## 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.

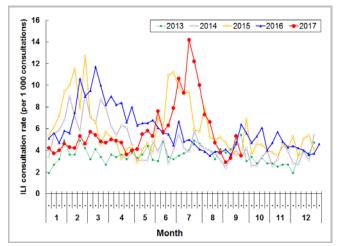
#### Local Situation of Influenza Activity (as of Sep 27, 2017)

#### Reporting period: Sep 17 - 23, 2017 (Week 38)

- The latest surveillance data showed that the local influenza activity 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 for personal protection.
- In the coming 2017/18 season, the Vaccination Subsidy Scheme will 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. Eligible groups for free vaccination will be the same as that of 2016/17 under the Government Vaccination Programme. The various vaccination programmes will be launched in Oct 2017 and the details will be announced in due course.

### Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private doctors, 2013-17

In week 38, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPCs) was 3.5 ILI cases per 1,000 consultations, which was lower than 5.3 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private doctors was 47.3 ILI cases per 1,000 consultations, which was lower than 48.7 recorded in the previous week (Figure 1, right).



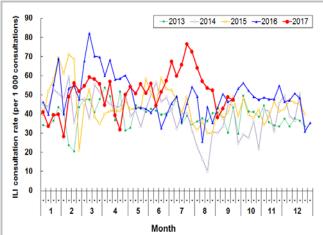


Figure 1 ILI consultation rate at sentinel GOPCs (left) and private doctors (right), 2013-17

#### Laboratory surveillance, 2013-17

Among the respiratory specimens received in week 38, 115 (2.79%) were tested positive for seasonal influenza viruses, including seven (0.17%) influenza A(H1), 49 (1.19%) influenza A(H3), 52 (1.26%) influenza B and seven (0.17%) influenza C. The percentage of respiratory specimens tested positive for seasonal influenza viruses last week was 2.79%, which was lower than 3.63% recorded in the previous week (Figure 2). Among the influenza viruses detected in the last week, the proportions of B, A(H3), A(H1) and C were 45.2%, 42.6%, 6.1% and 6.1% respectively.

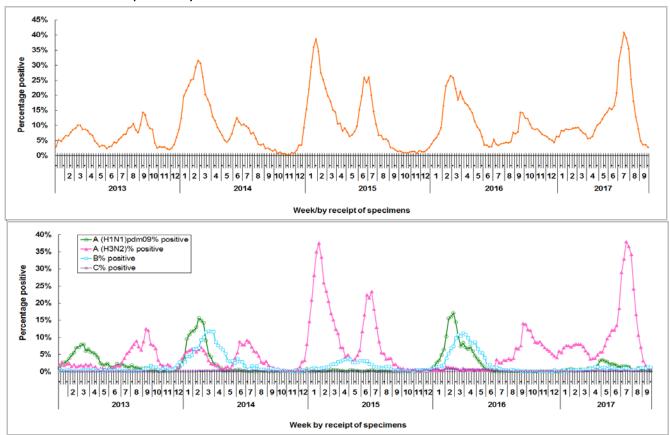


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2013-17 (upper: overall positive percentage, lower: positive percentage by subtypes)

#### Influenza-like illness outbreak surveillance, 2013-17

In week 38, five ILI outbreaks occurring in schools/institutions were recorded (affecting 33 persons), as compared to six outbreaks recorded in the previous week (affecting 41 persons) (Figure 3). In the first 4 days of week 39 (Sep 24 to 27, 2017), three institutional ILI outbreaks were recorded (affecting 16 persons).

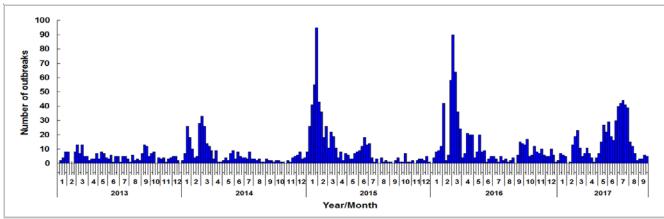


Figure 3 ILI outbreaks in schools/institutions, 2013-17

### Rate of influenza-like illness syndrome group in accident and emergency departments, 2013-17#

In week 38, the rate of the influenza-like illness syndrome group in the accident and emergency departments (AED) was 157.7 (per 1,000 coded cases), which was higher than 147.8 in the previous week (Figure 4).

#Note: The influenza-like illness syndrome group includes codes such as influenza, upper respiratory tract infection, fever, cough, throat pain, and pneumonia.

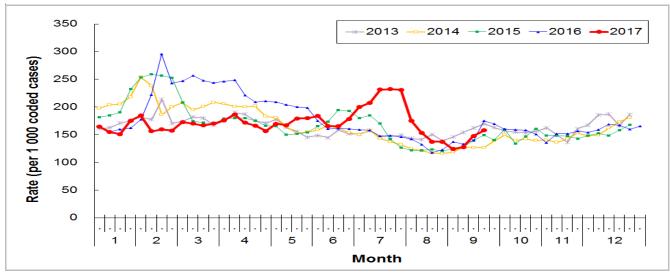


Figure 4 Rate of ILI syndrome group in AED, 2013-17

### Influenza associated hospital admission rates and deaths in public hospitals based on discharge coding, 2013-17

In week 38, the admission rates in public hospitals with principal diagnosis of influenza for persons aged 0-4 years, 5-9 years, 10-64 years and 65 years or above were 0.47, 0.41, 0.03 and 0.13 cases (per 10,000 people in the age group) respectively, as compared to 0.50, 0.31, 0.04 and 0.36 cases in the previous week (Figure 5). Weekly number of deaths with any diagnosis of influenza is also shown in Figure 5.

