However, there is no evidence this plan could be used for novel pathogens or for multiple disease outbreaks in the future. No further evidence for such a plan is found under Ministry of Health, Medical Research Institute or Ministry of Agriculture.[2,3,4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Sri Lanka preparedness and response plan for COVID-19. April 2020. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/news/2020/FinalSPRP.pdf] Accessed 30 April 2021

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. [http://www.health.gov.lk/moh_final/english/]. Accessed 29 April 2021

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". [<http://www.mri.gov.lk/>]. Accessed 29 April 2021

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 29 April 2021

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1 , No = 0

Current Year Score: 1

Sri Lanka's national laboratory that serves as a reference facility is accredited. The Medical Research Institute (MRI), established in 1991, functions as the national reference laboratory in Sri Lanka. MRI's polio, measles and rubella laboratories are WHO accredited. [1] According to the June 2017 Joint External Evaluation report for Sri Lanka, "several private sector laboratories and one public sector laboratory are ISO 15189 accredited" and the " animal health sector has ISO 17025 accredited laboratories." [2]

[1] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 16 November 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

Sri Lanka's national laboratory, Medical Research Institute, that serves as a reference facility is subject to external quality assurance (EQA) review. According to the June 2017 Joint External Evaluation report for Sri Lanka, Sri Lanka has a "voluntary, external quality assurance programme in bacteriology, chemical pathology, and haematology" since 2014. In addition, the Medical Research Institute participates in some pathogen-specific international quality assurance programmes. [1] However, there is no detail on who conducts the EQA and the Ministry of Health, Ministry of Agriculture and the Medical Research

Institute websites do not provide this information. [2,3,4]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 16 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020. [<http://www.agrimin.gov.lk/>]. Accessed 16 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an established nationwide specimen transport system in Sri Lanka. According to the June 2017 Joint External Evaluation report for Sri Lanka, specimen transport is handled on an ad hoc basis "mostly by informal transport through ambulances and other vehicles." [1] There is no structured system in place for how to package specimens safely and securely. Specimen transport is available to other countries via courier; however, the WHO recommends Sri Lanka "improve the ad hoc specimen transport system and develop a systematic national programme." [1] There is no public evidence of an update or any change in the specimen transport system on their Medical Research Institute, Ministry of Health or Ministry of Agriculture website. [2,3,4]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 16 November 2020

[2] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 16 November 2020

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no evidence of a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. Although the present COVID-19 pandemic has seen a rapid authorization of private hospitals across Sri Lanka to scale up testing, there is no evidence of a plan that could be used for the same during outbreaks in the future. [1]No evidence is found under the Epidemiology Unit under the Ministry of Health, Medical Research Institute or Ministry of Agriculture websites [2,3,4]

[1] Democratic Socialist Republic of Sri Lanka. Official Website for Sri Lanka's Response to COVID-19. [https://covid19.gov.lk/news/health/private-hospitals-possibilities-for-conduct-of-pcr-tests-for-covid-19-discussed.html] Accessed 16 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [http://www.mri.gov.lk/]. Accessed 16 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [http://www.agrimin.gov.lk/]. Accessed 16 November 2020

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

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

Current Year Score: 1

There is evidence of Sri Lanka having ongoing event-based surveillance, but no evidence that the data is being analysed on a daily basis, rather it is being done on a weekly basis. According to the June 2017 Joint External Evaluation report for Sri Lanka, the country does conduct event-based surveillance. It relies on "print and electronic media reports, direct phone calls, facsimiles and direct information from health care institutions," and the government investigates all reported events. [1] The National Epidemiological Unit under the Ministry of Health, lists weekly and quarterly epidemiological reports on infectious diseases reported in the country. [2]There is no evidence that the data from this event-based surveillance system is analysed on a daily basis in Sri Lanka's Comprehensive Disaster Management Programme, Disaster Management Centre, National Emergency Operation Centre, Ministry of Health, Ministry of Agriculture or Medical Research Institute websites. [3,4,5,6,7] At present, in light of the COVID-19 pandemic, the surveillance and reporting is done on a daily basis according to the National Epidemiological Unit under the Ministry of Health.[2]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1]. Accessed 16 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Disease Surveillance.[https://www.epid.gov.lk/].Accessed 16 November 2020

[3] Democratic Socialist Republic of Sri Lanka.Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster

Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 16 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Disaster Management Centre. "National Emergency Operation Centre (EOC)". [http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 16 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 16 November 2020.

[7] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Sri Lanka reported a potential public health emergency to the World Health Organization (WHO) within the last two years.

Sri Lanka reported cases of covid-19 to the WHO before January 30 when it was declared as PHEIC. As the country has been battling the Covid-19 pandemic and public alert, surveillance and updates on the outbreak in the country are provided on the websites of Ministry of Health, WHO websites. [1,2] The Ministry of Health and Indigenous Medical Services in collaboration with the WHO Country Office for Sri Lanka continue to closely monitor the situation and to strengthen preparedness and response efforts'. [3] At present, daily updates on the number of new cases, total number of active cases and the total number of deaths can be noted on the WHO website. [2]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. [<https://www.epid.gov.lk/>]. Accessed 16 November 2020

[2] World Health Organization. "Novel Coronavirus (2019-nCoV) Situation Report - 10" 30 January 2020. [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200130-sitrep-10-ncov.pdf?sfvrsn=d0b2e480_2]

[3] World Health Organization (WHO). Srilanka.COVID-19. [<https://www.who.int/srilanka/covid-19>]. Accessed 7 December 2020

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 1

The Sri Lankan government operates an electronic reporting surveillance system at both the national and sub-national level. According to the WHO Joint External Evaluation report for Sri Lanka, conducted in June 2017, Sri Lanka's event-based

surveillance system has both a print and an electronic part to it. [1] Furthermore, there is a web-based surveillance system that reaches from the ministry level to district medical officers. Reporting is regulated in Sri Lanka and is "coordinated at the national level by the epidemiology unit, at the district level by regional epidemiologists, and at the divisional level by the Ministry of Health, Nutrition and Indigenous Medicine, and public health inspectors." [1] The National Epidemiological Unit under the Ministry of Health has disease specific surveillance forms publicly available, which can be accessed by health workers/medical officers, filled up and submitted directly to the epidemiological unit by fax/email.[2]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 16 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Disease Surveillance- Investigation Forms. 2020. [<https://www.epid.gov.lk/>] Accessed 16 November 2020.

2.3.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka collects real time laboratory data. The Joint External Evaluation report for Sri Lanka, conducted in June 2017, states that "there is a web-based surveillance system that reaches from the ministry level to district medical officers" and scores the country as a 4 for Indicator D.2.2 (Interoperable, interconnected, electronic real-time reporting system), indicating that there is in place an "interoperable, interconnected, electronic real-time reporting system, for public health and/or veterinary surveillance systems." [1,2] This is reinforced by evidence of publicly available disease surveillance forms on the National Epidemiological Unit Website which can be accessed by the district medical officers and submitted directly to the Epidemiological Unit. [3] However, the JEE report also recommends that the country "increase capacity for incorporating laboratory data in the surveillance system by, for example, establishing a public health laboratory." [1] The Ministry of Health does not have any information on real time surveillance systems and neither does the Medical Research Institute. [4,5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 16 November 2020

[2] World Health Organization. "Joint External Evaluation Tool - International Health Regulations (2005)". [http://apps.who.int/iris/bitstream/handle/10665/204368/9789241510172_eng.pdf;jsessionid=E6458699B4219EE890C4D1AEBCC793EB?sequence=1]. Accessed 16 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Disease Surveillance- Investigation Forms. 2020. [<https://www.epid.gov.lk/>] Accessed 16 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020

[5] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 1

Although Electronic health records have been introduced in Sri Lanka, they are not commonly used. According to a journal published in the International Journal of Scientific and Research Publications, in 2019, 'the national Electronic Medical Records (EMR) system in Sri Lanka is Hospital Health Information Management System (HHIMS) which started in 2010 and had successful pilot implementations in different hospitals: Dompe District hospital, Dambadeniya Base Hospital, Avissawella base hospital and Mahaoya base hospital. The Open-source version of HHIMS version 1 was implemented for the Regional Director of Health Services, Kegalle through the partnership with Information Communication Technology Agency (ICTA) in 2010. Ministry of Health, Nutrition & Indigenous Medicine planned to implement this system in 47 hospitals in 2016, 100 hospitals in 2017, and 150 hospitals in 2018 (Ministry of Health, 2017). However, 'the current EMR solution only covers the Out Door Patient Department (OPD) and its related sections although there is provision in the system to implement it other departments such as wards, blood bank, etc. It was planned to implement the EMR system in 300 hospitals during 2016 to 2018 however, only 50 hospitals (15%) have been implemented in mid-2019. Ministry of Health plans to issue e-Health cards for all Sri Lankans by 2020, however there is no national plan for its realization. The current status of EMR implementation is stagnated.' [1] There is no recent information available via the Ministry of Health, Ministry of Agriculture nor the Medical Research Institute websites indicate electronic health records are actively in use. [2,3,4]

[1] Kumudini Sarathchandra. 2019. 'Implementation challenges and Research Gaps of Electronic Medical Records (EMR) in Public Sector Hospitals of Sri Lanka.' International Journal of Scientific and Research Publications. Volume 9: Issue 7: 174-180 [<http://www.ijsrp.org/research-paper-0719/ijsrp-p9124.pdf>] Accessed 16 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 16 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 16 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute". 2020. [<http://www.mri.gov.lk/>]. Accessed 16 November 2020

2.4.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Sri Lanka's national public health system has access to electronic health records of individuals in their country. Although Electronic Health Records system was introduced in the country in 2010, it is not commonly used. According to a journal published in the International Journal of Scientific and Research Publications, in 2019, 'the national Electronic Medical Records (EMR) system in Sri Lanka is Hospital Health Information Management System (HHIMS) which started in 2010 and had successful pilot implementations in different hospitals: Dompe District hospital,

Dambadeniya Base Hospital, Avissawella base hospital and Mahaoya base hospital. The Open-source version of HHIMS version 1 was implemented for the Regional Director of Health Services, Kegalle through the partnership with Information Communication Technology Agency (ICTA) in 2010 .Ministry of Health, Nutrition & Indigenous Medicine planned to implement this system in 47 hospitals in 2016, 100 hospitals in 2017, and 150 hospitals in 2018 (Ministry of Health, 2017).However, 'the current EMR solution only covers the Out Door Patient Department (OPD) and its related sections although there is provision in the system to implement it other departments such as wards, blood bank, etc. It was planned to implement the EMR system in 300 hospitals during 2016 to 2018 however, only 50 hospitals (15%) have been implemented in mid-2019 .Ministry of Health plans to issue e-Health cards for all Sri Lankans by 2020 ,however there is no national plan for its realization. The current status of EMR implementation is stagnated.' [1] There is no recent information available via the Ministry of Health, Ministry of Agriculture nor the Medical Research Institute websites on electronic health record use. [2,3,4]

[1] Kumudini Sarathchandra.2019. 'Implementation challenges and Research Gaps of Electronic Medical Records (EMR) in Public Sector Hospitals of Sri Lanka.' International Journal of Scientific and Research Publications. Volume 9:Issue 7: 174-180 [<http://www.ijsrp.org/research-paper-0719/ijsrp-p9124.pdf>] Accessed 17November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 17 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020.[<http://www.agrimin.gov.lk/>]. Accessed 17 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 17 November 2020

