

National Action Plan for Health Security of Sri Lanka

2019 - 2023

Strengthening Implementation of the International Health Regulations



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Democratic Socialist Republic of Sri Lanka



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Message from the Hon. Minister of Health, Nutrition and Indigenous Medicine

We have witnessed many times that disease outbreaks bring high costs to the lives of our communities, giving huge social impact and immense burden to health system. The recent dengue epidemic has already shown that the burden is broad in terms of, short-term cost for control, patient care, hospital admission and social disruption.

The emerging and reemerging epidemics raised new attention on the implementation of the International Health Regulations (2005), adopted in 2005 by Sri Lanka and member states of the WHO and the critical need for countries to have strong health systems to respond to adverse health events when they arise. The International Health Regulations (IHR) 2005 constitute the essential framework for addressing global health security as they aim at ensuring global health security while avoiding unnecessary interference with international traffic and trade. Sri Lanka needs to be fully prepared even before any disease outbreak or an emergency strikes, and we need to be ready to protect our citizens and remain resilient in the face of these threats. A National Action Plan for Health Security (NAPHS) is thus key to address health security and emergencies capabilities holistically within a country.

This NAPHS was developed using a multisectoral approach and drawn expertise from various sectors. This reflects a shared commitment to enhance collaboration when addressing national health security. The NAPHS aims to create and maintain active collaboration between the sectors for addressing health security using “One health approach concept” so as to ensure that there is timely preparedness, and a consistent and coordinated response in the event of occurrence of an event of public health concern.

The plan will be implemented under the guidance of the Ministry of Health, Nutrition and Indigenous Medicine with other supportive relevant ministries and organizations. To achieve this, an Inter-ministerial IHR Committee to administer the plan and to monitor, was already established. Successful implementation of the NAPHS will contribute significantly to the overall goal of improving national, regional and global health security. This NAPHS should be considered a “living document” and is open for feedback, additions and revisions based on changing needs.

As the Minister of Health, I will provide policy, financial support and will implement necessary legislations to achieve full potential of NAPHS. I appreciate and thank all personnel involved in formulating NAPHS. I am certain that all stake holders will work diligently with commitment to achieve maximum health security for Sri Lanka

Hon. Dr. Rajitha Senaratne
Minister of Health, Nutrition and Indigenous Medicine

Message from the Director General of Health Services

The journey towards the development of this National Action Plan for Health Security (NAPHS) had been long but rewarding. The processes of development of the NAPHS started way back in 2017, few months after the Joint External Evaluation (JEE) was conducted. The national IHR steering committee initiated the development of NAPHS focusing on JEE recommendations and current public health challenges. The NAPHS will serve as a platform for multiple stakeholders to work in harmony to achieve higher level of health security in Sri Lanka.

At the same time I would like to extend my sincere gratitude to many stakeholders who contributed to the NAPHS. In addition to the contribution of preparation of NAPHS, Ministry of Health coordinated the activity. The other stakeholders are from Department of Animal Production and Health, Ministry of Agriculture, Ministry of Mahaweli Development and Environment, Central Environment Authority, Sri Lanka Atomic Energy Regulatory Council, Sri Lanka Atomic Energy Regulatory Board, Ministry of Defence, Ministry of Foreign Affairs, Department of Immigration and Emigration, Sri Lanka Ports Authority, Airport Aviation Sri Lanka, Ministry of Fisheries and Aquatic Resources and Ceylon Association of Shipping Agents. Monitoring and evaluation of NAPHS will be mainly done by the heads of relevant Ministries/ Departments/Units. In addition, inter ministerial IHR steering committee will be monitoring and evaluating the implementation of NAPHS.

Finally, I would like to thank the WHO, IHR National focal points, Officials of the JEE point of contact (Quarantine Unit) and stakeholders for their effort and valuable time spent on this national endeavor.

Dr. Anil Jasinghe
Director General of Health Services
Ministry of Health, Nutrition and Indigenous Medicine

Message from WHO Representative to Sri Lanka

Four hundred years ago an English poet wrote that “No man (or woman) was an Island unto themselves.” It is even more true today with our connected world in which health security affects us all. We must all protect ourselves, and each other, from threats like infectious diseases, chemical and radiological events.

That is why WHO is working with the Government of Sri Lanka and another 195 governments to prevent and respond to public health crises.

As part of its commitment to the International Health Regulations, in 2017 the Government of Sri Lanka embarked on the process of developing a “National Action Plan for Health Security” and has worked closely with WHO and other partners in producing this plan.

The adoption and implementation of the Plan significantly strengthens the country’s ability to prevent, detect and respond to public health threats and as a result Sri Lanka will be better prepared to protect its citizens and health system from the impact of disasters.

By better protecting the people of Sri Lanka the country also is making a major contribution to the health security of the regional and global community and should be commended for doing so. While congratulating the government for launching the health security plan, WHO express its commitment to continue the support extended to the government for its implementation.

Dr Razia Narayan Pendse
The WHO Representative to Sri Lanka

Executive summary

Since the implementation of International Health Regulations (IHR) -2005 in 2007, Sri Lanka has made a remarkable progress in implementing and developing IHR core capacities. In 2012 and 2014, Sri Lanka has requested for extensions to achieve IHR core capacities and fulfilled those capacities in 2016.

One key component of new IHR monitoring and evaluation framework is the Joint External Evaluation (JEE) along with IHR annual reporting, after action review and simulation exercises. Sri Lanka initiated the preliminary work on JEE to aware IHR implementation status in January 2017. JEE mission completed in June 2017 and final report was published by the Ministry of Health in August 2017.

During the 2017 JEE, Sri Lanka and WHO subject-matter experts identified high priorities for improvement in technical areas with lower capacities, but also identified actions that would reinforce, sustain, and further optimize capacities that are already highly rated according to the JEE tool. There are three main cross cutting recommendations; Strengthen multi-sectoral engagement and foster a true One Health approach, enhance surveillances systems (human and animal health) and ensure sustainable and scalable health security through improved documentation.

Preparation of National Action Plan for Health Security (NAPHS) was coordinated by national IHR steering committee chaired by Director General Health Services in latter part of the 2017. NAPHS was prepared based on JEE recommendations and additional country priorities with a view to contribute towards a safer nation by strengthening IHR core capacities and capabilities to prevent, detect and respond to public health threats efficiently and effectively adopting a multi-stakeholder approach.

Importantly, the NAPHS derives from, maintains alignment with, underscores, and supports the goals and implementation plans of other national policies and action plans of health and other relevant sectors. The finalizing NAPHS workshop was held in March 2018 with the support of WHO and completed the action plan preparation in August 2018.

NAPHS is a multi-stakeholder, medium term dynamic action plan with a results-based approach. The implementation of NAPHS is whole of government responsibility and commitment. The implementation and monitoring of the overall plan and sectoral plans are critical to achieve desired results and will be done by relevant Departments/Ministries. The respective ministries, departments and units will include the activities in the NAPHS, in their annual work plan. The activities in the NAPHS will be implemented in phase wise manner. The NAPHS will be funded mainly through government funds, whereas selected activities will be funded by donors.

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List of Abbreviations and Acronyms

AASL	Airport and Aviation Services (Sri Lanka)
AFC	Anti Filariasis Campaign
AMC	Anti Malaria Campaign
AMOOH	Assistant Medical Officer of Health
AMR	Anti - Microbial Resistance
BIA	Bandaranaike International Airport
BSE	Bovine Spongiform Encephalopathy
CAPP	Chemical Accidents Prevention and Preparedness
CAASL	Civil Aviation Authority of Sri Lanka
CEA	Central Environmental Authority
CPD	Continuous Professional Development
D/AH	Director / Animal Health
DAPH	Department of Animal Production and Health
DDG(ET & R)	Deputy Director General (Education, Training and Research)
DDG/LS	Deputy Director General Laboratory Services
DDG PHS	Deputy Director General Public Health Services
D/FHB	Director / Family Health Bureau
DG/DAPH	Director General / Department of Animal Production and Health
DGHS	Director General of Health Services
D/LS	Director/Laboratory Services
DMC	Disaster Management Centre
D/MRI	Director/Medical Research Institute
DoA	Department of Agriculture
D/PHVS	Director / Public Health Veterinary Services
DPRD	Disaster Preparedness and Response Division
D/VR	Director / Veterinary Research
D/VRI	Director / Veterinary Research Institute
D/WLH-DWC	Director / Wildlife Health-Department of Wildlife Conservation
EMP	Emergency Management Plan
EOC	Emergency Operation Centre
E & OH	Environmental and Occupational Health
E & OH & FS	Environmental and Occupational Health and Food Safety

FAO	Food and Agriculture Organization
FBO	Food Business Operators
FCAU	Food Control Administrative Unit
FETP	Field Epidemiology Training Programme
GHP	Good Hygiene Practice
GMP	Good Manufacturing Practice
HAB	Harmful Algal Blooms
HACCP	Hazard Analysis Critical Control Point
HCAI	Health Care Associated Infections
HPAI	Highly Pathogenic Avian Influenza
HPB	Health Promotion Bureau
HR	Human Resource
IAEA	International Atomic Energy Agency
IDH	Infectious Disease Hospital
IEC	Information, Education and Communication
IHR	International Health Regulations
IPC	Infection, Prevention and Control
ITI	Industrial Technology Institute
JE	Japanese Encephalitis
JEE	Joint External Evaluation
LA	Local Authority
Met Dpt	Department of Meteorology
MoA	Ministry of Agriculture
Mo E & NR	Ministry of Environment and Natural Resources
MoFAR	Ministry of Fisheries and Aquatic Resources
MoH	Ministry of Health
Mo LS & RCD	Ministry of Livestock and Rural Community Development
Mo MD & E	Ministry of Mahaweli Development and Environment
MOOH	Medical Officer of Health
MOU	Memorandum of Understanding
MSD	Medical Supplies Division
NACWC	National Authority for Chemical Weapons Convention
NBRO	National Building Research Organisation

NFA	National Food Authority
NFP	National Focal Point
NIC	National Influenza Centre
NIID	National Institute of Infectious Diseases (Former infectious Disease Hospital)
No.	Number
OIE	World Organization for Animal Health
PDAPH	Provincial Department of Animal Production and Health
PDHS	Provincial Director of Health Services
PGIS	Postgraduate Institute of Science
PHC	Public Health Care
PHEOC	Public Health Emergency Operation Centre
PoE	Points of Entry
PVS	Performance of Veterinary Services
QHRMS	Quarantine Health Record Management and Surveillance System
RDHS	Regional Director of Health Services
RE	Regional Epidemiologist
RMSD	Regional Medical Supplies Division
SEARO	South East Asia Regional office
SLAB	Sri Lanka Accreditation Board
SLAERC	Sri Lanka Atomic Energy Regulatory Council
SLCM	Sri Lanka College of Microbiologist
SLPA	Sri Lanka Ports Authority
SOP	Standard Operation Procedures
SPC	State Pharmaceuticals Corporation
UDA	Urban Development Authority
UN	United Nations
VIC	Veterinary Investigation Center
VIO	Veterinary Investigation Officer
VPS	Virtual private server
VS	Veterinary Surgeon
VSO	Veterinary Surgeons Office
WHO	World Health Organization

1. BACKGROUND

1.1 Geographical and demographic features of the country

Sri Lanka is a tropical island lying off the South Asian region, South Eastern coast of the Indian peninsula, between latitudes 5° 55' and 9° 51' N and longitudes 79° 41' – 81° 54' E above the equator. It has a land area of 65,610 square kilometers with a population of about 20.3 million. It has a maximum length of 432 km (Devundara to Point Pedro) and maximum breadth of 224 km (Colombo - Sangamankanda). Sri Lanka with its tear-dropped shape is dominated by the astonishingly varied features of topography, making it one of the most scenic places in the world.

The island is divided into nine provinces and twenty five districts. Map depicting the districts of Sri Lanka is given in Figure 1.



Figure 1: District map of Sri Lanka

Total population in Sri Lanka is about 20.3 million. Highest population densities are seen in Colombo, Gampaha and Kalutara districts.

Age-sex composition of population describes the pattern of the distribution of people in different age categories according to sex. In Sri Lanka, population pyramid structure changed significantly from a pyramid shape towards that of a barrel shape. The population planning programs and policies from 1960 to 1994, which have been implemented by successive Sri Lankan governments to achieve targeted fertility decline, have been largely responsible for the spectacular decline of the birth rate.

Age-sex pyramid of Sri Lanka in 1981, 2001 and 2012 are shown in Figure 2 and this displays a shift of age cohorts over the years. The base population in 1981 is greater than that of 2001 and 2012. But the base population of 2012 is slightly greater than that of 2001 and this may be due to changing pattern of fertility, mortality and migration. According to the report of Census of Population and Housing - 2012, median age of population is 31 years where as the median age was around 21.3 years until 1981. Sex ratio (number of males per 100 females) in 2012 is 93.8. Life expectancies at birth for females and males are 78.6 and 72 years respectively (Department of Census and Statistics, 2016).

1.2 Socio economic indicators of Sri Lanka

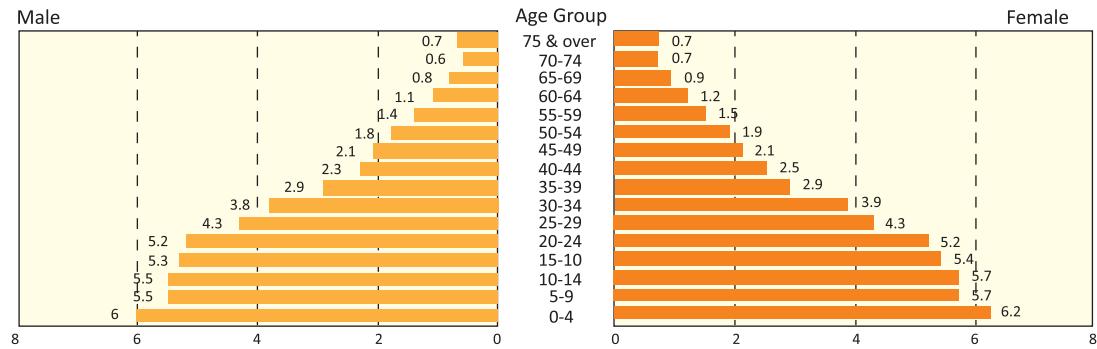
Sri Lanka has advanced gradually to reach a per capita GDP of US dollars 4,065 by 2017, establishing itself as a middle income economy. However, the country can progress further only if policymaking remains rational with a long term focus on greater public good, while minimising policy swings motivated by short term political gains.

