

COVID-19 & FLU EXPRESS



COVID-19 & 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 COVID-19 and influenza activities.

Local Situation of COVID-19 Activity (as of Aug 16, 2023)

Reporting period: Aug 6 – Aug 12, 2023 (Week 32)

- The latest surveillance data showed that the local COVID-19 activity is comparable to the preceding week.
- Members of the public are advised to maintain strict personal and environmental hygiene at all times for personal protection against COVID-19 infection and prevention of the spread of the disease in the community. For more details, please visit the COVID-19 information page (<https://www.chp.gov.hk/en/healthtopics/content/24/102466.html>).
- For the latest information on COVID-19 and prevention measures, please visit the thematic website of COVID-19 (<https://www.coronavirus.gov.hk/eng/index.html>).
- Members of the public are advised to take note of the latest recommendations on the use of COVID-19 vaccines in Hong Kong to protect themselves from serious outcomes of COVID-19. For more details, please visit (https://www.chp.gov.hk/files/pdf/consensus_interim_recommendations_on_the_use_of_covid19_vaccines_in_hong_kong_29mar.pdf).

Laboratory surveillance for COVID-19 cases

Positive nucleic acid test laboratory detections for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus

In week 32, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 399 as compared to 390 in the preceding week. (Figure 1.1)

In the first 4 days of week 33 (Aug 13 – Aug 16), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 53 to 74.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 40,808 (as of Aug 16, 2023).

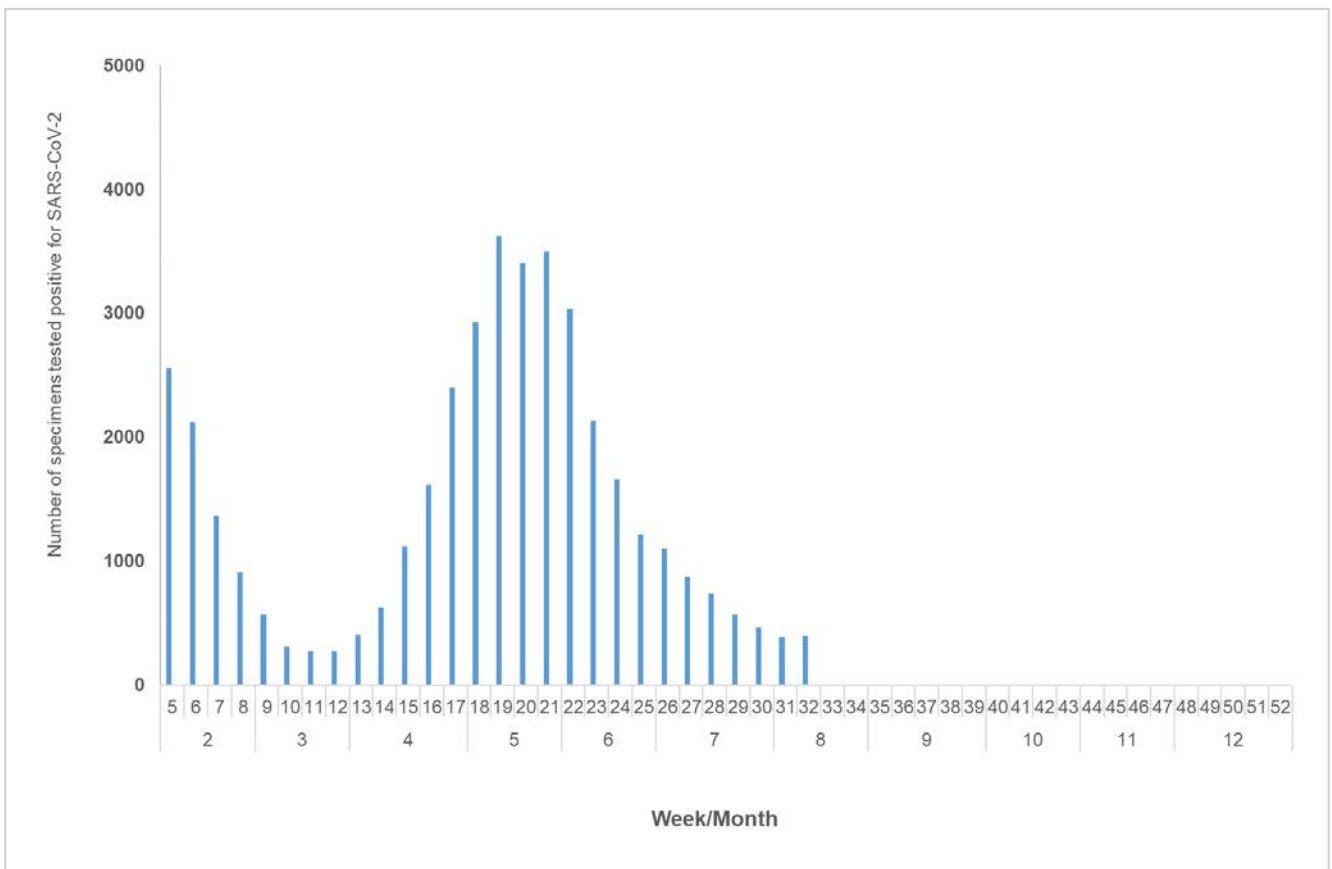


Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

Positive detection rate of specimens tested positive for SARS-CoV-2 virus at the Public Health Laboratory Services Branch

Among the 5,135 respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 32, 323 (6.29%) were tested positive for SARS-CoV-2 virus. (Figure 1.2)

