

# 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 May 16, 2018)

**Reporting period: May 6 – 12, 2018 (Week 19)**

- 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 19, 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 4.2 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 42.9 ILI cases per 1,000 consultations, which was lower than 46.9 recorded in the previous week (Figure 1, right).

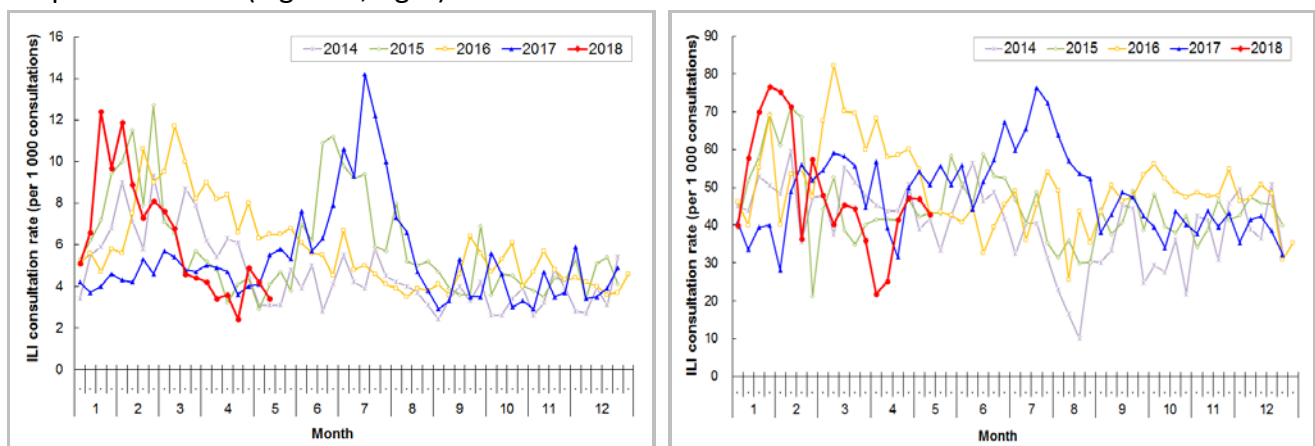


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

## Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 19, the positive percentage of seasonal influenza viruses was 1.85%, which was below the baseline threshold of 10.7% and lower than 2.33% recorded in the previous week (Figure 2). The 78 influenza viruses detected last week included 40 (0.95%) influenza A(H1), 14 (0.33%) influenza A(H3), 18 (0.43%) influenza B and 6 (0.14%) influenza C.

