

# 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 Sep 19, 2018)

**Reporting period: September 9 – 15, 2018 (Week 37)**

- 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. In the Government Vaccination Programme (GVP), eligible groups for free vaccination will be the same as that of 2017/18. VSS and GVP will be launched on 10 and 24 October 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 37, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 5.5 ILI cases per 1,000 consultations, which was higher than 3.7 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 31.7 ILI cases per 1,000 consultations, which was lower than 48.2 recorded in the previous week (Figure 1, right).

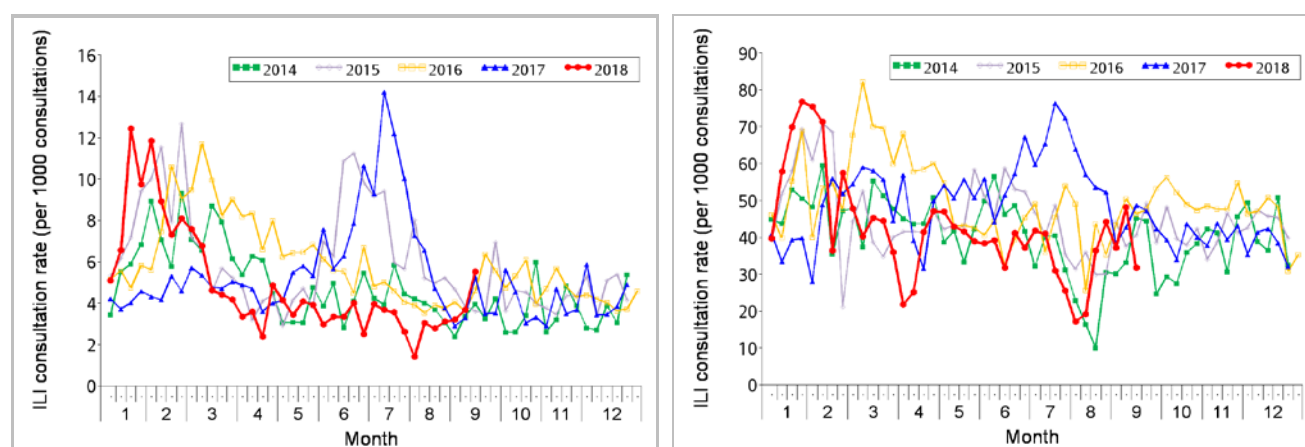


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

## Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 37, the positive percentage of seasonal influenza viruses was 3.10%, which was below the baseline threshold of 10.7% and was lower than 3.21% recorded in the previous week (Figure 2). The 134 influenza viruses detected last week included 73 (1.69%) influenza A(H1), 60 (1.39%) influenza A(H3) and 1 (0.02%) influenza C.