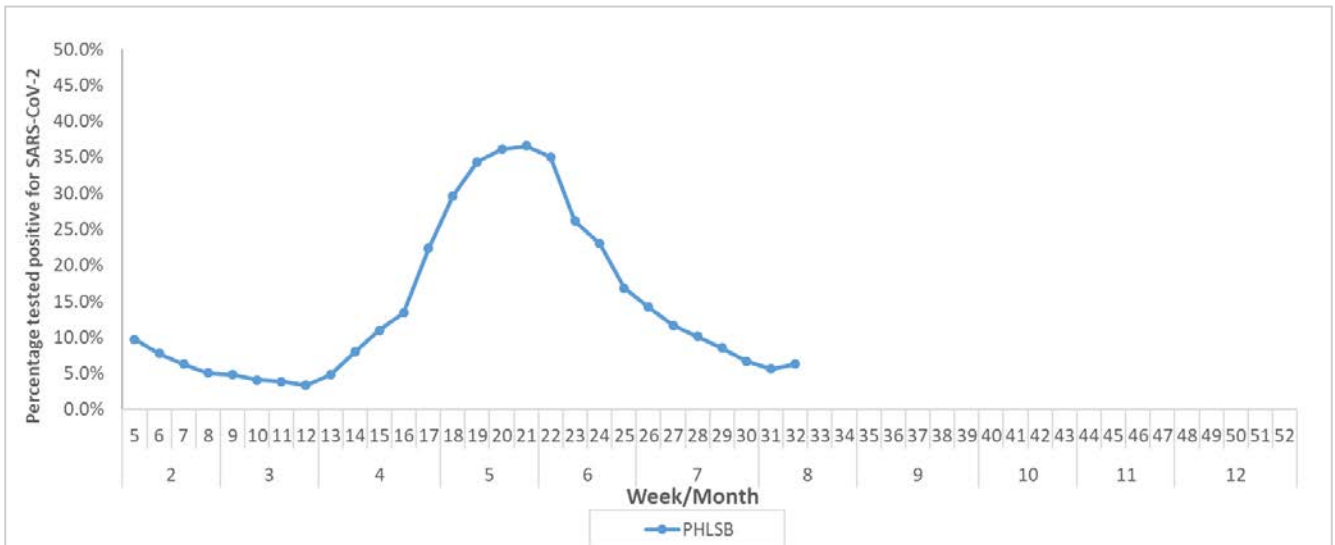


Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

Laboratory surveillance on genetic characterisation for COVID-19 cases

PHLSB of the Centre for Health Protection (CHP) conducts genetic characterisation on a sample of specimens positive for SARS-CoV-2 as well as reported severe and death cases for COVID-19. Latest surveillance data showed that XBB and its descendant lineages continues to be the most prevalent variant, comprised more than 95% of all characterised specimens. (Figure 1.3)

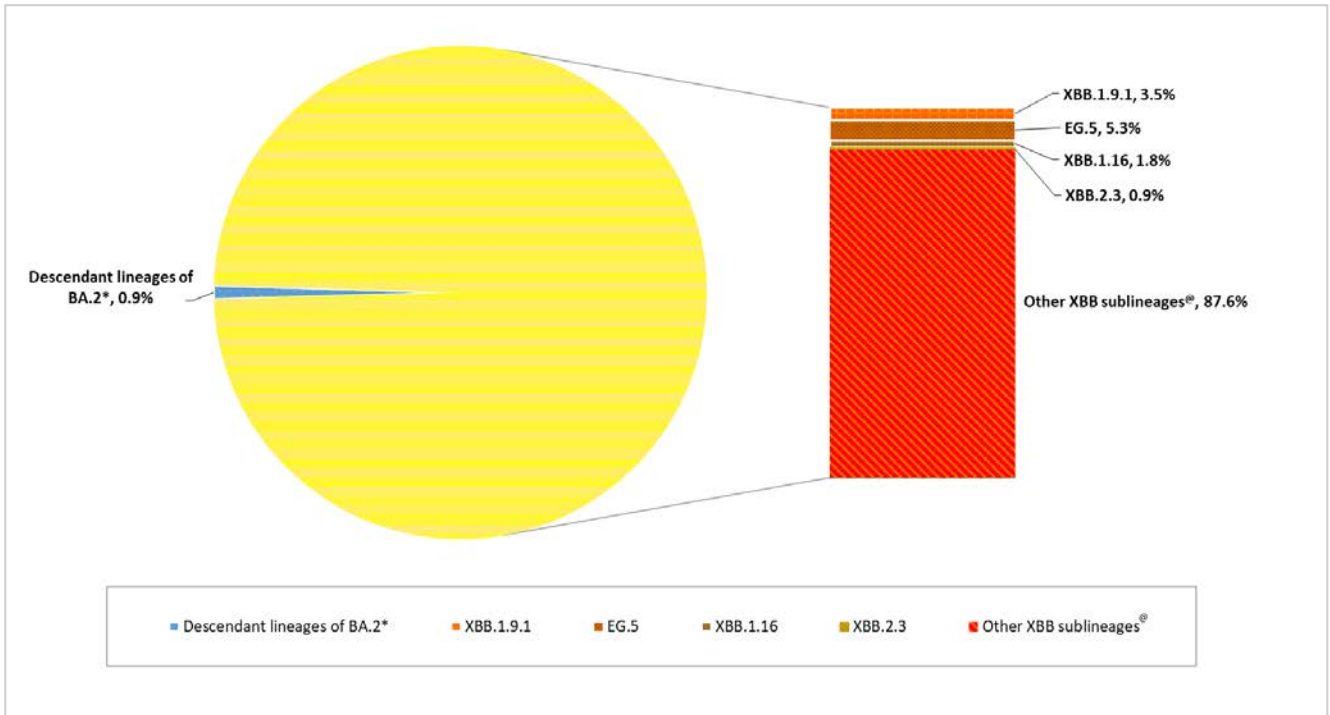


Figure 1.3 Proportion of variants among specimens tested positive for SARS-CoV-2 virus by PHLSB

* Excluding BF.7, BN.1, CH.1.1, XBB, other recombinant sublineages and their descendant lineages

@Include XBL (recombinant of XBB.1 and BA.2.75) and some XBB specimens pending their descendant lineage information

COVID-19 outbreak surveillance

In week 32, 1 COVID-19 outbreak occurring in schools/institutions was recorded (affecting 5 persons), as compared to 1 outbreak recorded in the previous week (affecting 6 persons). (Figure 1.4)

In the first 4 days of week 33 (Aug 13 – Aug 16), 2 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 9 persons).

