

# 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 Oct 10, 2018)

**Reporting period: September 30 – October 6, 2018 (Week 40)**

- 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) will be expanded to cover those aged 50 to 64 to receive subsidised seasonal influenza vaccination. It will also continue 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. VSS has been launched on Oct 10, 2018. In addition, the Government Vaccination Programme (GVP) will be launched on Oct 24, 2018. Eligible groups for free vaccination will be the same as that of 2017/18. 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 40, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 3.2 ILI cases per 1,000 consultations, which was lower than 3.7 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 32.3 ILI cases per 1,000 consultations, which was higher than 18.6 recorded in the previous week (Figure 1, right).

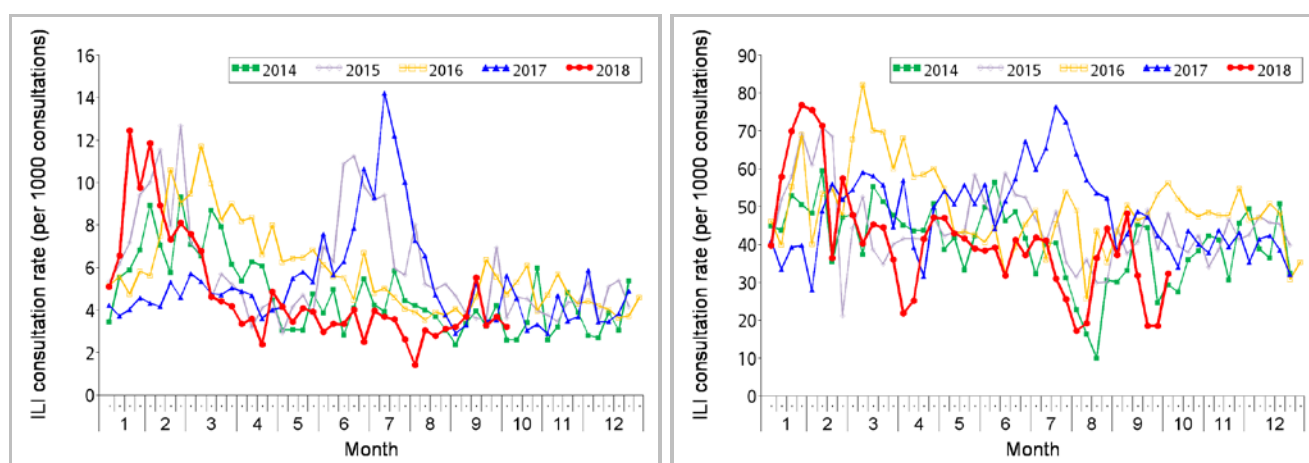


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

## Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 40, the positive percentage of seasonal influenza viruses was 3.40%, which was below the baseline threshold of 10.7% and was lower than 3.48% recorded in the previous week (Figure 2). The 143 influenza viruses detected last week included 113 (2.69%) influenza A(H1), 27 (0.64%) influenza A(H3) and 3 (0.07%) influenza B.