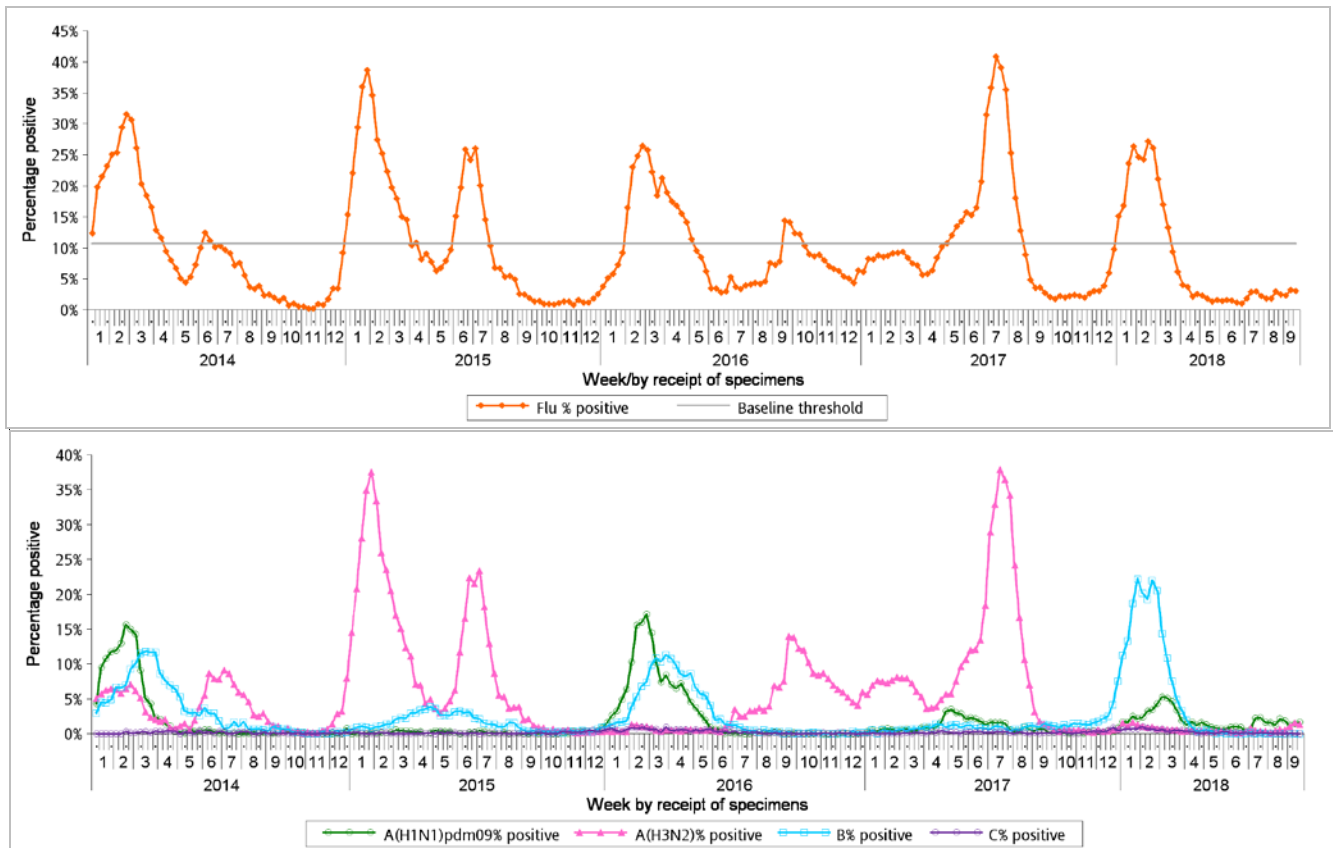


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 37, six ILI outbreaks occurring in schools/institutions were recorded (affecting 35 persons), as compared to two outbreaks recorded in the previous week (affecting 9 persons) (Figure 3). In the first 4 days of week 38 (Sep 16 to 19), one ILI outbreak in a school was recorded (affecting 5 persons).

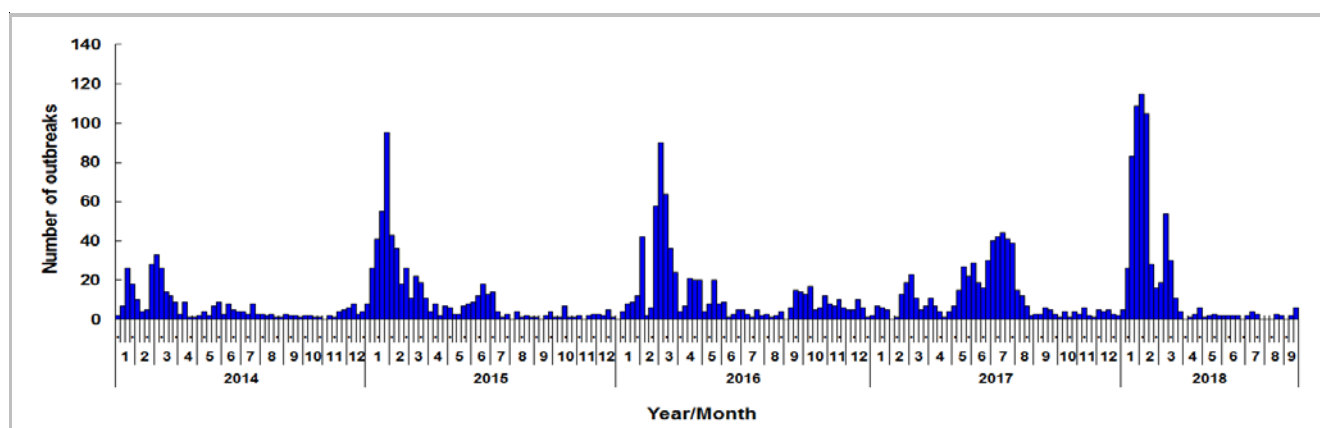


Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 36	Week 37	First 4 days of week 38 (Sep 16 to 19)
Kindergarten/ child care centre	0	3	1
Primary school	1	1	0
Secondary school	0	0	0
Residential care home for the elderly	1	1	0
Residential care home for persons with disabilities	0	1	0
Others	0	0	0
<i>Total number of outbreaks</i>	2	6	1
<i>Total number of persons affected</i>	9	35	5

