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FLU EXPRESS

衞生防護中心 Centre for Health Protection
保障市民健康 Protecting Hong Kong's health

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 12, 2018)

Reporting period: September 2 – 8, 2018 (Week 36)

- 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).

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

In week 36, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 3.7 ILI cases per 1,000 consultations, which was higher than 3.2 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 48.2 ILI cases per 1,000 consultations, which was higher than 37.2 recorded in the previous week (Figure 1, right).

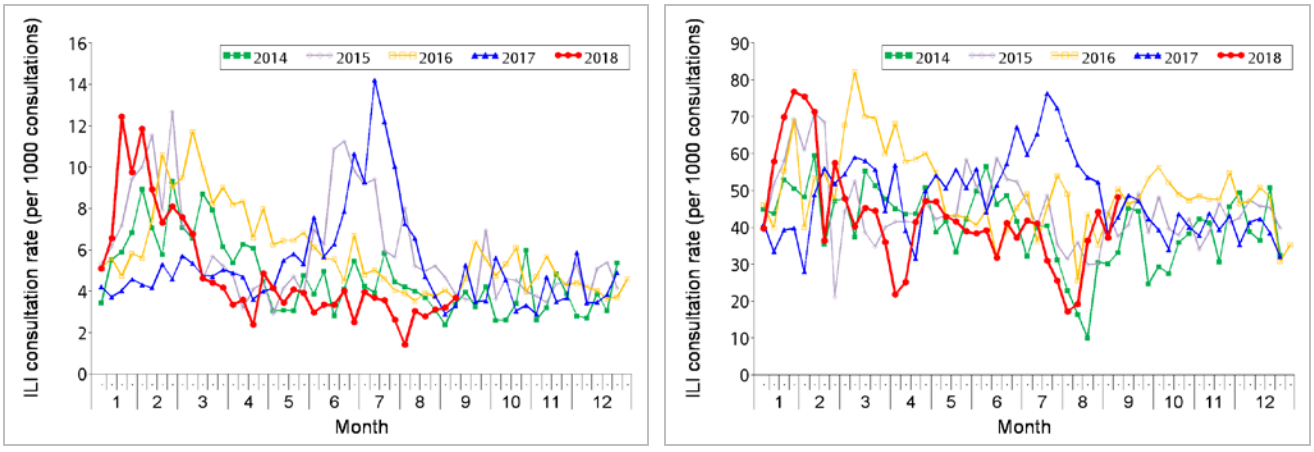

Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2014-18

Laboratory surveillance, 2014-18

Among the respiratory specimens received in week 36, the positive percentage of seasonal influenza viruses was 3.19%, which was below the baseline threshold of 10.7% and was higher than 2.38% recorded in the previous week (Figure 2). The 134 influenza viruses detected last week included 61 (1.45%) influenza A(H1), 67 (1.59%) influenza A(H3), 3 (0.07%) influenza B and 3 (0.07%) influenza C.