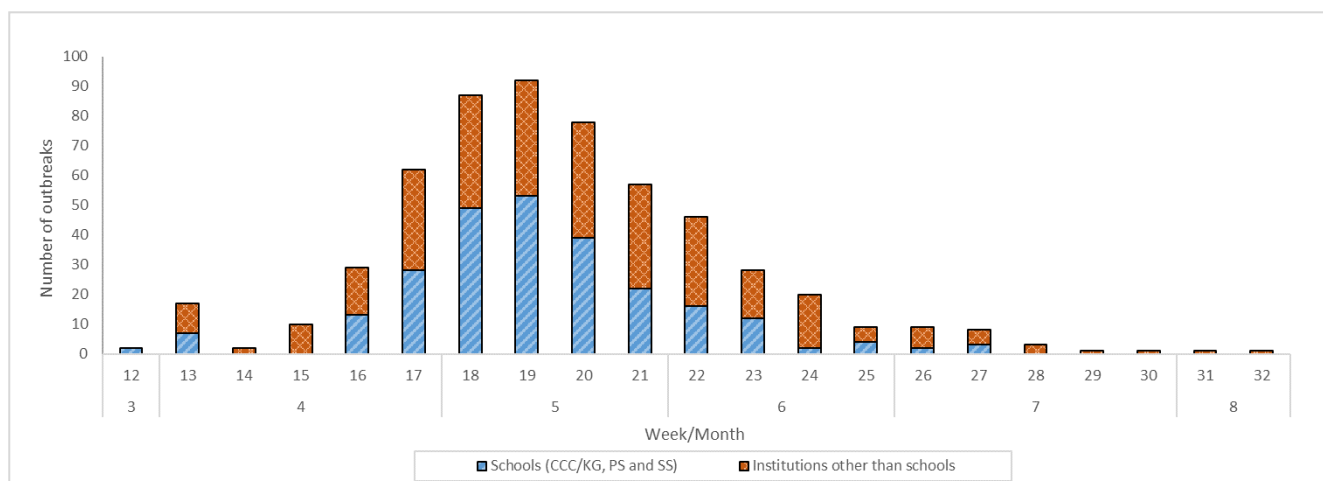


Figure 1.4 COVID-19 outbreaks in schools/institutions

Type of institutions	Week 31	Week 32	First 4 days of week 33 (Aug 13 – Aug 16)
Child care centre/ kindergarten (CCC/KG)	0	0	0
Primary school (PS)	0	0	1
Secondary school (SS)	0	0	0
Residential care home for the elderly	0	1	1
Residential care home for persons with disabilities	1	0	0
Others	0	0	0
<i>Total number of outbreaks</i>	1	1	2
<i>Total number of persons affected</i>	6	5	9

Surveillance of severe and fatal COVID-19 cases

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

In week 32, the weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 26 as compared to 28 in the preceding week. (Figure 1.5)

In the first 4 days of week 33 (Aug 13 – Aug 16), 16 severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 were recorded.

Since Jan 30, 2023, the cumulative number of fatal cases with cause of death preliminarily assessed to be related to COVID-19 was 862 (as of Aug 16, 2023).

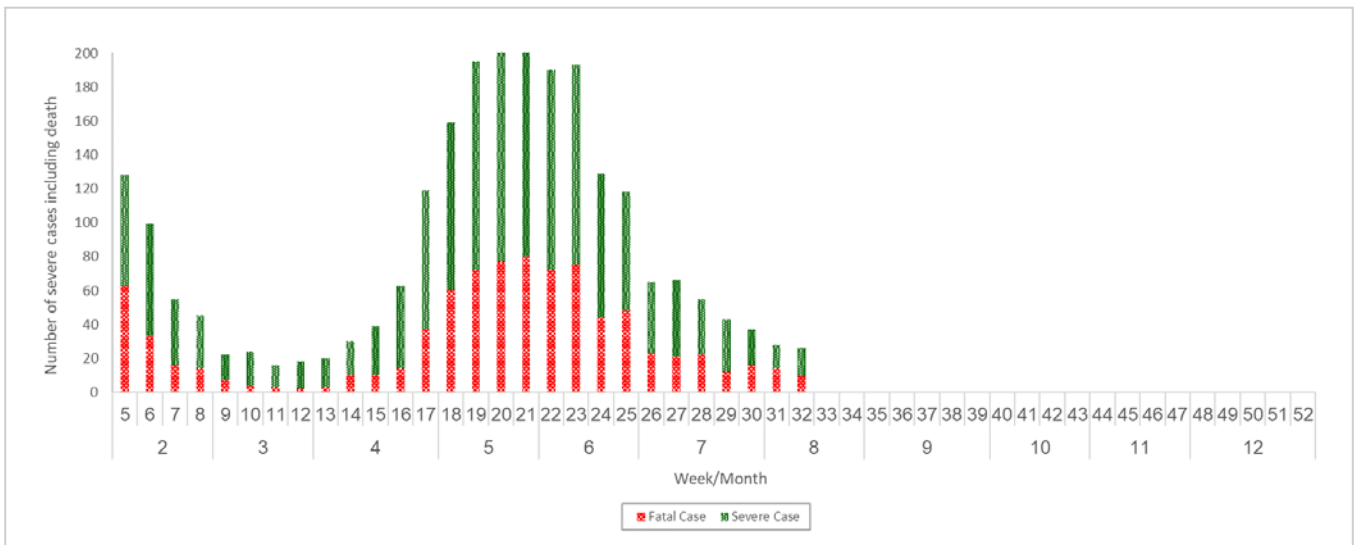


Figure 1.5 Weekly number of severe COVID-19 cases including deaths

Sewage surveillance of SARS-CoV-2 virus

In week 32, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 231,000 copy/L as compared to around 214,000 copy/L in the preceding week. (Figure 1.6)

