

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 Aug 9, 2017)

Reporting period: Jul 30 – Aug 5, 2017 (Week 31)

- The latest surveillance data showed that the local influenza activity has decreased significantly from its peak in the past two weeks but still remained elevated. It is expected that this summer influenza season will last for some time.
- The Centre for Health Protection (CHP) has collaborated with the Hospital Authority (HA) and private hospitals to reactivate the enhanced surveillance for severe seasonal influenza cases (i.e. influenza-associated admissions to intensive care unit or deaths) among patients aged 18 or above since May 5, 2017. As of Aug 9, 489 severe cases (including 348 deaths) were recorded. Separately, 19 cases of severe paediatric influenza-associated complication/death (including three deaths) (aged below 18 years) were recorded in the same period.
- Apart from adopting personal, hand and environmental hygiene practices against respiratory illnesses, those members of the public who have not received influenza vaccine may get the vaccination as soon as possible for personal protection.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Given that seasonal influenza vaccines are safe and effective, all persons aged 6 months or above except those with known contraindications are recommended to receive influenza vaccine for personal protection.
- In the coming 2017/18 season, the Vaccination Subsidy Scheme will continue to provide subsidised vaccination to children aged 6 months to under 12 years, elderly aged 65 years or above, pregnant women, persons with intellectual disabilities and recipients of Disability Allowance. Eligible groups for free vaccination will be the same as that of 2016/17 under the Government Vaccination Programme. The various vaccination programmes will be launched in Oct / Nov 2017 and the details will be announced in due course.

Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2013-17

In week 31, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 7.3 ILI cases per 1,000 consultations, which was lower than 10.0 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 63.9 ILI cases per 1,000 consultations, which was lower than 72.4 recorded in the previous week (Figure 1, right).

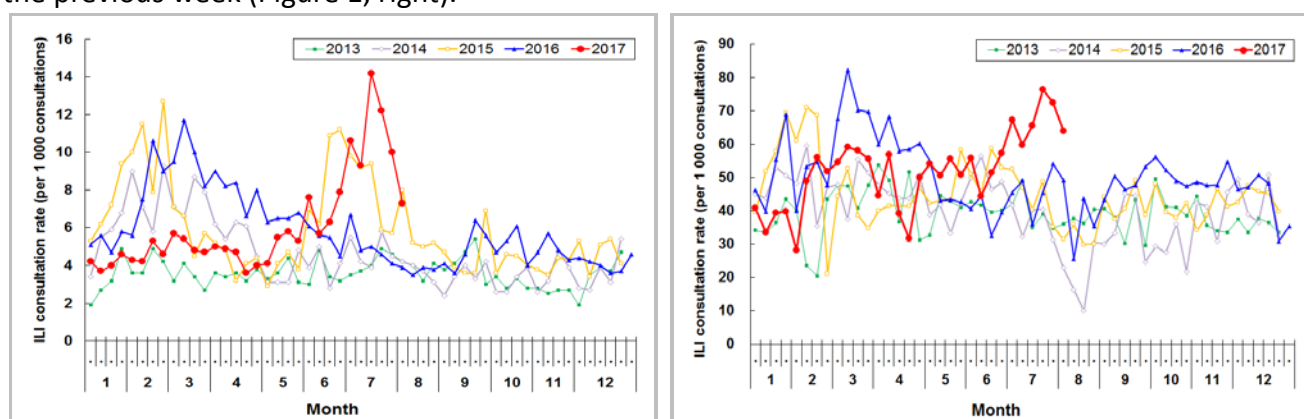


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 31, 1451 (25.28%) were tested positive for seasonal influenza viruses, including 21 (0.37%) influenza A(H1), 1386 (24.15%) influenza A(H3), 37 (0.64%) influenza B and 7 (0.12%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 25.28%, which was lower than 35.52% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of A(H3), A(H1), B and C were 95.5%, 1.4%, 2.5% and 0.5% respectively.

