

# Assessment of core capacities at points of entry in Sri Lanka to Implement International Health Regulations (2005)



**Directorate of Quarantine, Ministry of Health , Sri Lanka**

Supported by the



International Organization for Migration (IOM)

2013

**ASSESSMENT OF CORE CAPACITIES  
AT POINTS OF ENTRY, SRI LANKA  
TO IMPLEMENT INTERNATIONAL HEALTH  
REGULATIONS (2005)**

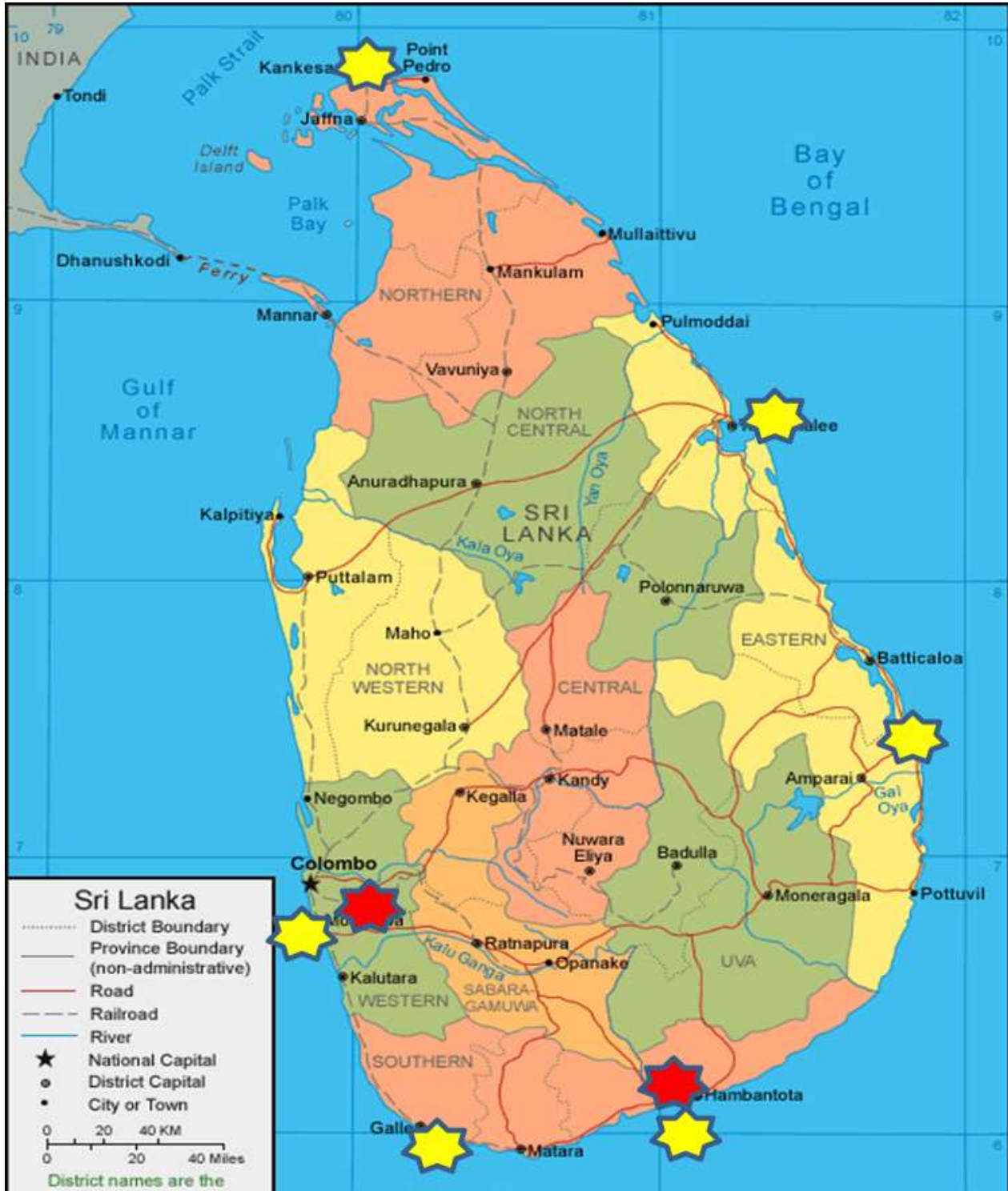
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# AIRPORTS AND SEAPORTS IN SRI LANKA



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## EXECUTIVE SUMMARY

The emergence and re-emergence of infectious diseases and threats of deliberate use of biological and chemical agents have emerged as threats to 'public health security'. Increased international air travel, has caused spread of infectious disease across the globe faster and farther, best illustrated by the outbreaks of SARS in 2003 and Influenza A in 2009. The International Health Regulations are a set of legally binding regulations, for the World Health Organization Member States to guide prevention and control of public health hazards: biological (infectious, zoonotic, food born), chemical and radio-nuclear material, manifested by imported or exported human cases, infected or contaminated vectors or contaminated goods, which may cause a public health emergency of international concern (PHEIC).

Increasing international migration flow in the present day emphasises the need to strengthen the points of entry (POE) to Sri Lanka, adhering to domestic and international legislations and avoiding unnecessary interference with International traffic and trade. The eight core capacities at the POE needed to detect, assess, notify and respond to a public health emergency were evaluated in September 2013 by the Directorate for Quarantine.

A desk review of domestic and international laws, regulations and literature was carried out at the outset. The protocol developed by the WHO was used in developing the check list. Services related to IHR (2005) core capacities: human resources, infrastructure (general), financial, networking with other agencies (mechanism), and training related to IHR were assessed in component I. The eight core capacity requirements: national legislation and policy, coordination and NFP communications, surveillance, response, preparedness, risk communication, human resource, laboratory and capacity were assessed in component II. Assessment was done through field visits, observations and key informant interviews with relevant stakeholders from health and non-health sectors. In addition, data compiled at the Port Health Offices were analysed to assess relevant indicators. The major system and service gaps identified under each core capacity are given in Table 2

Mapping of current practices at POE including stakeholders and resources was done and a gap analysis was performed using IHR (2005) core capacity requirements as 'best practices' for POE. Findings of this report will provide evidence to build an innovative strategy to face the modern challenges due to the changing dynamics of international travel and disease epidemiology.

## INTRODUCTION

The International Sanitary Regulations, first adopted in 1951 were renamed as the International Health Regulations (IHR) in 1969. The 1951 IHR intended to monitor and control only six serious infectious diseases: cholera, plague, yellow fever, smallpox, relapsing fever and typhus. Developments in international ship/aircraft traffic affected the international transmission of disease and in May 2005, the World Health Assembly adopted a revised IHR which entered into force in June 2007.

The IHR (2005) identifies five human health hazards : (a) biological-infectious diseases, zoonotic diseases, contaminated food (b)chemical agents, (c) nuclear and radioactive material and) which may cause a public health emergency of international concern (PHEIC) as manifested by imported or exported human cases, infected or contaminated vectors, or contaminated goods . The emergence and re-emergence of infectious diseases, threat of deliberate use of biological and chemical agents etc, have highlighted the need to strengthen points of entry while adhering to domestic and international legislations (IHR 2005).

The core capacities are the capacities needed to detect, assess, notify and report and respond to public health events (events or emergencies) of national and international concern. developed by a technical group of experts of WHO. The core capacities enable effective application of health measures to prevent international spread of diseases. There are eight core capacities and a set of components are measured for each core capacity. For each component a set of 1 to 3 indicators are given to measure the current status or progress where each indicator represents a set of activities.