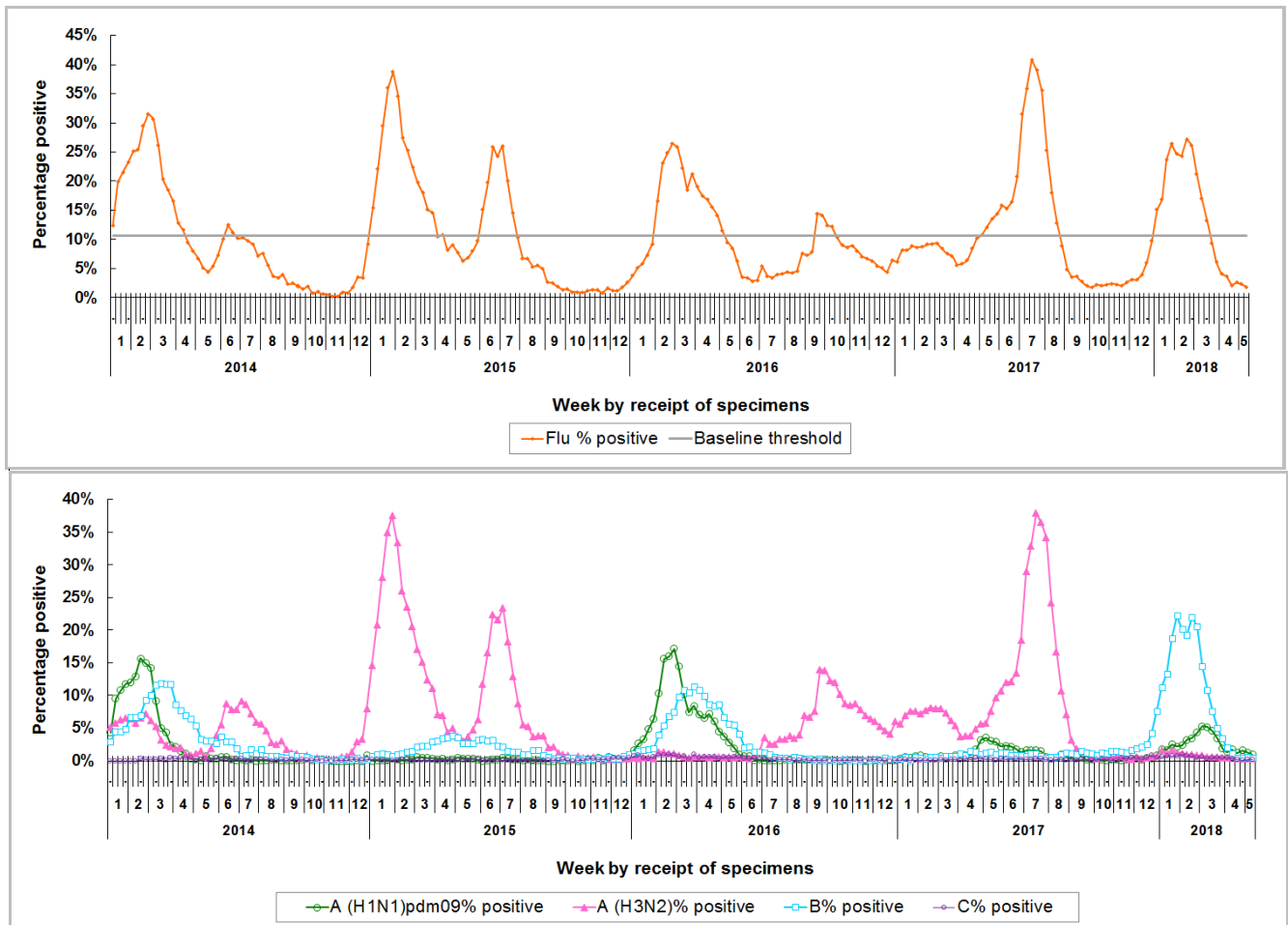


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 19, two ILI outbreaks occurring in schools/institutions were recorded (affecting seven persons), as compared to one outbreak recorded in the previous week (affecting three persons) (Figure 3). In the first 4 days of week 20 (May 13 to 16), two ILI outbreaks in schools/institutions were recorded (affecting six persons).

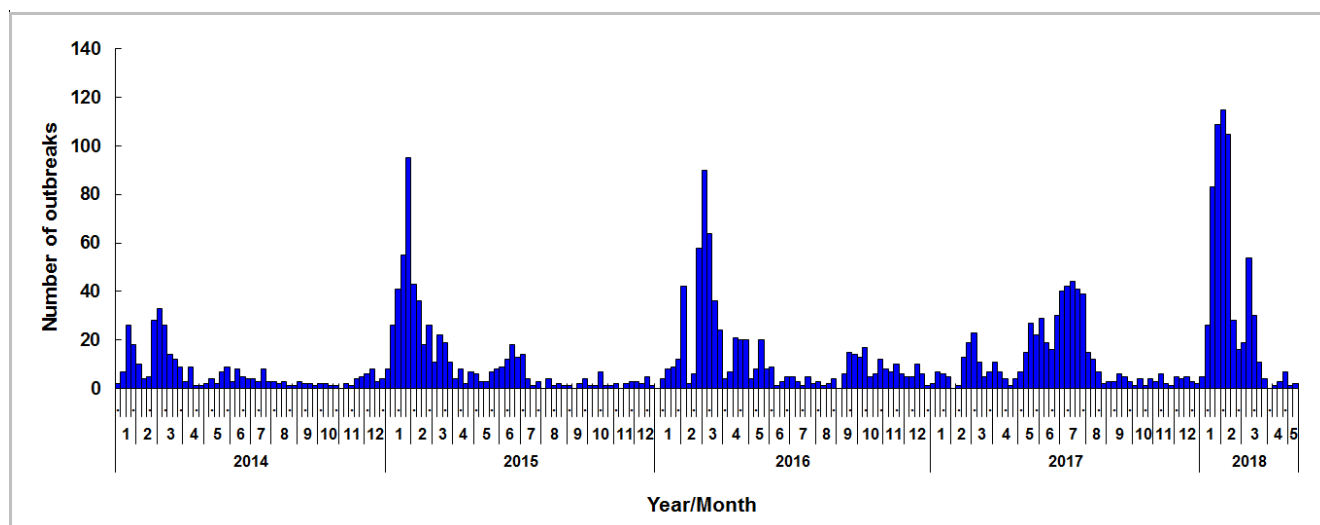


Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 18	Week 19	First 4 days of week 20 (May 13 to 16)
Kindergarten/ child care centre	1	1	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	0	0
<i>Total number of outbreaks</i>	1	2	2
<i>Total number of persons affected</i>	3	7	6

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

In week 19, the overall admission rate in public hospitals with principal diagnosis of influenza was 0.03 (per 10,000 population), which was below the baseline threshold of 0.20 and 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 0.22, 0.13, 0.01 and 0.07 cases (per 10,000 people in the age group) respectively, as compared to 0.51, 0.13, 0.03 and 0.07 cases in the previous week (Figure 4).

