

# 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 7, 2018)

**Reporting period: October 28 – November 3, 2018 (Week 44)**

- 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 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.
- In the coming 2018/19 season, the Vaccination Subsidy Scheme (VSS) has been expanded to cover those aged 50 to 64 to receive subsidised seasonal influenza vaccination. It also 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. Under the Government Vaccination Programme (GVP), eligible groups for free vaccination are the same as that of 2017/18. VSS and GVP have been launched on Oct 10 and Oct 24, 2018 respectively. 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 44, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 3.4 ILI cases per 1,000 consultations, which was lower than 4.1 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 39.6 ILI cases per 1,000 consultations, which was higher than 32.1 recorded in the previous week (Figure 1, right).

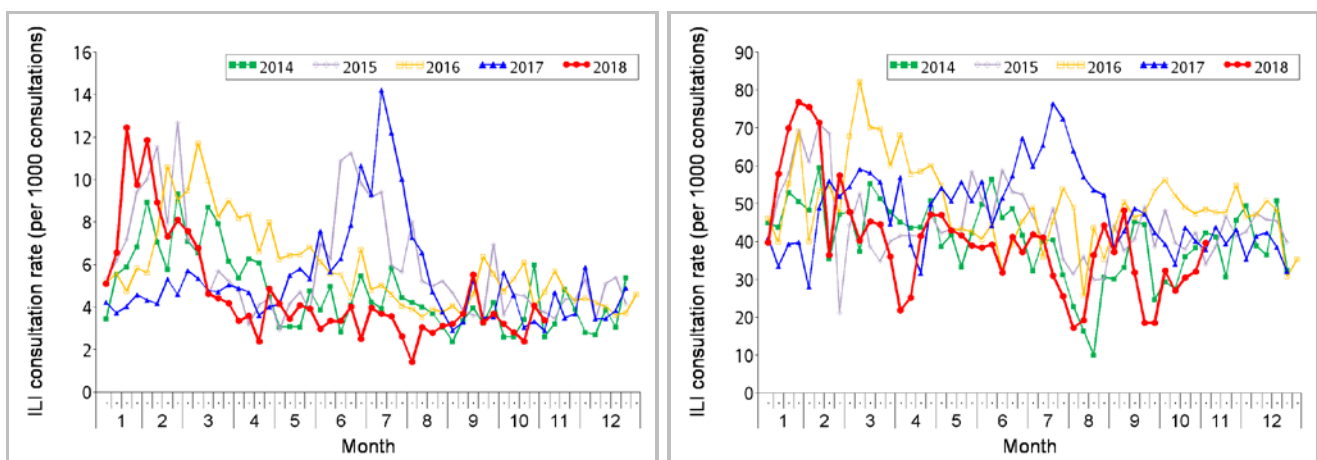


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

### Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 44, the positive percentage of seasonal influenza viruses was 3.01%, which was below the baseline threshold of 10.7% but higher than 2.04% recorded in the previous week (Figure 2). The 134 influenza viruses detected last week included 96 (2.16%) influenza A(H1), 31 (0.70%) influenza A(H3), 4 (0.09%) influenza B and 3 (0.07%) influenza C.

