

# 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 July 11, 2018)

**Reporting period: July 1 – 7, 2018 (Week 27)**

- The latest surveillance data showed that the overall influenza activity in Hong Kong remained at a low level.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Given that seasonal influenza vaccines (SIV) are safe and effective, all persons aged 6 months or above except those with known contraindications are recommended to receive influenza vaccine to protect themselves against seasonal influenza and its complications, as well as related hospitalisations and deaths.
- Apart from adopting personal, hand and environmental hygiene practices against respiratory illnesses, members of the public aged six months or above who have not yet received any SIV in the 2017/18 season can still receive it for personal protection against seasonal influenza. However, persons who had already completed seasonal influenza vaccination in the 2017/18 season are not recommended to receive any further dose of SIV within the same season.
- The Vaccination Subsidy Scheme (VSS) and the Government Vaccination Programme (GVP) for the 2017/18 season have been launched on Oct 18 and Oct 25, 2017 respectively. The VSS continues to provide subsidised vaccination to 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. Eligible groups for free vaccination are the same as those of 2016/17 under the GVP. For more details, please refer to the webpage ([http://www.chp.gov.hk/en/view\\_content/17980.html](http://www.chp.gov.hk/en/view_content/17980.html)).

## Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2014-18

In week 27, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 4.0 ILI cases per 1,000 consultations, which was higher than 2.5 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 41.8 ILI cases per 1,000 consultations, which was higher than 37.1 recorded in the previous week (Figure 1, right).

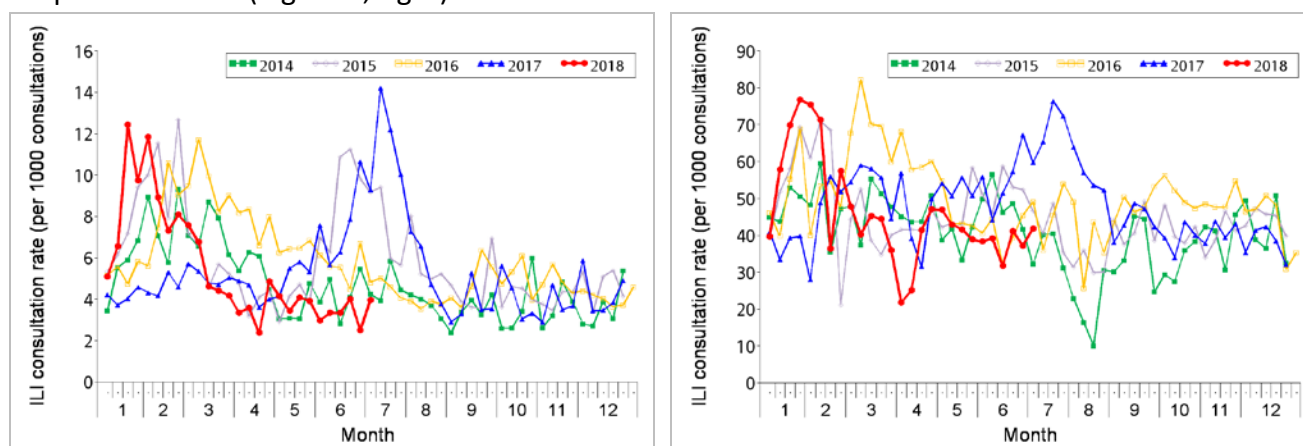


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

## Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 27, the positive percentage of seasonal influenza viruses was 1.85%, which was below the baseline threshold of 10.7% but was higher than 1.03% recorded in the previous week (Figure 2). The 71 influenza viruses detected last week included 26 (0.68%) influenza A(H1), 34 (0.89%) influenza A(H3), 8 (0.21%) influenza B and 3 (0.08%) influenza C.

