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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 Dec 14, 2022)

Reporting period: Dec 4 – 10, 2022 (Week 50)

- 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, 2018-22

In week 50, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 0.6 ILI cases per 1,000 consultations, which was the same as 0.6 recorded in the previous week (Figure 1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 29.1 ILI cases per 1,000 consultations, which was higher than 13.3 recorded in the previous week (Figure 1, right).

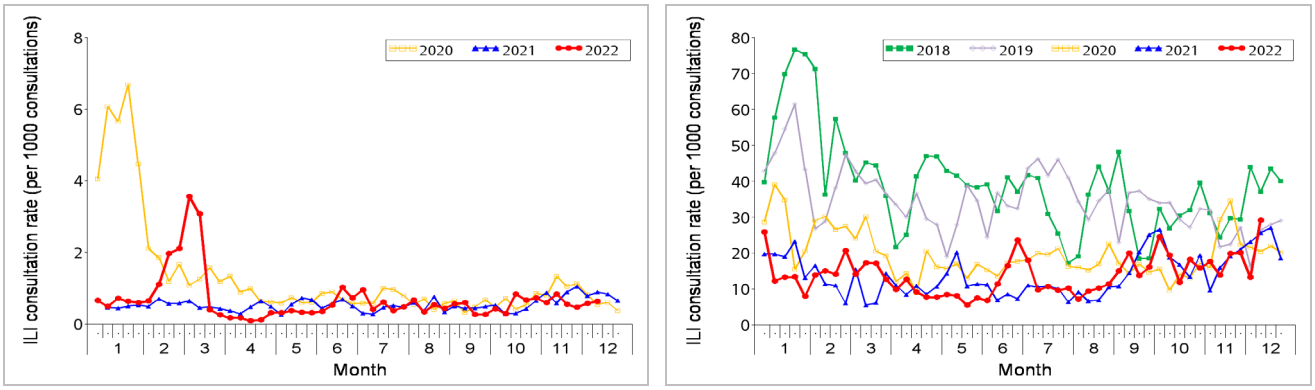

Figure 1 ILI consultation rates at sentinel GOPC (2020-22) (left) and PMP clinics (2018-22) (right)
Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

Laboratory surveillance, 2018-22

Among the 1862 respiratory specimens* received in week 50, 10 (0.54%) were tested positive for seasonal influenza A or B viruses. These positive detections include 9 (90%) influenza A(H3) and 1 (10%) influenza B viruses. The positive percentage (0.54%) was below the baseline threshold of 9.21% and was lower than 0.72% recorded in the previous week (Figure 2).