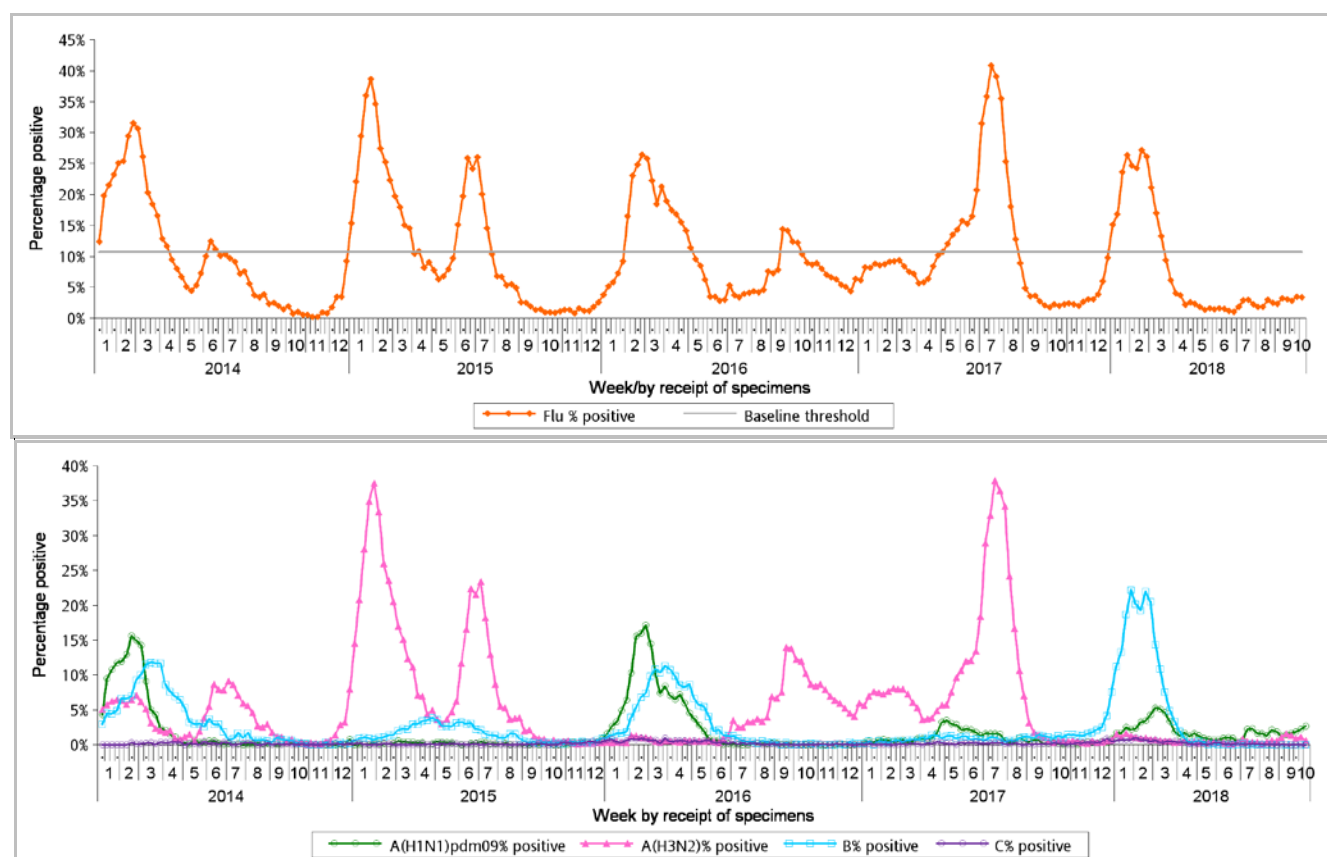


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 40, one ILI outbreak occurring in a school was recorded (affecting 5 persons), as compared to one outbreak recorded in the previous week (affecting 3 persons) (Figure 3). In the first 4 days of week 40 (Oct 7 to 10), six ILI outbreaks in schools were recorded (affecting 31 persons).

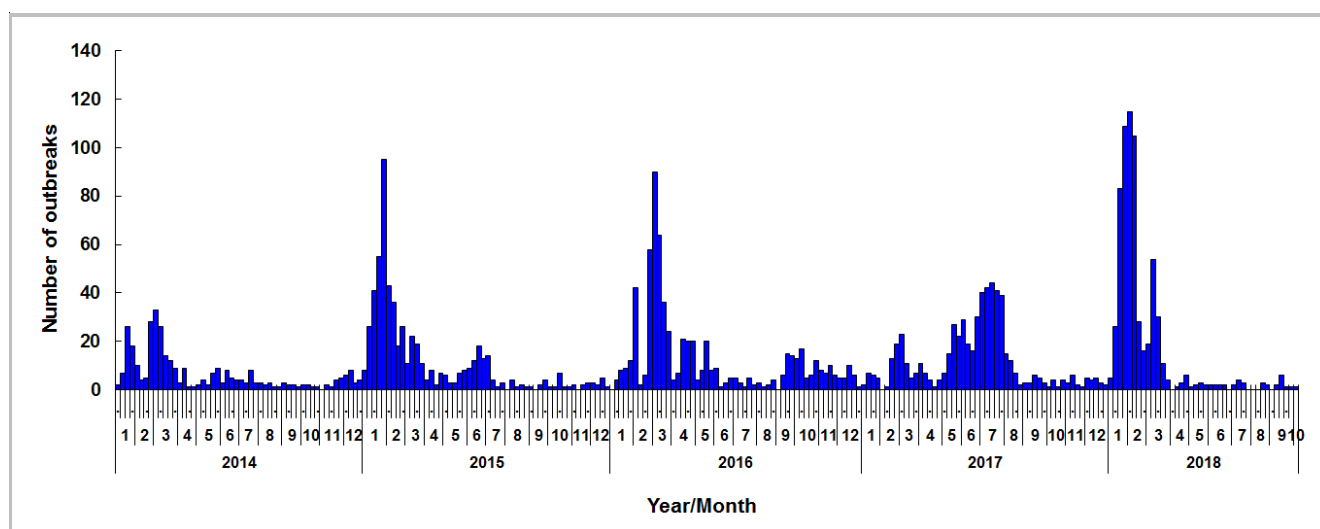


Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 39	Week 40	First 4 days of week 41 (Oct 7 to 10)
Kindergarten/ child care centre	1	1	4
Primary school	0	0	2
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	0	0
<i>Total number of outbreaks</i>	1	1	6
<i>Total number of persons affected</i>	3	5	31