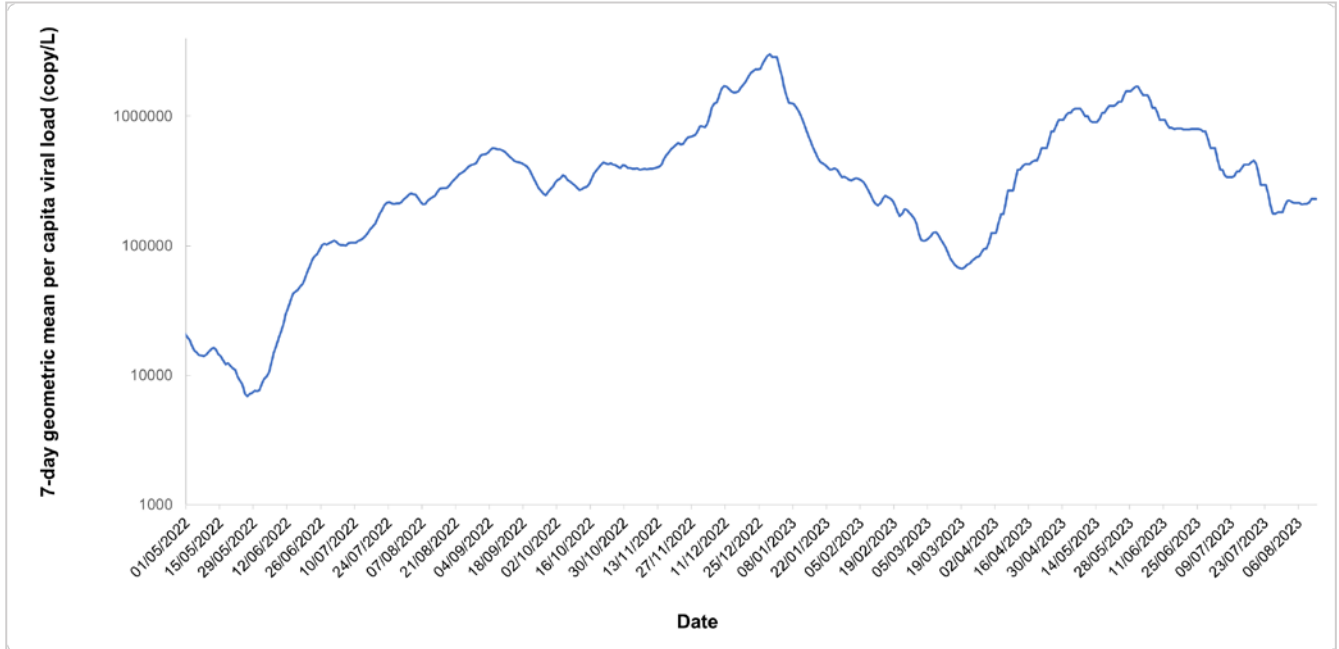


Figure 1.6 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

COVID-19 surveillance among sentinel general out-patient clinics and sentinel private medical practitioner clinics

In week 32, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 50.9 (Figure 1.7) and 22.1 (Figure 1.8) COVID-19 cases per 1,000 consultations, respectively.

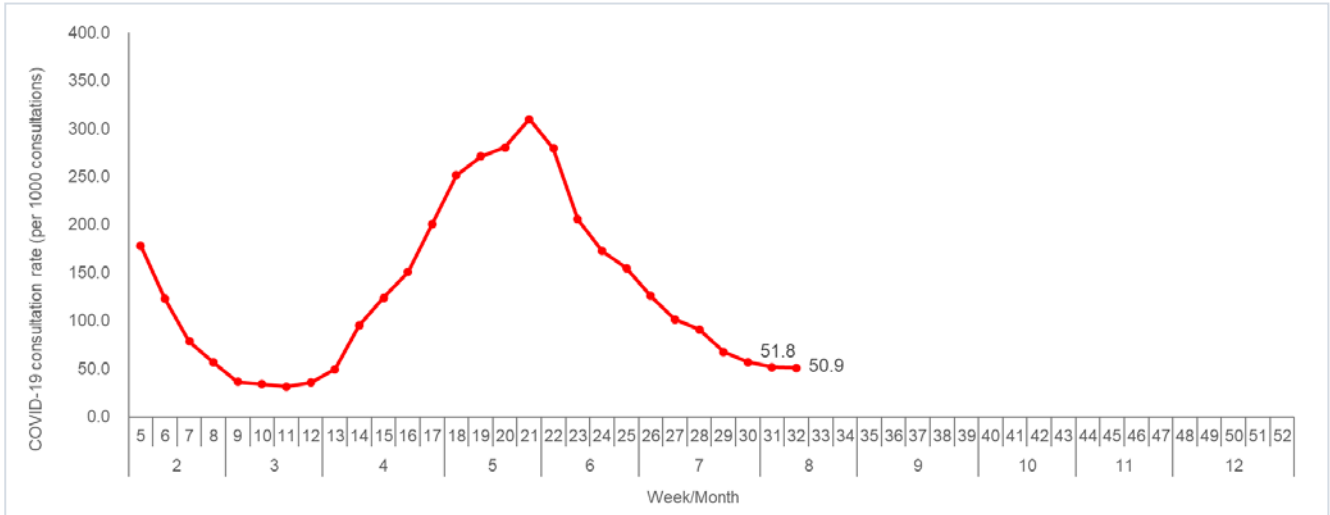


Figure 1.7 Average consultation rate of COVID-19 cases in GOPC

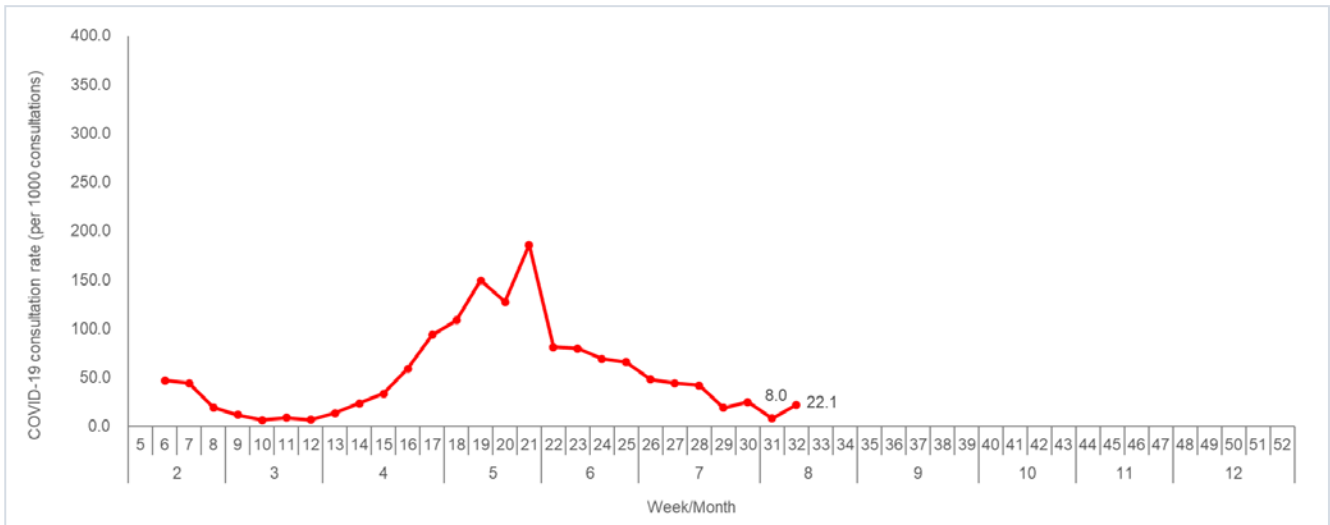


Figure 1.8 Average consultation rate of COVID-19 cases in private medical practitioner clinics

