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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 Mar 11, 2015)

Reporting period: Mar 1 – 7, 2015 (Week 10)

- The latest surveillance data show that the local influenza activity has continued to decrease but is still elevated above the baseline. Hong Kong is expected to remain in the winter influenza season in the coming few weeks. The public should continue to be vigilant.
- The predominating virus is influenza A(H3N2), but influenza B virus detections are on the rise.
- 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 Jan 2, 2015. As of Mar 11 noon, there were 482 cases of influenza associated ICU admission or death, in which 361 were fatal cases. In the past week (Mar 1 – 7), 57 cases were recorded. Separately, there were no new reports of severe paediatric influenza infection (aged below 18 years) in the same period. The total number of severe cases recorded among all age groups in the past week was 57.
- 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 10, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) decreased to 6.6 ILI cases per 1,000 consultations from 7.1 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors increased to 52.6 ILI cases per 1,000 consultations from 44.3 recorded in the previous week (Figure 1, right). The maximum rates recorded by both systems in this season have already reached a high level comparable to the peak levels recorded in previous seasons with high activities.

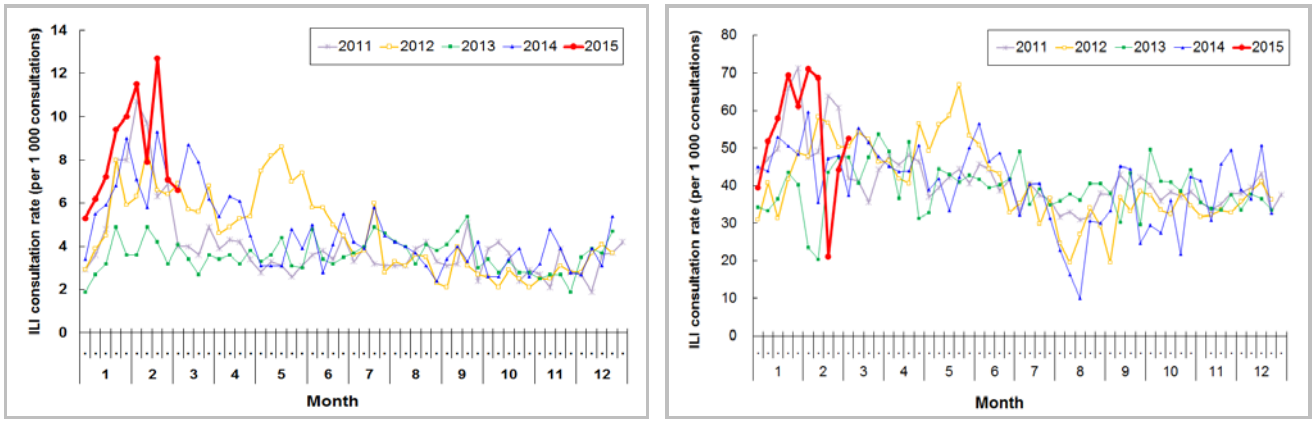

Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2011-15

Laboratory surveillance, 2011-15

Among the respiratory specimens received in week 10, 808 (19.49%) were tested positive for seasonal influenza viruses, including 23 (0.56%) influenza A(H1N1)pdm09, 698 (16.84%) influenza A(H3), 85 (2.05%) influenza B and 2 (0.05%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week decreased to 19.49% from 22.32% in the previous week (Figure 2). The proportion of A(H3N2) dropped from 92.2% to 86.4% in the last two weeks while that of B correspondingly increased from 6.5% to 10.5% among influenza virus detections. That of A(H1) and C remained low.