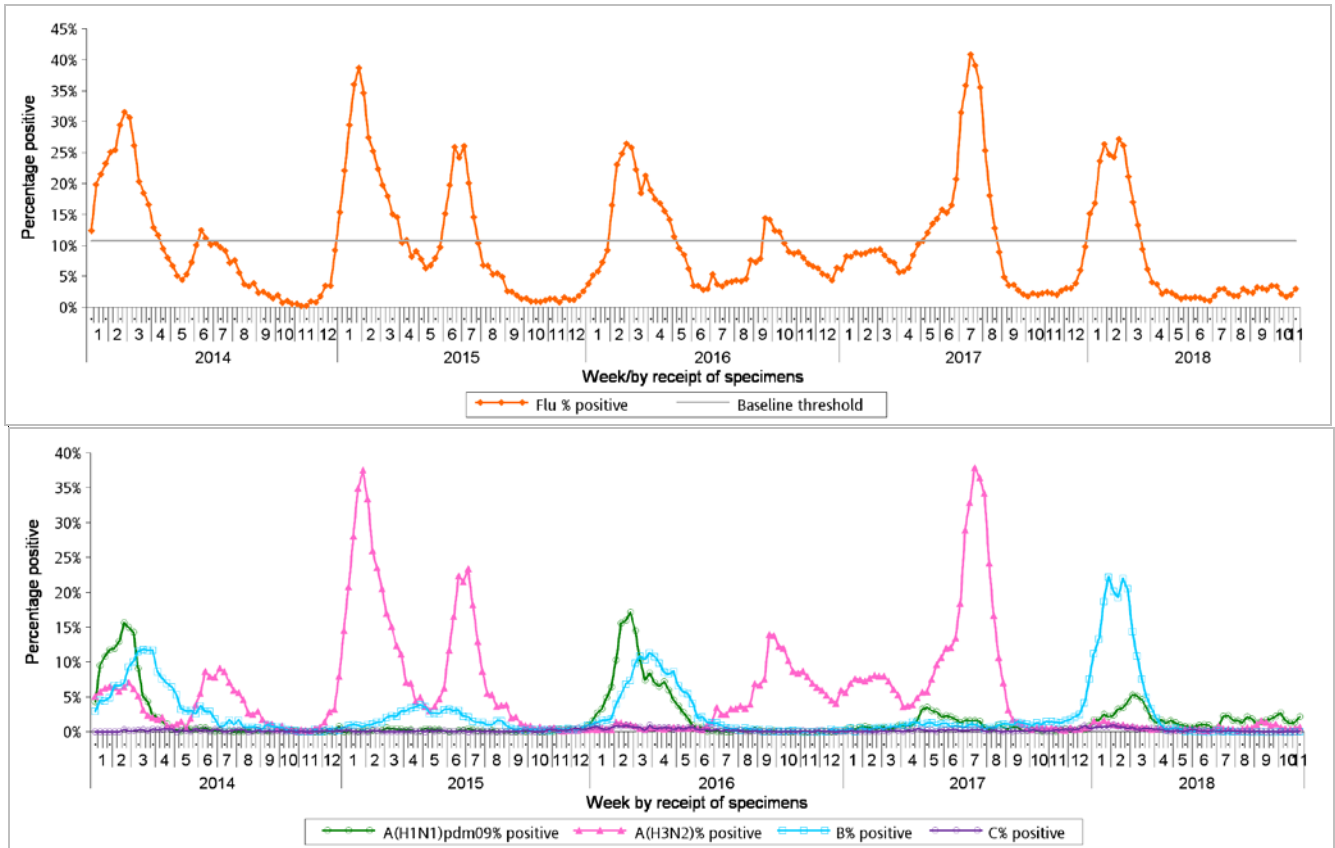


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 44, three ILI outbreaks occurring in schools/ institutions were recorded (affecting 19 persons), as compared to five outbreaks recorded in the previous week (affecting 29 persons) (Figure 3). In the first 4 days of week 45 (Nov 4 to 7), four ILI outbreaks in schools were recorded (affecting 15 persons).

