

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 Nov 15, 2023)

Reporting period: Nov 5 – Nov 11, 2023 (Week 45)

- The latest surveillance data showed that local COVID-19 activity remained stable.
- 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. High risk people who have never been vaccinated or infected with COVID-19 before should adopt additional hygiene measures to protect themselves such as avoid going to crowded places, wear mask properly and maintain hand hygiene. For more details, please visit the COVID-19 information page (<https://www.chp.gov.hk/en/healthtopics/content/24/102466.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. High-risk priority groups are recommended to receive a dose of COVID-19 vaccine at least six months since the last dose or infection before a possible COVID-19 winter surge in the coming months, regardless of the number of doses received previously. For more details, please visit ([https://www.chp.gov.hk/files/pdf/consensus interim recommendations on the use of covid19 vaccines in hong kong 11oct.pdf](https://www.chp.gov.hk/files/pdf/consensus_interim_recommendations_on_the_use_of_covid19_vaccines_in_hong_kong_11oct.pdf)).
- 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>).

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 45, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 177 as compared to 236 in the preceding week. (Figure 1.1)

In the first 4 days of week 46 (Nov 12 – Nov 15), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 19 to 21.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 47,841 (as of Nov 15, 2023).

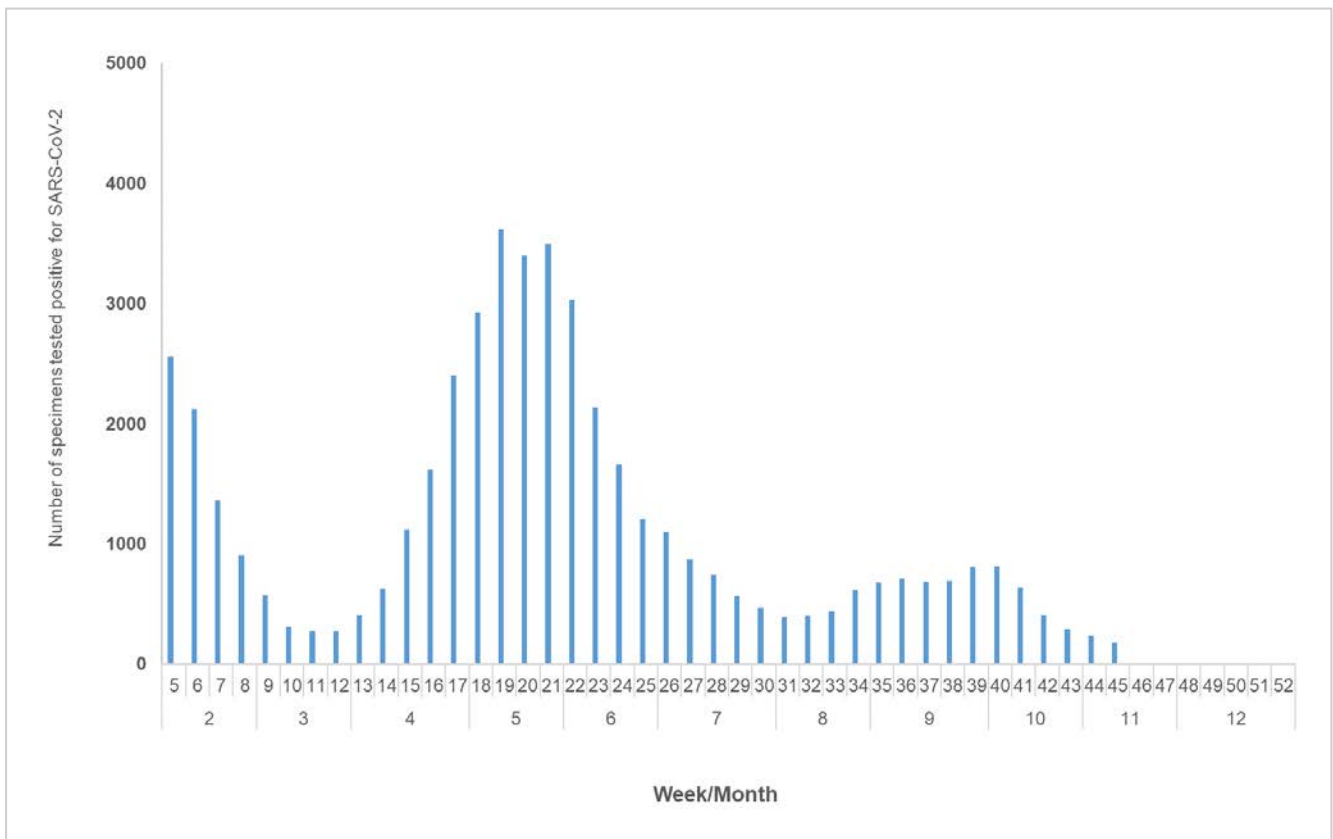


Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

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

Among the 6,188 respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 45, 144 (2.33%) were tested positive for SARS-CoV-2 virus. (Figure 1.2)