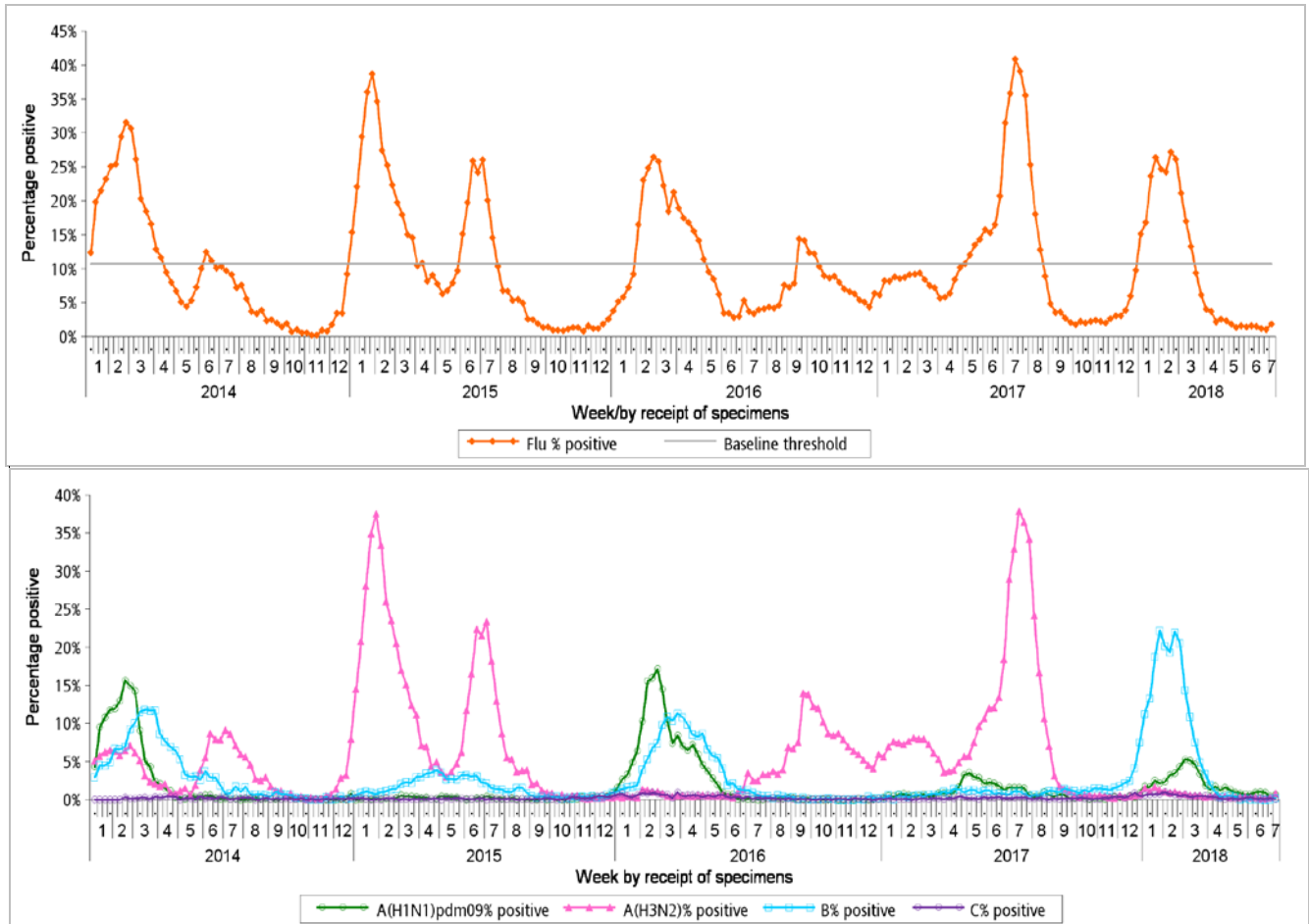


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[Note: The baseline threshold is 1.96 standard deviation above the average weekly positive percentage during non-season periods from 2014-2017.]

## Influenza-like illness outbreak surveillance, 2014-18

In week 27, two ILI outbreaks occurring in schools/institutions were recorded (affecting 27 persons) (Figure 3). No outbreaks were recorded in the previous week. In the first 4 days of week 28 (Jul 8 to 11), three ILI outbreaks in schools/ institutions were recorded (affecting 11 persons).

