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 Nov 2, 2016)

Reporting period: Oct 23 - 29, 2016 (Week 44)

- The latest surveillance data showed that the local influenza activity has largely returned to the baseline level.
- The Centre for Health Protection (CHP) has collaborated with the Hospital Authority (HA) and private hospitals to reactivate the enhanced surveillance for severe seasonal influenza cases (i.e. influenza-associated admissions to intensive care unit (ICU) or deaths) among patients aged 18 or above since Sep 23, 2016. As of Nov 2, 65 severe cases (including 45 deaths) were recorded. Separately, no cases of severe paediatric influenza-associated complications or deaths (aged below 18 years) were recorded in the same period.
- 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.
- In the coming 2016/17 season, subsidised vaccination will be provided for 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 (DA). The Vaccination Subsidy Scheme (VSS) 2016/17 has been launched on October 20. For details of VSS, please refer to the webpage (http://www.chp.gov.hk/en/view content/46107.html). In addition, the eligibility of free vaccination will be expanded to include children aged 6 years to under 12 years from families receiving Comprehensive Social Security Assistance or holding valid Medical Waiver Certificates and DA recipients who are existing clients of public clinics and hospitals (http://www.chp.gov.hk/en/content/116/45099.html). The Government Vaccination Programme (free vaccination) has been rolled out on Nov 3. Please refer to the webpage for details (http://www.chp.gov.hk/en/view content/18630.html).

Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2012-16

In week 44, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 4.7 ILI cases per 1,000 consultations, which was higher than 4.0 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 48.6 ILI cases per 1,000 consultations, which was higher than 47.4 recorded in the previous week (Figure 1, right).

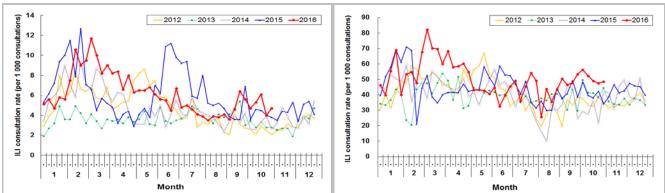


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2012-16

Laboratory surveillance, 2012-16

Among the respiratory specimens received in week 44, 292 (8.68%) were tested positive for seasonal influenza viruses, including 2 (0.06%) influenza A(H1), 284 (8.44%) influenza A(H3), 4 (0.12%) influenza B and 2 (0.06%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 8.68%, which was lower than 8.98% 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 97.3%, 1.4%, 0.7% and 0.7% respectively.

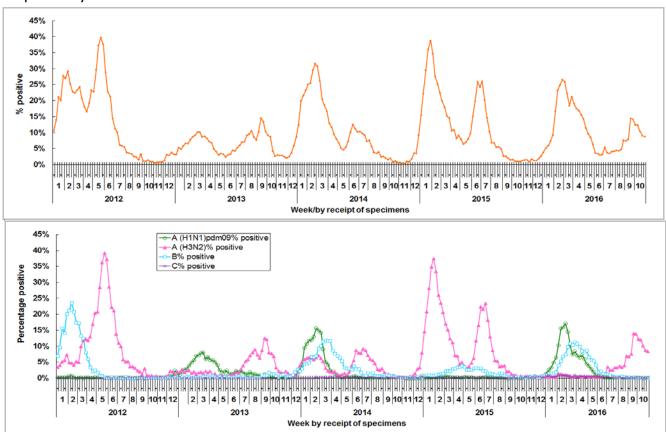


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2012-16 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2012-16

In week 44, 12 ILI outbreaks occurring in schools/institutions were recorded (affecting 49 persons), as compared to 6 outbreaks (affecting 26 persons) recorded in the previous week (Figure 3). In the first 4 days of week 45(Oct 30 to Nov 2, 2016), 5 institutional ILI outbreaks were recorded (affecting 18 persons).

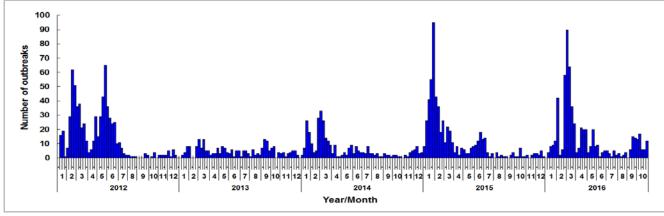


Figure 3 ILI outbreaks in schools/institutions, 2012-16

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

In week 44, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 136.8 (per 1,000 coded cases), which was lower than the rate of 151.9 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.