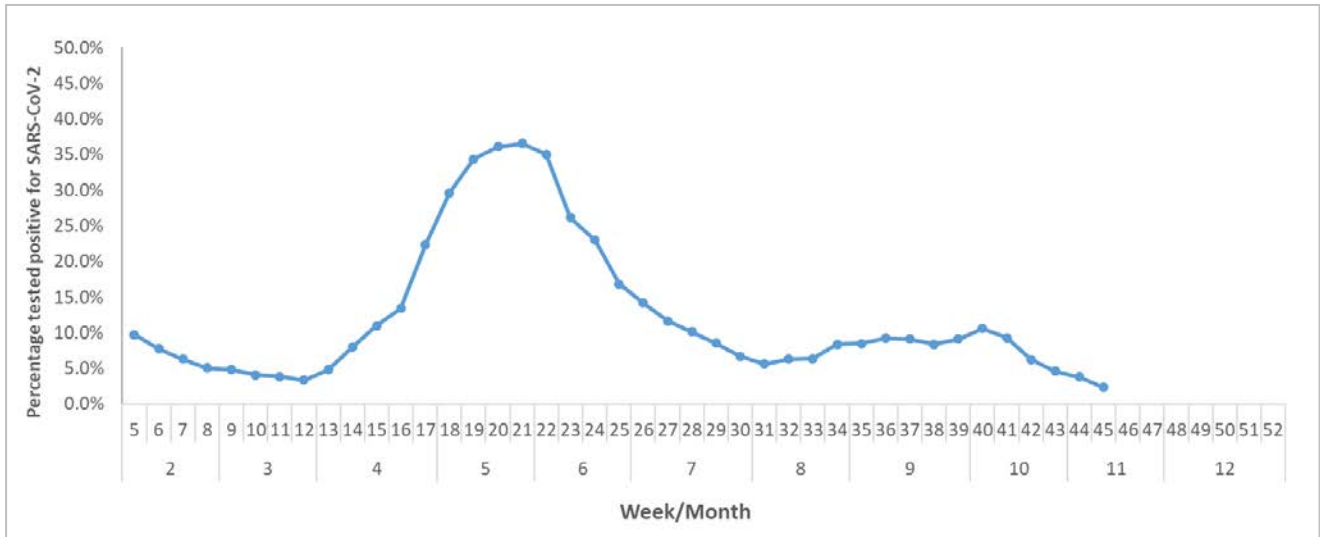


Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

COVID-19 outbreak surveillance

In week 45, 3 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 18 persons), as compared to 1 outbreak recorded in the previous week (affecting 5 persons). (Figure 1.3)

In the first 4 days of week 46 (Nov 12 – Nov 15), 1 COVID-19 outbreak occurring in schools/institutions was recorded (affecting 3 persons).

