

Current situation of seasonal influenza in Sri Lanka

The influenza viruses

Seasonal influenza viruses are largely grouped as A, B and C. The Influenza A virus sub types H1N1 and H3N2 have been in circulation causing influenza recently. In addition, there are two type B viruses that are also circulating as seasonal influenza viruses. Influenza C poses much less of a disease burden. Globally seasonal influenza has shown a decreasing trend according to the World Health Organization surveillance data. Similarly in tropical Asia, influenza activity has been low (WHO 2015).

Global burden of influenza

Based on FluNet reporting, during the latter half of April and early May 2015, 26.1% of the globally tested samples have been influenza A while 73.9 % were reported to be influenza B. Of the sub typed influenza A viruses, 53.8% were influenza A (H1N1) pdm09 and 46.2% were influenza A (H3N2).

Burden of influenza in Sri Lanka

Cases of influenza continue to be reported from all areas of the country. By the third week of May 2015, the Medical Research Institute has tested 220 samples positive samples for influenza ; influenza A - 139 and influenza B – 81 (National Influenza Center, MRI).

Sentinel site surveillance of influenza

Epidemiology Unit, Sri Lanka conducts influenza sentinel sites surveillance at 19 selected hospitals in order to check the current circulating viral pattern. Surveillance is carried out for Influenza Like Illness (ILI) and Severe Acute Respiratory Infection (SARI). ILI is defined as an acute respiratory illness with measured temperature $\geq 38^{\circ}\text{C}$ and cough, with onset within the past ten days. SARI is defined as requiring hospitalization in addition to the features of ILI (WHO 2014). Samples of nasopharyngeal aspirates are collected up to 10 per month from ILI patients and up to 05 per month from SARI patients.

During March 2015 3798 ILI patients and 137 SARI patients were reported. They consisted of 1.08% and 1.93 % of the total OPD visits and total hospital admissions respectively. Of the 111 ILI samples collected during March 2015, 07 samples were positive for influenza A (influenza A H1N1 – 05, influenza A H3N2 01, un-typed – 01) and influenza B - 11. Among the 19 SARI samples received during March 2015, only 01 has been positive for influenza A H3N3.

During April 2015 another 1526 ILI patients and 166 SARI patients were reported. They amounted up to 1% and 2.85% of the total OPD visits and total hospital admissions respectively. It was noted that from March 2015 to April 2015, the number of total SARI patients reported has increased by about 1%.

Outbreak investigations by the Epidemiology Unit

During the first week of March 2015, seven suspected cases of influenza were reported to the Epidemiology Unit from Thissamaharama, which included five pregnant women and two children. Of the pregnant women two were positive for influenza A. However the cases were found to be geographically

scattered on further investigation. It was also noted that three pregnant women who died during the month of April have been found to be positive for influenza A.