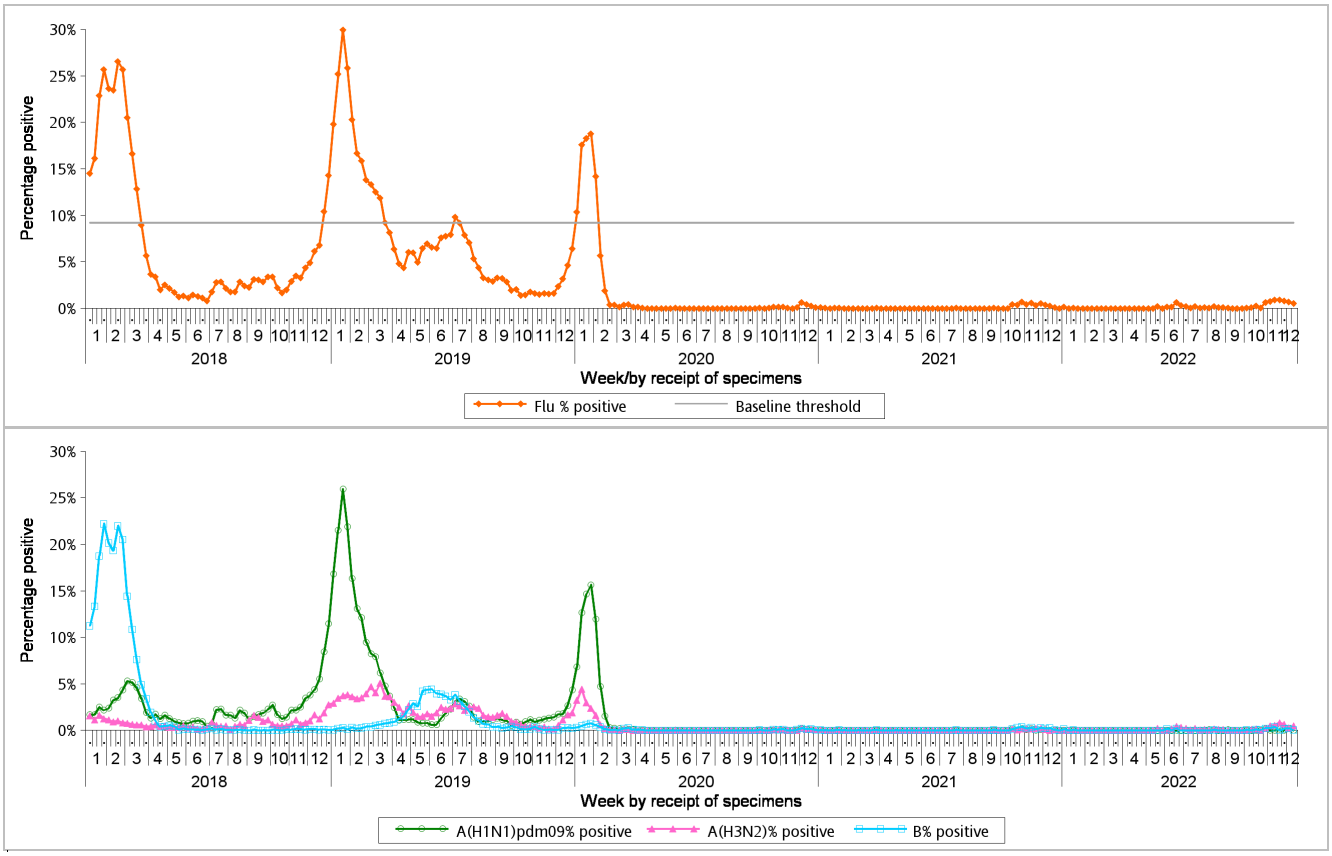

Figure 2 Percentage of respiratory specimens tested positive for influenza viruses, 2018-22 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 691 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 1171 specimens received by Hospital Authority

Influenza-like illness outbreak surveillance, 2018-22

In week 50, 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 51 (Dec 11 – 14), no ILI outbreaks in schools/institutions were recorded.