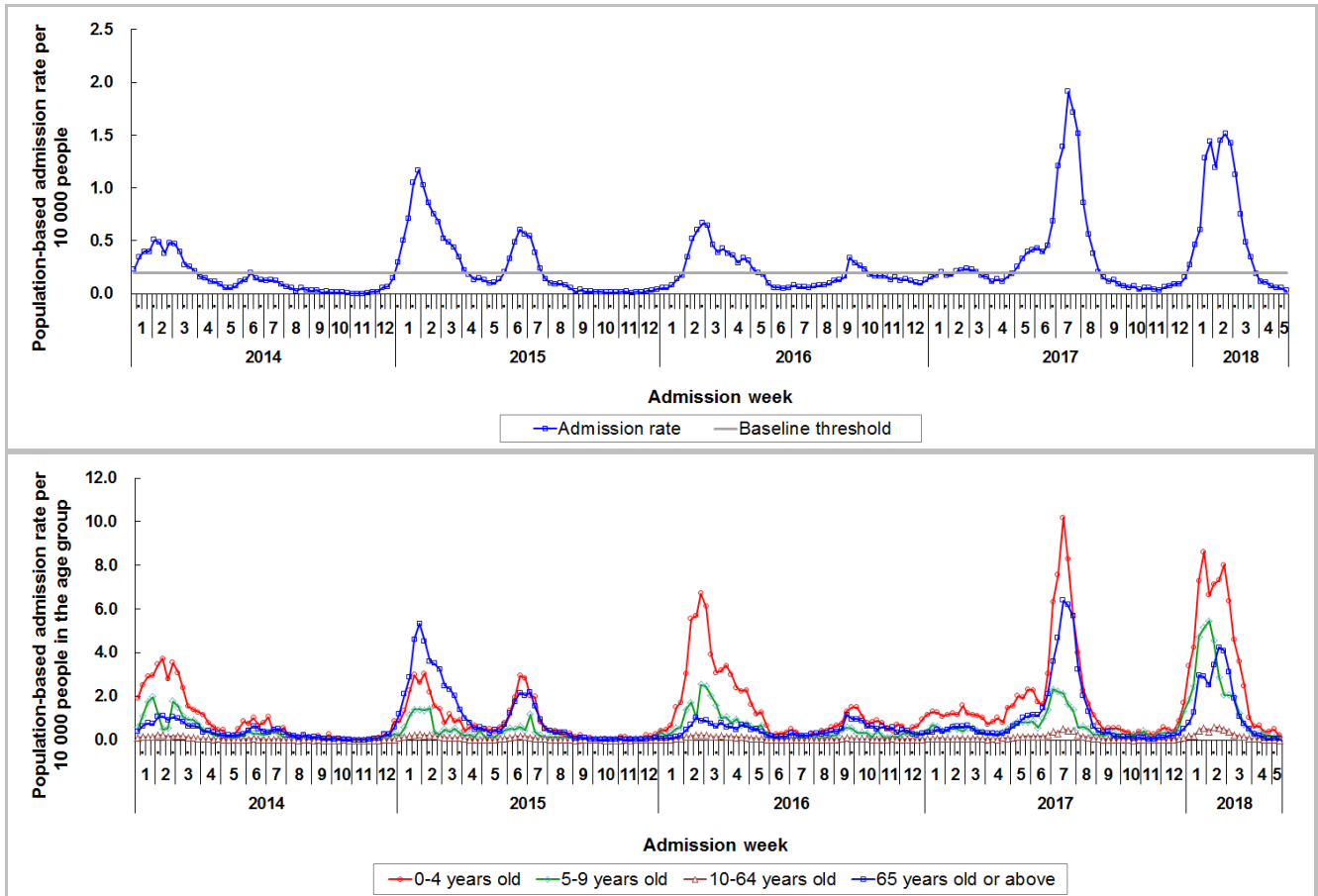


Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[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 19, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 146.6 (per 1,000 coded cases), which was lower than the rate of 154.6 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.*