Global situation of COVID-19 activity

- According to the World Health Organization (WHO), as of Aug 6, 2023, over 769 million confirmed cases and over 6.9 million deaths have been reported globally. Nearly 1.5 million new cases and over 2500 deaths were reported in the last 28 days (Jul 10 to Aug 6, 2023) globally.
- The highest numbers of new 28-day cases were reported from Korea, Brazil, Australia, Singapore and Italy. The highest numbers of new 28-day deaths were reported from Brazil, Korea, Russia, Peru and Australia.
- WHO commented that current trends in reported COVID-19 cases were underestimates of the true number due to the reduction in testing and delays in reporting in many countries. Therefore, related data should be interpreted with caution.
- WHO has updated its tracking system and working definitions for variants of SARS-CoV-2. From Mar 15 2023, the tracking system classifies Omicron sublineages as variants under monitoring (VUMs), variants of interest (VOIs), or variant of concern (VOCs). Currently WHO is monitoring three VOIs, which are EG.5, XBB.1.5 and XBB.1.16, and six VUMs, which are BA.2.75, CH.1.1, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3.
- WHO classified EG.5 as a VOI on Aug 9, 2023. While EG.5 has shown increased prevalence, growth advantage, and immune escape properties, there have been no reported changes in disease severity to date. Based on the available evidence, the public health risk posed by EG.5 was evaluated as low at the global level, aligning with the risk associated with XBB.1.16 and XBB.1.5.
- From Jul 17 to Jul 23, 2023, the prevalence of EG.5 and XBB.1.16 were 17.4% and 25.2% respectively, an increase compared to 7.5% and 22.2% from Jun 19 to Jun 25, 2023. During the same period, the prevalence of XBB.1.5 decreased from 16.8% to 12.7%. Among the VUMs, XBB.1.9.1 observed a decrease in prevalence from 15.8% to 12.7% while other VUMs have shown stable trends.

Sources:

Information will be extracted from the following sources when updates are available: [World Health Organization Weekly epidemiological update on COVID-19](#)

Local Situation of Influenza Activity (as of Aug 16, 2023)

Reporting period: Aug 6 – 12, 2023 (Week 32)

- The latest surveillance data showed the overall influenza activity has increased since July, but it has not yet exceeded the seasonal epidemic threshold at this juncture.
- 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.
- People who aged six months or above and have not yet received the seasonal influenza vaccination in the 2022/23 season can still receive the vaccine to enhance personal protection. For details about influenza vaccination, 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 seasonal influenza and its prevention, please visit the Centre for Health Protection's Seasonal Influenza page (http://www.chp.gov.hk/en/view_content/14843.html).

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

In week 32, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 3.8 ILI cases per 1,000 consultations, which was higher than 3.0 recorded in the previous week (Figure 2.1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 14.0 ILI cases per 1,000 consultations, which was higher than 10.4 recorded in the previous week (Figure 2.1, right).

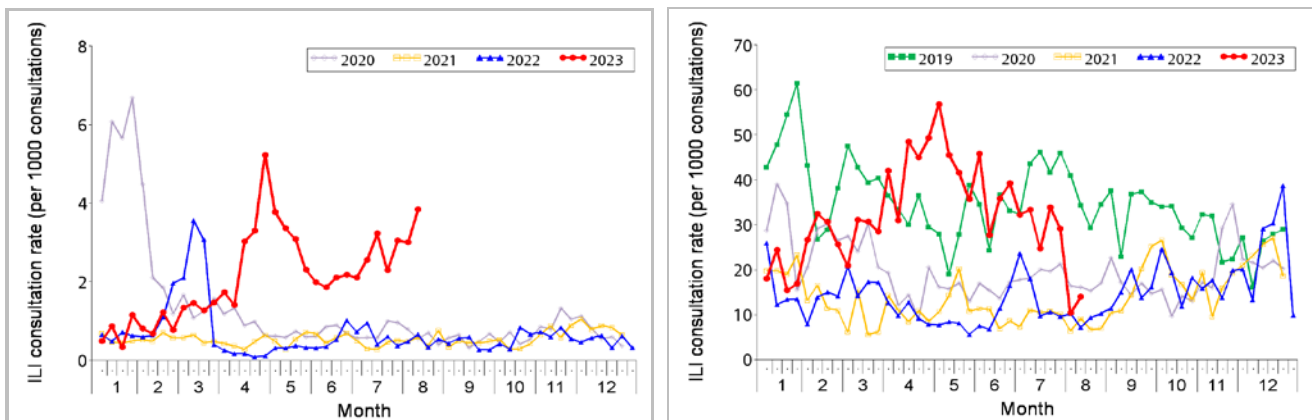


Figure 2.1 ILI consultation rates at sentinel GOPC (2020-23) (left) and PMP clinics (2019-23) (right)
 Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

Laboratory surveillance, 2019-23

Among the 6,157 respiratory specimens* received in week 32, 535 (8.69%) were tested positive for seasonal influenza A or B viruses. Among the subtyped influenza detections, there were 69 (13%) influenza A(H1), 447 (85%) influenza A(H3) and 12 (2%) influenza B viruses. The positive percentage (8.69%) was below the baseline threshold of 9.21% but was higher than 8.31% recorded in the previous week (Figure 2.2).

