

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 Feb 15, 2017)

Reporting period: Feb 5 – 11, 2017 (Week 6)

- The latest surveillance data showed that the local influenza activity was largely similar to the previous week. The activity in recent weeks has increased as compared to early January.
- 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, 2016. 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, 2016, 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 6, 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 similar to 4.3 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 48.9 ILI cases per 1,000 consultations, which was higher than 28.1 recorded in the previous week (Figure 1, right).

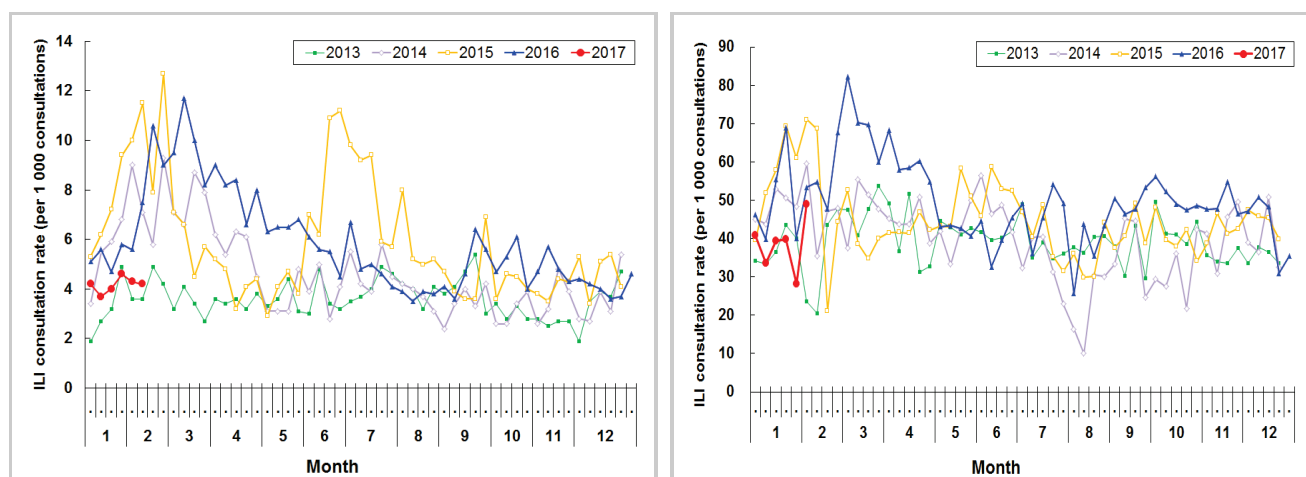


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 6, 359 (8.75%) were tested positive for seasonal influenza viruses, including 25 (0.61%) influenza A(H1), 317 (7.72%) influenza A(H3), 14 (0.34%) influenza B and 3 (0.07%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 8.75%, which was similar to 8.63% 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 88.3%, 7.0%, 3.9% and 0.8% respectively.