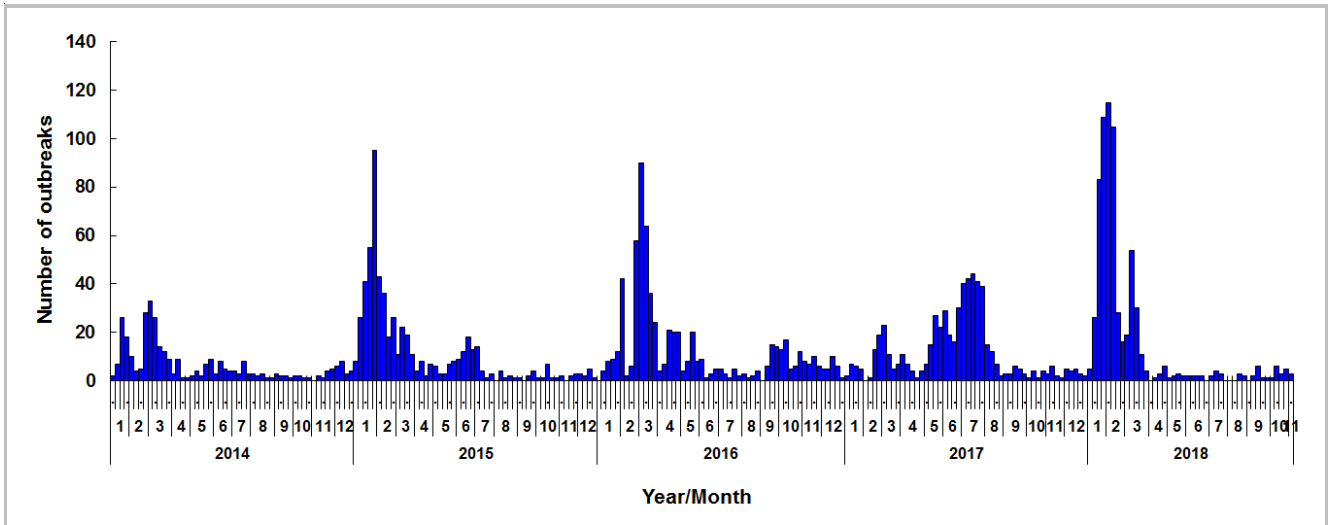


Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 43	Week 44	First 4 days of week 45 (Nov 4 to 7)
Kindergarten/ child care centre	1	1	1
Primary school	3	1	3
Secondary school	0	0	0
Residential care home for the elderly	0	1	0
Residential care home for persons with disabilities	0	0	0
Others	1	0	0
<i>Total number of outbreaks</i>	5	3	4
<i>Total number of persons affected</i>	29	19	15

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

In week 44, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.08 (per 10,000 population), which was below the baseline threshold of 0.20 but higher than 0.06 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 0.61, 0.36, 0.03 and 0.13 cases (per 10,000 people in the age group) respectively, as compared to 0.58, 0.26, 0.02 and 0.09 cases in the previous week (Figure 4).