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

In week 37, 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 was the same as that 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, 0.20, 0.03 and 0.15 cases (per 10,000 people in the age group) respectively, as compared to 0.54, 0.30, 0.03 and 0.19 cases in the previous week (Figure 4).

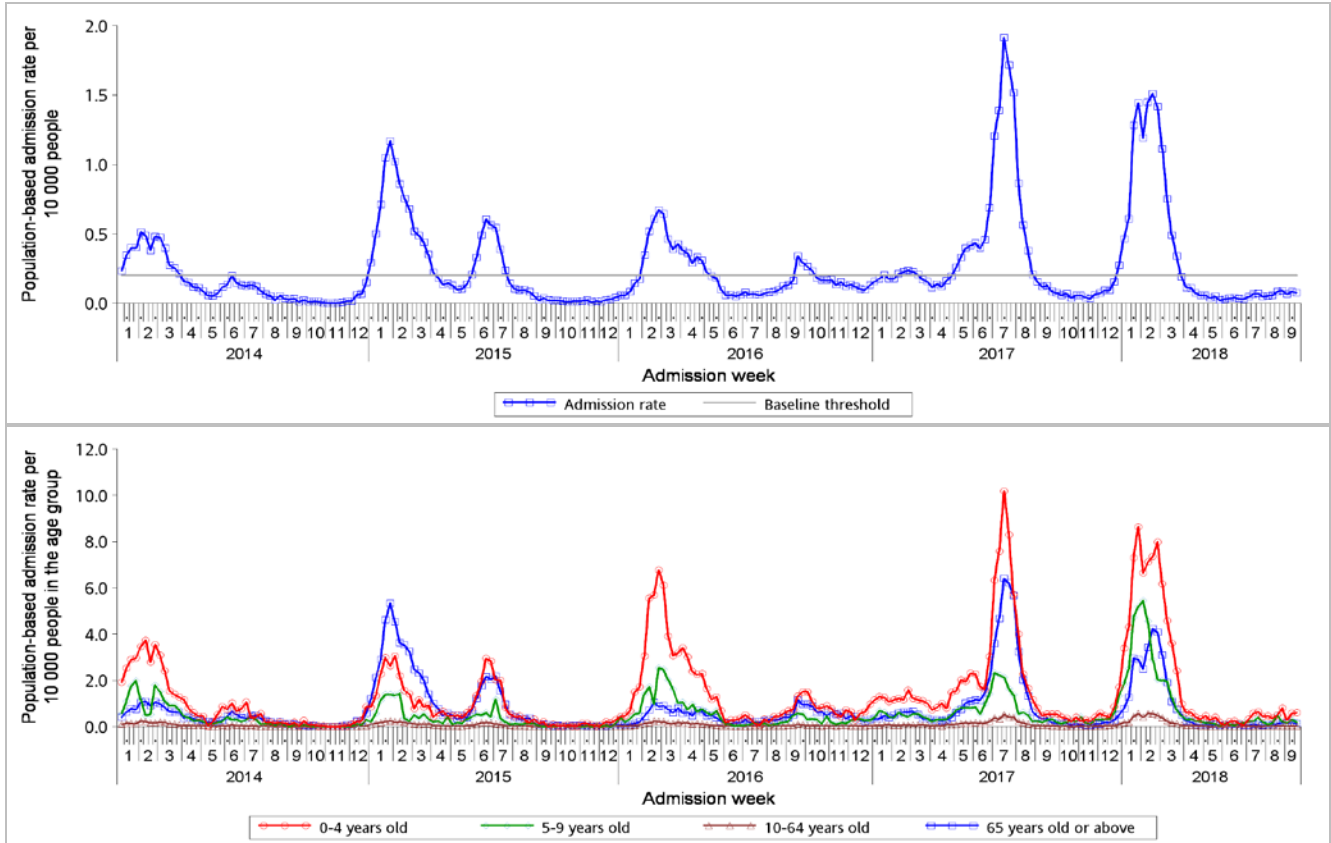


Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[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 37, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 142.6 (per 1,000 coded cases), which was higher than the rate of 134.0 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.*