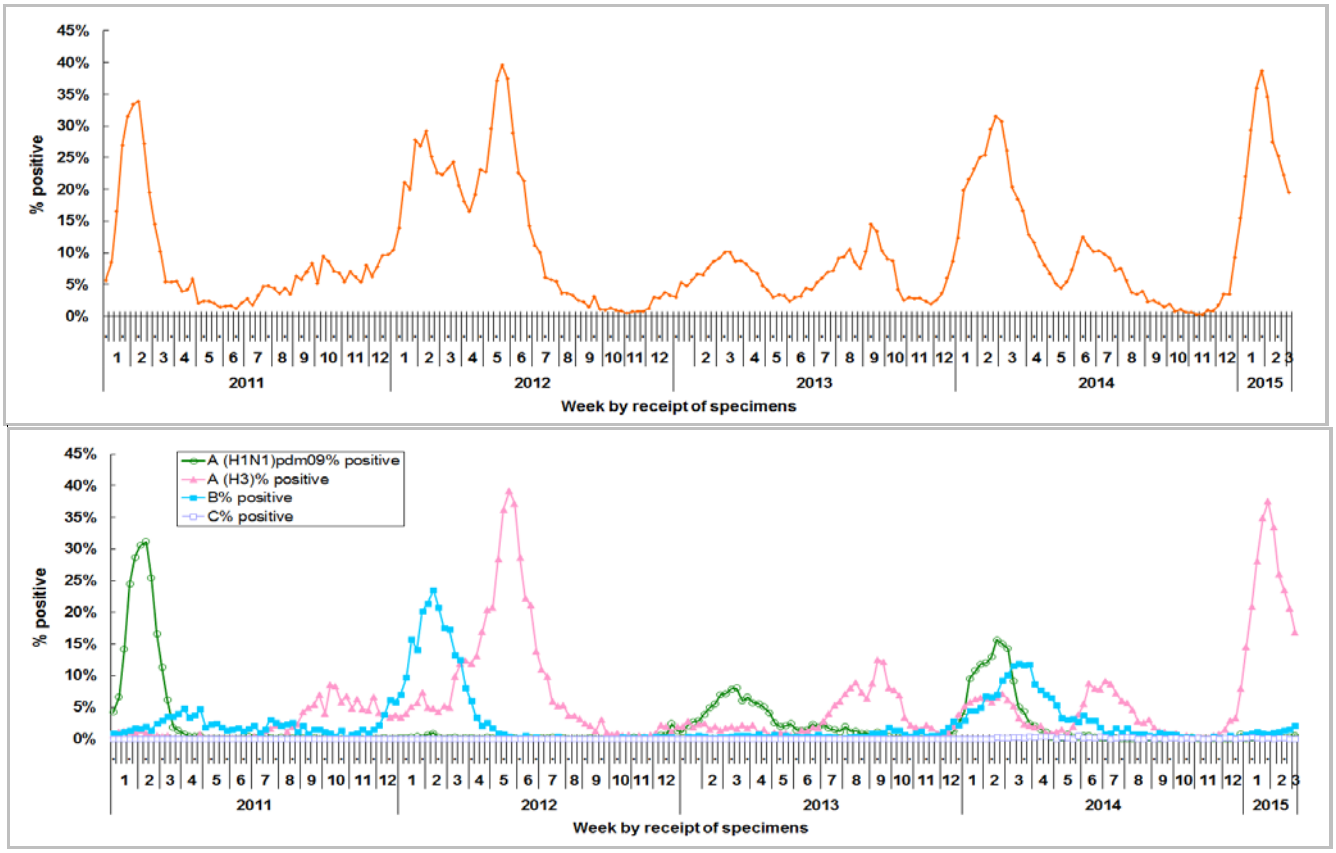

Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2011-15 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2011-15

In week 10, the number of ILI outbreaks occurring in schools/ institutions recorded decreased to 11 from 26 recorded in the previous week (Figure 3). In the first 4 days of week 11 (Mar 8 to 11, 2015), 12 ILI outbreaks occurring in schools/ institutions were recorded. Majority of the outbreaks in the past four weeks occurred in residential care homes for the elderly (66.0%), primary schools (8.8%) and secondary schools (8.8%).