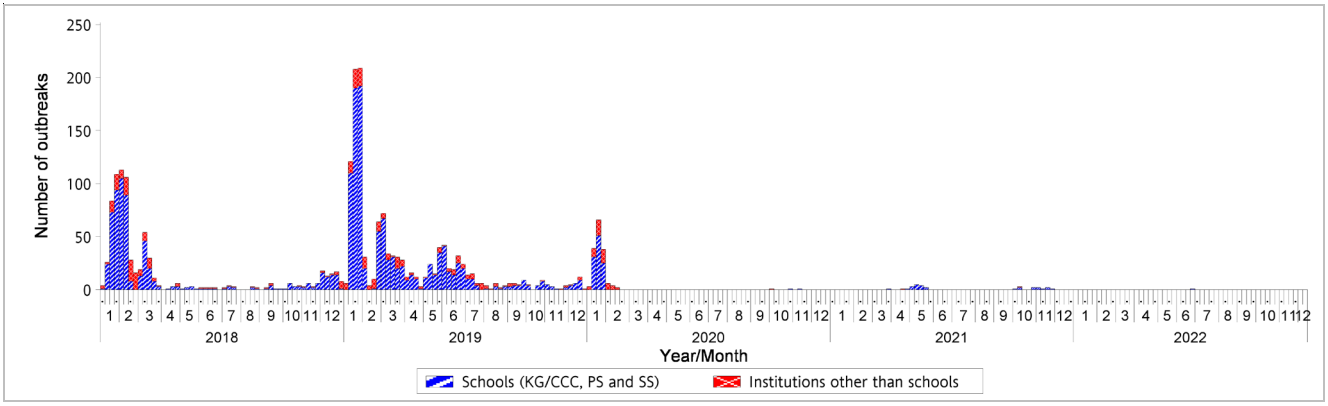

Figure 3 ILI outbreaks in schools/institutions, 2018-22

Type of institutions	Week 49	Week 50	First 4 days of Week 51 (Dec 11 – 14)
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 50, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.01 (per 10,000 population), which was below the baseline threshold of 0.25 but was higher than 0.004 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 0.15, 0, 0, 0, 0 and 0 cases (per 10,000 people in the age group) respectively, as compared to 0.08, 0, 0, 0.003, 0 and 0 cases in the previous week (Figure 4).

