

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 Jan 28, 2015)

Reporting period: Jan 18 – 24, 2015 (Week 4)

- The overall influenza activity has continued to increase and rapidly reached a high level comparable to the peak levels in previous seasons with high activities. Nonetheless, it may further increase.
- The predominating virus is influenza A(H3N2).
- 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 Jan 28 noon, there were 122 cases of influenza associated ICU admission or death, in which 64 were fatal cases. In the past week (Jan 18-24), 44 cases were recorded. Separately, one case of severe paediatric influenza infection (aged below 18 years) was recorded in the same period. A total of 45 severe cases among all age groups were recorded in the past week, which was more than the highest weekly number of 33 recorded during influenza seasons since 2011.
- The hospital admission rate of influenza among elderly aged 65 years or above was at a high level, exceeding the highest levels recorded in the past few years.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Except for those with contraindications, influenza vaccination is suitable for all members of the public.
- 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, 2013-15

In week 4, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 9.4 ILI cases per 1,000 consultations (Figure 1).

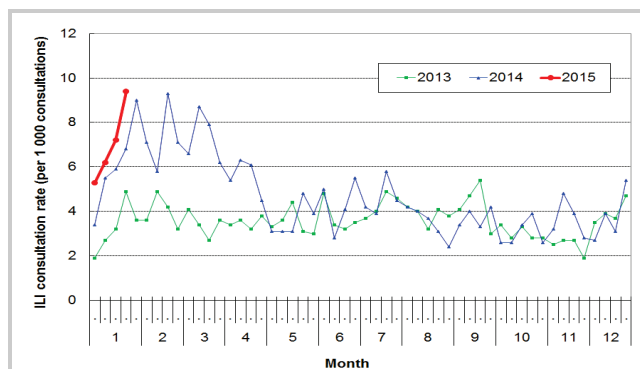


Figure 1 ILI consultation rate at sentinel GOPC, 2013-15

Influenza-like illness surveillance among sentinel private doctors, 2013-15

In week 4, the average consultation rate for ILI among sentinel private doctors was 69.4 ILI cases per 1,000 consultations (Figure 2).

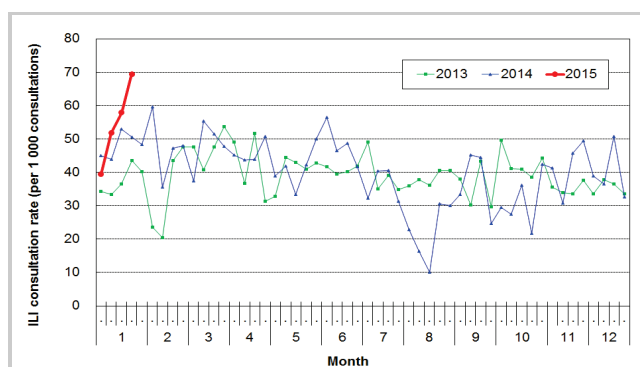


Figure 2 ILI consultation rate at sentinel GP, 2013-15

Influenza virus detections (Laboratory surveillance), 2014-15

Among the respiratory specimens received in week 4, 1336 (30.96%) were tested positive for seasonal influenza viruses, including 2 influenza A(H1N1)pdm09, 1295 influenza A(H3) and 39 influenza B (Figure 3).

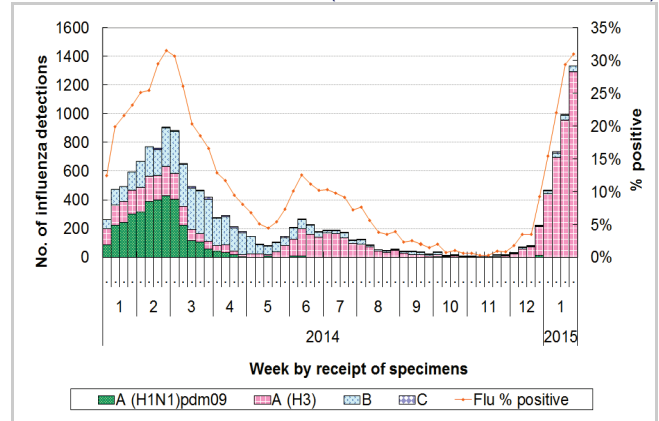


Figure 3 Influenza virus detections, 2014-15

Percentage positive for influenza viruses, 2014-15

Among the respiratory specimens received in week 4, 0.05% was influenza A(H1N1)pdm09, 30.01% influenza A(H3) and 0.90% influenza B (Figure 4).

