

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, 2017)

Reporting period: Dec 25 – 31, 2016 (Week 53)

- The latest surveillance data showed that the influenza activity slightly increased as compared 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, 2012-16

In week 53, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 4.6 ILI cases per 1,000 consultations, which was higher than 3.7 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 35.4 ILI cases per 1,000 consultations, which was higher than 30.9 recorded in the previous week (Figure 1, right).

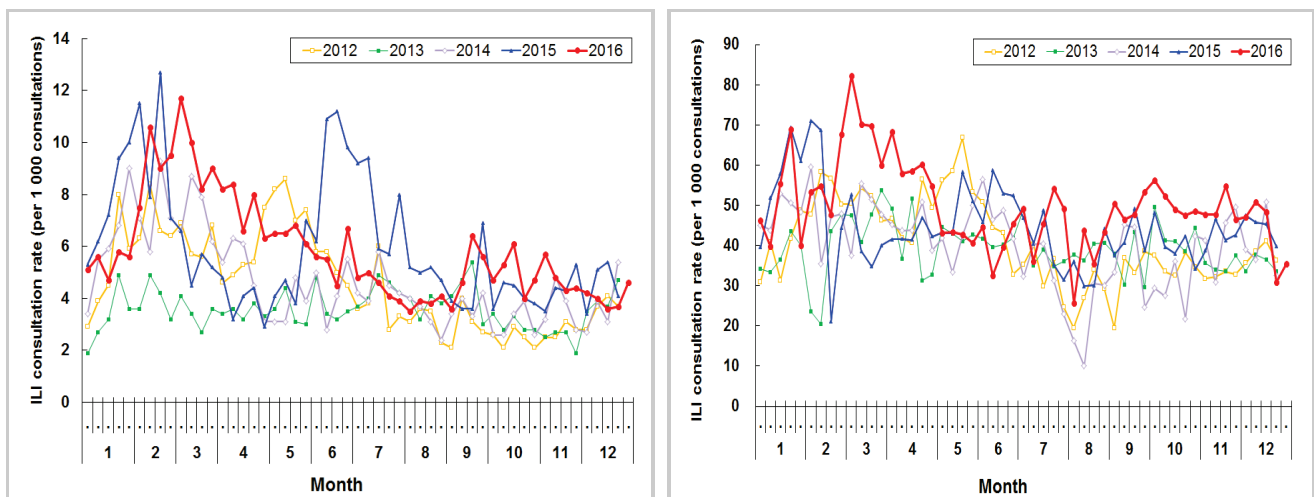


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2012-16

Laboratory surveillance, 2012-16

Among the respiratory specimens received in week 53, 218 (6.21%) were tested positive for seasonal influenza viruses, including 2 (0.06%) influenza A(H1), 205 (5.84%) influenza A(H3), 7 (0.20%) influenza B and 4 (0.11%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 6.21%, which was higher than 4.38% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of A(H3), B, C and A(H1) were 94.0%, 3.2%, 1.8% and 0.9% respectively.