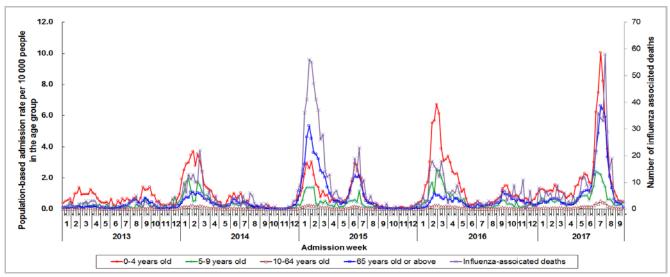


Figure 5 Influenza associated hospital admission rates and deaths, 2013-17

### Fever surveillance at sentinel child care centres/ kindergartens, 2013-17

In week 38, 0.70% of children in the sentinel child care centres/ kindergartens (CCC/ KG) had fever (38°C or above) as compared to 0.83% recorded in the previous week (Figure 6).

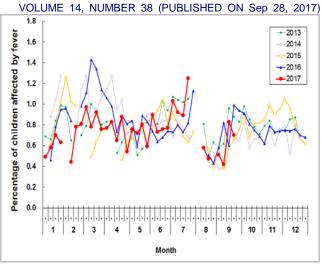


Figure 6 Percentage of children with fever at sentinel CCC/ KG, 2013-17

# Fever surveillance at sentinel residential care homes for the elderly, 2013-17

In week 38, 0.11% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above) as compared to 0.10% recorded in the previous week (Figure 7).

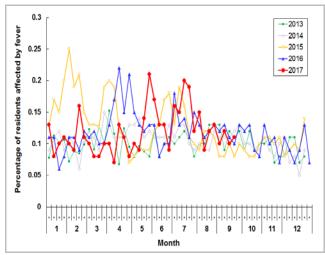


Figure 7 Percentage of residents with fever at sentinel RCHE, 2013-17

## Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2013-17

In week 38, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.80 ILI cases per 1,000 consultations as compared to 1.71 recorded in the previous week (Figure 8).

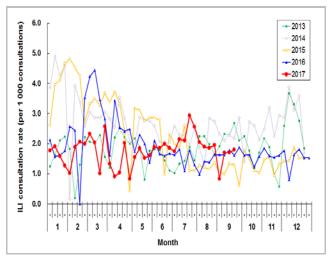


Figure 8 ILI consultation rate at sentinel CMP, 2013-17

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

• In week 38 and the first 4 days of week 39 (Sep 24 to 27, 2017), there were no cases of severe paediatric influenza-associated complication/ death.

#### Surveillance of oseltamivir resistant influenza A(H1N1)pdm09 virus infection

 In week 38 and the first 4 days of week 39 (Sep 24 to 27, 2017), 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 low levels in the temperate zone of the northern hemisphere. In the temperate zone of the southern hemisphere and in some countries of South and South East Asia, high levels of influenza activity continued to be reported. In Central America and the Caribbean, influenza activity continued to be reported in a few countries. Worldwide, influenza A(H3N2) viruses are predominating.

- The 2016/17 winter influenza season in the United States, Canada, the United Kingdom and Europe had ended and the influenza activity in these areas remained at low levels.
- In Southern China (week ending Sep 17, 2017), influenza activity was still at a very high level. The proportion of ILI cases in emergency and outpatient departments reported by sentinel hospitals was 3.3%, the same as that reported in the previous week (3.3%), but higher than that in the corresponding period in 2014-2016 (2.7%, 2.5%, 2.9%). The proportion of influenza detections was 25.0%, higher than 24.0% recorded in the previous week. The predominant circulating subtype was Influenza A (H3N2).
- In Macau (week ending Sep 16, 2017), the proportion of ILI cases in emergency departments among adults decreased, while that among children increased from the previous week. The proportion of influenza detections was 2.9%, higher than 1.9% in the previous week. Influenza A(H3) constituted 100% of the influenza detections.
- In New Zealand (week ending Sep 17, 2017), ILI consultation rates decreased compared to the previous week and were below the seasonal threshold level. Influenza A(H3N2) are the predominant viruses in New Zealand this year.
- In Australia (two-week period ending Sep 15, 2017), influenza activity at the national level decreased this reporting fortnight after reaching a peak in mid-August. Despite the national decline, high levels of activity continue to be reported across the country, with seasonal activity in some states and territories yet to have reached a peak. The peak week of national influenza activity this season has been at comparable or higher levels than in recent years, with high activity persisting for a number of weeks. Influenza A(H3N2) is currently the predominant circulating influenza A virus nationally. Influenza B viruses also continue to circulate, with the proportion of total notifications attributed to influenza B increasing this reporting fortnight.

#### Sources:

Information have been extracted from the following sources when updates are available: Chinese National Influenza Center, Health Bureau of Macau Special Administrative Region, New Zealand Ministry of Health and Australian Department of Health..