Basic socio economic indicators of Sri Lanka are shown in Table 1

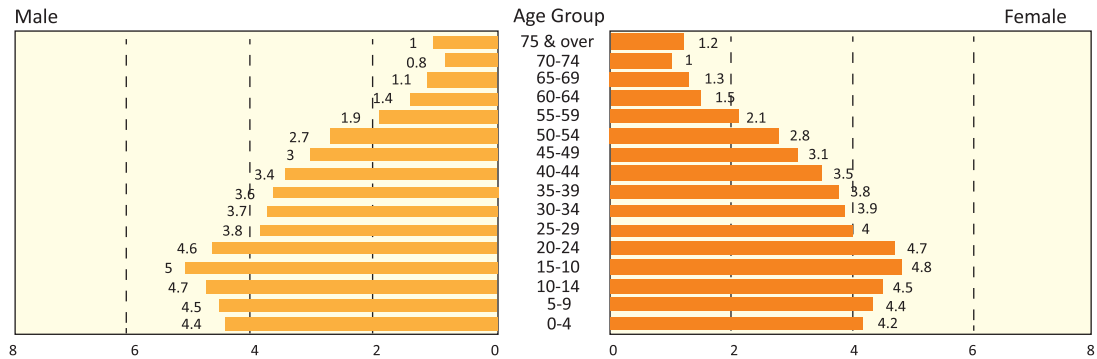
Table 1: Basic socio economic indicators of Sri Lanka

Indicator	Year	Data	Source	
GNI per capita at current prices (Rs.)	2016**	546,408	Department of Census & Statistics	
Human development index	2015	0.766	UNDP, Human Development Report, 2015	
Literacy rate (%) (10 years or more)	Total	2012	95.7	Census of population & Housing, 2012
	Female		94.6	
	Male		96.9	
Singulate mean age at marriage (years)	2012	23.4	Census of population & Housing, 2012	

(Source: Ministry of Health, Nutrition and Indigenous Medicine, 2018)

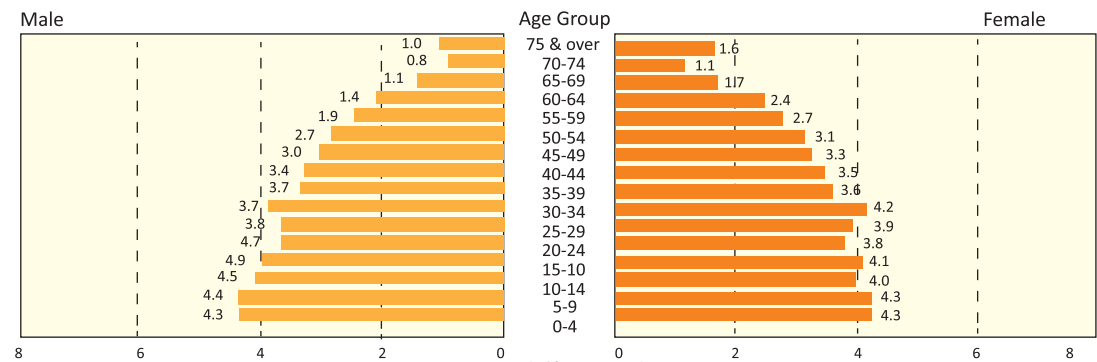


Census 1981 - Percentage of Population



Based on Population Census 2001 - Percentage of Population

(Excludes: Northern & Eastern Province)



Based on Population Census 2012 (5% Sample) - Percentage of Population

Figure 2: Percentage of Population in Sri Lanka by age and sex in 1981, 2001 and 2012

(Source: Ministry of Health 2015)

1.3 Government of Sri Lanka

Sri Lanka is a democratic republic with an executive presidency. Under the 1978 constitution, the head of state and government is the President. Parliamentary and presidential elections are held every six years. Parliament has a single chamber with 225 members. Members are directly elected, but vacant seats occurring during the life of a Parliament go to nominees of the party holding the seat.

Ministers are appointed by the President, who chairs the cabinet and appoints the independent judiciary. Amendments may be made to the constitution, subject to a two-thirds majority in Parliament; however, to amend certain entrenched articles of the constitution approval in a national referendum is also required. The constitution provides for Provincial Councils constitute the intermediate level of government that was established within the existing governmental system which was comprised of two levels, national and local. The establishment of a Provincial Council in every province provided for a set of structures and positions with authority to exercise powers and functions at the provincial level, which also define the roles, responsibilities and relationships of a Provincial Council. It is to be noted that Provincial Councils do not function in isolation, and were established within the framework of the existing system of government, bringing about changes in its structure and functioning.

1.4 Implementation of International Health Regulations (IHR)-2005 in Sri Lanka

Since the implementation of IHR -2005 in 2007, Sri Lanka has made a remarkable progress in implementing and developing IHR core capacities. In 2012 and 2014, Sri Lanka has requested for extensions to achieve IHR core capacities and fulfilled those capacities in 2016. As IHR implementation is a dynamic process it is important to critically look at the implementation status periodically and progress continuously.

WHO committee on Ebola outbreak has identified key 12 recommendations to improve IHR implementation in countries. As one key recommendation, the new IHR monitoring framework had been adopted by World Health Organization (WHO) in 2016.

One key component of this new IHR monitoring and evaluation framework is the Joint External Evaluation (JEE) along with IHR annual reporting, after action review and simulation exercises. The global movement of evaluating health security situation in countries via voluntary JEE process was initiated by WHO and supported by Centre for Disease Control and Prevention of USA and other international agencies and governments. The main objective of JEE is to identify the gaps in the health security which enabling countries to plan for better secure future.

1.4.1 National Steering Committee on IHR- 2005

Ministry of Health, Sri Lanka created the National Steering Committee on IHR-2005 with the involvement of health and non-health members in 2016. The need to conduct the JEE to review IHR implementation status was discussed at the first meeting of the National Steering Committee under the chairmanship of Director General Health Services in August 2016. In the latter part of 2016, Ministry of Health has requested from WHO to assist technically and financially to conduct JEE.



Figure 3: IHR steering committee meeting conducted on 16th January 2018

2. RISK PROFILING OF PUBLIC HEALTH HAZARDS IN SRI LANKA

The Disaster Management Act No. 13 of 2005 (Parliament of the Democratic Socialist Republic of Sri Lanka, 2005) provides the basis for the identification of public health threats in Sri Lanka. The Disaster Management Act recognizes 21 types of events which could become public health threats. In addition to the above 21 types of events, certain additional threats have been considered during the risk profiling of public health threats in Sri Lanka. The list of public health hazards considered are listed in Table 2.

Table 2: List of public health hazards of Sri Lanka

Category 1 - Natural hazards	Category 2 Man-made hazards	Category 3 Biological hazards	Category 4 Complex hazards
Floods	Fire	Epidemics	Civil or internal strife
Drought	Forest fire	Animal diseases	Terrorist attacks
Landslides	Land transportation accidents	Plant diseases	
Extreme heat	Water transportation accidents		
Extreme cold	Air transportation accidents		
Cyclone	Chemical accidents		
Lightening	Industrial accidents		
Tornado	Radio-nuclear accidents		
Earthquake	Construction failure		
Tsunami	Oil spill		
Coastal erosion			
Salt water intrusion			

2.1 Methodology of risk profiling of public health threats in Sri Lanka

The unit of the public health risk profiling was the country. The country level risk profiling was based on the district level risk profiling of public health threats through a multi-stakeholder consultative process.

Following equation was used for the risk profiling:

$$\text{Risk} = \frac{\text{Impact} \times \text{Frequency} \times \text{Vulnerability} \times \text{Exposure}}{\text{Capacity}} \dots\dots\dots \text{Equation 1}$$

Scoring system presented in Table 3 was used for impact, frequency, vulnerability, exposure, and capacity.

Table 3: Scoring system used for impact, frequency, vulnerability, exposure and capacity

Score	Definition
1	1 - Very low
2	2 - Low
3	3 - Moderate
4	4 - High
5	5 - Very high

The existing risk maps were used while when information was not available, expert judgement was used. Risk score was calculated with the use of the risk equation 1. Risk square was presented as a percentage for the ease of comparison. Based on the risk scores as percentages, ranking of the hazards was done. In addition, based on the cumulative score as percentages for each category, category-wise ranking was also done. The public health risk profile of Sri Lanka will be updated as per the new information available.

2.2 Results of risk profiling of public health threats in Sri Lanka

Hazard wise profiling of public health risk for Sri Lanka is shown in Table 4 and the prioritization of public health risk score for different hazards are shown in Figure 4.

As per Table 4 and Figure 4, the top ten priority public health risk scores were reported for the following hazards, in the descending order: epidemics, floods, drought, lightening, land transportation accidents, landslides, fire, chemical accidents, tsunami and cyclone

Table 4: Hazard-wise profiling of public health risk for Sri Lanka

Category	Hazard	Impact	Frequency	Vulnerability	Capacity	Exposure	Risk Score out of 100	
1	Natural Hazards	Flood	3	4	5	5	5	9.6
		Drought	3	4	3	2	3	8.64
		Landslides	3	3	4	4	2	2.88
		Extreme heat	1	2	1	2	3	0.48
		Extreme cold	1	1	1	1	1	0.16
		Cyclone	4	1	2	4	3	0.96
		Lightening	2	3	3	2	3	4.32
		Tornado	1	2	1	2	3	0.48
		Earthquake	1	1	1	1	1	0.16
		Tsunami	5	1	5	4	1	1
		Coastal Erosion	1	1	2	1	1	0.32
		Salt Water Intrusion	1	1	2	1	1	0.32
2	Man-made Hazards	Fire	2	3	3	3	3	2.88
		Forest Fire	1	2	2	3	3	0.64
		Land Transportation Accident	3	3	3	4	4	4.32
		Water Transportation Accident	1	1	1	4	2	0.24
		Air Transportation Accident	1	1	1	4	1	0.08
		Chemical Accidents	2	1	3	3	1	1.44
		Industrial Accidents	2	1	1	3	1	0.32
		Radio - Nuclear Accidents	1	1	1	2	1	0.12
		Construction Failure	1	1	1	4	1	0.24
		Oil Spill	1	1	1	2	1	0.24
3	Biological Hazards	Epidemics	4	5	5	5	5	16
		Animal Diseases	2	1	1	1	1	0.08
		Plant Diseases	2	1	1	1	2	0.32
4	Complex Hazards	Civil or Internal Strife	2	1	2	4	3	0.64
		Terrorist Attack	2	1	1	3	1	0.32

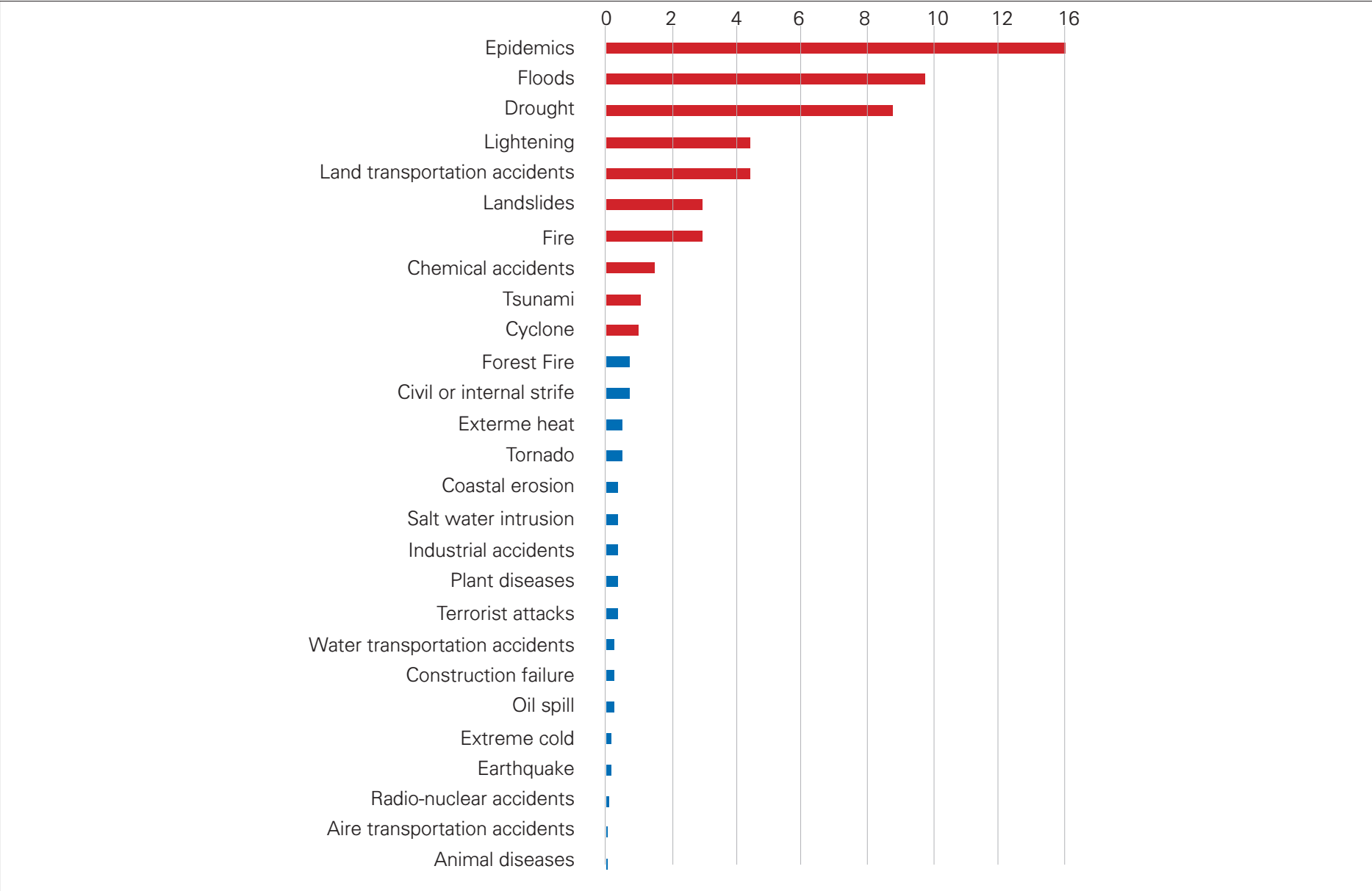


Figure 4: Prioritization of public health risk scores of Sri Lanka

3. JOINT EXTERNAL EVALUATION AND DEVELOPMENT OF NATIONAL ACTION PLAN FOR HEALTH SECURITY

3.1 Arrangements for Joint External Evaluation

Sri Lanka initiated the preliminary work on JEE of IHR implementation in January 2017. Co-National Focal Points of IHR-2005 in Sri Lanka are the Directorate of Quarantine Unit and Epidemiology Unit of Ministry of Health. Ministry of Health led the activity of identifying the main stakeholders for 19 areas of JEE and other related stakeholders from different sectors in Sri Lanka (Annex 1).

Quarantine Unit which was the point of contact for JEE mission initiated the process by disseminating the JEE tool (World Health Organization, 2016) to all the stakeholders with necessary instructions. Main stakeholders were instructed to get the assistance of other relevant stakeholders when filling the JEE Tool. Several small group discussions were conducted by the Doctors of Quarantine Unit with the main stakeholders to discuss about the relevant sections of JEE Tool. This was a tedious process but had an advantage of having one to one discussion with the main stakeholders to clarify their doubts and queries. During the small group meetings main stakeholders were asked to complete the self-evaluation JEE tool (World Health Organization, 2016) with the discussion with other relevant stakeholders.,

Preliminary meeting was conducted on 04th of April 2017 with the involvement of the IHR focal point in WHO/SEARO, WHO/ Sri Lanka and stakeholders in Sri Lanka. As the stakeholders had an idea about the JEE tool, they could get a clear picture after the preliminary meeting.

JEE was scheduled to be conducted in June 2017. Sri Lanka had experience severe outbreak of Dengue fever and severe flood situation during this period. Despite this difficult situation, country decided to conduct the JEE.

IHR Co-National focal point of the Quarantine Unit had the opportunity to participate JEE mission in Myanmar which conducted from 3rd-8th May 2017. This was an excellent opportunity to experience the JEE process and it was tremendously helped to plan the JEE process in Sri Lanka.

3.2 Joint External Evaluation

JEE was conducted from 19th -23rd of June 2017. Each main stakeholder was instructed to identify a presenter and they were given the PowerPoint format to present during the session. There had been technical sessions and discussions on 19 technical areas and three field visits (Medical Research Institute, Port Health Office of Colombo Seaport and National Institute for Infectious Diseases) during 5 days. Senior medical administrators and Consultants were invited to chair each session in order to get the support of higher government officials and to make them aware about the whole process. In addition, WHO team leader was appointed to co-chair each session.

During the JEE, scores were given for each indicator after coming to consensus with the local counterpart. Final briefing session was chaired by the Secretary of Health and team leader of WHO presented the priority actions and recommendations.

Secretary of Health requested from stakeholders to prepare Five Year National Action Plan for Health Security (NAPHS) based on the gaps identified during the JEE and during other routine evaluations. Score for each indicator in each technical area is shown in Annex 2. It was mentioned that the JEE will be conducted once in every five years.

Draft of the JEE report was shared among the stakeholders and after getting their comments, the final report was published by the World Health Organization in August 2017 (World Health Organization, 2017) The published JEE report was tabled at National Steering Committee Meeting on International Health Regulations -2005 which was chaired by Deputy Director General – Laboratory Services on 19th of September 2017.



