

FLU EXPRESS



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 Jul 8, 2015)

Reporting period: Jun 28 – Jul 4, 2015 (Week 27)

- Hong Kong is currently in the summer influenza season. The latest surveillance data showed that the local influenza activity still remained at a relatively high level.
- The Centre for Health Protection has collaborated with the Hospital Authority and private hospitals to monitor influenza associated intensive care unit (ICU) admissions or deaths (aged 18 years or above) since Jun 12, 2015. As of Jul 8, there were 108 cases of influenza associated ICU admission or death, in which 77 were fatal cases. In past week (Jun 28 to Jul 4), 22 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 in the past week was 22.
- 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 starting from Oct 6, 2014.

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

In week 27, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) decreased to 9.2 ILI cases per 1,000 consultations from 9.8 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors decreased to 46.8 ILI cases per 1,000 consultations from 52.4 recorded in the previous week (Figure 1, right).

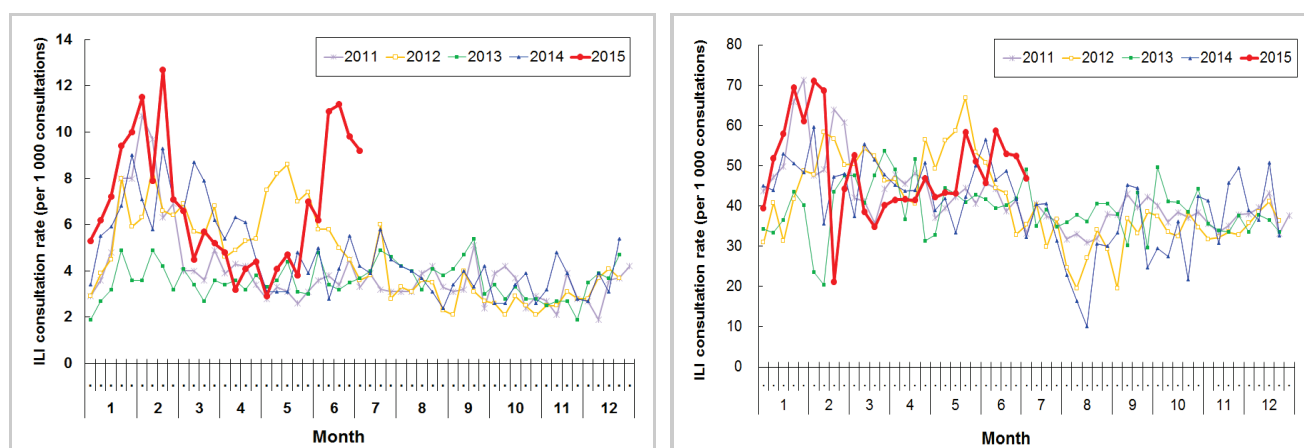


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2011-15

Laboratory surveillance, 2011-15

Among the respiratory specimens received in week 27, 990 (25.88%) were tested positive for seasonal influenza viruses, including 18 (0.47%) influenza A(H1), 891 (23.29%) influenza A(H3), 80 (2.09%) influenza B and 1 (0.03%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 25.88%, which was higher than 24.20% recorded in the previous week (Figure 2). Among influenza virus detections, the proportion of A(H3N2) increased from 89.1% to 90.0% in the last two weeks while that of B decreased from 9.3% to 8.1%. That of A(H1) and C remained low.

