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FLU EXPRESS

衞生防護中心 Centre for Health Protection
保障市民健康 Protecting Hong Kong's health

Flu Express is a weekly report produced by the Respiratory Disease Office of the Centre for Health Protection. It monitors and summarizes the latest local and global influenza activities.

Local Situation of Influenza Activity (as of Aug 12, 2015)

Reporting period: Aug 2 – 8, 2015 (Week 32)

- The summer influenza season had already ended and the overall influenza activity in the past week remained at a low level.
- The Centre for Health Protection collaborated with the Hospital Authority and private hospitals to monitor influenza associated intensive care unit (ICU) admissions or deaths (aged 18 years or above) during the summer influenza season. Between Jun 12 and Aug 7, there were 185 cases of influenza associated ICU admission or death, in which 135 were fatal cases. During the last week of the enhanced surveillance period (Aug 2 to 7), 10 cases were recorded. Separately, no cases of severe paediatric influenza infection (aged below 18 years) were recorded in the same period. The total number of severe cases recorded among all age groups from Aug 2 to 7 was 10.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Except for those with contraindications, influenza vaccination is suitable for all persons aged 6 months or above.
- Children (aged between six months and less than 6 years, or attending a kindergarten or child care centre in Hong Kong) and elderly (aged 65 years or above), who are eligible, can be subsidized for seasonal influenza vaccination from enrolled private doctors participating in the Government's vaccination subsidy schemes. 2014/15 subsidy schemes will end on Aug 14, 2015.

Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2011-15

In week 32, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) decreased to 5.2 ILI cases per 1,000 consultations from 8.0 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors increased to 36.0 ILI cases per 1,000 consultations from 31.4 recorded in the previous week (Figure 1, right).

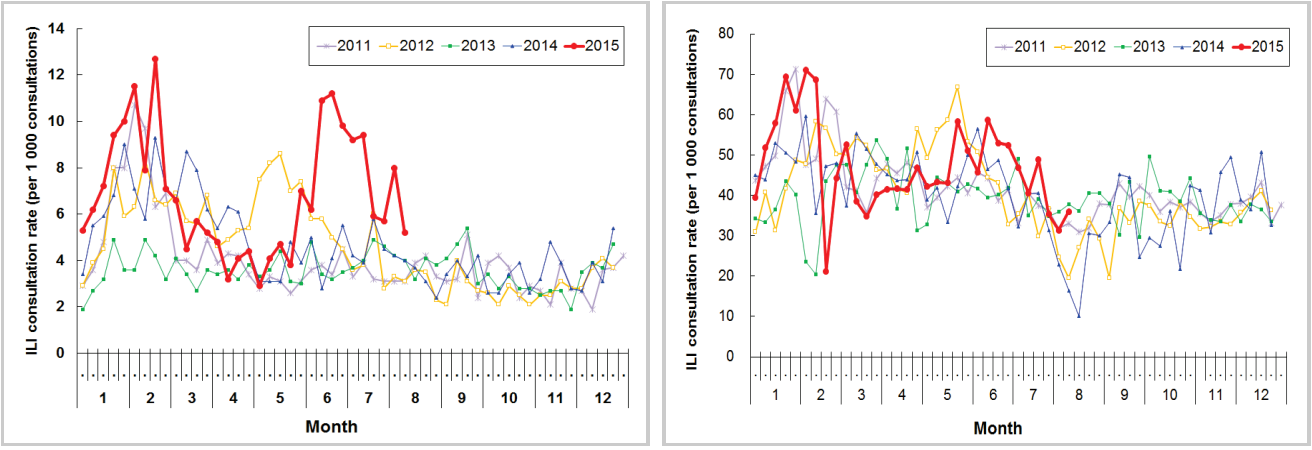

Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2011-15

Laboratory surveillance, 2011-15

Among the respiratory specimens received in week 32, 194 (6.69%) were tested positive for seasonal influenza viruses, including 7 (0.24%) influenza A(H1), 154 (5.31%) influenza A(H3), 30 (1.04%) influenza B and 3 (0.10%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 6.69%, which was similar to 6.79% recorded in the previous week (Figure 2). Among influenza virus detections, the proportion of A(H3N2) decreased from 81.6% to 79.4% in the last two weeks while that of B was 15.3% which was similar to 15.5% in previous week. That of A(H1) and C remained low.