The Article 5 and Annex 1a of the IHR (2005) requires countries to assess their ability of existing structures, capacities and resources to meet the minimum requirements for handling a PHEIC within two years following the entry into force of the regulations. In line with this, the Directorate for Quarantine, Ministry of Health, Sri Lanka with technical and logistical support of the International Organization for Migration carried out an assessment of the core capacities to implement IHR (2005) at points of entry in Sri Lanka in September 2013.

The aim of the assessment was to obtain information on the current status of IHR (2005) core capacities for the five hazards at the points of entry. It is expected that the results of this assessment would help in the development and implementation of the action plans for the points of entry and thereby ensure the establishment and maintenance of the IHR (2005) core capacities.



## COUNTRY BACKGROUND

Sri Lanka, an island situated in a strategic location in the Southern Indian Ocean in South Asia. For administrative purposes Sri Lanka is divided into 9 provinces and 25 districts. According to the International Monetary Fund, Sri Lanka has a yearly gross domestic output of US\$ 71 billion in 2014. It has a GDP of US\$143 billion. With a nominal value of US\$3,385 Sri Lanka is second only to the Maldives in the South Asian region in terms of per capita income. However Sri Lanka ranks well above other South Asian countries in the Human Development Index (HDI) with 0.750 points.

Sri Lanka has a population of 20,277,597 people, and an annual population growth rate of 0.73%. Sri Lanka has a birth rate of 17.6 births per 1,000 people and a death rate of 6.2 deaths per 1,000 people. Sri Lankans have a life expectancy of 77.9 years at birth, which is 10% higher than the world average. Sri Lanka has excellent health outcome indicators. The infant mortality rate stands at 8.5 per 1,000 births and the maternal mortality rate at 0.39 per 1,000 births, which is on par with figures from the developed countries despite the low levels of government expenditure on health (4% of GDP). Sri Lanka has a literacy rate of 92.5%, thus one of the most literate populations amongst developing nations.

Sri Lanka provides free universal healthcare. Sri Lanka has a unique healthcare system where one can go directly to the hospital (government or private), to the family doctor or directly see a specialist. The health care system consists of both state and private sectors. The state healthcare institutions are either under the Health Ministry or the provincial health services. There is an extensive network of state healthcare institutions which provide curative/rehabilitative healthcare services and preventive/promotive healthcare services. The state hospitals provide 96% of inpatient care and 45% of outpatient care while the private sector mostly staffed by government doctors doing dual practice provide 4% of inpatient care and 55% of outpatient care.

Disease surveillance system of Sri Lanka consists of 3 main components: routine notification of communicable diseases, special surveillance on selected communicable diseases and sentinel site surveillance. Notification of communicable diseases is a legal requirement in Sri Lanka since 1897. Any person who breaches this regulation will be guilty of an offence and will be prosecuted in Magistrate Court. There is a list of notifiable diseases for Sri Lanka approved by the Advisory Committee on Communicable Diseases on 11th February 2005.

Any medical practitioner who attends a person suffering from any disease in the list of notifiable diseases should notify (on suspicion) it to the proper authority. There are two



groups of diseases: Group A and Group B. Group B diseases should be notified to the Medical Officer of Health (MOH), Regional Epidemiologist and the Chief Epidemiologist. Group A diseases should be notified in addition to the DGHS and DDG (PHS). Mode of notification can be telephone, Fax, Telegram, or manually using the form H544.

The data received at the Epidemiology Unit are analysed and compiled into a weekly epidemiological report (WER) and the Quarterly Epidemiological Bulletin (QEB). The WER and QEB are disseminated to all District and Divisional level public health units and hospitals. The data compiled and analysed at the district level are also presented at the Quarterly District Review meetings. There are special investigations conducted for selected diseases. Although the surveillance system covers the whole island, it's a passive Surveillance system with no properly linked Laboratory Surveillance. Notifications are limited to inward cases from the government hospitals. There is minimum contribution from OPD and the private sector.

History of port health laws and regulations in Sri Lanka dates back to 1897 with the establishment of the Quarantine and Prevention of Diseases Ordinance of Sri Lanka, which was subsequently amended several times, with the latest revision in 1960. The Q&P Ordinance of 1897 makes provision for preventing the introduction and spread of all contagious and infectious diseases into and outside Sri Lanka.

The Directorate for Quarantine was established by the Ministry of Health in 2008 to ensure the implementation of IHR (2005) in the country. There are two National Focal points (NFPs) for implementing IHR (2005) i.e.-Director Quarantine and the Chief Epidemiologist. There are other designated IHR Focal Points for preventing and responding to zoonotic (Director General-Animal Production and Health), foodborne (Director-Environment and Occupational Health Unit), chemical (Chairman-Central Environment Authority) and radio-nuclear hazards (Chairman-Atomic Energy Authority).

There are 2 international Airports–Katunayake and Mattala and 4 sea ports -Colombo, Galle, Hambantota, Trincomalee operational in Sri Lanka at present. All the Port health Officers -Medical Officers and Public Health Inspectors - operating at the points of entry (Air ports and Sea Ports) are under the administration of the Directorate for Quarantine. Sri Lanka's geographical location influences the complex dynamics of ever increasing international migration and cross border travel. With the government's vision of transforming the country into five strategic hubs in the region the points of entry to Sri Lanka need to be strengthened to prevent, protect against, control and provide public health response to international spread of diseases. This strengthening will positively contribute to the country's development goals while avoiding unnecessary interference with International traffic and trade.

## **OBJECTIVES OF THE ASSESSMENT**

The objective of the assessment of the core capacities at points of entry (POE) in Sri Lanka to implement International Health Regulations (2005) was:

1. to obtain the baseline information for development or strengthening of core capacities at the POE
2. to assess the progress in developing core capacities at the POE
3. to identify areas that need improvement in development or strengthening of core capacities at the POE

## METHOD

To achieve the objective mentioned above, an assessment of the core capacities at points of entry in Sri Lanka to implement International Health Regulations (2005) was carried out by the Directorate for Quarantine, Ministry of Health, Sri Lanka which is a National Focal Point for implementation of IHR (2005), with technical and logistical support of the International Organization for Migration.

The assessment was carried out during September 2013 covering the five human health hazards: (a) biological-infectious diseases, zoonotic diseases, contaminated food (b)chemical agents, (c) nuclear and radioactive material which may cause a public health emergency of international concern (PHEIC). A desk review of domestic and international laws, regulations and literature was carried out. The protocol developed by the WHO for assessing national surveillance and response capacities for the IHR (2005) was primarily used in developing the questionnaire.

Component I- assessed services related to IHR 2005 core capacities which included Human resources-Port Health Medical officers, Port PHI, others staff, infrastructure (general), financial, networking with other agencies (mechanism), and training related to IHR.

Component II assessed the eight core capacity requirements: national legislation and policy, coordination and NFP communications, surveillance, response preparedness, risk communication, human resource, laboratory capacity, points of entry. A pre-assessment meeting with the participation of the Director/Quarantine and the two Consultant Community Physicians attached to the Directorate for Quarantine was held to review the assessment tool.

Assessment of core capacities was done through field visits, observations key informant interviews with relevant stakeholders from health and non-health sectors. The sites of assessment included Bandaranaike International Airport and the Colombo Harbour.

