

# 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 18, 2017)

**Reporting period: Jan 8 – 14, 2017 (Week 2)**

- The surveillance data in the past few weeks showed that the local influenza activity is increasing gradually and the 2016/17 winter influenza season is expected to arrive very soon.
- 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](http://www.chp.gov.hk/en/view_content/46107.html)) and ([http://www.chp.gov.hk/en/view\\_content/18630.html](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 2, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 3.7 ILI cases per 1,000 consultations, which was lower than 4.2 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 33.5 ILI cases per 1,000 consultations, which was lower than 40.9 recorded in the previous week (Figure 1, right).

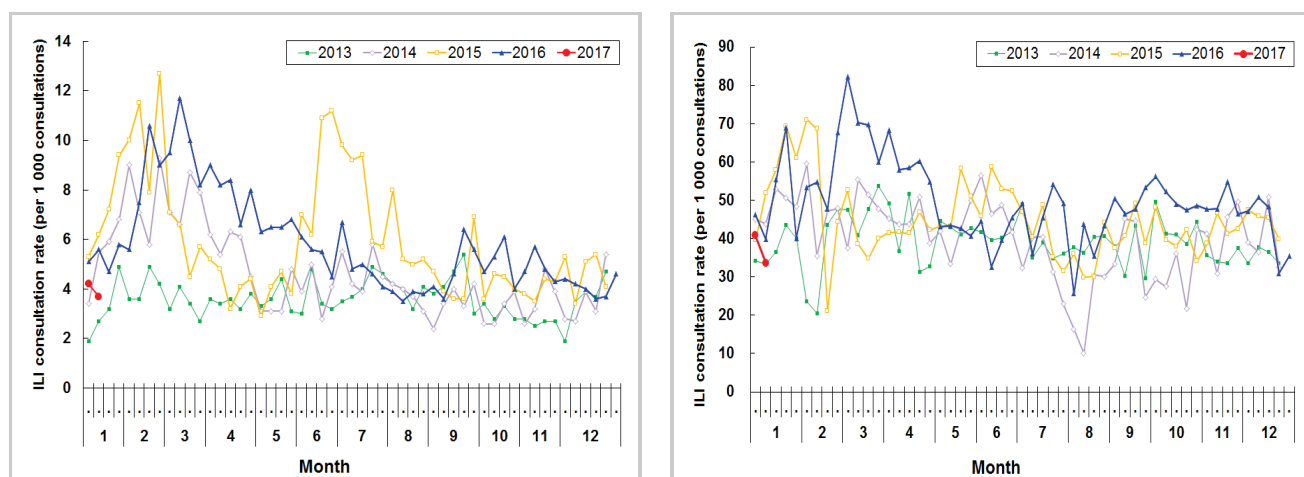


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

## Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 2, 325 (8.13%) were tested positive for seasonal influenza viruses, including 21 (0.53%) influenza A(H1), 276 (6.90%) influenza A(H3), 22 (0.55%) influenza B and 6 (0.15%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 8.13%, which was higher than 6.20% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of A(H3), B, A(H1) and C were 84.9%, 6.8%, 6.5% and 1.8% respectively.