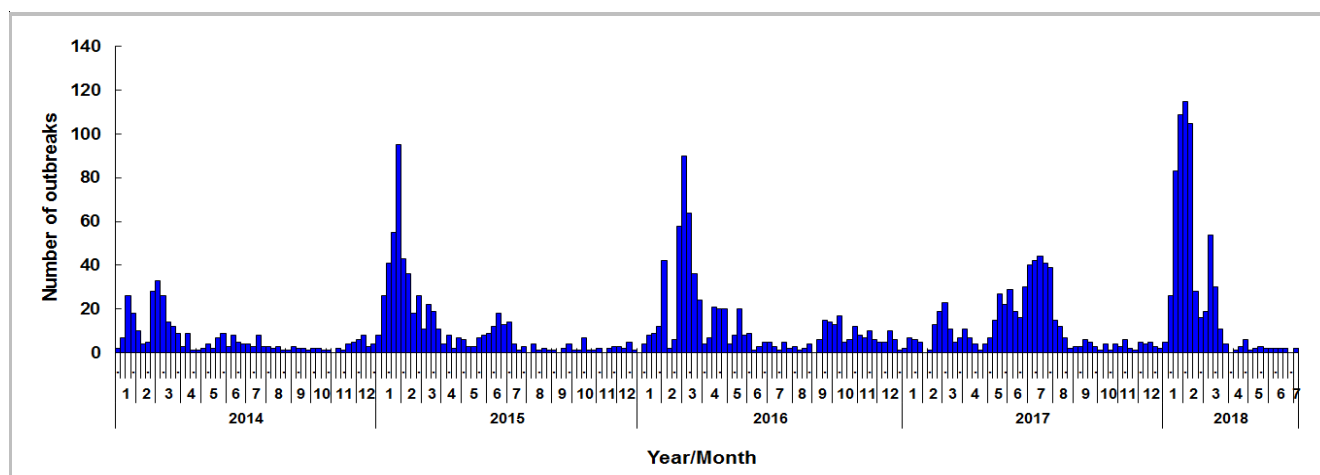


Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 26	Week 27	First 4 days of week 28 (July 8 to 11)
Kindergarten/ child care centre	0	0	2
Primary school	0	1	0
Secondary school	0	0	0
Residential care home for the elderly	0	0	0
Residential care home for persons with disabilities	0	0	0
Others	0	1	1
<i>Total number of outbreaks</i>	0	2	3
<i>Total number of persons affected</i>	0	27	11

## Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2014-18

In week 27, the overall admission rate in public hospitals with principal diagnosis of influenza was 0.04 (per 10,000 population), which was below the baseline threshold of 0.20 but was higher than 0.03 recorded in the previous week. The influenza-associated admission rates for persons aged 0-4 years, 5-9 years, 10-64 years and 65 years or above were 0.29, 0.20, 0.02 and 0.05 cases (per 10,000 people in the age group) respectively, as compared to 0.07, 0.13, 0.02 and 0.05 cases in the previous week (Figure 4).