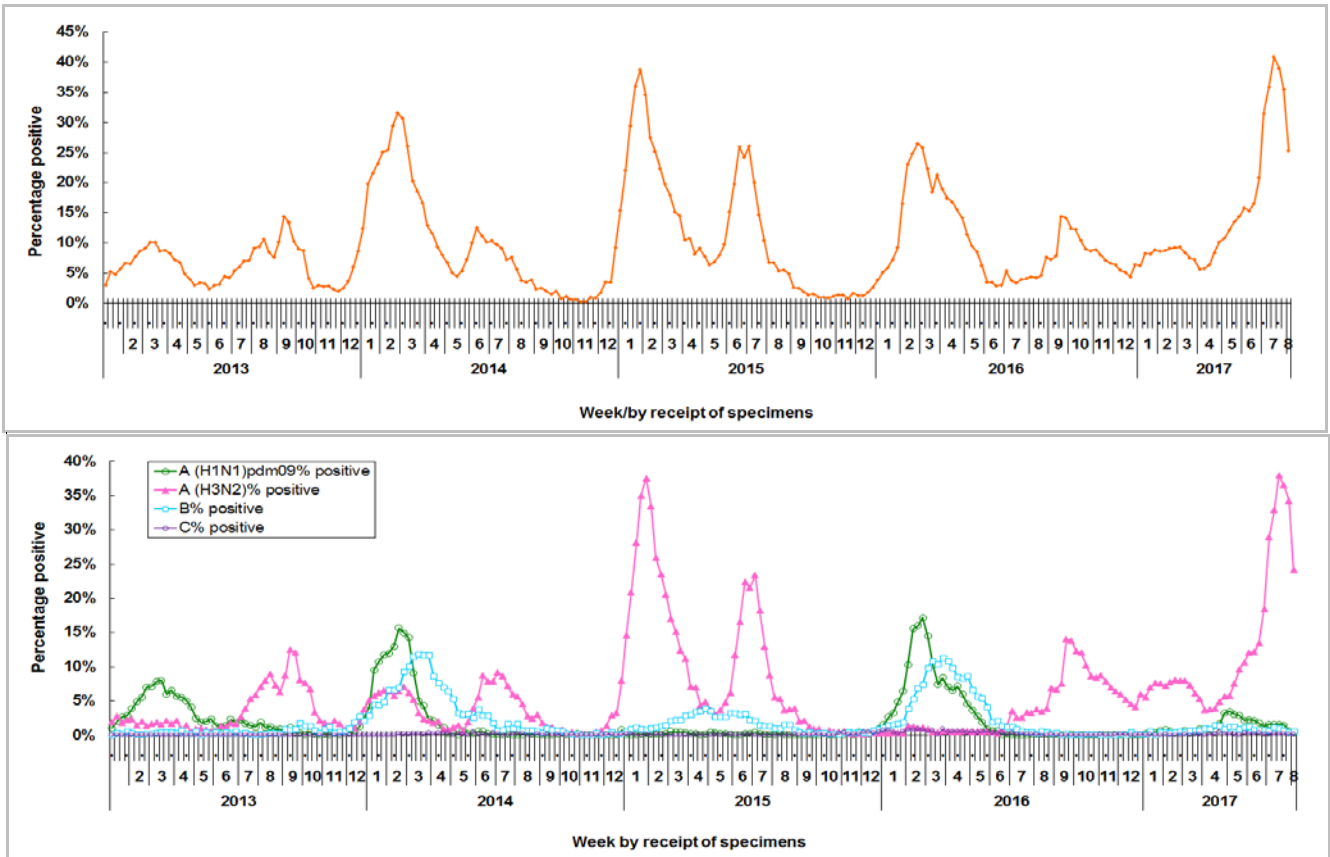


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2013-17

In week 31, 15 ILI outbreaks occurring in schools/institutions were recorded (affecting 73 persons), as compared to 39 outbreaks recorded in the previous week (affecting 226 persons) (Figure 3). In the first 4 days of week 32 (Aug 6 to 9, 2017), 5 institutional ILI outbreaks were recorded (affecting 33 persons).