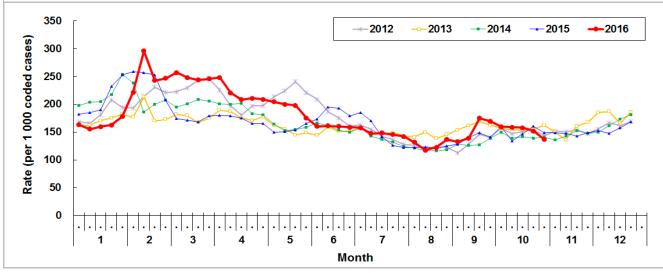


Figure 4 Rate of ILI syndrome group in AED, 2012-16

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

In week 44, 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 0.81, 0.43, 0.04 and 0.43 cases (per 10,000 people in the age group) respectively, as compared to 0.88, 0.11, 0.05 and 0.62 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

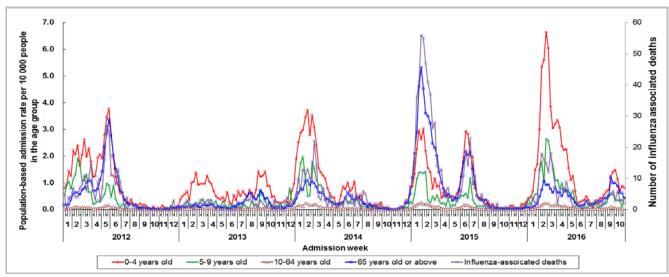


Figure 5 Influenza associated hospital admission rates and deaths, 2012-16

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

In week 44, 0.62% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.69% in the previous week (Figure 6).

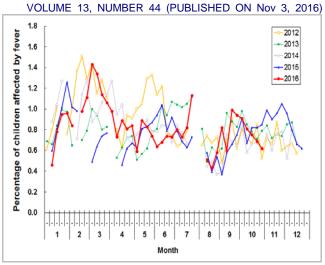


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2012-16

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

In week 44, 0.13% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.08% in the previous week (Figure 7).

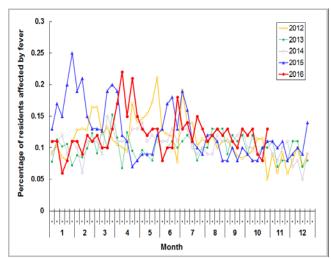


Figure 7 Percentage of residents with fever at sentinel RCHE, 2012-16

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

In week 44, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.85 ILI cases per 1,000 consultations as compared to 1.58 recorded in the previous week (Figure 8).

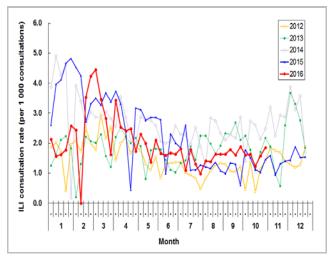


Figure 8 ILI consultation rate at sentinel CMP, 2012-16

Surveillance of severe influenza cases

(Note: The data reported are provisional figures and subject to further revision)

• Since activation of the enhanced surveillance for severe influenza infection on Sep 23, 2016, a total of 65 adult severe cases (including 45 deaths) were recorded (as of Nov 2)(Figure 9). Among them, 54 patients had infection with influenza A(H3N2), two patients with influenza B, one patient with influenza C and eight patients with influenza A pending subtype. No paediatric severe cases were reported in the same period. In the last influenza season in early 2016, 409 adult cases (including 211 deaths) and 27 paediatric cases (including 3 deaths) were filed.

Enhanced surveillance for severe seasonal influenza (Aged 18 years or above)

• In week 44, 13 cases of influenza associated ICU admission/death were recorded, in which 8 of them were fatal. In the first 4 days of week 45 (Oct 30 to Nov 2, 2016), 5 cases of influenza associated ICU admission/death were recorded, in which 3 of them were fatal.

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

• In week 44 and in the first 4 days of week 45 (Oct 39 to Nov 2, 2016), there were no new reports of severe paediatric influenza-associated complication/death.

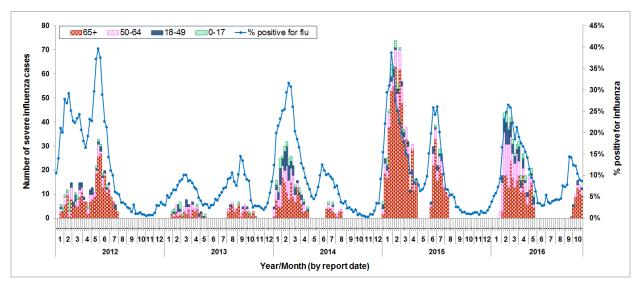


Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2012-2016 Remark: The surveillance system for severe influenza cases aged 18 years or above was only activated intermittently during influenza seasons.

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

• In week 44 and the first 4 days of week 45 (Oct 30 to Nov 2, 2016), 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 Oct 22, 2016), the influenza activity remained at a low level. The proportion of outpatient visits for ILI was 1.3%, which was below the national baseline of 2.2%.
- In Canada (week ending Oct 22, 2016), the influenza activity was at interseasonal levels with the majority regions reporting low or no influenza activity.
- In the United Kingdom (week ending Oct 23, 2016), the influenza activity was at low level.
- In Europe (week ending Oct 23, 2016), low influenza activity was reported.
- In Australia (week ending Oct 14, 2016), the influenza activity has continued to decline following a seasonal peak in early September. Influenza A(H3N2) continued to be the dominant circulating virus nationally.
- In Taiwan (week ending Oct 29, 2016), the influenza activity increased earlier compared with previous seasons in Taiwan, but the influenza season has not yet arrived.

Sources:

Information have been extracted from the following sources when updates are available: <u>United States Centers for Disease Control and Prevention</u>, <u>Public Health Agency of Canada</u>, <u>Public Health England</u>, <u>Joint European Centre for Disease Control and Prevention-World Health Organization/Flu News Europe</u>, <u>Australian Department of Health</u> and <u>Taiwan Centers for Disease Control</u>.