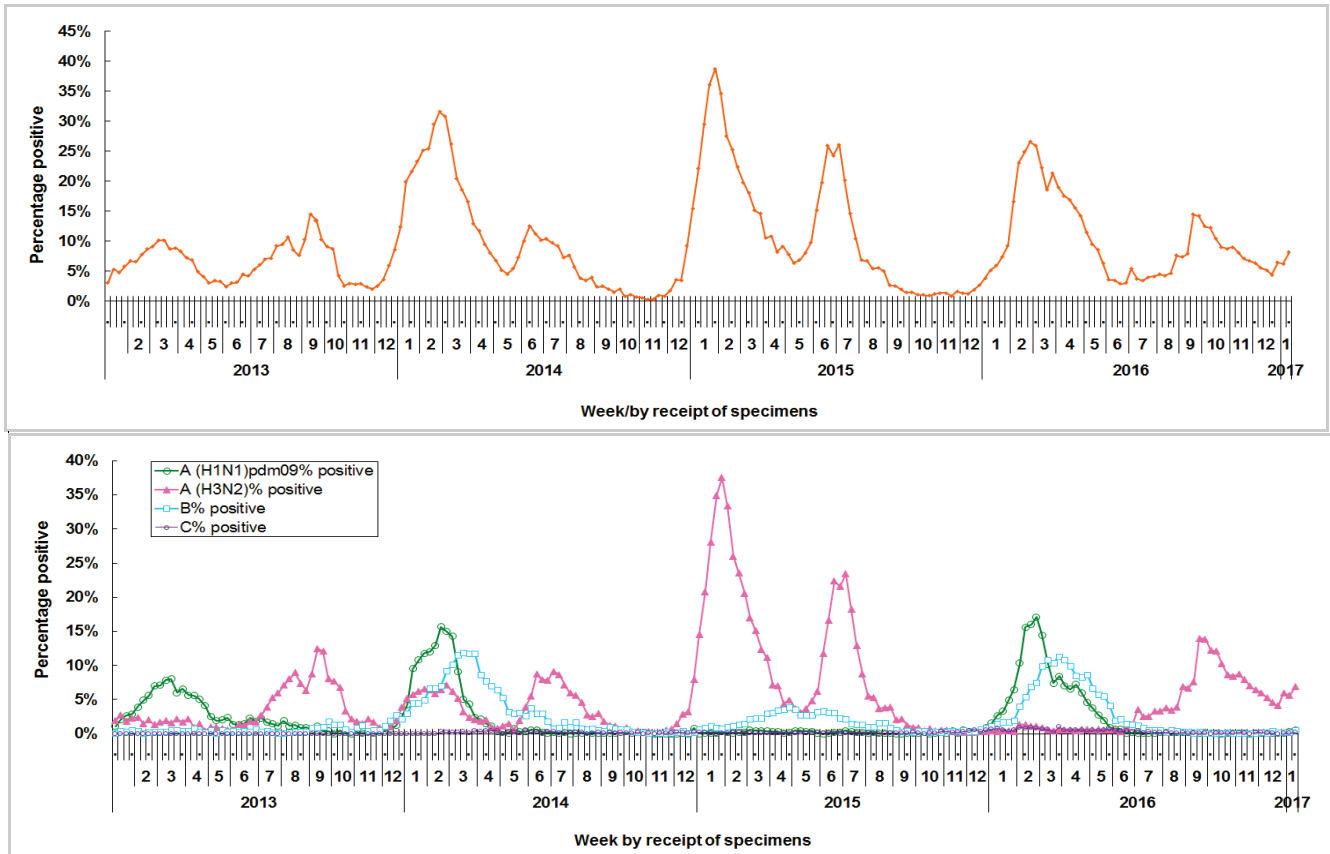


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

## Influenza-like illness outbreak surveillance, 2013-17

In week 2, seven ILI outbreaks occurring in school/institution were recorded (affecting 25 persons), as compared to two outbreaks (affecting 7 persons) recorded in the previous week (Figure 3). In the first 4 days of week 3 (Jan 15 to 18, 2017), one institutional ILI outbreak was recorded (affecting 4 persons).