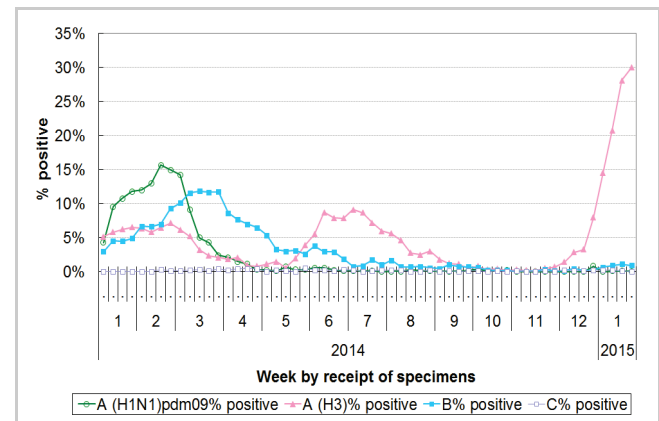


Figure 4 Percentage positive for influenza viruses, 2014-15

Influenza-like illness outbreak monitoring, 2014-15

In week 4, 55 ILI outbreaks occurring in schools/institutions were recorded. In the first 4 days of week 5 (Jan 25 to 28, 2015), 68 ILI outbreaks occurring in schools/institutions were recorded (Figure 5). The outbreaks in the past four weeks mainly occurred in primary schools (34%), residential care homes for the elderly (32%) and kindergartens or child care centres (15%).

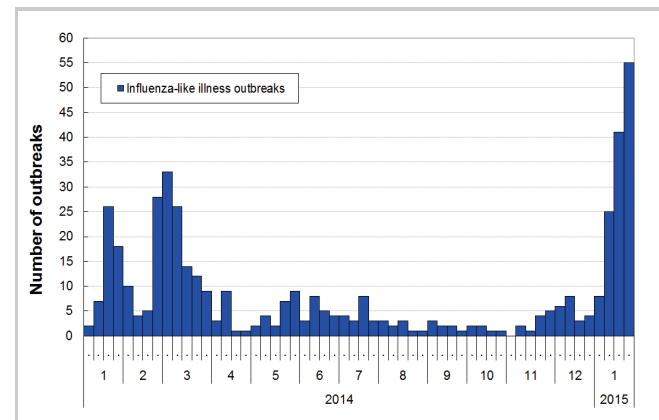


Figure 5 ILI outbreaks, 2014-15

Rate of influenza-like illness syndrome group in accident and emergency departments, 2013-15[#]

In week 4, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 235.4 (per 1,000 coded cases) (Figure 6).

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

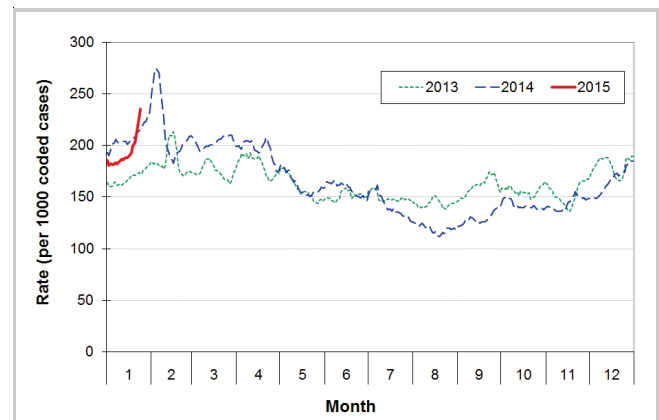


Figure 6 Rate of ILI syndrome group in AED, 2013-15

Influenza associated hospital admission rates and deaths based on discharge coding, 2013-15

In week 4, 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 2.92, 0.23 and 3.79 cases (per 10,000 people in the age group) respectively. The hospital admission rate of influenza among elderly aged 65 years or above is at a high level, exceeding the highest levels recorded in the past few years (Figure 7). Weekly number of deaths with any diagnosis of influenza is also shown in the figure on the right hand side.