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

In week 40, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.07 (per 10,000 population), which was below the baseline threshold of 0.20 and was lower than 0.09 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 0.87, 0.26, 0.02 and 0.10 cases (per 10,000 people in the age group) respectively, as compared to 0.69, 0.30, 0.04 and 0.16 cases in the previous week (Figure 4).

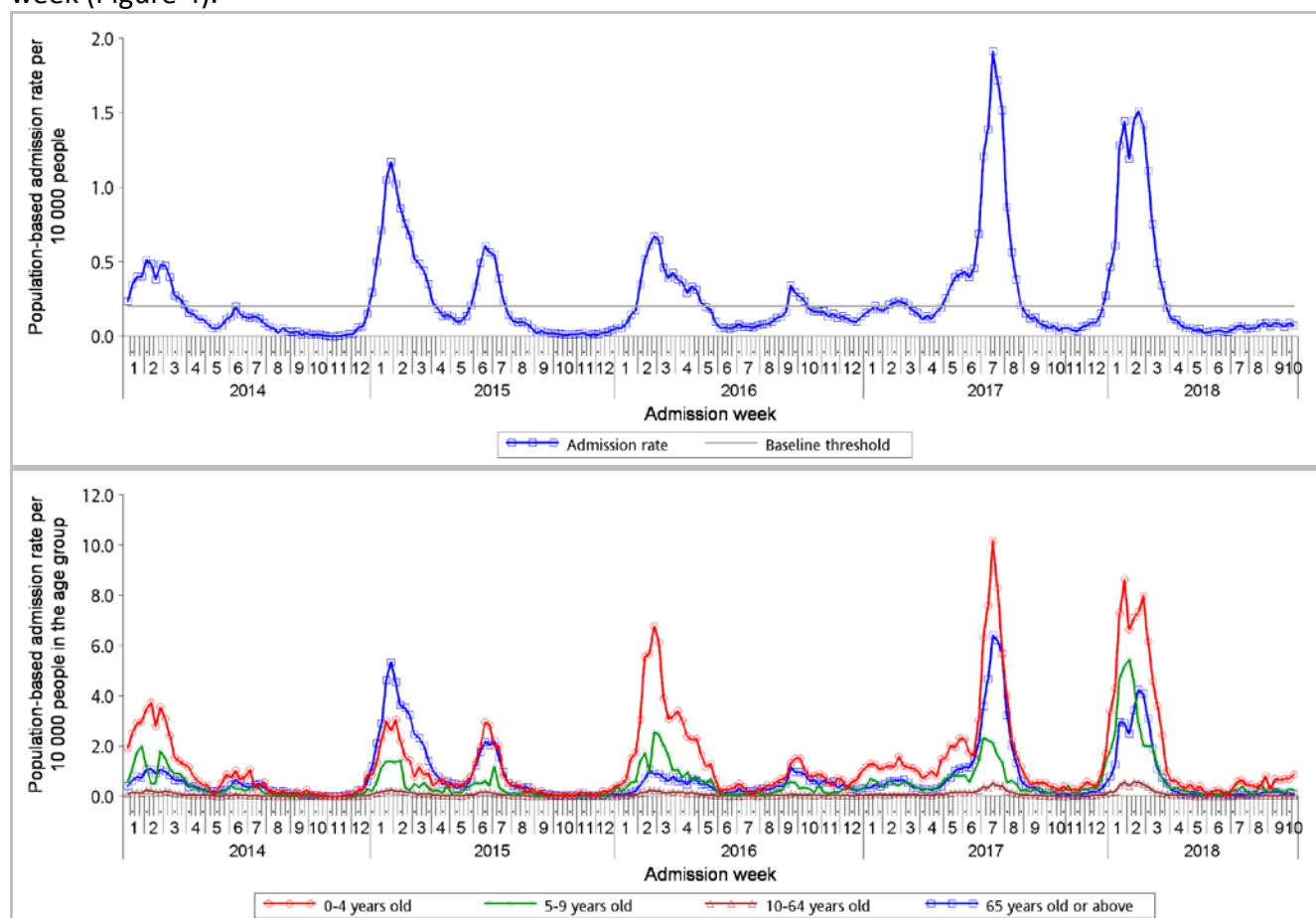


Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[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 40, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 146.1 (per 1,000 coded cases), which was higher than the rate of 143.2 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.*

