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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 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 Feb 1, 2023)

Reporting period: Jan 22 – 28, 2023 (Week 4)

- 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 2022-23 is therefore important. For the coming 2022-23 season, Seasonal Influenza Vaccination School Outreach and the Residential Care Home Vaccination Programme were launched on September 29, whereas the Vaccination Subsidy Scheme (VSS) and the Government Vaccination Programme (GVP) began on October 6. For details, please refer to the webpage (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)
- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced the monitoring systems.

Influenza-like-illness surveillance among sentinel general outpatient clinics and sentinel private medical practitioner clinics, 2019-23

In week 4, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 1.2 ILI cases per 1,000 consultations, which was higher than 0.3 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 16.9 ILI cases per 1,000 consultations, which was higher than 15.4 recorded in the previous week (Figure 1, right).

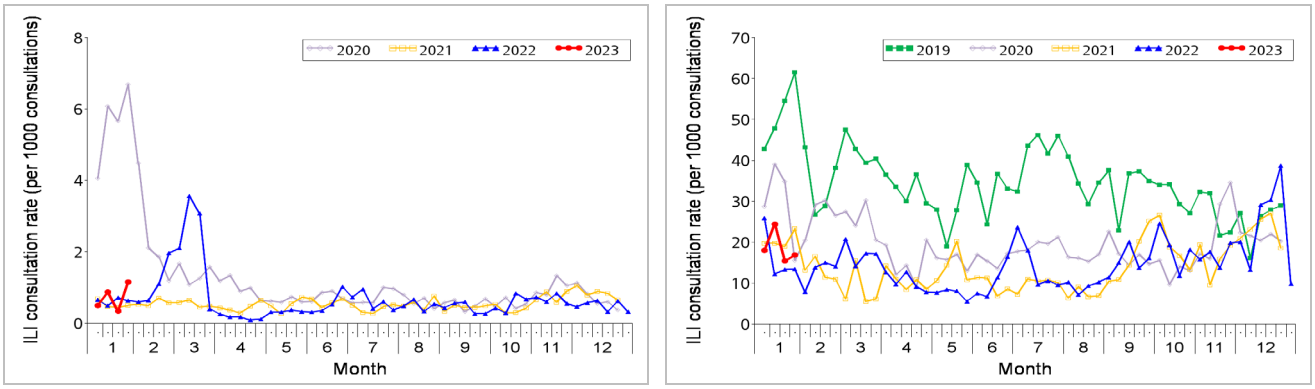

Figure 1 ILI consultation rates at sentinel GOPC (2020-23) (left) and PMP clinics (2019-23) (right)
Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

Laboratory surveillance, 2019-23

Among the 4680 respiratory specimens* received in week 4, 51 (1.09%) were tested positive for seasonal influenza A or B viruses. These positive detections include 1 (2%) influenza A(H1), 44 (86%) influenza A(H3) and 6 (12%) influenza B viruses. The positive percentage (1.09%) was below the baseline threshold of 9.21% but was higher than 0.71% recorded in the previous week (Figure 2).