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has data standards to ensure data is comparable. Although Electronic Health Records system was introduced in the country in 2010, it is not commonly used. According to a journal published in the International Journal of Scientific and Research Publications , in 2019, 'the national Electronic Medical Records (EMR) system in Sri Lanka is Hospital Health Information Management System (HHIMS) which started in 2010 and had successful pilot implementations in different hospitals: Dompe District hospital, Dambadeniya Base Hospital, Avissawella base hospital and Mahaoya base hospital. The Open-source version of HHIMS version 1 was implemented for the Regional Director of Health Services, Kegalle through the partnership with Information Communication Technology Agency (ICTA) in 2010 .Ministry of Health, Nutrition & Indigenous Medicine planned to implement this system in 47 hospitals in 2016, 100 hospitals in 2017, and 150 hospitals in 2018 (Ministry of Health, 2017).However, 'the current EMR solution only covers the Out Door Patient Department (OPD) and its related sections although there is provision in the system to implement it other departments such as wards, blood bank, etc. It was planned to implement the EMR system in 300 hospitals during 2016 to 2018 however, only 50 hospitals (15%) have been implemented in mid-2019 .Ministry of Health plans to issue e-Health cards for all Sri Lankans by 2020 ,however there is no national plan for its realization. The current status of EMR implementation is stagnated.' [1] There is no recent information available via the Ministry of Health, Ministry of Agriculture nor the Medical Research Institute websites on ensuring that data is comparable. [2,3,4]

[1] Kumudini Sarathchandra.2019. 'Implementation challenges and Research Gaps of Electronic Medical Records (EMR) in Public Sector Hospitals of Sri Lanka.' International Journal of Scientific and Research Publications. Volume 9:Issue 7: 174-180 [<http://www.ijsrp.org/research-paper-0719/ijsrp-p9124.pdf>] Accessed 17November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 17 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture.2020.[<http://www.agrimin.gov.lk/>]. Accessed 17 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 17 November 2020

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

2.4.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of established mechanisms for the relevant ministries responsible for animal, human and wildlife surveillance to share data in Sri Lanka. According to the Joint External Evaluation for Sri Lanka, conducted in June 2017, the "Department of Animal Health and Production and the Ministry of Health, Nutrition and Indigenous Medicine share specimens for tuberculosis testing." [1] However, no public evidence of such mechanisms can be found on their Ministry of Health, Ministry of Agriculture, Ministry of Environment, Medical Research Institute, Department of Animal Health & Production or the National Epidemiology Unit under the Ministry of Health websites. [2,3,4,5,6,7]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 17 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 17 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 17 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Central Environmental Authority. 2020. [<http://www.cea.lk/web/en/about-us>]. Accessed 17 November 2020

[5] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020.[<http://www.mri.gov.lk/>]. Accessed 17 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Department of Animal Production & Health. 2020. [<http://www.daph.gov.lk/web/index.php?lang=en>]. Accessed 17 November 2020

[7]] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit.[<https://www.epid.gov.lk/web/>] Accessed 17 November 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 evidence that Sri Lanka makes de-identified health surveillance data on disease outbreaks publicly available via reports on government websites, but there is a time lag of over a month in the reporting. There is de-identified health surveillance data on disease outbreaks made available on the National Epidemiological Unit website. According to the website weekly and quarterly disease outbreak reports are published. A comprehensive list of all weekly reports from the year 2007 till the 1st week of January 2021 are indeed available on their website at the time of the research. The weekly reports have not been updated since January., 2021. List of notifiable diseases are cholera, plague, yellow fever, encephalitis, dengue fever, typhus fever, malaria, leishmaniasis, rabies, leptospirosis among others. [1] In light of the present COVID-19 pandemic, daily de-identified health surveillance data are made available on the Epidemiological Unit website.[2]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Disease Surveillance.[https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=148&Itemid=449&lang=en] Accessed 29 April 2021.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit.'COVID-19 Daily Situation Report'. [https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=225&Itemid=480&lang=en] Accessed 17 November 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 evidence that Sri Lanka makes de-identified COVID-19 surveillance data (including details such as daily case count, daily death count, active cases, recovered cases etc) available via daily reports on the Epidemiology Unit website under the Ministry of Health.[1]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit.'COVID-19 Daily Situation Report'. [https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=225&Itemid=480&lang=en] Accessed 17 November 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 evidence of laws, regulations, or guidelines that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities in Sri Lanka. Sri Lanka's Ministry of Health, Nutrition and Indigenous Medicine published "The National Policy on Health Information" in April 2016 which puts forward the ensuring of "privacy and confidentiality of healthcare recipients" as one of its guidelines. The policy states that "the Health Information System (HIS) [is] one of the "building blocks" of any health system" and that one of their policy objectives is to

"ensure optimal data/information sharing and access to, health information in relation to all shareable data in health information systems, while ensuring ethical considerations and confidentiality of care recipients." [1]

[1] Sri Lanka Ministry of Health, Nutrition and Indigenous Medicine. "The National Policy on Health Information." 2017. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/NationalPolicyonHealthInformation.pdf]. Accessed 17 November 2020

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of Sri Lanka's laws, regulations, or guidelines safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, including the mention of protections from cyber attacks (e.g., ransomware). Sri Lanka's Ministry of Health, Nutrition and Indigenous Medicine published "The National Policy on Health Information" in April 2016 which puts forward the ensuring of "privacy and confidentiality of healthcare recipients" as one of its guidelines. [1] However, it does not cover protections from cyber attacks, hacks, or any other kind of digital crime. [1] Furthermore, there is no evidence of any such safeguarding guidelines on their Ministry of Health or Medical Research Institute website. [2,3]

[1] Sri Lanka Ministry of Health, Nutrition and Indigenous Medicine. "The National Policy on Health Information." 2017. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/NationalPolicyonHealthInformation.pdf]. Accessed 17 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Downloads. [https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=141&Itemid=465&lang=en] Accessed 17 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 17 November 2020

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has 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 for one or more diseases. No evidence of any such commitment can be found on their Ministry of Health website, Ministry of Agriculture or Medical Research Institute website. [1,2,3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 17 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 17 November 2020

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020.[<http://www.mri.gov.lk/>]. Accessed 17 November 2020

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no evidence of 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 an active or future public health emergency in Sri Lanka. Although Contact tracing has been given importance to control the spread of the disease in light of the present COVID-19 pandemic, there is no mention of a national system to provide support to conduct contract tracing at the sub national level.[1] No evidence is found under the Ministry of Health, National Epidemiology Unit or Medical Research Institute websites.[2,3,4]

[1] Subramanian Nirupama.30 June 2020. 'Dealing with Covid-19: Lessons from the experience of Sri Lanka'.The Indian Express.[<https://indianexpress.com/article/explained/dealing-with-covid-lessons-from-the-experience-of-sri-lanka-6482114/>] Accessed 17 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 17 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Downloads.[https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=141&Itemid=465&lang=en] Accessed 17 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020.[<http://www.mri.gov.lk/>]. Accessed 17 November 2020

2.5.1b

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

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

Current Year Score: 0

There is no evidence that Sri Lanka provides wraparound services to enable infected people and their contacts to self-isolate as recommended, neither economic support (paycheck, job security) nor medical attention. In the present Covid-19 pandemic, although self isolation and quarantining of cases and suspected cases has been stressed and medical attention to these cases has been given importance, the other services particularly economic support etc has not been mentioned.[1] No evidence for such wraparound services has been mentioned under the Ministry of Health, National Epidemiological Unit or the Medical Research Institute websites.[1,2,3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020.Covid-19 Related Circulars and Letters.[http://www.health.gov.lk/moh_final/english/news_read_more.php?id=914] Accessed 17 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. Downloads.[https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=141&Itemid=465&lang=en] Accessed 17 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 17 November 2020

2.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Sri Lanka makes de-identified data on contact tracing efforts for COVID-19 available via daily reports on government websites. Daily situational update on Covid-19 is available on the Epidemiological Unit website under the Ministry of Health[1]. The COVID-19 Daily situational report gives details on the number of active cases, the number of people under quarantine, clusters/high risk groups and their contacts and the number of people tested positive among the clusters and their contacts. This information is updated on a 24 hour basis.[1]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit.'COVID-19 Daily Situation Report'. [https://www.epid.gov.lk/web/index.php?option=com_content&view=article&id=225&Itemid=480&lang=en] Accessed 18 November 2020

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is insufficient evidence of a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of an active or future public health emergency. In light of the present pandemic,however, the Sri Lanka preparedness

and response plan for COVID-19 was released by the Ministry of Health which clearly outlines the roles of the authorities at the ports of entry in identifying, quarantining and isolating/testing probable suspects and to trace and quarantine their contacts.[1] Additionally, International Health Regulation 2005 (IHR-2005) however requires a Public Health Emergency Contingency Plan (PHECP) to be developed and maintained in designated points of entry (PoE) for responding to events that may constitute a public health emergency of international concern (PHEIC). Sri Lanka has developed such a document; National Action Plan for Health Security of Sri Lanka, 2019-2023. [2] Following the Joint External Evaluation (JEE) for Sri Lanka, conducted in June 2017, the National Plan for Health Security has been developed. [3]The National Action Plan outlines the importance of the Ports of entry. The plan 'states parties should designate and maintain the core capacities at the international airports and ports which implement specific public health measures required to manage a variety of public health risks'. However, contact tracing and quarantining of these contacts has not been mentioned in the plan. [2]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Sri Lanka preparedness and response plan for COVID-19. April 2020. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/news/2020/FinalSPRP.pdf] Accessed 18 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is evidence that applied epidemiology training programs (such as FETP) available in country but there is no evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP). According to the Joint External Evaluation for Sri Lanka, conducted in June 2017, "applied and basic epidemiology is included in postgraduate degrees in medical administration and community medicine." Furthermore, the report states that human paramedical, veterinary medicine and paraveterinary professionals receive epidemiology training in Sri Lanka. [1] The Postgraduate Institute of Science, which is a school set up by the Ministry of Education and Higher Education in 1996, offers a Masters in applied epidemiology. [2] Their Ministry of Health's Epidemiology Unit also trains its professionals in epidemiology. [3] In addition, Sri Lanka is also a participant in an ongoing effort to build FETP capacity in non-communicable disease detection run by Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) and funded by the Centers for Disease Control and Prevention (CDC). [4] There is no specific evidence that the Sri Lankan government provides resources to send citizens to another country to participate in

applied epidemiology training programs on their Ministry of Health website. [3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020.

[2] Postgraduate Institute of Science. "Masters in Applied Epidemiology". 2020 [<http://www.pgis.pdn.ac.lk/appepi.php>]. Accessed 18 November 2020.

[3] Ministry of Health. "Epidemiology Unit". 2020. [<http://www.epid.gov.lk/web/index.php?lang=en>]. Accessed 18 November 2020.