Figure 5: Participants of Joint External Evaluation of Sri Lanka

3.2.1 Cross cutting recommendations of JEE

1. Strengthen multi-sectoral engagement and foster a true One Health approach

- Establishes or enhances mechanisms to promote systematic collaboration between the human health, animal health and other relevant sectors on technical and policy areas.

2. Enhance surveillances

- Integrates the surveillance efforts of the human and animal health sectors, across all levels of government and specially at the national level
- Improves the quality and management of data, considering the use of enhanced electronic reporting tools and registries to facilitate the rapid collection, exchange, analysis and use of health data. New information technology has enabled the development of electronic patient registries covering clinical and laboratory data from all levels and sectors of the healthcare system. This allows real-time surveillance and reporting activities as well as linkages with other sources of data.

3. Ensure sustainable and scalable health security through improved documentation

- Develops, finalizes and formally approves national plans, memoranda of understanding, standard operating procedures and other administrative mechanisms that facilitate and formalize implementation, communication and coordination across sectors, while maintaining the flexibility to adapt to situations as they develop
- Implements these administrative mechanisms to empower all relevant sectors and ensure a One Health and multi hazard approach, contributing to business continuity and Sri Lanka's ability to respond to unexpected events and large scale emergencies

3.3 Vision, Mission, Objectives of the National Action Plan for Health Security

Vision

A safer nation through strengthened capacities for public health security

Mission

To contribute towards a safer nation by strengthening core capacities and capabilities to prevent, detect and respond to public health threats efficiently and effectively adopting a multi-stakeholder approach.

Objectives

1. To build and sustain multi-stakeholder engagement to attain IHR core capacities through consultation and consensus.
2. To ensure comprehensive risk assessment to support decision-making before incidents and during response and recovery operations
3. To strengthen and maintain national core capacities and contribute to the achievement of sustainable development goals.
4. To align activities among stakeholders adopting a 'one health approach' to engage the human, animal and agriculture sectors
5. To assimilate results based monitoring and evaluation for national health security.

3.3.1 Guiding principles and core values of National Action Plan for Health Security

Country ownership and leadership

The National Focal Points for IHR and the National Steering Committee will coordinate and support the implementation of activities in line with the national guidelines

Evidence based practice

Policies, programmes and activities will be based on evidence generated scientifically at national and international levels

Strengthening partnerships and collaborations

All relevant stakeholders of the government and non-government sectors will be partners of the national planning process.

Gender equity and human rights

Gender and human rights principles that ensure incorporation of gender equity and human rights perspectives into policies and programmes.

3.3.2 Platform for National Action Plan for Health Security – linkage with existing plan; interplay between relevant sectors enablers

Many of the existing parliamentary Acts, policies, strategies and plans that links with the NAPHS is given below.

1. Quarantine and Prevention of Disease Ordinance (1897)
2. Notifiable Disease List (last gazetted in 2014)
3. Food Act (1980), amended in 1991
4. Animal Diseases Act (1992)
5. Plant Protection Act (1999) and Seeds Act (2003)
6. Civil Aviation Act (2010)
7. Sri Lanka Ports Authority Act (1979)

8. Sri Lanka Disaster Management Act (2005)
9. National Environmental Act (2000)
10. National Authority on Tobacco and Alcohol Act, No. 27 of 2006
11. Ministry of Health Master Plan 2017-2025
12. National Strategic Plan for Combating AMR
13. Circular on the national external quality assurance programme
14. Veterinary Public Health Concept Paper
15. Veterinary Surgeons and Practitioners Act
16. World Organization for Animal Health PVS Gap Analysis of the Veterinary Services of Sri Lanka (2011)
17. Biosafety Manual for medical laboratories- second Edition
18. Enforcement of Private Medical Institutions (registration) Act (2006)
19. National Immunization Hand book
20. National Immunization Policy
21. Comprehensive multiyear plan for immunization (2017–2021)
22. National guidelines on Influenza, dengue, leptospirosis, gonococcus
23. National External Quality Assessment Scheme in Bacteriology
24. National influenza pandemic plan
25. Polio outbreak preparedness and response plan
26. National Health Strategic Master Plan (2017-2025)
27. Health facility survey (2015)
28. National Disaster Management Plan (2013—2017)
29. Sri Lanka Comprehensive Disaster Management Programme (2014—2018)
30. Strategic Plan for Health Sector Disasters and Emergency Management
31. National Medicinal Policy
32. Public Health Contingency Plan for Sea Ports
33. Public Health Contingency Plan for Airports
34. Standard operating procedures for prevention, early warning and response to public health events at points of entry
35. Action Plan for Sound Management of Chemicals in Sri Lanka
36. Radiation Emergency Management Plan (draft)

3.4 Preparation of National Action Plan for Health Security of Sri Lanka

Each main stakeholder was instructed to prepare five year action plans after discussing with other stakeholders based on JEE recommendations and other priority areas according to the excel format and guidance given by WHO (World Health Organization, 2018).

A three day workshop was conducted on 20-22nd March 2018 to discuss the action plans with the involvement of Focal points of WHO SEARO and WHO Sri Lanka. All relevant stakeholders were invited to attend for discussion. The costing of the activities of NAPHS was done by respective units based on guidelines

given and experiences on preparing national budget. Planning and costing of activities were difficult in some instances such as: involvement of multiple units; amendment of the legislations; long term activities; uncertainty about the sub activities. In such instances an approximate figure for costing was used. Each unit is expected to find funds from the Government and donor agencies.

Draft NAPHS was submitted to Director General of Health Services during the 4th National Steering Committee Meeting on International Health Regulations -2005 held on 21/08/2018. All the steering committee members were given a copy of NAPHS to further discuss with relevant higher officials of the respective units and to obtained their comments prior to finalization. Cost estimation for activities in each area is shown in Table 5.

Table 5: Total cost estimation of each technical area

No.	Technical area	Estimated cost (Rs.)
1	National Legislation, Policy and Financing	1,950,000
2	IHR Coordination, Communication and Advocacy	1,600,000
3	Antimicrobial resistance	90,000,000
4	Zoonotic Disease	637,700,000
4	Food Safety	1,273,100,000
6	Biosafety and Biosecurity	174,420,000
7	Immunizations	1,000,000
8	National Laboratory System	147,000,000
9	Real Time Surveillance	40,000,000
10	Reporting	1,000,000
11	Workforce Development	21,220,000
12	Preparedness	28,300,000
13	Emergency response operation	15,700,500
14	Linking Public Health and Security Authorities	6,000,000
15	Medical Counter measures and Personnel Deployment	125,100,000
16	Risk Communication	6,825,000
17	Points of Entry (PoE)	179,400,000
18	Chemical Events	1,045,500,000
19	Radiation Emergencies	11,300,000
	Total	3,807,115,500

Workshop to develop five year national Action plan for health security to Strengthen the implementation of international health regulations (2005)

Jointly Organized by Ministry of Health and WHO, Sri Lanka



20-21-22 March 2018 Hotel Taj Samudra (Crystal Ball Room)

Figure 6: Participants of the Workshop to develop National Action Plan for Health Security

3.4.1 Implementation, Monitoring and Evaluation of activities of National Action Plan for Health Security

NAPHS is a multi-stakeholder medium term action plan with a results-based approach. The NAPHS implementation and monitoring of the overall plan and sectoral plans are critical to achieve desired results. The NAPHS encompasses four important components of IHR monitoring and evaluation framework; annual reporting, after action reviews, simulation exercise and Joint external evaluations.

Overall coordination of NAPHS will be done by National Co Focal Points of IHR-2005 in Sri Lanka.

3.4.1.1 Implementation of NAPHS

The implementation of NAPHS is whole of government responsibility and commitment. The respective ministries, departments and units will include the activities in the plan within their annual work plan. The activities in the NAPHS will be implemented in phase wise. The NAPHS will be funded mainly through government funds, whereas selected projects will be funded by donors.

3.4.1.2 Monitoring of the NAPHS

The monitoring of NAPHS activities will be based on agreed upon indicators / milestones mentioned in the activity plans.

The responsibility of monitoring sectoral / cross sectoral activities of NAPHS lies with the main stakeholder of each technical area. The overall monitoring of the NAPHS will be done by the national IHR steering committee headed by DGHS. The Quarantine unit will function as a secretariat of the IHR steering committee and collate necessary information from the stakeholders. In addition, most of the activities will be monitored through routine monitoring systems of the respective departments, units and institutions.

3.4.1.2.1 Monitoring Framework

The Key Performance Indicators identified within the NAPHS will be used to monitor the progress of implementation of NAPHS

3.4.1.2.2 Monitoring and reporting frequency

The main stakeholders for each technical area will report every 6 months to the IHR steering committee. The progress of the NAPHS will be published annually.

3.4.1.3 Evaluations of the NAPHS

The end evaluation and midterm evaluations of the NAPHS will be carried out as IHR joint external evaluation with the WHO. Table 6 shows the responsibility and frequency of monitoring and evaluation of NAPHS.

Table 6: Responsibility and frequency of monitoring and evaluation of NAPHS

Level of monitoring and evaluation	Responsibility	Frequency
National Level	IHR steering committee	Every 6 months
Ministerial level / Department level	Head of the department and Main Stakeholder	Every quarter
Unit level	Head of the unit	Every quarter

4. ACTIVITIES OF NATIONAL ACTION PLAN FOR HEALTH SECURITY

PREVENT

1. National Legislation, Policy and Financing

Adequate legal framework for States Parties to support and enable the implementation of all their obligations and rights made by the IHR should have been available within the country. Therefore this technical area makes sure that availability of legislation and financing in place in all relevant sectors to support IHR implementation including core capacity development and maintenance.

There are two indicators under the national legislation, policy and financing technical area and scores achieved during the Joint External Evaluation (JEE) are as follows.



JEE Indicator		JEE Score
P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR		Score 4
P.1.2 Legislation, policies and administrative arrangements enable compliance with the IHR (2005)		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Update the Quarantine and Prevention of Disease Ordinance with amendments that were recently approved by Sri Lanka's cabinet, in order to bring the legislation up to date with IHR requirements. 2. Formalize, through regular meetings and established terms of reference, coordination between IHR focal points within the various line ministries as an administrative requirement for IHR implementation. 3. Establish a multisectoral technical working group to further assess the legal system and administrative arrangements in relation to the IHR across the whole of government, and, where necessary, adjust laws, regulations and administrative practices in order to enable IHR implementation. 4. Document and publish the administrative arrangements and policies from various sectors in order to further encourage cross-sectoral collaboration. 	

JEE Indicator	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.							
JEE Scores	Score 4							
Objective 1.1.1	To develop and assess the need for changes in other parts of national legislation in order to have capability across government to implement the IHR.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Incorporate the Cabinet approved legal amendments to quarantine and disease prevention act of Sri Lanka.	DDG-PHS-1, Chief Legal Officer, National Focal Points (NFP) of IHR-2005 (Director/ Quarantine Unit and Chief Epidemiologist)/ Ministry of Health	<ul style="list-style-type: none"> Amended quarantine and disease prevention act. 	√	√	√		
02	Formalize National steering committee on IHR 2005, identify relevant committee members from different sectors and define their roles and responsibilities.	DDG-PHS-1, Chief Legal Officer, NFP of IHR-2005/ Ministry of Health	<ul style="list-style-type: none"> Amended quarantine and disease prevention act. Formulated roles and responsibilities of the National Focal Points of IHR-2005. 	√	√			

JEE Indicator	P1.2 Legislation, policies and administrative arrangements enable compliance with the IHR (2005)								
JEE Scores	Score 3								
Objective 1.1.1	To establish a multisectoral group for further adjustments to laws and regulations to fully comply with the IHR-2005								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Establish a multi sectoral group for further adjustments to laws and regulations to fully comply with the IHR-2005 and conduct meetings	DGHS, DDG-PHS-1, Legal Officer NFP of IHR-2005/ Ministry of Health Heads of other units/ Ministries	<ul style="list-style-type: none"> Established group 	√	√	√	√	√	
02	Map the existing legal provisions, policies and administrative arrangements relevant to implementation of IHR and suggest areas to be addressed in specific legislation and policies to comply with IHR-2005.	DGHS, DDG-PHS-1, Legal Officer NFP of IHR-2005/ Ministry of Health	<ul style="list-style-type: none"> Completed report on the legal provisions, policies and administrative arrangements relevant to implementation of IHR with suggestions 	√	√				
03	Review and revision of existing legislation, policies and administrative strategies related to IHR by relevant stakeholders	Responsible authorities of relevant stakeholder units	<ul style="list-style-type: none"> Reviewed report. Revised legislation, policies and administrative strategies related to IHR 		√	√			
04	Amendment of specific administrative arrangements by relevant stakeholders	Responsible authorities of relevant stakeholder units	<ul style="list-style-type: none"> Issued circulars / administrative documents in line with IHR 		√	√	√	√	

2. IHR Coordination, Communication and Advocacy

The effective implementation of the IHR (2005) requires multisectoral/multidisciplinary approaches through national partnerships for effective alert and response systems. There for coordination of nationwide resources, including the sustainable functioning of a National IHR Focal points (Quarantine Unit and Epidemiology Unit) which are act as national centers IHR (2005) communications is a key requisite for IHR (2005) implementation.

There is one indicator under IHR Coordination, Communication and Advocacy technical area and score achieved during JEE is as follows.



JEE Indicator		JEE Score
P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR		Score 2
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Draft and formalize terms of reference for the National IHR Steering Committee, including roles and responsibilities and frequency of meetings; and formulate an action plan for the committee. 2. The National IHR Steering Committee should participate fully in completing the IHR annual questionnaire. 3. Hold an annual meeting of the National IHR Steering Committee to inform members about IHR updates. 	

JEE Indicator	P2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR							
JEE Scores	Score 2							
Objective 2.1.1	To conduct IHR steering Committee Meetings and update on IHR							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct IHR steering Committee Meetings	DGHS, DDG-PHS-1, Director/ Quarantine	<ul style="list-style-type: none"> Percentage of planned meeting conducted 	√	√	√	√	√
02	Identify two focal points from each sector to liaise with National Focal Points-IHR-2005/ Ministry of Health	DGHS, DDG-PHS-1, National Focal Points-IHR-2005/ Ministry of Health	<ul style="list-style-type: none"> Appointed two focal points from each sector Formulated the roles and responsibilities of the focal points 	√	√	√	√	√
Objective 2.1.2	To complete IHR annual questionnaire with the participation of all stakeholders.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Annual meeting with relevant stakeholders to fill IHR Annual Questionnaire	DGHS, DDG-PHS-1, Director/ Quarantine	<ul style="list-style-type: none"> Filled IHR Annual questionnaire with full participation of the stakeholders 	√	√	√	√	√

3. Antimicrobial resistance

Support work being coordinated by WHO, FAO and OIE to develop an integrated global package of activities to combat antimicrobial resistance, spanning human, animal, food and environmental aspects. One health approach is one of the ways to achieve this objective and in addition to that need of national comprehensive plan to combat antimicrobial resistance and strengthening of surveillance and laboratory capacity at the national and international level.

There are four indicators under antimicrobial resistance technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
P.3.1. Antimicrobial resistance (AMR) detection		Score 3
P.3.2. Surveillance system for infections caused by AMR pathogens		Score 3
P.3.3. Healthcare associated infection (HCAI) prevention and control programs		Score 3
P.3.4. Antimicrobial stewardship Activities		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Conduct systematic awareness programmes on AMR among target groups in the human health, veterinary, fisheries, and agriculture sectors. 2. Establish and expand the national AMR surveillance system to cover all priority pathogens for AMR in human health and relevant AMR pathogens (such as Salmonella, E.coli, and S. aureus) in animal health. 3. Expand healthcare acquired infections (HCAI) surveillance to include at least one additional HCAI (such as surgical site infections or ventilator-associated pneumonia). 4. Establish antibiotic stewardship programmes and strengthen legislation against unauthorized prescriptions in the human and animal health sectors. 	

