# FLU EXPRESS



*Flu Express* is a weekly report produced by Surveillance Division of the Communicable Disease Branch of the Centre for Health Protection. It monitors and summarizes the latest local and global influenza activities.

## Local Situation of Influenza Activity (as of Dec 1, 2021)

#### Reporting period: November 21 - 27, 2021 (Week 48)

- The latest surveillance data showed that the overall seasonal influenza activity in Hong Kong remained low.
- 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.
- As Hong Kong continues to face the challenge of COVID-19 pandemic, influenza viruses and the virus that causes COVID-19 may both spread in the winter influenza season. To protect the healthcare system from being overwhelmed, getting influenza vaccination during 2021-2022 is therefore important. The 2021/22 seasonal influenza vaccination programmes, including Vaccination Subsidy Scheme (VSS) and Government Vaccination Programme (GVP), were launched 2021. 6 October. For details, please refer to the webpage on (https://www.chp.gov.hk/en/features/17980.html).
- Apart from getting influenza vaccination, members of the public should always maintain good personal and environmental hygiene.
- For the latest information on influenza and prevention measures, please visit the Centre for Health Protection's pages below for more information:
  - The influenza page (http://www.chp.gov.hk/en/view\_content/14843.html)
  - Webpage on Personal Hygiene (https://www.chp.gov.hk/en/healthtopics/content/460/19899.html)
  - Video on "Prevent diseases · Maintain good hygiene" (https://youtu.be/X0OxrsgAP2w)

# Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private medical practitioner clinics, 2017-21

In week 48, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 1.1 ILI cases per 1,000 consultations, which was higher than 0.9 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 21.0 ILI cases per 1,000 consultations, which was higher than 19.2 recorded in the previous week (Figure 1, right).

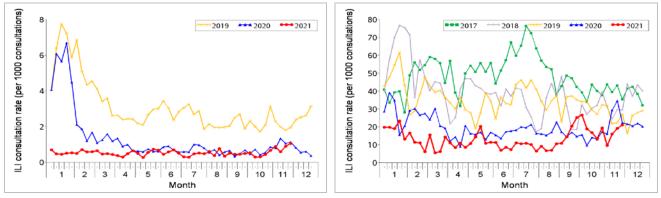


Figure 1 ILI consultation rates at sentinel GOPC (2019-21) (left) and PMP clinics (2017-21) (right) Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

#### Laboratory surveillance, 2017-21

Among the 1424 respiratory specimens received in week 48, 8 (0.56%) were tested positive for seasonal influenza A or B viruses. These positive detections include 1 (13%) influenza A(H1), 3 (38%) influenza A(H3) and 4 (50%) influenza B viruses. The positive percentage (0.56%) was below the baseline threshold of 9.21% but was higher than 0.34% recorded in the previous week (Figure 2).

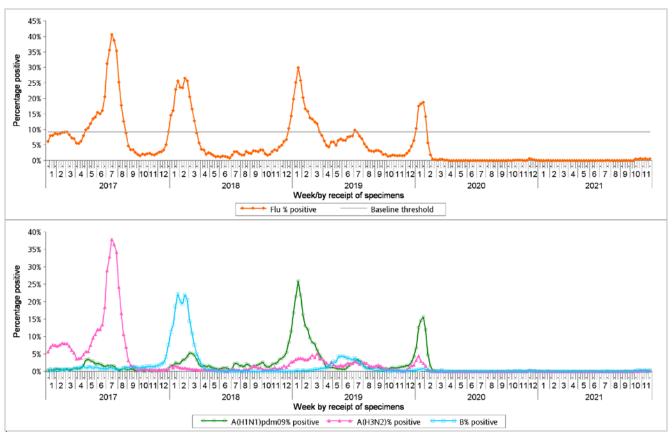


Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2017-21 (upper: overall positive percentage, lower: positive percentage by subtypes)

[Note: The baseline threshold is 1.96 standard deviation above the average weekly positive percentage during non-season periods from 2014 week 49 - 2019 week 48.]

Remarks: Some specimens may contain vaccine strains from people with recent history of receiving live-attenuated influenza vaccine

### Surveillance of oseltamivir resistant influenza A and B viruses

- In March 2020, there were no new reports of oseltamivir (Tamiflu) resistant influenza A and B viruses.
- For the results of previous months, please refer to the following webpage: <u>https://www.chp.gov.hk/en/statistics/data/10/641/695/6903.html</u>

### Influenza-like illness outbreak surveillance, 2017-21

In week 48, 1 ILI outbreak occurring in a school was recorded (affecting 4 persons), as compared to 2 outbreaks recorded in the previous week (affecting 10 persons) (Figure 3). In the first 4 days of week 49 (Nov 28 to Dec 1), no ILI outbreaks in schools/ institutions were recorded.

