

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 11, 2017)

Reporting period: Jan 1 – 7, 2017 (Week 1)

- The latest surveillance data showed that the influenza activity of last week was similar to the previous week.
- 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.
- The Vaccination Subsidy Scheme (VSS) 2016/17 was launched on October 20. Subsidised vaccination has been provided for children aged 6 months to under 12 years, elderly aged 65 years or above, pregnant women, persons with intellectual disabilities and persons receiving Disability Allowance (DA). In addition, starting from November 3, the eligibility of free vaccination under the Government Vaccination Programme has been expanded to include children aged 6 years to under 12 years from families receiving Comprehensive Social Security Assistance or holding valid Medical Waiver Certificates as well as persons receiving DA who are existing clients of public clinics and hospitals. Please refer to the webpages (http://www.chp.gov.hk/en/view_content/46107.html) and (http://www.chp.gov.hk/en/view_content/18630.html) for details.

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

In week 1, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 4.2 ILI cases per 1,000 consultations, which was lower than 4.6 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 40.9 ILI cases per 1,000 consultations, which was higher than 35.4 recorded in the previous week (Figure 1, right).

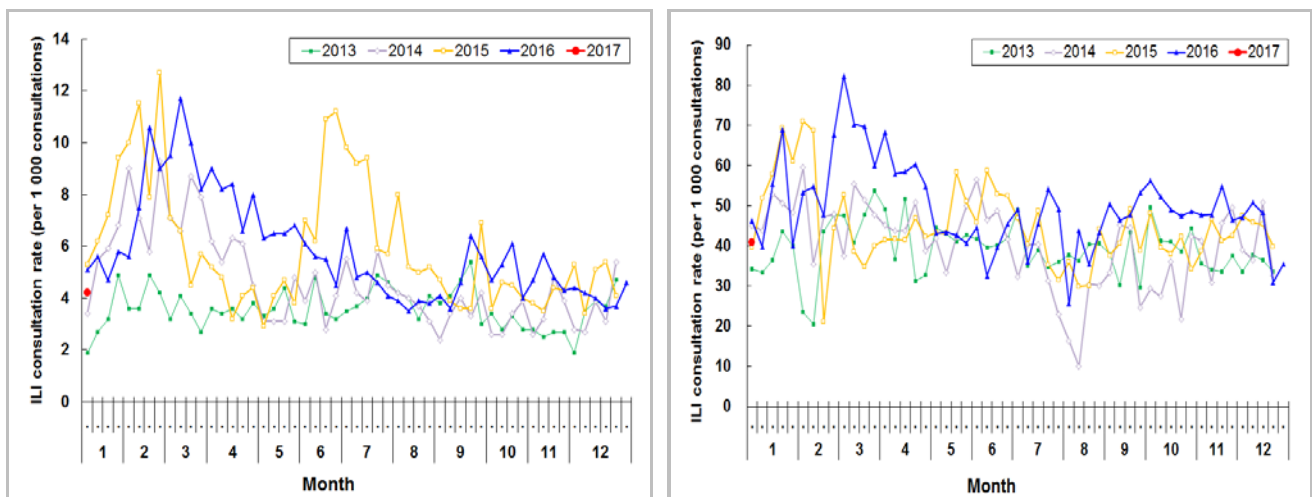


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 1, 232 (6.14%) were tested positive for seasonal influenza viruses, including 12 (0.32%) influenza A(H1), 210 (5.56%) influenza A(H3), 8 (0.21%) influenza B and 2 (0.05%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 6.14%, which was lower than 6.39% 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 90.5%, 5.2%, 3.4% and 0.9% respectively.