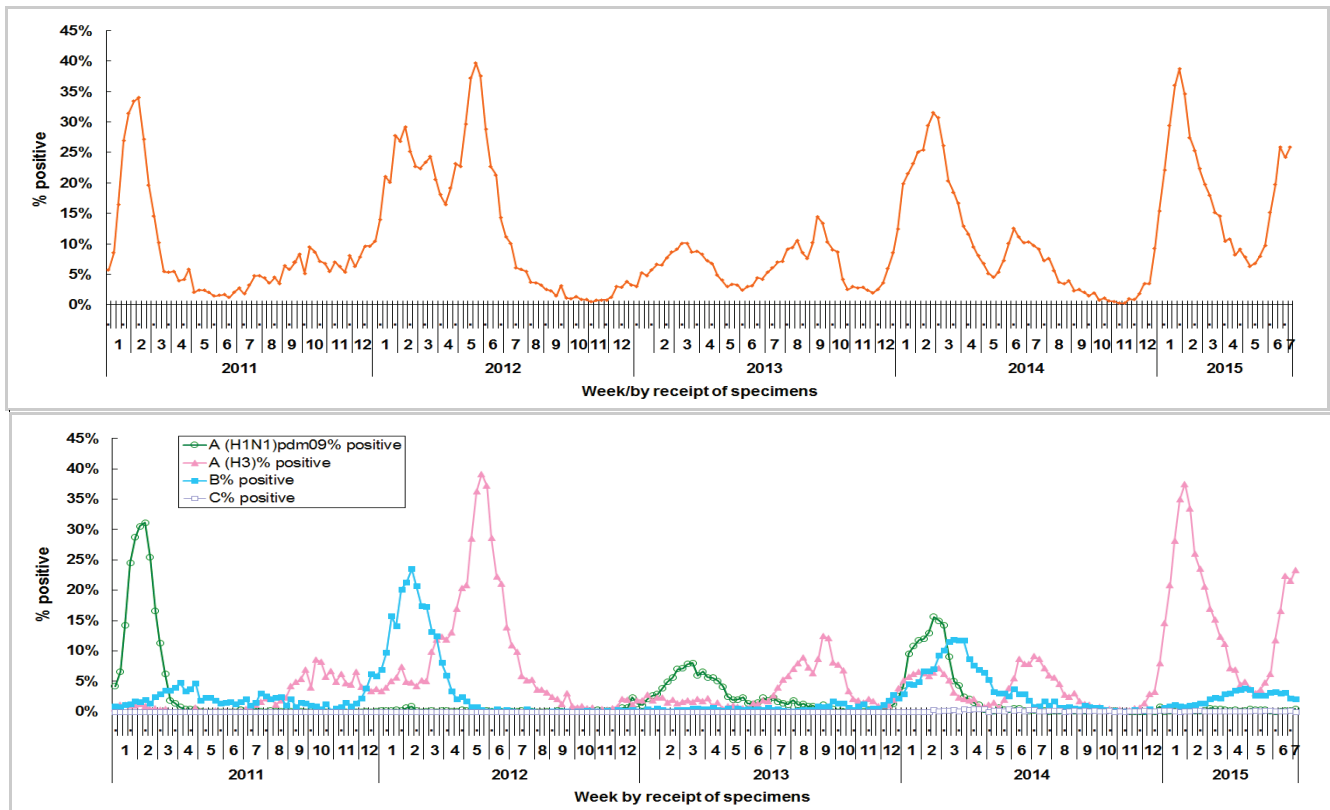


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2011-15 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2011-15

In week 27, the number of ILI outbreaks occurring in schools/ institutions recorded was 14 (affecting 55 persons), as compared to 14 (affecting 62 persons) recorded in the previous week (Figure 3). In the first 4 days of week 28 (Jul 5 to 8, 2015), 3 institutional ILI outbreaks were recorded (affecting 12 persons). Majority of the outbreaks in the past four weeks occurred in residential care homes for the elderly (52.6%) and schools (39.1%).

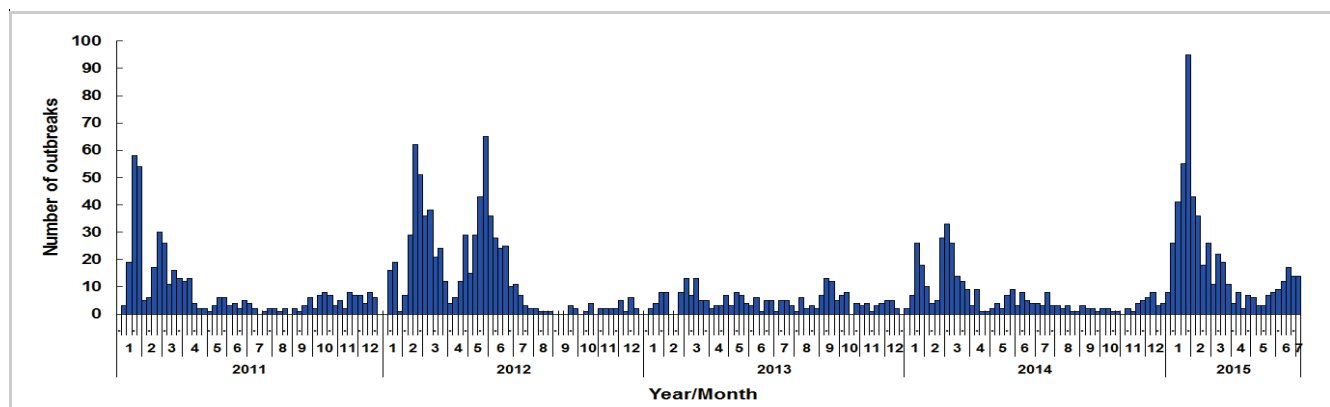


Figure 3 ILI outbreaks in schools/institutions, 2011-15

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

In week 27, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 187.5 (per 1,000 coded cases), which was higher than the rate of 180.1 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.