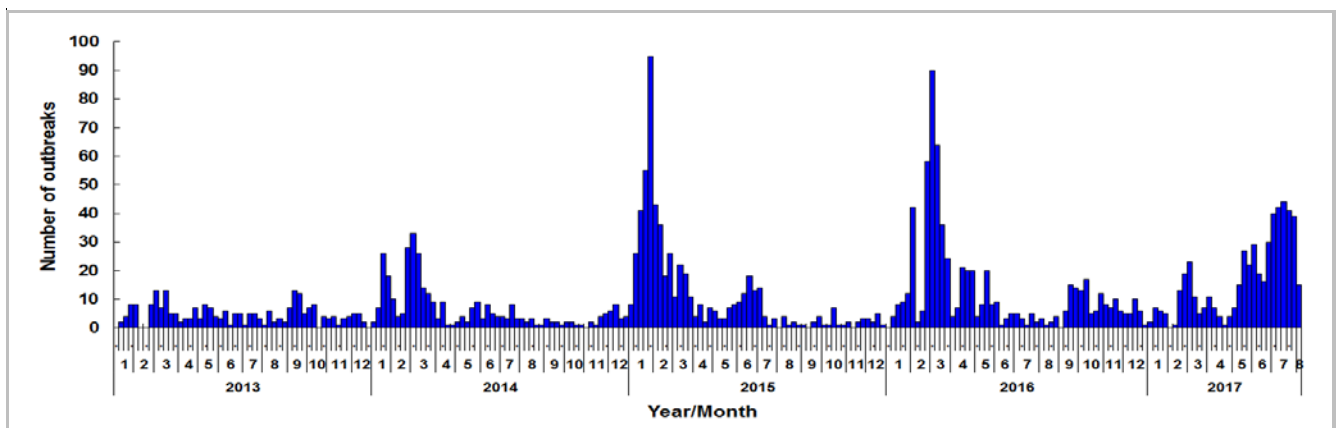


Figure 3 ILI outbreaks in schools/institutions, 2013-17

Rate of influenza-like illness syndrome group in accident and emergency departments, 2013-17[#]

In week 31, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 176.2 (per 1,000 coded cases), which was lower than 232.3 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.

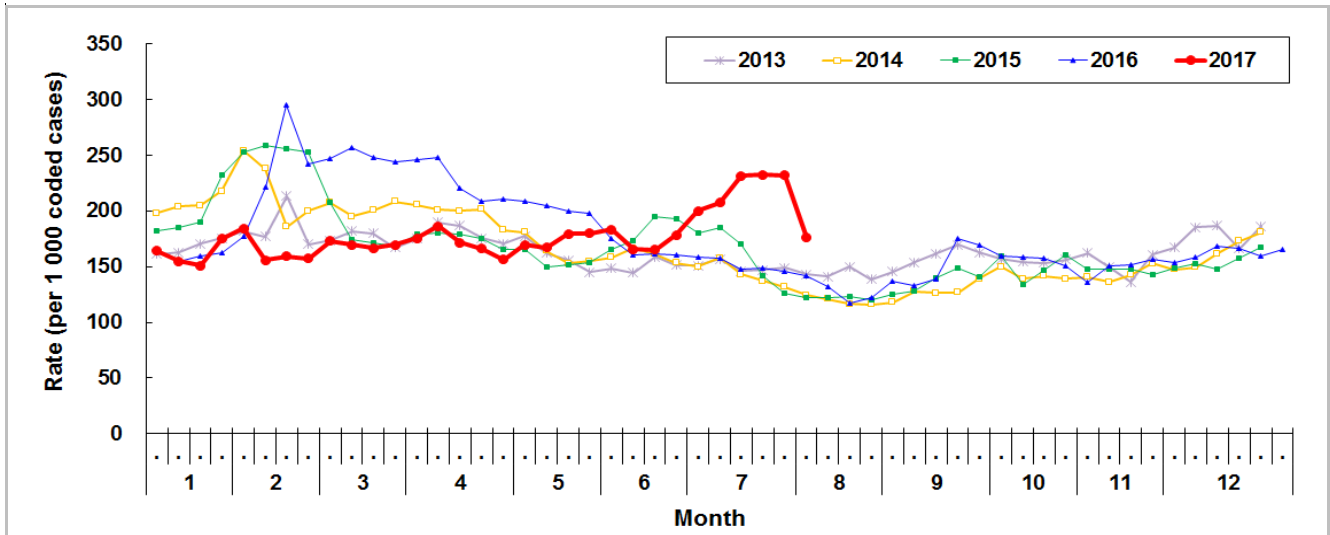


Figure 4 Rate of ILI syndrome group in AED, 2013-17

Influenza associated hospital admission rates and deaths in public hospitals based on discharge coding, 2013-17

In week 31, the admission rates in public hospitals with principal diagnosis of influenza for persons aged 0-4 years, 5-9 years, 10-64 years and 65 years or above were 3.72, 0.62, 0.20 and 2.73 cases (per 10,000 people in the age group) respectively, as compared to 5.72, 1.41, 0.41 and 5.71 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