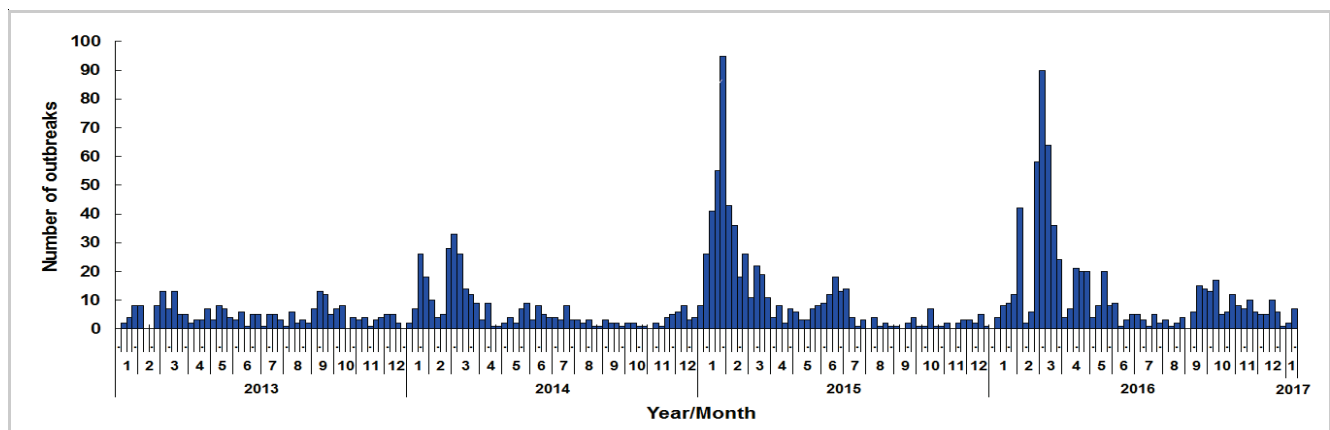


Figure 3 ILI outbreaks in schools/institutions, 2013-17

## Rate of influenza-like illness syndrome group in accident and emergency departments, 2013-17<sup>#</sup>

In week 2, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 156.1 (per 1,000 coded cases), which was lower than the rate of 165.3 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.*

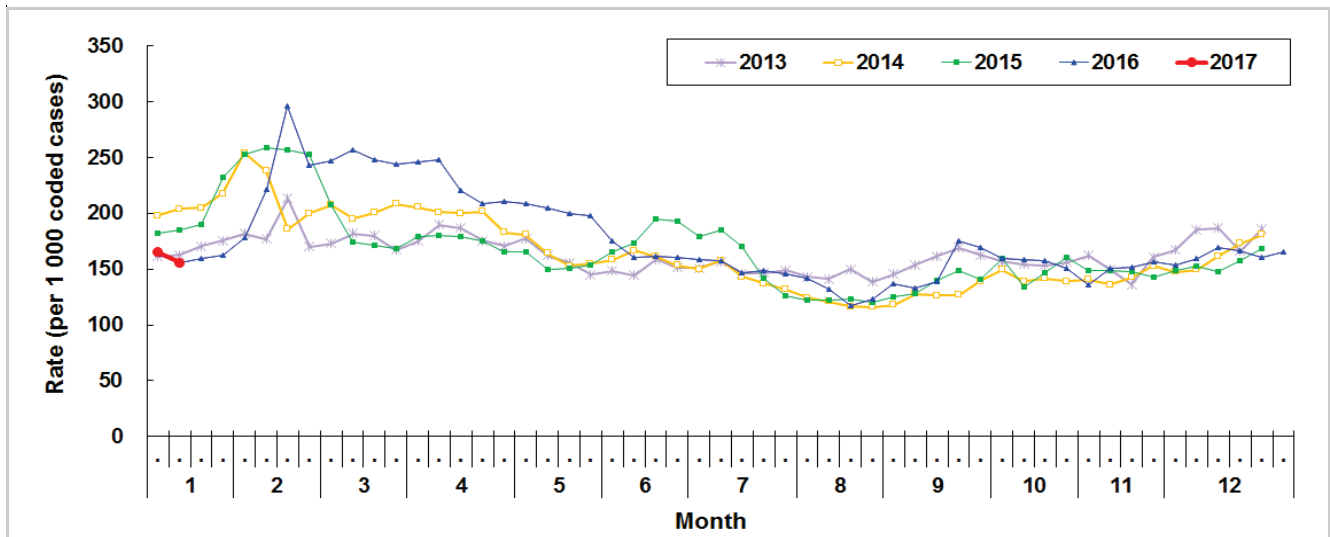


Figure 4 Rate of ILI syndrome group in AED, 2013-17

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

In week 2, 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, 0.66, 0.05 and 0.26 cases (per 10,000 people in the age group) respectively, as compared to 1.11, 0.41, 0.05 and 0.32 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