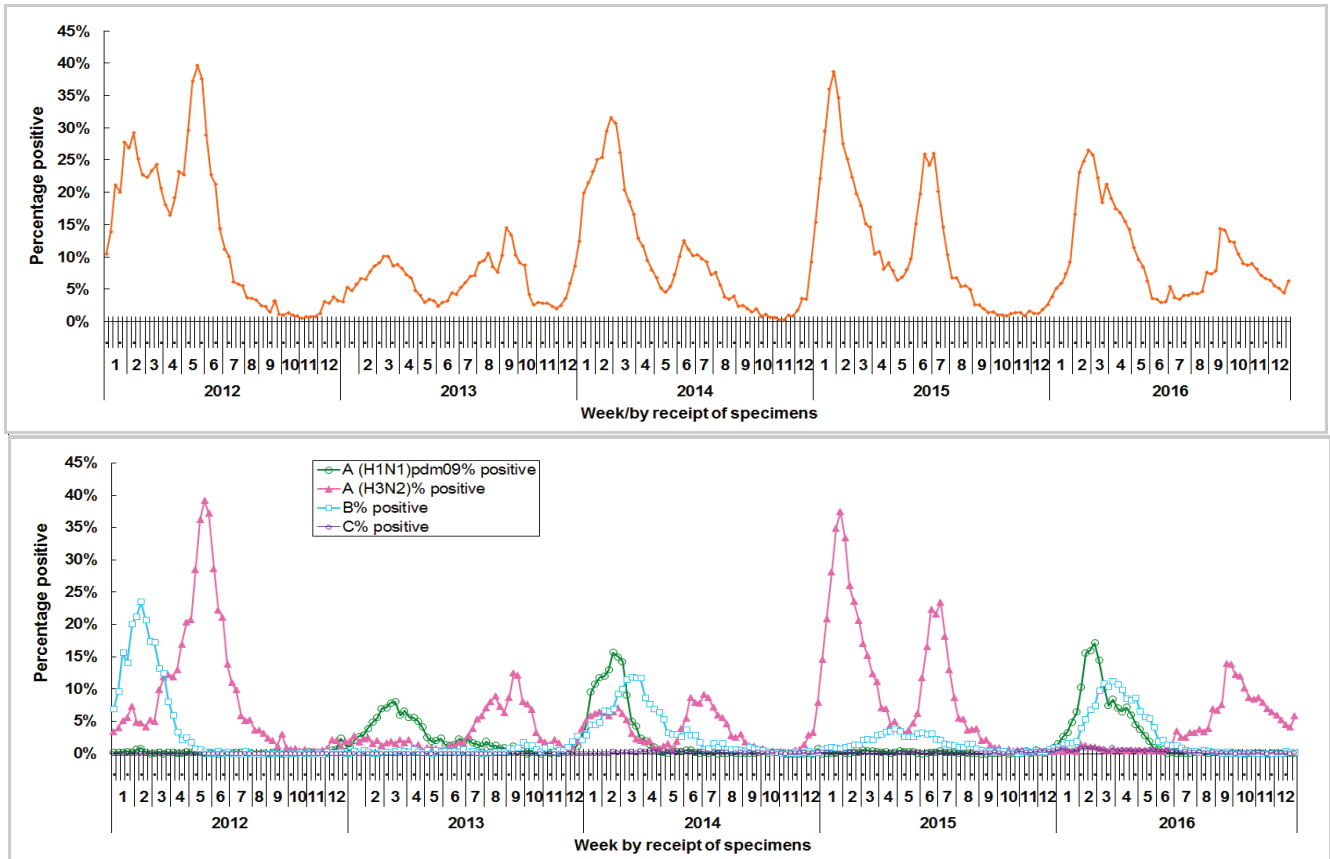


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2012-16 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2012-16

In week 53, one ILI outbreak occurring in a school was recorded (affecting 3 persons), as compared to 6 outbreaks (affecting 30 persons) recorded in the previous week (Figure 3). In the first 4 days of week 1 in 2017 (Jan 1 to 4, 2017), 2 institutional ILI outbreaks were recorded (affecting 7 persons).

