

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 Mar 8, 2017)

Reporting period: Feb 26 – Mar 4, 2017 (Week 9)

- The latest surveillance data showed that the local influenza activity has continued to increase.
- 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 Feb 24, 2017. As of Mar 8, 25 severe cases (including 13 deaths) were recorded. Separately, one case of severe paediatric influenza-associated complication or death (aged below 18 years) was 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.
- 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 9, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 5.7 ILI cases per 1,000 consultations, which was higher than 4.6 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 54.5 ILI cases per 1,000 consultations, which was higher than 51.9 recorded in the previous week (Figure 1, right).

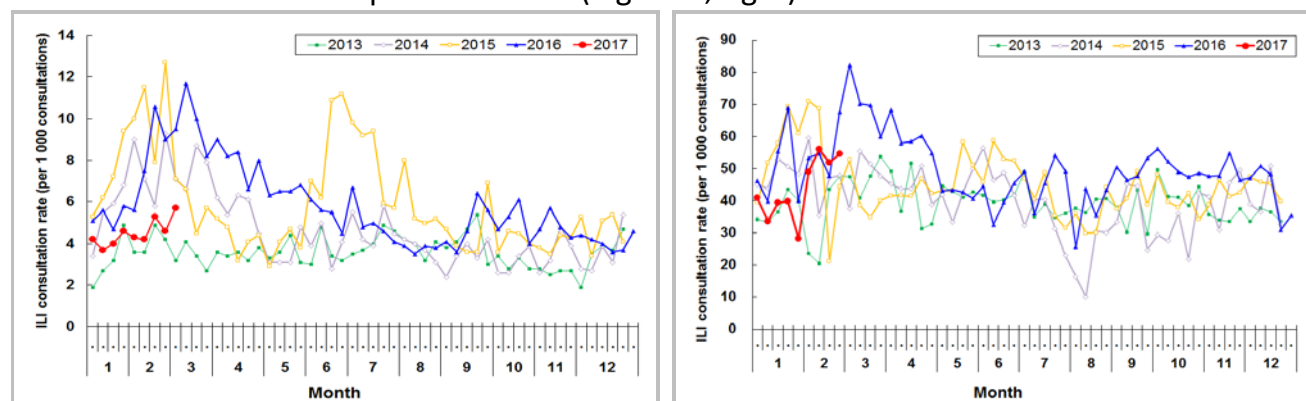


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 9, 383 (9.33%) were tested positive for seasonal influenza viruses, including 28 (0.68%) influenza A(H1), 329 (8.02%) influenza A(H3), 20 (0.49%) influenza B and 6 (0.15%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 9.33%, which was higher than 9.23% 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 85.9%, 7.3%, 5.2% and 1.6% respectively.

