Influenza Surveillance

As part of the pandemic preparedness activities that was initiated in the country for Avian/Pandemic Influenza, this activity in humans had been established complementary to the influenza surveillance already initiated among animals by the Department of Animal Production and Health (DAPH). Both these activities are supervised by the National Technical Committee for Avian/Pandemic Influenza Preparedness. Human and animal influenza surveillance activities are expected to act as the early warning system for a possible Avian/Pandemic Influenza outbreak in the country.

Human Influenza surveillance

Human Influenza surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory tract Infections (SARI) surveillance.

ILI surveillance has been initiated in 20 hospitals identified as sentinel surveillance sites for Avian/Pandemic Influenza. These institutions have been selected considering their importance in geographical location and also in being a ‘hot spot’ for bird migration. They are expected to send at least thirty (30) samples per month from patients with influenza like illness (ILI) attending OPD to the Medical Research Institute (MRI). MRI is the national Influenza Centre (NIC) in Sri Lanka for human influenza surveillance. ICN is the responsible officer for this activity supervised by the Microbiologist of the institution. Once ILI patients are diagnosed by the medical officers of the OPD, ICN would select those from whom specimen are collected out of those. She or he would also collect the information on the number of total OPD attendees and
the number with ILI daily and consolidate this information into a weekly return that is sent to the Epidemiology Unit.

SARI surveillance has been established in 3 hospitals in the country; Lady Ridgeway Children’s Hospital (LRH), Colombo South Teaching Hospital (CSTH) and Teaching Hospital Peradeniya. These are expected send in up to 20 respiratory samples per month from inward patients admitted with severe acute respiratory tract infections. For the epidemiology component of this activity ICN would collect the information on the number of total inward patients in relevant wards and the number with SARI, daily and consolidate this information into a weekly return that is sent to the Epidemiology Unit.

Following case definitions are used for human influenza surveillance.

**ILI:** Sudden onset of a fever over 38°C and cough or sore throat in absence of other diagnoses

**SARI:** Those who meet ILI case definition with shortness of breath or difficulty in breathing and who requires hospital admission

**Animal Influenza Surveillance**

This is carried out by the Department of Animal Production and Health (DAPH) of the Ministry of Livestock Development who is the partner of the Ministry of Health in Avian/Pandemic Preparedness activities. Under routine animal influenza surveillance, pooled and serum samples are collected randomly from backyard farms, industrial farms and hot spots for migratory birds. These also include identified special targets such as wet markets, processing plants, parent stocks, pet birds and ducks. Any unusual bird deaths or disease outbreaks are also investigated. Sampling is mainly carried out by the Veterinary Investigation Officers (VIO).

Both human and animal influenza surveillance activities are monitored by the National Technical Committee for Avian/Pandemic Influenza Preparedness. This 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 and the Director General of Health Services of Ministry of Health.