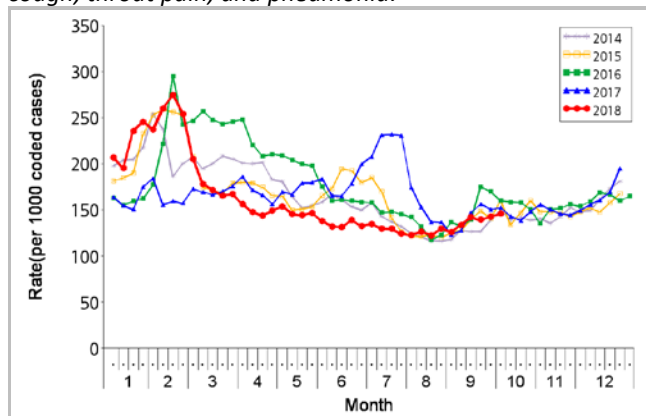


Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

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

In week 40, 0.74% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.73% recorded in the previous week (Figure 6).

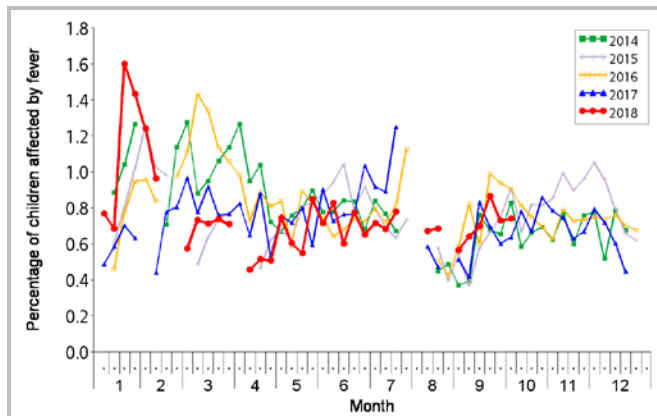


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

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

In week 40, 0.10% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.08% recorded in the previous week (Figure 7).

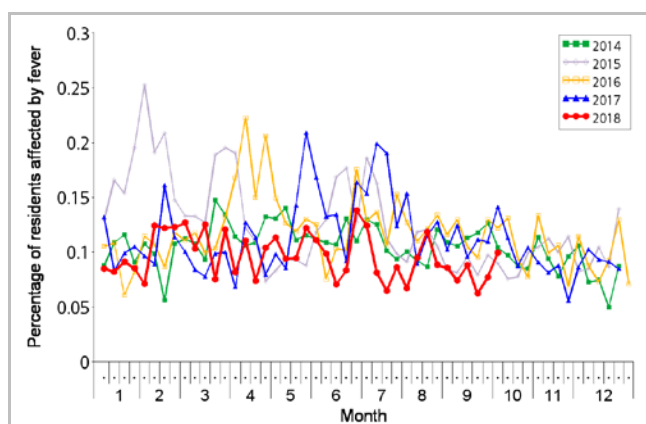


Figure 7 Percentage of residents with fever at sentinel RCHes, 2014-18

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

In week 40, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.45 ILI cases per 1,000 consultations as compared to 0.75 recorded in the previous week (Figure 8).

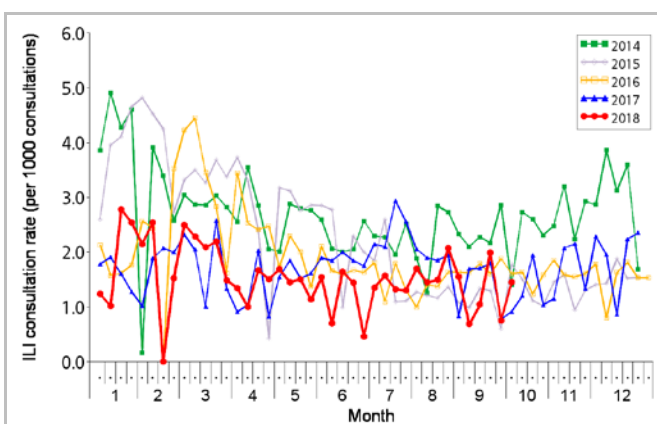


Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

## 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 40, two adult cases of ICU admission/death with laboratory confirmation of influenza (including two deaths) were recorded as compared to six cases (including five deaths) recorded in the previous week. One of the two severe adult cases were known to have received the 2017/18 influenza vaccine.