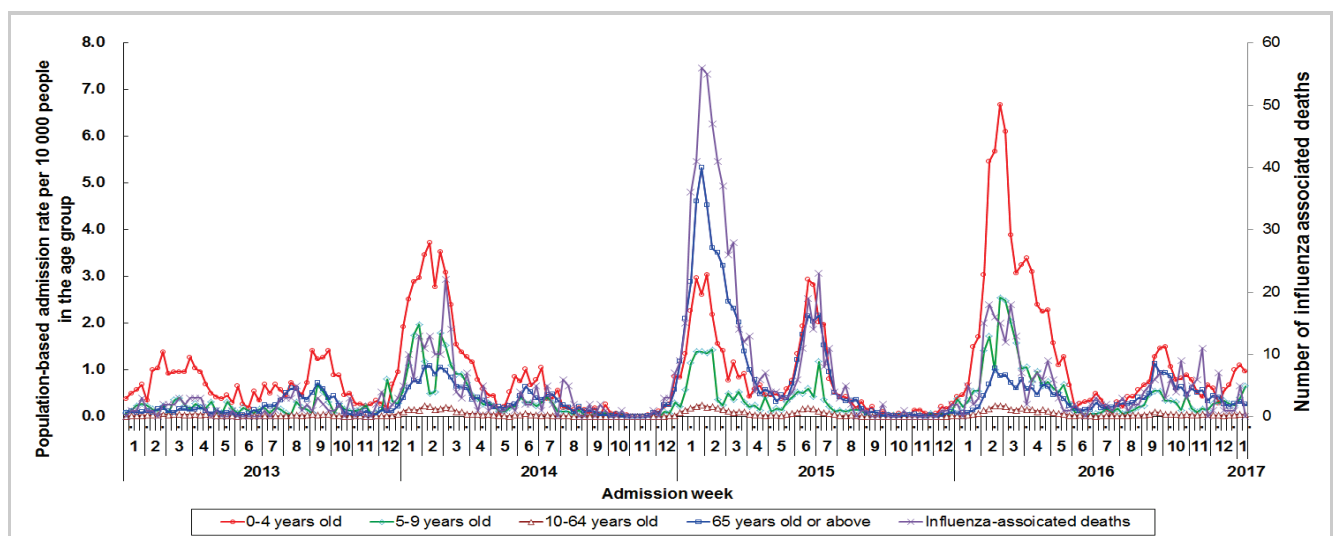


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

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

In week 2, 0.58% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever ( $38^{\circ}\text{C}$  or above) as compared to 0.49% in the previous week (Figure 6).

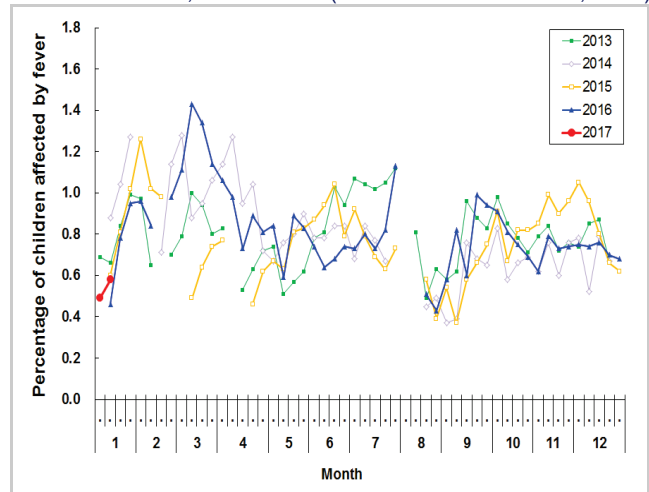


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

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

In week 2, 0.08% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever ( $38^{\circ}\text{C}$  or above) as compared to 0.13% in the previous week (Figure 7).