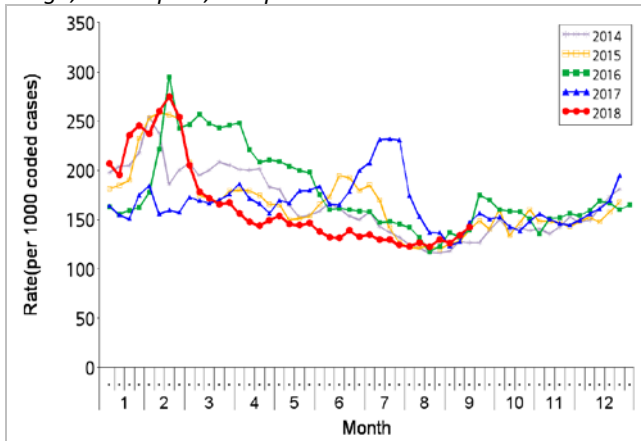


Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

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

In week 37, 0.70% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.64% recorded in the previous week (Figure 6).

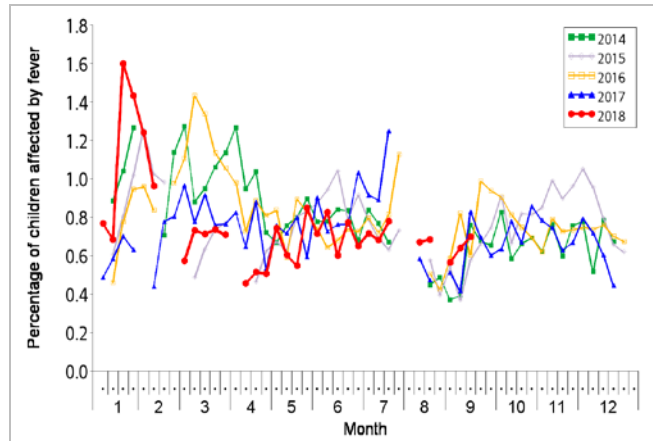


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

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

In week 37, 0.09% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.07% recorded in the previous week (Figure 7).

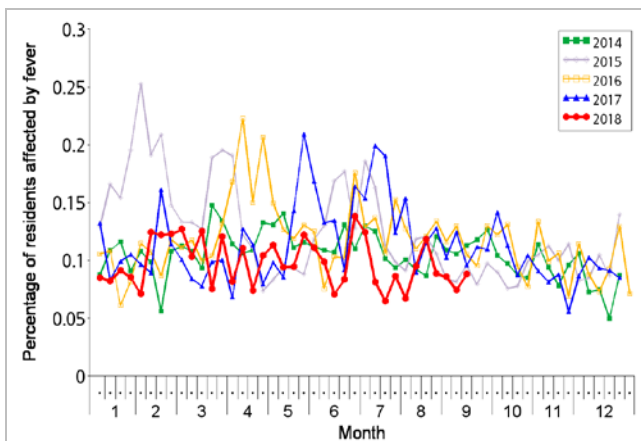


Figure 7 Percentage of residents with fever at sentinel RCHes, 2014-18

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

In week 37, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.04 ILI cases per 1,000 consultations as compared to 0.69 recorded in the previous week (Figure 8).

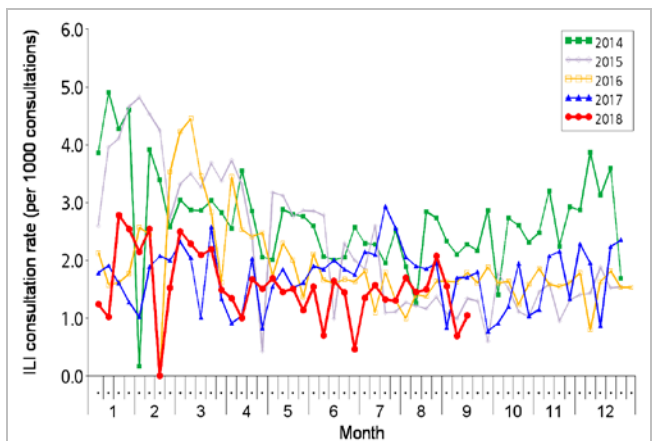


Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

## 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 37, two non-fatal adult cases of ICU admission/death with laboratory confirmation of influenza were recorded as compared to four cases (including one death) were recorded in the previous week. None 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 36	2	1	0	0	1
Week 37	1	1	0	0	0

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

- In week 37 and the first 4 days of week 38 (Sep 16 to 19), 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 Sep 19). 21 (81%) did not receive the influenza vaccine for the 2017/18 season.