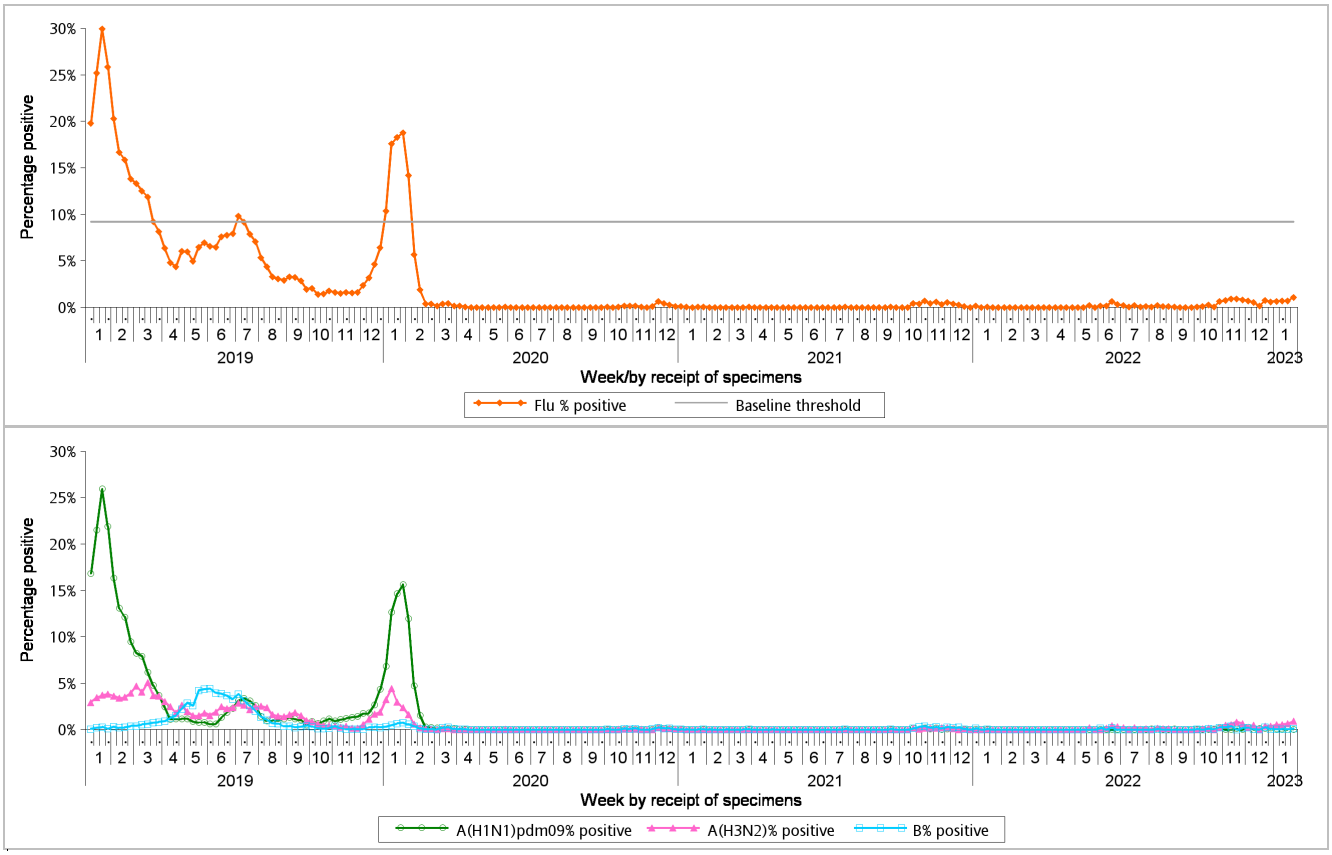

Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2019-23 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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: https://www.chp.gov.hk/en/statistics/data/10/641/695/6903.html

* Including 1465 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 3215 specimens received by Hospital Authority

Influenza-like illness outbreak surveillance, 2019-23

In week 4, no ILI outbreaks occurring in schools/institutions were recorded, as compared to no outbreaks recorded in the previous week (Figure 3). In the first 4 days of week 5 (Jan 29 – Feb 1), no ILI outbreaks in schools/institutions were recorded.