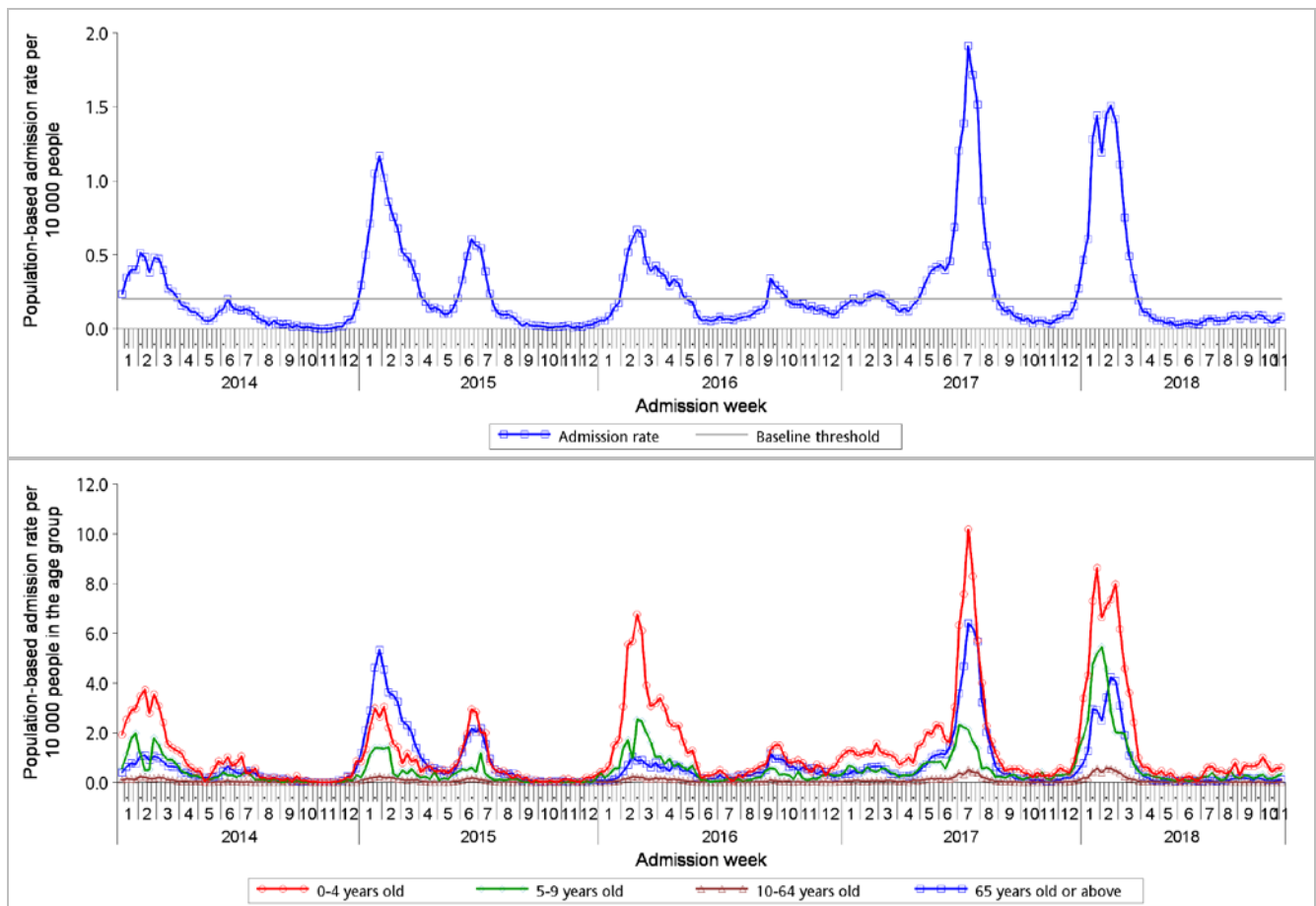


Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[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 44, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 161.6 (per 1,000 coded cases), which was higher than the rate of 140.4 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.*

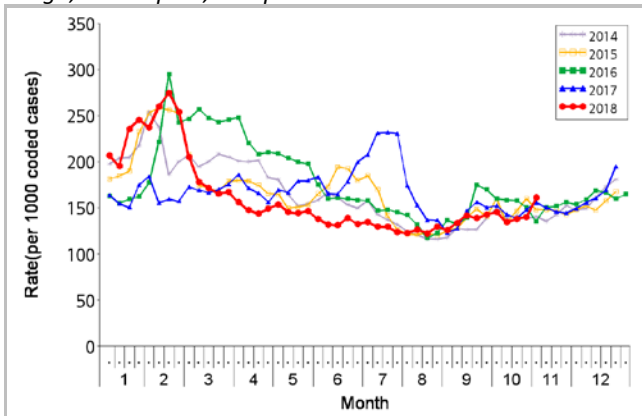


Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

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

In week 44, 1.01% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.72% recorded in the previous week (Figure 6).