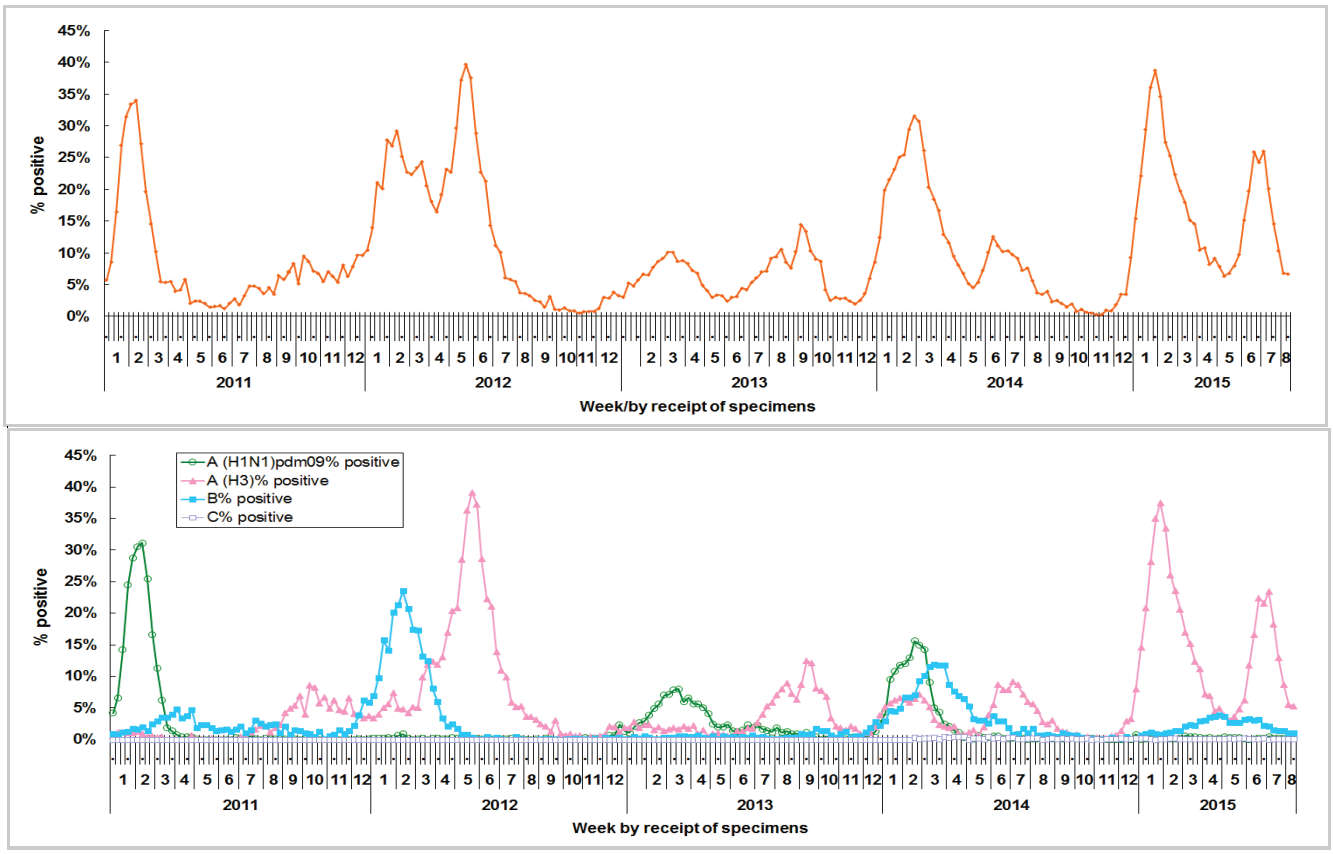

Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2011-15 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2011-15

In week 32, 4 ILI outbreaks (affecting 17 persons) occurring in schools/ institutions were recorded, as compared to no outbreaks recorded in the previous week (Figure 3). In the first 4 days of week 33 (Aug 9 to 12, 2015), no institutional ILI outbreaks were recorded.