JEE Indicator	P 3.1 Antimicrobial resistance (AMR) detection								
JEE Scores	Score 3								
Objective	To strengthen the AMR surveillance system								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Development of a system for multisectoral coordination between human and animals	Ministry of Health, Department of Animal Production and Health (DAPH), Ministry of fisheries and aquatic resources	<ul style="list-style-type: none"> Percentage of meeting held out of planned 	√	√	√	√	√	
02	Expand capability for AMR surveillance at veterinary laboratories	DAPH, Ministry of fisheries and aquatic resources	<ul style="list-style-type: none"> Percentage of meeting held out of planned AMR surveillance at veterinary laboratories 	√	√	√	√	√	
03	Designated laboratories to conduct detection and reporting of all priority AMR pathogens regularly	Ministry of Health, DAPH, Ministry of fisheries and aquatic resources, Department of agriculture	<ul style="list-style-type: none"> Detection and reporting of all priority AMR pathogens by Humans, Animal and Agriculture sectors 	√	√	√	√	√	

JEE Indicator	P3.2 Surveillance system for infections caused by AMR pathogens							
JEE Scores	Score 3							
Objective	To establish a surveillance system for infections caused by AMR pathogens							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establishment of the National Surveillance system on Antimicrobial resistance for human sector and sustain it. (Shigella has been included as a priority pathogen)	Ministry of Health	<ul style="list-style-type: none"> Number of hospitals carrying out surveillance out of the planned number 	√	√	√	√	√
02	Establishment of the National Surveillance system on Antimicrobial resistance for animal (veterinary and fisheries) sector according to OIE	DAPH, Ministry of fisheries and aquatic resources	<ul style="list-style-type: none"> Number of sites carrying out surveillance out of the planned number 	√	√	√	√	√
03	Establish the national surveillance system for all priority pathogens in sentinel sites for human sector	Ministry of Health	<ul style="list-style-type: none"> Number of sites carrying out surveillance out of the planned number 	√	√	√	√	√

JEE Indicator	P. 3. 3. Healthcare associated infection (HCAI) prevention and control programs							
JEE Scores	Score 3							
Objective	To strengthen Healthcare associated infection (HCAI) prevention and control programs at national and subnational level							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Formulation of national infection control policy	Ministry of Health	<ul style="list-style-type: none"> Publishing document of infection control policy 	√	√			
02	HCAI reporting of all identified HCA Infection indicators in selected hospitals	Ministry of Health	<ul style="list-style-type: none"> Percentage of selected hospitals reporting all indicators out of planned 	√	√	√	√	√
03	Awareness and training programmes on infection prevention and control	Ministry of Health, Sri Lanka College of Microbiologists (SLCM)	<ul style="list-style-type: none"> Number of programmes conducted 	√	√	√	√	√
04	Development of national infection prevention and control (IPC) guidelines	Ministry of Health, SLCM	<ul style="list-style-type: none"> Publishing IPC guidelines 	√	√	√		
05	Strengthen practicing of international standards for isolation	Ministry of Health	<ul style="list-style-type: none"> Availability of negative pressure rooms 	√	√	√	√	
06	Strengthen infection control surveillance in farms	DAPH	<ul style="list-style-type: none"> Number of sites participating 	√	√	√	√	√

JEE Indicator	P3.4 Antimicrobial stewardship Activities								
JEE Scores	Score 3								
Objective	To enhance AMR stewardship activities								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Conducting awareness programmes among target groups i.e. administrators, technical staff, farmers and general public	Ministry of Health, DAPH, Ministry of fisheries and aquatic resources, Department of agriculture	<ul style="list-style-type: none"> Percentage of programmes conducted out of planned 	√	√	√	√	√	
02	Develop legislation to ensure strict oversight and enforcement of unauthorized, over-the counter sale of antibiotics in both human and animal health sectors.	Ministry of Health, DAPH, Ministry of fisheries and aquatic resources, Department of agriculture	<ul style="list-style-type: none"> Availability of legislations 	√	√	√	√	√	
03	Review of prescription patterns	Ministry of Health	<ul style="list-style-type: none"> Number of hospitals and No. of sales outlets in which the audits are done 		√	√	√	√	
04	Introduction of prescription policies phase wise	Ministry of Health	<ul style="list-style-type: none"> Availability of policies 				√	√	
05	Developing Antimicrobial stewardship	Ministry of Health	<ul style="list-style-type: none"> Number of hospitals having a Antimicrobial stewardship programme 		√	√	√	√	
06	Improve awareness on AMR in human, veterinary and fisheries & agriculture	Ministry of Health, DAPH, Ministry of fisheries and aquatic resources, Department of agriculture	<ul style="list-style-type: none"> Percentage of programmes conducted out of planned 		√	√	√	√	
07	Implementation of world antibiotic week in national scale	Ministry of Health, DAPH, Ministry of fisheries and aquatic resources, Department of agriculture	<ul style="list-style-type: none"> Number of activities conducted in antibiotic week 		√	√	√	√	

4. Zoonotic diseases

Adopted measured behaviors, policies and/or practices to prevent and minimize the transmission of zoonotic diseases into human populations. Development of national operational frame work based on international standards, guidelines and successful existing models that specify the actions necessary to promote one health approaches to policies, practices and behaviors that could minimize the risk of zoonotic disease emergence and spread.



There are three indicators under the zoonotic diseases technical area and scores achieved during JEE are as follows.

JEE Indicator		JEE Score
P.4.1 Surveillance systems in place for priority zoonotic diseases / pathogens		Score 3
P.4.2 Veterinary or Animal Health Workforce		Score 3
P.4.3 Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional		Score 2
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Establish a veterinary public health team within the Department of Animal Health and Production with an appropriate allocation of human, physical and operational resources at both the central and field levels. 2. Establish a formal One Health platform, bringing together the four key ministries and agencies (Health, Animal Health and Production, Fisheries and Environment/Wildlife) with local government and private stakeholders to deliver a national zoonotic disease control strategy. 3. Design, implement and annually evaluate zoonotic disease control plans for rabies, brucellosis, tuberculosis and leptospirosis, among others. 	

JEE Indicator	P4.1 Surveillance systems in place for priority zoonotic diseases/pathogens							
JEE Scores	Score 3							
Objective	To further develop the comprehensive surveillance systems in place for priority zoonotic diseases/pathogens							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Finalize and approve zoonotic disease control strategy	DG/DAPH, D/AH, D/WLH-DWC	<ul style="list-style-type: none"> Finalized Strategic Plan for zoonotic disease control 	√				
02	Establish surveillance programs for important zoonoses - rabies, leptospirosis, brucellosis, TB etc.	D/AH, D/WLH-DWC, D/PHVS	<ul style="list-style-type: none"> Surveillance plans, monthly reports Surveillance data in the Vet. epidemiological bulletin 	√	√	√	√	√
03	Upgrade laboratory facilities at central and district level for disease surveillance	DG/DAPH, D/AH, D/WLH-DWC, D/PHVS	<ul style="list-style-type: none"> Percentage of upgraded laboratories 	√	√	√		
04	Improve the implementing capacity for Veterinary Public Health (VPH) at central, Provincial and divisional level	Ministry of Rural Economy, DAPH, PDAPH	<ul style="list-style-type: none"> Percentage of divisional level Veterinary Public health facilities with minimum carder 	√	√	√	√	√
05	Improve the capacity of animal quarantine at point of entry	Ministry of Rural Economy, DAPH	<ul style="list-style-type: none"> Published protocols, Number of trainings carried out per year, Availability of minimum required infrastructure at PoEs 	√	√	√	√	√

JEE Indicator	P4.2 Veterinary or Animal Health Workforce							
JEE Scores	Score 3							
Objective	To enhance the veterinary or animal health work force							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a VPH mechanism at central and peripheral (provincial & divisional) level	Ministry of Rural Economy, DG/DAPH, PDAPH	<ul style="list-style-type: none"> VPH officers are in place with assigned duties 	√	√	√	√	√
02	Advertise existing vacancies and recruitment	Ministry of Rural Economy, DG/DAPH	<ul style="list-style-type: none"> Number of vacancies filled out of approved 	√	√	√	√	√

JEE Indicator	P4.3 Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional							
JEE Scores	Score 2							
Objective	To establish a functional mechanism to respond to infectious zoonoses and potential zoonoses							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Improve the epidemiology capacity of VIOs and field VSs	DG/DAPH, D/AH	<ul style="list-style-type: none"> Number of candidates complete Master courses and CPD modules 	√	√	√	√	√
02	Improve the laboratory capacity for animal disease diagnosis	DG/DAPH, D/AH, D/VR	<ul style="list-style-type: none"> Availability of veterinary public health laboratory facilities at district and national level (with minimum identified core tests) 	√	√	√		
03	Prepare and publish of SOPs for laboratory methods and field disease investigation and response mechanisms	D/AH, D/VR	<ul style="list-style-type: none"> SOPs available at VICs and VSOs 	√				
04	Improve the disease reporting system based on a real time reporting mechanism for nationally identified zoonotic pathogens	DG/DAPH, DGHS	<ul style="list-style-type: none"> Percentage of joint investigations conducted within specified time period 	√	√	√	√	√

5. Food safety

State Parties should have surveillance and response capacity for food and water borne diseases risk or events. It requires to effective communication and collaboration among the sectors responsible for food safety, safe water and sanitation. Timely detection and effective response of potential food related events in collaboration with other sectors responsible for food safety should be achieve by the implementation of strategies under this technical area.

There is one indicator under the food safety technical area and score achieved during JEE is as follows.



JEE Indicator		JEE Score
P.5.1 Mechanisms are established and functioning for detecting and responding to food borne disease and food contamination		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Strengthen collaboration between Sri Lanka's various agencies and ministries, aspiring to a "farm-to-plate" approach. 2. Carry out a risk profiling assessment and use the results to revise inter-agency responsibilities and the overall food safety strategy. 3. Upgrade capacities and guidelines, particularly laboratory capacity in areas such as on-site testing, and testing on chemical residues. 	

JEE Indicator	P5.1 Mechanism for multisectoral collaboration are established to ensure rapid response to food safety emergencies and outbreaks of food borne diseases								
JEE Scores	Score 3								
Objective 1	To strengthen collaboration between ministries in the food supply chain from farm to plate.								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
1.1	Develop National Food safety Policy and strategic plan	Food Control Administrative Unit (FCAU) / Ministry of Health, Ministry of Agriculture, Ministry of Fisheries, DAPH	<ul style="list-style-type: none"> Policy and strategic plan available 	√	√				
1.2	Conduct coordination committee meeting quarterly for all stakeholders	Ministry of Health	<ul style="list-style-type: none"> Meeting minutes 		√	√	√	√	
1.3	Sharing of common action plan	Ministry of Health, Ministry of Agriculture, Ministry of Fisheries, DAPH	<ul style="list-style-type: none"> Relevant section of plans available 		√	√	√	√	
1.4	Establish food safety program monitoring committee at National, Provincial, District and Divisional level	FCAU /PDHS/ RDHS	<ul style="list-style-type: none"> Number of functioning committees 		√	√	√	√	
Objective 2	To develop food safety risk profiling capacity								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
2.1	Capacity building of risk profiling team	Ministry of Health, Ministry of Agriculture, Ministry of fisheries and aquatic resources development, DAPH Ministry of Fisheries, DAPH	<ul style="list-style-type: none"> Resource team available 		√	√			

2.2	Develop a multisectoral management plan, based on the risk profile	Ministry of Health	• Plans available			√	√	√
2.3	Update regulations, based on Good Hygiene Practice (GHP)	Ministry of Health, Ministry of Agriculture, Ministry of fisheries and aquatic resources development, DAPH	• Number of regulations gazetted	√	√	√	√	√
Objective 3	To strengthen the food analysis capacity							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
3.1	Conduct gap analysis in food testing	FCAU– Laboratories	• Conducted Gap analyzing		√		√	
3.2	Expansion of laboratory testing capacity to include heavy metals, pesticide residue , harmful algal blooms (HAB)	E & OH & FS / Ministry of Health, Government Analysts / Water Board	• Expanded laboratory testing capacity		√	√	√	√
3.3	Review food laboratory quarterly	Food Control Administrative Unit (FCAU)/ Ministry of Health	• Number of reviews per year		√	√	√	√
3.4	Accreditation of food laboratories	FCAU// Ministry of Health, Sri Lanka Accreditation Board	• Number of accredited food laboratories		√	√		
3.5	Establishment of laboratory quality management system and Laboratory information system	E & OH & FS / Ministry of Health			√	√	√	√

Objective 4		To enforce Good Hygiene Practice(GHP) in Food Business Operations (FBO)						
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
4.1	Registration of food premises regulation adapted	Ministry of Health	• Regulation available		√			
4.2	Enforce food premises regulation	Ministry of Health	• All FBO registered		√	√	√	√
4.3	Adapt good practices and legislations on slaughter	DAPH	• Number of slaughter houses adhered good practice		√	√	√	√
4.4	Develop a training module and registration of all trained food handlers	Ministry of Health	• Percentage of trained workers	√	√	√		
Objective 5		To establish Food Authority						
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
5.1	Policy approval and logistic support to establish National Food Authority	Ministry of Health, Other stakeholders	• Approved policy		√	√		
5.2	Establish units for- risk profiling, legal and enforcement	Ministry of Health, Other stakeholders	• Approved cadre				√	√
5.3	Training of staff in all ministries involving in food chain on GHP, Good Manufacturing Practice (GMP) and Hazard Analysis Critical Control Point (HACCP)	Ministry of Health, Other stakeholders	• Number of training programs conducted		√	√	√	√

Objective 6		To establish food safety surveillance system							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
6.1	Establish food safety surveillance system	Ministry of Health and other stakeholders	• Food surveillance system in place		√	√	√	√	
6.2	Establish common E -platform	Ministry of Health	• E platform available		√	√	√	√	
6.3	Establish a rapid response system	Ministry of Health	• Rapid response system in place			√	√	√	
Objective 7		To conduct outbreak investigations							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
7.1	Multisectoral outbreak investigation of a food event	Ministry of Health, Other ministries	• Food event investigated		√	√	√	√	
7.2	Outbreak control	Ministry of Health, Other ministries	• Outbreak investigation and control reports	√	√	√	√	√	
7.3	Quarterly review meeting at national level	Ministry of Health, Other ministries	• Number of review meetings conducted		√	√	√	√	

Objective 8		To make consumer awareness							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
8.1	Develop a food safety communication strategy	Ministry of Health, Other stakeholders	<ul style="list-style-type: none"> Communication strategy available 		√	√	√	√	
8.2	Establish 24/7 reporting system "Suwasariya"	Ministry of Health	<ul style="list-style-type: none"> Number of inquiries from public 		√	√	√	√	
8.3	Conduct food safety weeks	Ministry of Health, Ministry of Agriculture, Ministry of fisheries and aquatic resources development, DAPH	<ul style="list-style-type: none"> Food safety week report 		√	√	√	√	
Objective 9		To strengthen border control activities related to food items							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
9.1	Strengthen border control activities of all food items	Ministry of Health and other stakeholders	<ul style="list-style-type: none"> Communication strategy available 		√	√	√	√	
9.2	Strengthen risk based surveillance and testing facilities	Ministry of Health and other stakeholders	<ul style="list-style-type: none"> Risk based surveillance and testing facilities in place 		√	√	√	√	
9.3	Establish an alert system	Ministry of Health	<ul style="list-style-type: none"> Alert system in place 		√	√	√	√	



6. Biosafety and Biosecurity

National biosafety and bio security system in place to ensure the safety from dangerous pathogens who are identified, held, secured and monitored in a minimal number of facilities according to best practices such as biological risk management training and educational outreach are conducted to promote a shared culture responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats.

There are two indicators under the biosafety and biosecurity technical area and score achieved during JEE are as follows.