Key informant interviews were conducted using the check list. Key Informants from the health sector included the Port Medical Officers, Port Public Health Inspectors, Food and Drug inspectors of the Colombo Harbour and the Bandaranaike International Airport, Harbour Master of the Colombo Harbour, Chief Medical Officer/Medical Centre of the Bandaranaike International Airport, Chief Judicial Medical Officer and the Judicial Medical Officer of Base Hospital Negumbo, Superintendents of the Infectious Disease Hospital and the Base Hospital, Negumbo, Director, Environment and Occupational Health Unit, Coordinator-Disaster preparedness and response Unit, Director of the Medical Research institute.

The non-health sector key informants included Chief Medical Officer of the Sri Lanka Airport and Aviation Services, focal points of the Department of Animal Production and Health, the Atomic Energy Authority and the Central Environment Authority for the Bandaranaike International Airport and the Colombo Harbour

In addition, data collected manually and compiled at the Port Health Offices of the Bandaranaike International Airport and the Colombo Harbour were analysed to assess trends of relevant indicators.

# Findings of the Assessment

## Core capacity 1: National legislation, policy and financing

### National legislation

To implement IHR (2005) which came into force in 2007, a suitable legal framework is a mandatory requirement. A desk review of IHR (2005) and the domestic laws and regulations e.g. Quarantine and Prevention of Diseases Ordinance of Sri Lanka, Food Act, Prevention of Mosquito Breeding Act, Seeds Act, Atomic Energy Authority Act was carried out.

#### A. National legislation related to the Health sector

##### 1. The Quarantine and Prevention of Diseases (Q&P) Ordinance of Sri Lanka

This ordinance was enacted in 1897 (chapter 222, No.3) and was amended several times subsequently: No.7 of 1917, No.14 of 1919, No.14 of 1920, No.13 of 1936, No.11 of 1939, No.5 of 1941, No.13, of 1943, Act No.12 of 1952, Quarantine Regulations of 1960 (chapter 173). The Q&P Ordinance of 1897 makes provision for preventing the introduction and spread of contagious and infectious diseases into and outside Sri Lanka. Therefore, the Q&P ordinance is the key legal document in relation to the implementation of IHR (2005) in the country.

The Honorable Minister of Health has been vested the power of making and revoking or varying any regulation to fulfil the above objectives. The Director General of Health Services (DGHS) is the competent authority. The chairmen of the local authorities also had been appointed as the competent authority in relation to certain regulations. The Direct General of Health Services has delegated some of his powers to the Medical Officer of Health (MOH) and the chairman of the local authority vide government Gazette Notification No. 7481 of 28-08-1925 & 10713 of 17-09-1954. The Public Health Inspectors are Authorised Officers under the Q&P Ordinance as per Gazette notification No. 9134 of 11-06-1943 and 6365 of 22-04-1938.

*The following gaps in the Quarantine Act (1960) to accommodate IHR (2005) at POE were identified:*

- The Directorate for Quarantine was established by the Ministry of Health in 2008 to ensure the implementation of IHR (2005) in the country. There are two National Focal points (NFPs) for implementing IHR (2005) i.e.-Director Quarantine and the Chief

Epidemiologist. However, the roles and responsibilities of the two NFPs are not included in the Q&P Ordinance (1960). Similarly there are no circular instructions issued by the Ministry of Health the roles and responsibilities of the two NFPs.

- The Competent Authority defined in the Q&P Ordinance is the DGHS and has delegated some of his powers to the Medical Officer of Health. However, the Competent Authority is not defined in terms of the implementation of the IHR (2005) i.e. Director Quarantine or the Port Health Medical Officers are not delegated as Competent Authority.
- The Q&P Ordinance mainly address contagious/infectious diseases - not 'events', and already infected persons - not 'threats' as specified in Annex-ii of the IHR (2005). Similarly international notification and preparedness are not included in the Q&P ordinance.
- Ministry of Health is responsible only for the hazards relevant to 'humans' whereas the Department of Animal production and Health is responsible for the 'animal' component, which is not reflected in the Q&P ordinance.
- Partnerships/coordination with other ministries/other units of Ministry of Health are important for the response and preparedness of multi-hazard nature of IHR. However, such details are not included in the Q&P ordinance.
- The Q&P ordinance does not specify documents such as the Maritime Declaration of Health, Aircraft General Declaration, Ship Sanitation Certificates/Ship Sanitation Control Certificates/ Ship Sanitation Control Exemption Certificates, as specified in IHR (2005).
- Full respect of human Rights (art 3,30,31,32) and the guidance provided by the charter of the United Nations and the constitution of the WHO Art. 3 are not included in the Q&P ordinance

#### **1. Food Act**

Food Act No. 26 1980, which was amended by Food (amendment) Act No. 20 of 1991 which provided for the manufacture, importation, sale, exposure for sale, storage or distribution of food. In the multi-hazard approach of IHR (2005), contaminated food is an important source of food borne diseases. In addition ensuring a safe environment for travellers by conducting inspection programmes for eating establishments, flight catering facilities etc at the POE is a compulsory requirement. Therefore identifying the gaps and making necessary amendments to the Food Act (1991) is critical for the effective implementation of IHR (2005) in the country.

The Director General of Health Services, (DGHS) who is designated the Chief Food Authority is responsible for the administration of the Act. He is assisted by the Deputy Director General (Public Health Services) and the Director (Environmental & Occupational Health). Local authorities are appointed area Food Authorities for their respective areas of administration. The Principal Collector of Customs (Director General of Customs) and the Commissioner of Excise also function as Food Authority in respect of imported foods and excisable foods respectively. Medical Officers of Health (M.O.O.H), Food & Drugs Inspectors (F & D.II) and Public Health Inspectors (P.H.II) are designated Authorized Officers under the Act and assist the local authorities in the implementation of the Act by inspecting food establishments, sampling foods and conducting prosecutions

*The following gaps in the Food Act (1991) to accommodate IHR (2005) at POE were identified:*

- The APMO/PHMO has not been delegated the authority by DGHS as per the Food Act. The Local authority (Chairman of the Municipal Council) or the Medical Officer of Health of the respective area has only been delegated the authority by DGHS.
- The assessment revealed the following: PHII of Colombo Municipal Council (CMC) and MC/Seeduwa or MOH/Katunayaka are responsible for implementing the Food Act at the BIA and Colombo Harbour respectively. As a result, although regular inspections are carried out by the APPHI/PHPHI purchasing samples for inspection, prosecuting food outlets found guilty etc. are not done. Instead the findings of the inspections are forwarded to the SLAAS/SLPA for necessary actions. Similarly when offering tenders to food outlets recommendation are not obtained from the APMO/PHMO. When food served at the outlets at the POE is supplied from sources outside the POE, it is necessary to inspect those manufacturers, yet there is no legal authority for the APPHI/PHPHI nor there is a mechanism to work in collaboration with the range PHII (CMC or Katunayaka) to inspect those manufacturers.

*Special note-Food and Drug Inspectors (FDI) are responsible for inspecting cargo containing food whereas the PHII are responsible for inspecting food supplied to travellers.*

## **2. Prevention of Mosquito Breeding Act**

The main objective of the Prevention of Mosquito Breeding Act. No.11 of 2007 is to prevent and eradicate mosquito breeding that can cause Malaria, Filariasis, yellow fever, Dengue, Encephalitis. Control of vectors and reservoirs in and near POE is one of the



responsibilities of the competent authority and a core capacity to be filled at the POE as mosquitos may transport an infectious agent from areas of the POE that are used for operations involving travellers, conveyances, containers, cargo and postal parcels, into or out of the country. If not properly controlled, mosquitos could board ships, breed and be carried overseas. Furthermore, mosquitos on board can, in turn, spread disease to POE in other countries.