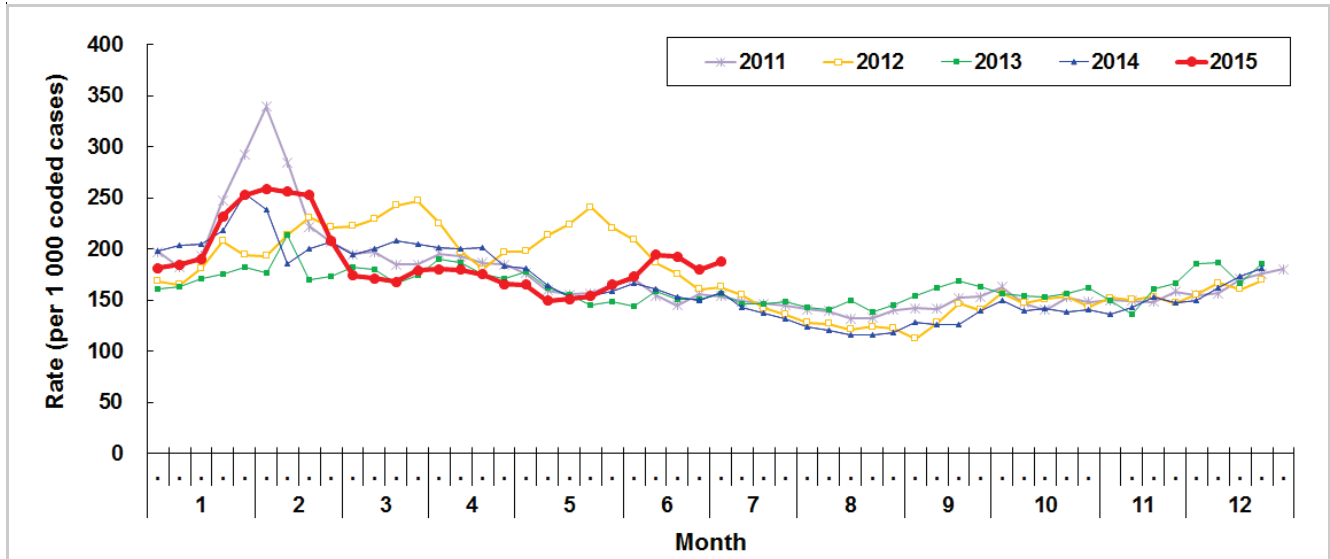


Figure 4 Rate of ILI syndrome group in AED, 2011-15

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

In week 27, 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 decreased to 2.12, 0.15 and 1.90 cases (per 10,000 people in the age group) respectively, as compared to 3.18, 0.18 and 2.06 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