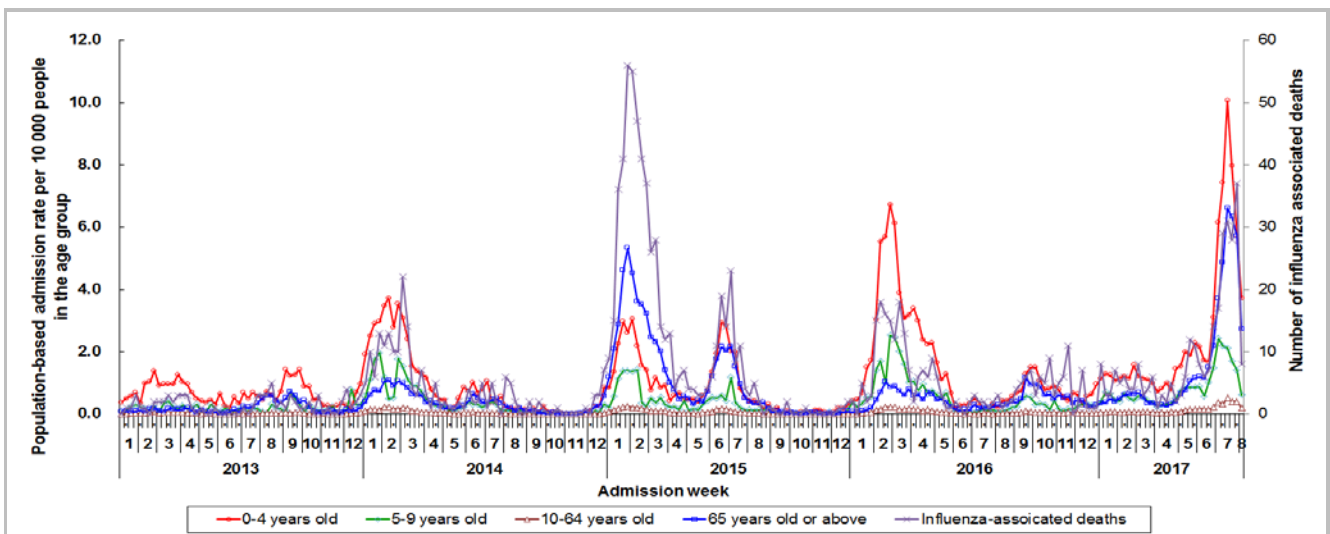


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

Fever surveillance at sentinel child care centres/ kindergartens, 2013-17

The surveillance for week 30-31 was suspended due to summer holiday. In week 29, 1.25% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.89% recorded in the previous week (Figure 6).

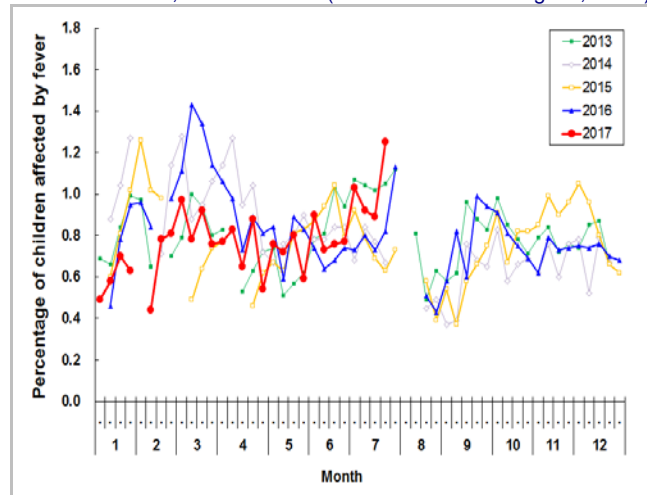


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

Fever surveillance at sentinel residential care homes for the elderly, 2013-17

In week 31, 0.15% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.12% recorded in the previous week (Figure 7).