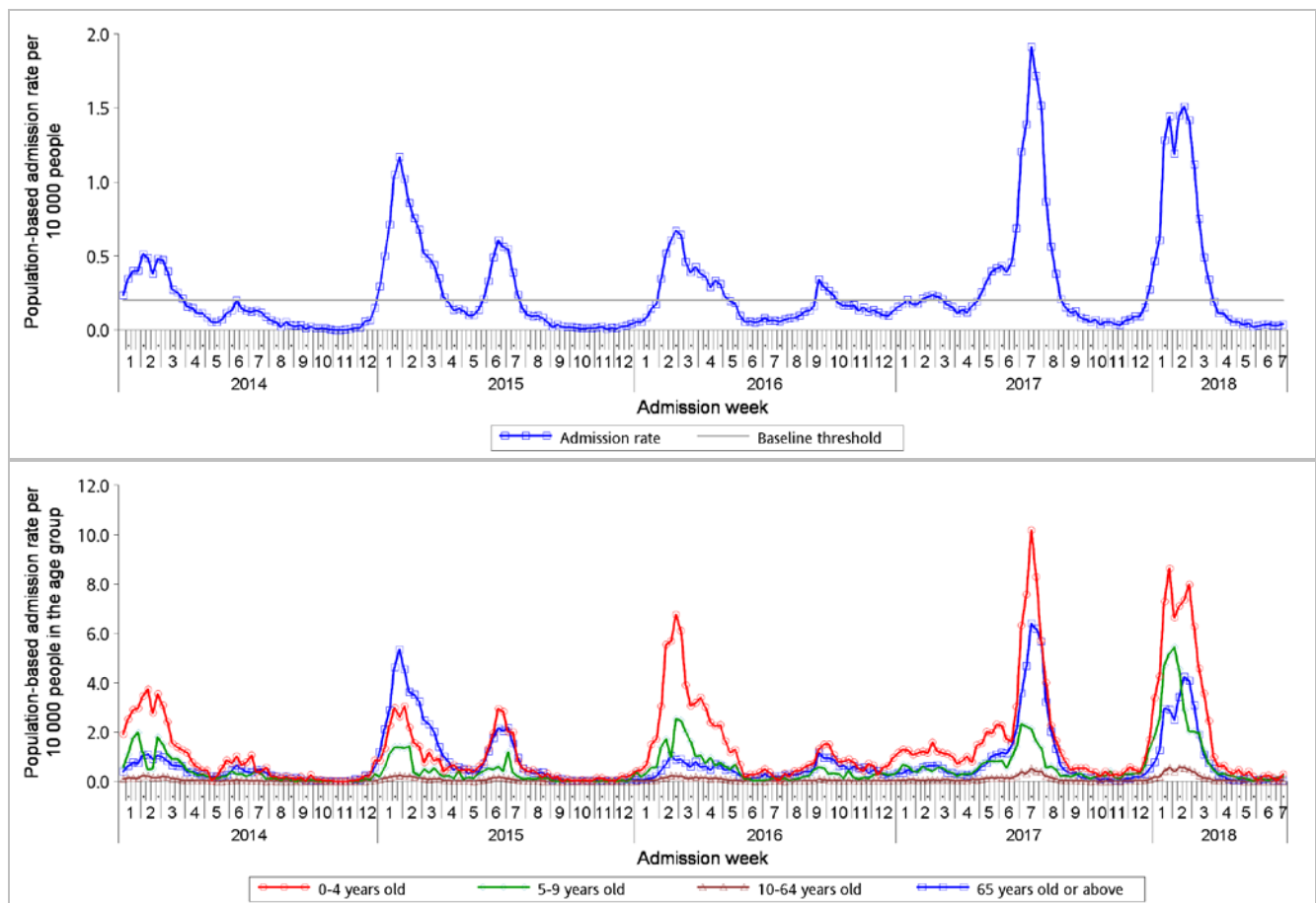


Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[Note: The baseline threshold is 1.96 standard deviation above the average weekly admission rate during non-season periods from 2014-2017.]

## Rate of ILI syndrome group in accident and emergency departments, 2014-18<sup>#</sup>

In week 27, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 135.7 (per 1,000 coded cases), which was higher than the rate of 133.0 in the previous week (Figure 5).

*#Note: This syndrome group includes codes related to ILI such as influenza, upper respiratory tract infection, fever, cough, throat pain, and pneumonia.*

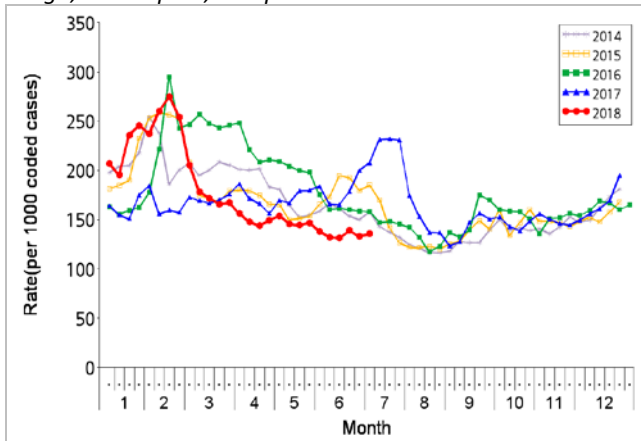


Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

## Fever surveillance at sentinel child care centres/ kindergartens, 2014-18

In week 27, 0.72% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above), compared to 0.65% recorded in the previous week (Figure 6).