JEE Indicator		JEE Score
P.6.1 Whole-of-government biosafety and biosecurity system in place for human, animal and agriculture facilities		Score 2
P.6.2 Biosafety and biosecurity training and practices		Score 1
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop a comprehensive, multisectoral biosafety and biosecurity strategy and accompanying legislation. 2. Based on the strategy, develop an action plan for implementation at the national level for both the public and private sectors, : <ul style="list-style-type: none"> ● A biosafety and biosecurity training programme that includes professional awareness training; ● Measures to update the inventory dangerous pathogens and toxins 3. Update the laboratory licensing accreditation process to include biosafety and biosecurity requirements. 4. Identify how sustained funding can be ensured for biosafety and biosecurity programmes. 	

JEE Indicator	P6.1 Whole-of-government biosafety and biosecurity system in place for human, animal and agriculture facilities							
JEE Scores	Score 2							
Objective	To develop a comprehensive national biosafety and biosecurity system							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish line of authority and relevant committees to develop a national comprehensive biosafety and biosecurity system in SL.	DDG (LS), DDG (ET&R), D/MRI, D/Lab Service,SLCM, DG / DAPH,D / VRI, Department of Agriculture, Central Environmental Authority	<ul style="list-style-type: none"> National Advisory Committee established Steering committees for Human Health, Animal sector and Plant sector established 					
02	Develop national level records or an inventory to monitor the number and type of dangerous pathogens and toxins collected in the country. fisheries) sector according to OIE	DDG (LS), DDG (ET&R), D/MRI, D/Lab Service,SLCM, DG / DAPH,D / VRI, Department of Agriculture, Central Environmental Authority	<ul style="list-style-type: none"> Availability of institutional inventories Availability of tool to collect data Availability of central data base Availability of SOPs Availability of the national inventory 	√	√	√	√	√
03	Develop comprehensive national biosafety and biosecurity frame work and legislation	DDG (LS), DDG (ET&R), MRI, D / Lab Service, SLCM, DG / DAPH, D / VR, D / AH & D/ VRA, Ministry of Agriculture, Mo LS & RCD, MOA, MoMD & E, MoE & NR, Central Environmental Authority	<ul style="list-style-type: none"> Number of steering group meetings held No. of workshops conducted to collect information Number of different sections of the legislation covered 	√	√	√	√	√
04	Improve pathogen control measures, including standards for physical containment and operational handling and containment failure reporting systems.	DDG (LS), MRI,DDG (ET & R), D / Lab Service, DG / DAPH, D / VR & D/AH, Department of Agriculture, Central Environmental Authority	<ul style="list-style-type: none"> Improved standards and systems in place 		√	√	√	√

05	Implement laboratory licensing and accreditation process for state sector laboratories.	DDG (LS), MRI, DDG (ET&R), D / Lab Service, DG / DAPH & D / VR, DOA	<ul style="list-style-type: none"> Number of training programmes conducted No. of activities performed for stepwise upgrades of laboratories in line with international standards Number of Laboratories accredited 		√	√	√	√
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JEE Indicator P6.2 Biosafety and biosecurity training and practices									
JEE Scores Score 2									
Objective To conduct biological risk management training and educational outreach that includes professional awareness training;									
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Complete a training needs assessment.	DDG (LS), MRI, DDG (ET & R), D / Lab Service, MoH, DG /DAPH, DOA, Mo LS & RCD, MOA, MoMD & E, MoE & NR,CEA	Staff training schedules	√	√				
02	Develop A train-the-trainers programme on biosafety based on the results of the needs	DDG (LS), MRI, DDG (ET&R), D / Lab Service, MoH, DG / DAPH, DOA, Mo LS & RCD, MOA, MoMD & E, MoE & NR,CEA	Number of trainers in the country	√	√	√	√	√	
03	Develop the national level comprehensive common training curriculum needs.	DDG (LS), MRI, DDG (ET & R), D / Lab Service, MoH, DG/ DAPH, DOA, Mo LS & RCD, MOA, MoMD & E, MoE & NR, CEA	Availability of a common training curriculum	√	√	√	√	√	

7. Immunization

A functioning national vaccine delivery system with nationwide reach, effective distribution, access for marginalized populations, adequate cold chain and ongoing quality control are essential to respond to the new disease threats.

There are two indicators under immunization technical area and score they have achieved during JEE as follow.



JEE Indicator		JEE Score
P.7.1.Vaccine coverage (1 st Dose of measles contain vaccine) as part of national program		Score 5
P.7.2 National vaccine access and delivery		Score 5
Recommendations for priority actions	1. Introduce the Immunization Act, which will provide legal backing for the full implementation of the National Immunization Policy.	

JEE Indicator	P.7.1.Vaccine coverage (1st Dose of measles contain vaccine) as part of national program								
JEE Scores	Score 5								
Objective	To maintain a well-qualified adequate number of public sector workforce								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Develop / revise a national level norms for key public health workers	DDG (PHS) 1&2 DDG (Planning) D / FHB, Chief Epidemiologist	<ul style="list-style-type: none"> Number of norms developed for key PHC workers 	√	√				
02	Identify the country needs of each key public health workers for next 5 years	DDG (PHS) 1 & 2 DDG (Planning) DDG (ET & R),D/ FHB, Chief Epidemiologist	<ul style="list-style-type: none"> Number of PHC workers categories -country need identified for next 5 years 	√	√				
03	Identify the training needs and gaps for next 5 years	DDG (PHS) 1&2 DDG (Planning) DDG (ET & R), Heads of the training institutes	<ul style="list-style-type: none"> Number of PHC workers categories training need identified for next 5 years 	√	√				
04	Address the identified training need gaps at institution level	DDG (PHS)1 & 2 DDG (Planning) DDG (ET & R), Heads of the training institutes	<ul style="list-style-type: none"> Number of PHC training institutions with necessary facilities to train optimum number of trainees 	√	√	√	√		

JEE Indicator	P.7.2 National vaccine access and delivery							
JEE Scores	Score 5							
Objective	To improve the national vaccine access and delivery							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Ensure the fair distribution of all categories of PHC staff depend on community demand	DGHS, DDG (Planning), PD, RDHS, MOOH	<ul style="list-style-type: none"> Number of districts with fair distribution of all categories of PHC staff bases on the community need 	√	√	√	√	
02	Ensure the rational, evidence based and timely introduction of new vaccines to the EPI schedule	Epidemiology Unit	<ul style="list-style-type: none"> Rational introduction of new vaccines 	√	√	√	√	
03	Ensure all immunization clinic centers have minimum required facilities to deliver effective, safe, and quality immunization services to the public.	Epidemiology Unit, Directorate of Private Health sector, Private Health Services Regulatory Council	<ul style="list-style-type: none"> Number of immunization clinics with minimum required facilities 	√	√	√	√	

8. National laboratory system

Real time bio surveillance with a national laboratory system and provision of effective modern point of care was targeted by this technical area. There should be a national laboratory system with capable of safely and accurately detecting and characterizing pathogens causing epidemic diseases including both known and unknown.

There are four indicators under the national laboratory system technical area and scores achieved during JEE are as follows.



DETECT

JEE Indicator		JEE Score
D.1.1 Laboratory testing for detection of priority diseases		Score 4
D.1.2 Specimen referral and transport system		Score 2
D.1.3 Effective modern point of care and laboratory based diagnostics		Score 3
D.1.4 Laboratory Quality System		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop a national standard operating procedure for safe and efficient specimen transport to reference laboratories. 2. Develop a quality management system for laboratories, including national reference laboratories in the human and animal health sectors. 3. Increase the number of laboratories (human and veterinary) that participate in quality assurance programmes. 4. Strengthen multisectoral collaboration by sharing laboratory facilities and data, particularly between the human and animal health sectors. 5. Expand the number and scope of agreements with regional laboratories for specialized or advanced diagnostics (such as for emerging diseases). 	

JEE Indicator	D.1.1 Laboratory testing for detection of priority diseases							
JEE Scores	Score 4							
Objective	To conduct laboratory testing for detection of priority diseases							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Improve testing capacity in veterinary laboratories for IHR core tests relevant to animal health.	DDG (LS), DDG (ET & R), D/LS, MRI, DAPH, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Testing capacity improved for IHR core tests 		√	√	√	√
02	Improve testing capacity in Plant Quarantine laboratories for Phytosanitary tests relevant to Plant health/ In relation to Genetically Modified Organisms(GMO).	Department of Agriculture	<ul style="list-style-type: none"> Testing laboratories are upgraded and accredited in line with the international standards 		√	√	√	
03	Establish coordination between human and veterinary laboratories.	DDG (LS), DDG (ET & R), D/LS, MRI, DAPH, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Shared reports 	√	√	√	√	√
04	Expand the national system for procurement and quality assurance of laboratories.	DDG (LS), DDG (ET & R), D / LS, MRI, DAPH, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Number of labs enrolled 	√	√	√	√	√
05	Expand the national system for outsourcing testing activities for quality assurance.	Department of Agriculture	<ul style="list-style-type: none"> Well established approval mechanism for regulatory activities 		√	√	√	√

JEE Indicator	D.1.2 Specimen referral and transport system								
JEE Scores	Score 2								
Objective	To establish an organized specimen referral and transport system								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Improve the specimen transport system and develop a systematic national programme.	DDG (LS), DDG (ET&R), D/LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Number of centers provided transport facilities. Number of centers provided triple package system for specimen transport and +4c storage facilities 	√	√	√	√	√	
02	Establish regulations for a specimen referral network for each of the core tests.	DDG(LS), DDG (ET & R), D/LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Number of meetings to discuss about the regulations and printing the regulations 	√	√	√	√	√	
03	Establish systematic delivery system for reports from reference laboratories.	DDG (LS), DDG (ET & R), D/LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Number of hospitals / specimen collecting centers provided facilities for E reporting system, laboratory information system 	√	√	√	√	√	
04	Develop a specimen transport system for veterinary laboratories	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development	<ul style="list-style-type: none"> Number of centers provided transport facilities. Number of centers provided triple package system for specimen transport and +4 c storage facilities 		√	√	√	√	
05	Develop a specimen detention, storing and transport system for Plant Quarantine laboratories.	Department of Agriculture	<ul style="list-style-type: none"> Established facility for detention and storing Established proper specimen transfer facilities (-20 coolers), protected packaging) 		√	√	√	√	

JEE Indicator	D.1.3 Effective modern point of care and laboratory based diagnostics							
JEE Scores	Score 3							
Objective	To strengthen the point of care facilities in primary health care institutions							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish improved tier-specific testing strategies for rapid diagnostics and other point-of care tests.	DDG (LS), DDG (ET & R), D/LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Established strategies 	√	√	√	√	√
02	Establish a plan for evaluating new point-of-care tests.	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Evaluated new point of care tests 	√	√	√	√	√
03	Develop and establish a point-of-care testing capability at primary care hospitals and veterinary facilities.	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Established point-of-care testing capability at primary care hospitals and veterinary facilities 		√	√	√	√

JEE Indicator	D.1.4 Laboratory Quality System								
JEE Scores	Score 3								
Objective	To develop a laboratory quality system								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Develop monitoring of quality indicators and develop international standards of measurements for the quality indicators.	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Developed quality indicators 	√	√	√	√	√	
02	Establish a national external quality assurance programme for the animal health sector.	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Number of Laboratory involve in national external quality assurance programme 		√	√	√	√	
03	Ensure that accreditation programmes include all laboratories.	DDG (LS), DDG (ET & R), D / LS, MRI, Department of Agriculture, Ministry of Fisheries & Aquatic Resources Development, DAPH	<ul style="list-style-type: none"> Number of laboratories enrolled for accreditation programme 		√	√	√	√	

9 . Real time surveillance

Strengthened foundational indicator and event based surveillance system that are able to detect events of significance for public health, animal health and health security, improved communication and collaboration across sectors and between sub national (local and intermediate) , national and international levels of authority regarding surveillance of events of public health significance.

There are four indicators under the real time surveillance technical area and score they have achieved during JEE as follows.



JEE Indicator		JEE Score
D.2.1 Indicator and event based surveillance systems		Score 3
D.2.2 Interoperable, interconnected, electronic real-time reporting system		Score 4
D.2.3 Integration and analysis of surveillance data		Score 4
D.2.4 Syndromic surveillance systems		Score 4
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Expand the web-based surveillance system so that it includes hospitals. 2. Increase capacity for incorporating laboratory data in the surveillance system by, for example, establishing a public health laboratory. 3. Formalize and implement structures for sharing data between the human and animal health sectors. 4. Develop formal structures, based on existing collaboration practices, for the joint analysis of surveillance data from the animal and human health sectors at all levels. 	

JEE Indicator	D.2.1 Indicator and event based surveillance systems								
JEE Scores	Score 3								
Objective	To establish indicator and event based surveillance system								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Introduction of web based communicable disease notification mechanism from health care institution to MOOH offices	Epidemiology Unit	<ul style="list-style-type: none"> Number of health care institutions with functioning web bases notification system 	√	√	√	√	√	
02	Establish a web based mechanism to monitor & evaluate the completeness and timeliness of communicable disease notification at each level.	Epidemiology unit , Health care institutions	<ul style="list-style-type: none"> Web base system is in place to monitor & evaluate the completeness & timeliness of communicable disease notification process. 	√	√	√	√		
03	Provision of in service training on communicable disease notification for medical officers attached to both state and private health care institutions	Epidemiology unit , Health care institutions, Regional Epidemiologist	<ul style="list-style-type: none"> Number of health care institutions where training programme conducted in a given year 	√	√	√	√		
04	Develop a efficient information sharing mechanism between health care institutions and laboratories	Epidemiology unit , Health care institutions	<ul style="list-style-type: none"> Number of institutions with information sharing mechanism 			√	√		

Objective	To enhance influenza surveillance and response activities							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Strengthen the influenza sentinel site surveillance	DDG (PHS)1, Chief Epidemiologist, D / MRI, NIC - MRI	<ul style="list-style-type: none"> Percentage of sentinel sites timely reporting cases of influenza like illness out of planned 	√	√	√	√	√
02	Expand the diagnostic facilities for influenza at MRI and Regional labs	DDG (PHS)1, Chief Epidemiologist, D / MRI, NIC - MRI	<ul style="list-style-type: none"> Completion of the task 	√	√	√	√	√
03	Further strengthen the collaboration between Human health and animal health sector at each level (National, district, and divisional) activities related to influenza control	DDG (PHS)1, Chief Epidemiologist, D / MRI, NIC - MRI, D / Animal Health	<ul style="list-style-type: none"> Number of meetings conducted 	√	√	√	√	√
04	Develop a business contingency plan for selected key service sectors in the event of influenza pandemic preparedness	DDG (PHS)1, Chief Epidemiologist, D / MRI, NIC - MRI	<ul style="list-style-type: none"> Developed business contingency plan 	√	√			

JEE Indicator	D.2.2 Interoperable, interconnected, electronic real-time reporting system							
JEE Scores	Score 4							
Objective	To establish an interoperable, interconnected, electronic real time reporting system							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a formal mechanism to exchange relevant disease surveillance information between human and animal health sector.	Epidemiology Unit, DAPH	<ul style="list-style-type: none"> Number of districts with functioning mechanism to exchange surveillance information between animal and human sector 			√	√	

JEE Indicator	D.2.3 Integration and analysis of surveillance data							
JEE Scores	Score 4							
Objective	To integrate and analysis of surveillance data							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a formal mechanism to exchange relevant disease surveillance information between human and animal health sector.	Epidemiology Unit, DAPH	<ul style="list-style-type: none"> Number of districts with functioning mechanism to exchange surveillance information between animal and human sector 			√	√	

JEE Indicator	D.2.4 Syndromic surveillance systems							
JEE Scores	Score 4							
Objective	To develop a syndromic surveillance system							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct periodical national risk assessment for communicable diseases in view of identification of current needs	Epidemiology Unit, DAPH	<ul style="list-style-type: none"> Conducted periodical risk assessment exercises 			√	√	

10. Reporting

Timely and accurate disease reporting according to WHO requirements and consistent coordination with FAO and OIE. National IHR focal points, OIE delegates and WAHIS National focal points will have access to a toolkit of best practices, model procedures, reporting templates and training materials to facilitate rapid notification of events that may constitute a PHEIC.