[4] Training Programs in Epidemiology and Public Health Interventions Network. "Building FETP Capacity in Non-communicable Disease Detection through Mini-Grants". 2020. [<https://www.tephinet.org/building-fetp-capacity-in-non-communicable-disease-detection-through-mini-grants>]. Accessed November 18 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

Sri Lanka has specific animal health field epidemiology training program offered (such as FETPV). According to their Postgraduate Institute of Science, it offers a program in Applied Epidemiology that provides "students with an understanding of epidemiological concepts with training in essential methodological skills required to conduct epidemiological studies in human and animal populations." [1] In addition, Sri Lanka is also a part of the South Asian Association for Regional Cooperation (SAARC) which conducts Field Epidemiology Training Programmes for veterinarians such as the one conducted in India in May of 2017, which Sri Lanka was a part of. [2]

[1] Postgraduate Institute of Science. "M.Sc. / Postgraduate Diploma in Applied Epidemiology". 2020. [<http://www.pgis.pdn.ac.lk/assets/syllabi/appepid.pdf>]. Accessed by October 12 2018.

[2] Indian Council of Agricultural Research. "Field Epidemiology Training Programme for Veterinarian for SAARC nations". May 2017. [<https://icar.org.in/content/field-epidemiology-training-programme-veterinarian-saarc-nations>]. Accessed 18 November 2020

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential. No evidence is available via the National Action Plan for Health Security of Sri Lanka (NAPHS) 2019 - 2023 published in 2018, the Joint External Evaluation (JEE) for Sri Lanka, conducted in June 2017 or the Ministry of Health. [1, 2, 3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020.

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020

[3] Ministry of Health, Sri Lanka. [http://www.health.gov.lk/moh_final/english/] Accessed 14 June 2021.

3.1.1b

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

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

Current Year Score: 0

There is no evidence that Sri Lanka has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential. No evidence is available via the National Action Plan for Health Security of Sri Lanka (NAPHS) 2019 - 2023 published in 2018, the Joint External Evaluation (JEE) for Sri Lanka, conducted in June 2017 or the Ministry of Health. [1, 2, 3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020

3.1.1c

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

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

Current Year Score: 0

There is no evidence that the overarching plan to address public health emergencies in Sri Lanka includes considerations for pediatric and/or other vulnerable populations. The National Action Plan for Health Security of Sri Lanka(NAPHS) 2019 - 2023 was published in 2018. Epidemics and animal diseases are included in biological hazards under the list of public health hazards of Sri Lanka. Accordingly, mechanisms for responding to zoonoses and potential zoonoses, plans for real time surveillance, testing for priority diseases, preparedness and emergency response operations in time of public health emergency has been covered under this plan. [1] While the NAPHS discusses epidemics/public health threats, preparedness and response plans, it fails to give importance to the pediatric and/or vulnerable populations in the event of a public health emergency.[1]The NAPHS was developed following the recommendations of the Joint External Evaluation (JEE) for Sri Lanka, conducted in June 2017.[2]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020

3.1.1d

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

Yes = 1 , No = 0

Current Year Score: 1

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. No public evidence of a private sector collaboration in the case of an emergency was found on their Ministry of Health or Disaster Management Center websites. [1,2] The June 2017 Joint External Evaluation report for Sri Lanka, also does not make any mention of mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. [3] Following the recommendations of the JEE report, the National Action Plan for Health Security of Sri Lanka(NAPHS) 2019 - 2023 was published in 2018. While the NAPHS discusses epidemics/public

health threats, it lacks a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response.[4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 18 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. Disaster Management Center.2020. [<http://www.dmc.gov.lk/>].Accessed 18 November 2020.

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 18 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 1

There is evidence that Sri Lanka has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic, but for one disease. In light of the current COVID-19 pandemic and in line with the National Action Plan for Health Security of Sri Lanka (NAPHS), Sri Lanka preparedness and response plan for COVID-19 was published in April 2020 which highlights NPIs e.g Ban on mass gathering and retraction of public movement, Closure of schools and universities ,Closure of non-essential services, Travel restrictions, Island -wide curfews with work from home modality, Non-contact delivery of food and essential supplies to doorsteps. However, there is no specific criteria when these NPIs were implemented and it is not clear if these NPIs can be used for other diseases.[1] No evidence is found for such guidelines for other diseases under the Ministry of Health, Epidemiology Unit or Disaster Management Center websites [2,3,4]. the NAPHS 2019 - 2023 does not mention such policies or plans.[5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Sri Lanka Preparedness and Response Plan for COVID-19. April 2020.[http://www.health.gov.lk/moh_final/english/public/elfinder/files/news/2020/FinalSPRP.pdf] Accessed 18 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 18 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit.2020.[<https://www.epid.gov.lk/>] Accessed 18 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. Disaster Management Center. 2020. [<http://www.dmc.gov.lk/>].Accessed 18 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

In light of Covid-19, Sri Lanka has activated its national emergency response plan but there is no evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year. The National Action Plan for Health Security of Sri Lanka (NAPHS) 2019 - 2023 was published in 2018.[1] In line with the NAPHS a specific plan for the present pandemic was developed and activated in April 2020, 'Sri Lanka Preparedness and Response Plan for COVID-19'. [2] There is no evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year. No evidence for such an exercise is found under the World Health Organization (WHO) websites, Ministry of Health, Disaster Management Center, Ministry of Agriculture or the Epidemiology Unit websites [3,4,5,6,7,8]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 18 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Sri Lanka Preparedness and Response Plan for COVID-19. April 2020. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/news/2020/FinalSPRP.pdf] Accessed 18 November 2020

[3] World Health Organization (WHO). Strategic Partnership For International Health Regulations (2005) and Health Security (SPH). 'Sri Lanka'. [https://extranet.who.int/sph/simulation-exercise-list?field_region_tid=All&tid=331&field_simulation_status_tid=All&field_simulation_type_tid=All&title=] Accessed 18 November 2020

[4] World Health Organization. 'Sri Lanka'. [<https://www.who.int/countries/lka/>] Accessed 17 September 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 18 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Defence. Disaster Management Center. 2020. [<http://www.dmc.gov.lk/>]. Accessed 18 November 2020

[7] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/web/index.php/en>] Accessed 18 November 2020

[8] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Epidemiological Unit. 2020. [<https://www.epid.gov.lk/>] Accessed 18 November 2020

3.2.1b

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

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

Current Year Score: 0

There is no evidence that in the past year, Sri Lanka has undergone an exercise to identify a list of gaps and best practices through either through an infectious disease response or a biological-threat focused exercise . There is no evidence that the country has completed a national-level biological threat-focused exercise nor any evidence of a planned exercise with the WHO in the past year and there is no evidence of an after-action-review listed under the WHO. [1,2,3].In addition there is no evidence on their Ministry of Health or Ministry of Disaster Management website that suggests any such exercises have been carried out in the past year. [4,5] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, also notes that developing "procedures for post-response (and post-exercise) review and corrective action planning" is a priority action. [6]

[1] World Health Organization (WHO). Strategic Partnership For International Health Regulations (2005) and Health Security (SPH). 'Srilanka'. [https://extranet.who.int/sph/simulation-exercise-list?field_region_tid=All&tid=331&field_simulation_status_tid=All&field_simulation_type_tid=All&title=] Accessed 20 November 2020

[2] World Health Organization. 'Srilanka'. [<https://www.who.int/countries/lka/>] Accessed 20 November 2020

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

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 20 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Disaster Management. 2020. [<http://www.disastermin.gov.lk/web/>]. Accessed 20 November 2020

[6] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that in the past year, Sri Lanka has undergone a national-level biological threat-focused exercise that has included private sector representatives. There is no evidence that the country has completed a national-level biological threat-focused exercise nor any evidence of a planned exercise with the WHO in the past year and there is no evidence of an after-action-review listed under the WHO. [1,2,3].In addition there is no evidence on their Ministry of Health or Ministry of Disaster Management website that suggests any such exercises have been carried out in the past year. [4,5] The Joint External Evaluation report for Sri Lanka, conducted in June 2017, also notes that developing "procedures for post-response

(and post-exercise) review and corrective action planning" is a priority action. [6]

[1] World Health Organization (WHO). Strategic Partnership For International Health Regulations (2005) and Health Security (SPH). 'Srilanka'. [https://extranet.who.int/sph/simulation-exercise-list?field_region_tid=All&tid=331&field_simulation_status_tid=All&field_simulation_type_tid=All&title=] Accessed 20 November 2020

[2] World Health Organization. 'Srilanka'. [<https://www.who.int/countries/lka/>] Accessed 20 November 2020

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

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 20 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Disaster Management. 2020. [<http://www.disastermin.gov.lk/web/>]. Accessed 20 November 2020

[6] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Sri Lanka has in place an Emergency Operations Centre. According to the Joint External Evaluation for Sri Lanka, conducted in June 2017, there are 4 different emergency operations centres in Sri Lanka "one at the national level and three at the subnational level." [1] The Public Health Emergency Operations Centre (PHEOC) comes under the Disaster Preparedness and Response Division of the Ministry of Health, Nutrition and Indigenous Medicine and is alert 24 hours and also has mandate over any other public health emergencies. [1,2] In addition, they have a Disaster Management Centre under their Ministry of Defense which among other things takes care of "epidemics effects" through the National Emergency Operations Center.[3,4] "The Disaster Management Centre has been established under the National Council for Disaster Management in accordance with the Sri Lanka Disaster Management Act No. 13 of 2005 passed by the Parliament of Sri Lanka on 13th May 2005." [3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 20 November 2020

[4] Sri Lanka Disaster Management Centre. "National Emergency Operation Centre (EOC)". [http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 20

November 2020

3.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that the Emergency Operations Centre (EOC) is required to conduct an annual health focused drill. There is also no evidence that an annual health focused drill is conducted by the EOC. Neither the Joint External Evaluation report for Sri Lanka, conducted in June 2017, nor their Disaster Management Center or Disaster Preparedness and Response Division of the Ministry of Health, Nutrition and Indigenous Medicine indicate any such drill requirements. [1,2,3] Furthermore, neither Sri Lanka's Comprehensive Disaster Management Programme put forth by the Ministry of Disaster Management nor their Sri Lanka Disaster Management Act, No. 13 of 2005 address the requirement of conducting drills in any frequency. [4,5] The JEE report also notes that developing "an integrated national public health emergency training and exercise programme" is a priority action. The JEE also states that "due to frequent activations of the Public Health Emergency Operations Center (PHEOC), responses to other priority public health threats are not exercised; there is no comprehensive exercise programme linking the master training curriculum." [1] Further the National Action Plan for Health Security of Sri Lanka 2019 - 2023 released in 2018 by the Ministry of Health states that there are national plans to conduct annual PHEOC simulation (one) exercise irrespective of response to real disasters.[6] However, there is no evidence of implementation under the Disaster Management Center (National Emergency Operation Center) or Disaster Preparedness and Response Division of the Ministry of Health, Nutrition and Indigenous Medicine websites. [2,3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center. [http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 20 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 20 November 2020

[5] Parliament of the Democratic Socialist Republic of Sri Lanka. "Sri Lanka Disaster Management Act, No. 13 of 2005". May 2005. [http://www.disastermin.gov.lk/web/images/pdf/DMACTNO13_E.pdf]. Accessed 20 November 2020.