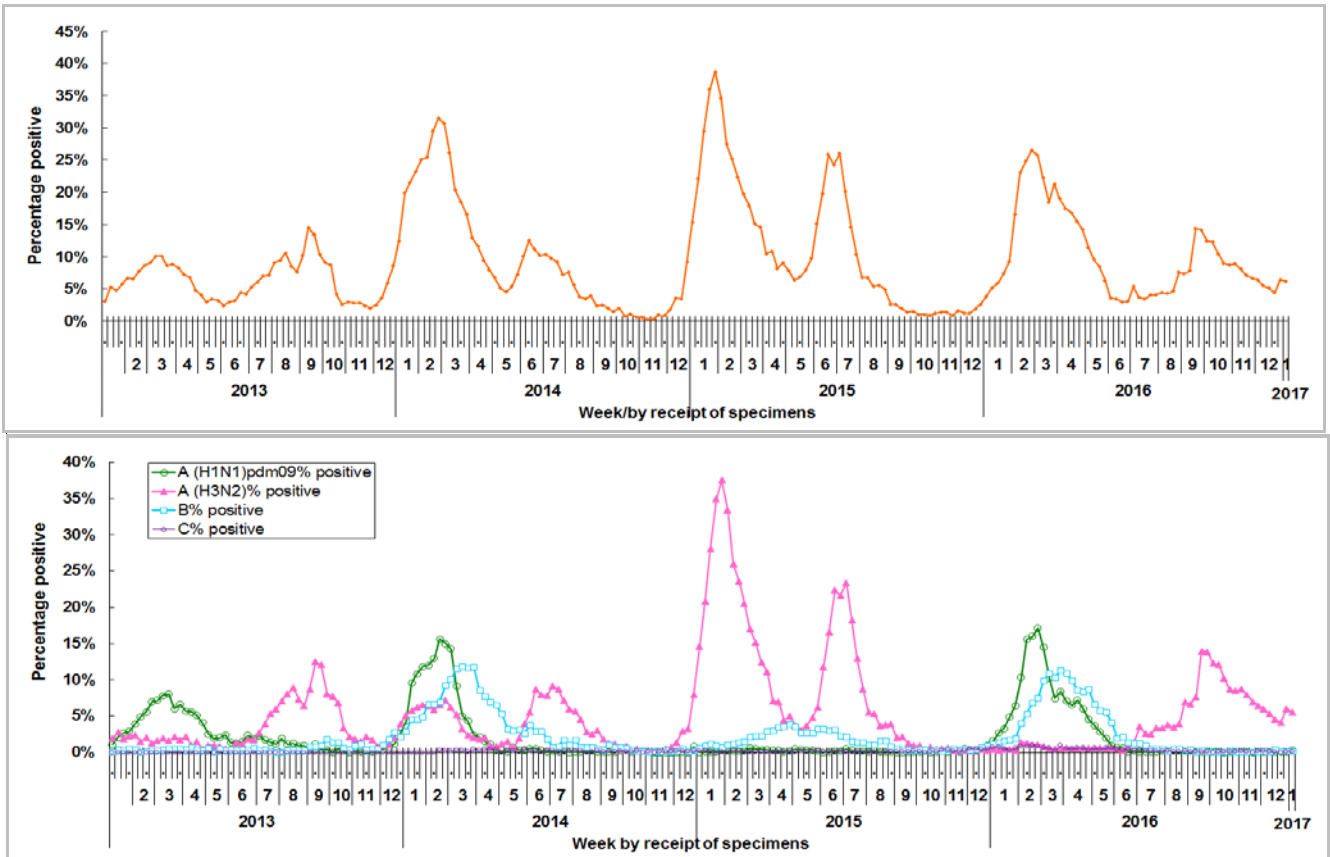


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2013-17

In week 1, two ILI outbreaks occurring in school/institution were recorded (affecting 7 persons), as compared to one outbreak (affecting 3 persons) recorded in the previous week (Figure 3). In the first 4 days of week 2 in 2017 (Jan 8 to 11, 2017), two institutional ILI outbreaks were recorded (affecting 7 persons).