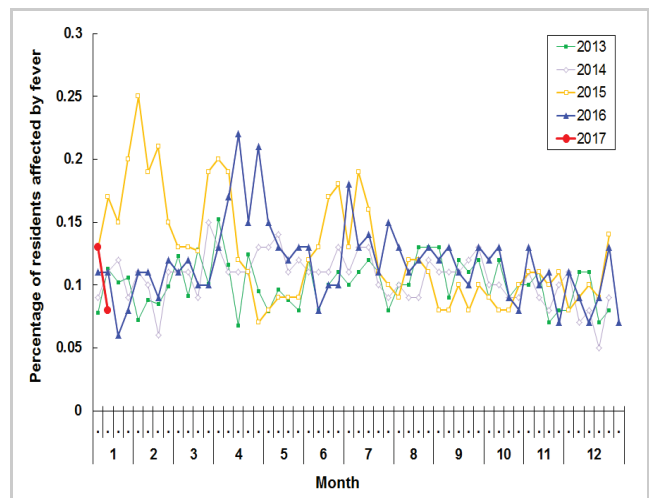


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

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

In week 2, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.91 ILI cases per 1,000 consultations as compared to 1.78 recorded in the previous week (Figure 8).

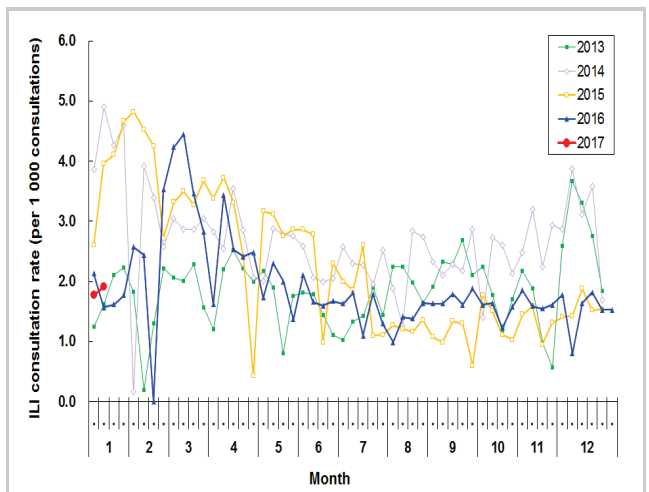


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

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

- In week 2, one case of severe paediatric influenza-associated complication was reported. In the first 4 days of week 3 (Jan 15 to 18, 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	Any co-infection?	Vaccination history
2	10 months	Male	Pneumonia and Septic shock	No	Influenza A(H3)	Parainfluenza	Not vaccinated

*Data as of Jan 18, 2017*

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

- In week 2 and the first 4 days of week 3 (Jan 15 to 18, 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 Jan 7, 2017), the influenza activity increased. The proportion of outpatient visits for ILI was 3.2%, which was above the national baseline of 2.2%.
- In Canada (week ending Jan 7, 2017), greater numbers of influenza detections, outbreaks and hospitalizations were reported compared to previous weeks suggesting that Canada is nearing peak influenza activity. Influenza A(H3N2) continues to be the most common subtype detected.
- In the United Kingdom (week ending Jan 8, 2017), influenza is circulating. Increases were seen in influenza-associated outbreaks in the community and the proportion of laboratory samples positive for influenza, but other indicators, such as influenza-related admissions to hospital and intensive care, remained similar to the previous week. The positivity of influenza detection was 27.4% in the week ending January 8, which was above the threshold for 2016/17 season of 8.6%.
- In Europe (week ending Jan 8, 2017), the influenza activity remained high across the region with high or very high intensity in 10 out of 43 reporting countries. The proportion of virus detections among sentinel surveillance specimens was around 50% for the third consecutive week, which was above the seasonal threshold of 10%. The majority of influenza viruses detected was influenza A(H3N2).
- In Taiwan (week ending Jan 14, 2017), the influenza activity slightly decreased. The proportions of ILI cases in out-patient clinics and emergency departments slightly decreased recently. The number of severe influenza cases was slightly higher than the previous week but was on downward trend. The number of hospital admission for influenza also decreased slightly recently. The predominating viruses were influenza A(H3N2).
- In Japan (week ending Jan 8, 2017), the influenza season has started since mid-November last year. The average number of reported ILI cases per sentinel site was 10.58 in the week ending January 8, 2017, higher than the baseline level of 1.00.
- In Korea (week ending Jan 7, 2017), the influenza activity has increased since early December last year. The weekly ILI rate decreased to 39.4 from 63.5 recorded in previous week, which was still above the baseline of 8.9. The proportion of influenza detections also increased to 42.9%.

### 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](#).