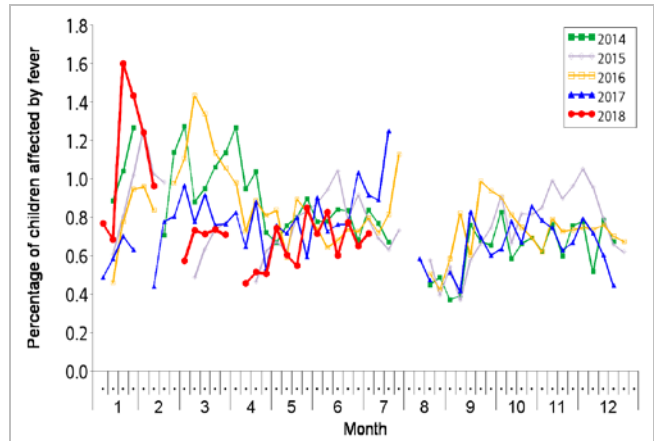


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

## Fever surveillance at sentinel residential care homes for the elderly, 2014-18

In week 27, 0.12% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.14% recorded in the previous week (Figure 7).

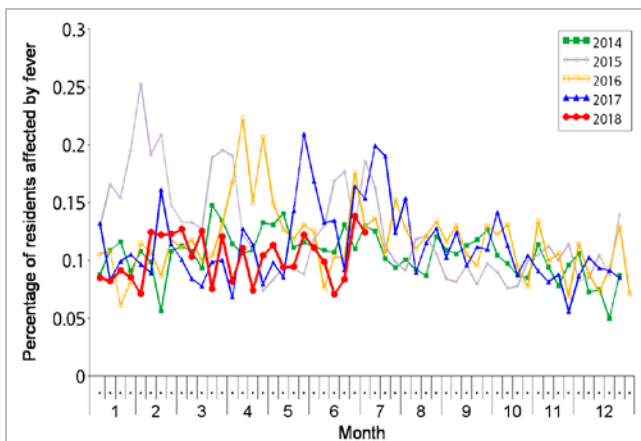


Figure 7 Percentage of residents with fever at sentinel RCHes, 2014-18

## Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2014-18

In week 27, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.35 ILI cases per 1,000 consultations as compared to 0.46 recorded in the previous week (Figure 8).

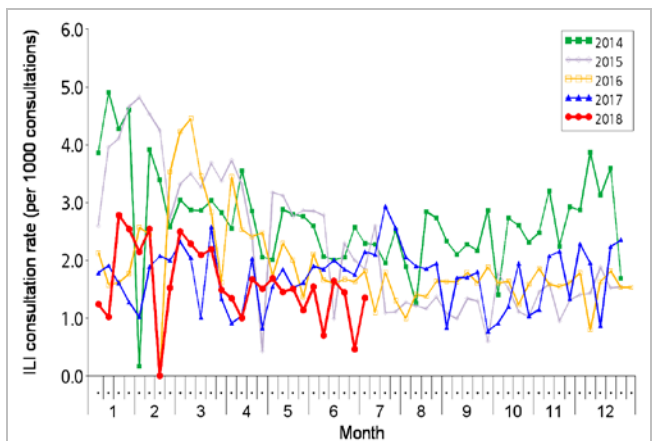


Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

## Surveillance of severe influenza cases

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

### **Surveillance for intensive care unit (ICU) admissions/deaths with laboratory confirmation of influenza among adult patients (Aged 18 years or above)**

*For surveillance purpose, the cases refer to laboratory-confirmed influenza patients who required ICU admission or died within the same admission of influenza infection. Their causes of ICU admission or death may be due to other acute medical conditions or underlying diseases.*

- In week 27, one adult case of ICU admission/death with laboratory confirmation of influenza (a non-fatal case) was recorded, as compared to two cases (both were fatal cases) in the previous week. The severe adult case was not known to have received the 2017/18 influenza vaccine.

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 26	0	0	0	0	2
Week 27	0	0	1	0	0

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

- In week 27 and the first 4 days of week 28 (Jul 8 to 11), there was one case of severe paediatric influenza-associated complication/death.

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving influenza vaccine for this season
28	9 years	Female	Encephalitis	Yes	Influenza A (H3)	Yes

Data as of Jul 11, 2018

- In 2018, 25 paediatric cases of influenza-associated complication/death were recorded, in which three of them were fatal (as of Jul 11). 21 (84%) did not receive the influenza vaccine for the 2017/18 season.