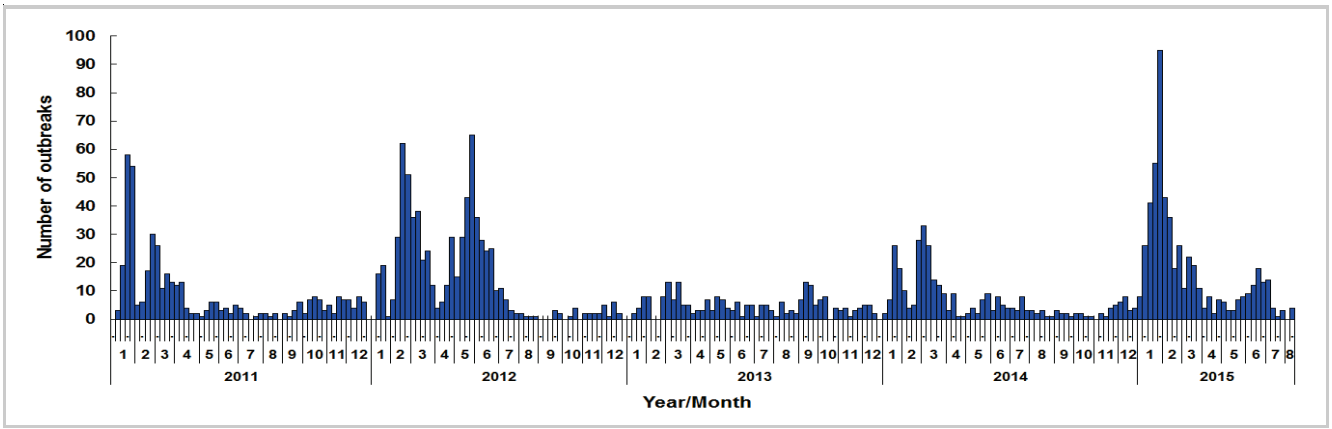

Figure 3 ILI outbreaks in schools/institutions, 2011-15

Rate of influenza-like illness syndrome group in accident and emergency departments, 2011-15#

In week 32, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 123.1 (per 1,000 coded cases), which was similar to the rate of 122.7 in the previous week (Figure 4).

#Note: The influenza-like illness syndrome group includes codes such as influenza, upper respiratory tract infection, fever, cough, throat pain, and pneumonia.

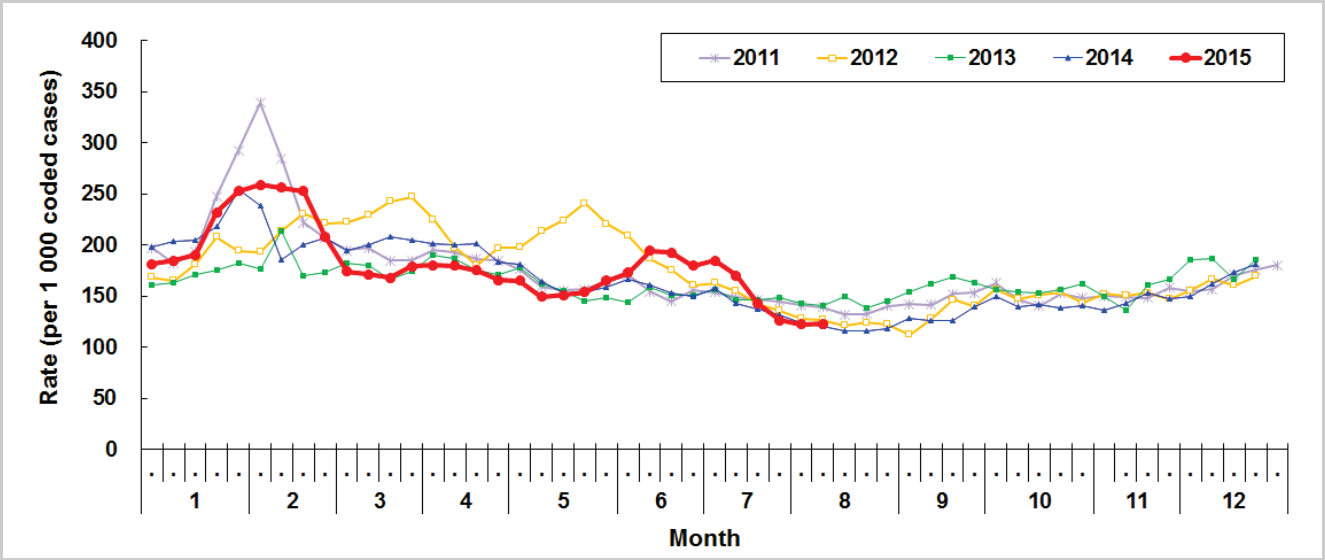

Figure 4 Rate of ILI syndrome group in AED, 2011-15

Influenza associated hospital admission rates and deaths in public hospitals based on discharge coding, 2011-15

