

## **National Avian/Pandemic Preparedness and Response Programme – Sri Lanka**

Sri Lanka's location in the South East Asian Region among the countries that had reported recent H5N1 Avian Influenza outbreaks among poultry and in some cases in humans, had posed a constant threat of the disease manifesting in the country. Further Sri Lanka has a large poultry industry with a considerable proportion of people engaged in backyard poultry operations. Being a tropical island it attracts over a two hundred species of migratory birds fleeing cold winters in temperate regions every year. Considering these risk factors OIE had classified Sri Lanka in the high risk category for pandemic influenza. Pandemic Influenza Preparedness and Response activities in the country began in 2005 with due guidance and support from the WHO and OIE. WHO and World Bank fund most of the activities under this national programme which is headed jointly by the Ministries of Health and Livestock Development & Agriculture. In the Ministry of Health its communicable disease centre - the Epidemiology Unit, the national laboratory - Medical Research Institute and the communication and health promotion department - Health Education Bureau are involved in managing these activities along with the Department of Animal Production and Health (DAPH) in the Ministry of Livestock Development and Agriculture.

The following activities have been initiated under the National Avian/Pandemic Influenza Preparedness and Response Programme in the country and are ongoing presently.

### **Preparedness and Communication**

#### **1.1 Preparedness**

1. National Steering Committee on Avian/Pandemic Influenza Preparedness co-chaired by the Ministers of Health and Agriculture was formed to provide political leadership to the programme. This committee consists of high level officials from the two ministries and it meets to discuss related policy and political issues and to coordinate with other government Ministries at in an inter-ministerial capacity when relevant.
2. National Technical Committee on Avian/Pandemic Influenza Preparedness is a working group of high level technical officers of the two main Ministries and other relevant government, non government and international donor agencies. The committee is co-chaired by the Director General of Department of Animal Production & Health of the Ministry of Livestock Development & Agriculture and

the Director General of Health Services of Ministry of Health. Its membership include representatives from all the important key stakeholders involved in the scope of the preparedness programme such as heads of main laboratories and research centers in the two sectors, senior technical officials from different sectors covering epidemiology, health education, agriculture, veterinary science, education, disaster management, wild life and environment, representatives from supplies departments of both sectors, directors of major curative human and animal health institutions, representatives from media, officials from main non government organizations and donor agencies related to two sectors and officials representing armed forces. These members meet every month to monitor and evaluate the progress of the ongoing activities and to offer guidance and solutions to improve activities within the programme.

3. Provincial technical committees on Avian/Pandemic Influenza Preparedness had been established in 4 out of the nine provinces in the country. These committees are fashioned along the structure of its national counterpart and hold the same responsibilities on the activities carried out within the provinces. This activity is still ongoing and District committees are also to be established under the patronage of these provincial committees.
4. A National Pandemic Influenza Preparedness Plan (NIPP) with scientific and technical information on prevention and containment of potential pandemic influenza outbreaks in animals and on response to such infections in humans had been formulated by the two main departments involved in the preparedness programme, the Epidemiology Unit and the DAPH of the two ministries.
5. Specific guidelines on response/management of poultry outbreaks of avian influenza and human cases have been developed by the Epidemiology Unit and the DAPH and distributed as government circulars among all human and animal health staff.
6. Preparedness plans for all 26 administrative districts of the country had been developed by the district human and animal health authorities.
7. A national workshop on table top exercises for evaluating and updating the present NIPP had been held with the participation of all the key stakeholders involved in the Avian/Pandemic Influenza Preparedness.

## **1.2 Communication**

1. The National Communication Strategy on Avian/Pandemic Influenza Preparedness had been developed by the Health Education Bureau (HEB), Epidemiology Unit and the DAPH to outline all the activities related to the communication component of the preparedness programme. It is reviewed and updated periodically. This activity was funded by the UNICEF.
2. A national community survey on behavior with regard to Avian/Pandemic Influenza Preparedness funded by UNICEF had been completed in order to assess the ground situation as a pre-requisite for development of communication material for the programme. A post intervention survey is also planned for the future.
3. Communication materials for public in print form, TV and radio spots for public in electronic media and education materials for animal and human health care workers in print form are being developed in local languages of Sinhala and Tamil by the HEB and the DAPH.
4. Seminars on Avian/Pandemic Influenza preparedness and response for media personnel at national and district level have been conducted by the HEB and the DAPH.
5. Risk communication programmes on Avian/Pandemic Influenza Preparedness for animal and human health care workers are being conducted by the HEB and the DAPH.
6. Audio and Visual laboratories of HEB and DAPH had been upgraded to accommodate the workload within the Avian/Pandemic Influenza Preparedness Programme.

