

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 4, 2018)

Reporting period: Dec 24 – 30, 2017 (Week 52)

- The latest surveillance data showed that the local seasonal influenza activity has increased in the past two weeks. It is anticipated that the influenza activity in Hong Kong will continue to increase, indicating the impending arrival of the winter influenza season.
- 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 to protect themselves against seasonal influenza and its complications, as well as related hospitalisations and deaths.
- Apart from adopting personal, hand and environmental hygiene practices against respiratory illnesses, those members of the public who have not received influenza vaccine are urged to get vaccinated as soon as possible for personal protection.
- In the 2017/18 season, the Vaccination Subsidy Scheme (VSS) and the Government Vaccination Programme (GVP) have been launched on Oct 18 and Oct 25, 2017 respectively. The VSS continues 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 are the same as those of 2016/17 under the GVP. For more details, please refer to the webpage (<http://www.chp.gov.hk/en/features/17980.html>).

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

In week 52, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 4.9 ILI cases per 1,000 consultations, which was higher than 3.9 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 32.2 ILI cases per 1,000 consultations, which was lower than 38.5 recorded in the previous week (Figure 1, right).

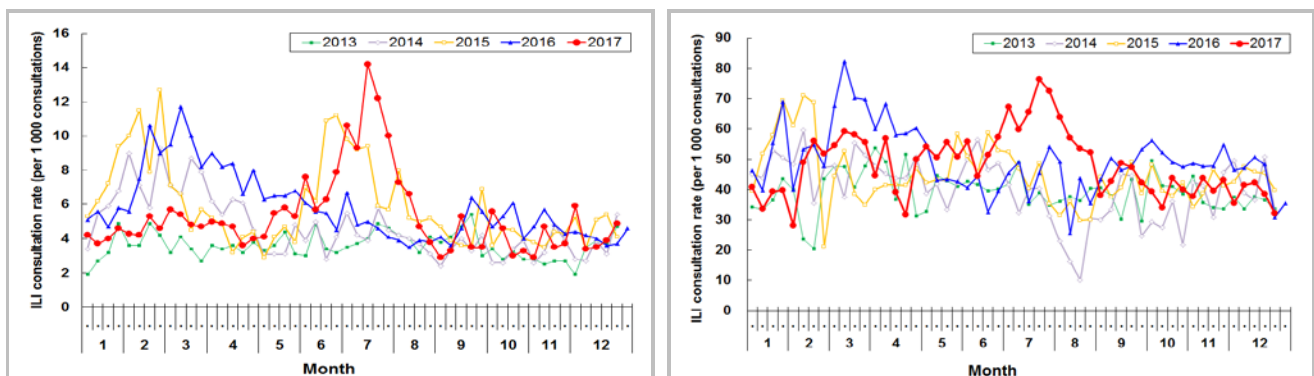


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 52, 421 (9.32%) were tested positive for seasonal influenza viruses, including 37 (0.82%) influenza A(H1), 26 (0.58%) influenza A(H3), 336 (7.44%) influenza B and 22 (0.49%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 9.32%, which was higher than 6.02% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of B, A(H1), A(H3) and C were 79.8%, 8.8%, 6.2% and 5.2% respectively.