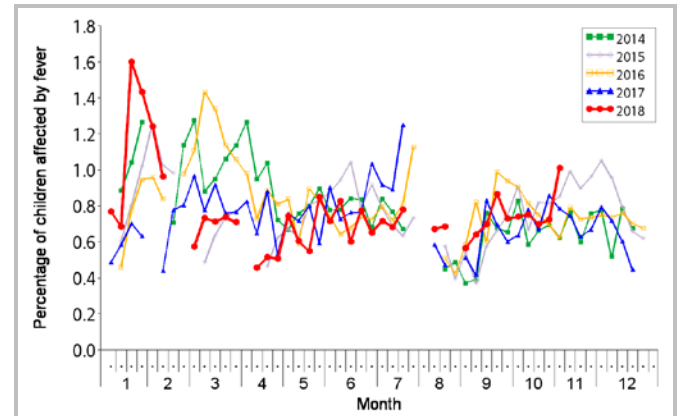


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

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

In week 44, 0.06% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.10% recorded in the previous week (Figure 7).

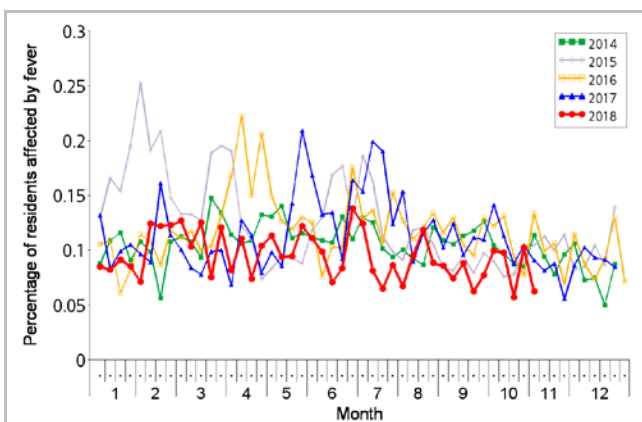


Figure 7 Percentage of residents with fever at sentinel RCHes, 2014-18

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

In week 44, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.17 ILI cases per 1,000 consultations as compared to 1.57 recorded in the previous week (Figure 8).

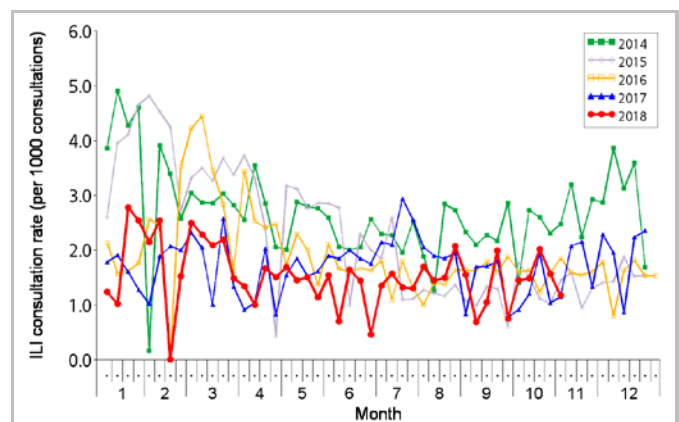


Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

## 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 44, two adult cases of ICU admission/deaths with laboratory confirmation of influenza were recorded (including one death) as compared to none recorded in the previous week. None of the two severe adult cases were known to have received the 2018/19 influenza vaccine.

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 43	0	0	0	0	0
Week 44	1	0	0	0	1

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

- In week 44 and the first 4 days of week 45 (Nov 4 to 7), there was one case of severe paediatric influenza-associated complication.

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving influenza vaccine for this season
44	5 years	Male	Sepsis	No	Influenza A (H3)	No

Data as of Nov 7, 2018

- In 2018, 27 paediatric cases of influenza-associated complication/death were recorded, in which three of them were fatal (as of Nov 7). 22 (81%) did not receive the seasonal influenza vaccine.