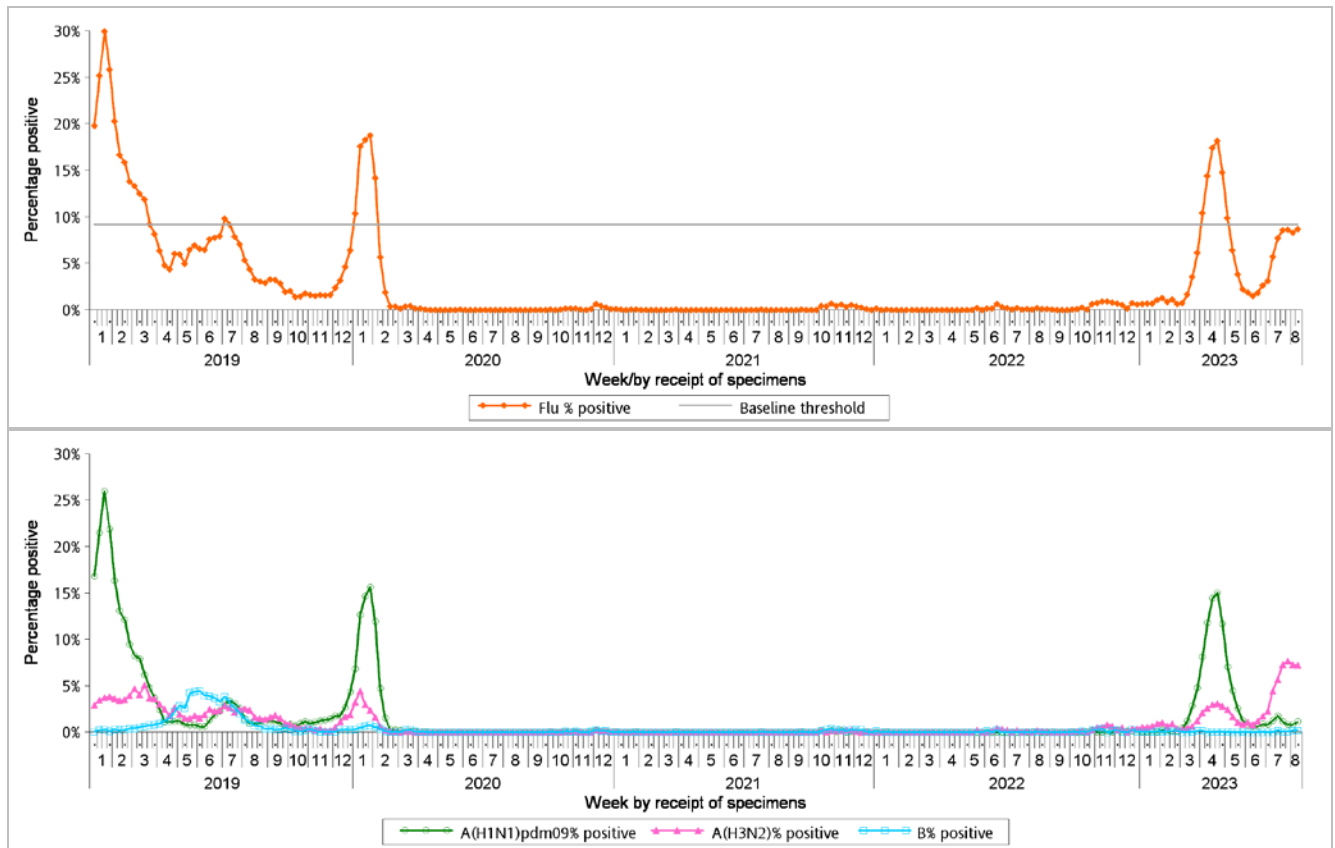


Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2019-23 (upper: overall positive percentage, lower: positive percentage by subtypes)

[Note: The baseline threshold is 1.96 standard deviation above the average weekly positive percentage during non-season periods from 2014 week 49 to 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 June 2023, 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/10/641/695/7035.html>

* Including 5,135 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 1,022 specimens received by the Hospital Authority

Influenza-like illness outbreak surveillance, 2019-23

In week 32, 6 ILI outbreaks occurring in schools/institutions were recorded (affecting 27 persons), as compared to 9 outbreaks recorded in the previous week (affecting 46 persons) (Figure 2.3). In the first 4 days of week 33 (Aug 13 to 16), 7 ILI outbreaks occurring in schools/institutions were recorded (affecting 38 persons).

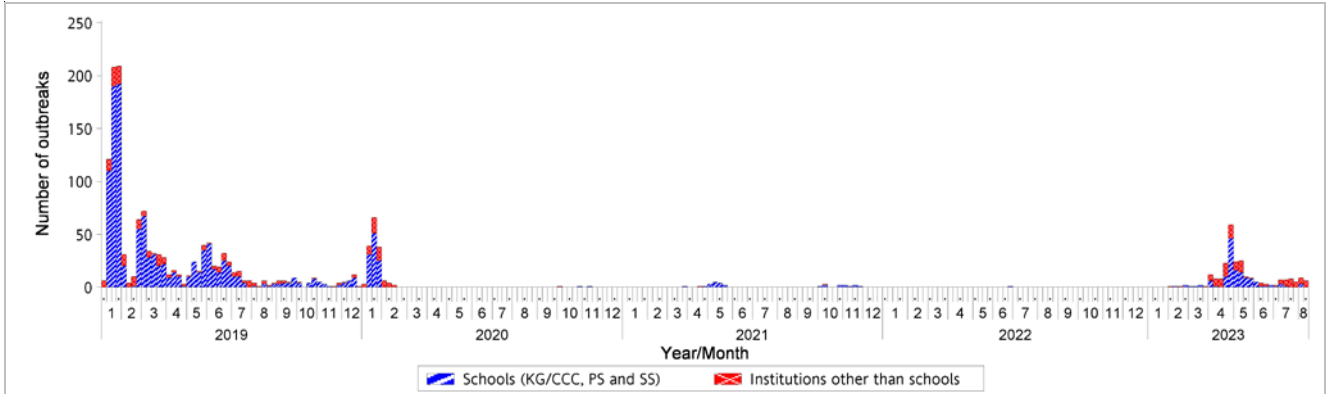


Figure 2.3 ILI outbreaks in schools/institutions, 2019-23

Type of institutions	Week 31	Week 32	First 4 days of Week 33 (Aug 13 – 16)
Child care centre/ kindergarten (CCC/KG)	3	0	2
Primary school (PS)	0	0	0
Secondary school (SS)	0	0	0
Residential care home for the elderly	3	4	3
Residential care home for persons with disabilities	2	2	2
Others	1	0	0
<i>Total number of outbreaks</i>	9	6	7
<i>Total number of persons affected</i>	46	27	38

Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2019-23

In week 32, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.32 (per 10,000 population), which was above the baseline threshold of 0.25 but was lower than 0.36 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 2.56, 0.81, 0.24, 0.08, 0.10 and 0.58 cases (per 10,000 people in the age group) respectively, as compared to 2.00, 0.60, 0.31, 0.09, 0.13 and 0.86 cases in the previous week (Figure 2.4).