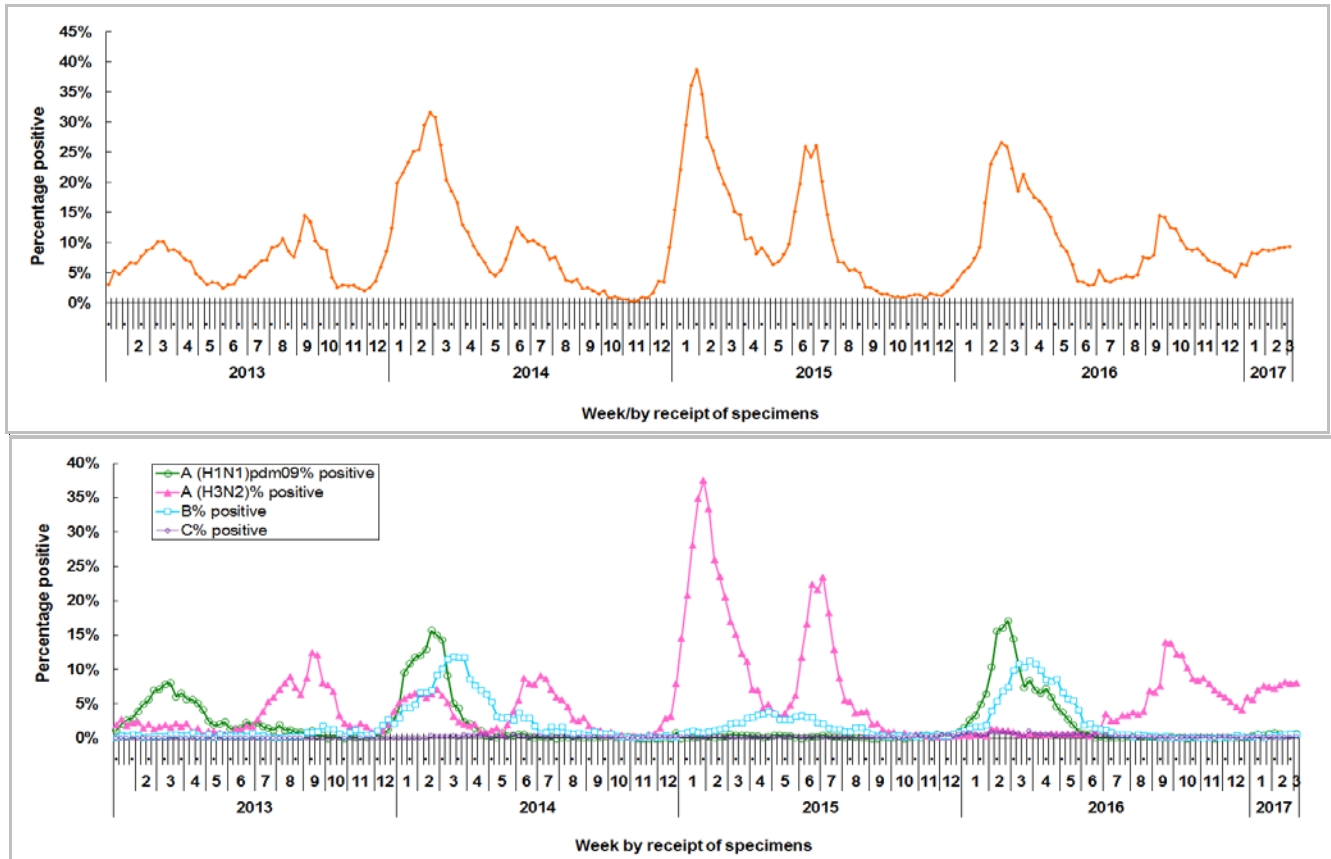


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

Influenza-like illness outbreak surveillance, 2013-17

In week 9, 23 ILI outbreaks occurring in schools/ institutions were recorded (affecting 127 persons), as compared to 19 outbreaks recorded in the previous week (affecting 92 persons) (Figure 3). In the first 4 days of week 10 (Mar 5 to 8, 2017), 10 institutional ILI outbreaks were recorded (affecting 37 persons).