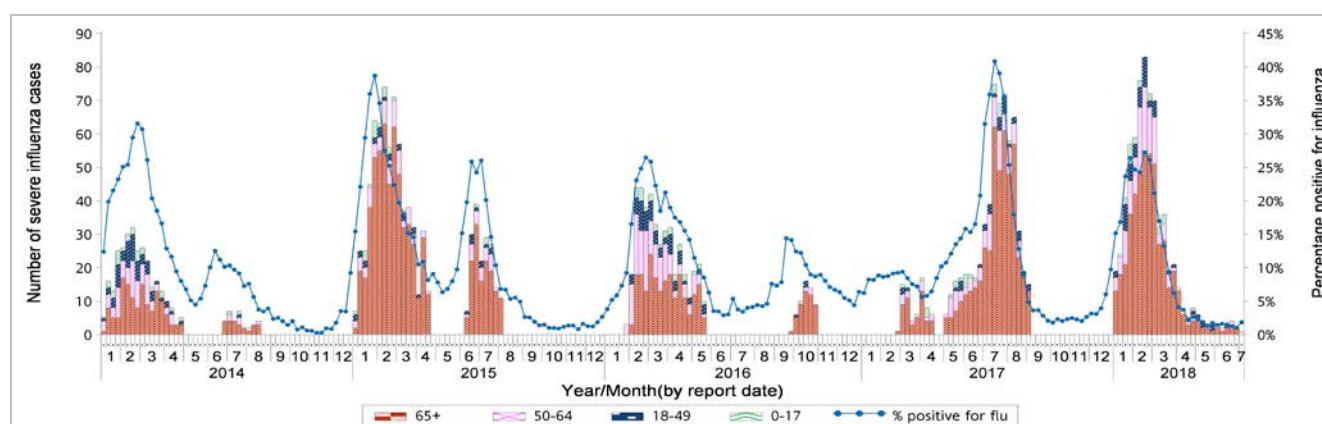


Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenza viruses in Figure 2 is also shown in this graph)

Note: The surveillance system for severe influenza cases among adult patients aged 18 years or above was only activated intermittently during influenza seasons before 2018.



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

- In week 27 and the first 4 days of week 28 (Jul 8 to 11), 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

Influenza activity returned to inter-seasonal levels in the temperate zone of the northern hemisphere. Increased influenza activity was reported in some countries in tropical America. Influenza detections continued to increase in Southern Africa and in recent weeks started to increase in South America. However influenza activity remained at inter-seasonal levels in Australia and New Zealand. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.

- In the United States (week ending Jun 30, 2018), influenza activity was at a low level. The proportion of outpatient visits for ILI was 0.8%, which was below the national baseline of 2.2%. The percentage of respiratory specimens testing positive for influenza was 0.59%.
- In Canada (May 20 to Jun 23, 2018), influenza activity is at interseasonal levels across the country. The majority of regions in Canada are reporting no influenza activity. Influenza A is the most common influenza virus circulating in Canada.
- In the United Kingdom (week ending Jul 1, 2018), indicators for influenza showed low levels of activity. The positivity of influenza detection was 0.7% in the week ending Jul 1, 2018, which was below the baseline threshold of 8.6%.
- In Europe (May 21 to Jun 24, 2018), influenza activity was at inter-seasonal levels. 1% of sentinel specimens were tested positive for influenza virus.
- In Australia (fortnight ending Jul 1, 2018), currently influenza activity was low and remained at inter-seasonal levels.
- In New Zealand (week ending Jul 8, 2018), influenza activity was still unseasonably low but is starting to increase. It is expected that influenza virus circulation in New Zealand will increase in the next few weeks.
- In Mainland China (week ending Jul 1, 2018), influenza activity was at inter-seasonal level. There were only few influenza A(H1N1) viruses detected in northern provinces.
- In Macau (week ending Jun 23, 2018), the proportion of ILI cases in emergency departments among adults was at a low level, while that among children decreased as compared to the previous week. The proportion of influenza detections remained at a low level.

### Sources:

Information have been extracted from the following sources when updates are available: [World Health Organization](#), [United States Centers for Disease Control and Prevention](#), [Public Health Agency of Canada](#), [Public Health England](#), [Joint European Centre for Disease Prevention and Control-World Health Organization/Flu News Europe](#), [Australian Department of Health](#), [New Zealand Ministry of Health](#), [Chinese National Influenza Center](#) and [Health Bureau of Macao Special Administrative Region](#).