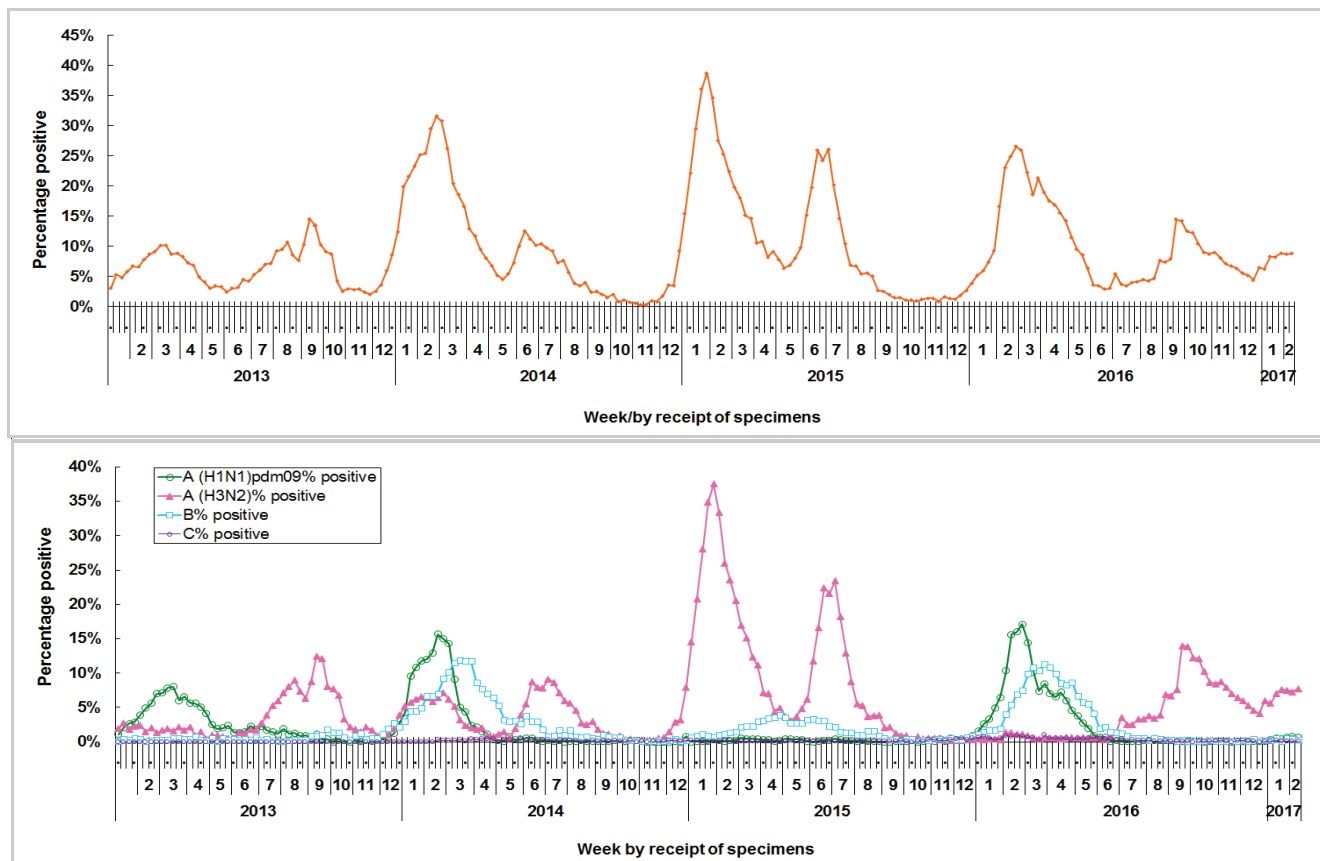


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2013-17

In week 6, one ILI outbreak occurring in a school was recorded (affecting 5 persons), as compared to no outbreaks recorded in the previous week (Figure 3). In the first 4 days of week 7 (Feb 12 to 15, 2017), 10 institutional ILI outbreaks were recorded (affecting 67 persons).