The Proper Authority (Medical Officer of Health) and the PHII are empowered to notice under this Act. However the PHI should get the written authority from the Medical Officer of Health to perform his work legally In addition, regulations Gazetted under the Q&P Ordinance, Mosquito Borne Disease (Prevention) Regulations 9570/ 21-06-1946 , 10340- 10-02-1952 and 10395 / 21- 06- 1952 are still in force. They were not repealed by the Prevention of Mosquito Breeding Act No. 11 of 2007.

*The following gaps in the Prevention of Mosquito Breeding Act. No.11 of 2007 to accommodate IHR (2005) at POE were identified:*

- The APMO/PHMO has not been delegated the authority by DGHS as per the Prevention of Mosquito Breeding Act. The Local authority (Chairman of the Municipal Council) or the Medical Officer of Health of the respective area has only been delegated the authority by DGHS.
- The assessment revealed the following: PHII of Colombo Municipal Council (CMC) and MC/Seeduwa or MOH/Katunayaka are responsible for implementing the Prevention of Mosquito Breeding Act. at the BIA and Colombo Harbour respectively. As a result, inspections for breeding sites and prosecuting should be out by the PHI from the CMC or the respective MOH area.

## **2. National legislation related to the Non-Health sector**

- **Animal Diseases Act**

Animal Diseases Act, No. 59 of 1992 provides legal authority for control and prevention of animal diseases and control of import and export of animals and products in and out of the country. Part II of the Act describes power of the Director in relation to control and prevention of animal diseases i.e. notification of illness in imported animals, seizure of animal products, destruction and disposal of animal products and disinfection of premises. Part III of the Act describes power of the Director in import/export of animals/animal products. This part includes powers related to prohibition on import without a permit, issue of permit for the import of

an animal product, power of Minister to declare any port or other place as being infected with disease, power of Ports Authority to refuse entry to vessels carrying any infected or diseased animal, notice of arrival by importer, Health certificate, landing, quarantine, protective zone and animals in transit.

The Department of Animal Production and Health has formulated procedure for import/export live animals and livestock in and out of the country. [http://www.daph.gov.lk/web/index.php?option=com\\_content&view=article&id=110&Itemid=180&lang=en](http://www.daph.gov.lk/web/index.php?option=com_content&view=article&id=110&Itemid=180&lang=en) There are Animal Quarantine Units established within the POE.

*Special note-The National Plant Quarantine Service, Department of Agriculture, is responsible for enforcing the implementation of Plant Protection Act No.35 of 1999 and Seeds Act No 22, 2003 and Regulations made in relation to plant quarantine activities of the country. There are Plant Quarantine Units established within the POE. They are responsible for issuing health clearance for import of foods of plant origin e.g. seeds (Kadala-chick pea)*

- **Atomic Energy Authority Act**

Atomic Energy Authority Act No.19 of 1969. Atomic Energy Authority (AEA) has established a radiological emergency response programme under which an on-line radiation monitoring system is in order to measure environmental radiation levels continuously at different locations around the country. The system also works as a Nuclear Disaster Early Warning System and has 7 Remote Monitoring Stations (RMS) are installed in Colombo, Kalpitiya, Mannar, Delft, Kankasasthurai, Trincomalee and Galle and the Central Monitoring Station (CMS) is installed at the AEA premises

### **National policy and financing related to IHR (2005)**

- A National policy related to IHR (2005) is not available in Sri Lanka. Financing for activities related to IHR implementation was largely from the state.

## Core capacity 2: Coordination and NFP communications

The effective implementation of the IHR requires multi-sectoral partnerships as per the WHO guidelines.

### **A. National Focal Points**

The National Focal Points (NFP) (Director Quarantine and the Chief Epidemiologist) are the focal points for IHR communications with the WHO and for all relevant sectors within the country. The NFP is the national authority responsible for notification of PHEIC to the WHO. The NFP should also provide technical and logistical support to risk assessment and initiate the response during a PHEIC in coordination with all health and non-health stakeholders. The NFP monitors events at the international level through the WHO and receives e-mail alerts of events notified by other countries to the WHO.

Directorate of Quarantine is mainly responsible for the implementation of Quarantine and prevention of diseases ordinance of 1897, and International Health Regulations (IHR-2005). The main POEs under the administration of the Directorate are the Port Health Offices at the Colombo, Galle, Tricomalee and the Airport Health Offices at Katunayake and Mattala.

### **B. Coordination and communication with provincial and district health staff of the country**

There is a well-established mechanism used by the central public health units for the implementation, M&E of all public health programmes within the country which is through the Provincial Directors of Health Services (PDHS) and Regional Directors of Health Services (RDHS). Therefore communication/coordination related to IHR events between the NFPs and district health staff is expected to occur through the PDHS, RDHS and the Regional Epidemiologists.

### **C. Coordination and communication with health and non-health stakeholders**

There are designated Focal Points of IHR stakeholders within and outside the health sector e.g. zoonotic (Director General-Animal Production and Health), foodborne (Director-Environment and Occupational Health Unit, Ministry of Health), chemical (Chairman-Central Environment Authority) and radio-nuclear hazards (Chairman-Atomic Energy Authority) for preventing and responding to a PHEIC

The following gaps were identified in the coordination and communication mechanism:

- A national level committee relevant to IHR (2005) implementation had not been established.
- The channel of communication between the NFPs and the other Focal Points within and outside health sector was not well documents/established.
- Stakeholder meetings on the IHR (2005) had been conducted at the national level ? but not at the district level. However there were no stakeholder meetings conducted within the last 12 months of the assessment by the Director/quarantine.
- Although there is a Ministry for Disaster Management in Sri Lanka and a Disaster Preparedness and Response Unit (DPRU) within the Ministry of Health, the national disaster management policy/strategic plan does not address the IHR (2005) ?. As a result there was no disaster management action plan addressing the IHR (2005) at the district level. However all other health related emergencies were coordinated by a DPRU of the Ministry of Health and a well-established mechanism was in operation.
- There was no web page for IHR specific information in the Ministry of Health Website

## Core capacity 3: Surveillance

As per the WHO guidelines, the IHR require a sensitive and a flexible surveillance system with an early warning function. A detailed description of the surveillance system of Sri Lanka is given under the country profile. There are 3 main components: rapid detection, risk assessment and alert/notification.

Routine surveillance data regarding international travel and trade are monitored at POE (Table 1).

**Table 1 Routine activities -Port Health Officer Colombo Harbor**

Indicator	2009	2010	2011	2012
No. of Ship arrival/ Pratique granted	4,202	3,457	4,205	4,235
No. of Yellow fever vaccines given	70	94	104	87
No. of Ship Sanitation Exemptions Certificate issued	84	199	201	188

BIA Katunayake - In the year 2012, 22,620 air crafts have arrived out of which 16,629 air craft's disinfection activities were carried out. 3,209,370 passengers have arrived and 221 valid international certificate for yellow fever vaccination were produced. 453 human remains were released out of which 22 were released for Judicial Medical Officer for post mortems. In the same year, the quarantine unit of the airport Health office had carried out 110 sanitary inspections and sent 12 food samples, 18 water samples for bacteriological analysis.