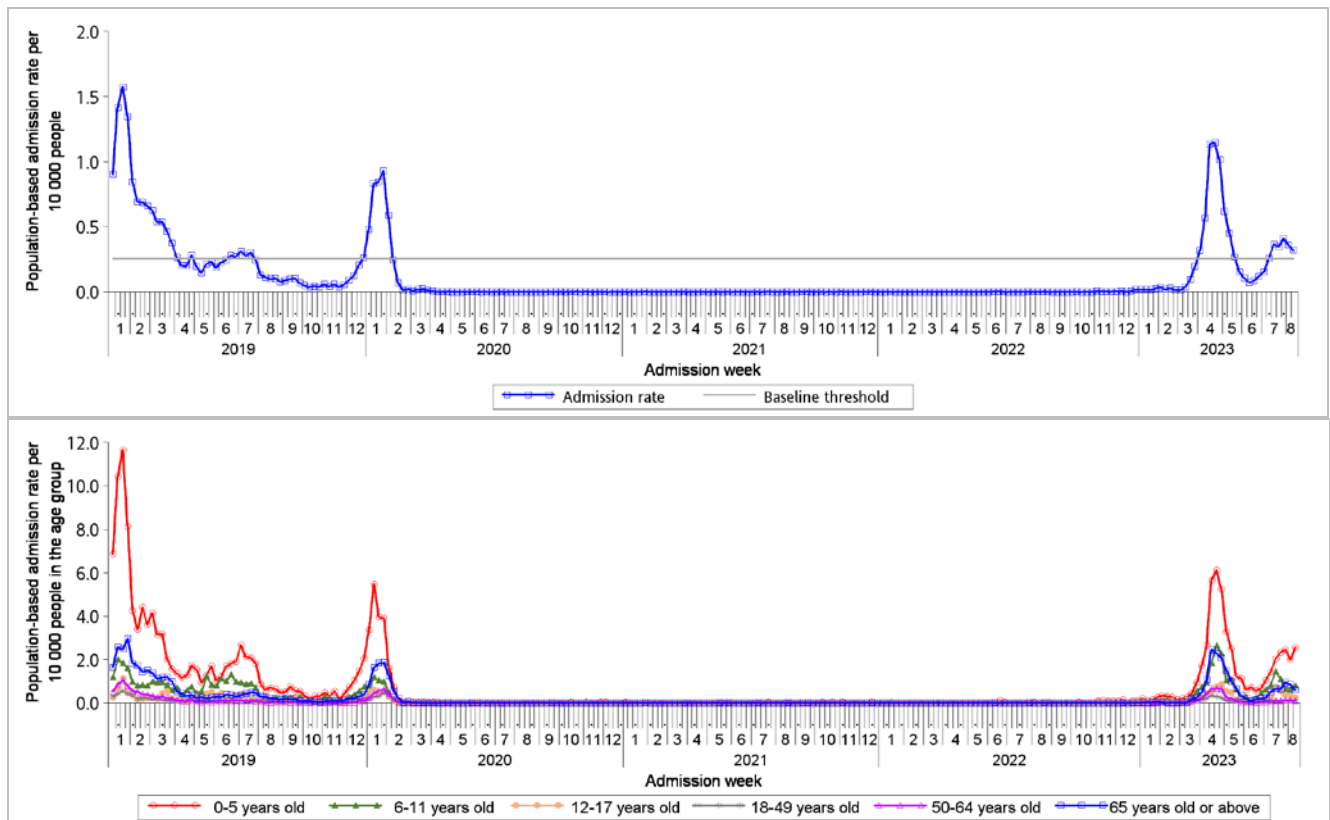


Figure 2.4 Influenza-associated hospital admission rates, 2019-23 (upper: overall rate, lower: rates by age groups)
 [Note: The baseline threshold is 1.96 standard deviation above the average weekly admission rate during non-season periods from 2014 week 49 to 2019 week 48.]

Rate of ILI syndrome group in accident and emergency departments, 2019-23[#]

In week 32, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 143.2 (per 1,000 coded cases), which was the same as the rate of 143.2 in the previous week (Figure 2.5).

#Note: This syndrome group includes codes related to ILI such as influenza, upper respiratory tract infection, fever, cough, throat pain, and pneumonia.

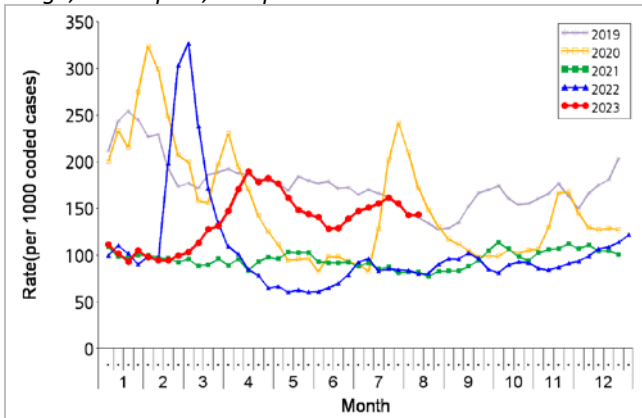


Figure 2.5 Rate of ILI syndrome group in AEDs, 2019-23

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

In week 32, 0.79% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above). The surveillance for week 30-31 was suspended due to summer holiday (Figure 2.6).

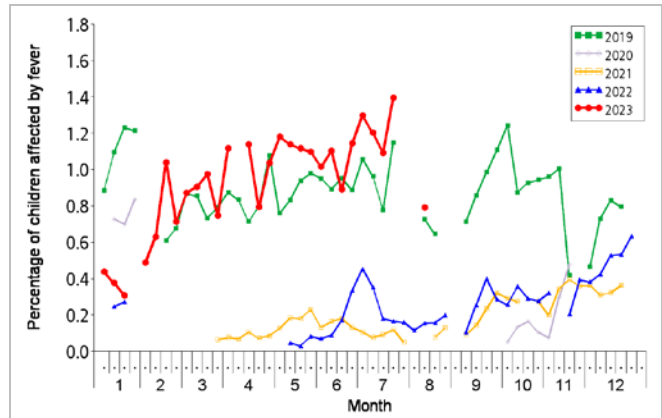


Figure 2.6 Percentage of children with fever at sentinel CCCs/KGs, 2019-23

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

In week 32, 0.08% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), compared to 0.12% recorded in the previous week (Figure 2.7).

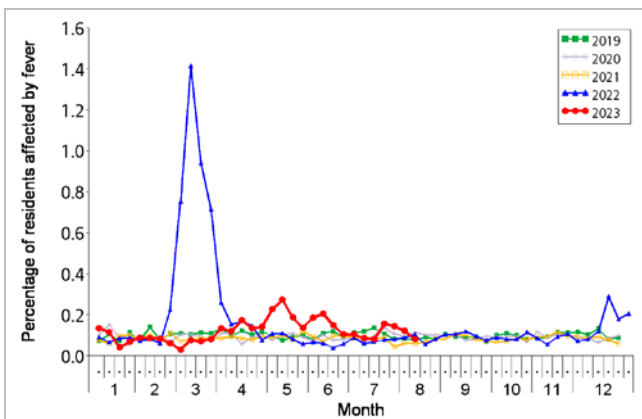


Figure 2.7 Percentage of residents with fever at sentinel RCHEs, 2019-23

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

In week 32, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.38 ILI cases per 1,000 consultations as compared to 0.74 recorded in the previous week (Figure 2.8).

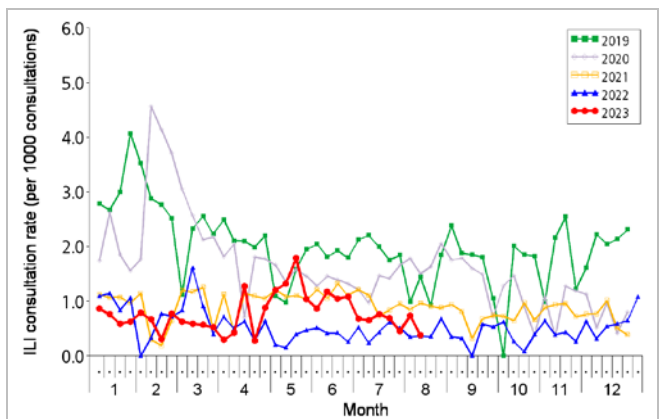


Figure 2.8 ILI consultation rate at sentinel CMPs, 2019-23

Surveillance of severe influenza cases

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

Surveillance for intensive care unit (ICU) admission/death 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 32, 24 adult cases of ICU admission/deaths with laboratory confirmation of influenza were recorded (including 19 deaths) as compared to 18 cases (including 13 deaths) recorded in the previous week.