## **Surveillance and Detection**

### **2.1 Laboratory Capacity and Infrastructure**

1. The main laboratory, Medical Research Institute (MRI) has been recognized as a National Influenza Centre (NIC) and it collaborates with the global influenza laboratory network.
2. Virologists and laboratory technicians of the Virology Department in the National Influenza Centre (Medical Research Institute – MRI) of the country had been trained overseas on influenza laboratory diagnosis and detection

3. Training workshops for virologists, microbiologists and laboratory technicians by foreign experts on influenza detection and surveillance had been conducted.
4. Molecular and Viral laboratories in the National Influenza Centre had been upgraded under Avian/Pandemic Influenza Preparedness Programme
5. Essential equipment and stocks of reagents had been purchased for the Virology Department in the National Influenza Centre under the Avian/Pandemic Influenza Preparedness Programme

## **2.2 Epidemiology Capacity and Infrastructure**

1. A number of Epidemiologists from the Epidemiology Unit and the districts had been trained overseas on outbreak investigation and response, risk communication, rapid containment and avian influenza pandemic preparedness
2. All regional epidemiologists and relevant technical officers from key related fields had been trained locally on rapid containment of pandemic influenza with resource persons from WHO
3. Local computer network of the Epidemiology Unit had been upgraded
4. A special operation room – ‘Influenza Operation Cell’ has been established with new recruits e.g financial assistants, programme assistants, programmers and data entry operators, to facilitate smooth running of activities of the national avian influenza preparedness programme and its work is still ongoing

## **2.3 Sentinel, Laboratory based Surveillance for Influenza Like Illness (ILI)**

Twenty hospitals had been selected as sentinel sites for influenza surveillance. These hospitals are mostly tertiary hospitals in identified high risk districts for possible AI transmission. An effective epidemiological and laboratory surveillance of influenza cases attending the Out Patient Departments (OPD) of these institutions had been established. Each hospital is expected to send at least 30 respiratory samples from these patients to the National Influenza Centre, MRI every month where they are tested for influenza viruses to identify current circulating influenza strains in the country.

- 1 These hospitals are also expected to send weekly data returns on the influenza patients to the Epidemiology Unit where the data are entered into a database for further analysis

- 2 This human influenza surveillance programme is complementary to the routine animal influenza surveillance carried out by DAPH on poultry and migratory birds under national avian influenza preparedness programme
- 3 Hospital staff especially those in the OPD are being trained on AI preparedness and on influenza surveillance and influenza surveillance activities in these sentinel hospitals are periodically reviewed by the Epidemiology Unit

Surveillance of Severe Acute Respiratory Tract Infections (SARI) is being established in 3 hospitals in the country. Respiratory specimen for laboratory surveillance and epidemiological data from inward SARI patients will be collected under this activity.

### **Response and Containment**

1. Rapid Response Teams have been established in all 26 districts under the regional epidemiologists
2. Preparedness plans for each of the sentinel hospital had been developed by the hospital authorities with due guidance from regional epidemiologists
3. Isolation units have been established in all these 20 sentinel hospitals as part of the national avian influenza preparedness and response programme. This activity included refurbishment of the existing units and procurement of necessary equipment
4. An emergency rehabilitation plan for the main AI referral centre in the country, the Infectious Diseases Hospital in Colombo has been developed.
5. Emergency stocks of Personal Protective Equipment (PPE) and anti viral agent Oseltamivir have been supplied to all sentinel hospitals and these will be replenished on expiry
6. Hospital staff in sentinel hospitals are being trained on case management, response , containment and infection control
7. Simulation exercises have been conducted at Colombo South Teaching Hospital and are planned in other selected sentinel hospitals. This activity will assess the level of preparedness of these institutions.

Some of the above listed activities are being funded by the World Health Organization and several of the activities under Communication component were funded by UNICEF. But financial support for most was funded by the World Bank under their Health Sector Development Project (HSDP). The AI component of this project commenced its funding

in 2008 and wrapped up in 2009. CDC Atlanta, USA has pledged support for planned expansion of these activities and implementation of other associated activities to achieve the optimum preparedness and response level suitable for the country..