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 20 November 2020

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that 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. Neither their Disaster Preparedness and Response Division under the Ministry of Health nor their National Emergency Operation Center under the Disaster Management Center show any evidence of such a response being conducted. [1,2] According to the June 2017 Joint External Evaluation report for Sri Lanka, "historical examples of rapid activation exist" but "activation of the national PHEOC within 120 minutes of a declared public health emergency (following ministry-developed criteria and processes) has not yet been achieved". The JEE report also states that "due to frequent activations of the PHEOC, responses to other priority public health threats are not exercised." [3] No other evidence of drills conducted in Sri Lanka pertaining the present Covid-19 pandemic can be found under the Disaster Preparedness and Response Division of the Ministry of Health. [1]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center.

[http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 20 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 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 neither public evidence that public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event nor are there publicly available standard operating procedures, guidelines, MOUs or other agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e. bioterrorism attack). According to the June 2017 Joint External Evaluation (JEE) report for Sri Lanka, "the armed forces, police, Department of Civil Defence and Sri Lanka Customs have real experience of collaborating with health authorities during emergencies." [1] However, no such guidelines for response can be found on their Ministry of Health nor Disaster Management Center websites. [2,3] Sri Lanka's Comprehensive Disaster Management Programme put forth by the Ministry of Disaster Management states that the country will "establish a system to detect and respond to emergency situations that

could be created by biological, chemical, radiological and nuclear accidents (AEA, Weapons Convention Authority, CEA, and MRI);" however, there is no evidence of this being in effect. [4] The JEE FROM 2017 recommends that Sri Lanka "perform regular joint exercises between the health, security and other sectors." [1] In line with the recommendations of the JEE report, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 released in 2018 by the Ministry of Health states that there are national plans for 'development of standard operating procedures for collaboration between different stakeholders for health sector response' and to 'conduct multistakeholder simulation exercises annually.' The stake holders concerned are the public health and the security authorities [5] However there is no evidence that these plans have been implemented under the Ministry of Health and the Disaster Management Center websites.[2,3]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020.[http://www.health.gov.lk/moh_final/english/]. Accessed 20 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management. Center. 2020.[<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 20 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. (<http://www.disasterm.in.gov.lk/web/images/pdf/slcdmp%20english.pdf>). Accessed 20 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 20 November 2020

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a risk communication plan or any strategy document that outlines how messages will reach populations and sectors with different communications needs. The June 2017 Joint External Evaluation (JEE) report for Sri Lanka, recommends the development of a consolidated risk communications plan that brings together existing policies, protocols and procedures in Sri Lanka. [1]Accordingly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 released in 2018 by the Ministry of Health states that there are national plans to develop a consolidated National risk communication plan under the leadership of the Health Promotion Bureau.[2] The Health Promotion Bureau has Risk Communication Unit is involved in the development of risk communication National Strategic plan, capacity building on Risk Communication activities and works in collaboration with relevant stakeholders for communicable diseases prevention activities and is also involved in Improvement of Health literacy of the Sri Lankans through number of media activities.However there is no evidence of a risk communication plan.[3] However, it is noteworthy that the Health Promotion Bureau has a program called the 'Suwasariya' / Healthnet, which provides fast and simple expert advice in all three languages about any health issue and what to do next through telephone calls, e-mails or Skype and is supported by a tri lingual web site which contains information on health. As a whole, HPB has been successful and has received recognition for its

remarkable contribution to health promotion through integrated multidisciplinary approach.[3] In light of the present pandemic, the 'Suwasariya' has a 24 hour trilingual health hotline open to all queries on COVID-19.[3] No further evidence of a risk communication plan is found under the Ministry of Health or the National Emergency Operation Center under the Disaster Management Center.[4,5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 20 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Health Promotion Bureau. Risk Communication Unit. [<https://www.hpb.health.gov.lk/en>] Accessed 20 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 08 December 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center. [http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 08 December 2020

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

Although the June 2017 Joint External Evaluation (JEE) for Sri Lanka, states that "Sri Lanka has good operational capacity for risk communications, [with a] demonstrated ability to deal with large-scale emergencies," the report also notes that there is no published risk communications plan. The JEE report recommends the development of a consolidated risk communications plan that brings together existing policies, protocols and procedures in Sri Lanka. [1]Accordingly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 released in 2018 by the Ministry of Health states that there are national plans to develop a consolidated National risk communication plan under the leadership of the Health Promotion Bureau.[2] The Health Promotion Bureau has a Risk Communication Unit that is involved in the development of risk communication National Strategic plan, capacity building on Risk Communication activities and works in collaboration with relevant stakeholders for Communicable diseases prevention activities and is also involved in Improvement of Health literacy of the Sri Lankans through number of media activities. However there is no evidence of a risk communication plan.[3] No evidence is found under the Ministry of Health or the National Emergency Operation Center under the Disaster Management Center.[4,5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 20 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Health Promotion Bureau. Risk Communication Unit. [<https://www.hpb.health.gov.lk/en>] Accessed 20 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 08 December 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center.

[http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 08 December 2020

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that a risk communication plan or any strategy document designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. Although the June 2017 Joint External Evaluation (JEE) for Sri Lanka, states that "Sri Lanka has good operational capacity for risk communications, [with a] demonstrated ability to deal with large-scale emergencies," the report also notes that there is no published risk communications plan. The JEE report recommends the development of a consolidated risk communications plan that brings together existing policies, protocols and procedures in Sri Lanka. [1] Accordingly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 released in 2018 by the Ministry of Health states that there are national plans to develop a consolidated National risk communication plan under the leadership of the Health Promotion Bureau. [2] The Health Promotion Bureau has a Risk Communication Unit that is involved in the development of risk communication National Strategic plan, capacity building on Risk Communication activities and works in collaboration with relevant stakeholders for Communicable diseases prevention activities and is also involved in Improvement of Health literacy of the Sri Lankans through number of media activities. However there is no evidence of a risk communication plan. [3] Also, there is no evidence that there is a specific position within the government to serve as the primary spokesperson to the public during a public health emergency under the Health Promotion Bureau, Disaster Preparedness and Response Division under the Ministry of Health nor their National Emergency Operation Center under the Disaster Management Center websites. [3,4,5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 20 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Health Promotion Bureau. Risk Communication Unit. [<https://www.hpb.health.gov.lk/en>] Accessed 20 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center.

[http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 20 November 2020

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 1

There is 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 in the past year. However, the public health system seems to actively share information during active emergencies rather than regularly utilize online media platforms. The Health Promotion Bureau has a Risk Communication Unit that is involved in the Development of risk communication National Strategic plan, capacity building on Risk Communication activities, works in collaboration with relevant stakeholders for Communicable diseases prevention activities and is also involved in Improvement of Health literacy of the Sri Lankans through number of media activities. It has a program called the 'Suwasariya' / Healthnet, which provides fast and simple expert advice in all three languages about any health issue and what to do next through telephone calls, e-mails or Skype and is supported by a tri lingual web site which contains information on health. As a whole, HPB has been successful and has received recognition for its remarkable contribution to health promotion through integrated multidisciplinary approach.[1] In light of the present pandemic, the 'Suwasariya' has a 24 hour trilingual health hotline open to all queries on COVID-19. The website provides live updates on the COVID-19 situation in the country.[1] Further, the Health Ministry has a Twitter and Facebook account which it uses to share information on public health emergencies. [2,3] At present regular media briefings and updates on COVID-19 are provided on Facebook and Twitter pages.[2,3]

[1] Democratic Socialist Republic of Sri Lanka. Health Promotion Bureau. Risk Communication Unit. [<https://www.hpb.health.gov.lk/en>] Accessed 20 November 2020

[2] Twitter. Ministry of Health. Srilanka. November 2020. [https://twitter.com/moh_srilanka?lang=en] Accessed 20 November 2020

[3] Facebook. Ministry of Health. November 2020. [<https://www.facebook.com/MoHNIMSriLanka/>] Accessed 20 November 2020

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years. In light of the present pandemic, COVID-19, the senior leaders have been regularly addressing the public and sharing information about the situation in the country and also safety measures, protocols in order to fight the pandemic. The leaders leading the fight against the pandemic are the President, Prime Minister and the Health Minister of Srilanka.[1,2,3] Updates from the Health Minister are also seen on the Health Ministry Twitter and Facebook accounts.[4,5]

There has been no misinformation or disinformation from these leaders. [1,2,3,4,5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Health Promotion Bureau. [<https://www.hpb.health.gov.lk/en>] Accessed 20 November 2020

[3] Daily News. June 17, 2020. 'President's timely steps prevented COVID 19 outbreak'. [<http://www.dailynews.lk/2020/06/17/local/220890/%E2%80%98president%E2%80%99s-timely-steps-prevented-covid-19-outbreak%E2%80%99>] Accessed 21 November 2020

[4] Twitter. Ministry of Health. Srilanka. November 2020. [https://twitter.com/moh_srilanka?lang=en] Accessed 20 November 2020

[5] Facebook. Ministry of Health. November 2020. [<https://www.facebook.com/MoHNIMSriLanka/>] Accessed 20 November 2020

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 34.11

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: 115.06

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: 8.0

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: 5.0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0, No = 1

Current Year Score: 0

There is sufficient evidence that in the past year Sri Lanka has issued a restriction, without international/bilateral support, on the import of medical goods, specifically surgical masks in light of the COVID-19 pandemic. The ban was imposed on March 20, 2020 and lifted on April 11, 2020. Evidence for this is found in a study conducted during the present pandemic by the Ministry of Commerce and Industry, Government of India, 'An Analysis of South Asian Trade Measures during Covid-19 Pandemic: Preparedness, Protectionism and Prevention' and in the International Trade Center Websites [1,2]

[1] Government of India. Ministry of Commerce and Industry. 'An Analysis of South Asian Trade Measures during Covid-19 Pandemic: Preparedness, Protectionism and Prevention'. [https://www.unescap.org/sites/default/files/143%20Final-Prerana%20Manral-India_0.pdf] Accessed 21 November 2020

[2] International Trade Center. Market Access Map.'Covid-19 Temporary Trade Measures'. 'Sri Lanka'. [<https://www.macmap.org/covid19>]. Accessed 21 November 2020

3.7.1b

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

Yes = 0, No = 1

Current Year Score: 0

There is sufficient evidence that in the past year Sri Lanka has issued a restriction, without international/bilateral support, on the import non medical goods, specifically non-essential goods including vehicles and plastic goods in light of the COVID-19

pandemic. The restriction was imposed on April 03,2020 and was partially lifted on 21 May 2020, retaining the ban on vehicle imports. Evidence for this is found in a study conducted during the present pandemic by the Ministry of Commerce and Industry, Government of India, 'An Analysis of South Asian Trade Measures during Covid-19 Pandemic: Preparedness, Protectionism and Prevention' and in the International Trade Center Websites [1,2]

[1] Government of India. Ministry of Commerce and Industry. 'An Analysis of South Asian Trade Measures during Covid-19 Pandemic: Preparedness, Protectionism and Prevention'. [https://www.unescap.org/sites/default/files/143%20Final-Prerana%20Manral-India_0.pdf] Accessed 21 November 2020

[2] International Trade Center. Market Access Map.'Covid-19 Temporary Trade Measures'. 'Srilanka'. [<https://www.macmap.org/covid19>]. Accessed 21 November 2020