There are two indicators under the reporting technical area and scores achieved during JEE are as follows.

JEE Indicator		JEE Score
D.3.1 System for efficient reporting to WHO, FAO and OIE		Score 3
D.3.2 Reporting network and protocols in country		Score 2
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop and establish protocols, processes, regulations and if necessary, legislation on reporting, for implementation within one year. 2. Develop a collaboration mechanism between the human and animal health sectors that is aligned with the IHR and World Organization for Animal Health standards. 	

JEE Indicator	D.3.1 System for efficient reporting to WHO, FAO and OIE							
JEE Scores	Score 3							
Objective	To develop a system for efficient reporting to WHO, FAO and OIE							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct a need assessment to identify the real need of developing protocols, processes, regulations and legislation regarding reporting of IHR related issues	National IHR focal points, DAPH	<ul style="list-style-type: none"> National needs of developing protocols, processes, regulations, and legislation regarding reporting of IHR related issues identified 	√	√			
02	Develop necessary protocols, processes, regulations, and legislation regarding reporting of IHR related issues	National IHR focal points, DAPH	<ul style="list-style-type: none"> Availability of necessary protocols, processes, regulations and legislation regarding reporting of IHR related issues. 			√	√	

JEE Indicator	D.3.2 Reporting network and protocols in country							
JEE Scores	Score 2							
Objective	To develop reporting network and protocols in country							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a formal mechanism to exchange relevant disease surveillance information between human and animal health sector.	Epidemiology Unit / Ministry of Health, DAPH	<ul style="list-style-type: none"> Number of districts with functioning mechanism to exchange surveillance information between animal and human sector 			√	√	

11. Workforce development

State parties should have skilled and component health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005). A workforce including physicians, animal health or veterinarians, biostatisticians, laboratory scientists, farming/livestock professionals with an optimal target of one trained field epidemiologist per 200,000 population, who can systematically cooperate to meet relevant IHR and PVS core competencies.

There are three indicators under the workforce development technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
D.4.1 Human resources are available to implement IHR core capacity requirements		Score 4
D.4.2 Applied epidemiology training program in place such as FETP		Score 4
D.4.3 Workforce strategy		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Review the draft workforce strategy; giving consideration to the various sectors that need to be included, cadre revisions based on realistic cadre projections, measures to retain staff and career pathways for some categories of staff (veterinary staff and public health laboratory technicians, for example); and responding to the workforce-related recommendations of the World Organization for Animal Health's PVS gap analysis. 2. Develop strategies for joint training programmes with other sectors to improve coordination and collaboration between the human and animal health sectors. 3. Expand the current public health and field epidemiology training programmes to include: refresher courses, an induction programme for field epidemiologists, regular in-service programmes and continuous professional development programmes for veterinary public health staff and a sustainable methodology and process to provide continuous and regular education for field epidemiology staff from both the human and animal health sectors. 	

JEE Indicator	D.4.1 Human resources are available to implement IHR core capacity requirements								
JEE Scores	Score 4								
Objective	To formalize coordination related to workforce development between the human and animal sectors, despite collaborate between the two sectors during outbreaks.								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Promotion of training and research activities focus on animal and human health within the IHR scope.	ETR Unit / Ministry of Health, DAPH	<ul style="list-style-type: none"> Number of workshops conducted per year. Number of participants to each workshop. 		√				
02	Fulfill the requirement of HR for IHR activities	Ministry of Health	<ul style="list-style-type: none"> Number of health staff trained per year. Identified training needs. 		√				
03	Capacity building of the laboratory staff and other categories of MRI	Ministry of Health	<ul style="list-style-type: none"> Number of training modules developed per year. Number of Local training programs conducted per year. Number of International training programs conducted per year. 		√				
04	Capacity building of the laboratory staff and other categories of VRI	Ministry of Health	<ul style="list-style-type: none"> Number of training modules developed per year. Number of Local training programs conducted per year. Number of International training programs conducted per year. 		√				

JEE Indicator	D.4.2 Applied epidemiology training program in place such as FETP							
JEE Scores	Score 4							
Objective	To streamline field epidemiology training.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Preparing training modules for the identified Public Health Staff related to IHR and Field Epidemiology (RE, MOOH, PHID, SPHI, Tutor PHI, PHI, SPHM, PHM, PHNS, PHNO, PHFO, Entomologists, Veterinary Surgeon)	ETR Unit + DAPH	<ul style="list-style-type: none"> Number of IHR training modules completed in each year. Number of training modules introduces to the existing programs. 		√			
02	Provision of technical guidance for coordination of training programs related to IHR	Ministry of Health	<ul style="list-style-type: none"> Number of programs conducted under technical guidance. 		√			
03	Formulation and launching of online e-learning mechanism	Ministry of Health	<ul style="list-style-type: none"> Number of e-learning programs conducted per year Number of participants to each e-learning programme. 			√		
04	Identification of the training needs of Human health sectors	Ministry of Health	<ul style="list-style-type: none"> Conduct annual stakeholder meetings. 			√		
05	Identification of the training needs of Animal sectors	DAPH	<ul style="list-style-type: none"> Conduct annual stakeholder meetings. 		√			
06	Capacity building and training of field staff in human health sectors	Ministry of Health	<ul style="list-style-type: none"> Number of training programs conducted per year. Number of participants to each training programme. 		√			

07	Capacity building and Training of field staff in Animal sectors	DAPH	<ul style="list-style-type: none"> Number of training programs conducted per year. Number of participants to each training programme. 		√			
08	Training of MOOHs (Medical officer of Health) and AMOOHs (Assistant Medical officer of Health)	Ministry of Health	<ul style="list-style-type: none"> Number of MOOHs and AMOOHs participated to the program. 		√			
09	Field epidemiology training as apart of Post Graduate MSc and MD in Community Medicine	Board of study Community Medicine	<ul style="list-style-type: none"> Number of Post Graduate trainees recruited per year. 		√			
10	Field epidemiology training Program for Veterinary Surgeons	PGIS	<ul style="list-style-type: none"> Number of PG trainees recruited per year. 		√			

JEE Indicator	D.4.3 Workforce strategy								
JEE Scores	Score 3								
Objective	To implement the workforce strategy in both the human and animal health sectors								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Prepare workforce development strategic plan for IHR in Health sector.	Ministry of Health	<ul style="list-style-type: none"> Number of activities in the strategic plan suggested by the Ministry of Health. Availability of strategic plan 		√				
02	Prepare workforce development strategic plan for IHR in Animal sector.	DAPH	<ul style="list-style-type: none"> Number of activities in the strategic plan suggested by the DAPH Availability of strategic plan 		√				

12. Preparedness

Preparedness includes the development and maintenance of national, intermediate and local or primary response level public health emergency response plans for relevant biological, chemical, radiological and nuclear hazards.

There are two indicators under the preparedness technical area and score achieved during JEE are follows.



JEE Indicator		JEE Score
R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented		Score 1
R.1.2 Priority public health risks and resources are mapped and utilized		Score 1
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Identify and map the country's main risks. 2. Develop and disseminate the national emergency preparedness and response plan among responsible stakeholders, considering a multi-hazard approach in compliance with the IHR. 	

JEE Indicator		R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented						
JEE Scores		Score 1						
Objective R.1.1.1		To conduct multi-hazard risk mapping at district and national level.						
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct district (26) level multi-hazard risk assessments.	National level: DPRD, Epidemiology Unit, D - E&OH, DMC, Met Department, NBRO, CEA, Ministry of Industries District level:RDHS, District Secretary with the support of Assistant Director Disaster Management, District Met Offices, District NBRO Offices, District level officers of CEA	<ul style="list-style-type: none"> Number of district risk assessments conducted Number of risk assessment reports available Number of risk assessment maps available. 	√	√	√	√	√
02	Develop and update national level multi-hazard risk map.	DPRD, Epidemiology Unit, D- E&OH, DMC, Met Department, NBRO, RDHS	<ul style="list-style-type: none"> Five national multihazard risk assessment workshops conducted. Five updated national multihazard risk assessment reports available. Five updated multi hazard risk maps available. 	√	√	√	√	√

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Objective R.1.1.2	To develop and disseminate joint national preparedness and response plan							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct two national consultative workshops for the development and one national meeting for the dissemination of joint national emergency preparedness and response plan.	National level: DPRD, Epidemiology Unit, FHB, MSD, HEB, D- MS, D- E&OH, DMC, RDHS, Armed Forces	<ul style="list-style-type: none"> Number of consultations conducted Availability of the plan; usefulness of the plan demonstrated during real disasters or simulation exercises 	√	√	√		

JEE Indicator	R.1.2 Priority public health risks and resources are mapped and utilized							
JEE Scores	Score 1							
Objective R. 1.2.1	To advocate for development sharing and use with the involvement of multiple stakeholders							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Established a formal mechanism to exchange relevant disease surveillance information between human and animal health sector.	Epidemiology Unit, DAPH	<ul style="list-style-type: none"> Number of districts with functioning mechanism to exchange surveillance information between animal and human sector 			√	√	

Objective R.1.2.2		To train 12 key personnel from the DPRD, Epidemiology Unit, Quarantine Unit, D-E&OH and DMC and RDHS on multihazards risk assessment at a center of excellence on performing risk assessments.						
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Train 12 key personnel from the DPRD, Epidemiology Unit, Quarantine Unit, D-E&OH and DMC and RDHS on multi-hazards risk assessment at a center of excellence.	DPRD, DMC	<ul style="list-style-type: none"> Two advocacy seminars conducted Stakeholder cooperation for risk mapping enhanced 	√	√			
02	Train 12 key personnel from the DPRD, Epidemiology Unit, Quarantine Unit, D-E&OH and DMC and RDHS on multi-hazards risk assessment at a center of excellence.	Center of Excellence; Ministry of Health; WHO	<ul style="list-style-type: none"> Number of officials trained in multihazard risk assessment Trained persons lead risk assessments conducted at district and national level 	√				

13. Emergency response operations

Countries will have a public health emergency operation centre (EOC) functioning according to minimum common standards: maintaining trained, functioning, multi-sectoral rapid response teams and real time bio surveillance laboratory networks and information systems: and trained EOC staff capable of activating a coordinated emergency response within 120 minutes of the identification of a public health emergency.

There are four indicators under the national laboratory system technical area and scores achieved during JEE are as follows.



JEE Indicator	JEE Score
R.2.1 Capacity to Activate Emergency Operations	Score 1
R.2.2 Emergency Operations Centre Operating Procedures and Plan	Score 2
R.2.3 Emergency Operations Program	Score 3
R.2.4 Case management procedures are implemented for IHR relevant hazards	Score 4
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop a national PHEOC handbook, following WHO guidelines, that expands upon existing response documentation and includes: <ul style="list-style-type: none"> • Procedures for daily ‘watch mode’ operations, to include triage of information from surveillance, laboratory, and other information sources, as well as keeping public health leaders informed of emerging public health situations in a timely manner; • Criteria and authorities for declaration of a public health emergency; • Procedures for activation and deactivation of the national PHEOC; • A concept of operations for the national PHEOC within the national disaster management system, and; • Procedures for post-response (and post-exercise) review and corrective action planning. 2. Develop an integrated national public health emergency training and exercise programme that includes: <ul style="list-style-type: none"> • A competency-based master curriculum of public health emergency management trainings for both national and sub-national emergency operations centre staff, building upon existing training programmes, and addressing both position-specific functions as well as training on national public health policies, plans, and procedures. • A multi-year series of progressive discussion and operations-based exercises that address national risk-based priority public health threats. 3. Expand the cadre of trained personnel on roster as both core and surge staff for national and sub-national PHEOCs.

JEE Indicator	R.2.1 Capacity to Activate Emergency Operations								
JEE Scores	Score 1								
Objective	To develop PHEOC guidelines and to train key staff on their use during emergencies and disasters.								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Conduct a national level meeting for key stakeholders to obtain their inputs towards the development of the PHEOC handbook.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> • Consultation held • Recommendations Document available for the PHEOC handbook. 	√					
02	Develop and print PHEOC guidebook as per the WHO guidelines.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> • Printable version of the PHEOC handbook • Printed copies of the handbook. 		√	√			
03	Development of an integrated national public health emergency training curriculum.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> • Availability of training curriculum; 	√	√	√	√	√	√
04	Conducting national level PHEOC training programs for national level officers involved in disaster response	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> • Number of training programs conducted • Level of contribution for Public Health Emergency management from the trained staff. 		√		√		
05	Training of sub-national level staff on PHEOC based in the national public health emergency training curriculum.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> • Number of training programs conducted • Level of contribution for Public Health Emergency management from the trained staff. 		√	√	√	√	√

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JEE Indicator	R.2.2 Emergency Operations Centre Operating Procedures and Plan							
JEE Scores	Score 2							
Objective	To improve emergency operation center operating procedures and the plan							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Clarification of the role of the DGHS during disasters	DPRD, DGHS	<ul style="list-style-type: none"> DGHS is aware of his role during disaster response. 	√				
02	Advanced content of emergency operations procedure developed.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC	<ul style="list-style-type: none"> Availability of advanced content Stakeholders aware of the advanced content Advanced content used for effective disaster response. 				√	

JEE Indicator		R.2.3 Emergency Operations Program						
JEE Scores		Score 3						
Objective		To establish an emergency operation program						
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct annual PHEOC simulation (one) exercise irrespective of response to real disasters.	DPRD, Epidemiology Unit, D-Quarantine, D-E & H, DMC	<ul style="list-style-type: none"> Simulation exercise conducted Number of reviews conducted based on the simulation exercises Corrective action initiated based on the simulation exercises Amendments done to the PHEOC handbook and the training from the simulations. 	√	√	√	√	√
02	Development of PHEOC activation criteria and protocol.	DPRD, Epidemiology Unit, D-Quarantine, D-E & H, DMC	<ul style="list-style-type: none"> Availability of PHEOC activation criteria and protocol All relevant stakeholders aware of the above criteria and protocol Above criteria and protocol used during the disaster and emergency response. 				√	
03	Document lessons learnt report after each disaster and disseminate above learning.	DPRD, Epidemiology Unit, D-Quarantine, D-E & OH, DMC, respective RDHS where the disaster occurs.	<ul style="list-style-type: none"> Number of reviews conducted Number of lessons learnt Publications based on the reviews Number of corrective actions done based on the lessons learnt Improvements achieved in disaster response based from the lessons learnt. 	√	√	√	√	√

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JEE Indicator	R.2.4 Case management procedures are implemented for IHR relevant hazards							
JEE Scores	Score 4							
Objective	To improve the implementation of case management procedures for IHR related activities.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Plan and systematic dissemination of management and transport of potentially infectious patients.	Eidemiology Unit, D-Quarantine, College of Microbiologists	<ul style="list-style-type: none"> • Number of training programs conducted • Number of staff trained • Use of knowledge and skills during management and transport of potentially infectious patients. 	√	√	√	√	√
02	Refresher training on the use of case management guidelines during outbreaks.	Eidemiology Unit, D-Quarantine, College of Microbiologists	<ul style="list-style-type: none"> • Number of training programs conducted • Number of staff trained • Use of knowledge and skills on case management guidelines during outbreaks. 	√	√	√	√	√

14. Linking public health and security authorities

In the event of a biological event of suspected or confirmed deliberate origin, a country will be able to conduct a rapid, multisectoral response, including the capacity to link public health and law enforcement and to provide and/or request effective and timely international assistance, including to investigate alleged use events. Development and implementation of a memorandum of understanding (MOU) or other similar framework outlining roles, responsibilities and best practices for sharing relevant information between and among appropriate human and animal health, law enforcement and defence personnel and validation of the MOU through periodic exercises and simulations.

There is one indicator under the linking public health and security authorities technical area and score achieved during JEE is as follows.