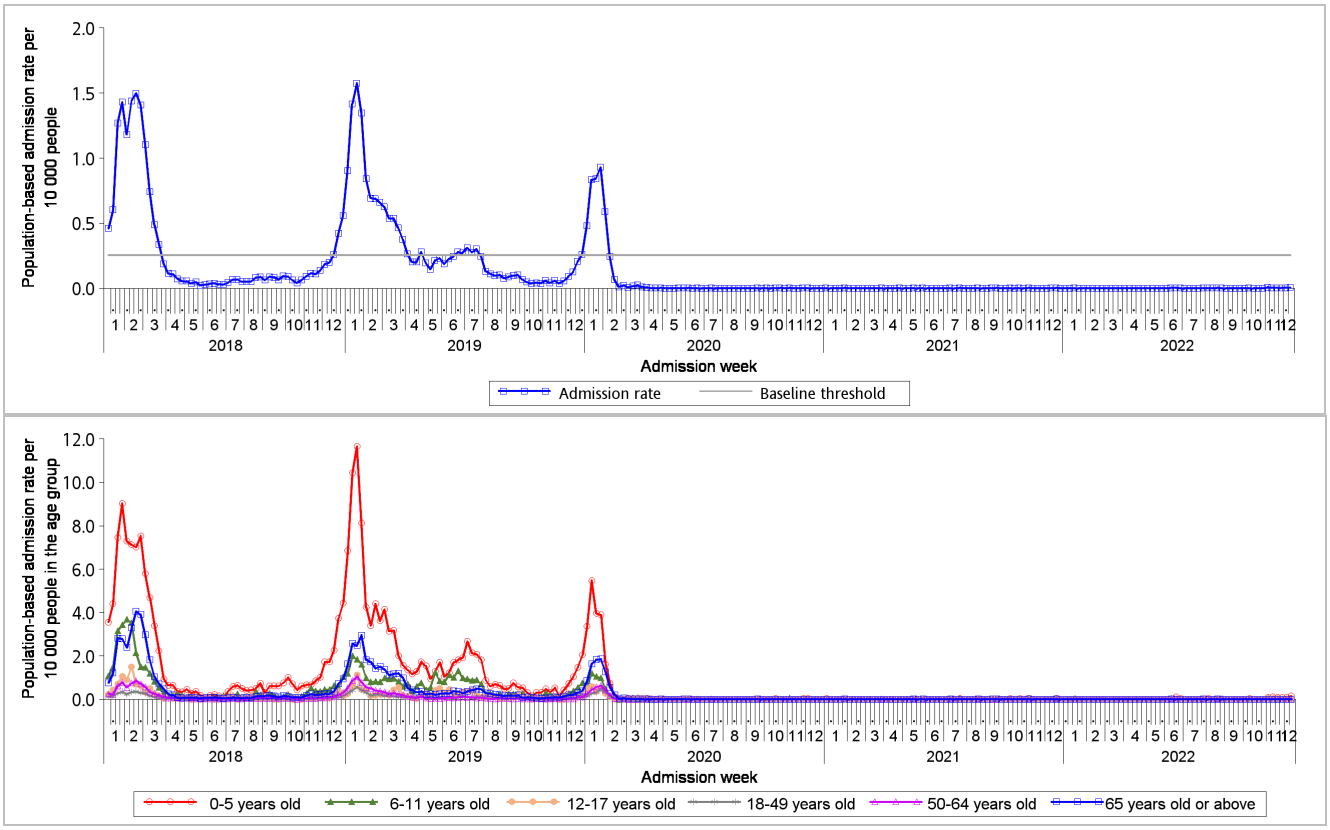

Figure 4 Influenza-associated hospital admission rates, 2018-22 (upper: overall rate, lower: rates by age groups)

[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, 2018-22#

In week 50, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 106.6 (per 1,000 coded cases), which was higher than the rate of 98.9 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.

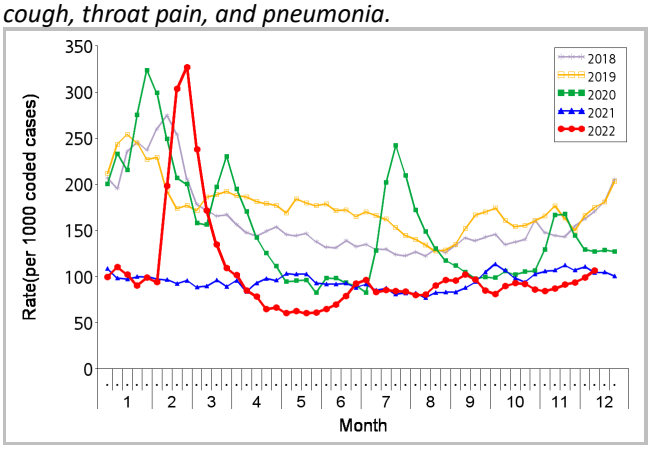

Figure 5 Rate of ILI syndrome group in AEDs, 2018-22

Fever surveillance at sentinel child care centres/ kindergartens, 2018-22

In week 50, 0.53% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.42% recorded in the previous week (Figure 6).

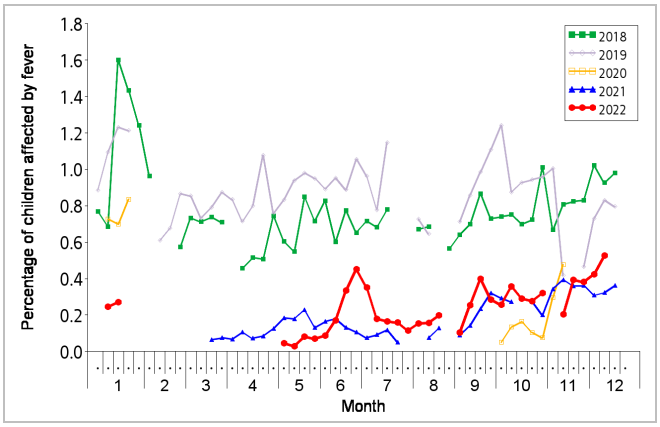

Figure 6 Percentage of children with fever at sentinel CCCs/KGs, 2018-22

Fever surveillance at sentinel residential care homes for the elderly, 2018-22

In week 50, 0.12% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), compared to 0.08% recorded in the previous week (Figure 7).

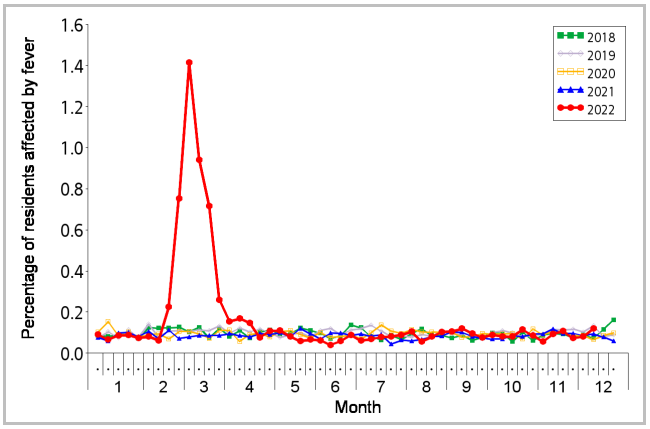

Figure 7 Percentage of residents with fever at sentinel RCHEs, 2018-22

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2018-22

In week 50, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.54 ILI cases per 1,000 consultations as compared to 0.32 recorded in the previous week (Figure 8).