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0 , No = 1

Current Year Score: 0

In the past year, Srilanka has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. This measure has been taken in light of the present Covid-19 pandemic by the Government of Srilanka.[1] According to the Department of Immigration and Emigration,' All types of visa issuance to enter Sri Lanka and All types of Electronic Travel Authorizations (ETA)/ Entry Visas, Landing Endorsements, Multiple Entry Visas and Residence Visas already granted to all countries/ nationalities have been temporarily suspended'.[1]

[1] Democratic Socialist Republic of Sri Lanka. Department of Immigration and Emigration. Suspension of Visas in Sri Lanka due to the Pandemic COVID - 19 Outbreak. 06 April 2020. [

http://www.immigration.gov.lk/web/index.php?option=com_content&view=article&id=337&lang=en] Accessed 21 November 2020

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 100.41

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 218.03

2018

WHO; national sources

4.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a public workforce strategy in place. At the time of the June 2017 Joint External Evaluation (JEE) for Sri Lanka", the national workforce strategy was still in draft form. [1] Following the JEE recommendations for Sri Lanka, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 was published by the Ministry of Health in 2018. This plan has a section on Workforce Development and states that there is a plan to develop and implement the workforce strategy in both the human and animal health sectors under the leadership of Ministry of Health and Department of Animal Production and Health respectively[2] However, there is no evidence of a workforce strategy in place under the Ministry of Health and Department of Animal Production and Health till date [3,4]

World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 21 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 21 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Department of Animal Production and Health.2020.[<http://daph.gov.lk/web/index.php?lang=en>] Accessed 21 November 2020

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 415.0

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 not enough evidence to state that Sri Lanka has 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. There is some evidence that quarantine facilities have been used in the past but it is unclear if these facilities meet the international standards for quarantine facilities. In the Dengue Epidemic in 2017, the National Institute of Infectious Diseases played a pivotal role in isolation and treatment of infected patients. According to a journal on the response of the Sri Lankan health system to the Dengue Epidemic in 2017, 'The National Institute of Infectious Diseases (NIID), Sri Lanka previously known as the Infectious Diseases Hospital (IDH) is the only designated quarantine hospital and the only specialized hospital for communicable diseases in Sri Lanka. This hospital was established more than 160 years ago during the British colonial period. It has 200 beds including one dedicated dengue ward which consists of 40 beds, which consists of male and female units. There are 4 consultant specialists, 45 medical officers, 75 nursing officers and 125 health assistants working in the hospital'. [1] However, According to the June 2017 Joint External Evaluation (JEE) report for Sri Lanka, Sri Lanka's "facilities for assessment, care and isolation of ill passengers need to be further developed." In addition, the report recommends that Sri Lanka "establish negative-pressure isolation rooms in all tertiary care level hospitals, according to international standards." [2] Following the recommendation of the JEE report for Sri Lanka, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 was released by the Ministry of Health in 2018 which states that there are plans to develop a quarantine bay for ill passengers / Colombo Port, Improve quarantine / isolation facilities at NIID (IDH).[3] It is noteworthy that in the current COVID-19 pandemic, facilities have been set up across the countries to contain suspected cases and also to treat positive patients although these facilities have not been designated as permanent quarantine facilities. [4]

[1] D Rathnayake , A Wijewickrama , K Aluthge. 2018. "Response of the National Institute of Infectious Diseases, Sri Lanka to an unexpected dengue epidemic in 2017".Ceylon Medical Journal.63:108-112

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[4] The Hindu. 25 July 2020. 'Sri Lanka has completely curbed community spread of coronavirus: Head of COVID-19 task force'. [<https://www.thehindu.com/news/international/sri-lanka-has-completely-curbed-community-spread-of-coronavirus-head-of-covid-19-task-force/article32189566.ece>] Accessed 21 November 2020.

4.1.2c

Does the country meet one of the following criteria?

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

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence that in the past two years Sri Lanka has demonstrated the capacity to expand isolation facility in the country, but no evidence it has updated or tested a plan to expand isolation capacity. In light of the present COVID-19 pandemic Sri Lanka has demonstrated the capacity to expand isolation facility in the country as evidenced in the Sri Lanka Preparedness and Response Plan, COVID 19, April 2020. [1] Facilities have been set up across the country to contain suspected cases and also to treat positive patients although these facilities have not been designated as permanent quarantine facilities.[1,2] There is no evidence that the country has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak. According to the June 2017 Joint External Evaluation (JEE) report for Sri Lanka, Sri Lanka's "facilities for assessment, care and isolation of ill passengers need to be further developed." In addition, the report recommends that Sri Lanka "establish negative-pressure isolation rooms in all tertiary care level hospitals, according to international standards." [3] Following the recommendation of the JEE report for Sri Lanka, the National Action Plan for Health Security of Sri Lanka 2019 – 2023 was released by the Ministry of Health in 2018 which states that there are plans to develop a quarantine bay for ill passengers / Colombo Port, Improve quarantine / isolation facilities at NIID (IDH).[4] There is no further update on the plan under the Ministry of Health or the Disaster Management Center websites. [5,6]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Sri Lanka preparedness and response plan for COVID-19. April 2020.[http://www.health.gov.lk/moh_final/english/public/elfinder/files/news/2020/FinalSPRP.pdf] Accessed 30 April 2021

[2] Subramanian Nirupama.30 June 2020. 'Dealing with Covid-19: Lessons from the experience of Sri Lanka'.The Indian Express.[<https://indianexpress.com/article/explained/dealing-with-covid-lessons-from-the-experience-of-sri-lanka-6482114/>] Accessed 30 April 2021

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 30 April 2021

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 – 2023. 2018.[<https://extranet.who.int/sph/docs/file/2815>] Accessed 30 April 2021.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2021.[<http://www.dprd.health.gov.lk/>] Accessed 30 April 2021

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. National Emergency Operation Center.

[http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en].Accessed 30 April 2021

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 1

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

The "Guidelines for Procurement of Pharmaceuticals & Medical Devices" document from 2006 does lay out an outline for the acquisition of laboratory needs and calls for all medical devices procured to "satisfy [their] Quality, safety, Performance, Effectiveness and Efficacy criteria." [1] In addition, the guidelines state that "pharmaceuticals and Medical Devices may be procured by International Competitive Bidding (ICB), National Competitive Bidding (NCB), Limited/restricted International Competitive Bidding (LIB), in accordance with the applicable provisions stipulated in PG, subject to any modifications contained herein." [1] Evidence from the Ministry of Health shows that the procurement system has been utilised to award contracts for laboratory and medical equipments. [2] There is no evidence under the Ministry of Agriculture that the procurement system has been utilised for acquisition of laboratory and medical supplies. [3] According to the June 2017 Joint External Evaluation (JEE) report for Sri Lanka, "the national system for procurement and quality assurance should be expanded." [4] Accordingly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 was released by the Ministry of Health in 2018 which states that there are plans to 'expand the national system for procurement and quality assurance of laboratories'. [5]

[1] Sri Lanka National Procurement Agency. "Guidelines for Procurement of Pharmaceuticals & Medical Devices". 2006. [<http://www.treasury.gov.lk/documents/57687/174939/PharmaceuticalGuidelines20060810.pdf/bd579c26-73c9-45b2-a3a4-83fdbb28dca0>]. Accessed 21 November 2020

[2] Ministry of Health, Nutrition & Indigenous Medicine. 'Tenders and Procurement. [http://www.health.gov.lk/moh_final/english/tender_notice.php?spid=35]. Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. Procurement Information. [<http://www.agrimin.gov.lk/web/index.php/en/information-act-1/procurement-information>] Accessed 08 December 2020

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. (<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>). Accessed 21 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 0

There is insufficient evidence to demonstrate that Sri Lanka maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. In the section on medical countermeasures in the June 2017 Joint External Evaluation report for Sri Lanka, there is no specific mention of stockpiles but the report does detail that Sri Lanka has a "well-established countrywide supply, distribution and storage network, supported by trained pharmacists." The report also states that "Sri Lanka also has an emergency purchasing system and the ability to redistribute medicines among institutions through a database system" although it does not detail if the system is based on established agreements with manufacturers or distributors. [1] The National Health Strategic Master Plan 2016 - 2025 has devised a Drugs Adequacy Index to identify which facilities have shortages or surplus of drugs, although this appears to be more targeted toward routine use. [2] Also, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 which was released by the Ministry of Health in 2018, in accordance with the JEE report states that there are plans to develop and adopt standard protocols to be followed by the Medical Supplies Division (MSD) and State Pharmaceuticals Corporation (SPC) as the National Procuring Agency for the emergency procurement of medical countermeasures, regionally and internationally. However there is no mention of stockpile of medical supplies that could be used in a public health emergency. [3] No evidence is found under the Disaster Preparedness and Response Division under the Ministry of Health, the Disaster Management Center under the Ministry of Defense or the National Medicines Regulatory Authority. [4,5,6]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 21 November 2020.

[2] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HRH.pdf>]. Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 21 November 2020

[6] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 21 November 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

Sri Lanka does not have a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. There is no mention of a stockpile of laboratory supplies in the Disaster Preparedness and Response Division under the Ministry of Health. [1] No further evidence is found under the Ministry of Health or Disaster Management Center under the Ministry of Defense. [2,3] In addition no plans for stockpiles of laboratory supplies is found under the National Action Plan for Health Security of Sri Lanka 2019 - 2023, released by the Ministry of Health in 2018.[4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 21 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. There is insufficient evidence to demonstrate that Sri Lanka maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) or laboratory supplies for national use during a public health emergency under Ministry of Health, Ministry of Defense or National Medicines Regulatory Authority websites. [1,2,3] There is also no specific mention of stockpiles of medical supplies or laboratory supplies in the June 2017 Joint External Evaluation (JEE) report for Sri Lanka. [4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 30 April 2021

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 30 April 2021

[3] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2021 [<http://nmra.gov.lk/>]. Accessed 30 April 2021