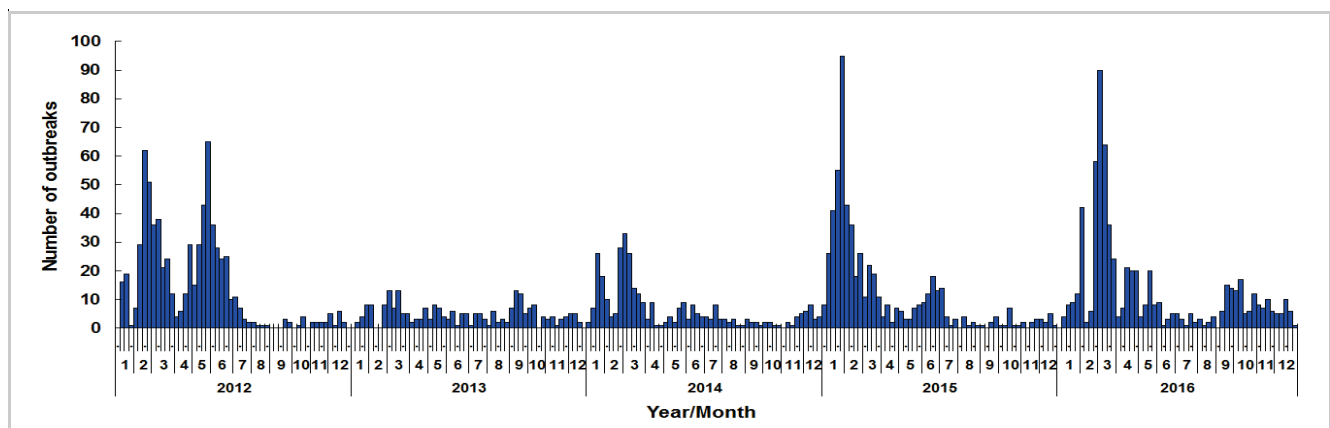


Figure 3 ILI outbreaks in schools/institutions, 2012-16

Rate of influenza-like illness syndrome group in accident and emergency departments, 2012-16[#]

In week 53, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 165.8 (per 1,000 coded cases), which was higher than the rate of 160.1 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.

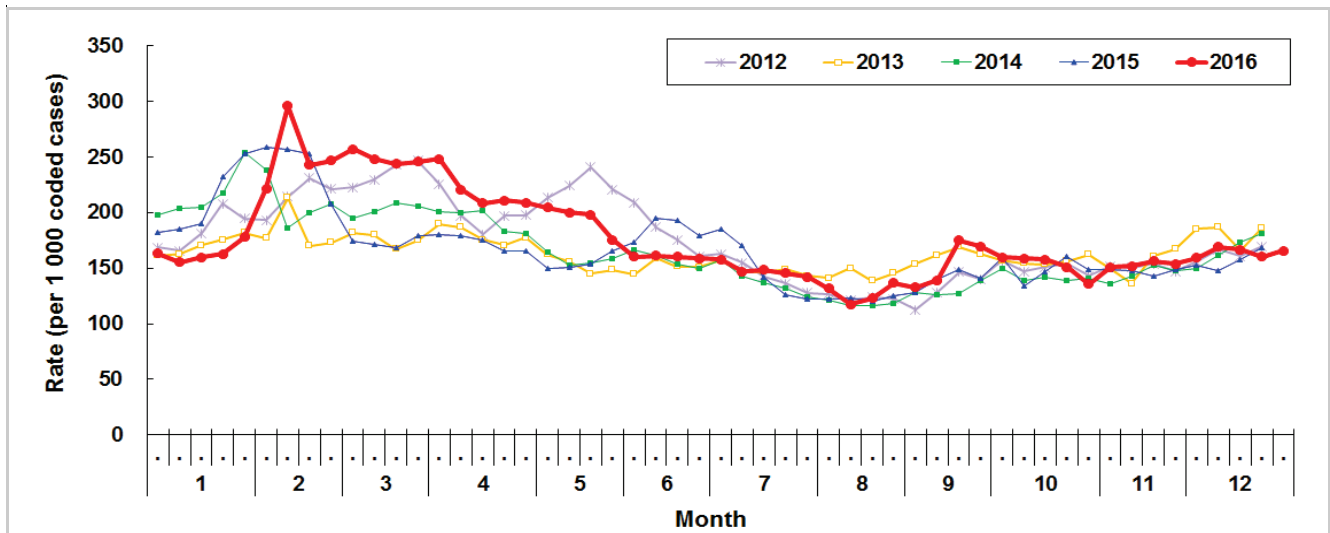


Figure 4 Rate of ILI syndrome group in AED, 2012-16

Influenza associated hospital admission rates and deaths in public hospitals based on discharge coding, 2012-16

In week 53, 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 0.89, 0.21, 0.03 and 0.25 cases (per 10,000 people in the age group) respectively, as compared to 0.71, 0.28, 0.03 and 0.21 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