Week	Influenza type			
	A(H1)	A(H3)	B	A (pending subtype)
Week 31	3	11	0	4
Week 32	2	18	0	4

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

- In week 32 and the first 4 days of week 33 (Aug 13 – 16), there was one case of severe paediatric influenza-associated complication/death.

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving influenza vaccine for this season
32	16 years	Male	Shock	No	Influenza A (H3)	Yes

- In 2023, 8 paediatric cases of severe influenza-associated complication/death were recorded, in which 4 of them were fatal (as of Aug 16, 2023).

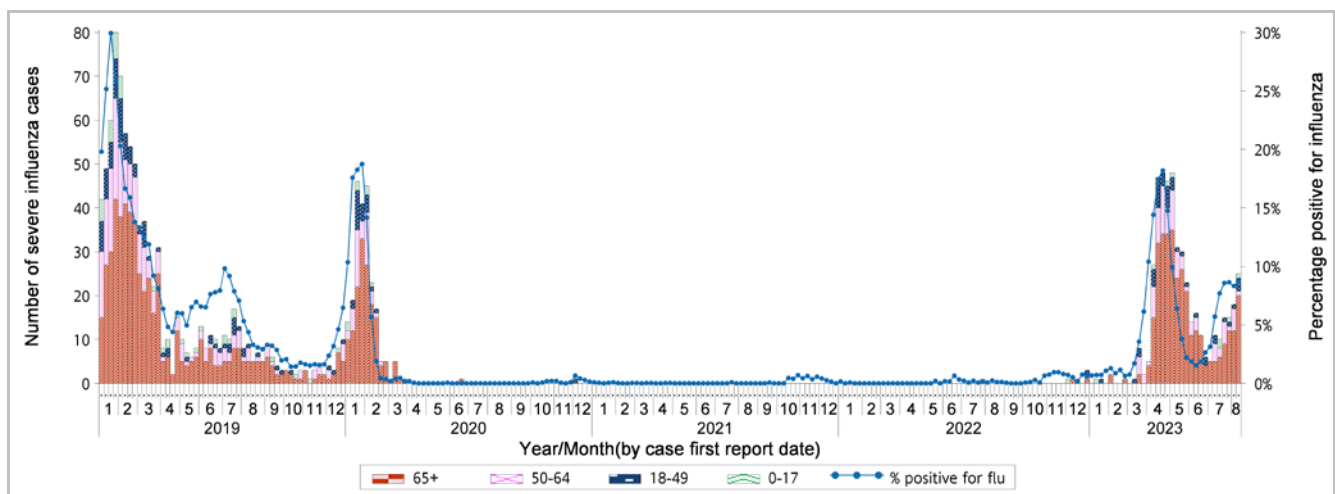


Figure 2.9 Weekly number of severe influenza cases by age groups, 2019-23 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

Global Situation of Influenza Activity

Globally, influenza detections remained low, with activity in many countries in southern hemisphere now decreasing after having peaked in recent weeks (data up to Jul 23, 2023).

- In the United States (week ending Aug 5, 2023), influenza activity remained low. The percentage of specimens tested positive for influenza remained low (1.0%). The percentage of out-patient visits for ILI was 1.1%, which was below the national baseline of 2.5%.
- In the United Kingdom (week ending Jul 30, 2023), influenza activity remained low. Influenza positivity remained low and stable at 0.8%. The weekly ILI consultation rate in England remained stable and was within baseline activity levels.
- In Mainland China (week ending Aug 6, 2023), influenza surveillance data showed that influenza detections in some southern provinces slightly increased whereas the influenza activities in the northern provinces remained at low levels. The percentage of specimens tested positive for influenza in the southern and northern provinces were 2.5% and 0.3% respectively.
- In Taiwan (week ending Jul 29, 2023), influenza activity decreased. The percentage of specimens tested positive for influenza in week 28 was 15.3%. Influenza A(H1N1) and A(H3N2) viruses were co-circulating.
- In Japan (week ending Aug 6, 2023), the average number of reported ILI cases per sentinel site slightly decreased to 1.44 from 1.64 in the preceding week, but was above the baseline level of 1.00. Influenza A(H3) viruses were predominating.
- In Korea (week ending Aug 5, 2023), the weekly ILI rate remained higher than epidemic threshold (4.9 cases per 1,000 outpatients). The rate in week 31 was 14.1 per 1,000 out-patient visits as compared to 15.0 in the preceding week. In week 31, 18 out of 261 respiratory specimens (6.9%) were tested positive for influenza (including 5 influenza A(H3N2) and 13 influenza A(H1N1)pdm09).
- In Singapore (week ending Aug 5, 2023), the average daily number of consultations for acute respiratory infection remained low. The overall positivity rate for influenza among ILI samples in the community was 27.8% in the past 4 weeks. Majority of the influenza detections in July were influenza A(H3N2) viruses (63.7%), followed by influenza A(H1N1) (27.6%) and influenza B viruses (8.4%).
- In Australia (fortnight ending Aug 6, 2023), influenza activity in the community has decreased. This fortnight (Jul 24 to Aug 6), the ILI consultation rate among sentinel general practitioners was 8.04 cases per 1,000 consultations, lower than 8.39 in the previous fortnight. Among the 19,346 samples tested across sentinel laboratories, 8% were positive for influenza, compared to 10% in the previous fortnight. Influenza A(H1N1) and influenza B viruses were co-circulating.
- In New Zealand (week ending Aug 6, 2023), ILI activity in the community continued to decrease and was lower than that at the same time in 2022. Influenza B and influenza A(H1N1) viruses had been the most commonly detected viruses in the community in recent weeks.

Sources:

Information have been extracted from the following sources when updates are available: [World Health Organization](#), [United State Centers for Disease Control and Prevention](#), [UK Health Security Agency](#), [Chinese National Influenza Center](#), [Taiwan Centers for Disease Control](#), [Japan Ministry of Health, Labour and Welfare](#), [Korean Centers for Disease Control and Prevention](#), [Singapore Ministry of Health](#), [Australian Department of Health and Aged Care](#) and [New Zealand Ministry of Health](#).