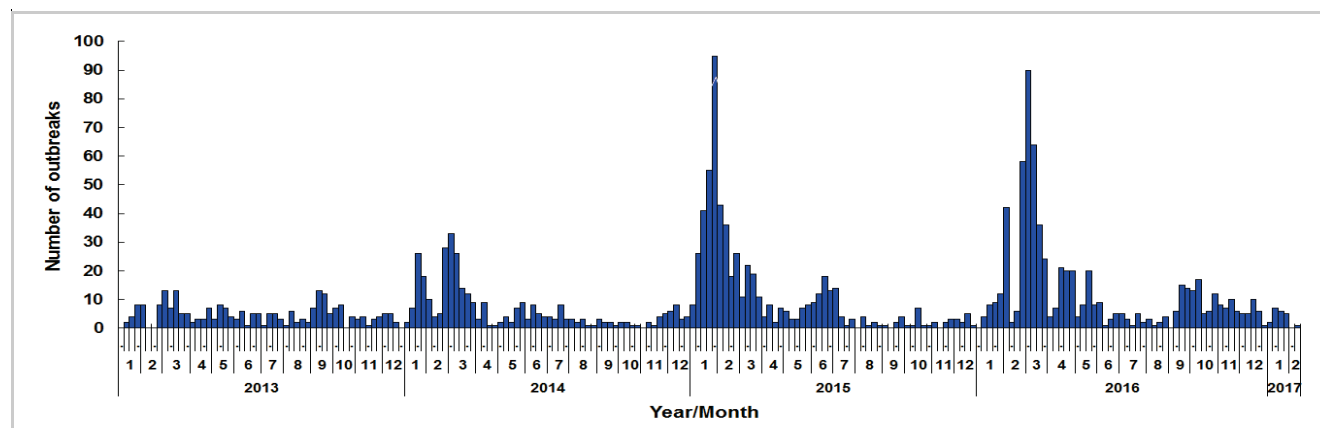


Figure 3 ILI outbreaks in schools/institutions, 2013-17

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

In week 6, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 157.8 (per 1,000 coded cases), which was lower than the rate of 185.1 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.

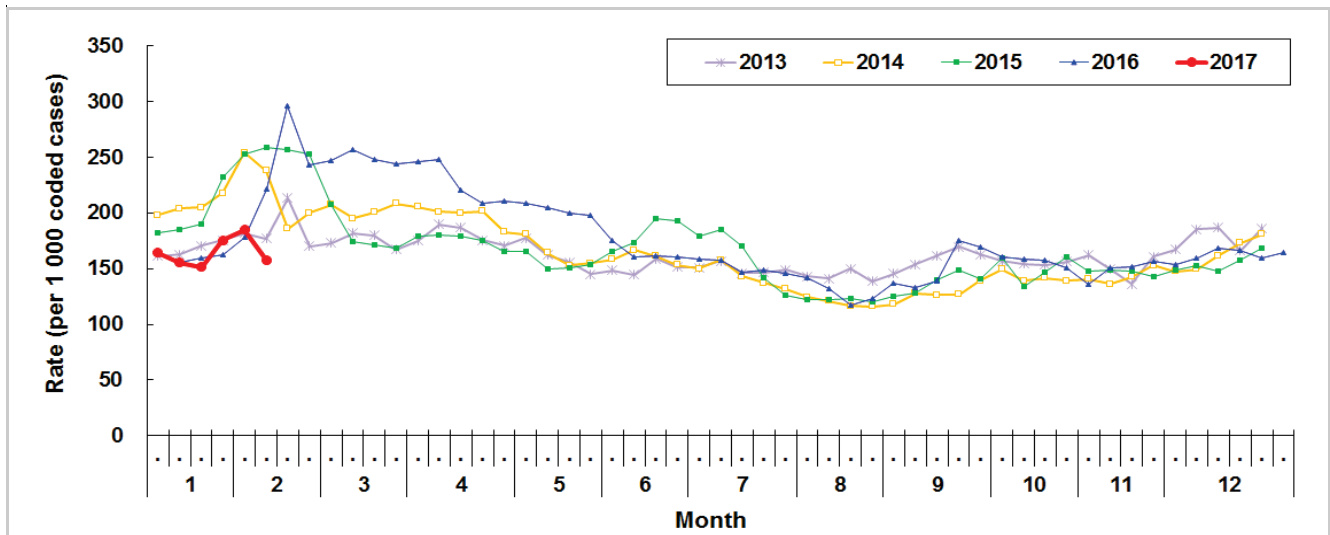


Figure 4 Rate of ILI syndrome group in AED, 2013-17

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

In week 6, 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 1.11, 0.52, 0.05 and 0.49 cases (per 10,000 people in the age group) respectively, as compared to 1.11, 0.40, 0.05 and 0.46 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