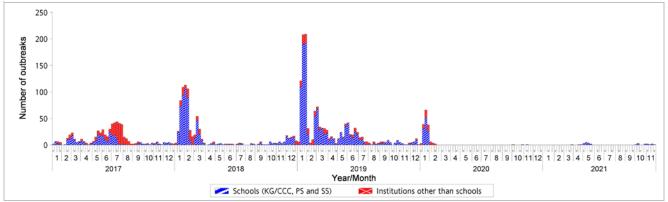


Figure 3 ILI outbreaks in schools/institutions, 2017-21

Type of institutions	Week 47	Week 48	First 4 days of Week 49 (Nov 28 – Dec 1)
Child care centre/ kindergarten (CCC/KG)	2	1	0
Primary school (PS)	0	0	0
Secondary school (SS)	0	0	0
Residential care home for the elderly	0	0	0
Residential care home for persons with	0	0	0
disabilities			
Others	0	0	0
Total number of outbreaks	2	1	0
Total number of persons affected	10	4	0

# Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2017-21

In week 48, the overall admission rates in public hospitals with principal diagnosis of influenza was 0 (per 10,000 population), which was below the baseline threshold of 0.25 and same as 0 recorded in the previous week. The influenza-associated admission rates for persons aged 0-5 years, 6-11 years, 12-17 years, 18-49 years, 50-64 years and 65 years or above were 0, 0, 0, 0, 0 and 0 cases (per 10,000 people in the age group) respectively, as compared to 0, 0, 0, 0, 0 and 0 cases in the previous week (Figure 4).

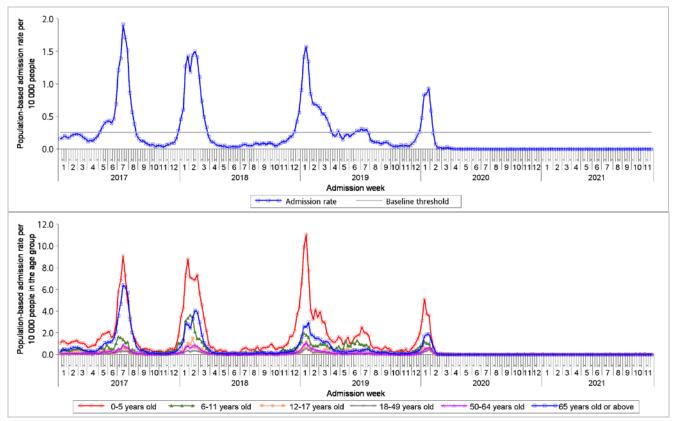


Figure 4 Influenza-associated hospital admission rates, 2017-21 (upper: overall rate, lower: rates by age groups) [Note: The baseline threshold is 1.96 standard deviation above the average weekly admission rate during non-season periods from 2014 week 49 – 2019 week 48.]

## Rate of ILI syndrome group in accident and emergency departments, 2017-21<sup>#</sup>

In week 48, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 107.3 (per 1,000 coded cases), which was lower than the rate of 112.3 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.

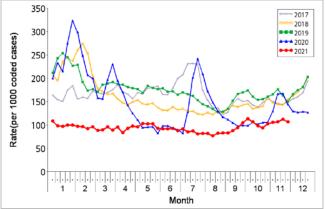


Figure 5 Rate of ILI syndrome group in AEDs, 2017-21

# Fever surveillance at sentinel residential care homes for the elderly, 2017-21

In week 48, 0.10% 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).

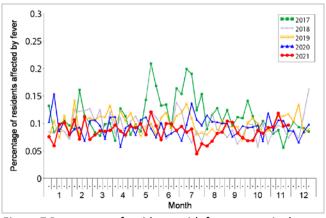


Figure 7 Percentage of residents with fever at sentinel RCHEs, 2017-21

# Fever surveillance at sentinel child care centres/ kindergartens, 2017-21

In week 48, 0.36% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.36% recorded in the previous week (Figure 6).