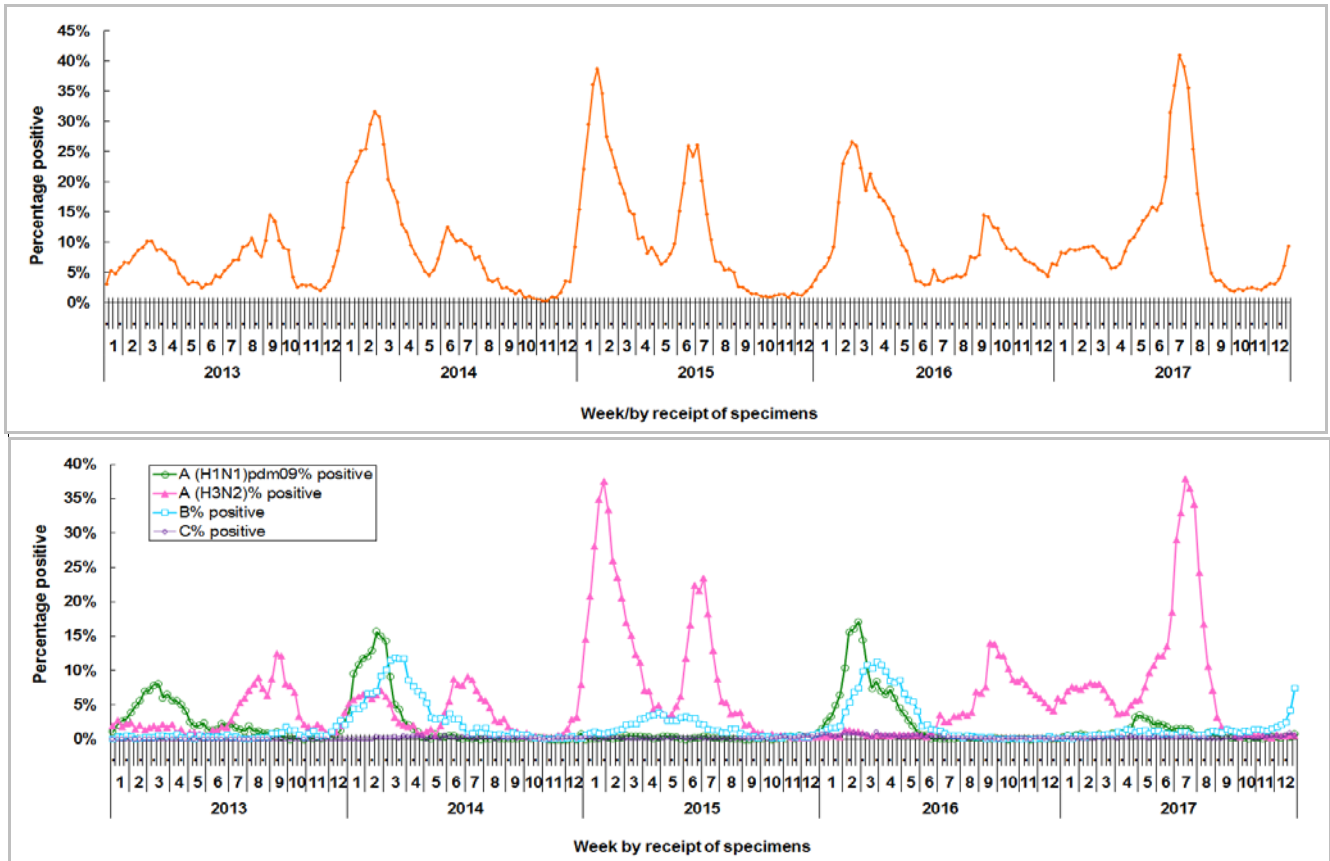


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2013-17

In week 52, two ILI outbreaks occurring in schools/ institutions were recorded (affecting 6 persons), as compared to three outbreaks recorded in the previous week (affecting 17 persons) (Figure 3). In the first 4 days of week 1, 2018 (Dec 31, 2017 to Jan 3, 2018), two ILI outbreaks in schools/institution were recorded (affecting 8 persons).