### **The following gaps were identified in the surveillance system:**

- The list of notifiable diseases did not include all the IHR (2005) notifiable conditions, such as Severe Acute Respiratory Syndrome (SARS), influenza caused by new sub-types as well as chemical and radio-nuclear hazards.
- Notification of zoonotic events or any events likely to have significant impacts on the environment and with public health implications/ chemical and radio-nuclear hazards to the NFP were not specified in the list.
- Director Quarantine is not specified in the regulations as to notify the multi-hazards of IHR (2005)

## 1. Rapid detection

### a) Rapid detection for any PHEIC at Sri Lanka Ports Authority (SLPA)- Colombo Harbour

SLPA only provides the services to the ships and clearing is done by the consignee/Clearing and Forwarding Agent which is through the Sri Lanka Customs. Ship Husbandry Agents look after all needs including illness on board.

Surveillance of any infectious disease is based on information received from Ships on travellers (passengers or crew members) through the **Maritime Declaration of Health** prior to arrival to the CH. Details of any deaths, cases, suspect due to infectious diseases and/or PHEIC on board are received from the Master of the Ship either directly (via e mail) or through an Agent approved by the Sri Lanka Ports Authority (SLPA) over the phone or by radio messaging the Port Control Tower. Such alerts are verified by the PHMO by communicating with the Master of the Ship. Details of cases are entered in the Sick Crew Members' Register maintained at the Port Health Office.

Prior to arrival additional information such as nature of the cargo and operations to be carried out in the Port-*i.e animals and livestock, food items, food items of plant origin*, list of Ports for the past 30 days with arrival and departure dates are also submitted to the PHMO.

Pratique is granted to ships/vessels coming from foreign ports to Sri Lanka. Pratique is the license (Health Clearance Certificate) given to a ship to enter a port on assurance from the captain to convince the authorities that she is free from contagious disease.

The PHMO requested additional clearance from relevant units for the imported animals, food and livestock prior to granting pratique which prevents introduction of zoonotic and food borne disease to the country.

*Imported animals (as cargo or pet) and livestock- prior approval from Director General - Department of Animal Production and Health is needed. Health clearance is given by the Quarantine Unit, Department of Animal Production and Health within the CH.*

*Imported food items (as cargo)-prior approval that the food items are fit for human consumption is needed from the Director General of Health Services (DGHS) or a person designated by the DGHS. Health clearance from Food and Drug Inspectors (FDI) of the CH, working under the Food Control Administration Unit, Directorate for Environment & Occupational Unit, Ministry of Health is needed.*

All vessels arriving from a foreign Port are inspected by the PHMO before granting 'free pratique'.

On arrival to the Port, the Master of the Ship or the Agent completes and submits the following information to the PHMO: Maritime Declaration of Health, passenger and crew List-with Yellow Fever Vaccination history and Yellow Fever Vaccination Certificates, Ship Sanitation Control Certificate (SSCC) or Ship Sanitation Control Exemption certificate (SSCEC) or extension to SSCC/SSCEC and **details of occurrence of any death or cases or suspects due to infectious disease/or PHEIC after the information provided to PHMO prior to arrival to the Port.** On inspection, if a ship is found not up to the standard, PHMO orders fumigation of the ship which is done by a private agent under the supervision of the PHPHI. The SSCC certificate issued after a re-inspection

#### **The following gap was identified at Sri Lanka Ports Authority (SLPA)-Colombo Harbour**

- Although the SLPA has informed all the Agents to get clearance from the Port Health Office, not all ships come via the Port Health Office. However if a passenger or a crew member is reported as sick, the PHMO is always informed.

#### **b) Rapid detection for any PHEIC at Bandaranayike International Airport (BIA)**

Surveillance of any PHEIC at BIA is based on the information received from the Pilots-in-command.

Before arrival the pilot-in-command declares that there is no threat to land via radio message through Air Traffic Controller/Airline Operating Agency to the destination Airdrome Tower, which conveys it to the SLAAS/Medical Centre. Surveillance of any infectious disease will be based on this information received from Pilot-in-command of the Aircraft.

On arrival to the Air Port, the Pilot-in-command of the Aircraft or the Agent should complete and deliver the **Aircraft General Declaration** to the port health office.

If there are any deaths, cases or suspect due to infectious diseases and/or PHEIC on board, those details will be received by the SLAAS/Medical Centre.

Additional clearance is needed for the imported animals, food and livestock and it prevents introduction of zoonotic and food borne disease to the country.



*Imported animals (as pet) and livestock- prior approval from Director General - Department of Animal Production and Health is needed. Health clearance is given by the Quarantine Unit, Department of Animal Production and Health within the Colombo Harbour. Imported food items (as cargo)-prior approval that the food items are fit for human consumption is needed from the Director General of Health Services (DGHS) or a person designated by the DGHS. Health clearance from Food and Drug Inspectors (FDI) of the CH, working under the Food Control Administration Unit, Directorate for Environment & Occupational Unit, Ministry of Health is needed.*

**The following gaps were identified at BIA:**

- The Air Traffic Controller/Airline Operating Agency informs only the SLAAS/Medical Centre through the destination Airdrome Tower. Information is not received directly by the APMO from the Pilot in-command of the Aircraft before arrival.
- On arrival to the Airport, the Pilot-in-command of the Aircraft or the Airline Operating Agency should complete and deliver the **Aircraft General Declaration** to the APMO. However there is a delay in receiving this by the Airport health Office and the APMO does not get the General Declaration Form from Pilots-in-command on regular basis
- Even if there is a death/case/suspect due to infectious diseases on board, the General Declaration Form is sent to the AASL/Medical Centre. The MO/Medical Centre decides whether to inform APMO or not. There is no parallel reporting regarding such incidents to APMO
- In addition, if coming from listed countries, travellers are screened for Malaria and yellow fever at the BIA.

## 2. Risk assessment

### **a) Risk assessment of a death/case/suspected case at SLPA/Colombo Harbour**

The Master of the Ship carrying a human death/case/suspected case of having an infectious disease of public health importance, before its arrival to the Port, hoists a flag on top of the Yellow Flag to indicate the occurrence of such illness. The Master of the Ship also informs the PHMO either directly via e mail or through its Agent or by radio messaging the Port Control Tower about the occurrence of such illness.

The PHMO, PHPHI and a supportive staff member, usually visit the ship in an out-habour vessel. Once on board, the PHMO carries out a prompt risk assessment based on the Maritime Declaration of Health, list of Ports for the past 30 days, Crew and passenger list, Ship Sanitation Control Certificate (SSCC) or Ship Sanitation Control Exemption certificate (SSCEC) or extension to SSCC/SSCEC, number of affected/suspected Travellers. From each case or suspect; medical history, travel itinerary, vaccination/prophylaxis history is taken. Assessment of the case/suspect is carried out in the ship in a place provided by the Master of the ship. Only interviews and non-invasive medical examination are done. Assessment includes examination of any part of the Ship which the PHMO considers as necessary. If needed, other travellers e.g. those who had contacts with the case/suspect, or the entire Ship is assessed. If contact tracing is considered necessary, information to locate the other travellers are obtained: Name, Destination in Sri Lanka (address), contact details (telephone no.s)

The following gaps were identified in the risk assessment at the Colombo Harbour : There are no facilities for assessment of affected/suspected travellers, separate from other travellers at the Port health office of Colombo Harbour. Assessment of the case/suspect is carried out in the ship in a place provided by the Master of the ship. Although facilities including an ETU are available at SLPA/Medical Centre the mandate of the Medical Centre at the Colombo Harbour is to provide treatment to the staff of SL Ports Authority and does not take care of sick crew member or a passenger unless its a medical or surgical emergency.