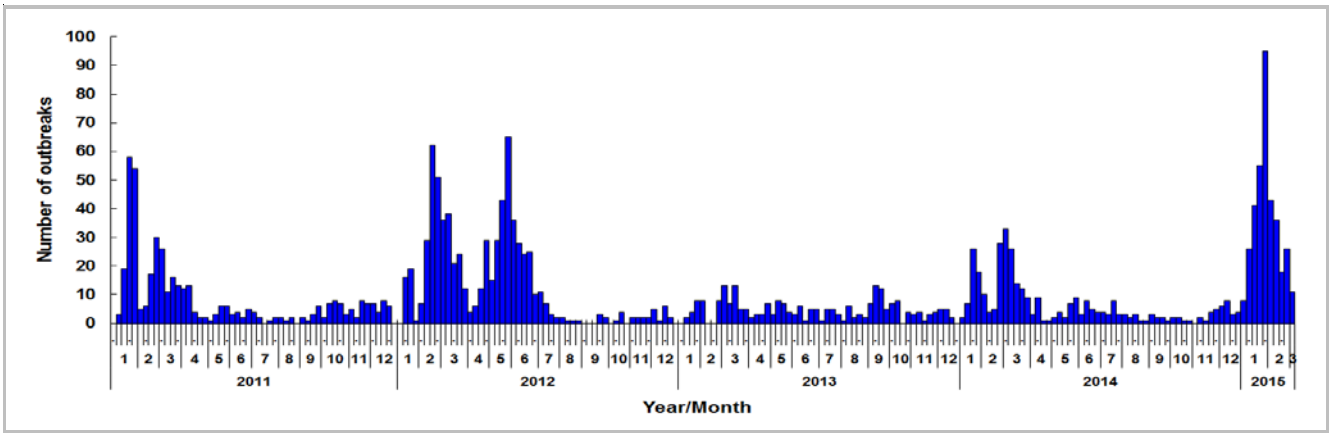

Figure 3 ILI outbreaks in schools/institutions, 2011-15

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

In week 10, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) decreased to 175.0 (per 1,000 coded cases) from the rate of 208.1 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.

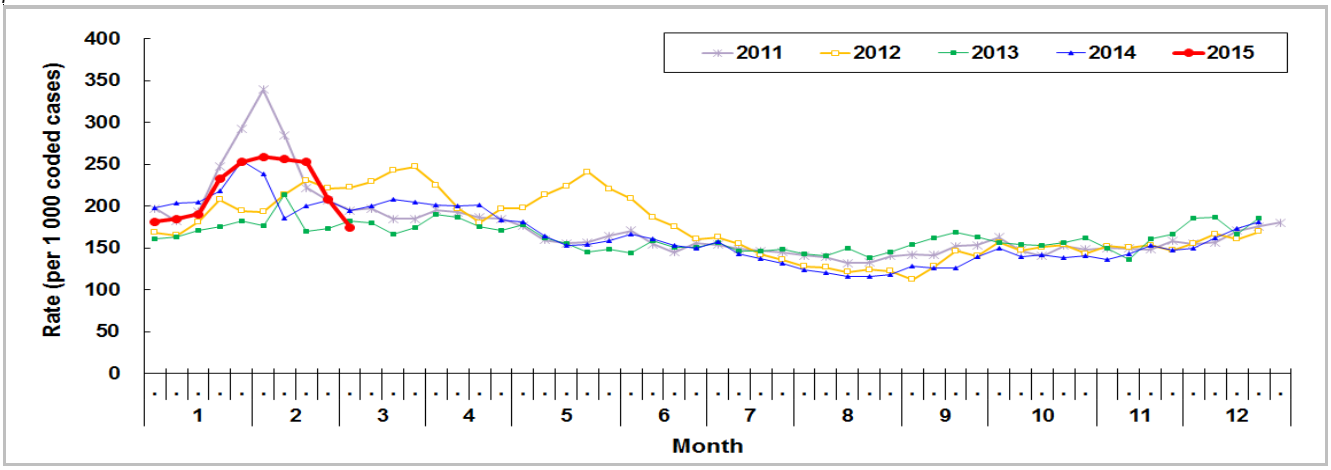

Figure 4 Rate of ILI syndrome group in AED, 2011-15

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

In week 10, 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 0.76, 0.12 and 2.05 cases (per 10,000 people in the age group) respectively, as compared to 1.48, 0.16 and 3.15 cases in the previous week. Persons over age 65 years or above continue to have the highest admission rate (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