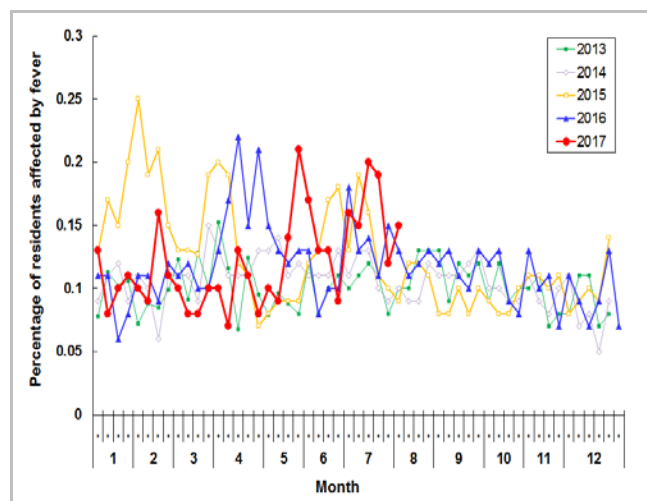


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2013-17

In week 31, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 2.05 ILI cases per 1,000 consultations as compared to 2.56 recorded in the previous week (Figure 8).

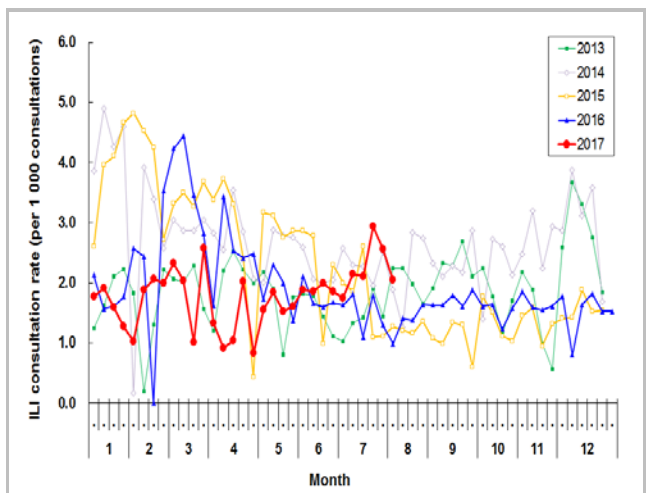


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

Surveillance of severe influenza cases

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

Since the activation of the enhanced surveillance for severe influenza infection on May 5, 2017, a total of 508 severe cases (including 351 deaths) were recorded cumulatively (as of Aug 9) (Figure 9). These included:

- 489 cases (including 348 deaths) among adult patients aged 18 years or above. Among them, 438 patients had infection with influenza A(H3N2), 21 patients with influenza A(H1N1)pdm09, 14 patients with influenza B and 16 patients with influenza A pending subtype. 186 (38.0%) were known to have received the influenza vaccine for the 2016/17 season. Among the 348 fatal cases, 159 (45.7%) were known to have received the influenza vaccine. In the winter season in early 2017, 66 adult severe cases (including 41 deaths) were filed.
- 19 cases (including three deaths) of severe paediatric influenza-associated complication/death. Seventeen (89.5%) cases did not receive the influenza vaccine for the 2016/17 season. To date in 2017, 27 paediatric cases (including four deaths) were filed.

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

- In week 31, 57 cases of influenza associated ICU admission/death were recorded (including 41 deaths), which was lower than 71 cases (including 54 deaths) recorded in week 30. In the first 4 days of week 32 (Aug 6 to 9, 2017), 37 cases of influenza associated ICU admission/death were recorded, in which 27 of them were fatal.

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

- In week 31, there was one case of severe paediatric influenza-associated complication. In the first 4 days of week 32 (Aug 6-9, 2017), no cases of severe paediatric influenza-associated complication/death were reported. The case details are as follow:

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving influenza vaccine for this season
31	6 months	Female	Encephalopathy and myocarditis	No	Influenza A (H3)	No