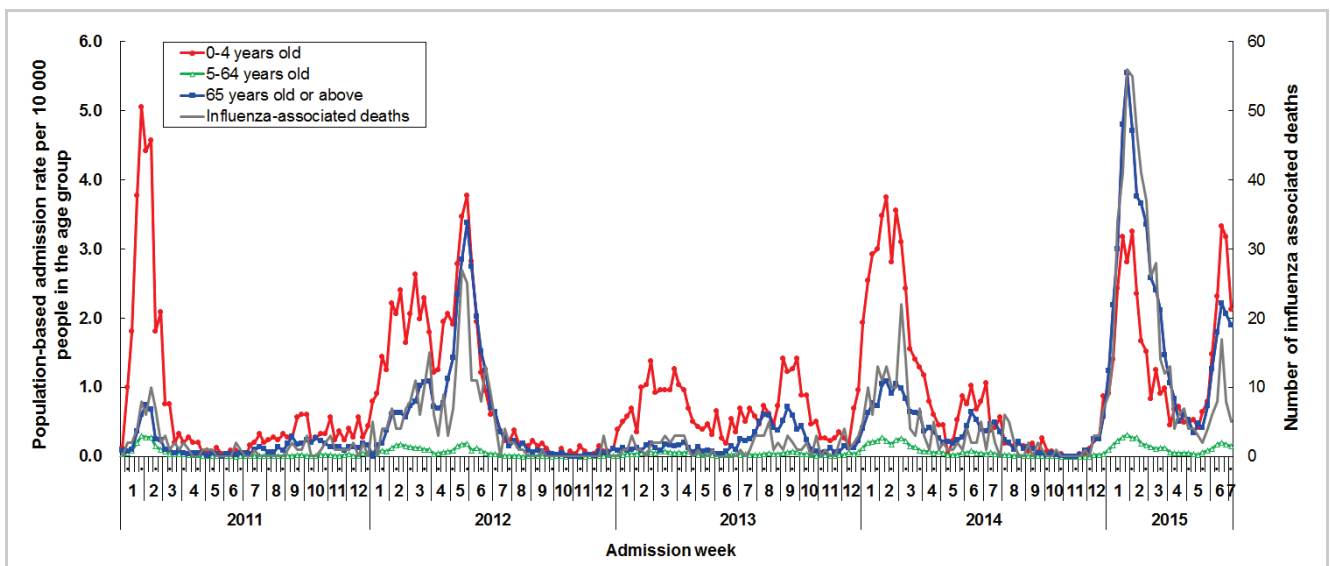


Figure 5 Influenza associated hospital admission rates and deaths, 2011-15

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

In week 27, 0.79% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.92% in the previous week (Figure 6).

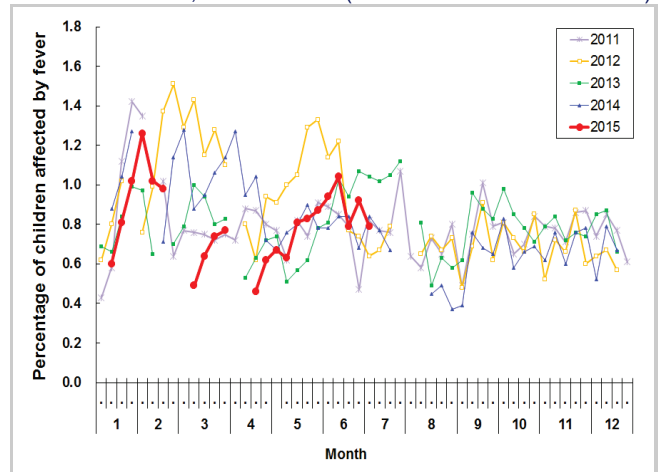


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2011-15

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

In week 27, 0.19% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), as compared to 0.13% in the previous week (Figure 7).

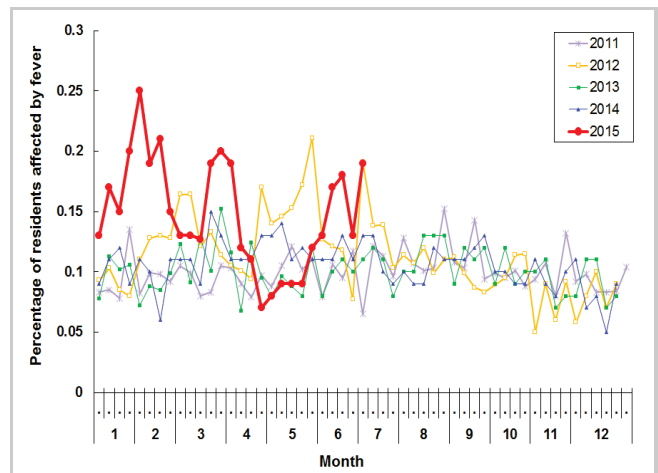


Figure 7 Percentage of residents with fever at sentinel RCHE, 2011-15

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

In week 27, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.85 ILI cases per 1,000 consultations as compared to 2.00 in the previous week (Figure 8).

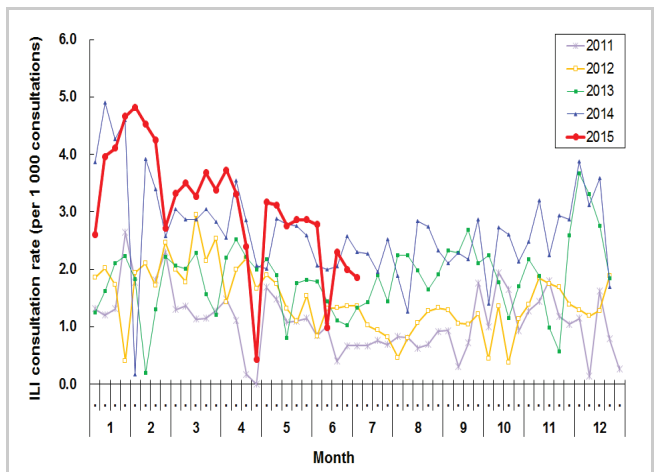


Figure 8 ILI consultation rate at sentinel CMP, 2011-15

Surveillance of severe influenza cases

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

- Since activation of the enhanced surveillance for severe influenza infection on Jun 12, 2015, a total of 108 adult severe cases (including 77 deaths) and two paediatric severe cases were recorded (as of July 8)(Figure 9). Among them, 77 were influenza A(H3N2), 22 were influenza A pending subtype, 10 were influenza B, 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)

- In week 27, 22 cases of influenza associated ICU admission/ death were recorded, in which 18 of them were fatal. In the first 4 days of week 28 (Jul 5 to 8), 11 cases of influenza associated ICU admission/ death were recorded, in which 7 of them were fatal.