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 30 April 2021

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is no evidence 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 nor is there any evidence of a plan/mechanism to procure medical supplies for national use during a public health emergency. There is evidence of a national procurement protocol in place which can be utilized by the Ministries of Health for the acquisition medical supplies (e.g. equipment) for routine needs, however there is no evidence that the protocol can also be used for acquisition of medical supplies during a public health emergency.[1] The "Guidelines for Procurement of Pharmaceuticals & Medical Devices" document from 2006 does lay out an outline for the acquisition of laboratory needs and calls for all medical devices procured to "satisfy [their] Quality, safety, Performance, Effectiveness and Efficacy criteria." [1] In addition, the guidelines state that "pharmaceuticals and Medical Devices may be procured by International Competitive Bidding (ICB), National Competitive Bidding (NCB), Limited/restricted International Competitive Bidding (LIB), in accordance with the applicable provisions stipulated in PG, subject to any modifications contained herein." [1] Evidence from the Ministry of Health shows that the procurement system has been utilised to award contracts for laboratory and medical equipments.[2] There is no evidence of a plan to leverage domestic manufacturing or a mechanism to procure medical supplies during a public health emergency in these guidelines. [1,2] Also, according to a June 2017 report by the World Health Organization (WHO) on the "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka", in the section on medical countermeasures in the June 2017 Joint External Evaluation report for Sri Lanka, there is evidence that Sri Lanka has a "well-established countrywide supply, distribution and storage network, supported by trained pharmacists." The report also states that "Sri Lanka also has an emergency purchasing system and the ability to redistribute medicines among institutions through a database system" although it does not detail if the system is based on established agreements with manufacturers or distributors. It is also not clear if this system can be used for public health emergencies and the WHO recommends that "the national system for procurement and quality assurance be expanded." [3] The National Health Strategic Master Plan 2016 - 2025 has devised a Drugs Adequacy Index to identify which facilities have shortages or surplus of drugs, although this appears to be more targeted toward routine use. [4] The National Action Plan for Health Security of Sri Lanka 2019 - 2023 was released by the Ministry of Health in 2018 states that there are plans to develop and adopt standard protocols to be followed by the Medical Supplies Division(MSD) and State Pharmaceuticals Corporation (SPC) as the National Procuring Agency for the emergency procurement of medical countermeasures, regionally and internationally.[5] The State Pharmaceuticals Corporation of Sri Lanka, which is the agency responsible for procurement also does not outline any contingency plans to distribute medical countermeasures during emergencies and neither does their Ministry of Health or National Medicines Regulatory Authority.[6,7,8]No further evidence is found under the Disaster Preparedness and Response Division under the ministry of Health or the Disaster Management Center under the Ministry of Defense [9,10]

[1] Sri Lanka National Procurement Agency. "Guidelines for Procurement of Pharmaceuticals & Medical Devices". 2006. [<http://www.treasury.gov.lk/documents/57687/174939/PharmaceuticalGuidelines20060810.pdf/bd579c26-73c9-45b2-a3a4-83fdbb28dca0>]. Accessed 21 November 2020

[2] Ministry of Health, Nutrition & Indigenous Medicine. "Tenders and Procurement.

[http://www.health.gov.lk/moh_final/english/tender_notice.php?spid=35]. Accessed 21 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. (<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017-33-eng.pdf?sequence=1>). Accessed 21 November 2020

[4] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016.

[<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20%20Admin%20-%20%20HRH.pdf>]. Accessed 21 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[6] State Pharmaceuticals Corporation of Sri Lanka. "SPC Services." [<http://www.spc.lk/spc-services.php>]. Accessed 21 November 2020

[7] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed by 21 November 2020

[8] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 21 November 2020

[9] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[10] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 21 November 2020

4.2.3b

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is no evidence 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 nor is there evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency. There is evidence that Sri Lanka has a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory needs (such as equipment, reagents and media) however there is no evidence that the protocol can also be used for acquisition of laboratory supplies during a public health emergency[1] The "Guidelines for Procurement of Pharmaceuticals & Medical Devices" document from 2006 does lay out an outline for the acquisition of laboratory needs and calls for all medical devices procured to "satisfy [their] Quality, safety, Performance, Effectiveness and Efficacy criteria." [1] Evidence from the Ministry of Health shows that the procurement system has been utilised to award contracts for laboratory and medical equipments. [2] However, according to a June 2017 report by the World Health Organization (WHO) on the "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka", the WHO recommends that "the national system for procurement and quality assurance should be expanded." [3] Accordingly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 was released by the Ministry of Health in 2018 which states that there are plans to 'expand the national system for procurement and quality assurance of laboratories'. [4] No evidence is found under the Disaster Preparedness and Response Division under the ministry of Health or the Disaster Management Center under the Ministry of Defense [5,6]

[1] Sri Lanka National Procurement Agency. "Guidelines for Procurement of Pharmaceuticals & Medical Devices". 2006. [<http://www.treasury.gov.lk/documents/57687/174939/PharmaceuticalGuidelines20060810.pdf/bd579c26-73c9-45b2-a3a4-83fdbb28dca0>]. Accessed 21 November 2020

[2] Ministry of Health, Nutrition & Indigenous Medicine. "Tenders and Procurement." [http://www.health.gov.lk/moh_final/english/tender_notice.php?spid=35]. Accessed 21 November 2020

[3] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. (<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33->

eng.pdf?sequence=1). Accessed 21 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020. [<http://www.dprd.health.gov.lk/>] Accessed 20 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 21 November 2020

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. In the section on medical countermeasures in the June 2017 Joint External Evaluation report for Sri Lanka, there is evidence that Sri Lanka has a "well-established countrywide supply, distribution and storage network, supported by trained pharmacists." Sri Lanka does not have a formal plan in place "for receiving or sending medical countermeasures during an emergency" and recommends that the country draft one. The report however, mentions that "Sri Lanka also has an emergency purchasing system and the ability to redistribute medicines among institutions through a database system" although it does not detail if the system is based on established agreements with manufacturers or distributors. It is also not clear if this system can be used for public health emergencies [1] The National Health Strategic Master Plan 2016 - 2025 has devised a Drugs Adequacy Index to identify which facilities have shortages or surplus of drugs, although this appears to be more targeted toward routine use. [2] Also, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 which was released by the Ministry of Health in 2018 , in accordance with the JEE report states that there are plans to develop and adopt standard protocols to be followed by the Medical Supplies Division(MSD) and State Pharmaceuticals Corporation (SPC) as the National Procuring Agency for the emergency procurement of medical countermeasures, regionally and internationally. [3]The State Pharmaceuticals Corporation of Sri Lanka, which is the agency responsible for procurement also does not outline any contingency plans to dispense medical countermeasures during emergencies and neither does their Ministry of Health or National Medicines Regulatory Authority. [4,5,6]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 21 November 2020

[2] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HRH.pdf>]. Accessed 21 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 21 November 2020

[4] State Pharmaceuticals Corporation of Sri Lanka. "SPC Services." [<http://www.spc.lk/spc-services.php>]. Accessed 21 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed by October 1 2018.

[6] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 21 November 2020

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

4.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a public plan in place to receive health personnel from other countries to respond to a public health emergency. According to the WHO, "Sri Lanka has no written plan for deploying and receiving emergency medical teams." [1] Following the recommendations of the June 2017 Joint External Evaluation report for Sri Lanka the National Action Plan for Health Security of Sri Lanka 2019 - 2023 was released by the Ministry of Health in 2018, which states that there are plans to incorporate sections on systematic deployment and receiving of emergency medical teams to existing national general and health sector disaster preparedness and response plans and plans to register Sri Lanka National Emergency Medical Team with WHO.[2]Furthermore, neither their National Health Strategic Master Plan 2016 - 2025 nor Ministry of Health and Disaster Management websites outline any such plans. [3,4,5]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 22 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 22 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20%20Admin%20-%20%20HRH.pdf>]. Accessed 22 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center.2020.[<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 23 November 2020

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.95

2014

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: 250.56

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: 0

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has issued legislation, a policy or a public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. The June

2017 Joint External Evaluation report for Sri Lanka makes no mention of such a policy. [1] Furthermore, neither their Comprehensive Disaster Management Programme ,National Health Strategic Master Plan 2016 - 2025, National Action Plan for Health Security of Sri Lanka 2019 - 2023, nor their Ministry of Health, or Disaster Management websites outline any such commitments. [2,3,4,5,6]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 22 November 2020.

[2] Democratic Socialist Republic of Sri Lanka Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 22 November 2020

[3] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20%20Admin%20-%20%20HRH.pdf>]. Accessed 22 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 22 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020.

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Defense.2020. Disaster Management Center. [<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 22 November 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a system being in place for public health officials and healthcare workers to communicate during a public health emergency in Sri Lanka. According to the June 2017 Joint External Evaluation report for Sri Lanka, it is recommended that a "consolidated national risk communication plan would strengthen and streamline the current risk communication process." [1] Furthermore, neither their National Health Strategic Master Plan 2016 - 2025, Comprehensive Disaster Management Programme nor their Ministry of Health, Ministry of Disaster Management website outline such a system. [2,3,4,5]The National Action Plan for Health Security of Sri Lanka 2019 - 2023, published following the recommendations of the JEE states that there are plans to formalize a risk communication plan. [6]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 22 November 2020.

[2] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20%20Admin%20-%20%20HRH.pdf>]. Accessed 22 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020

[4] Sri Lanka Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 22 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. 2020. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 22 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 22 November 2020

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a system being in place for public health officials and healthcare workers to communicate during a public health emergency in Sri Lanka, and hence none that would encompass private sector works. According to the June 2017 Joint External Evaluation report for Sri Lanka, it is recommended that a "consolidated national risk communication plan would strengthen and streamline the current risk communication process." [1] Furthermore, neither their National Health Strategic Master Plan 2016 - 2025, Comprehensive Disaster Management Programme nor their Ministry of Health, Ministry of Disaster Management website outline such a system. [2,3,4,5]The National Action Plan for Health Security of Sri Lanka 2019 - 2023, published following the recommendations of the JEE states that there are plans to formalize a risk communication plan. [6]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 22 November 2020.

[2] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HRH.pdf>]. Accessed 22 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020

[4] Sri Lanka Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 22 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. 2020. [<http://www.drr.dmc.gov.lk/index.php?lang=en>] Accessed 22 November 2020

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 22 November 2020

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that the national public health system monitors for and tracks the number of health care associated infections that take place in healthcare facilities in Sri Lanka. There is no evidence of any records of infections which were Healthcare associated infections (HAI) on their Ministry of Health website or their Medical Research Institute website. [1, 2] Furthermore, their surveillance data on their epidemiology unit does not indicate if any metrics are HAI-specific. [3] Furthermore, there is no mention of tracking the number of health care associated infections in Sri Lanka's National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022 or their National Health Strategic Master Plan 2016 - 2025. [4,5] Additionally, there is no data for HAI statistics via their "Annual Health Statistics" from their Ministry of Health website [6] A 2013 study indicates that there is national monitoring of HCAI but only for a handful of diseases/procedures: "Three national indicators related to IPC have been identified in consultation with the Sri Lanka College of Microbiologists. These 3 indicators, Staphylococcus aureus bacteraemia rates, surgical site infection (SSI) rates following Lower Segment Caesarean Section (LSCS), and hand hygiene compliance rates are currently being monitored by the healthcare quality and safety directorate of the Ministry of Health." [7] However, the report also notes that "Surveillance of HAI and AMR is carried out only in a few Sri Lankan hospitals and feedback is given to the relevant hospital administrators and the consultants" with the exception of the previous indicators mentioned. [7] Lastly, the National Action Plan for Health Security of Sri Lanka 2019 - 2023 states that there are plans to formulate national infection control policy, plans for HCAI reporting of all identified HCAI Infection indicators in selected hospitals and development of national infection prevention and control (IPC) guidelines.[8] In light of the current covid-19 pandemic, the government websites do not have evidence of a public system to monitor or track the number of health care workers who have been affected by Covid-19 through their work.[1,2,3]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020

[2] Democratic Socialist Republic of Sri Lanka. "Medical Research Institute".2020. [<http://www.mri.gov.lk/>]. Accessed 22 November 2020.

[3] Democratic Socialist Republic of Sri Lanka.Ministry of Health. Epidemiology Unit.2020.[<https://www.epid.gov.lk/web/>] Accessed 22 November 2020

[4] Democratic Socialist Republic of Sri Lanka. "National Strategic Plan for Combating Antimicrobial Resistance in Sri Lanka 2017 - 2022". 2017. [<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 22 November 2020.