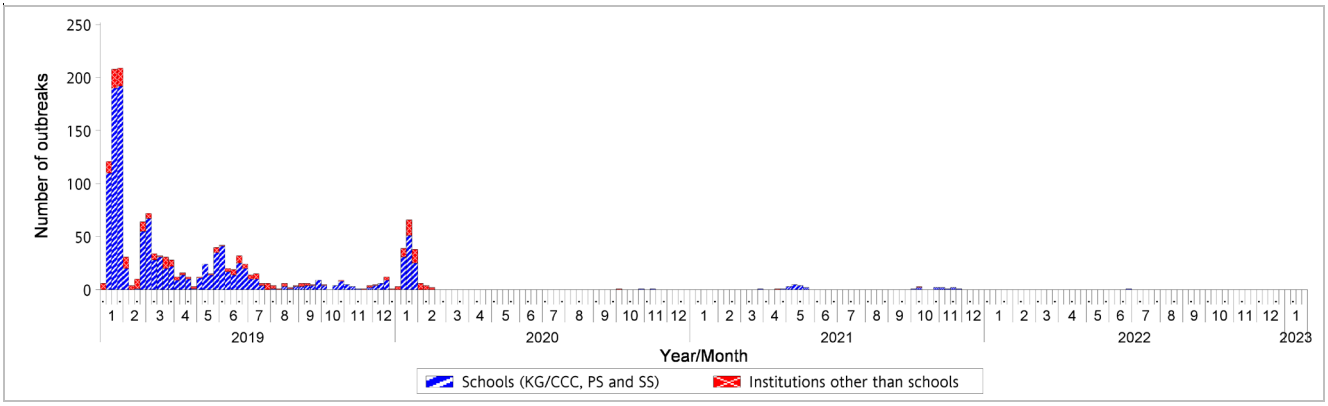

Figure 3 ILI outbreaks in schools/institutions, 2019-23

Type of institutions	Week 3	Week 4	First 4 days of Week 5 (Jan 29 – Feb 1)
Child care centre/ kindergarten (CCC/KG)	0	0	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 disabilities	0	0	0
Others	0	0	0
Total number of outbreaks	0	0	0
Total number of persons affected	0	0	0

Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2018-22

In week 4, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.02 (per 10,000 population), which was below the baseline threshold of 0.25 and was the same as 0.02 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 0.19, 0.03, 0, 0.01, 0 and 0.02 cases (per 10,000 people in the age group) respectively, as compared to 0.15, 0, 0.03, 0, 0 and 0.03 cases in the previous week (Figure 4).