JEE Indicator		JEE Score
R.3.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented		Score 4
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Expand mechanisms for information sharing and joint operations between the security and health sectors. 2. Perform regular joint exercises between the health, security and other sectors 	

JEE Indicator	R.3.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented							
JEE Scores	Score 4							
Objective	To promote intersectoral collaboration between public health and security authorities.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Development of standard operating procedures for collaboration between different stakeholders for health sector response	DPRD/Ministry of Health and other stakeholders	<ul style="list-style-type: none"> • Number of consultations completed. • Availability of standard operating procedures. • Enhanced collaboration between stakeholders. 		√			
02	Conduct multistakeholder simulation exercises annually.	DPRD/Ministry of Health and other stakeholders	<ul style="list-style-type: none"> • Number of simulation exercises conducted Level of participation of stakeholders • Use of multistakeholder collaboration based during actual disaster response. 	√	√	√	√	√

15. Medical countermeasures and personnel deployment

A national framework for transferring (sending and receiving) medical countermeasures and public health and medical personnel among international patterns during public health emergencies.

There are two indicators under the medical countermeasures and personnel deployment technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency		Score 2
R.4.2 System is in place for sending and receiving health personnel during a public health emergency		Score 1
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Revise and formalize policy guidelines for receiving or sending medical countermeasures during an emergency. 2. Draft a national plan and associated guidelines for deploying national and receiving international personnel during emergencies, including capacity building for these personnel in collaboration with health and non-health stakeholders such as the Ministries of Defence, Disaster Management, Finance and Foreign Affairs. 	

JEE Indicator	R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency							
JEE Scores	Score 2							
Objective R. 1.1.1	To introduce the legal provisions for the supply and distribution of medical countermeasures during emergencies.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Development and adoption of national inter-ministerial standard operation procedures on International Relief Assistance	Ministry of Disaster Management, Ministry of Finance , Ministry of Foreign Affairs , Ministry of Health, Food Commissioners Department, Sri Lanka	<ul style="list-style-type: none"> Percentage of completion of inter-ministerial standard operation procedures on International Relief Assistance 					
02	Development of national guidelines for sending and receiving of medical countermeasures during a public health emergency.	Sri Lanka Customs	<ul style="list-style-type: none"> Percentage of completion of National Guidelines 	√	√			
03	Develop and adopt standard protocols to be followed by the MSD and State Pharmaceuticals Corporation (SPC) as the National Procuring Agency for the emergency procurement of medical countermeasures, regionally and internationally.	Medical Supplies Division (MSD), DPRD/Ministry of Health	<ul style="list-style-type: none"> Percentage of completion of standard protocols to be followed by the MSD and SPC 		√	√		
04	MSD to undertake a risk assessment for its national and regional drug stores for internal disasters that could affect them and external disasters for which they would have to respond to.	MSD	<ul style="list-style-type: none"> Number of units/stores which risk assessment completed 		√	√	√	√

05	MSD to update current disaster preparedness and response plan.	MSD	<ul style="list-style-type: none"> Percentage of completion of updated disaster preparedness response plan 		√	√		
06	MSD to develop standard operating procedure for the distribution of medical countermeasure during emergencies.	MSD	<ul style="list-style-type: none"> Percentage of completion of standard operating procedure for the distribution of medical countermeasures during emergencies 		√	√		
07	MSD to develop Emergency Storage plan.	MSD	<ul style="list-style-type: none"> Percentage of completion of Emergency Storage plan 		√	√		
08	MSD to enhance the emergency storage capacity,.	MSD	<ul style="list-style-type: none"> Number of institutions/ RMSD with enhanced emergency storage capacity 				√	√
09	Training of the staff of MSD on Disaster Management (local and foreign training)	MSD	<ul style="list-style-type: none"> Number of staff members trained 		√	√	√	√
10	Assess the emergency preparedness and response capacity through annual desktop simulation exercise.	MSD	<ul style="list-style-type: none"> Number of desktop simulation exercises 		√	√	√	√

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JEE Indicator	R.4.2 System is in place for sending and receiving health personnel during a public health emergency							
JEE Scores	Score 1							
Objective	To advocate and plan for systematic the deployment and receiving of emergency medical teams.							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Conduct advocacy campaign for health and non-health stakeholders on management of emergency medical teams in disasters.	DPRD, other stakeholders.	<ul style="list-style-type: none"> Advocacy done for health and non-health stakeholders. 		√	√	√	√
02	Incorporate sections on systematic deployment and receiving of emergency medical teams to existing national general and health sector disaster preparedness and response plans.	DPRD	<ul style="list-style-type: none"> Sections incorporated on systematic deployment and receiving of emergency medical teams to existing national general and health sector disaster preparedness and response plans. 		√	√		
03	Incorporate sections on systematic deployment and receiving of emergency medical teams to existing SOPs.	DPRD	<ul style="list-style-type: none"> Sections incorporated on systematic deployment and receiving of emergency medical teams to existing SOPs. 		√	√		
04	Train health staff on emergency medical teams coordination.	DPRD	<ul style="list-style-type: none"> Health staff trained on emergency medical teams coordination. 		√	√	√	√
05	Assemble of necessary equipment and supplies for the deployment of a national emergency medical team.	Ministry of Health	<ul style="list-style-type: none"> Necessary equipment and supplies available for the deployment of a national emergency medical team. 			√		
06	Registration of Sri Lanka National Emergency Medical Team with WHO.	Ministry of Health, WHO	<ul style="list-style-type: none"> Sri Lanka National Emergency Medical Team registered with WHO. 					

16. Risk communication

States parties should have risk communication capacity which is multi level and multi faced, real time exchange of information, advice and opinion between experts and officials or people who face a threat or hazard to their survival, health, economic or social wellbeing so that they can take informed decisions to mitigate the effects of the threat or hazard and take protective and preventive action.



There are five indicators under the risk communication technical area and scores achieved during JEE are as follows.

JEE Indicator		JEE Score
R.5.1 Risk Communication Systems (plans, mechanisms, etc.)		Score 2
R.5.2 Internal and Partner Communication and Coordination		Score 5
R.5.3 Public Communication		Score 3
R.5.4 Communication Engagement with Affected Communities		Score 4
R.5.5 Dynamic Listening and Rumour Management		Score 5
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop a consolidated risk communications plan that brings together existing policies, protocols and procedures. 2. Increase monitoring and outreach through social media (which could include the establishment of government social media accounts). 3. Develop a sector-wide training programme that includes regular seminars and refresher courses for risk communications and standard trainings for staff, including surge capacity staff. 4. Review the feasibility of developing a formal network for risk communications that includes stakeholders, partners and surge capacity staff from all sectors. 	

JEE Indicator	R.5.1 Risk Communication Systems (plans, mechanisms, etc.)							
JEE Scores	Score 2							
Objective	To establish a risk communication system for the country							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Include risk communication activities as a main agenda item with the 'National Committee on Health Communication' chaired by the DGHS established under the Health Promotion Policy	Health Promotion Bureau (HPB)	<ul style="list-style-type: none"> Risk communication activities are included in the National Committee on Health communication 		√	√	√	√
02	Development of a consolidated National risk communication plan	HPB	<ul style="list-style-type: none"> Consolidated national risk communication plan is developed 		√	√		
03	Identification and appointing a risk communication focal point at Ministry of Health	Director /HPB will be the focal point for risk communication	<ul style="list-style-type: none"> Risk communication focal point is established 		√			
04	Training of Health officials and staff on risk communication	HPB	<ul style="list-style-type: none"> Number of health officials, other staff and non health staff trained on risk communication 	√	√	√	√	√
05	Conducting Media conferences / briefings to educate the public / to prepare for an emergency	HPB	<ul style="list-style-type: none"> Number of media conferences conducted in a year Number of media persons attended Number of articles published on subject 	√	√	√	√	√

JEE Indicator	R.5.2 Internal and Partner Communication and Coordination							
JEE Scores	Score 5							
Objective	To improve the communication between stakeholders on risk management							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establishing a monthly risk reporting system from the RDHS level	HPB, Epidemiology unit, Disaster Preparedness and response unit, quarantine unit	<ul style="list-style-type: none"> Risk reporting system is established 			√		
02	Development and distribution of Information, education, communication materials (IEC) such as leaflets, posters, wallcharts, booklets to educate the health/non health staff and public	HPB	<ul style="list-style-type: none"> IEC materials are developed and distributed 		√	√	√	√

JEE Indicator	R.5.3 Public Communication							
JEE Scores	Score 3							
Objective	To improve the public communication at a risk situation							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Use of social media for risk communication and feedback	HPB, Disaster Preparedness and response Unit, Epidemiology unit, Quarantine unit of Ministry of Health	<ul style="list-style-type: none"> The social media network is developed 			√		
02	Development of a dialogue between risk communicators and general public	HPB, Disaster Preparedness and response unit, Epidemiology unit RDHS	<ul style="list-style-type: none"> Twenty-four hour hotline is developed. Number of educational programmes conducted by the Medical Officer of Health (MOOH) proportionate to the number of disasters 		√	√	√	√
03	Training of media persons on reporting a disaster or impending risk	HPB	<ul style="list-style-type: none"> Number of media persons trained annually 		√	√	√	√

JEE Indicator	R.5.4 Communication Engagement with Affected Communities							
JEE Scores	Score 4							
Objective	To improve the communication between health officials and affected communities at a disaster situation							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establishment of a system to communicate with affected communities in a disaster situation	HPB	<ul style="list-style-type: none"> Percentage of returns received by the HPB 			√		
02	Capacity building of the staff included under 5.1							

JEE Indicator	R.5.5 Dynamic Listening and Rumour Management							
JEE Scores	Score 5							
Objective	To improve the understanding of the concerns of the affected communities by the health staff at a disaster situation							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Increase the publicity of the 'Suwaseriya' 24 hour hotline among the public	HPB	<ul style="list-style-type: none"> Number of calls received for 'Suwaseriya' within a month 		√	√	√	√
02	Liaise with the other stakeholders for quick communication	HPB	<ul style="list-style-type: none"> Official link is established 			√		
03	Appointing a media spokesman at RDHS level and trained them especially on media briefing	HPB	<ul style="list-style-type: none"> Availability of media spokesmen in districts 			√	√	√

17. Points of Entry (PoE)

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.

There are two indicators under Points of Entry (PoE) technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
PoE.1 Routine capacities are established at PoE		Score 3
PoE.1 Effective Public Health Response at Points of Entry		Score 4
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Enhance facilities, in terms of spaces and equipment, at points of entry for the inspection, isolation and treatment of passengers who are suspected to be ill. 2. Develop a regular capacity building programme for health officials on how to carry out conveyance inspection and quarantine procedures. 3. Develop a health information system for points of entry that includes real-time surveillance for both human and animal health. 4. Establish an integrated vector surveillance mechanism for all medically important vectors at all designated points of entry. 5. Conduct regular simulation exercises on public health contingency plans at points of entry and publish the assessment reports. 	

JEE Indicator	PoE.1 Routine capacities are established at PoE								
JEE Scores	Score 3								
Objective 1.1	To develop the facilities for assessment, care and isolation of ill passengers at BIA and Colombo Port								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Purchase of equipment for BIA and Colombo port	Director / Quarantine	• Equipment purchased		√	√			
02	Develop a quarantine bay for ill passengers / Colombo Port	Director / Quarantine, SLPA	• Completion of the task			√			
03	Develop an isolation room with facilities for assessment and care at BIA / Colombo Port	Director / Quarantine, SLPA, AASL	• Completion of the task	√	√	√			
04	Train the staff on SOPs	Director / Quarantine	• Completion of the task	√	√	√	√		
05	Transport facilities for staff at PoE & Quarantine Unit	Director / Quarantine	• Completion of the task	√	√				
06	Improve quarantine / isolation facilities at NIID (IDH)	Director / NIID and Director /Quarantine	• Completion of the task	√	√	√			
Objective 1.2	To establish an integrated vector surveillance and control mechanism for medically important vectors								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Conduct an integrated vector surveillance and control mechanism for mosquitoes (process has been established with time frame, technical support to be seek)	Director / Quarantine, D/ AMC, D/AFC relevant stake holder	• Number of programs conducted for quarter out of planned	√	√	√	√	√	
02	Overseas / local training of staff on vector surveillance for medically important vectors	Director / Quarantine	• Number of staff trained		√	√			

03	Purchase equipment for the vector surveillance (e.g. during ship sanitation certification need to detect rat urine etc.)	Director / Quarantine	• Completion of the task	√	√	√		
04	Establish an integrated vector surveillance and control mechanism for other vectors (eg. rats)	Director / Quarantine / DG / APH	• Number of surveillance conducted out of identified all surveillance		√	√	√	√

Objective 1.3 To build capacity for ship sanitation certification, cruise ship inspection and air craft inspection								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Purchase equipment needed for ship sanitation certification, cruise ship inspection and air craft inspection	Director / Quarantine	• Completion of the task	√	√	√		
02	Overseas / local training of staff on Quarantine procedures / Ship sanitation certification and cruise and ship inspection / aircraft inspection	Director / Quarantine	• Number of staff trained out of planned		√	√	√	√

Objective 1.4 To develop an online information management system at Quarantine Unit, Assistant Port Health office and Public Health officers at Points of Entry and publish reports								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Purchase equipment needed for information management system	Director / Quarantine	• Completion of the task	√	√			
02	Develop a Quarantine Health Record Management and Surveillance System (QHRMS) and payment for service provision	Director / Quarantine	• Completion of the task	√	√			

03	Online Server space for QHRMS (VPS)	Director / Quarantine	• Completion of the task					
04	Maintenance of Quarantine Website	Director / Quarantine	• Completion of the task					
05	Train staff (overseas and local) on online information management system	Director / Quarantine	• Number of staff trained out of planned	√		√		
06	Publish Annual Report of Quarantine unit	Director / Quarantine	• Published annual report		√	√	√	√

JEE Indicator	PoE.2 Effective Public Health Response at Points of Entry								
JEE Scores	Score 4								
Objective 2.1	To update and publish contingency plans following regular exercises and after real events and purchase medical equipment and other auxiliary equipment are required for proper								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation					
				2019	2020	2021	2022	2023	
01	Update and publish Contingency Plans	Director / Quarantine	• Completion of the task		√		√	√	
02	Simulation exercises at PoEs with involvement of other stakeholders and annually published reports	Director / Quarantine /NIID, AASL, CAASL, SLPA, DMC, DPRD, Ministry of Defense and other respective units	• Simulation exercise to be done in once a year either in port or airport and published reports annually	√	√	√	√	√	
03	Purchase medical and other auxiliary equipment required for proper examination	Director / Quarantine	• Completion of the task		√	√			

18. Chemical events

State parties should have surveillance and response capacity for chemical risk or events. Timely detection of effective response of potential chemical risks and /or events in collaboration with other sectors responsible for chemical safety, industries, transportation and safe disposal.

There are two indicators under the chemical event technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
CE.1 Mechanisms are established and functioning for detecting and responding to chemical events or emergencies		Score 2
CE.2 Enabling environment is in place for management of chemical events		Score 2
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Create a national, multisectoral coordinating body to: <ul style="list-style-type: none"> • Establish an integrated chemical surveillance system that builds upon existing monitoring activities; • Strengthen laboratory capacities for chemical detection and identification; • Establish standards for environmental and occupational health monitoring across sectors; • Implement standards for classification and labeling of chemicals, and; • Facilitate the sharing, data basing, and integration of chemical-relevant data from the surveillance, laboratory, environmental and occupational health monitoring activities from all sectors. 2. Develop guidelines or standard operating procedures for chemical surveillance and risk assessment of chemical events. 3. Develop a national-level chemical event response plan based on a national risk assessment of chemical threats, expanding on existing documentation of roles and responsibilities, inventories of chemical sites, and case management guidelines. 	