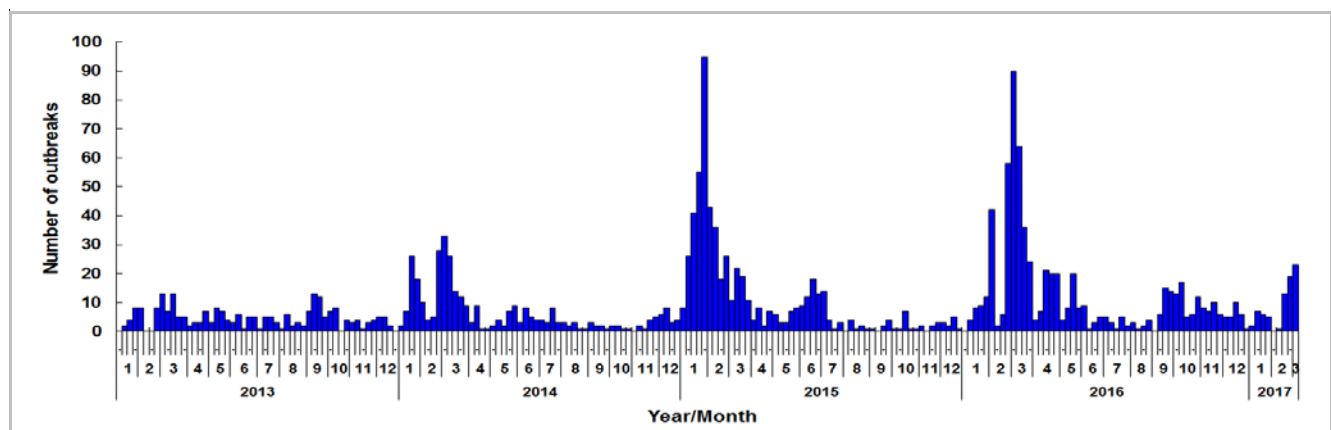


Figure 3 ILI outbreaks in schools/institutions, 2013-17

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

In week 9, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 173.9 (per 1,000 coded cases), which was higher than the rate of 157.6 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.

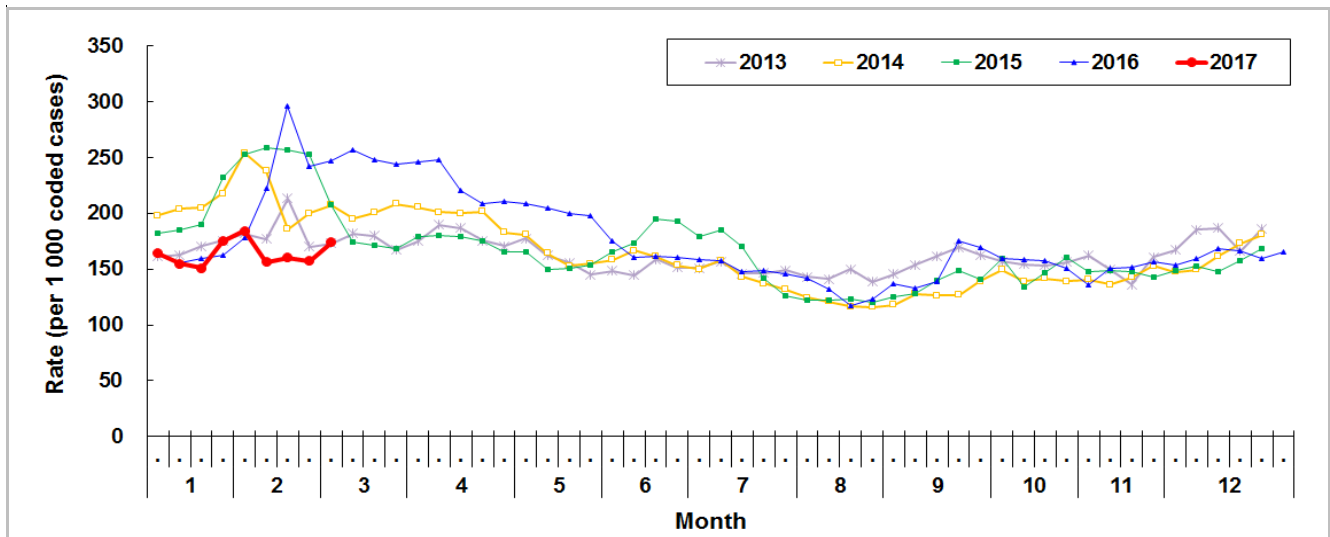


Figure 4 Rate of ILI syndrome group in AED, 2013-17

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

In week 9, 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 1.14, 0.66, 0.07 and 0.59 cases (per 10,000 people in the age group) respectively, as compared to 1.64, 0.48, 0.07 and 0.63 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