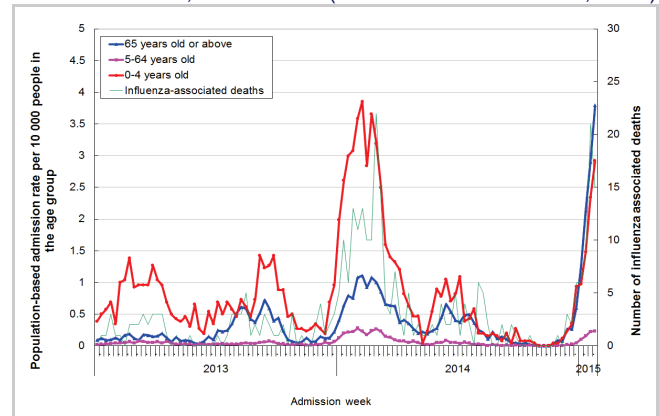


Figure 7 Influenza associated hospital admission rates and deaths, 2013-15

Fever surveillance at sentinel child care centres/ kindergartens, 2013-15

In week 4, 1.02% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above)(Figure 8).

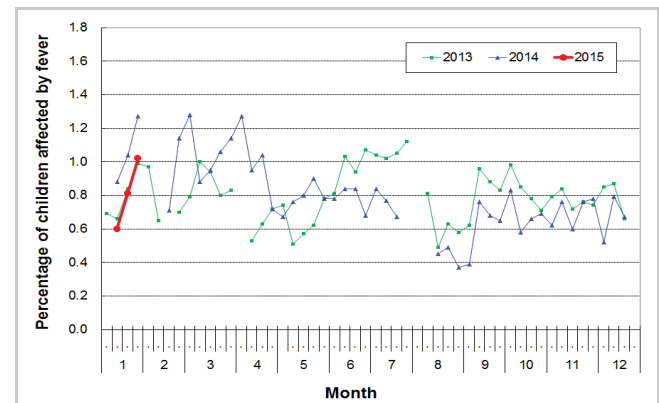


Figure 8 Percentage of children with fever at sentinel CCC/ KG, 2013-15

Fever surveillance at sentinel residential care homes for the elderly, 2013-15

In week 4, 0.20% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above)(Figure 9).

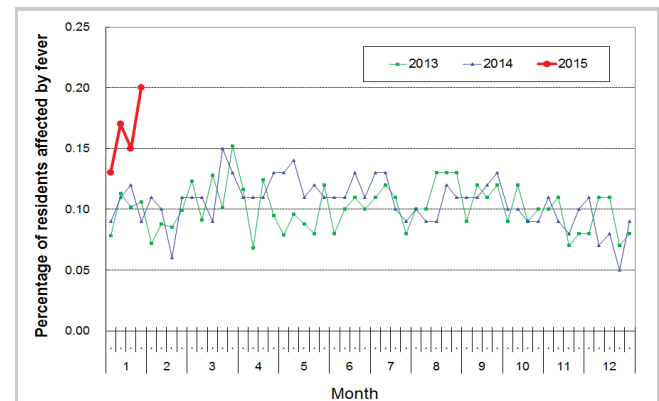


Figure 9 Percentage of residents with fever at sentinel RCHE, 2013-15

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2013-15

In week 4, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 4.66 ILI cases per 1,000 consultations (Figure 10).

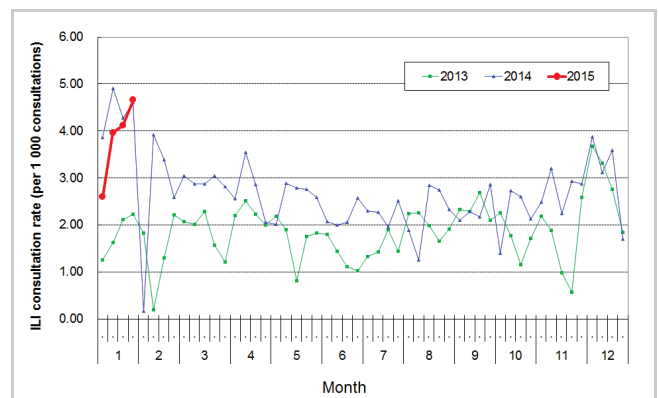


Figure 10 ILI consultation rate at sentinel CMP, 2013-15

Surveillance of severe influenza cases

- In the past week (Jan 18-24, 2015), a total of 45 severe cases were recorded, which was more than the highest weekly number of 33 recorded during influenza seasons since 2011 (Figure 11).

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

- From Jan 21, 2015, 12:00 noon, to Jan 28, 2015, 12:00 noon, 52 cases of influenza associated ICU admission/ death were recorded, in which 30 of them were fatal. In addition, three previously reported cases who required ICU admission passed away during this reporting period.