In week 32, the admission rates in public hospitals with principal diagnosis of influenza for persons aged 0-4 years, 5-64 years and 65 years or above were 0.42, 0.03 and 0.27 cases (per 10,000 people in the age group) respectively, as compared to 0.53, 0.02 and 0.40 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

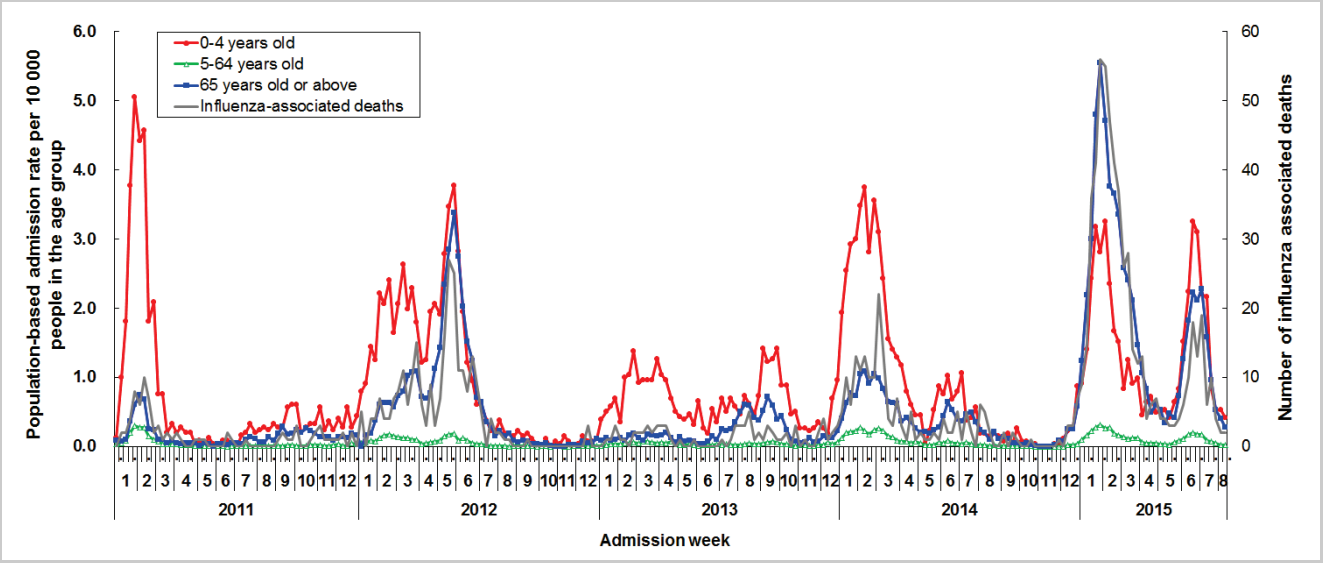

Figure 5 Influenza associated hospital admission rates and deaths, 2011-15

Fever surveillance at sentinel child care centres/ kindergartens, 2011-15

In week 30, 0.73% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.63% in the week 29 (Figure 6). The surveillance for week 31-32 was suspended due to summer holiday.

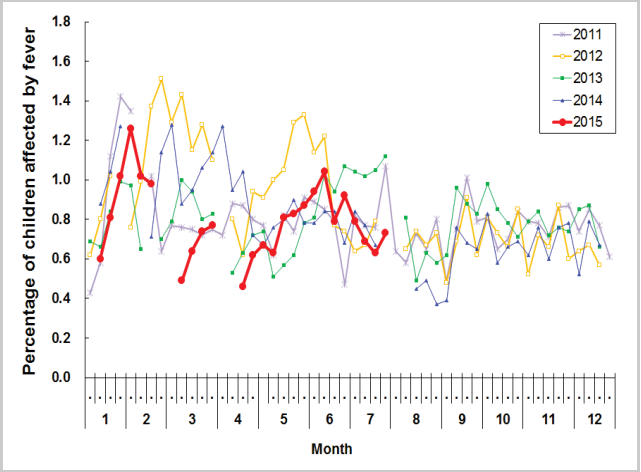

Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2011-15

Fever surveillance at sentinel residential care homes for the elderly, 2011-15

In week 32, 0.12% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), as compared to 0.09% in the previous week (Figure 7).

