



Highlights of Diseases and Events in January 2015

Situation of Influenza

From 1 January to 2 February 2015, total 4,041 influenza cases were reported, with attack rate of 6.27 per 100,000 populations. The highest attack rate was found in the northern provinces, including Chiang Mai, Lampang and Lumphu. Four deaths were attributable to influenza and case fatality rate was 0.07. Among 4 deaths, 3 were from Nakhon Ratchasima Province and caused by influenza A (H1N1 2009) while one of them, without any laboratory confirmation, was from Surat Thani Province.

The number of influenza cases has been increasing more than 2 times of median since November until the end of 2014. In addition, the number of influenza case reported in January was as high as that of in 2014 and more cases are expected to be reported further. During February-March 2015, about 7,000-9,000 cases are estimated to be reported every month, which will be similar to the same period of the last year.

During 5th week of 2015, more than 10% of proportion of influenza-like illness (ILI) was reported in Bangkok. Furthermore, northern provinces of Lampang, Phrae and Uthai Thani, and northeastern provinces of Buriram and Sisaket have potential to identify more ILI cases.

In January 2015, 2 outbreaks were reported to the Bureau of Epidemiology. One of the outbreaks occurred at a school in Bangkok, involving 40 cases with 9 cases positive by rapid test for influenza B while another outbreak was in 4 private schools located in Muang District of Chiang Mai Province with 5

cases positive for influenza A (H3N2), 2 cases for influenza A (H1N1 2009) and 2 cases with none.

The highest number of death was found in Nakhon Ratchasima Province since the end of 2014 until the beginning of 2015. Laboratory testing of patients since 1 October 2014 to 21 January 2015 revealed 476 cases of influenza A (unknown subtype), 131 cases of influenza B (unknown subtype), 65 cases of influenza A (H1N1 2009) and 3 cases of influenza A (H1). Isolation of fatal cases for the same period resulted 11 cases of influenza A (H1N1), 3 cases of influenza B (unknown subtype) and 2 cases of influenza A (unknown subtype).

The ILI surveillance data from the National Influenza Center of Department of Medical Science and hospital-based sentinel surveillance for pneumonia showed that influenza A (H3N2) mostly identified since at the end of 2014 till January 2015 was different from the virus found at the beginning of 2014, influenza A (H1N1) 2009, and the one identified in the middle of the year (influenza B). However, the number of specimens sent for laboratory testing was highly reduced in the second half of the year 2014. Isolation of specimens for influenza during October to December 2014 revealed that 100% of patients with influenza A (H3N2) had Switzerland strain which was same as the viral strain of H3N2 identified in Hong Kong and different from the strain currently used in the vaccine. Moreover, some patients with influenza B had Brisbane strain which differed from the vaccine used in 2014 as well.

Although trends of influenza cases and deaths at the beginning of 2015 in Thailand were lower than that of previous year, the situation should be closely monitored. As the influenza H3N2 virus identified was Switzerland strain and different from the strain in the vaccine used in last year, the effectiveness of the influenza vaccine to prevent outbreaks in the beginning of 2015 might be low, which was similar to study results from many other countries.