[5] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HRH.pdf>]. Accessed 22 November 2020.

[6] Sri Lanka Ministry of Health, Nutrition and Indigenous Medicine. "Annual Health Statistics". 2018.. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/AHB/2020/Final%20AHS%202018.pdf]. Accessed 22 November 2020.

[7] Wickramasinghe, S.C. and Dharmaratne, T.M.S.M., Health care associated infection (HCAI). Sri Lanka Journal of Child

Health, 42

[3] , pp.151-160. DOI. 2013. [<http://doi.org/10.4038/sljch.v42i3.6020>]. Accessed 22 November 2020.

[8] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 22 November 2020

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is a national requirement for ethical review before beginning a clinical trial in Sri Lanka. Sri Lanka's National Health Strategic Master Plan 2016 - 2025 clearly identifies "inadequate awareness and knowledge on research methods and ethics in research among health care staff interested in conducting research" as a weakness in its gap analysis. Sri Lanka considers "ethically conducted quality research" a prime directive for its health related vision for the country. [1] In April 2018 their Ministry of Health released its Code of Conduct for Health Research in Sri Lanka which outlines that going forward "ethics clearance is [to] obtained from an Ethics Review Committee registered with the National Health Research Ethics Committee" for clinical trials. [2]

[1] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016.

[<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20%20Admin%20-%20%20HRH.pdf>]. Accessed 22 November 2020.

[2] Sri Lanka Ministry of Health. "Code of Conduct for Health Research". April 2018.

[http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/2018/TheCodeofConduct.pdf]. Accessed 22 November 2020

4.7.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of Sri Lanka having an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics. Neither their Ministry of Health nor Ministry of Skills Development, Vocational Education, Research & Innovations make any mention of a way to expedite the process of approving clinical trials under any circumstance. [1,2] Lastly, their Code of Conduct for Health Research in Sri Lanka document also does not address any way to expedite the process for approving clinical trials and neither does the State Pharmaceuticals Corporation of Sri Lanka nor their National Medicines Regulatory Authority. [3,4,5]

- [1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 22 November 2020
- [2] Democratic Socialist Republic of Sri Lanka. Ministry of Skills Development, Vocational Education, Research & Innovations. 2020. [<http://www.mostr.gov.lk/web/index.php?lang=en>]. Accessed 22 November 2020.
- [3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. "Code of Conduct for Health Research". April 2018. [http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/2018/TheCodeofConduct.pdf]. Accessed 22 November 2020
- [4] Democratic Socialist Republic of Sri Lanka. State Pharmaceuticals Corporation of Sri Lanka. "SPC Services." [<http://www.spc.lk/spc-services.php>]. Accessed 22 November 2020.
- [5] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 22 November 2020

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1 , No = 0

Current Year Score: 1

Sri Lanka does have a government agency responsible for approving new medical countermeasures for humans. Sri Lanka's National Medicines Regulatory Authority (NMRA) is responsible for ensuring that pharmaceuticals and medical devices "meet the required standards of quality and are within the existing legislative framework with respect to the production, marketing and dispensing of these items." [1] According to the June 2017 Joint External Evaluation for Sri Lanka, the National Medicines Regulatory Authority aims to "ensure that all medicines and medical devices available in Sri Lanka are efficacious, safe and of acceptable quality, and to ensure uninterrupted supply and rational use." [2]

[1] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 23 November 2020

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 23 November 2020

4.7.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has an expedited process for approving medical countermeasures for human use during public health emergencies. Neither their Ministry of Health nor Ministry of Skills Development, Vocational Education, Research & Innovations make any mention of a way to expedite the process of approving clinical trials under any circumstance. [1,2] Their Guidelines for the conduct of clinical trials in Sri Lanka also do not mention the expediting of the approval procedure for medical countermeasures and neither are any expediting procedures outlined on Sri Lanka's National Medicines Regulatory Authority website. [3,4] Lastly, there is no evidence of such an expedited process in the June 2017 Joint

External Evaluation report for Sri Lanka either. [5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Skills Development, Vocational Education, Research & Innovations. [<http://www.mostr.gov.lk/web/index.php?lang=en>]. Accessed 23 November 2020

[3] Sub-Committee on Clinical Trials National Medicines Regulatory Authority Ministry of Health Sri Lanka. "Guidelines for the conduct of clinical trials in Sri Lanka". November 2016. [http://nmra.gov.lk/images/pdf/clinical%20trials%20guidelines_oct2014.pdf]. Accessed 23 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. National Medicines Regulatory Authority (NMRA). 2020. [<http://nmra.gov.lk/>]. Accessed 23 November 2020

[5] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 23 November 2020

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Sri Lanka has a national risk reduction strategy or a standalone national disaster risk reduction strategy for pandemics. Neither Sri Lanka's National Health Strategic Master Plan 2016 - 2025 nor its Comprehensive Disaster Management Programme make any mention of a risk reduction strategy. [1,2] Furthermore, no such strategy is available on its Ministry of Health or Disaster Management Center websites. [3,4] Lastly, the latest piece of legislation to come out of Sri Lanka on the matter is an act to amend the Sri Lanka Disaster Management At, No. 13 of 2005. [5] This document merely mentions epidemics in order to include it in the definition of a "disaster" but does not integrate any specific risk reduction strategies into the policy for epidemics or pandemics. [6] Lastly, a report put forth by PreventionWeb called "Sri Lanka National progress report on the implementation of the Hyogo Framework for Action (2013-2015) - Interim" does not include specific mention about pandemics being incorporated in a risk reduction strategy for Sri Lanka. [7]

[1] Democratic Socialist Republic of Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HRH.pdf>]. Accessed 23 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Disaster Management. "Sri Lanka Comprehensive Disaster Management Programme (SLCDMP)". 2014. [<http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>]. Accessed 23 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. 2020. [<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 23 November 2020.

[5] PreventionWeb. "Sri Lanka - government." 2018. [<https://www.preventionweb.net/organizations/3190/view>]. Accessed 23 November 2020

[6] Parliament of the Democratic Socialist Republic of Sri Lanka. "An act to amend the Sri Lanka Disaster Management At, No. 13 of 2005." 2020. [[http://www.ifrc.org/docs/idrl/Sri%20Lanka%20DM%20\(Amendment\)%20Act%20Nov%202011.pdf](http://www.ifrc.org/docs/idrl/Sri%20Lanka%20DM%20(Amendment)%20Act%20Nov%202011.pdf)]. Accessed 23 November 2020.

[7] PreventionWeb. "Sri Lanka National progress report on the implementation of the Hyogo Framework for Action (2013-2015) - Interim." January 2015. [https://www.preventionweb.net/files/41730_LKA_NationalHFAprogress_2013-15.pdf]. Accessed 23 November 2020.

5.2 CROSS-BORDER AGREEMENTS ON PUBLIC HEALTH AND ANIMAL HEALTH EMERGENCY RESPONSE

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 0

There is insufficient evidence that Sri Lanka has cross-border agreements as part of a regional group, with regards to public health emergencies but with evidence of gaps in implementation.

According to the Joint External Evaluation report for Sri Lanka, conducted in June 2017, "Sri Lanka does not have specific agreements in place for collaboration with other countries." [1] However, Sri Lanka is a part of the South Asian Association for Regional Cooperation (SAARC), which among other issues, holds multilateral meetings about health and population issues. [2]

The first meeting was, in the "wake of widespread threats brought about by the emergence of the Severe Acute Respiratory Syndrome (SARS), an Emergency Meeting of SAARC Health Ministers was convened in Male' in April 2003 to develop a regional strategy to deal with the deadly epidemic." [2] At the meeting, member states adopted the "Male' Declaration on a Collective SAARC Response to SARS." However, it is not clear this has been implemented in cases of other public health emergencies. [2] In a 2006 meeting, it was decided that there should be a SAARC Disease Surveillance Centre set up in order "to develop a comprehensive and multi-sectoral strategy covering both animal and human health in the context of pandemic preparedness but there is no evidence that this plan has been implemented. [2] Lastly, there is no evidence of such cross-border agreements on their Disaster Management Center or Ministry of Health websites.[3,4]

[1] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 23 November 2020

[2] South Asian Association for Regional Cooperation (SAARC). Areas of Cooperation."Social Affairs". [<https://saarc-sec.org/index.php/areas-of-cooperation/social-affairs>]. Accessed 04 November 2020.

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center.2020. [<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 23 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020.

5.2.1b

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

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

Current Year Score: 0

There is insufficient evidence that Sri Lanka has cross-border agreements, protocols or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies.

The country is part of the South Asian Association for Regional Cooperation which among other topics, deals with issues related to health and population. [1] In a 2006 meeting, it was decided that there should be a SAARC Disease Surveillance Centre set up in order "to develop a comprehensive and multi-sectoral strategy covering both animal and human health in the context of pandemic preparedness". [1] In addition, the "SAARC Chief Veterinary Officers' (CVOs) Forum is one of the regular Forums of SAARC dealing with controlling trans-boundary animal diseases, capacity building on epidemiology activities, networking among the veterinarians, regional laboratories and other veterinary institutions." The Seventh Meeting of the CVOs Forum was held on 23-24 July 2019 in Islamabad. The Seventh Meeting of the SAARC Chief Veterinary Officers' (CVOs) Forum reviewed the status of implementation of its earlier decisions, ongoing collaborations and activities as well as discussed various priority issues related to livestock, including disease information sharing and management, epidemiology, laboratory matters, controlling priority diseases like Foot and Mouth Disease (FMD), Peste des Petits Ruminants (PPR), Avian Influenza (AI) and Anti-microbial Use (AMU) stewardship. The Meeting recommended to add Rabies, Brucellosis, and Newcastle diseases as the new diseases affecting the region. The Meeting also recommended that ASF (African Swine Fever), Nipah and IBR may be considered as emerging threats. [2] The Regional Support Unit of SAARC provides "support to the Member States for Laboratory Information and Management System (LIMS) and SAC [SAARC Agricultural Centre] is organizing one Field Epidemiology Training Programme for the Veterinarians (FETPV)." [2] However, it is not clear if these agreements have been implemented by Sri Lanka. No further evidence is found under Disaster Management Center or Ministry of Health, Ministry of Agriculture websites.[3,4,5]

[1] South Asian Association for Regional Cooperation (SAARC). Areas of Cooperation. "Social Affairs". [<https://saarc-sec.org/index.php/areas-of-cooperation/social-affairs>]. Accessed 23 November 2020.

[2] South Asian Association for Regional Cooperation. Areas of Cooperation. 'Agriculture and Rural Development'. [http://saarc-sec.org/areas_of_cooperation/area_detail/agriculture-and-rural-development/click-for-details_4]. Accessed 23 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center. 2020.

[<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 23 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 23 November 2020

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

Does the county have signatory and ratification (or same legal effect) status to the Biological Weapons Convention?