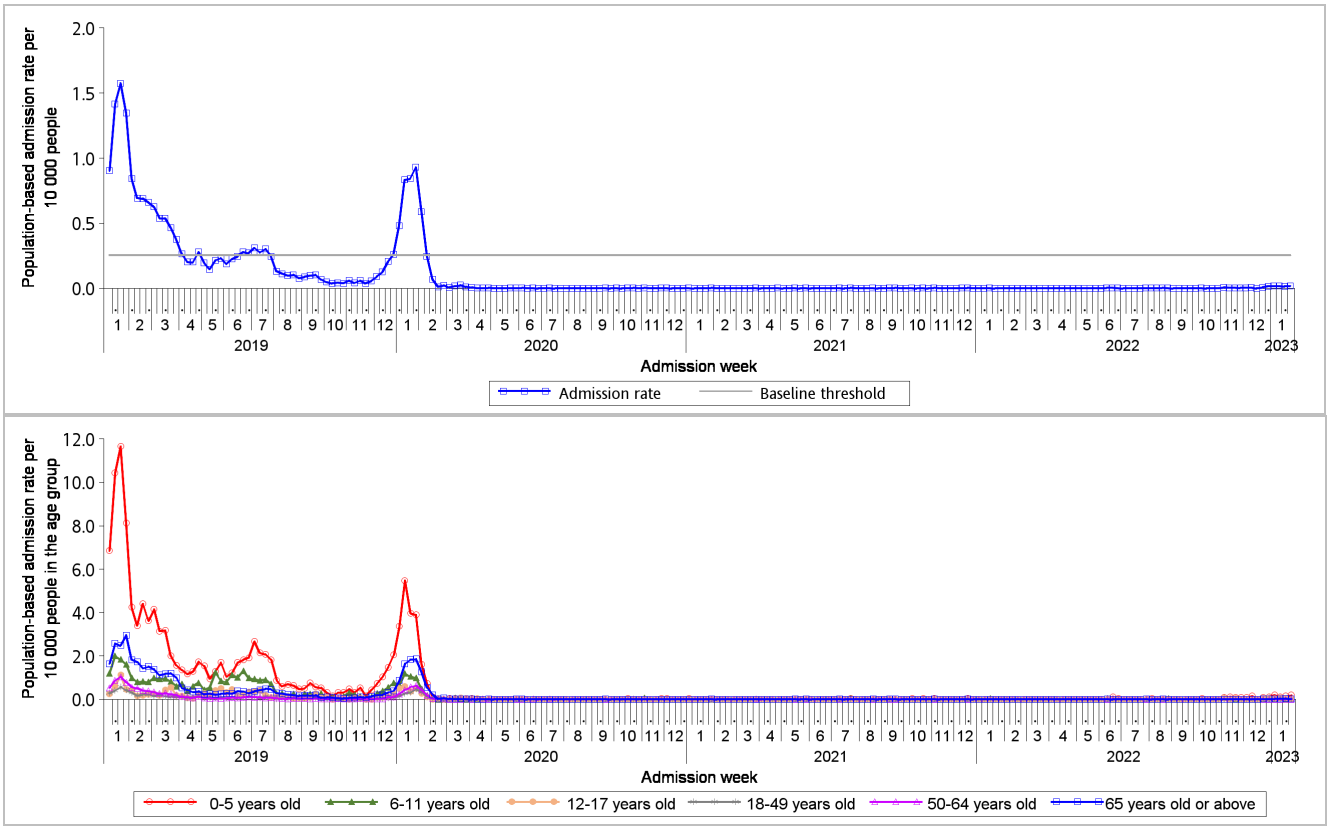

Figure 4 Influenza-associated hospital admission rates, 2019-23 (upper: overall rate, lower: rates by age groups)

[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, 2019-23#

In week 4, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 104.8 (per 1,000 coded cases), which was higher than the rate of 93.3 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.

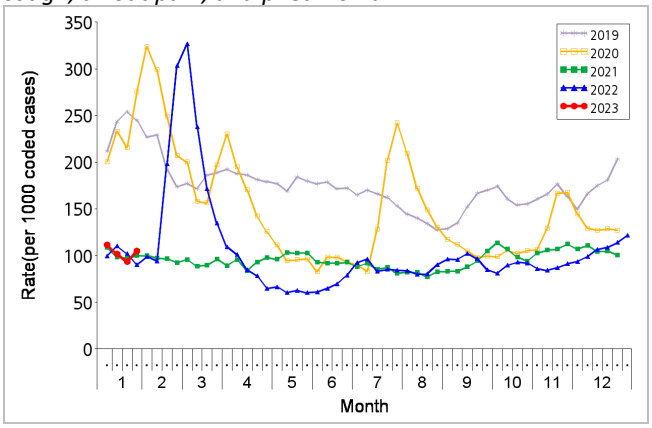

Figure 5 Rate of ILI syndrome group in AEDs, 2019-23

Fever surveillance at sentinel child care centres/ kindergartens, 2019-23

The surveillance for week 4 was suspended due to Chinese New Year holiday. In week 3, 0.31% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.38% recorded in the previous week (Figure 6).

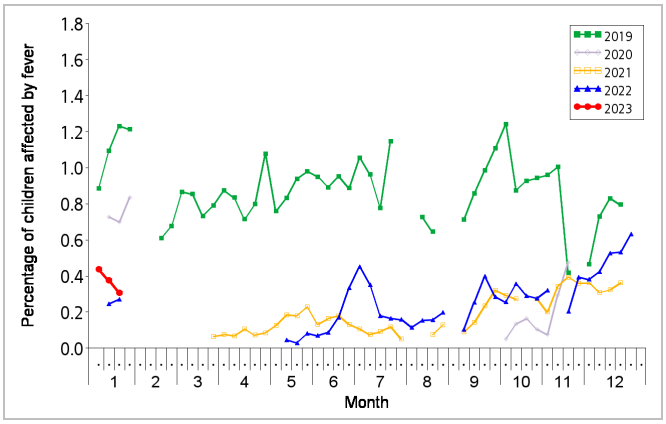

Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2019-23

Fever surveillance at sentinel residential care homes for the elderly, 2019-23

In week 4, 0.07% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), compared to 0.04% recorded in the previous week (Figure 7).