Data as of Aug 9, 2017

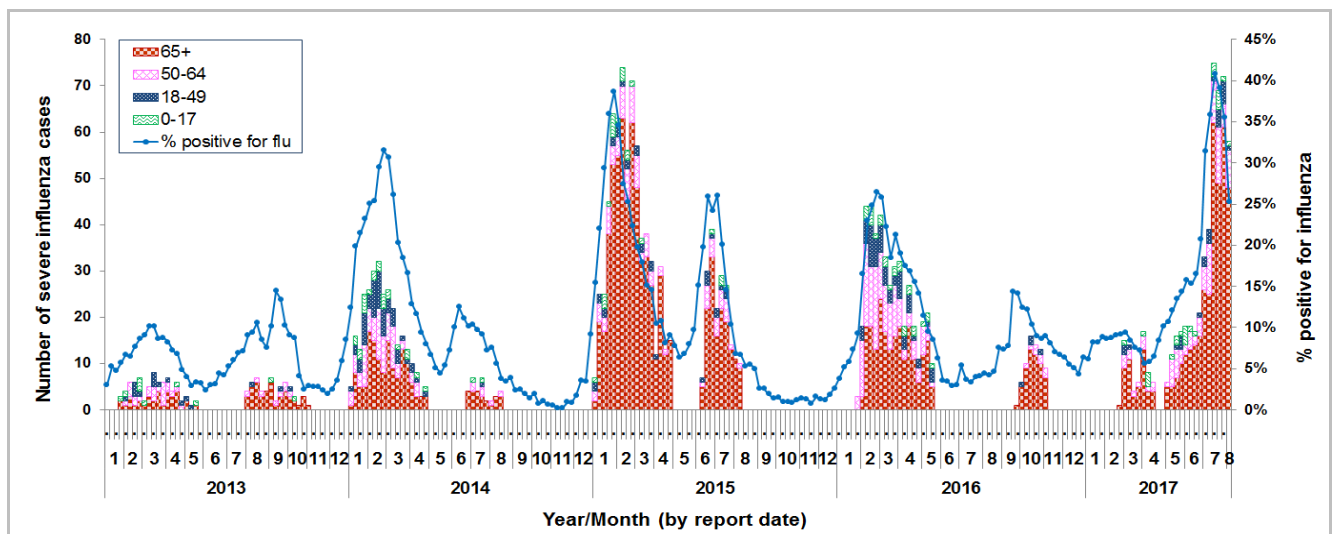


Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2013-2017

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 31 and the first 4 days of week 32 (Aug 6 to 9, 2017), there were no new reports of oseltamivir (Tamiflu) resistant influenza A(H1N1)pdm09 virus infection. There are totally 48 reports of oseltamivir resistant influenza A(H1N1)pdm09 virus detected in Hong Kong since 2009.

Global Situation of Influenza Activity

Influenza activity in the temperate zone of the northern hemisphere was reported at low levels. In the temperate zone of the southern hemisphere and in some countries of South East Asia, high levels of influenza activity continued to be reported. In Central America and the Caribbean, increased influenza activity was reported in a few countries. Worldwide, influenza A(H3N2) viruses are predominating.

- The 2016/17 winter influenza season in the United States, Canada, the United Kingdom and Europe had ended and the influenza activity in these areas remained at low levels.
- In Southern China (week ending Jul 30, 2017), influenza activity was at the summer peak and continued to increase. The proportion of ILI cases in emergency and outpatient departments reported by sentinel hospitals was 4.0%, lower than that reported in the previous week (4.1%), but higher than that in the corresponding period in 2014-2016 (3.5%, 3.6%, 3.1%). The proportion of influenza detections was 22.5%, slightly lower than 23.0% recorded in the previous week. The predominant circulating subtype was Influenza A (H3N2).
- In Macau (week ending Aug 5, 2017), the influenza situation has eased. Recently the number of ILI cases in emergency departments of hospitals has significantly decreased from the peak. The proportion of influenza detections in the last week was 37.3%, and influenza A(H3) constituted 98.2% of the influenza detection.
- In Taiwan (week ending Aug 5, 2017), the numbers and proportions of ILI cases in emergency and outpatient departments showed a decreasing trend. The predominating viruses were influenza A(H3N2), and influenza B constituted approximately 11% of the influenza detection in the week ending Aug 5.
- In New Zealand (week ending Jul 30, 2017), influenza-like illness consultation rates increased slightly compared to the previous week, and remained above the seasonal threshold level. The overall influenza positivity rate of tested samples has remained at a high level (about 50%). Influenza A(H3N2) are the predominant viruses in New Zealand this year.
- In Australia (two-week period ending Jul 21, 2017), influenza activity continued to increase indicating that the season is underway in a majority of regions across Australia. Influenza A(H3N2) is currently the predominant circulating A subtype in the majority of jurisdictions. Nationally, notifications of laboratory confirmed influenza B viruses reached a plateau this reporting fortnight.

Sources:

Information have been extracted from the following sources when updates are available: [Chinese National Influenza Center](#), [Health Bureau of Macau Special Administrative Region](#), [Taiwan Centers for Disease Control](#), [New Zealand Ministry of Health](#) and [Australian Department of Health](#).