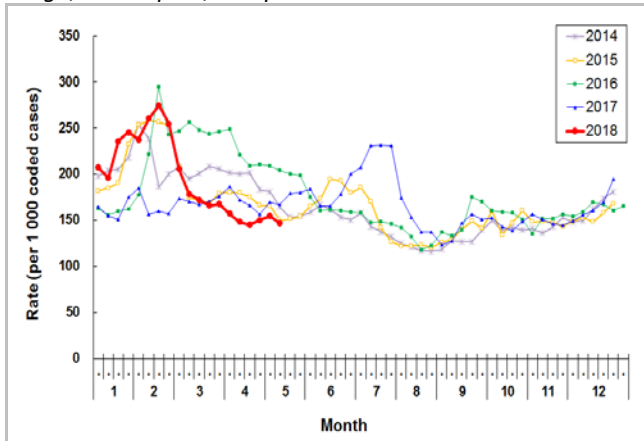


Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

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

In week 19, 0.60% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above), compared to 0.74% recorded in the previous week (Figure 6).

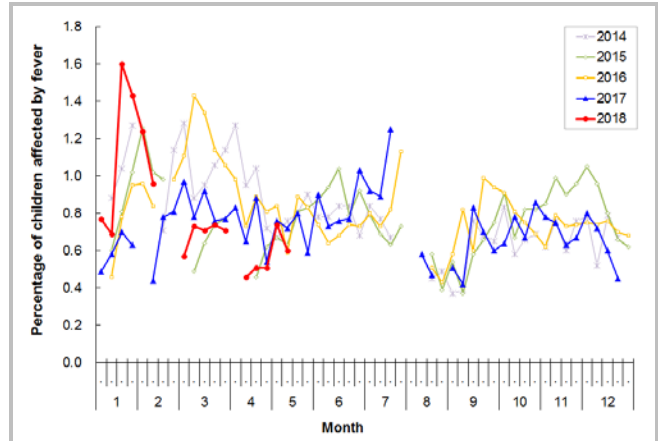


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

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

In week 19, 0.09% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.11% recorded in the previous week (Figure 7).

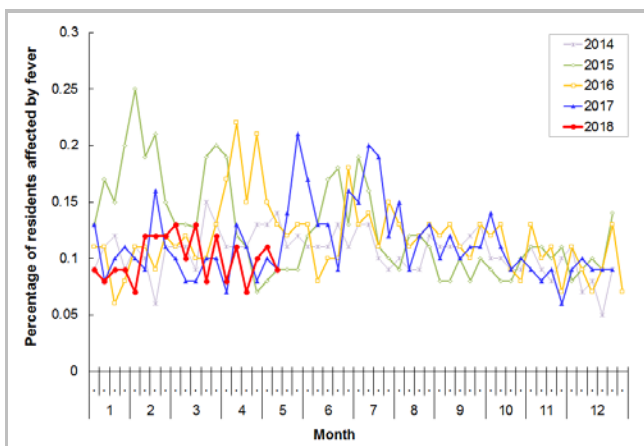


Figure 7 Percentage of residents with fever at sentinel RCHes, 2014-18

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

In week 19, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.45 ILI cases per 1,000 consultations as compared to 1.68 recorded in the previous week (Figure 8).

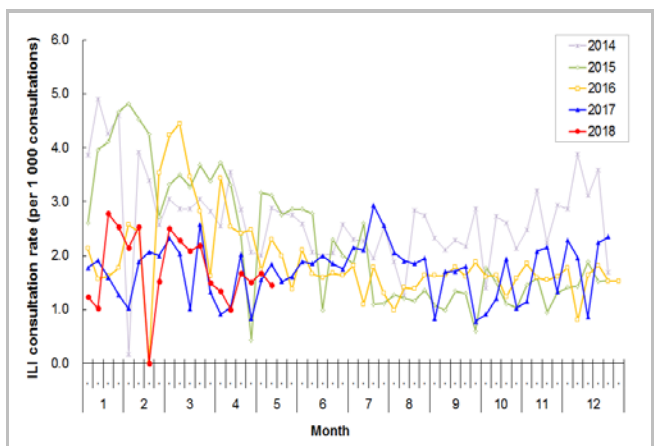


Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

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

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 18	4	0	1	0	1
Week 19	1	0	2	0	1

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

- In week 19 and the first 4 days of week 20 (May 13 to 16), there were no cases of severe paediatric influenza-associated complication/death.
- In 2018, 22 paediatric cases of influenza-associated complication/death were recorded, in which two of them were fatal (as of May 16). 20 (90.9%) did not receive the influenza vaccine for the 2017/18 season.