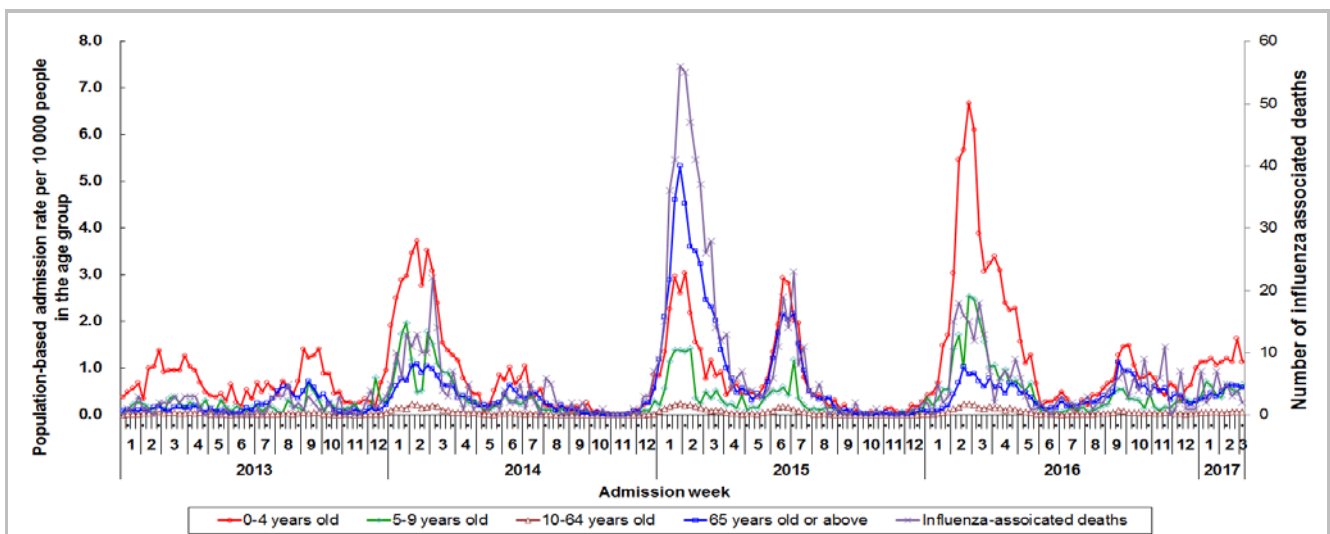


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

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

In week 9, 0.97% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.81% in the previous week (Figure 6).

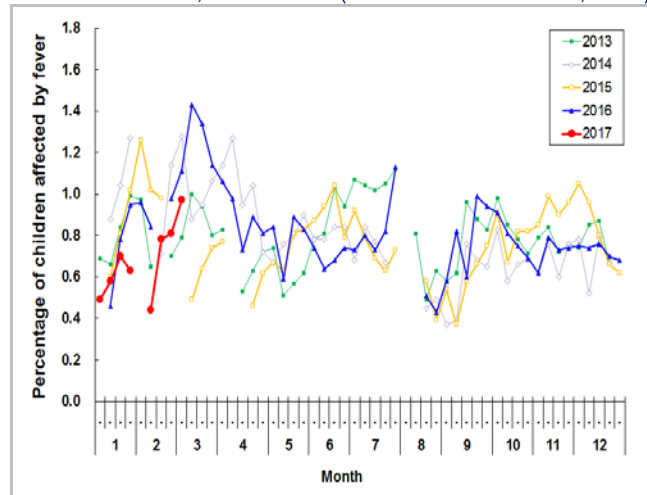


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

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

In week 9, 0.10% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.11% in the previous week (Figure 7).