JEE Indicator	CE.1 Mechanisms are established and functioning for detecting and responding to chemical events or emergencies							
JEE Scores	Score 2							
Objective 1.1	To establish sentinel surveillance system to detect hazardous chemical exposures in relation to chemical accidents							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Development of a programme for surveillance of chemical accidents	Disaster Management centre / Central Environment Authority / Ministry of Health / Sri Lanka police / Poison Center of National Hospital / National Authority for Chemical Weapons (Joint mechanism)	<ul style="list-style-type: none"> • Formation of steering committee • Guidelines and manuals developed • Number of simulation exercises • Number of Chemical Accidents Prevention and Preparedness (CAPP) reported by industries • Number of chemical accidents reported 		√	√	√	√

Objective 1.2	To strengthen risk analysis and mitigation in responding to chemical events							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish risk analysis process in response to chemical events	Central Environment Authority / Ministry of Health / National Authority for Chemical Weapons Convention (NACWC)	<ul style="list-style-type: none"> • Number of risk assessors identified • Number of training programmes conducted 		√	√	√	√

Objective 1.3 To establish an apex body for overall management of chemicals								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish an apex body for overall management of chemicals	Ministry of Environment (lead role), Other stakeholders- Central Environment Authority / Ministry of Health / Industrial technology Institute (ITI) / Government analyst / WHO / UN agencies / Universities	<ul style="list-style-type: none"> • Number of stakeholder meeting • Report in place • Action plan in place • Progress made at the end of each year 		√	√	√	√

Objective 1.4 To develop analytical facilities to monitor environmental and health effects of chemical events								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a well-equipped labs for environmental and health effects	Ministry of Environment, Central Environment Authority, Ministry of Health, Industrial technology Institute, Government Analyst's Department, WHO, UN agencies, Universities	<ul style="list-style-type: none"> • Number of stakeholder meetings • Action plan in place • Funding secured • Physical and financial progress of infrastructure development 		√	√	√	√

Objective 1.5 To develop capacities in chemical event response and detection								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Formation of rapid deployment team at district level to take immediate measures during a chemical accident	Disaster Management centre, Central Environment Authority, Ministry of Environment, Ministry of Health, Sri Lanka police NACWC, Ministry of Defence	<ul style="list-style-type: none"> • Number of stakeholder meetings • Action plan in place • Physical and financial progress of infrastructure development 		√	√	√	√

JEE Indicator	CE.2 Enabling environment is in place for management of chemical events							
JEE Scores	Score 2							
Objective 2.1	To streamline land use planning for siting of chemical industries and disposal facilities							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Prepare policy guideline on siting and installation of chemical based industries including life cycle management of chemicals	Ministry of Environment, Central Environment Authority, Urban Development Authority, Ministry of Local government / Land use policy planning Department, Ministry of Health, NACWC	<ul style="list-style-type: none"> Prepared policy guideline 					
01	Incorporate existing land use policy and plan with the siting of chemical industries and chemical disaster prone / risk areas	Ministry of Environment, Central Environment Authority, Urban Development Authority, Ministry of Local government / Land use policy planning Department, Ministry of Health, NACWC	<ul style="list-style-type: none"> Number of stakeholder meetings 		√	√		

Objective 2.2	To share information and monitoring and evaluation of chemical hazards and chemical events for future planning of response							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Establish a platform to share information	Ministry of Environment, Central Environment Authority, Ministry of Health, Ministry of Labour, Ministry of Industry and Commerce, Board of Investment, NACWC, Local Authority, Government Analyst's Department	<ul style="list-style-type: none"> Number of stakeholder meeting Number of reports in place Database in place Annual reports 		√	√	√	√

02	Establish a M&E system	Ministry of Environment, Central Environment Authority, Ministry of Health,	<ul style="list-style-type: none"> • Report in place • M & E Committee 			√		
03	Establish information clearing house	Sri Lanka Customs, Department of Import and Export Control, Board of Investment, NACWC	<ul style="list-style-type: none"> • Action plan in place • Number of sessions • Updating Aggregate National Data Enlisting Factories and Industries 					

Objective 2.3 To establish post-incident and Long-term Considerations								
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Provide multi-agency debriefings for all responders	Ministry of Environment, Central Environment Authority, Ministry of Health, Ministry of Labour, Ministry of Industry and Commerce, Board of Investment, NACWC, LA, Government Analyst's Department	<ul style="list-style-type: none"> • Number of stakeholder meeting 		√	√	√	√
02	Provide psychological counseling for victim and responders	Ministry of Health, Ministry of Defence	<ul style="list-style-type: none"> • Report in place 					
03	Enhance capability through Investigative Science and Technology	Ministry of Environment, Central Environment Authority, Ministry of Health, Ministry of Labour, Ministry of Industry and Commerce, Board of Investment, NACWC, Local Authority, Government Analyst's Department, Ministry of Defence	<ul style="list-style-type: none"> • Number of sessions 					
04	Initiate legislative and administrative measures	Ministry of Environment, Central Environment Authority, Ministry of Health, Ministry of Labour, Ministry of Industry and Commerce, Board of Investment, NACWC, Local Authority, Government Analyst's Department, Ministry of Defence	<ul style="list-style-type: none"> • Formation of a steering committee 					

19. Radiation emergencies

States parties should have surveillance and response capacity for radio nuclear hazards/events/emergencies. This requires effective communication and collaboration among the sectors responsible for radio nuclear management. Timely detection and effective response of potential radio-nuclear hazards/events/emergencies in collaboration with other sectors responsible for radio nuclear management.

There are two indicators under the radiation emergencies technical area and scores achieved during JEE are as follows.



JEE Indicator		JEE Score
RE.1 Mechanisms are established and functioning for detecting and responding to radiological and nuclear emergencies		Score 1
RE.2 Enabling environment is in place for management of radiation emergencies		Score 3
Recommendations for priority actions	<ol style="list-style-type: none"> 1. Develop risk assessment guidelines for radiation emergencies. 2. Finalize and gain approval for radiation emergency documents that are currently in draft form. 3. Incorporate the draft radiation Emergency Management Plan, the radiation detection guidelines and the radiation monitoring mechanism for radiation emergencies that may constitute a public health event of international concern into existing plans. 4. Develop an information sharing system for radiation-relevant information among all sectors. 5. Create an integrated multisectoral radiation emergency training and exercise programme. 	

JEE Indicator	RE.1 Mechanisms are established and functioning for detecting and responding to radiological and nuclear emergencies							
JEE Scores	Score 1							
Objective	To establish a functioning mechanism for detecting and responding to radiological and nuclear emergencies							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Allocate radiation surveillance and monitoring responsibilities in the draft Emergency Management Plan (EMP) for responsible stakeholders	SLAERC	<ul style="list-style-type: none"> Number of detection systems 	√	√	√	√	√
02	Allocation of roles and responsibilities to stakeholders in draft Emergency Management plan	SLAERC / DMC	<ul style="list-style-type: none"> Number of stakeholder meetings 	√				
03	Radiation detection strategy has been established by the draft EMP and radiation hazard assessment has been carried out it will continue according to the plan	SLAERC	<ul style="list-style-type: none"> Number of emergencies detected 	√	√	√	√	√
04	Development of SOP for management of radiation emergencies	SLAERC	<ul style="list-style-type: none"> Availability of SOP 	√	√			
05	Systematic Information exchange between SLAERC, IAEA and MoH during radiation emergency	SLAERC, Disaster preparedness unit, Ministry of Health	<ul style="list-style-type: none"> Shared reports 	√	√	√	√	√
06	Establishment of health facilities with capacity to manage patients of radiation emergency	Disaster Preparedness unit, Ministry of Health	<ul style="list-style-type: none"> Number of hospitals established Number of doctors trained 	√	√	√	√	√

JEE Indicator	RE.2 Enabling environment is in place for management of radiation emergencies							
JEE Scores	Score 3							
Objective	To enable the environment for management of radiation emergencies							
No.	Summary of planned activities at national level (Strategic actions)	Responsible authority(s) for implementation including budget line holder	Output indicators / Milestones (Monitoring and Evaluation)	Year of implementation				
				2019	2020	2021	2022	2023
01	Finalization of National Plan	SLAERC	<ul style="list-style-type: none"> Finalized national plan 		√			
02	Arrangement of National exercise	SLAERC / other stakeholders	<ul style="list-style-type: none"> Number of exercises conducted Number of responders trained 		√	√	√	√
03	Participation of International Atomic Energy Agency convex exercises and host the international exercise	SLAERC / stakeholders	<ul style="list-style-type: none"> Number of participants attended for exercises 		√		√	√

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6. ANNEXURES

Annex 1

Responsible authorities for preparation of five year action plan to ensure health security of Sri Lanka

No	Section	Main Stakeholder	Other stakeholders/Ministries/ Departments/Unit
1	National Legislation, Policy and Financing	Deputy Director General- Public Health Services -1/ MoH	DDG-Planning/MoH Quarantine Unit/ MoH Epidemiology Unit/ MoH Director/ International Health/ MoH Legal Unit/ MoH Legal Units of other Ministries Department of Legal Draftsmen
2	IHR Coordination, Communication and Advocacy	Director /Quarantine Unit/ MoH	Chief Epidemiologist/ MoH Quarantine Unit Disaster Preparedness and Response Division WHO
3	Points of Entry (PoE)	Director/Quarantine Unit/ MoH	Epidemiology Unit/ MoH Quarantine Unit Ministry of Foreign Affairs Department of Immigration and Emigration Harbour Master/Sri Lanka Ports Authority Airport Aviation Sri Lanka Ceylon Association of Shipping Agents
4	Antimicrobial resistance	Deputy Director General- Laboratory Services/ MoH	DDG-ET & R/MoH Director/Lab Services/ MoH Medical Research Institute/ MoH Department of Animal Production and Health (DAPH) Ministry of Fisheries and Aquatic Resources Development
5	Biosafety and Biosecurity	Deputy Director General - Laboratory Services/ MoH	DDG-ET & R/MoH DDG-MSD/MoH Medical Research Institute/ MoH Director/Lab Services/ MoH DAPH Director (Bio-Diversity) Ministry of Mahaweli Development and Environment

6	National Laboratory System	Deputy Director General - Laboratory Services/ MoH	DDG-ET & R/MoH DDG-MSD/MoH Director/Lab Services/ MoH Director/MSD Medical Research Institute/ MoH DAPH Department of Agriculture Ministry of Fisheries and Aquatic Resources Development
7	Zoonotic Disease	Director General/ Department of Animal Production and Health (DAPH)	DAPH Ministry of Fisheries and Aquatic Resources Development
8	Food Safety	Deputy Director General / Environment & Occupational Health/ MoH	Directorate/E & OH/MoH Epidemiology Unit/ MoH DAPH Department of Agriculture Ministry of Fisheries and Aquatic Resources Development
9	Chemical Events	Chemical & Hazardous Waste Management Unit / Central Environment Authority Deputy Director General / Environment & Occupational Health/ MoH	Central Environment Authority Directorate/ E & OH/MoH Directorate/NCD/MoH Head/National Poison Centre/ NHSL Director (Pollution Control & Chemical Management)/ Ministry of Mahaweli Development & Environment Director (Hazardous Waste & Chemical Management) Ministry of Mahaweli Development & Environment Ministry of Defence
10	Immunizations	Chief Epidemiologist/ Epidemiology Unit/ MoH	Epidemiology Unit/ MoH DAPH
11	Real Time Surveillance	Chief Epidemiologist/ Epidemiology Unit/ MoH	Epidemiology Unit/ MoH DAPH
12	Reporting	Chief Epidemiologist/ Epidemiology Unit/ MoH	Epidemiology Unit/ MoH DAPH

13	Workforce Development	Deputy Director General / Education Training & Research Unit/ MoH	Directorate/ET &R/MoH Epidemiology Unit/ MoH DAPH
14	Preparedness	National Coordinator/ Disaster Preparedness and Response Division / MoH	Disaster Preparedness and Response Division / MoH Ministry of Disaster Management DAPH
15	Emergency response operation	National Coordinator/ Disaster Preparedness and Response Division / MoH	Disaster Preparedness and Response Division / MoH Ministry of Foreign Affairs Department of Immigration and Emigration Ministry of Disaster Management
16	Linking Public Health and Security Authorities	National Coordinator/ Disaster Preparedness and Response Division / MoH	Disaster Preparedness and Response Division / MoH Ministry of Defence Ministry of Disaster Management
17	Medical Counter measures and Personnel Deployment	Deputy Director General / Medical Supplies Division/ MoH Director/ Medical Supplies Division/ MoH	Medical Supplies Division/ MoH Disaster Preparedness and Response Division / MoH Ministry of Disaster Management Medical Supplies Division/ MoH Ministry of Foreign Affairs
18	Risk Communication	Director/ Health Promotion Bureau/ MoH	Directorate/ Health Promotion Bureau/ MoH Epidemiology Unit/ MoH Quarantine Unit/MoH, Disaster Preparedness and Response Division / MoH Ministry of Disaster Management
19	Radiation Emergencies	Director General/ Sri Lanka Atomic Energy Regulatory Council	Sri Lanka Atomic Energy Regulatory Council Sri Lanka Atomic Energy Regulatory Board Ministry of Defence Epidemiology Unit/ MoH Quarantine Unit/MoH, Disaster Preparedness and Response Division / MoH Ministry of Disaster Management Ministry of Defence

Joint external evaluation scores for each technical area

Technical areas	Indicators	Score
National legislation, policy and financing	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005)	4
	P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with IHR (2005)	3
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR	2
Antimicrobial resistance	P.3.1 Antimicrobial resistance detection	3
	P.3.2 Surveillance of infections caused by antimicrobial-resistant pathogens	3
	P.3.3 Health care-associated infection (HCAI) prevention and control programmes	3
	P.3.4 Antimicrobial stewardship activities	3
Zoonotic diseases	P.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens	3
	P.4.2 Veterinary or animal health workforce	3
	P.4.3 Mechanisms for responding to infectious and potential zoonotic diseases are established and functional	2
Food safety	P.5.1 Mechanisms for multisectoral collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases	3
Biosafety and biosecurity	P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities	2
	P.6.2 Biosafety and biosecurity training and practices	1
Immunization	P.7.1 Vaccine coverage (measles) as part of national programme	5
	P.7.2 National vaccine access and delivery	5
National laboratory system	D.1.1 Laboratory testing for detection of priority diseases	4
	D.1.2 Specimen referral and transport system	2
	D.1.3 Effective modern point-of-care and laboratory-based diagnostics	3
	D.1.4 Laboratory quality system	3
Real-time surveillance	D.2.1 Indicator- and event-based surveillance systems	3
	D.2.2 Interoperable, interconnected, electronic real-time reporting system	4
	D.2.3 Integration and analysis of surveillance data	4
	D.2.4 Syndromic surveillance systems	4

Technical areas	Indicators	Score
Reporting	D.3.1 System for efficient reporting to FAO, OIE and WHO	3
	D.3.2 Reporting network and protocols in country	2
Workforce development	D.4.1 Human resources available to implement IHR core capacity requirements	4
	D.4.2 FETP or other applied epidemiology training programme in place	4
	D.4.3 Workforce strategy	3
Preparedness	R.1.1 National multi-hazard public health emergency preparedness and response plan is developed and implemented	1
	R.1.2 Priority public health risks and resources are mapped and utilized	1
Emergency response operations	R.2.1 Capacity to activate emergency operations	1
	R.2.2 EOC operating procedures and plans	2
	R.2.3 Emergency operations programme	3
	R.2.4 Case management procedures implemented for IHR relevant hazards.	4
Linking public health and security authorities	R.3.1 Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event	4
Medical countermeasures and personnel deployment	R.4.1 System in place for sending and receiving medical countermeasures during a public health emergency	2
	R.4.2 System in place for sending and receiving health personnel during a public health emergency	1
Risk communication	R.5.1 Risk communication systems (plans, mechanisms, etc.)	2
	R.5.2 Internal and partner communication and coordination	5
	R.5.3 Public communication	3
	R.5.4 Communication engagement with affected communities	4
Points of entry	PoE.1 Routine capacities established at points of entry	3
	PoE.2 Effective public health response at points of entry	4
Chemical events	CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	2
	CE.2 Enabling environment in place for management of chemical events	2
Radiation emergencies	CE.2 Enabling environment in place for management of chemical events	2
	RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	1
	RE.2 Enabling environment in place for management of radiation emergencies	3

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