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 39	3	1	1	0	1
Week 40	0	1	0	0	1

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

- In week 40 and the first 4 days of week 41 (Oct 7 to 10), there were no cases of severe paediatric influenza-associated complication/death.
- In 2018, 26 paediatric cases of influenza-associated complication/death were recorded, in which three of them were fatal (as of Oct 10). 21 (81%) did not receive the influenza vaccine for the 2017/18 season.

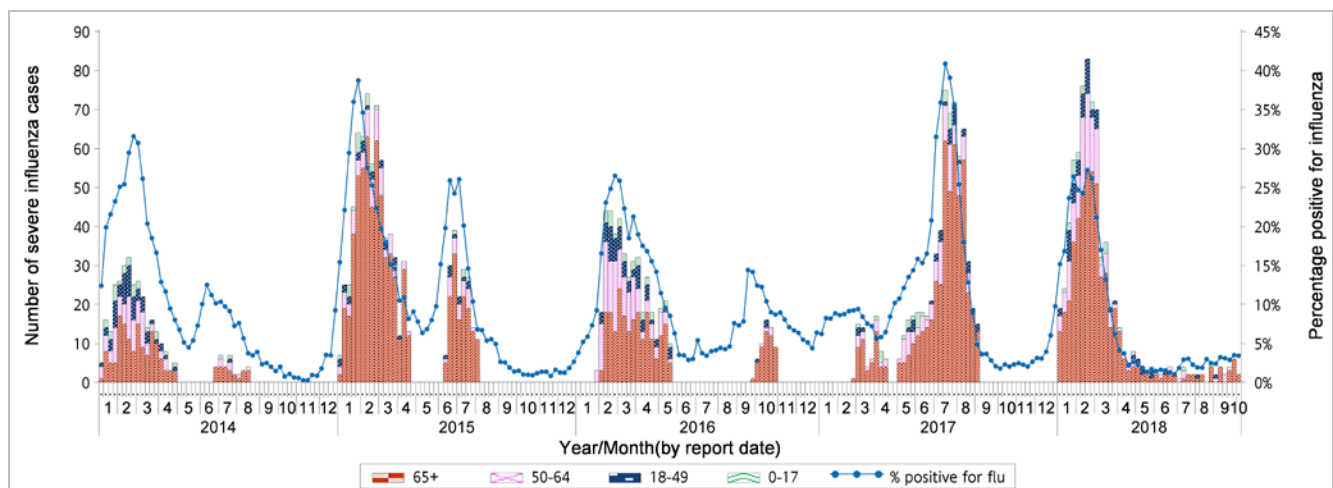


Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenza viruses in Figure 2 is also shown in this graph)

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 40 and the first 4 days of week 41 (Oct 7 to 10), 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 most of the 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 in South America and Southern Africa. Influenza activity remained at low seasonal levels in Australia and New Zealand. Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.

- In the United States (week ending Sep 29, 2018), influenza activity was at a low level. The proportion of outpatient visits for ILI was 1.2%, which was below the national baseline of 2.2%. The percentage of respiratory specimens testing positive for influenza was 0.75%.
- In Canada (Sep 9-22, 2018), influenza activity remained at interseasonal levels across the country. The majority of regions in Canada reported no influenza activity. Influenza A was the most common influenza virus.
- In the United Kingdom (week ending Sep 23, 2018), indicators for influenza showed low levels of activity. The positivity of influenza detection was 0.6% in the week ending September 23, 2018, which was below the baseline threshold of 8.6%.
- In Europe (Sep 3-30, 2018), influenza activity was at out-of-season levels in all countries. Of 65 specimens from primary health care settings, none was tested positive for influenza virus.
- In Australia (fortnight ending Sep 23, 2018), there were declines in the majority of indicators for person to person transmission of influenza and ILI, signaling that nationally the season peaked in recent weeks or is nearing its peak. Majority of confirmed influenza cases reported nationally were influenza A (88%).
- In New Zealand (week ending Oct 7, 2018), influenza activity has been very low this season, with a late peak in September. Measures of the activity dropped again last week. Influenza A(H1N1) has been the predominant flu virus circulating this season.
- In Mainland China (week ending Sep 23, 2018), influenza activity remained at an extremely low level. There were only few detections of influenza viruses, which were mainly influenza A(H1N1) viruses.
- In Macau (week ending Sep 22, 2018), the proportion of ILI cases in emergency departments among adults increased but that for children decreased as compared to the previous week. The proportion of influenza detections also increased from the previous week.

### 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](#).