Signed and ratified (or action having the same legal effect) = 2, Signed = 1, Non-compliant or not a member = 0

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 4

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

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

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

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

Current Year Score: 0

2021

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

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

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

5.4.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2021

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

5.4.1b

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

Yes = 1, No = 0

Current Year Score: 1

2021

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

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

5.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

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

Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years. There is no evidence their Ministry of Health, Ministry of Agriculture, Ministry of Finance-Budget

Highlights, Disaster Management Centre or their Disaster Preparedness and Response Division websites[1,2,3,4,5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 23 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Finance. Budget Speeches.[<http://www.treasury.gov.lk/budget/speeches/archive#2020>] Accessed 23 November 2020

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center.2020. [<http://www.drr.dmc.gov.lk/index.php?lang=en>]. Accessed 23 November 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Disaster Preparedness and Response Division. 2020.[<http://www.dprd.health.gov.lk/>] Accessed 23 November 2020

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

5.5.2a

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

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

Current Year Score: 0

2021

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

5.5.2b

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

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

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Sri Lanka has access to a publicly identified special emergency public financing mechanism and funds which they can access in the face of a public health emergency. Sri Lanka is a part of the South-East Asia Regional Health Emergency Fund (SEARHEF) which has been set up by the World Health Organization(WHO) South East Asia and its regional office and its 11 member countries and explicitly includes public health emergencies. [1,2] Additionally, according to the World Bank, Sri Lanka "graduated from IDA at the end of FY17, but will receive transitional support on an exceptional basis through the IDA18 period (FY18-20)." The country is therefore eligible for the Pandemic Financing Facility. [3] In addition, According to the June 2017 Joint External Evaluation (JEE) report for Sri Lanka, "following the 2004 tsunami, the government set up a national disaster commission that can provide funding during disasters." [4] However, no publicly available information on said commission or fund is available through their Ministry of Health or National Emergency Operation Center websites. [5,6] In light of the COVID-19 pandemic, the World Bank has supported Sri Lanka financially to help the country prevent, detect, and respond to the COVID-19 pandemic and strengthen its public health preparedness. [7,8]

[1] World Health Organization. Regional Office for South East Asia.2020.South East Asia Regional Health Emergency Fund (SEARHEF).[http://origin.searo.who.int/entity/searhef/en/] Accessed 08 December 2020

[2] World Health Organization. "Investment in emergency preparedness pays off in Sri Lanka". 2016. (http://www.searo.who.int/srilanka/documents/floods/en/). Accessed 08 December 2020

[3] World Bank Group. "Borrowing Countries". 2020. [http://ida.worldbank.org/about/borrowing-countries]. Accessed 08 December 2020

[4] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1]. Accessed 08 December 2020

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2018. [http://www.health.gov.lk/moh_final/english/]. Accessed 08 December 2020.

[6] Democratic Socialist Republic of Sri Lanka. Ministry of Defense. Disaster Management Center.National Emergency Operation Center.2020. [http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=59&Itemid=224&lang=en]. Accessed 08 December 2020.

[7] The World Bank. 'World Bank Fast-Tracks \$128 Million COVID-19 (Coronavirus) Support for Sri Lanka'.2 April 2020.[https://www.worldbank.org/en/news/press-release/2020/04/01/world-bank-fast-track-support-covid19-corona] Accessed 23 November 2020

[8] The World Bank. 'World Bank Supports Sri Lanka With \$56 Million to Mitigate COVID-19 Impacts'. 11 September 2020.[https://www.worldbank.org/en/news/press-release/2020/09/11/world-bank-supports-sri-lanka-with-usd56-million-mitigate-covid-19-impacts] Accessed 23 November 2020

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?
- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

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

Current Year Score: 0

There is no evidence that senior leaders (president or ministers) have made a public commitment either to support other countries to improve capacity to address epidemic threats by providing financing or support or to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity in the past three years. No press releases or policy documents outlining any evidence is found on their Ministry of Health or Ministry of Foreign Affairs websites. [1,2] There is no evidence on the World Health Organization, Srilanka country page.[3]It is noteworthy that in light of the present COVID-19 pandemic, Srilanka has pledged to support its neighboring countries.According to The OUTLOOK, dated 23 March 2020, 'President Rajapaksa has pledged to contribute USD 5 million to the SAARC COVID-19 Emergency Fund set up under the leadership of India for the South Asian Association for Regional Cooperation (SAARC) countries to battle the COVID-19 pandemic'.[4]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/]. Accessed 23 November 2020

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Foreign Affairs.2020.[<https://mfa.gov.lk/>] Accessed 23 November 2020

[3] World Health Organization. Srilanka.[<https://www.who.int/srilanka>] Accessed 23 November 2020

[4] The OUTLOOK. 23 March 2020. 'Sri Lanka pledges USD 5 mn to SAARC COVID-19 Emergency Fund'.

[<https://www.outlookindia.com/newscroll/sri-lanka-pledges-usd-5-mn-to-saarc-covid19-emergency-fund/1777809>] Accessed 23 November 2020

5.5.4b

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

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

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

Current Year Score: 1

There is no evidence that the country has, in the past three years provided other countries with financing or technical support to improve capacity to address epidemic threats but there is evidence Srilanka has requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. There is evidence via the Global Health Security Funding Tracker that Sri Lanka has invested donor funds by several international organizations to improve domestic capacity to address epidemic threats. The tracker notes that Sri Lanka has received funding from multiple donors to enhance their capacity on preparedness, emergency response operations, real time surveillance, zoonotic diseases among others from 2014 to 2020, some specific examples are from the International Bank for Reconstruction and Development for Sri Lanka: Primary Health Care System Strengthening Project from 2014 to 2020,Bill and Melinda Gates Foundation for Global Malaria Eradication through Accelerated Regional Elimination and Building the evidence base for appropriate care of the sick, undernourished from 2014 and 2020, from Asian Development Bank for Health System Enhancement Project from 2014 and 2020 , from The Global Fund to fight AIDS, Tuberculosis and Malaria for National Program for Tuberculosis Control and Chest Diseases from 2014 to 2020 etc.[1] Further, in light of the ongoing COVID-19 pandemic, Srilanka has received international aid from International Bank for Reconstruction and Development and International Development Association for ' Srilanka COVID-19 Emergency Response and Health Systems Preparedness Project '. [1]There is no evidence that Srilanka has provided other countries with financing or technical support to improve capacity to address epidemic threats. The World Health Organization does not mention any such public commitments made

by Sri Lanka. [2,3] In addition, no press releases or policy documents outlining this can be found on their Ministry of Health or Ministry of Foreign Affairs websites. [4,5]

[1] Global Health Security Funding Tracker.2021. [<https://tracking.ghscosting.org/#/data>]. Accessed 01 May 2021.

[2] World Health Organization. "Joint External Evaluation of IHR Core Capacities of the Democratic Socialist Republic of Sri Lanka". June 2017. [<http://apps.who.int/iris/bitstream/handle/10665/259266/WHO-WHE-CPI-REP-2017.33-eng.pdf?sequence=1>]. Accessed 01 May 2021

[3] World Health Organization. Sri Lanka.2021. [<https://www.who.int/countries/lka/en/>] Accessed 01 May 2021

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2021. [http://www.health.gov.lk/moh_final/english/]. Accessed 01 May 2021

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Foreign Affairs. 2021. [<https://www.mfa.gov.lk/>]. Accessed 01 May 2021

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 0

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of Sri Lanka having a publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza. There is no evidence of such a plan or policy on their Ministry of Health, Ministry of Agriculture, or Ministry of Skills Development, Vocational Education, Research & Innovations [1,2,3] Lastly, their National Health Strategic Master Plan 2016 - 2025 and the National Action Plan for Health Security of Sri Lanka 2019 - 2023 also do not address the sharing of genetic data or specimens. [4,5]

[1] Democratic Socialist Republic of Sri Lanka. Ministry of Health. 2020. [http://www.health.gov.lk/moh_final/english/] Accessed 25 November 2020.

[2] Democratic Socialist Republic of Sri Lanka. Ministry of Agriculture. 2020. [<http://www.agrimin.gov.lk/>]. Accessed 25 November 2020

[3] Democratic Socialist Republic of Sri Lanka. Ministry of Skills Development, Vocational Education, Research & Innovations. [<http://www.mostr.gov.lk/web/index.php?lang=en>]. [<http://www.mostr.gov.lk/web/index.php?lang=en>]. Accessed 25 November 2020

[4] Sri Lanka Ministry of Health. "National Health Strategic Master Plan 2016 - 2025". 2016. [<http://www.health.gov.lk/enWeb/HMP2016-2025/Health%20Admin%20-%20HHRH.pdf>]. Accessed 25 November 2020.

[5] Democratic Socialist Republic of Sri Lanka. Ministry of Health. National Action Plan for Health Security of Sri Lanka 2019 - 2023. 2018. [<https://extranet.who.int/sph/docs/file/2815>] Accessed 25 November 2020

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0, No = 1

Current Year Score: 1

There is no public evidence that Sri Lanka has not shared samples in accordance with the PIP framework in the past two years. The World Health Organisation has not reported any non-compliance in the past two years by Sri Lanka either on their website or as a press release. [1] In addition, there were no reports by the media on this matter.

[1] World Health Organization (WHO). Influenza. "Virus Sharing". 2020. [http://www.who.int/influenza/pip/virus_sharing/en/]. Accessed 24 November 2020

5.6.1c

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

Yes = 0, No = 1

Current Year Score: 1

There is no public evidence that Sri Lanka has not shared pandemic pathogen samples during an outbreak in the past two years. No evidence is found via World Health Organization (WHO) resources as well as media reports. [1,2,3]. There is no evidence that in light of the ongoing pandemic Covid-19, Sri Lanka has not shared pathogen samples.[2,3,4]

[1] World Health Organization. "Pandemic Influenza Preparedness Framework Annual Progress Report. 1 January -31 December, 2018. 2019. [<https://apps.who.int/iris/bitstream/handle/10665/311901/WHO-WHE-IHM-PIP-2019.1-eng.pdf?sequence=1&isAllowed=y>]. Accessed 24 November 2020.

[2] World Health Organization. Sri Lanka. [<https://www.who.int/Srilanka>] Accessed 24 November 2020.

[3] World Health Organization. Influenza. [<https://www.who.int/influenza/en/>] Accessed 24 November 2020.

[4] Democratic Socialist Republic of Sri Lanka. Ministry of Health. Health Promotion Bureau. COVID-19 Situation Report.2020. [<https://www.hpb.health.gov.lk/en>] Accessed 24 November 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: 2

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 38

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 2

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: 3

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

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

Current Year Score: 1

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 2

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country?

4 = Very high, 3 = High, 2 = Moderate, 1 = Low, 0 = Very low

Current Year Score: 0

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

How high is the risk of organized criminal activity to the government or businesses in the country?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 91.9

2017

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

6.2.2 Gender equality

6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

Current Year Score: 0.62

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: 0.1

2016

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 2

According to the World Bank, the most recent data for share of employment in the informal sector in Sri Lanka stands at 60%.
The data is from 2018.

[1] The World Bank. Data. Informal Employment. 2020.[<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS>] Accessed 24
November 2020

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 1

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 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: 0.39

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 2

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 18.59

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: 0.51

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 2

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 76.81

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: 466.7

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 10.84

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 22.9

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 5.2

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 89.42

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 95.78

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: 212.41

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

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

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018

6.5.4b

Trust medical and health advice from medical workers

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

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018