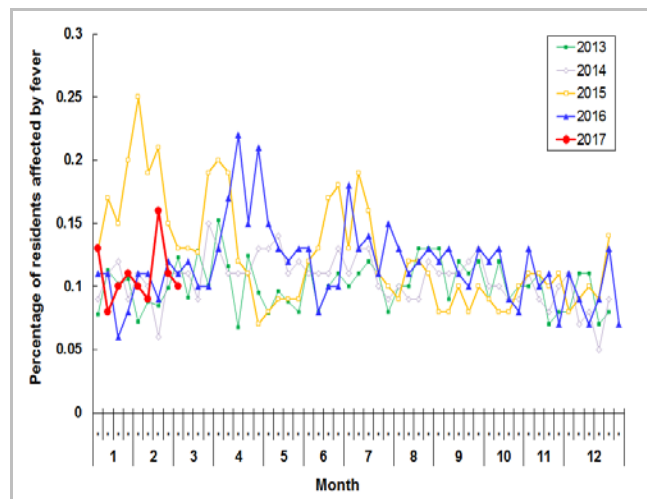


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

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

In week 9, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 2.32 ILI cases per 1,000 consultations as compared to 2.00 recorded in the previous week (Figure 8).

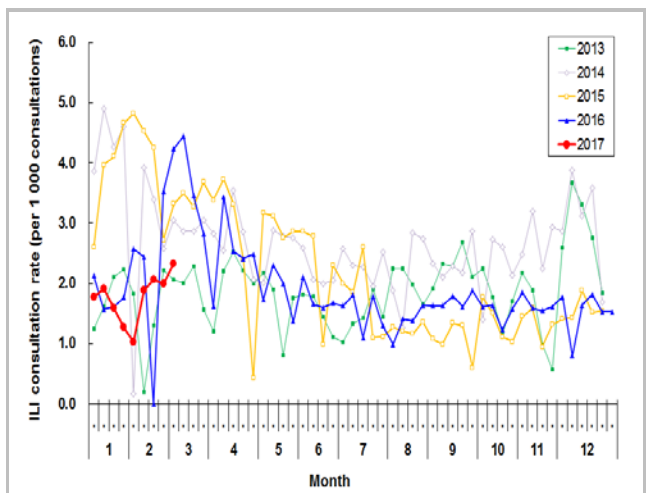


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

Surveillance of severe influenza cases

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

Since the activation of the enhanced surveillance for severe influenza infection on Feb 24, 2017, a total of 26 severe cases (including 13 deaths) were recorded cumulatively (as of Mar 8) (Figure 9). These included:

- 25 cases (including 13 deaths) among adult patients aged 18 years or above. Among them, 18 patients had infection with influenza A(H3N2), three patients with influenza A(H1N1)pdm09, two patients with influenza B and two patients with influenza A pending subtype. Eight (32.0%) were known to have received influenza vaccine for this season. Among the 13 fatal cases, five (38.5%) were known to have received influenza vaccine for this season. In the last winter season in early 2016, 409 adult severe cases (including 211 deaths) were filed.
- one case of severe paediatric influenza-associated complication. The case had infection with influenza A(H3N2) and did not receive influenza vaccine for this season. In the last winter season in early 2016, 27 paediatric cases (including three deaths) were filed.

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

- In week 9, 14 cases of influenza associated ICU admission/death were recorded, in which six of them were fatal. In the first 4 days of week 10 (Mar 5 to Mar 8), 10 cases of influenza associated ICU admission/death were recorded, in which six of them were fatal.