### **b) Risk assessment of a death/case/suspected at BIA:**

When there is a human death/case/suspected case of having infectious disease of public health importance on board (self-declared, detected by crew), the Pilot-in command of the Aircraft will inform the SLAAS/Medical Centre through the Airdrome Tower about the

occurrence of such illness prior to arrival to the Air Port. The APMO will be informed by the SLAAS/Medical Centre. Such alerts are verified by the APMO by communicating with the Pilot-in -command of the Aircraft through the Ground Manager/Air Traffic Controller/Airline Operating Agency

**The following gaps were identified in the risk assessment at the BIA:**

- There are no facilities for assessment of affected/suspected travellers, separate from other travellers at the Airport health office.
- There are two Medical Centres within the BIA - one to take care of the staff of SLAAS and other to take care of sick crew members and passengers. Basic facilities are available at SLAAS/Medical Centres

### **3. Alert/Notification**

As per the regulations of notifications of communicable diseases in Sri Lanka there is an obligations under Penal Code for Notifications. However the routine surveillance mechanism is not practiced at the BIA or Colombo Harbour. However, if the PHMO is informed by the Master of a Ship (or detects on inspection) a live animal case/suspect of having an illness or a dead animal on board, the Quarantine Unit of Department of Animal Production and Health within the Port is notified immediately over the phone by the PHMO. If the PHMO is informed about cargo containing contaminated /suspected food on board by the Master of a Ship (or detects on inspection), the Food and Drug Inspectors (FDI) of the Colombo Harbour are notified immediately by the PHMO. If the PHMO is informed about Cargo containing contaminated /suspected livestock by the Master of a Ship (or detect on inspection), the Quarantine Unit of Department of Animal Production & Health within the Port is notified immediately by the PHMO.

**The following gaps were identified in the alert/notification at the BIA and Colombo Harbour:**

- There was no documented plan for the channel of communication at POE. The PHMO/APMO immediately communicate such events and the immediate public health measures taken over the telephone to Director/Quarantine (or Epidemiology Unit or AMC if in a case of Malaria)
- There is poor coordination between the Airport Health Office and the SLAAS Medical Centres. The SLAAS/Medical Centre directly communicates with the Epidemiology Unit

Unit if an advice is needed-However the AASL/MO seeks advice from Airport Health Office if needed

- However the Director Quarantine is not included in the routine notification system of the POE.
- At present the Director/Quarantine immediately informs the DGHS and DDG (PHS) over the phone. The notification to the other agencies e.g. Director, Environment and Occupational Health Unit, Ministry of Health or Director General of the Department of Animal Production and Health is not documented.
- Notifying the Disaster Preparedness and Response Division, Ministry of Health was also not mentioned by the Director/Quarantine
- The Standard Notification forms (form H544) were not available with the Medical Centres of the BIA or the Colombo Harbour. Therefore routine notifications were not sent to the MOH where the patient resides or to the Chief PHMO. As a result the standard Notification Registers were not maintained and weekly reports are not sent to Epidemiology Unit
- Reporting is done from APMO to D/Q on Weekly, Monthly (GDF) and Annually-however there is no feedback/summary report from the D/Q on all cases notified from POE only quarterly statistics are sent to Director/Quarantine and the Epidemiology Unit by the Colombo Harbour.
- The poster on list of notifiable diseases published by the Epidemiology Unit was not on display. There were no manuals related to notifications e.g. surveillance case definitions
- There is no supervision from the local MOH or Regional Epidemiologist regarding surveillance
- The PHMO/APMO and PHPHI/APPHI were not specially trained on surveillance other than the training they have received during their basic training.
- The APMO/PHMO were not aware about the focal points to communicate directly in cases of cargo containing hazardous radioactive/nuclear material or chemical material on board. There were no chemical or radio-nuclear events reported within the past one year
- There is no official channel of communication with AASL Medical Centres.
- No machines were used for routine surveillance. However during the Avian Influenza pandemic in 2008 thermal scanners were acquired/installed at BIA and arriving travellers were requested to fill in the Health Declaration Form (HDF)
- There were no plans for rapid detection during a PHEIC at the Colombo Harbour
- The POE do not receive any feedback (copies of the WER or the QEB) from the Epidemiology Unit.

## Core capacity 4: Response

As per the WHO guidelines Multidisciplinary/multisectoral Rapid Response Teams (RRT) should be established and be available 24/7. They should be able to rapidly respond to a PHEIC.

- There is no Multi-hazard National Public Health Emergency Response mechanisms established
- Multidisciplinary/multisector Rapid Response Teams (RRT) were not identified for the multi-hazards approach of the IHR (2005) at the POE (BIA and Colombo Harbour). The main stakeholders at the Colombo Harbour and BIA are-SLPA, SL Customs, Department of immigration & Emigration, Ceylon association of Shipping Agents
- Roles/responsibilities of relevant stakeholders and the coordination mechanism with regard to a PHEIC at POE were not documented with the Director/Quarantine. There are Animal Quarantine Units and Plant Quarantine Units within the BIA and the Colombo Harbour.
- For animals affected /suspected of having an illness of PHEIC on board -assessment, isolation, treatment and other services is decided by the Animal Quarantine Unit of the Department of Animal Production and Health. For cargo containing contaminated livestock-seizure and destruction is decided by the Quarantine Unit of the Department of Animal Production and Health within the Port
- For cargo containing contaminated food on board-seizure and destruction of goods affected is decided by the Food and Drug inspectors of the Port in consultation with the Director, Environment & Occupational Health, Ministry of Health
- For cargo containing hazardous radioactive/nuclear material on board-assessment, isolation, treatment for persons, and seizure and destruction of goods affected would be decided by the Focal Point appointed by the Chairman of the Atomic Energy Authority. For cargo containing hazardous chemical material on board-assessment, isolation, treatment of persons, and seizure and destruction of goods affected would be decided by the by the Focal Point appointed by the Chairman, Central Environment Authority. Decontamination capabilities for chemical and radio-nuclear hazards at the national and district levels were not assessed
- The PHMO were not aware about the focal points to communicate directly in cases of cargo containing hazardous radioactive/nuclear material or chemical material on board.
- Standard Operating Procedures (SOP) for management of a PHEIC by the port health staff (MO and PHI) were not available at the POE. Port health staff was in the opinion that any additional health measures during a PHEIC will be decided by the NFP

Director/Quarantine and the Epidemiology Unit e.g entry or exit controls for arriving and departing travellers

- However national and district teams, including health care workers at health facility level, had been identified and trained in the management of other disasters. Corresponding training for managing multi-hazards approach of the IHR (2005) had not been undertaken.
- According to the PHMO in case of an affected or suspected ship, the Harbour Master will be communicated immediately over the phone by the PHMO advising not to allow the ship to enter any dock until authorized to do so by the PHMO, except for navigational reasons. However there was no designated mooring point of the Port to park such affected/suspected ship in Colombo Harbour
- . The PHMO also stated that they would advise the Master of the Ship not to allow any traveller on board to disembark and no cargo to be removed from the Ship until appropriate health measures have been taken and permission is granted by the PHMO.
- There are no facilities for the isolation/care of affected travellers within both POE—such cases will be transferred to a nearby hospital. During the SARS outbreak in 2003 affected travellers detected at BIA were transferred to Base Hospital Negumbo.
- If to be transferred, there is no circular designating the hospitals for transferring such patients. However as per the Quarantine Act, such travellers can be sent to IDH.
- At the BIA-SLAAS/MOO is responsible for assessment and care of medical illness/emergencies in travellers (passengers and crew other than SL Airlines/Mihin Air), providing access to ambulance/equipment and personnel for the transport of ill travellers to an appropriate medical facility.
- At SLPA- Any case/suspect detected by the PHMO is prearranged to be transferred to the IDH for isolation/quarantine in an ambulance borrowed from the SLPA/Medical Centre.
- There are no specially designated ambulances/equipment and no specially trained personnel for the transfer of travellers who may carry infection or contamination although appropriate PPE are available in adequate numbers at both POE.
- Case management protocols are not available for IHR hazards- A circular was issued during the SARS pandemic in 2003 declaring the guidelines and case definitions. However there were no circulars declaring the guidelines and case definitions chemical, radiological, nuclear events. The Ministry of Health, through the Epidemiology Unit and the Directorate for Quarantine has provided the technical support at POE during the influenza outbreak in 2008.
- Infection prevention and control (IPC) activities are well established at hospital level
- There is no specially designed programme to apply recommended measures to disinsect, derat, disinfect, decontaminate or otherwise treat baggage, cargo, containers, conveyances, goods or postal parcels in a PHEIC and there are no locations specially designated and equipped for this purpose within both POE