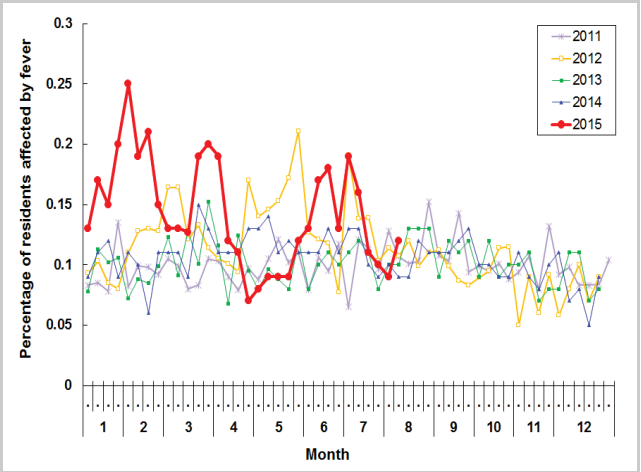

Figure 7 Percentage of residents with fever at sentinel RCHE, 2011-15

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2011-15

In week 32, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.21 ILI cases per 1,000 consultations as compared to 1.27 in the previous week (Figure 8).

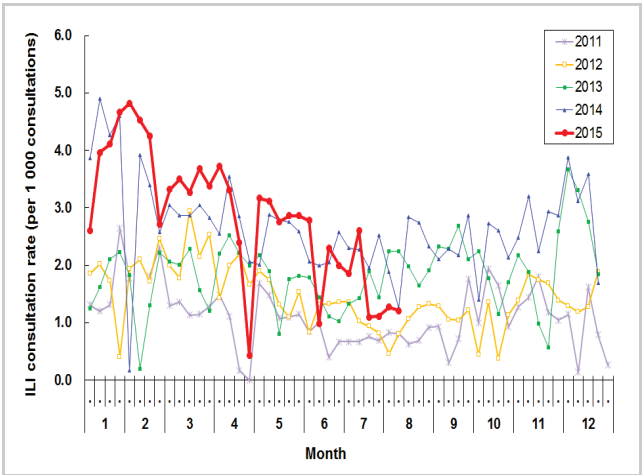

Figure 8 ILI consultation rate at sentinel CMP, 2011-15

Surveillance of severe influenza cases

(Note: The data reported are provisional figures and subject to further revision)

- During activation of the enhanced surveillance for severe influenza infection between Jun 12 and Aug 7, 2015, a total of 185 adult severe cases (including 135 deaths) and four paediatric severe cases were recorded (Figure 9). Among them, 140 were influenza A(H3N2), 27 were influenza A pending subtype, 19 were influenza B, two were influenza A(H1N1) and one contracted both influenza A(H3N2) and B. In the last winter season in early 2015, 647 adult cases (including 501 deaths) and 18 paediatric cases (including 1 death) were filed.

Enhanced surveillance for severe seasonal influenza (Aged 18 years or above)

- During the last week of the enhanced surveillance period (Aug 2 to 7),, 10 cases of influenza associated ICU admission/ death were recorded, in which 6 of them were fatal.

Surveillance of severe paediatric influenza-associated complication/death (Aged below 18 years)

- In week 32 and the first 4 days of week 33 (Aug 9 to 12), there were no new cases of severe paediatric influenza-associated complication/death.