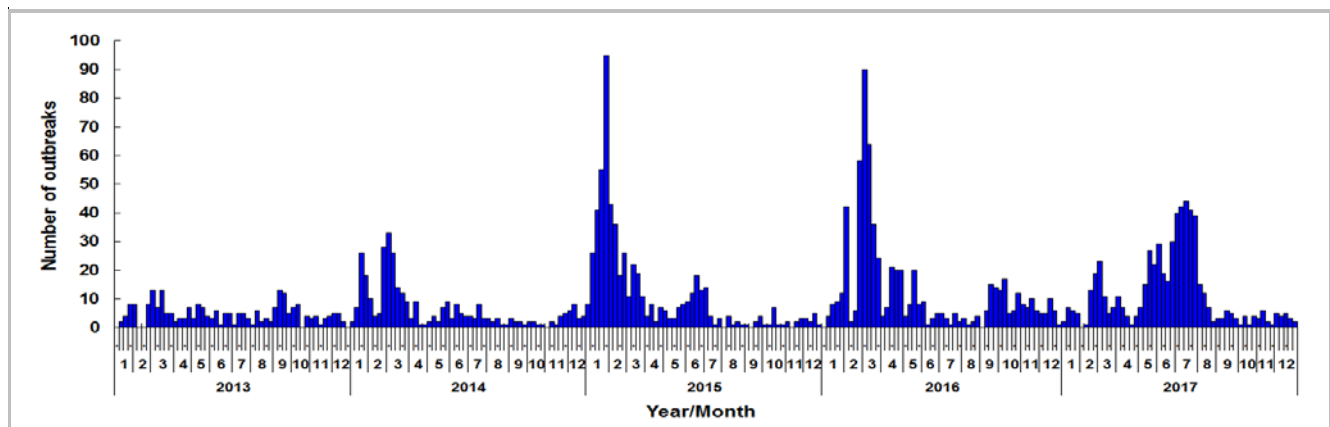


Figure 3 ILI outbreaks in schools/institutions, 2013-17

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

In week 52, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 196.1 (per 1,000 coded cases), which was higher than 170.2 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.

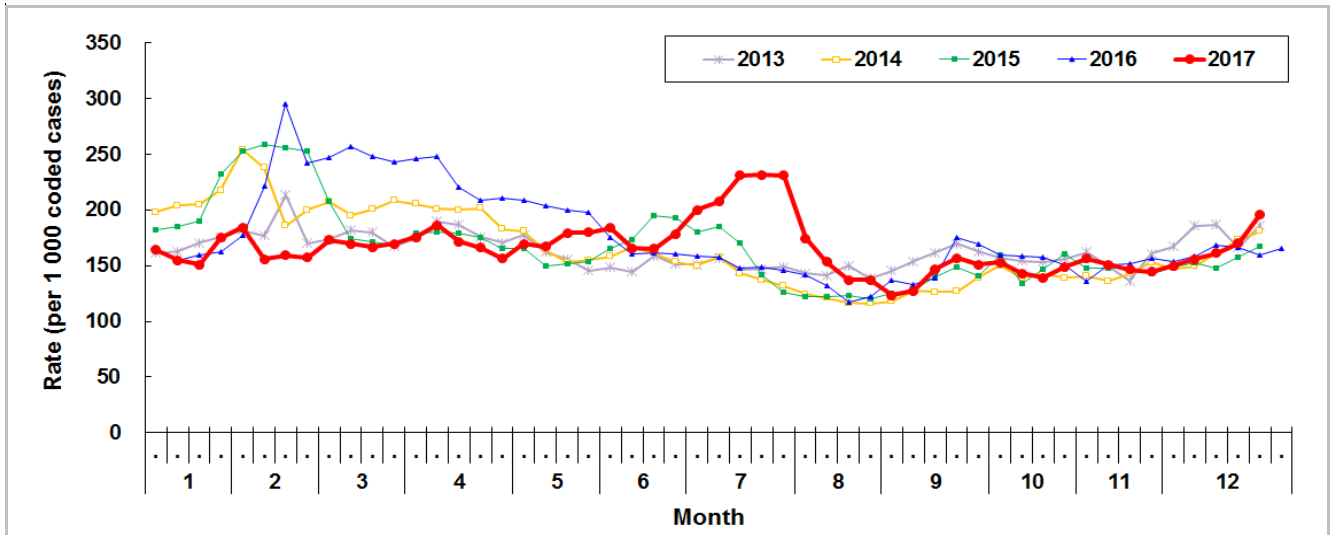


Figure 4 Rate of ILI syndrome group in AED, 2013-17

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

In week 52, 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 1.66, 1.15, 0.08 and 0.37 cases (per 10,000 people in the age group) respectively, as compared to 0.94, 0.59, 0.06 and 0.29 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