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

- In week 27, there were no new cases of severe paediatric influenza-associated complication/death. In the first 4 days of week 28 (Jul 5 to 8), one case of severe paediatric influenza-associated complication was reported involving a 7-year-old girl who had developed pneumonia. Her respiratory specimen was tested positive for influenza A (H3).

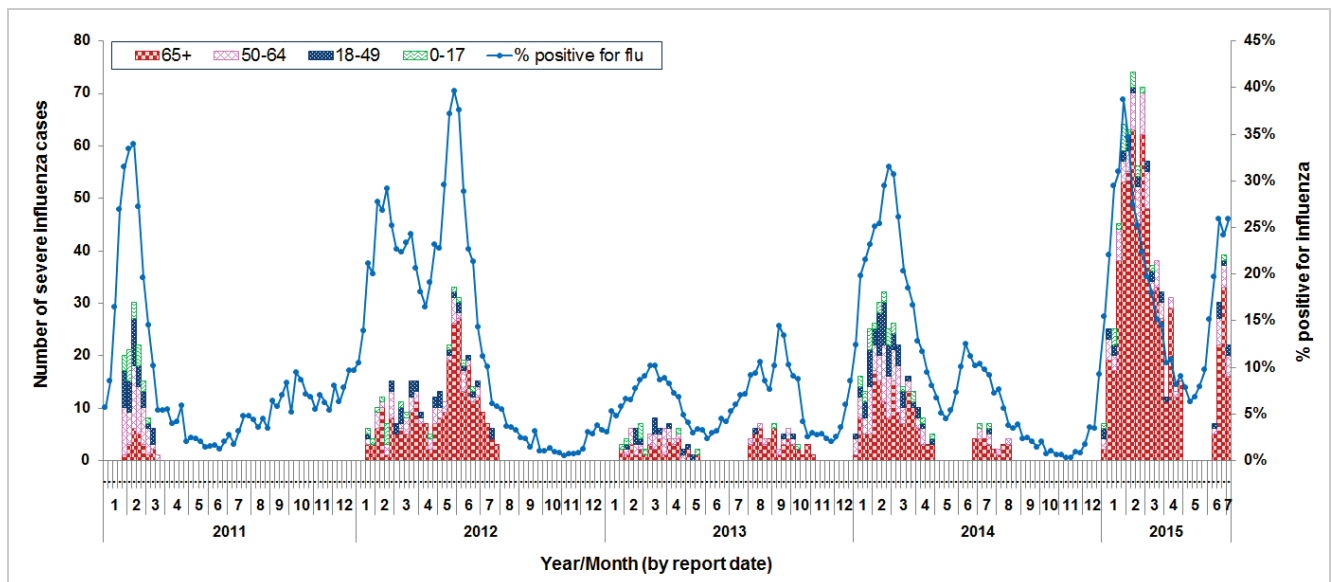


Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2011-2015

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 27 and the first 4 days of week 28, 2015 (Jul 5 to 8, 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 Jun 27, 2015), the proportion of outpatient visits for influenza-like illness is below the national baseline. The percentage tested positive for influenza viruses continued to decrease to a low level of 1.63% in the week ending Jun 27. Influenza A and B viruses accounted for 61% and 39% of all influenza viruses reported in this reporting period respectively.
- In Canada (Jun 7 to 20, 2015), influenza activity continued to decline and was approaching inter-seasonal levels.
- In the United Kingdom (week ending Jun 28, 2015), the influenza activity remained at a very low level.
- In Europe (May 18 to Jun 28, 2015), all countries reported low intensity of influenza activity with sporadic influenza virus detections across the Region.
- In Australia (as at Jul 8, 2015), the 2015 influenza season has started, with notifications of laboratory confirmed influenza increasing in recent weeks. Influenza B is the predominant circulating virus.
- In New Zealand (week ending Jun 28, 2015), the ILI consultation rate increased but was still below the seasonal threshold.
- In Mainland China (week ending Jun 28, 2015), southern China is 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](#).