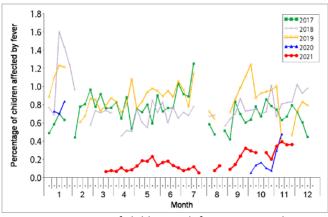


Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2017-21

## Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2017-21

In week 48, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.76 ILI cases per 1,000 consultations as compared to 0.72 recorded in the previous week (Figure 8).

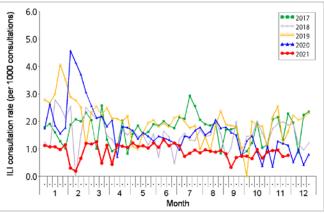


Figure 8 ILI consultation rate at sentinel CMPs, 2017-21

### Surveillance of severe influenza cases

(Note: The data reported are provisional figures and subject to further revision.)

#### <u>Surveillance for intensive care unit (ICU) admissions/deaths with laboratory</u> confirmation of influenza among adult patients (Aged 18 years or above)

Since 2018, the Centre for Health Protection (CHP) has collaborated with the Hospital Authority and private hospitals to monitor ICU admissions and deaths with laboratory confirmation of influenza among adult patients regularly. 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 48, no adult cases of ICU admission/death with laboratory confirmation of influenza were recorded.

Week	Influenza type						
	A(H1)	A(H3)	В	С	A (pending subtype)		
Week 47	0	0	0	0	0		
Week 48	0	0	0	0	0		

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

- In week 48 and the first 4 days of week 49 (Nov 28 Dec 1), there were no cases of severe paediatric influenza-associated complication/death.
- In 2021, no paediatric cases of influenza-associated complication/death were recorded (as of Dec 1).

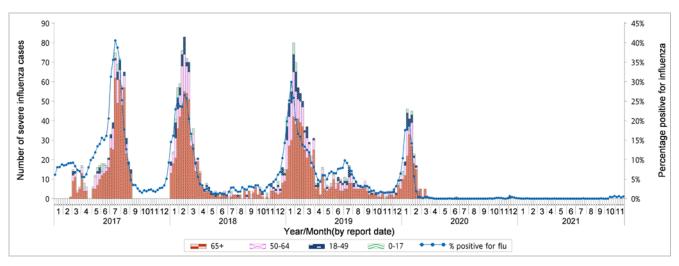


Figure 9 Weekly number of severe influenza cases by age groups, 2017-21 (the percentage positive for influenzas viruses in Figure 2 is also shown in this graph)

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.

## Global Situation of Influenza Activity

In the temperate zone of the northern hemisphere, influenza activity remained at inter-seasonal levels, and in the temperate zone of the southern hemisphere, influenza activity also remained at inter-seasonal levels. Globally, among influenza detections, influenza B viruses predominated.

- In the United States (week ending Nov 20, 2021), influenza activity remained low, but the number of virus detections and the percentage of patient visits for ILI has increased in recent weeks. The proportion of outpatient visits for ILI has increased to 2.2%, but it was below the national baseline of 2.5%. The percentage of specimens tested positive for influenza was 1.03%.
- In Canada (week ending Nov 20, 2021), influenza activity was low. A total of 23 laboratory detections of influenza (16 influenza A and 7 influenza B) were reported in week 46. The percentage visits for influenza-like illness (ILI) was 1.04%, which has been within or near expected level.
- In the United Kingdom (week ending Nov 21, 2021), influenza activity remained very low as reflected by hospital admission and ILI consultation rates as well as laboratory data. There were 30 influenza positive samples detected in week 46.
- In Europe (week ending Nov 21, 2021), influenza activity was low. 72 (5%) of the 1487 sentinel specimens in week 46 were tested positive for influenza viruses (62 influenza A (32 subtyped as A(H3) and 11 subtyped as A(H1)pdm09) and 11 influenza B).
- In Mainland China (week ending Nov 21, 2021), influenza surveillance data showed that the influenza activities in both southern and northern provinces were on rising trends, and were higher than the same period last year. Currently, majority of the influenza viruses detected were influenza B (Victoria).

Sources:

Information have been extracted from the following sources when updates are available: <u>World Health Organization</u>, <u>United States</u> <u>Centers for Disease Control and Prevention</u>, <u>Public Health Agency of Canada</u>, <u>Public Health England</u>, <u>Joint European Centre for Disease</u> <u>Prevention and Control-World Health Organization/Flu News Europe</u> and <u>Chinese National Influenza Center</u>.