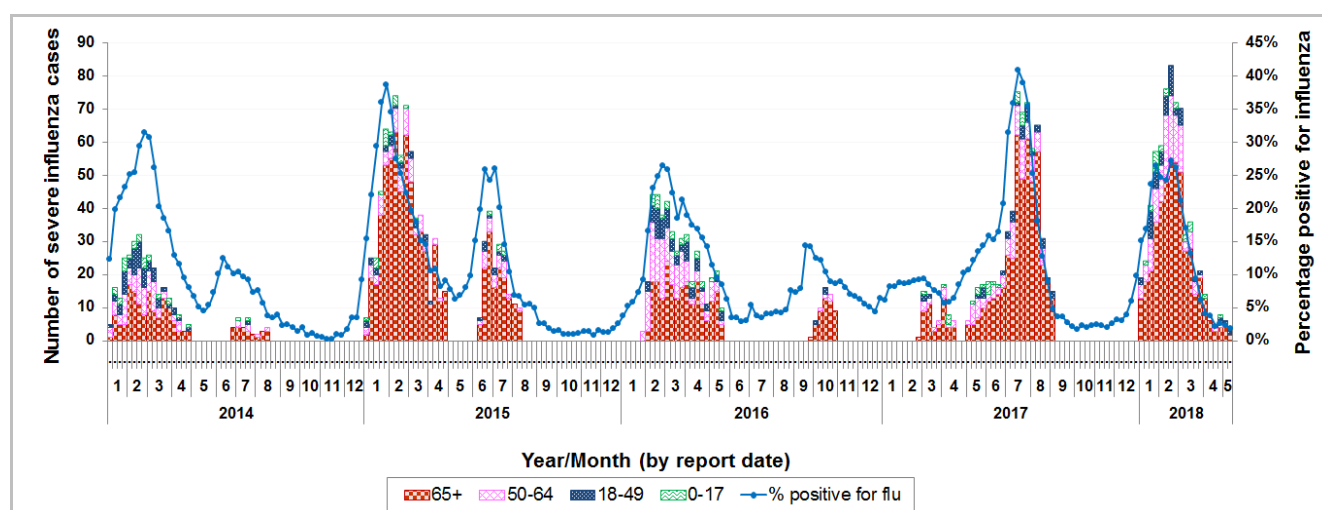


Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenza viruses in Figure 2 is also shown in this graph)

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 19 and the first 4 days of week 20 (May 13 to 16), 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 most of the countries in the temperate zone of the northern hemisphere except for some countries in Eastern Europe. Activity increased in some countries in tropical America. In the temperate zone of the southern hemisphere, influenza activity increased but remained below the seasonal thresholds. Worldwide, seasonal influenza subtypes A and B accounted for approximately the same proportion of influenza detections.

- In the United States (week ending May 5, 2018), influenza activity decreased. The proportion of outpatient visits for ILI was 1.5%, which was below the national baseline of 2.2%. Overall, influenza A(H3) viruses have predominated this season. Since early March, influenza B viruses have been more frequently reported than influenza A viruses. The percentage of respiratory specimens testing positive for influenza decreased.
- In Canada (week ending May 5, 2018), the influenza activity continued to decrease but parts of Central and Eastern Canada are still reporting localized activity. The percentage of tests positive for influenza in the week ending May 5, 2018 was 8%, and influenza A accounted for 66% of influenza detections.
- In the United Kingdom (week ending May 6, 2018), there was no longer widespread influenza circulation in the community, with all indicators below baseline threshold levels. The positivity of influenza detection was 2.5% in the week ending May 6, 2018, which was below the baseline threshold of 8.6%.
- In Europe (week ending May 6, 2018), influenza activity was at inter-seasonal levels in all but one reporting country. 6% of sentinel specimens were tested positive for influenza virus (compared to 11% in the previous week).
- In Mainland China (week ending May 6, 2018), influenza activity in both northern and southern provinces was at inter-seasonal levels. Influenza detection was little and most of them were influenza A(H1N1) viruses.
- In Macau (week ending May 5, 2018), the proportions of ILI cases in emergency departments among adults and children were at low levels. The proportion of influenza detections was 1.3%, which was lower than that in the previous week (4.7%).
- In Japan (week ending May 6, 2018), the average number of reported ILI cases per sentinel site was 0.61 in the week ending May 6, 2018, as compared to 1.23 in the previous week. It was below the baseline level of 1.00. The predominating virus in the past five weeks were influenza A(H3) and influenza B, followed by influenza A(H1N1)pdm09.

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