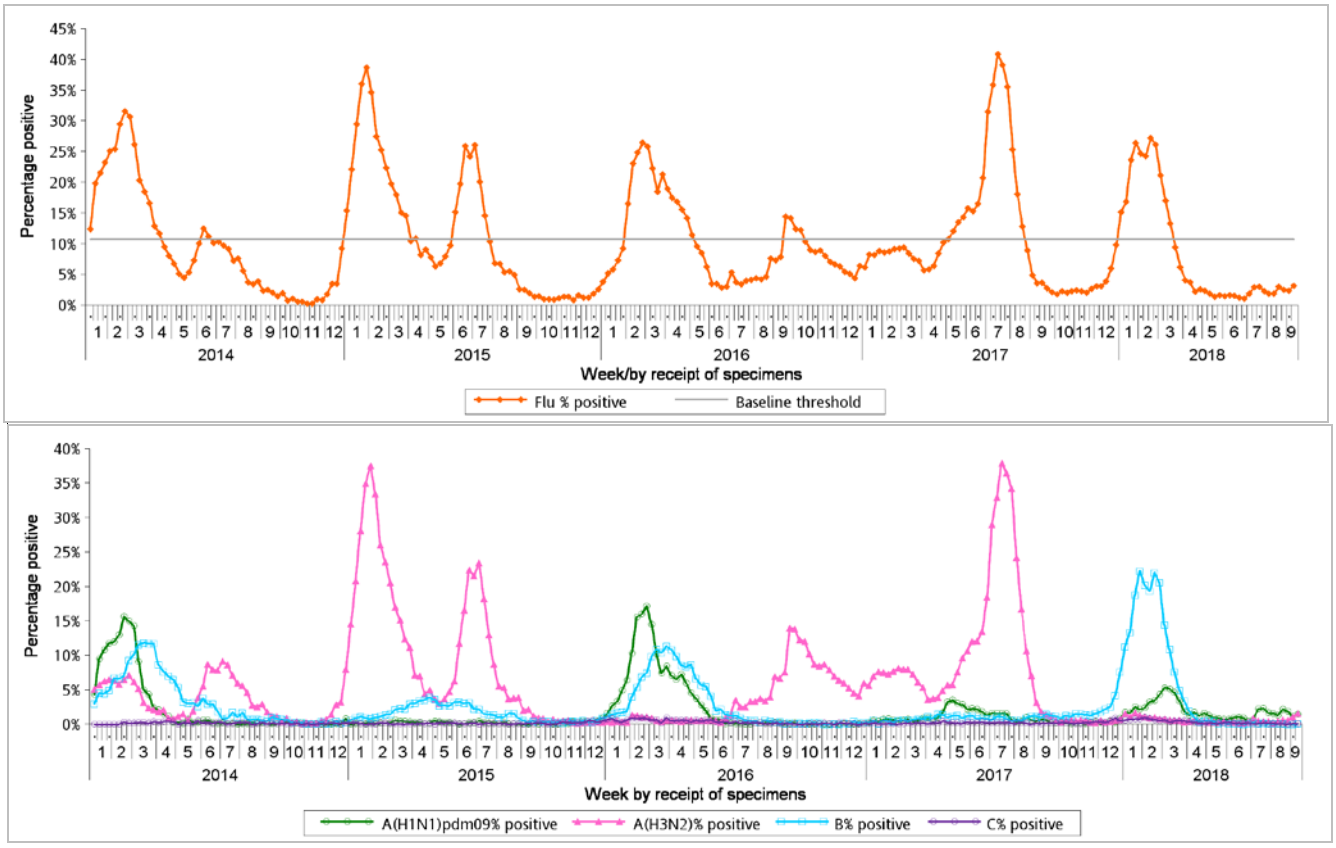

Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2014-18 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 36, 2 ILI outbreaks occurring in schools/institutions were recorded (affecting 9 persons), and no outbreaks were recorded in the previous week (Figure 3). In the first 4 days of week 37 (Sep 9 to 12), five ILI outbreaks in schools/institutions were recorded (affecting 31 persons).

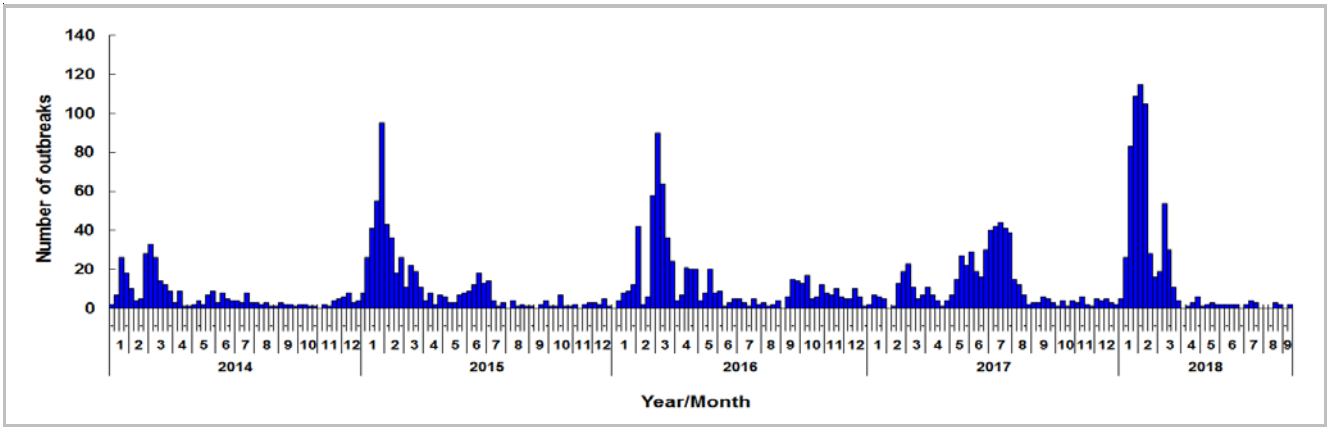

Figure 3 ILI outbreaks in schools/institutions, 2014-18

Type of institutions	Week 35	Week 36	First 4 days of week 37 (Sep 9 to 12)
Kindergarten/ child care centre	0	0	3
Primary school	0	1	0
Secondary school	0	0	0
Residential care home for the elderly	0	1	1
Residential care home for persons with disabilities	0	0	1
Others	0	0	0
Total number of outbreaks	0	2	5
Total number of persons affected	0	9	31