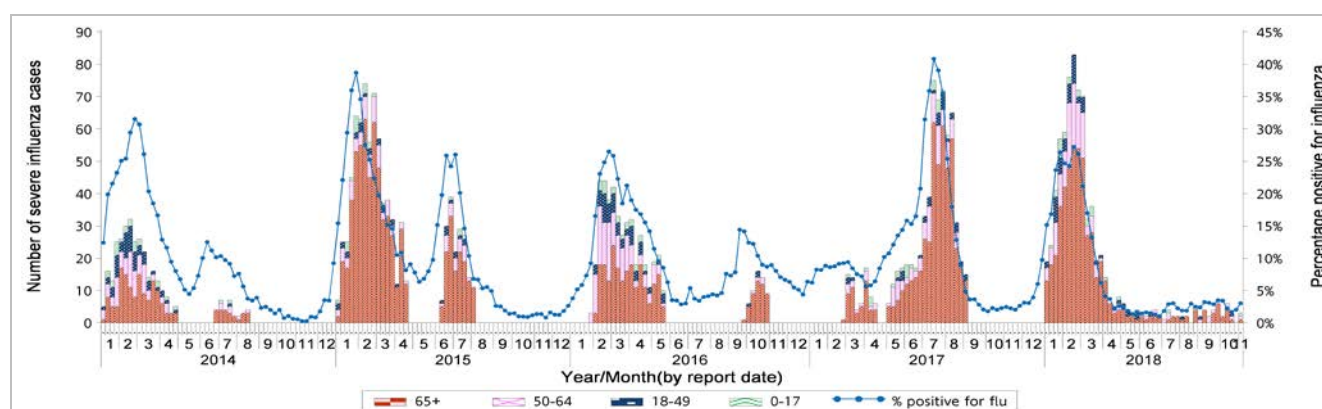


Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenza viruses in Figure 2 is also shown in this graph)

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 44 and the first 4 days of week 45 (Nov 4 to 7), 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 remained at inter-seasonal levels in temperate zone of the northern hemisphere. Increased influenza detections were reported in some countries of Southern and South-East Asia. In the temperate zones of southern hemisphere, influenza activity appeared to decrease overall. Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.

- In the United States (week ending Oct 27, 2018), influenza activity remained low, although small increases in activity were reported. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continued to co-circulate, with influenza A(H1N1)pdm09 viruses reported most commonly during the most recent three weeks. The proportion of outpatient visits for ILI was 1.7%, which was below the national baseline of 2.2%.
- In Canada (Oct 21 to 27, 2018), influenza activity crossed the seasonal threshold in the week ending Oct 27, 2018, indicating the beginning of the influenza season at the national level. The majority of regions in Canada reported sporadic or localized influenza activity. Influenza A was the most common influenza virus.
- In the United Kingdom (week ending Oct 28, 2018), influenza activity remained low with only sporadic cases of influenza detected in the community and all indicators below baseline threshold levels. The positivity of influenza detection was 0.8% in the week ending October 28, 2018, which was below the baseline threshold of 9.2%.
- In Europe (week ending Oct 28, 2018), influenza activity was low throughout the Region. Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care. Both influenza A and B type viruses were detected.
- In Australia (Oct 8 to 21, 2018), indicators for person to person transmission of influenza and ILI continued to decline after reaching a peak in early September. Activity levels have returned to or are approaching baseline levels. Majority of confirmed influenza cases reported nationally were influenza A (83%).
- In New Zealand (week ending Oct 28, 2018), the last weekly respiratory virus surveillance update for 2018 confirmed that the 2018 season has ended.
- In Mainland China (week ending Oct 28, 2018), influenza activity was still at a low level. Influenza viruses detected were mainly influenza A(H1N1).
- In Macau (week ending Oct 27, 2018), the proportion of ILI cases in emergency departments among adults remained low and that among children decreased as compared to the previous week. The proportion of influenza detections remained low.
- In Japan (week ending Oct 28, 2018), the average number of reported ILI cases per sentinel site was 0.19 in the week ending Oct 28, 2018, which was below the baseline level of 1.00. The predominating virus in the past five weeks was influenza A.

### 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](#), [Health Bureau of Macao Special Administrative Region](#) and [Japan Ministry of Health, Labour and Welfare](#).