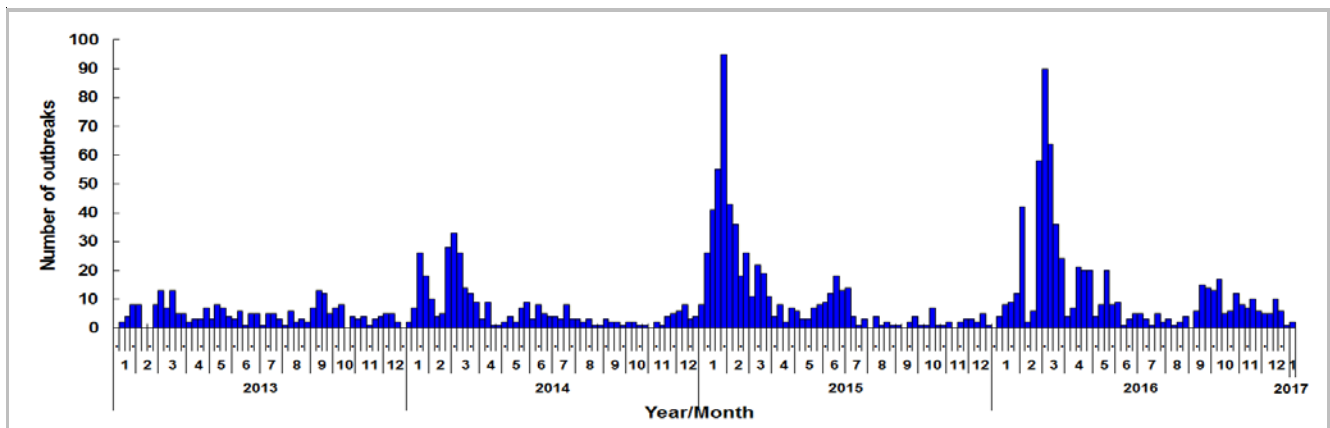


Figure 3 ILI outbreaks in schools/institutions, 2013-17

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

In week 1, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 165.7 (per 1,000 coded cases), which was similar to the rate of 165.4 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.

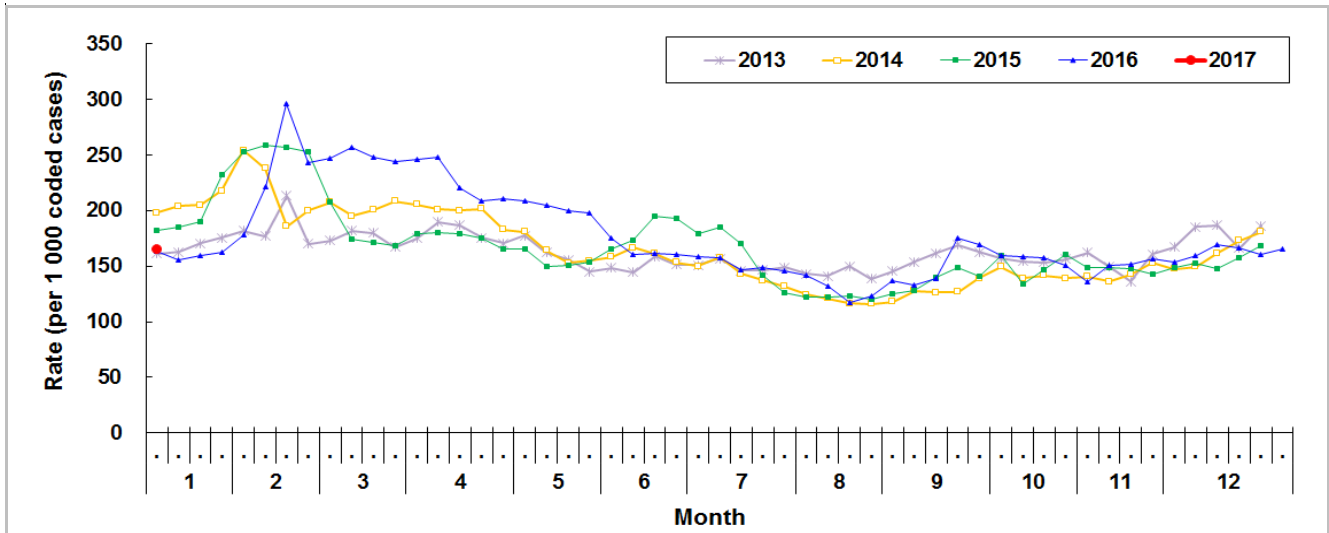


Figure 4 Rate of ILI syndrome group in AED, 2013-17

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

In week 1, 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 0.96, 0.41, 0.05 and 0.26 cases (per 10,000 people in the age group) respectively, as compared to 1.07, 0.21, 0.04 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.