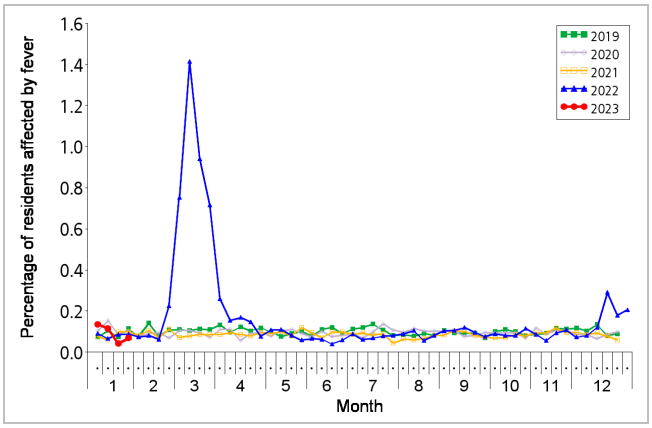

Figure 7 Percentage of residents with fever at sentinel RCHEs, 2019-23

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2019-23

In week 4, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.63 ILI cases per 1,000 consultations as compared to 0.59 recorded in the previous week (Figure 8).

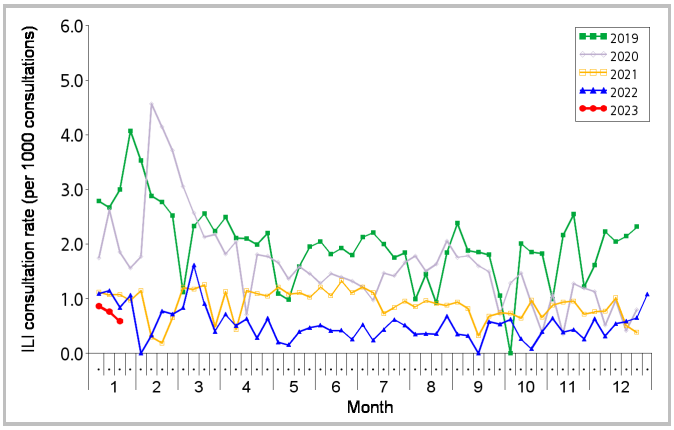

Figure 8 ILI consultation rate at sentinel CMPs, 2019-23

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)

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 4, no adult cases of ICU admissions/deaths with laboratory confirmation of influenza were recorded.

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 3	0	1	0	0	0
Week 4	0	0	0	0	0

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

- In week 4 and the first 4 days of week 5 (Jan 29 – Feb 1), there were no cases of severe paediatric influenza-associated complication/death.
- In 2023, 1 paediatric case of severe influenza-associated complication/death was recorded, which was a fatal case (as of Feb 1, 2023).

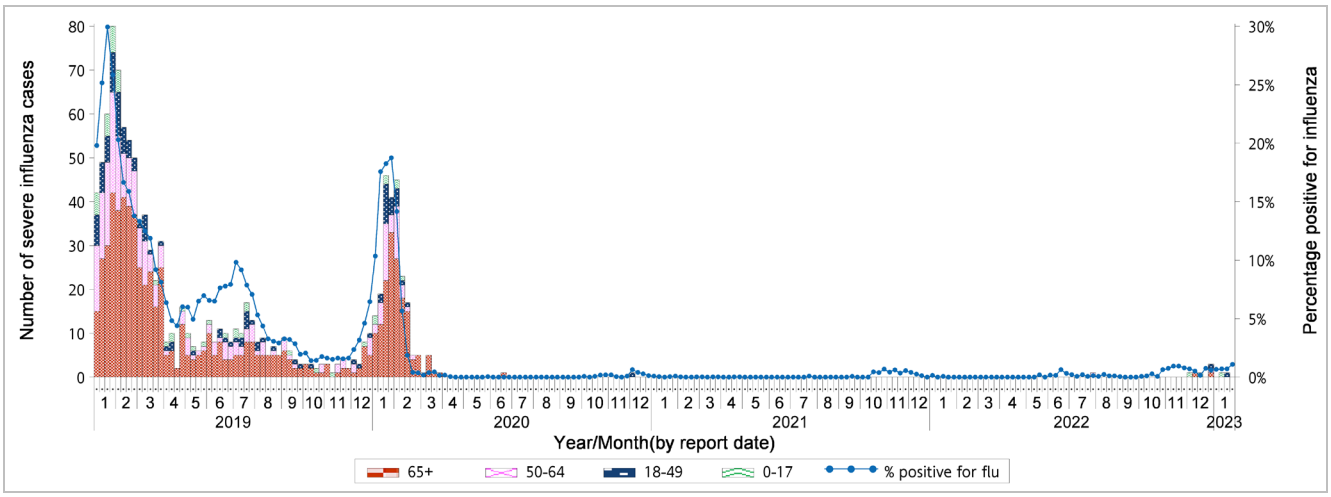

Figure 9 Weekly number of severe influenza cases by age groups, 2019-23 (the percentage positive for influenzas viruses in Figure 2 is also shown in this graph)