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

- In week 9, one case of severe paediatric influenza-associated complication was reported. In the first 4 days of week 10 (Mar 5 to 8, 2017), there were no new cases 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
9	4 years	Female	Meningoencephalitis	No	Influenza A(H3)	No

Data as of Mar 8, 2017

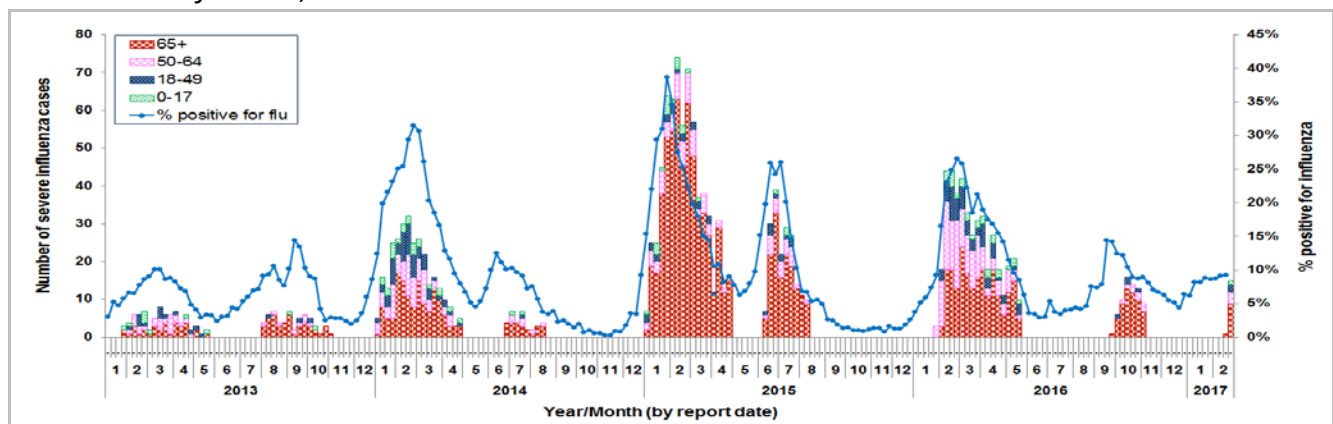


Figure 9 Weekly number of severe influenza cases recorded during influenza seasons, 2013-2017
Remark: The surveillance system for severe influenza cases aged 18 years or above was only activated intermittently during influenza seasons.

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

- In week 9 and the first 4 days of week 10 (Mar 5 to 8, 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 had reached the peak level for the 2016/17 winter season and were gradually decreasing. The predominating virus was influenza A(H3N2).

- In the United States (week ending Feb 25, 2017), the influenza activity remained elevated. The proportion of outpatient visits for ILI was 4.8%, which was above the national baseline of 2.2%.
- In Canada (week ending Feb 25 2017), many parts are still reporting elevated activity. The decline in influenza activity has been slow compared to previous seasons. Influenza A(H3N2) continues to be the most common subtype detected.
- In the United Kingdom (week ending Feb 26, 2017), influenza continues to circulate with indicators now generally decreasing. The positivity of influenza detection was 16.4% in the week ending February 26, which was above the threshold for 2016/17 season of 8.6%.
- In Europe (week ending Feb 26, 2017), influenza activity across the region, while decreasing, remained above levels observed during the out-of-season period. The proportion of virus detections among sentinel surveillance specimens decreased to 33% from 38% in the previous week, but was still above the seasonal threshold of 10%. The majority of influenza viruses detected was influenza A(H3N2).
- In Taiwan (week ending Mar 4, 2017), the proportion of ILI cases in emergency departments slightly increased, while the proportion in outpatient departments was similar to the previous week. The number of reported cases of severe influenza decreased in the past two weeks. The predominating viruses were influenza A(H3N2).
- In Japan (week ending Feb 26, 2017), the influenza season started in mid-November last year. The average number of reported ILI cases per sentinel site decreased to 16.87 in the week ending February 26, 2017 from 23.92 recorded in the previous week, but was still higher than the baseline level of 1.00.
- In Korea (week ending Feb 25, 2017), influenza activity has reached its peak in late December last year and has been decreasing in January. The weekly ILI rate decreased to 6.7 from 7.1 recorded in previous week while the baseline is 8.9. The proportion of influenza detections also decreased to 6.6% from 9.5%.

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](#).