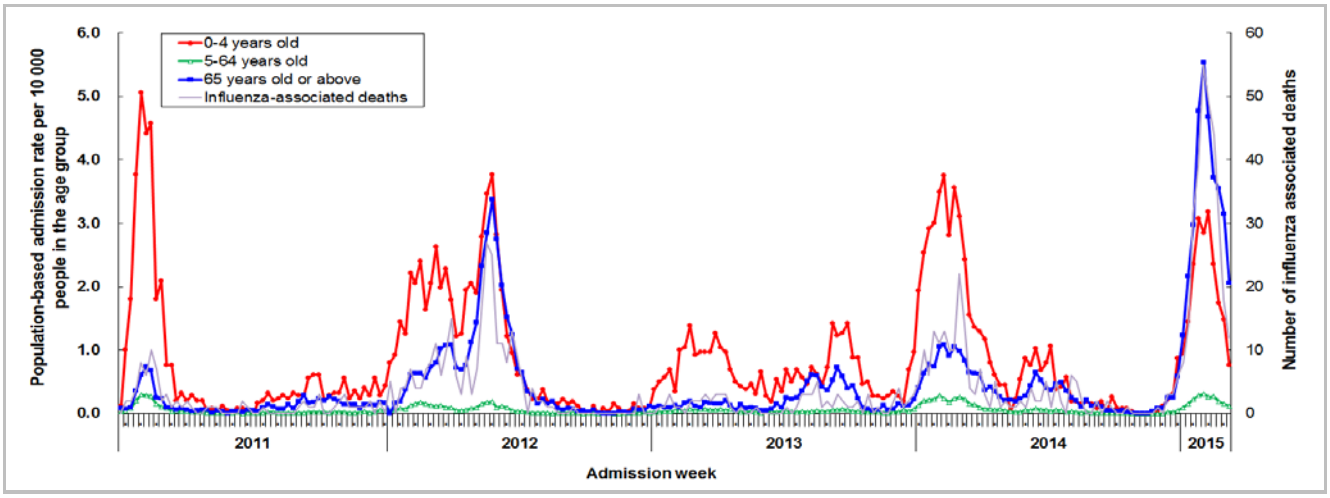

Figure 5 Influenza associated hospital admission rates and deaths, 2011-15

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

In week 10, 0.49% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.98% in week 7 (Figure 6). The surveillance for weeks 8 and 9 was suspended due to Chinese New Year holiday.

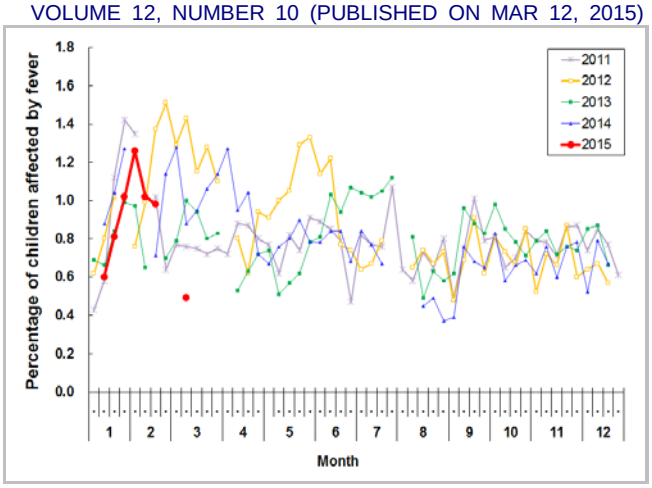

Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2011-15

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

In week 10, 0.13% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), same as the previous week (Figure 7).

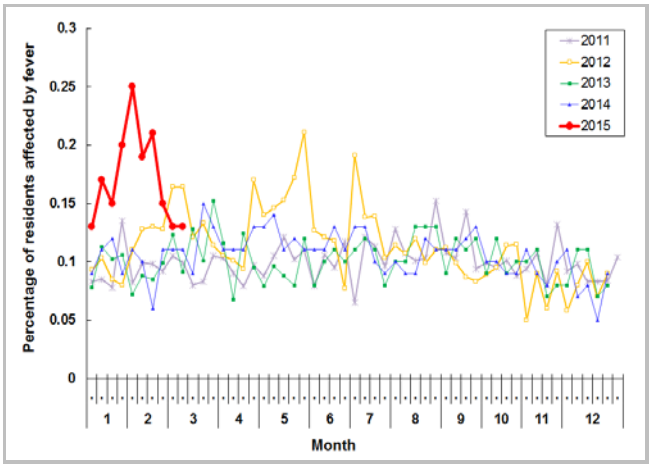

Figure 7 Percentage of residents with fever at sentinel RCHE, 2011-15

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

In week 10, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 3.5 ILI cases per 1,000 consultations (Figure 8) as compared to 3.32 in the previous week.