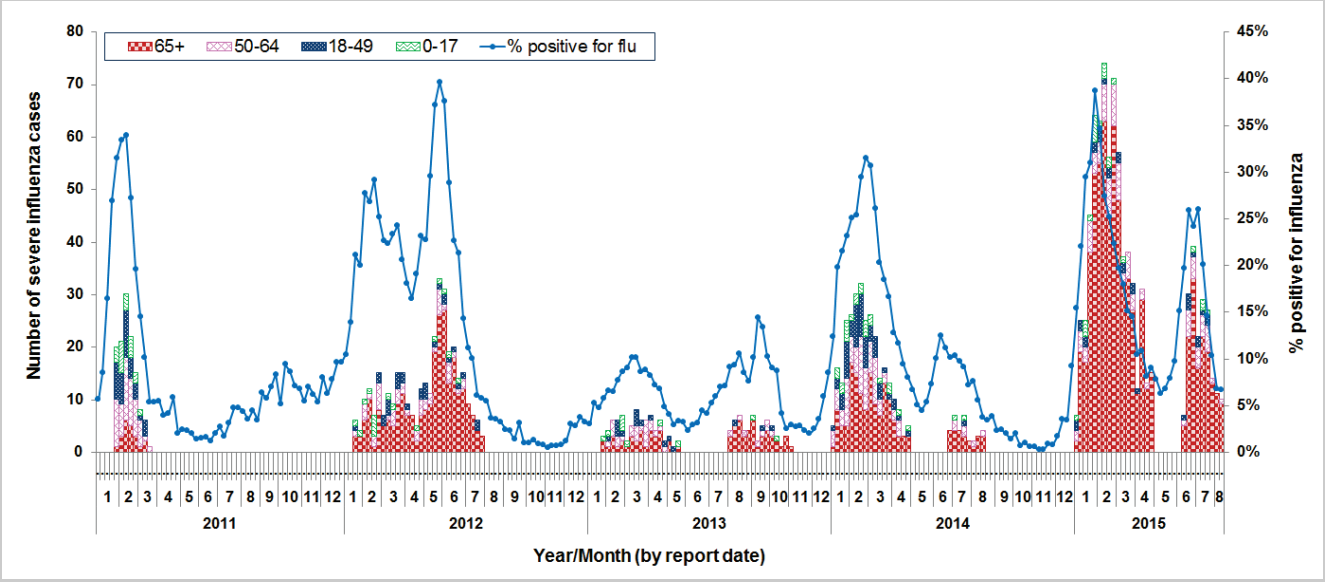

Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2011-2015
Remark: The surveillance system for severe influenza cases aged 18 years or above was only activated intermittently during influenza seasons.

Surveillance of oseltamivir resistant influenza A(H1N1)pdm09 virus infection

- In week 32 and the first 4 days of week 33, 2015 (Aug 9 to 12, 2015), there were no new reports of oseltamivir (Tamiflu) resistant influenza A(H1N1)pdm09 virus infection. There are totally 47 reports of oseltamivir resistant influenza A(H1N1)pdm09 virus detected in Hong Kong since 2009.

Global Situation of Influenza Activity

- In the United States (week ending Aug 1, 2015), the proportion of outpatient visits for influenza-like illness is below the national baseline.
- In Canada (Jul 19 to Aug 1, 2015), the influenza activity remained at inter-seasonal levels with only sporadic detections of influenza A.
- In the United Kingdom (week ending Jul 26, 2015), the influenza activity remained at a very low level.
- In Europe (Jun 29 to Aug 2, 2015), all countries reported low intensity of influenza activity.
- In Australia (Jul 18 to 31, 2015), influenza activity continued to increase nationally this fortnight. The season may be close to peaking in some areas but may continue to increase in others. Influenza B continues to be the dominant influenza type, comprising two thirds of all notifications.
- In New Zealand (week ending Aug 2, 2015), the ILI consultation rate has continued to increase and was above the average epidemic level in the same period from 2000 to 2013. Among the specimens received from sentinel and non-sentinel surveillance, there were 196 influenza B detections, 191 influenza A(not sub-typed), 54 influenza A(H3N2) and one influenza A(H1N1)pdm09.
- In Mainland China (week ending Aug 2, 2015), southern China is still in summer influenza season. Influenza A(H3N2) is the predominating virus. In northern China, the influenza activity remained at a low level with sporadic detections of influenza virus.

Sources:

Information have been extracted from the following sources when updates are available: United States Centers for Disease Control and Prevention, Public Health Agency of Canada, Public Health England, Joint European Centre for Disease Control and Prevention-World Health Organization/Flu News Europe, Australian Department of Health, New Zealand Ministry of Health and Chinese National influenza Center.