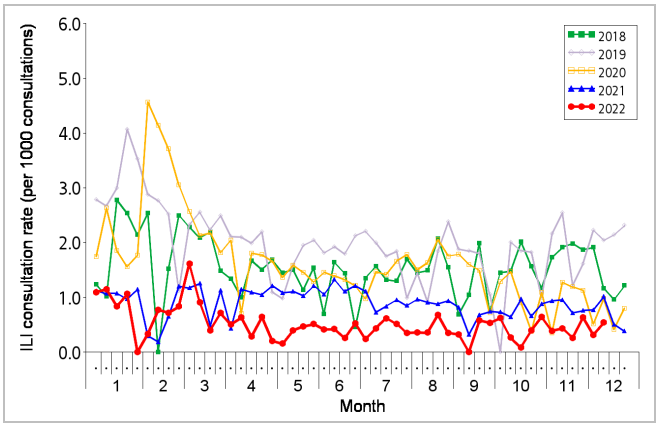

Figure 8 ILI consultation rate at sentinel CMPs, 2018-22

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 50, one adult case of death with laboratory confirmation of influenza was recorded.

Week	Influenza type				
	A(H1)	A(H3)	B	C	A (pending subtype)
Week 49	0	0	0	0	0
Week 50	0	1	0	0	0

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

- In week 50 and the first 4 days of week 51 (Dec 11 – 14), there were no cases of severe paediatric influenza-associated complication/death.
- In 2022, one paediatric case of influenza-associated complication/death was recorded, which was non-fatal (as of Dec 14, 2022).

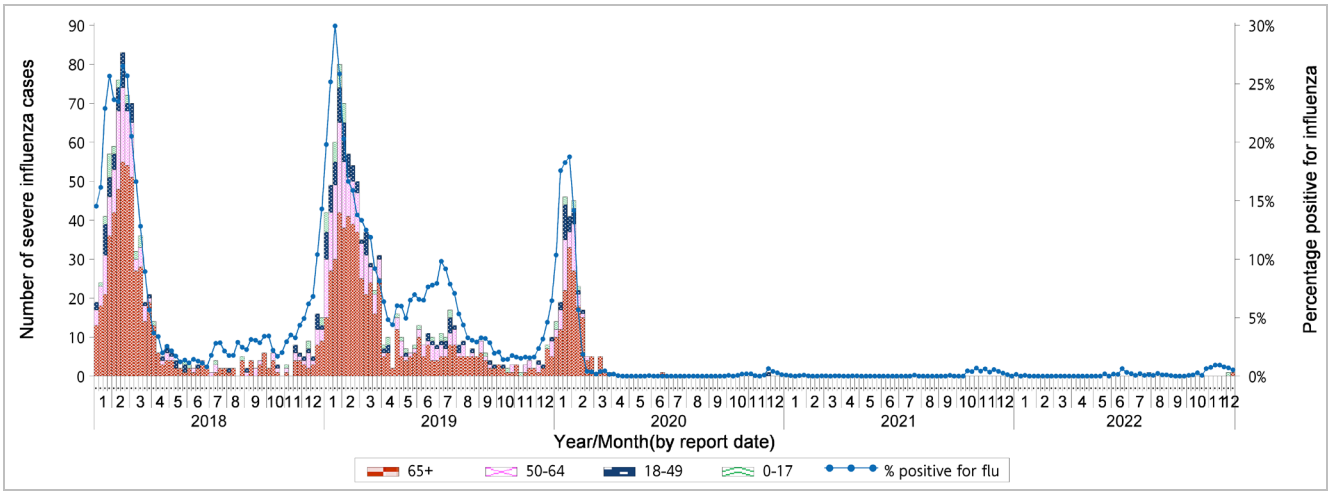

Figure 9 Weekly number of severe influenza cases by age groups, 2018-22 (the percentage positive for influenzas viruses in Figure 2 is also shown in this graph)