## Core capacity 5: Preparedness

As per the WHO guidelines preparedness includes the development of national, intermediate and community/primary level plans for a PHEIC. It also includes mapping of potential hazards and hazard sites, the identification of available resources, the development of appropriate national stockpiles of resources and support operations at the intermediate and community/primary response levels during a PHEIC.

- There was no national preparedness and response plan incorporating the all-hazards approach of the IHR (2005).
- However a disease-specific national preparedness plans for pandemic influenza (NIPP) was available but there were no districts preparedness plans. The 'National influenza Pandemic Preparedness Plan (NIPP) of Sri Lanka' was drafted in 2012. The NIPP is designed to enable the Ministry of Health to prepare for identifying and responding to an influenza pandemic. NIPP describes the strategies and activities to be undertaken by the Ministry of Health in close collaboration with the other key agencies. It does not cover methods for managing other communicable diseases or does not incorporate the all-hazards approach of the IHR (2005).
- A Public Health Emergency Preparedness Plan (draft) was also available for the BIA. The National Civil Aviation Public Health Emergency Preparedness Plan of Sri Lanka was developed as a result of one of the recommendations made by the assistant visit done by the international Civil Aviation organization Collaborative arrangement for the prevention and management of public health events in civil aviation (CAPSCA-AP) 28-29 May 2013. Actions subsequent to a suspected case being identified in flight, Screening of departure travelers where a PHEIC is declared within the Country and Measures for airport workers including airline staff working at the airport are included. A similar plan was not available for the Colombo Harbour
- No simulations/drills related to IHR were done at BIA or Colombo Harbour in the recent past.
- During the past 12 months - there were no training programmes conducted for Medical Officers, Nursing Officers and Supportive Staff identified from adjacent hospitals for attending to a PHEIC
- In addition there was no ambulances identified from an adjacent hospitals for immediate mobilization of cases/suspects in a PHEIC
- Stockpiling was practised for Tamiflu and personal protective equipment by the Director/Quarantine in consultation with the Chief Epidemiologist. There were stocks of PPE available at the BIA and Colombo Harbour



## Core capacity 6: Risk communication

An essential part of risk communication is the dissemination of information to the public outbreaks of disease and about health risks. As per the WHO guidelines, it is expected that risk communications promote the establishment of appropriate prevention and control action through interventions at individual, family and community levels.

- There was no designated 'spokesperson' in the Ministry of Health for risk communication during PHEIC or any other emergency.
- The websites of the Ministry of Health and the Epidemiology Unit are accessible to the media and public for information
- The NIPP has stated the communication channel in relation to reporting Avian Influenza cases/suspects. However there was no 'risk communication strategy' prepared by the NFP for a PHEIC. As a result communication partners and stakeholders were not identified and functional coordination and communication mechanisms were not established
- There were communication messages/materials for the common infectious diseases developed by the Epidemiology Unit and were done usually during the epidemic season.
- A risk communication channel was developed for the CHOGM by the DDG (MS), Ministry of health in 2013
- Risk communication mechanism to a zoonotic/chemical/radio-nuclear event not assessed

## Core capacity 7: Human resources

As per WHO guidelines, strengthening the skills and competencies of public health personnel is critical to the effective implementation of the IHR (2005)

### **The following gaps were identified**

- At the BIA there are three APMO and 8 PHI at present but a 24/7 service not provided by the Airport Health Office since a minimum of six APMO are required to provide such a service. At the Colombo Harbour a 24/7 service is provided by the Port health Office which has a cadre of 5 Medical officers and all positions were filled at the time of assessment. Although the cadre for PHPHI was two, only one PHI was in position.
- With the commissioning of new International Sea ports and Air ports in the country, carder positions have been revised and approved for the points of entry.
- At BIA and Colombo Harbour there were no plans to recruit additional staff (MOO, NOO, PHII, Supportive staff) in case of a PHEIC. However during the Avian Influenza pandemic in 2008, additional staff was mobilized by the DGHS from the adjoining hospitals.
- There is no approved duty list specific for the APMO, PHMO, APPHI or PHPHI
- Awareness of IHR (2005) among port health staff at BIA and CH was low. The staff has not been given any training on IHR related activities and an assessment of training needs had not been carried out during the last 5 years. Training-only 1 PHMO has undergone foreign trainings twice (on issuing ship sanitation certificates, regarding SARS) but it was not related to IHR (2005)
- The NIHS, Kalutara is the key public health training institute in the country. However, the training programs for MOH or PHI conducted by the NIHS do not include the IHR (2005).

## Core capacity 8: Laboratory

Laboratory services are needed for detection, investigation and response, in a PHEIC. The Medical Research institute is the designated laboratory for infectious diseases.

- A coordinating mechanism for laboratory services is established for Avian Influenza. The Medical Research Institute (MRI) in Colombo 08 has been identified as the focal point.
- Laboratory standard operating procedures (SOPs) for infectious and zoonotic diseases, Laboratory biosafety and laboratory biosecurity practices, Laboratory data management and reporting at MRI were not assessed
- Laboratory capacity to investigate chemical hazards and radio-nuclear events at the Central Environment Authority and Atomic Energy Authority were not assessed
- Whether a coordinating mechanism for laboratory services is available for chemical hazards and radio-nuclear events was not assessed
- Whether a list of international collaborating laboratories for investigating multi-hazards of IHR was available was not assessed
- Whether National guidelines are available for material transfer agreements for shipping specimens out of the country was not assessed

## Capacities for designated points of entry (PoE)

- IHR documents were in practice at the points of entry: the International Certificate of Vaccination or prophylaxis; the pertinent health section of the Aircraft General Declaration; the Ship Sanitation Control Certificate/Ship Sanitation Control Exemption Certificate; or the maritime declaration of health.
- There are no examination rooms or isolation facilities in the port health office of BIA or Colombo Harbour
- The communication facilities at BIA include the telephone and fax machine-no internet facilities
- All data are handles manually at BIA and Colombo Harbour. Record keeping was paper based. there was no web based surveillance system specific to IHR hazards
- There are no special programme for the control of vectors and reservoirs in and near points of entry

- There are certain activities carried out to ensure a safe environment for travellers including potable water supplies, eating establishments, flight catering facilities, public washrooms, appropriate solid and liquid waste disposal services and other potential risk areas, by conducting inspection programmes
- Bacteriological sampling are taken from 3 places within the Air Port per month and send to MRI (water and food surveillance), monthly report is received from MRI- however there are problems in arranging transport to send samples, in obtaining bottles

**Table 2 Gaps identified in the response, coordination, risk communication and preparedness, in relation to implementation of IHR (2005)**