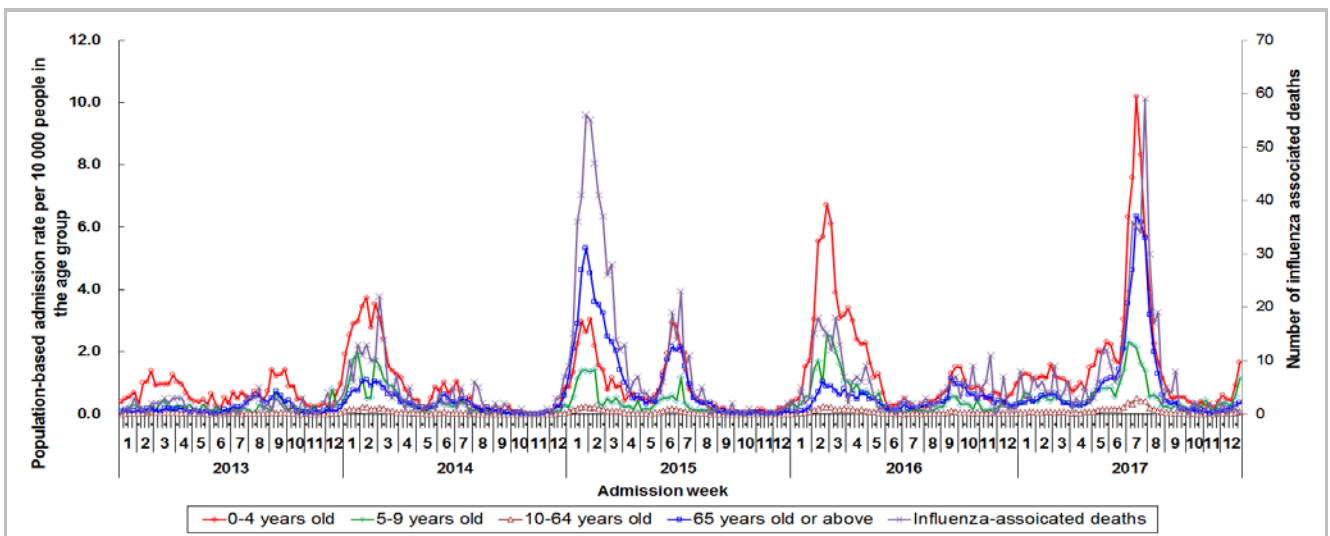


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

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

The surveillance for week 52 was suspended due to Christmas holiday. In week 51, 0.45% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.60% recorded in the previous week (Figure 6).

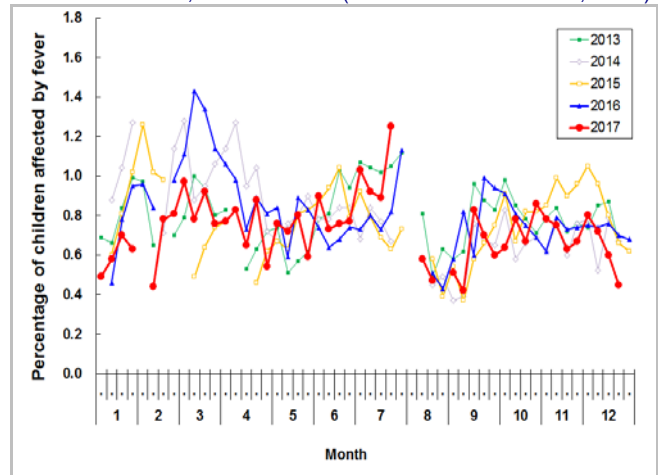


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

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

In week 52, 0.09% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), which was the same as that recorded in the previous week (Figure 7).

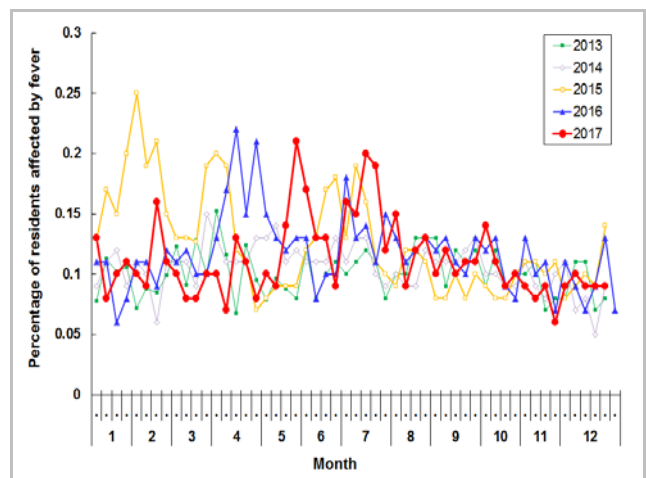


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

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

In week 52, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 2.35 ILI cases per 1,000 consultations as compared to 2.24 recorded in the previous week (Figure 8).