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 4, one case of severe paediatric influenza-associated complication involving a 2-year-old boy who had presented with fever and cough was reported. His respiratory specimen was tested positive for influenza A(H3).. In the first 4 days of week 5 (Jan 25 to 28, 2015), four cases of severe paediatric influenza-associated complications were reported. The first case was a 16-year-old girl who has developed pneumonia. The second case was a 6-year-old girl who had developed encephalitis. The third case was a 2-year-old girl who had developed severe pneumonia and shock. The last case was a 3-year-old girl who had developed pneumonia and shock. The respiratory specimens of all the cases were tested positive for influenza A(H3).

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

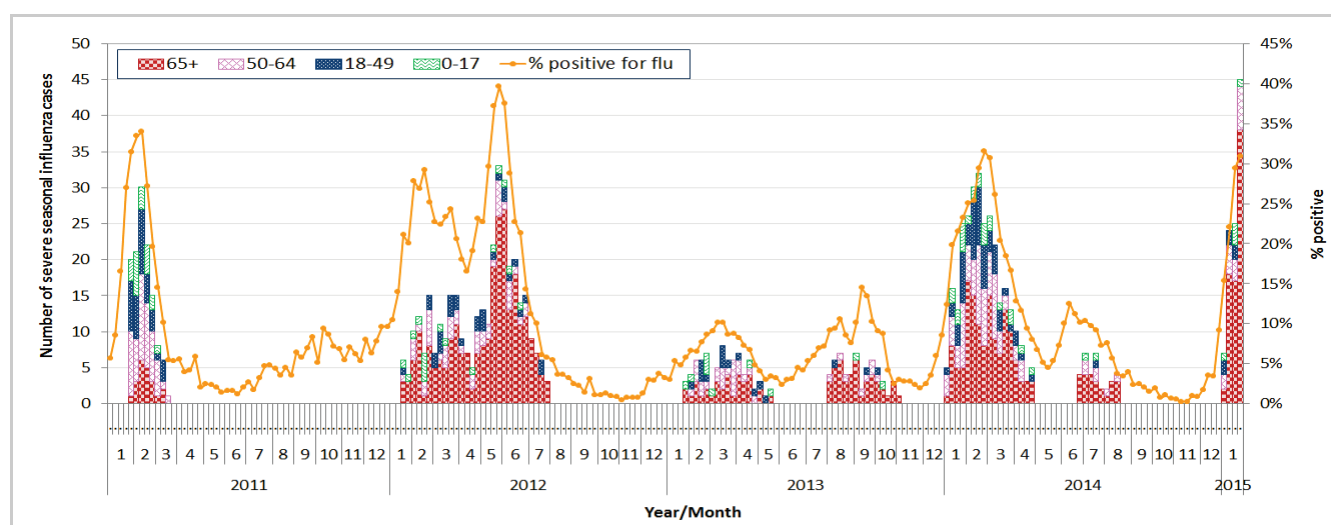


Figure 11 Weekly number of severe influenza cases recorded during influenza seasons, 2011-2015

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 4 and the first 4 days of week 5, 2015 (Jan 25 to 28, 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 Jan 17, 2015), the influenza activity might have peaked as the percentage that tested positive for influenza viruses stood at 31.4% in the last week of 2014 and dropped to 19.5% in the week ending January 17.
- In Canada (week ending Jan 17, 2015), the percentage that tested positive for influenza viruses peaked at 34.6% in the last week of 2014 and then decreased to 29.5% in the week ending January 17. Canada recorded 118 outbreaks of influenza A in long-term care facilities in the week ending January 17, compared with 125 in the previous week.
- In the United Kingdom (week ending Jan 18, 2015), 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 19.4 per cent in the week ending January 18.
- In Europe (week ending Jan 18, 2015), the percentage that tested positive for influenza viruses in Europe continued to increase from 28% in the week ending January 11 to 40% in the next, which is over the threshold of 10%.
- In Japan (week ending Jan 18, 2015), the average number of reported ILI cases per sentinel site rose from 3.49 in the first week of last December to 37.0 in the week ending January 18, far higher than the baseline level of 1.00.
- In Taiwan (week ending Jan 17, 2015), the percentage that tested positive for influenza viruses increased to 14.5% in the first week of 2015 from 10.0% in the preceding one.

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](#).