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

In week 36, 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 but was 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 0.47, 0.26, 0.03 and 0.16 cases (per 10,000 people in the age group) respectively, as compared to 0.29, 0.16, 0.03 and 0.16 cases in the previous week (Figure 4).

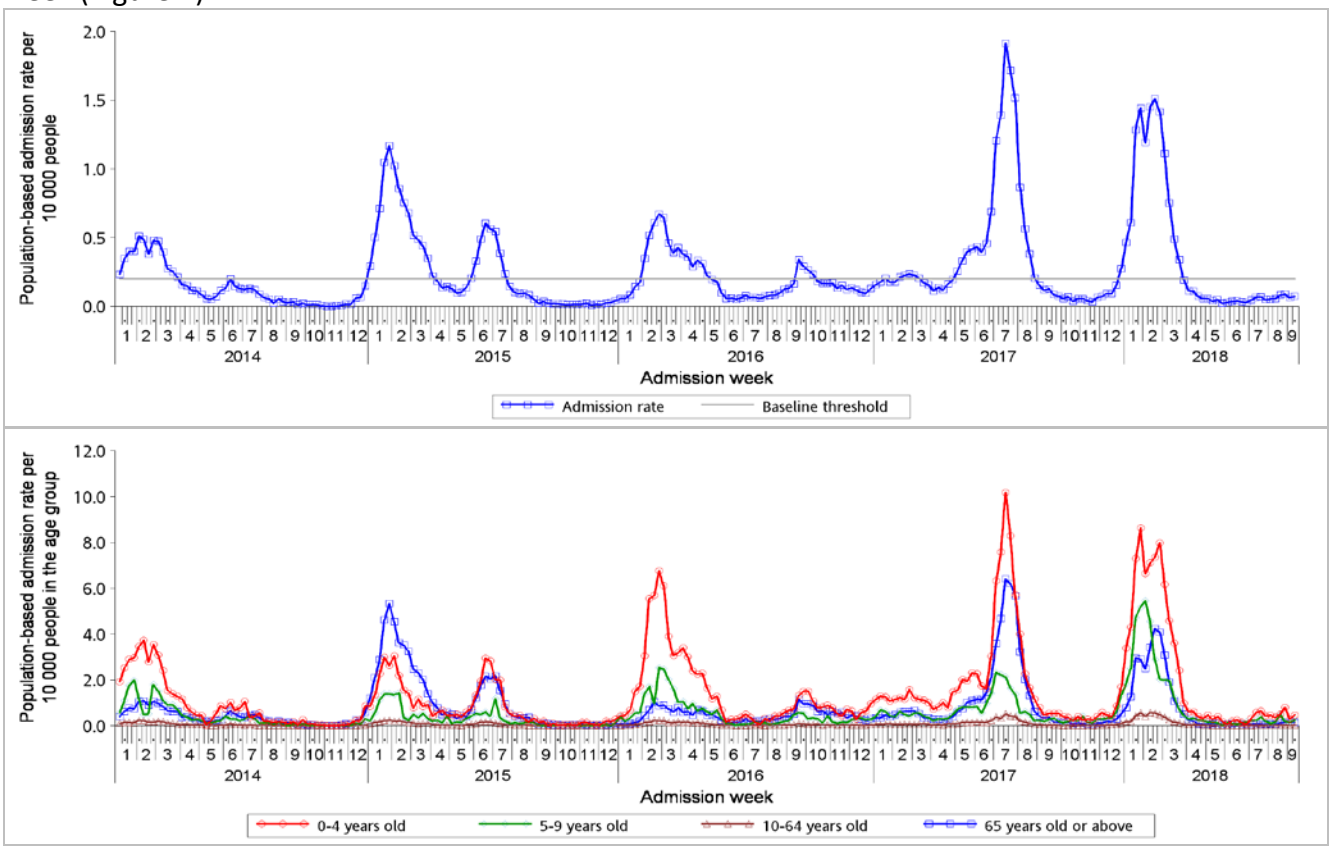

Figure 4 Influenza-associated hospital admission rates, 2014-18 (upper: overall rate, lower: rates by age groups)

[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#

In week 36, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 134.5 (per 1,000 coded cases), which was higher than the rate of 126.3 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.