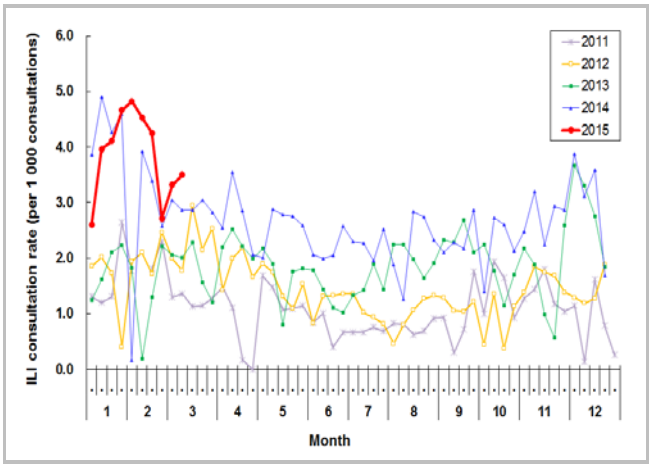

Figure 8 ILI consultation rate at sentinel CMP, 2011-15

Surveillance of severe influenza cases

- In week 10 (Mar 1 to 7, 2015), a total of 57 severe cases (among all age groups) including 44 deaths (an average of 8.1 severe cases and 6.3 deaths per day) were recorded, which were lower than the 71 cases including 54 deaths (an average of 10.1 severe cases and 7.7 deaths per day) recorded in the previous week (Figure 9). The weekly number recorded in the past seven weeks already exceeded the highest weekly number of 33 recorded during influenza seasons since 2011 (Figure 10).

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

- In week 10, 57 cases of influenza associated ICU admission/ death were recorded, in which 44 of them were fatal. In the first 4 days of week 11 (Mar 8 to 11, 2015), 22 cases of influenza associated ICU admission/ death were recorded, in which 17 of them were fatal.

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

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

- In week 10, there were no new reports of severe paediatric influenza-associated complication/death. In the first 4 days of week 11 (Mar 8 to 11, 2015), one case of severe paediatric influenza-associated complication was reported involving a 12-year-old boy who had developed encephalitis. His respiratory specimen was tested positive for influenza A(H3N2).

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

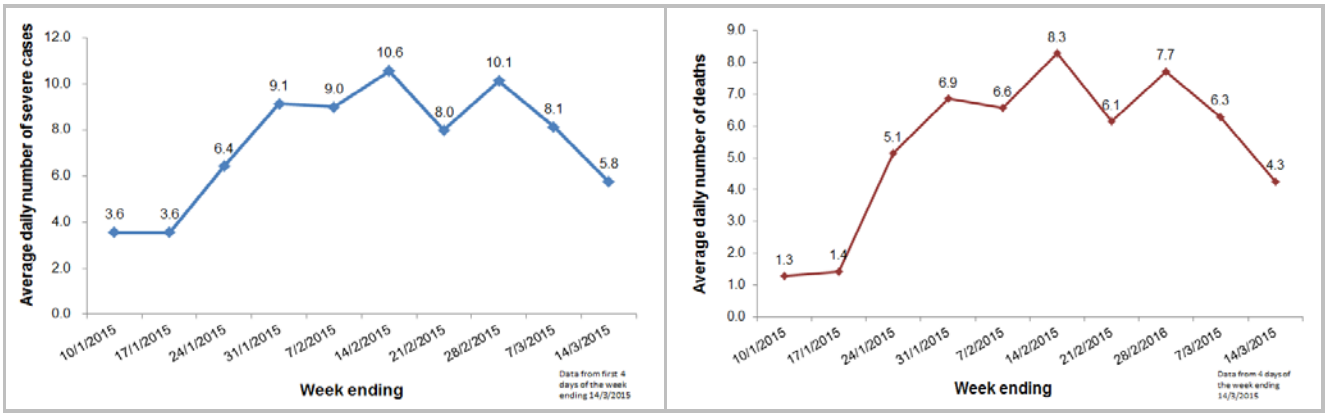

Figure 9 Average daily number of severe influenza cases (left) and average daily number of deaths (right).