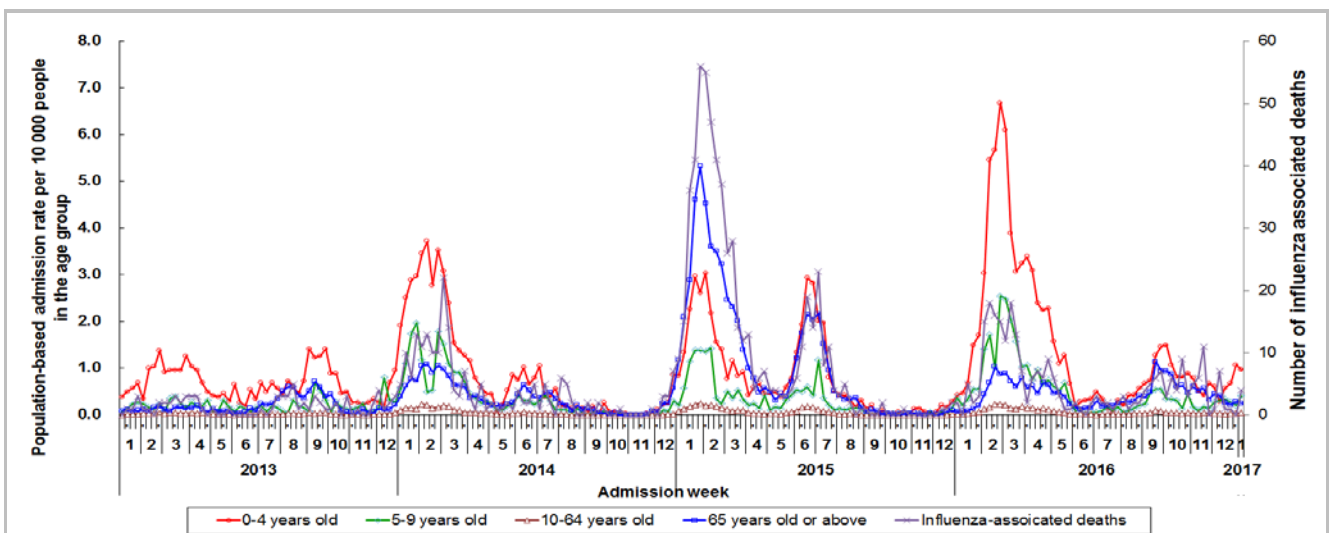


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

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

In week 1, 0.49% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.68% in week 52, 2016 (Figure 6). The surveillance for week 53, 2016 was suspended due to Christmas and New Year holiday.

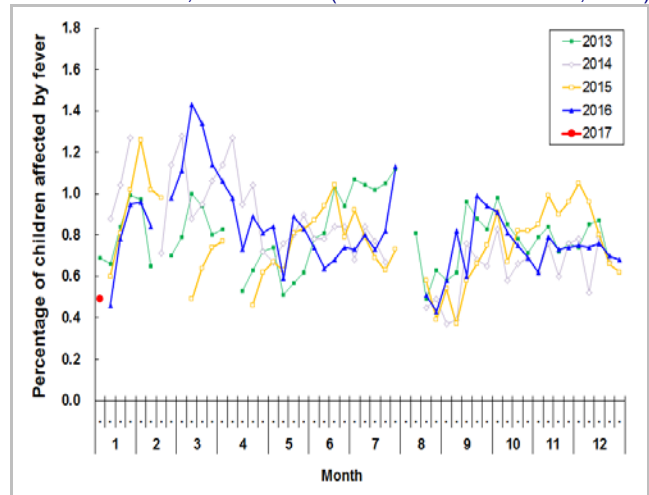


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

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

In week 1, 0.13% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.07% in the previous week (Figure 7).

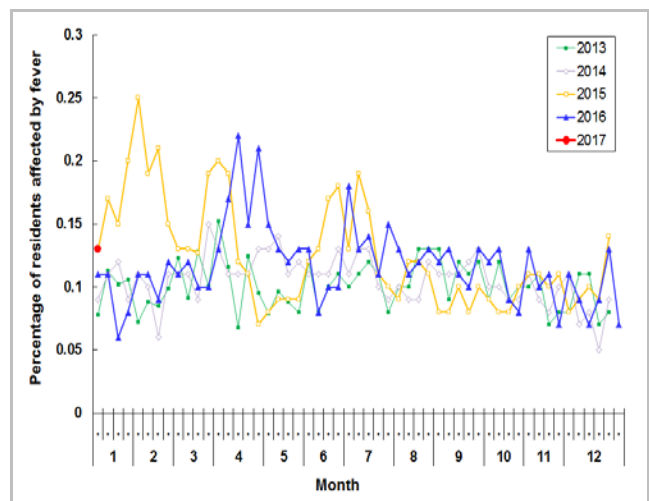


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

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

In week 1, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.78 ILI cases per 1,000 consultations as compared to 1.53 recorded in the previous week (Figure 8).