Global Situation of Influenza Activity

Globally, influenza activity decreased but remained somewhat elevated due to activity in the northern hemisphere. Influenza A viruses predominated with a slightly larger proportion of influenza A(H1N1)pdm09 viruses detected among the subtyped influenza A viruses. In the temperate zone of the southern hemisphere, influenza activity decreased to low levels.

- In the United States (week ending Jan 21, 2023), influenza activity continued to decline across the country. The percentage of specimens tested positive for influenza continued to decrease to 3.0% from the peak of 25.7% in early December last year. The percentage of outpatient visits for ILI also decreased to 2.6%, but still remained above the national baseline of 2.5%. The overall cumulative influenza-related hospitalisation rate was 58.1 per 100,000 population, which was 1.4 times higher than the highest cumulative in-season hospitalisation rate in week 3 during previous seasons going back to 2010-2011, which ranged from 0.5 to 41.9. Majority of influenza viruses detected this season were influenza A(H3N2) viruses.
- In Canada (week ending Jan 21, 2023), influenza activity continued to decline. The weekly percentage of tests positive for influenza continued to decline to 1.5%, which was at interseasonal levels. Influenza A(H3N2) was the dominant subtype, representing 93% of sub-typed influenza A detections this season (Aug 28, 2022 – Jan 21, 2023).
- In the United Kingdom (week ending Jan 22, 2023), influenza activity decreased. Influenza positivity decreased to 2.8% from 6.5% in the preceding week, with 203 samples tested positive for influenza (including 40 influenza A(H3), 4 influenza A(H1N1)pdm09, 112 influenza A(not subtyped) and 47 influenza B). Both weekly hospital admission and ICU admission rates for influenza returned to low intensity levels.
- In Europe (week ending Jan 22, 2023), the percentage of sentinel specimens tested positive for influenza remained stable at 22% as compared to 23% in the previous week, which was above the epidemic threshold of 10%. Influenza A(H1)pdm09 viruses became predominating in both sentinel and non-sentinel surveillance systems since week 2.
- In Mainland China (week ending Feb 1, 2023), influenza surveillance data showed that the percentages of specimens tested positive for influenza in the northern and southern provinces were at relatively low levels. Influenza A(H3N2) viruses were predominating.
- In Taiwan (week ending Jan 28, 2023), influenza activity continued to increase. Majority of the influenza detections in the past 4 weeks were influenza A(H3N2) viruses.
- In Japan (week ending Jan 22, 2023), the average number of reported ILI cases per sentinel site continued to increase to 9.59 from 7.37 in the preceding week, which was above the baseline level of 1.00. Influenza A(H3) viruses were predominating.
- In Korea (week ending Jan 21, 2023), influenza activity remained elevated. The weekly ILI rate decreased to 28.3 from 40.2 per 1000 outpatient visits in the preceding week. In week 3, 36 out of 254 respiratory specimens (14.2%) were tested positive for influenza (including 36 influenza A(H3N2)).
- In Singapore (week ending Jan 21, 2023), the daily number of consultations for acute respiratory infection remained stable. The overall positivity rate for influenza among ILI samples in the community was 15.5% in the past 4 weeks. Influenza A(H3N2) viruses were predominating.

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, UK Health Security Agency, Joint European Centre for Disease Prevention and Control-World Health Organization/Flu News Europe, Chinese National Influenza Center, Taiwan Centers for Disease Control, Japan Ministry of Health, Labour and Welfare, Korean Centers for Disease Control and Prevention and Singapore Ministry of Health.