Core capacity at POE	Gaps identified
National legislation and policy	<ol style="list-style-type: none"> <li>1. Primarily addresses 'contagious diseases' and already 'infected persons'.</li> <li>2. Non-delegation of the power of the Competent Authority to the implementers (Director/Quarantine and Medical Officer/Port Health) of the IHR (2005).</li> <li>3. Roles and responsibilities of the NFP, international notification, partnerships and coordination with other agencies having a stake in response in a PHEIC and preparedness not stated.</li> <li>4. IHR implementation documents not specified: Maritime Declaration of Health, Aircraft General Declaration, Ship Sanitation Control Certificates</li> <li>5. Non-delegation of the power of the Competent Authority (Medical Officer/Port Health) in ensuring of food safety of travellers and in control of vectors and reservoirs in and near POE - Food Act (No. 20 of 1991) and Prevention of Mosquito Breeding Act (No.11 of 2007) respectively.</li> </ol>
Coordination	<ul style="list-style-type: none"> <li>• Absence of a steering committee including the Ministry of Health and other relevant Ministries for implementation of IHR</li> <li>• Absence of SOP for coordination between the National Focal Points and the health and non-health stakeholders</li> </ul>
Surveillance	<ul style="list-style-type: none"> <li>• Absence of an effective surveillance system, with timely and comprehensive reporting, consisting of: rapid detection, risk assessment and alert.</li> <li>• Inconsistence of notification of a case or suspect of an infectious disease due to absence of clearly laid down flow of information, resulting from operation of separate Medical Centres within the POE.</li> <li>• Some of the IHR notifiable conditions are not included in the latest version of the list of notifiable diseases of Sri Lanka (2005) and Director Quarantine is not identified as a designated point to be</li> </ul>

	<p>notified in such events (19)</p> <ul style="list-style-type: none"> <li>• Unavailability of adequate facilities for risk assessment of a case or suspect of infectious origin at POE.</li> <li>• Lack of knowledge of Medical Officer/Port Health of the focal points to be contacted at POE, in case of a chemical or radio-nuclear event at the POE.</li> <li>• Periodical reports based on notifications are not generated nor is the information shared with Medical Officer/Port Health</li> </ul>
Response	<ul style="list-style-type: none"> <li>• Absence of adequate facilities for isolation of affected travellers within the POE, resulting in transferring them immediately to the closest hospital.</li> <li>• Absence of designated hospitals for managing cases or suspects for each POE.</li> <li>• Absence of specially designated ambulances, equipment or trained personnel at the POE nor they being identified from adjacent hospitals for immediate transportation of cases or suspects to an appropriate medical facility.</li> <li>• Absence of protocols for disposal of solid and liquid waste; decontamination of baggage, cargo, containers, conveyances, goods or postal parcels; disposal of human remains in a PHEIC of infectious origin</li> <li>• Absence of Rapid Response Teams, coordination mechanisms and SOPs with regard to a PHEIC at Sea Ports.</li> <li>• Absence of a location, specially designated and equipped for parking an affected or suspected Ship in the event of a PHEIC at Sea Ports</li> </ul>
Preparedness	<ul style="list-style-type: none"> <li>• Absence of a National Preparedness and Response Plan incorporating all-hazards approach of the IHR (2005), apart from the pandemic preparedness plan developed by the Epidemiology Unit during the Avian Influenza pandemic (18).</li> <li>• Absence of a Preparedness and Response Plan for PHEIC at the sea ports</li> <li>• Non-conduct of simulations to respond to a PHEIC at POE.</li> </ul>
Risk communication	<ul style="list-style-type: none"> <li>• Absence of a 'risk communication strategy' apart from the IEC material developed by the Epidemiology Unit during the SARS and Avian Influenza epidemic seasons or a designated 'spokesperson' in the Ministry of Health in the event of a PHEIC</li> </ul>

Human resource	<ul style="list-style-type: none"> <li>• Absence of job descriptions for the port health staff.</li> <li>• Absence of in-service training opportunities to Port Health Officers on IHR and no training needs assessments conducted during last 5 years</li> <li>• IHR is not included in the basic training curricular of medical undergraduates or public health staff</li> </ul>
Laboratory capacity	<ul style="list-style-type: none"> <li>• Laboratories not linked to the PHEIC response mechanism</li> </ul>

## Recommendations

### National legislation for the IHR (2005)

- Gaps Quarantine and Prevention of Diseases Ordinance (No 12 of 1952) needs to be identified to accommodate IHR and other relevant domestic and the international regulations
- Director Quarantine and Port Health officer and the airport health officers at the PoE needs to be identified as competent authority to suit the present context.

### Coordination and IHR NFP communications

- Identification of roles and responsibilities of relevant authorities and stakeholders in regard to IHR implementation.
- Preparation of Standard Operating Procedures (SOP) for implementation/coordination between NFP and inter-sectoral partners.
- Enhance communication, coordination and collaboration between the Ministry of Health and other relevant stakeholders
- Establish a steering committee including the Ministry of Health and other relevant Ministries to provide the official structure for collaboration.
- Establish IHR website or webpage



### **Capacities for public health surveillance**

- Improve screening facilities at points of entry
- Development of a national level country wide Port health informatics system to capture data related to routine procedures as well as procedure for PHEIC.
- Conversion of paper based record keeping at Points of Entry (Sea Ports and Air Ports) to e-forms

### **Capacities for public health response**

- Establishment of national and district level Rapid Response Teams (RRTs) to respond to a PHEIC
- Evaluation and update the emergency response procedures after a real or simulated public health response.
- Provide appropriate space, separate from other travellers, to interview suspect or affected persons
- Provide access to specially designated equipment, and to trained personnel with appropriate personal protection, for the transfer of travellers who may carry infection or contamination
- Apply recommended measures to disinsect, derat, disinfect, decontaminate or otherwise treat baggage, cargo, containers, conveyances, goods or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose

### **Capacities for public health preparedness**

- Conduct a national risk assessment to identify country specific potential public health event.
- Mapping available national resources for IHR relevant hazards
- Develop a Multi-hazard National Public Health Emergency Preparedness and Response Plan with the role of multi-sectoral partners.
- Nominate a national coordinator and contact points for relevant point of entry, health and other agencies
- Incorporate IHR related hazards into the national emergency response plan(s)
- Regularly assessment and maintaining stockpiles (critical stock levels) accessible for responding to priority biological, chemical, radiological events and other emergencies.
- Conduct a simulation of a PHEIC at POE in collaboration with the Disaster Preparedness and Response Unit, Ministry of Health and the Ministry of Disaster Management

## **Risk communication**

- Develop risk communication plans
- Conduct risk communication training for Public health staff

## **Human resources**

- Conduct needs assessment to identify gaps in human resources, logistics and training to meet IHR requirements
- Preparation of a training manual based on the SOPs for the Port Health Officers
- Conduct regular in-service training programmes to enhance the capacity of Port Health Officers e.g. inspection of conveyances
- Ensure minimum required trained personals and logistics are in place to meet IHR requirements.

## **Laboratory capacities**

- Strengthen national laboratory capacity to meet diagnostic requirements to cover all hazards of IHR (2005)
- Strengthen the laboratory surveillance system
- The list of international collaborating laboratories for investigating infectious, zoonotic chemical, radio-nuclear investigations needs to be identified which can be contacted in the event of a hazard requiring their assistance.
- Ensure specimen collection kits are available, especially at the peripheral level to transport specimen to the MRI

## **References**

International Health Regulations (2005), Second Edition, World Health Organization  
[www.who.int/ihr](http://www.who.int/ihr)