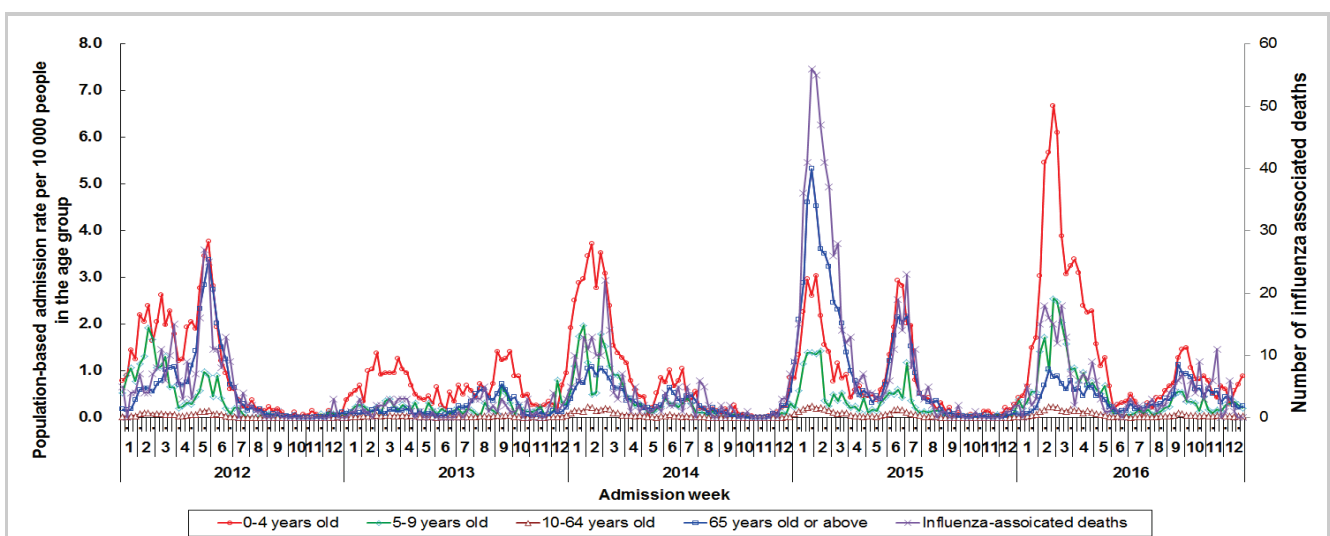


Figure 5 Influenza associated hospital admission rates and deaths, 2012-16

Fever surveillance at sentinel child care centres/ kindergartens, 2012-16

The surveillance for week 53 was suspended due to Christmas and New Year holiday. In week 52, 0.68% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.70% in the previous week (Figure 6).

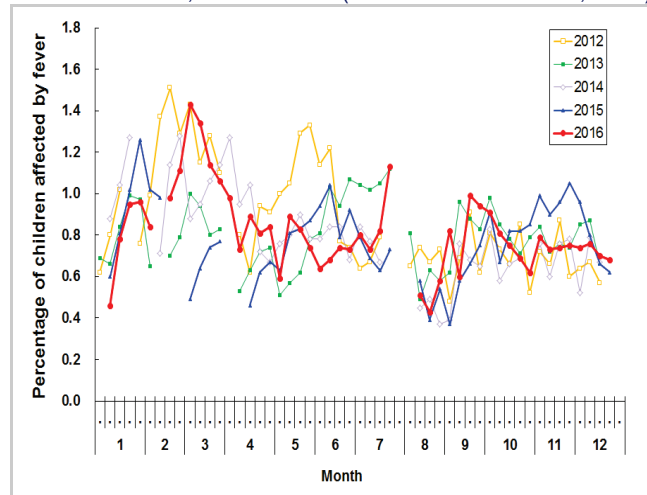


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2012-16

Fever surveillance at sentinel residential care homes for the elderly, 2012-16

In week 53, 0.07% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.13% in the previous week (Figure 7).