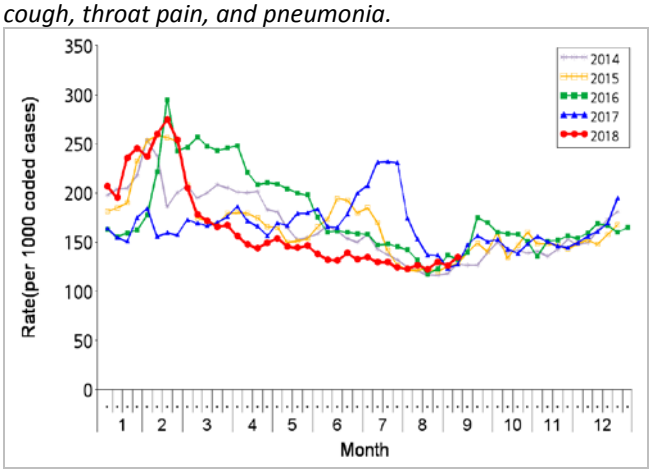

Figure 5 Rate of ILI syndrome group in AEDs, 2014-18

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

In week 36, 0.64% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.57% recorded in the previous week (Figure 6).

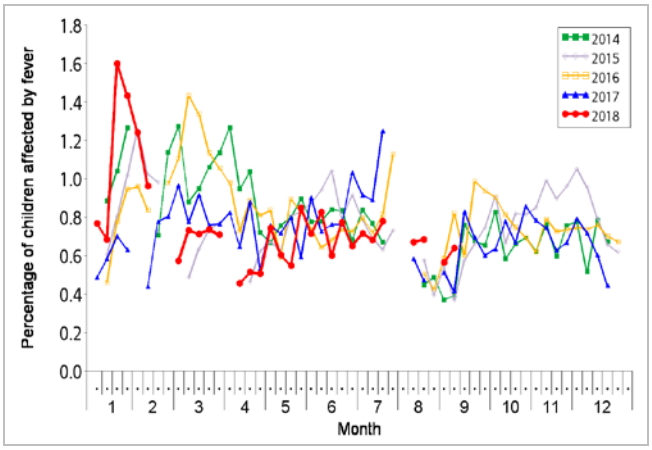

Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2014-18

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

In week 36, 0.07% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), compared to 0.09% recorded in the previous week (Figure 7).

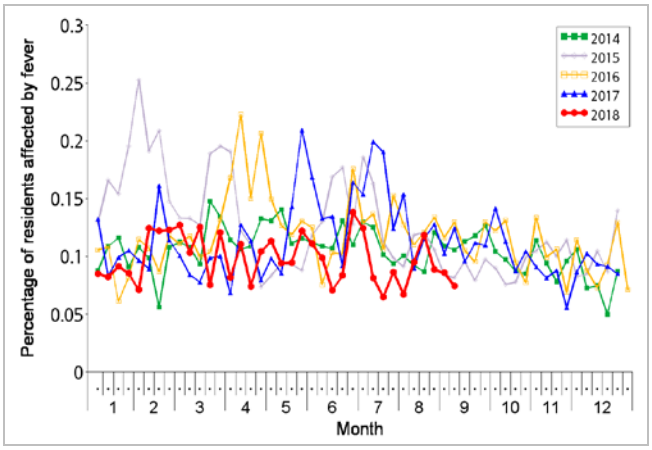

Figure 7 Percentage of residents with fever at sentinel RCHEs, 2014-18

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

In week 36, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.69 ILI cases per 1,000 consultations as compared to 1.55 recorded in the previous week (Figure 8).