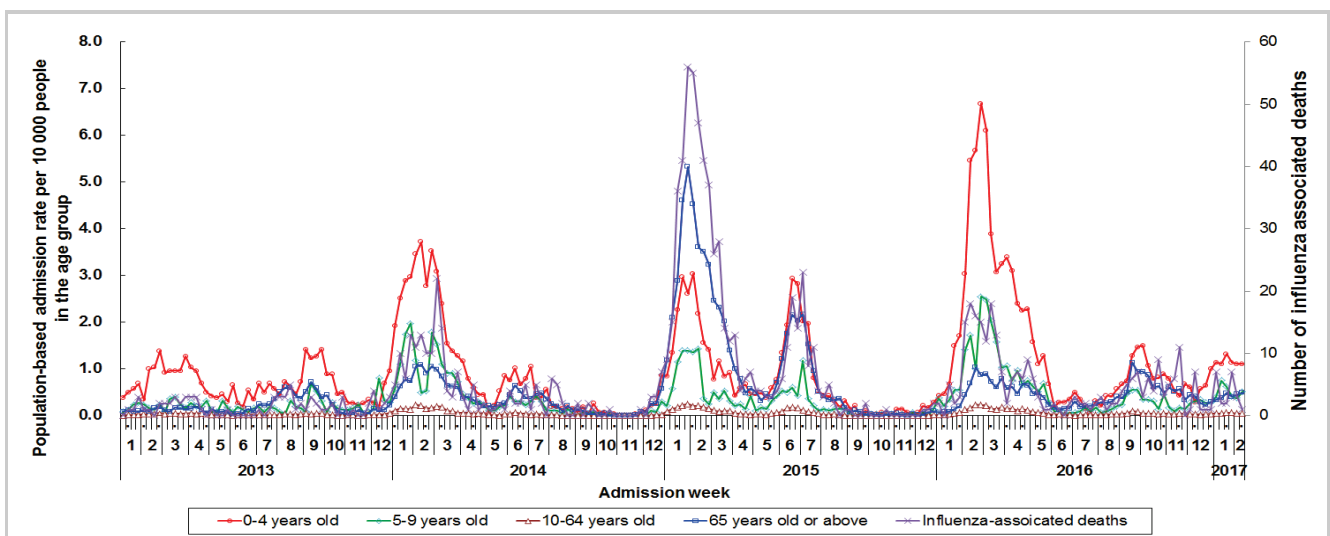


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

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

In week 6, 0.44% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.63% in week 4 (Figure 6). The surveillance for week 5 was suspended due to Chinese New Year holiday.

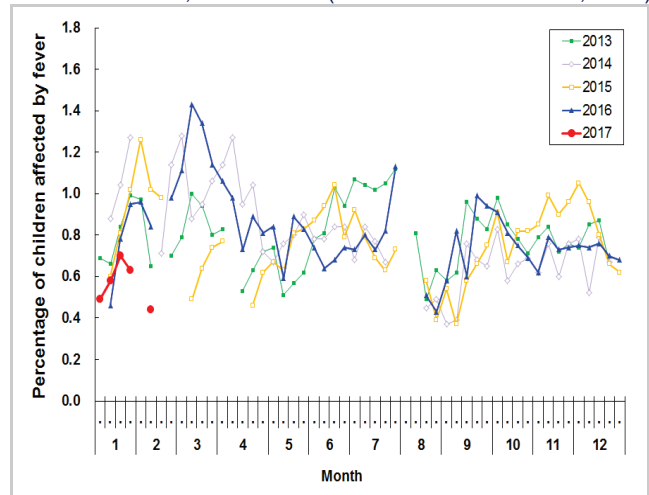


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

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

In week 6, 0.09% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.10% in the previous week (Figure 7).

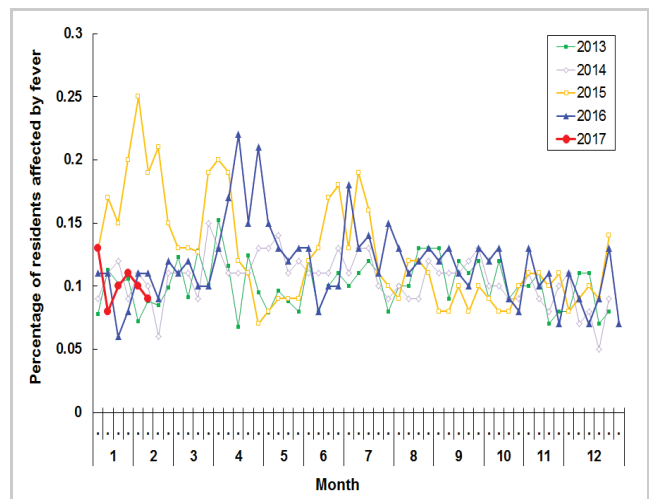


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

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

In week 6, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.89 ILI cases per 1,000 consultations as compared to 1.02 recorded in the previous week (Figure 8).