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

Globally, influenza activity increased and where subtyped, influenza A(H3N2) viruses predominated. In North America and many countries in Europe, influenza activity continued to increase, indicating an earlier start of influenza season in comparison with pre-COVID-19 pandemic seasons. In the temperate zones of the southern hemisphere, influenza activity continued to decrease in most reporting countries.

- In the United States (week ending Dec 3, 2022), influenza activity was high across the country. The percentage of outpatient visits for ILI remained high at 7.2% and was above the national baseline of 2.5%. The percentage of specimens tested positive for influenza remained high at 24.8%. Between October 1 and December 3, 2022, the overall cumulative influenza-related hospitalization rate was 26.0 per 100,000 population, which was 9.6 times higher than the highest cumulative in-season rate in week 48 during previous seasons going back to 2010-2011, which ranged from 0.2 to 2.7. Majority of influenza viruses detected this season were influenza A(H3N2) viruses.
- In Canada (week ending Dec 3, 2022), influenza activity continued to remain above expected levels typical of this time of year as Canada entered the sixth week of the influenza epidemic. All surveillance indicators were steady or increasing and nearly all were above expected levels typical of this time of year. The weekly percentage of tests positive for influenza remained above expected pre-pandemic level at 23.8% in week 48 but was similar to the previous week (23.9% in week 47). It was above the epidemic threshold at 5%. Influenza A(H3N2) was the dominant subtype, representing 96% of sub-typed influenza A detections this season (Aug 28 – Dec 3, 2022).
- In the United Kingdom (week ending Dec 4, 2022), influenza activity increased across the surveillance indicators. Influenza positivity increased to 14.3% from 12.5% in preceding week, with 651 samples tested positive for influenza (including 149 influenza A(H3), 30 influenza A(H1N1)pdm09, 449 influenza A(not subtyped) and 23 influenza B). Both overall weekly influenza hospitalization rate and ICU admission rate for influenza increased and were at medium intensities.
- In Europe, the start of the influenza epidemic was declared in week 46 (week ending Nov 20, 2022). In week 48 (week ending Dec 4, 2022), the percentage of sentinel specimens tested positive for influenza increased to 20% from 15% in the preceding week, which remained above the epidemic threshold (10%). Overall, influenza A(H3) viruses have dominated across most surveillance systems with recent increase and dominance of A(H1)pdm09 viruses in non-sentinel specimens.
- In Mainland China (week ending Dec 11, 2022), influenza surveillance data showed that the percentage of specimens tested positive for influenza in the southern provinces was slightly higher than that in the previous week, while the percentage of specimens tested positive for influenza in the northern provinces was slightly lower than that in the previous week. Influenza A(H3N2) viruses were predominating in both the northern and southern provinces.
- In Taiwan (week ending Dec 10, 2022), influenza activity persisted in the community. The number of ILI consultations in emergency and outpatient clinics were on decreasing trends in recent weeks, but was still higher than the same period of previous influenza season. Majority of the influenza detections in this season were influenza A(H3N2) viruses.
- In Korea (week ending Dec 3, 2022), the influenza activity started to increase in late September, and remained elevated recently. The weekly ILI rate continued to increase to 17.3 from 15.0 per 1000 outpatient visits in the preceding week. In week 49, 26 out of 312 respiratory specimens (8.3%) were tested positive for influenza (all were influenza A(H3N2) viruses).
- In Singapore (week ending Dec 3, 2022), the daily number of consultations for acute respiratory infection continued to decrease in the past few weeks. The overall positivity rate for influenza among ILI samples in the community in the past 4 weeks was 8.1%. 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, Korean Centers for Disease Control and Prevention and Singapore Ministry of Health.