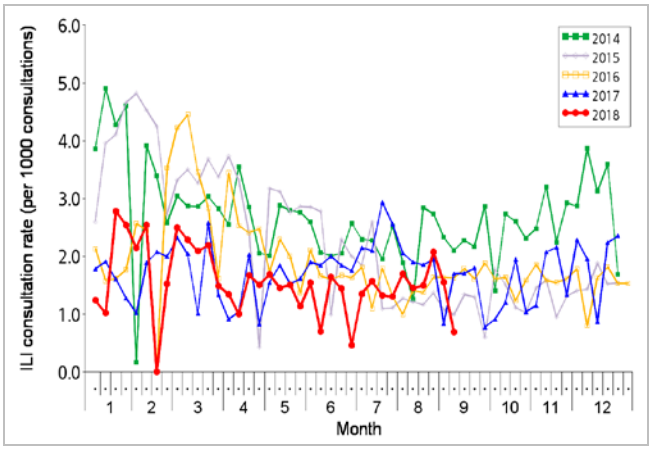

Figure 8 ILI consultation rate at sentinel CMPs, 2014-18

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 36, four adult cases of ICU admission/death with laboratory confirmation of influenza (including one death) were recorded as compared to two cases (including one death) were recorded in the previous week. Two of the four 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 35	0	1	0	0	1
Week 36	2	1	0	0	1

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

- In week 36 and the first 4 days of week 37 (Sep 9 to 12), 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 12). 21 (81%) did not receive the influenza vaccine for the 2017/18 season.

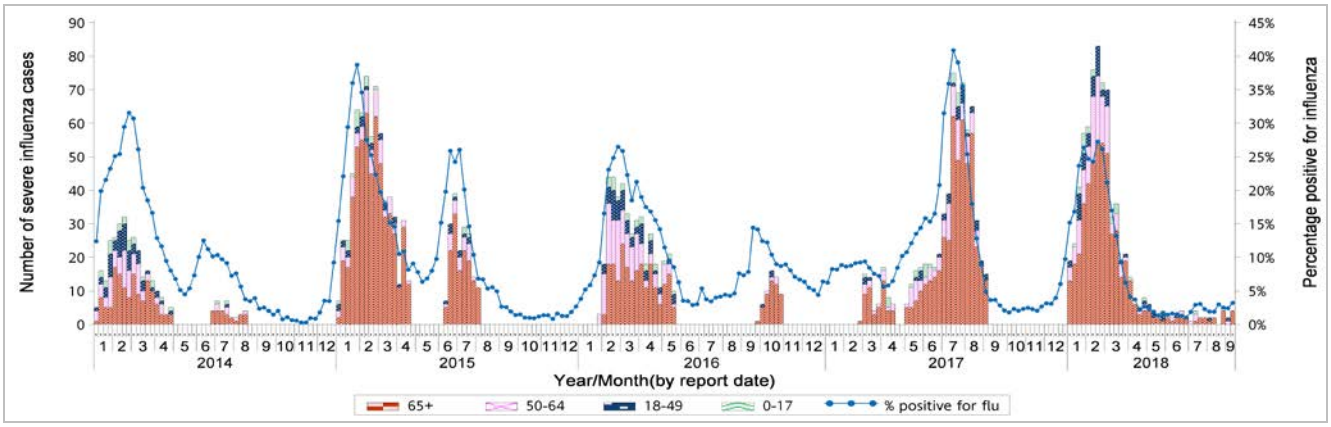

Figure 9 Weekly number of severe influenza cases by age groups, 2014-18 (the percentage positive for influenzas viruses in Figure 2 is also shown in this graph)

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 36 and the first 4 days of week 37 (Sep 9 to 12), 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. Reports of influenza activity were reported as decreased in some countries of tropical America. In the temperate zones of southern hemisphere, influenza activity remained elevated in South America and continued 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 1, 2018), influenza activity was at a low level. The proportion of outpatient visits for ILI was 1.0%, which was below the national baseline of 2.2%.
- In Canada (Jul 22 to Aug 25, 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 Aug 26, 2018), indicators for influenza showed low levels of activity. The positivity of influenza detection was 0.3% in the week ending August 26, 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 Aug 26, 2018), influenza activity was low and remained within or below the bounds of previous years. Majority of confirmed influenza cases reported nationally were influenza A (85%).
- In New Zealand (week ending Sep 9, 2018), influenza activity was still unseasonably low, but the influenza-like illness consultation rate at GP have nearly reached the seasonal baseline rate. Influenza detection among GP visits and hospital admissions were very similar to the previous week. Influenza A(H1N1) still predominates.
- In Mainland China (week ending Sep 2, 2018), influenza activity remained at an extremely low level. There were only few detections of influenza viruses, which were mainly influenza A(H1N1) viruses .

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 and Chinese National Influenza Center.