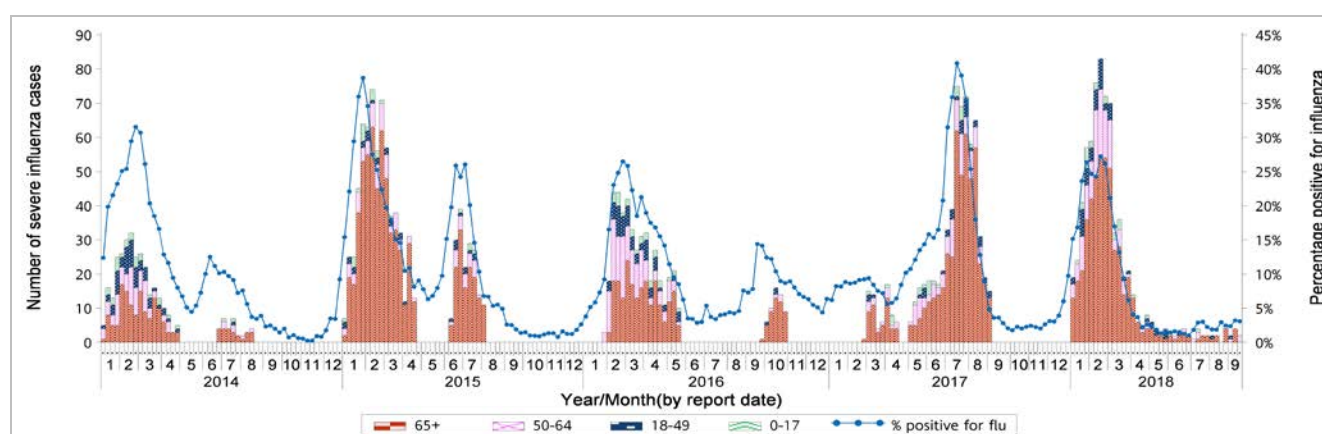


Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenza viruses in Figure 2 is also shown in this graph)

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 37 and the first 4 days of week 38 (Sep 16 to 19), 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. Decreased influenza activity was reported in most countries of tropical America. In the temperate zones of southern hemisphere, influenza activity remained elevated in South America and appeared to decrease in 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 8, 2018), influenza activity was at a low level. The proportion of outpatient visits for ILI was 1.1%, which was below the national baseline of 2.2%. The percentage of respiratory specimens testing positive for influenza was 1.83%.
- In Canada (Aug 26 to Sep 8, 2018), influenza activity was at interseasonal levels across the country. The majority of regions in Canada were reporting no influenza activity. Influenza A was the most common influenza virus.
- In the United Kingdom (week ending Sep 9, 2018), indicators for influenza showed low levels of activity. The positivity of influenza detection was 2.9% in the week ending September 9, 2018, which was below the baseline threshold of 8.6%.
- In Europe (Jul 30 to Sep 2, 2018), influenza activity was at inter-seasonal levels. Of all the samples from primary health care settings only one was tested positive for influenza virus.
- In Australia (fortnight ending Sep 9, 2018), person to person transmission of influenza and ILI in the community has been increasing slowly since July but remains at low levels.. Majority of confirmed influenza cases reported nationally were influenza A (86%).
- In New Zealand (week ending Sep 16, 2018), indicators of respiratory virus activity and severity remained very stable compared to the prior week. Influenza A(H1N1) still predominates this season.
- In Mainland China (week ending Sep 9, 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 1, 2018), the proportions of ILI cases in emergency departments among both adults and children decreased as compared to the previous week. The proportion of influenza detections also decreased 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](#), [Joint European Centre for Disease Prevention and Control-World Health Organization/Flu News Europe](#), [Public Health England](#), [Australian Department of Health](#), [New Zealand Ministry of Health](#), [Chinese National Influenza Center](#) and [Health Bureau of Macao Special Administrative Region](#).