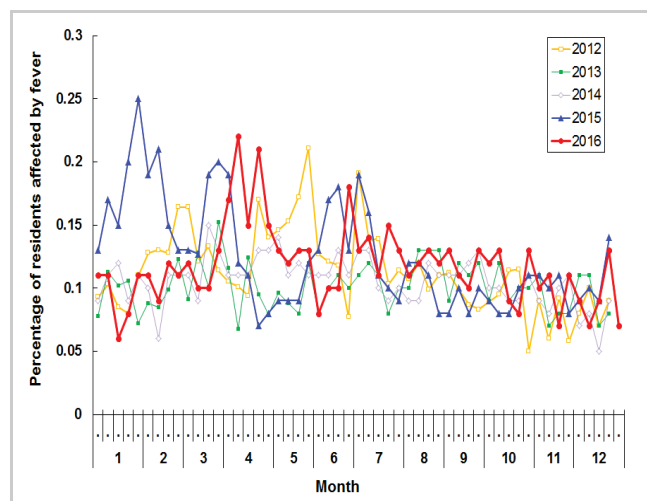


Figure 7 Percentage of residents with fever at sentinel RCHE, 2012-16

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2012-16

In week 53, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.53 ILI cases per 1,000 consultations, which was the same as that recorded in the previous week (Figure 8).

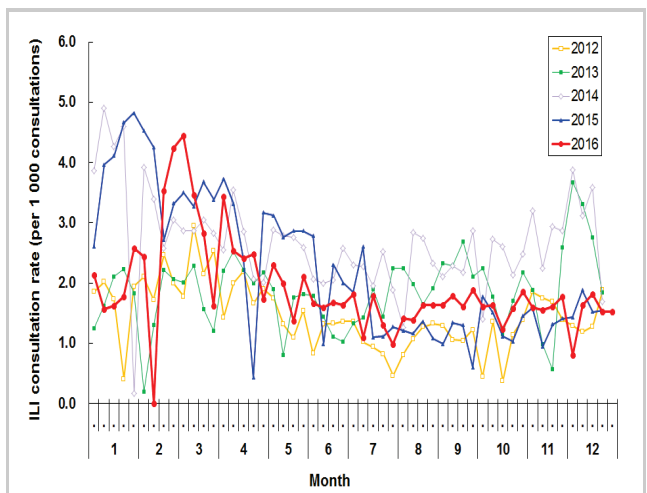


Figure 8 ILI consultation rate at sentinel CMP, 2012-16

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

- In week 53, 2016 and the first 4 days of week 1 in 2017 (Jan 1 to 4, 2017), there were no new reports of severe paediatric influenza-associated complication/death. In addition, the severe case affecting a 6-year-old boy reported in week 52, 2016 passed away on Jan 4, 2017. The cumulative number of severe paediatric influenza-associated complication/death in 2016 was 31, including 4 death cases.

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

- In week 53, 2016 and the first 4 days of week 1 in 2017 (Jan 1 to 4, 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 the United States (week ending Dec 24, 2016), the influenza activity increased. The proportion of outpatient visits for ILI was 2.9%, which was above the national baseline of 2.2%.
- In Canada (week ending Dec 17, 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 Dec 25, 2016), the influenza season has now started with increases seen in several indicators including influenza-associated consultation rates and 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 18.8% in the week ending December 25, which was above the threshold for 2016/17 season of 8.6%.
- In Europe (week ending Dec 25, 2016), the influenza activity continued to increase across the region. Very high intensity was reported in Finland. The proportion of virus detections among sentinel surveillance specimens increased to 47% from 38% last week, which was above the seasonal threshold of 10%. The majority of influenza viruses detected was influenza A(H3N2).
- In Taiwan (week ending Dec 31, 2016), the influenza activity remained stable. The proportions of ILI cases in out-patient clinics and emergency departments were stable recently. The numbers of severe influenza cases was higher than the previous week but that of hospital admission for influenza was stable. The predominating viruses were influenza A(H3N2).
- In Japan (week ending Dec 25, 2016), the influenza season has started since mid-November last year. The average number of reported ILI cases per sentinel site was 8.38 in the week ending December 25, 2016, higher than the baseline level of 1.00.
- In Korea (week ending Dec 24, 2016), the influenza activity has increased since early December last year. The weekly ILI rate increased to 86.2, which was above the baseline of 8.9. The proportion of influenza detections also increased to 54.4%.

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](#).