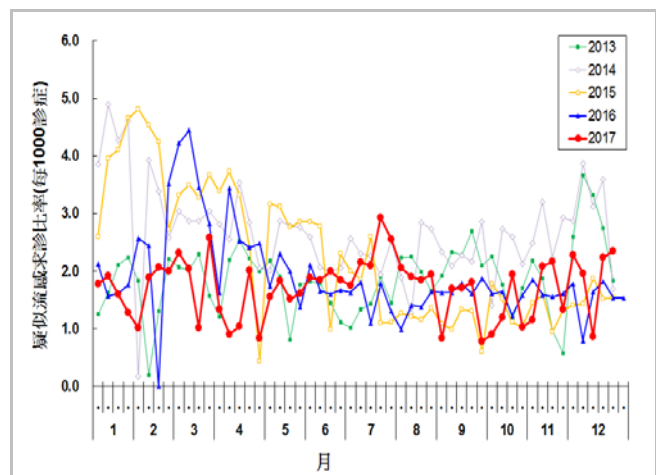


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

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

- In week 52 and the first 4 days of week 1, 2018 (Dec 31, 2017 to Jan 3, 2018), there were no cases of severe paediatric influenza-associated complication/ death.

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

- In week 52 and the first 4 days of week 1, 2018 (Dec 31, 2017 to Jan 3, 2018), 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 continued to increase in the temperate zone of the northern hemisphere. In the temperate zone of the southern hemisphere, activity decreased at inter-seasonal levels. In Central America and the Caribbean, influenza activity remained low. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections.

- In the United States (week ending Dec 23, 2017), influenza activity sharply increased. The proportion of outpatient visits for ILI was 5.0%, which was above the national baseline of 2.2%. The most frequently identified influenza virus type reported by public health laboratories in the week ending Dec 23, 2017 was influenza A (H3).
- In Canada (week ending Dec 16, 2017), the overall influenza activity continued to increase. The percentage of tests positive for influenza was 20.9%, which was higher than 17.7% recorded in the previous week. The majority of influenza detections continue to be A(H3N2) although a substantially greater number of influenza B detections has also been reported.
- In the United Kingdom (week ending Dec 24, 2017), influenza activity continues to increase for several indicators in particular the proportion of laboratory samples positive for influenza and influenza admissions to hospital and intensive care. The positivity of influenza detection was 19.0% in the week ending Dec 24, 2017, above the baseline threshold of 8.6%.
- In Europe (week ending Dec 24, 2017), influenza activity was increasing in countries in western, northern and southern Europe. 32% of sentinel specimens were tested positive for influenza virus, an increase over 28% in the previous week.
- In Mainland China (week ending Dec 24, 2017), the influenza activity in both southern and northern provinces was at the seasonal level for winter influenza season, and was still on an increasing trend. In southern provinces, the proportion of ILI cases in emergency and outpatient departments reported by sentinel hospitals was 4.3%, higher than that reported in the previous week (3.7%) and that in the corresponding period in 2014-2016 (2.4%, 2.8%, 3.3%). In northern provinces, that proportion was 5.2%, higher than that reported in the previous week (4.9%) and that in the corresponding period in 2014-2016 (3.9%, 2.7%, 3.5%). The proportion of influenza detections in the week ending December 24, 2017 was 40.2%. The predominant circulating influenza subtype was influenza B, followed by influenza A(H1N1)pdm09 and A(H3N2).
- In Macau (Jan 2, 2018), the proportions of ILI cases in emergency departments among both adults and children increased. The proportion of influenza detections was 14.2%, an increase from 11.5% in the previous week.
- In Taiwan (week ending Dec 30, 2017), the influenza season has arrived with increasing influenza activity. In the week ending December 30, the proportion of ILI cases in emergency department was 12.7% which was above the threshold of 11.4%. The predominating virus was influenza B which constituted 77% of the influenza detections.
- In Japan (week ending Dec 17, 2017), the influenza season has started in late November. The average number of reported ILI cases per sentinel site increased to 7.40 in the week ending December 17, 2017, which was higher than the baseline level of 1.00. The most frequently identified influenza virus type in the past five weeks was influenza A(H1N1)pdm09, followed by influenza B and A(H3N2).

Sources:

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