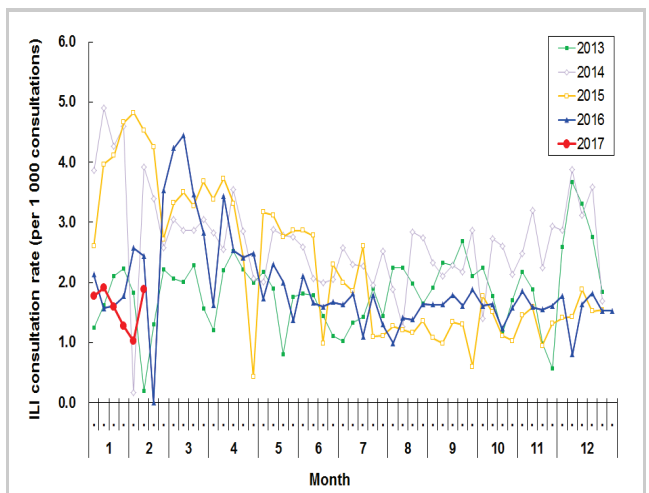


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

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

- In week 6, one case of severe paediatric influenza-associated complication was reported. In the first 4 days of week 7 (Feb 12 to 15, 2017), there were no new reports of severe paediatric influenza-associated complication/death. The case details are as follow:

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving influenza vaccine for this season
6	5 years	Male	Status epilepticus, suggestive of meningitis	No	Influenza A(H3)	Received the first dose for the first time but not the second dose*

Data as of Feb 15, 2017

** A child aged under 9 years who receives seasonal influenza vaccine for the first time requires two doses.*

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

- In week 6 and the first 4 days of week 7 (Feb 12 to 15, 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 influenza activities either remained elevated or have reached their peak levels for the 2016/17 winter season. The predominating virus was influenza A(H3N2).

- In the United States (week ending Feb 4, 2017), the influenza activity increased. The proportion of outpatient visits for ILI was 4.8%, which was above the national baseline of 2.2%.
- In Canada (week ending Feb 4 2017), influenza activity continued to be reported and two regions reported widespread influenza activity. A slight increase in the percent of test positive for influenza and number of laboratory confirmed outbreaks was observed. Influenza A(H3N2) continues to be the most common subtype detected.
- In the United Kingdom (week ending Feb 5, 2017), influenza activity continued across all indicators. The positivity of influenza detection was 23.1% in the week ending February 5, which was above the threshold for 2016/17 season of 8.6%.
- In Europe (week ending Feb 5, 2017), the influenza activity remained elevated across the region with 28 of 43 reporting countries reporting medium to very high intensity. The proportion of virus detections among sentinel surveillance specimens decreased to 45% from 51-52% seen since week 51/2016, and was above the seasonal threshold of 10%. The majority of influenza viruses detected was influenza A(H3N2).
- In Taiwan (week ending Feb 11, 2017), the proportions of ILI cases in emergency departments and out-patient clinics decreased as compared to the previous week, and returned to the levels recorded before Chinese New Year holiday. Recently the number of severe influenza cases was on downward trend, but the number of fatal influenza cases showed an increasing trend. The predominating viruses were influenza A(H3N2).
- In Japan (week ending Feb 5, 2017), the influenza season started in mid-November last year. The average number of reported ILI cases per sentinel site slightly decreased to 38.14 in the week ending February 5, 2017 from 39.14 recorded in the previous week, but higher than the baseline level of 1.00.
- In Korea (week ending Feb 4, 2017), the influenza activity has reached its peak in late December last year and has been decreasing in January. The weekly ILI rate decreased to 9.9 from 12.5 recorded in previous week, but it was still above the baseline of 8.9. The proportion of influenza detections also decreased to 10.6% from 19.7%.

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](#).