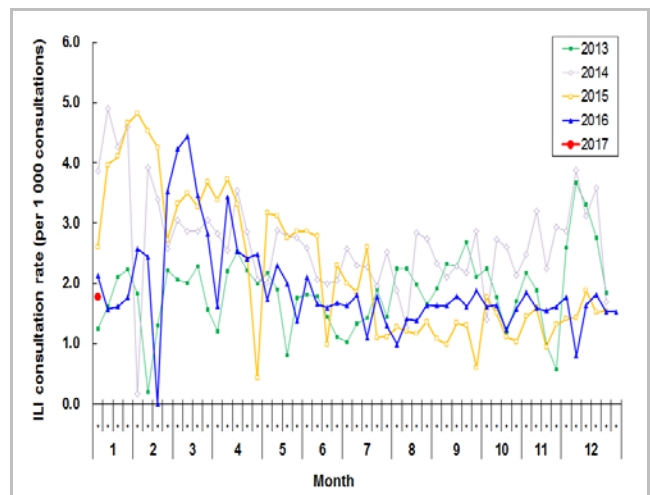


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

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

- In week 1, there were no new reports of severe paediatric influenza-associated complication/death. In the first 4 days of week 2 (Jan 8 to 11, 2017), one case of severe paediatric influenza-associated complication was reported. The case details are as follow:

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	Vaccination history
2	10 months	Male	Pneumonia and Septic shock	No	Influenza A(H3) (also positive for parainfluenza)	Not vaccinated

Data as of Jan 12, 2017 17:00

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

- In week 1 and the first 4 days of week 2 in 2017 (Jan 8 to 11, 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

In most areas in the Northern Hemisphere, the 2016/17 winter season has already started and the influenza activity is increasing with predominance of influenza A(H3N2).

- In the United States (week ending Dec 31, 2016), the influenza activity increased. The proportion of outpatient visits for ILI was 3.4%, which was above the national baseline of 2.2%.
- In Canada (week ending Dec 31, 2016), the influenza activity continued to increase with greater numbers of influenza detections, hospitalizations and outbreaks being reported. Influenza A(H3N2) continues to be the most common subtype detected.
- In the United Kingdom (week ending Jan 1, 2017), influenza is circulating. Increases were seen in influenza-associated outbreaks in the community, the proportion of laboratory samples positive for influenza and influenza-related admissions to hospital and intensive care. The positivity of influenza detection was 25.4% in the week ending January 1, which was above the threshold for 2016/17 season of 8.6%.
- In Europe (week ending Jan 1, 2017), the influenza activity continued to increase across the region with high or very high intensity in 7 out of 43 reporting countries. The proportion of virus detections among sentinel surveillance specimens slightly increased to 50% from 47% last week, which was above the seasonal threshold of 10%. The majority of influenza viruses detected was influenza A(H3N2).
- In Taiwan (week ending Jan 7, 2017), the influenza activity remained similar to last week. The proportions of ILI cases in out-patient clinics and emergency departments in the recent weeks remained similar. The number of severe influenza cases was lower than the previous week and that of hospital admission for influenza decreased slightly in recent weeks. The predominating viruses were influenza A(H3N2).
- In Japan (week ending Jan 1, 2017), the influenza season has started since mid-November last year. The average number of reported ILI cases per sentinel site was 8.54 in the week ending January 1, 2017, higher than the baseline level of 1.00.
- In Korea (week ending Dec 31, 2016), the influenza activity has increased since early December last year. The weekly ILI rate increased to 63.5, which was above the baseline of 8.9. The proportion of influenza detections also increased to 46.8%.

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](#), [Taiwan Centers for Disease Control](#), [Japan Ministry of Health](#) and [Korean Centers for Disease Control and Prevention](#).