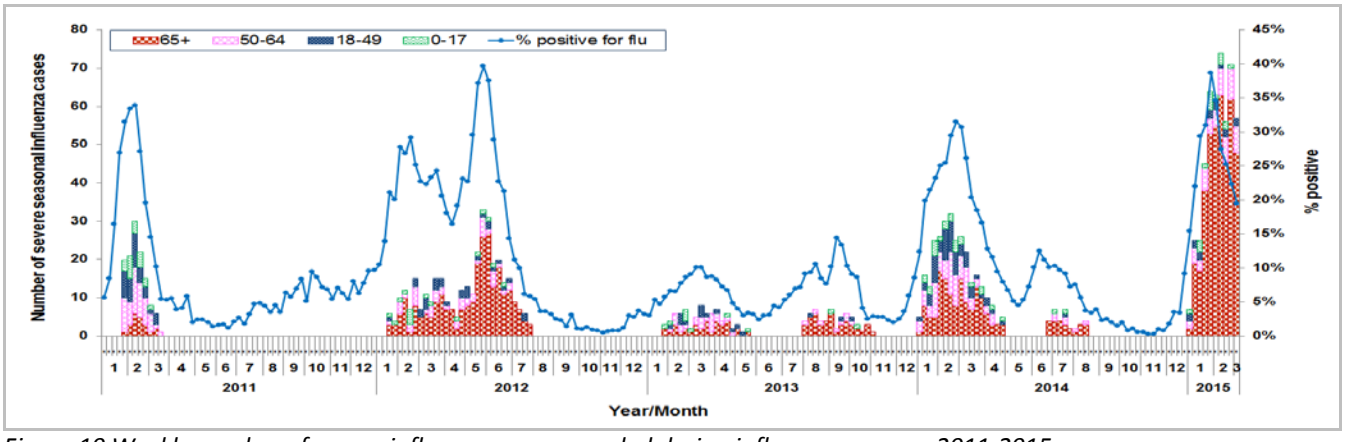

Figure 10 Weekly number of severe influenza cases recorded during influenza seasons, 2011-2015
Remark: The surveillance system for severe influenza cases aged 18 and above was only activated intermittently during influenza seasons.

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

- In week 10 and the first 4 days of week 11, 2015 (Mar 8 to 11, 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 Feb 28, 2015), the influenza activity is still elevated but continues to decrease. The percentage that tested positive for influenza viruses has peaked at 31.79% in the last week of 2014 and dropped to 10.9% in the week ending February 28.
- In Canada (week ending Feb 28, 2015), most of the influenza indicators have declined, or remained similar to the previous week. In the week ending Feb 28, the percentage that tested positive for influenza A virus (11.1%) continued to decline from the previous week while the percentage that tested positive for influenza B virus has continued to increase to 5.9%.
- In the United Kingdom (week ending Mar 1, 2015), indicators of influenza activity generally remain at similar or lower levels compared to the previous week. The percentage that tested positive for influenza viruses in England reached a peak of 31.7% in the first week of 2015 and decreased to 13.1% in the week ending March 1.
- In Europe (week ending Mar 1, 2015), the percentage tested positive for influenza viruses remained at a high level of 50% in the week ending March 1, which was over the threshold of 10%.
- In Japan (week ending Mar 1, 2015), the average number of reported ILI cases per sentinel site dropped to 5.88 in the week ending March 1 from 39.42 in the week ending January 25.
- In Taiwan (week ending Mar 7, 2015), the influenza season persisted as the percentage tested positive for influenza viruses was still at a high level of 29.9% in the week ending Feb 21.

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, Japan Ministry of Health, Labour and Welfare and Taiwan Centers for Disease Control.