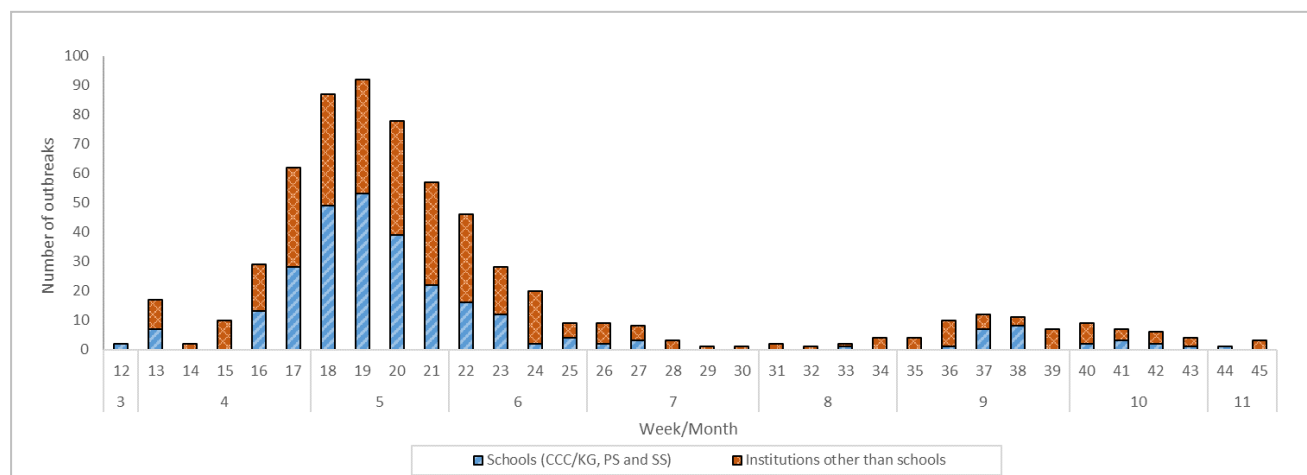


Figure 1.3 COVID-19 outbreaks in schools/institutions

| Type of institutions | Week 44 | Week 45 | First 4 days of week 46 (Nov 12 – Nov 15) |
|---|---------|---------|--|
| Child care centre/ kindergarten (CCC/KG) | 0 | 0 | 0 |
| Primary school (PS) | 0 | 0 | 0 |
| Secondary school (SS) | 1 | 0 | 0 |
| Residential care home for the elderly | 0 | 2 | 1 |
| Residential care home for persons with disabilities | 0 | 1 | 0 |
| Others | 0 | 0 | 0 |
| <i>Total number of outbreaks</i> | 1 | 3 | 1 |
| <i>Total number of persons affected</i> | 5 | 18 | 3 |

Surveillance of severe and fatal COVID-19 cases

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

In week 45, the weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 6 as compared to 17 in the preceding week. (Figure 1.4)

Since Jan 30, 2023, the cumulative number of fatal cases with cause of death preliminarily assessed to be related to COVID-19 was 998 (as of Nov 11, 2023).

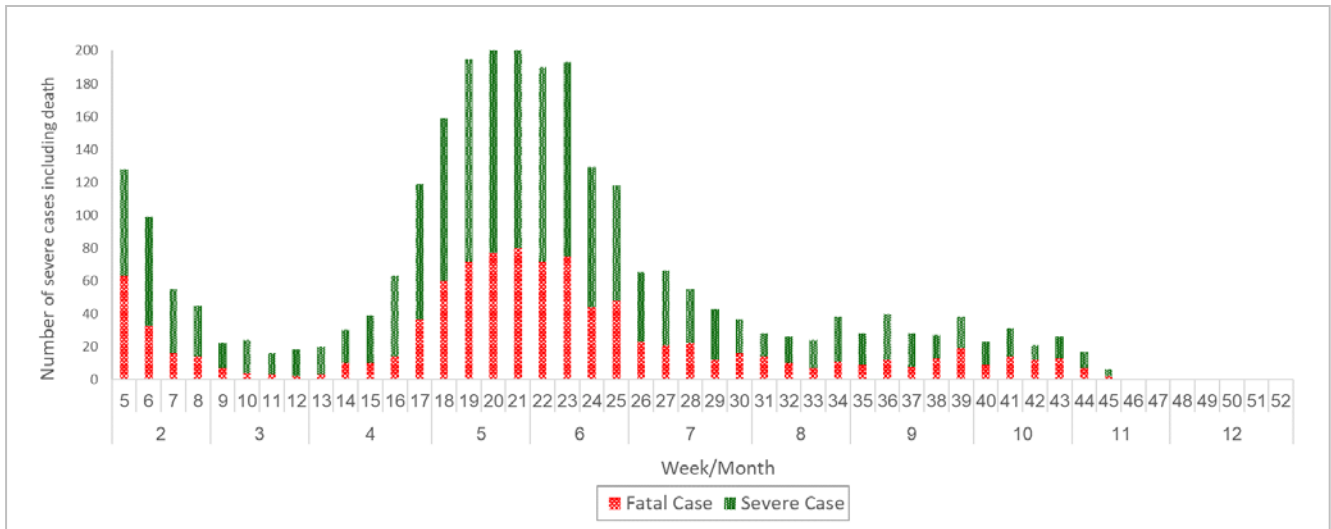


Figure 1.4 Weekly number of severe COVID-19 cases including deaths

Sewage surveillance of SARS-CoV-2 virus

In week 45, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 116,000 copy/L as compared to around 130,000 copy/L in the preceding week. (Figure 1.5)

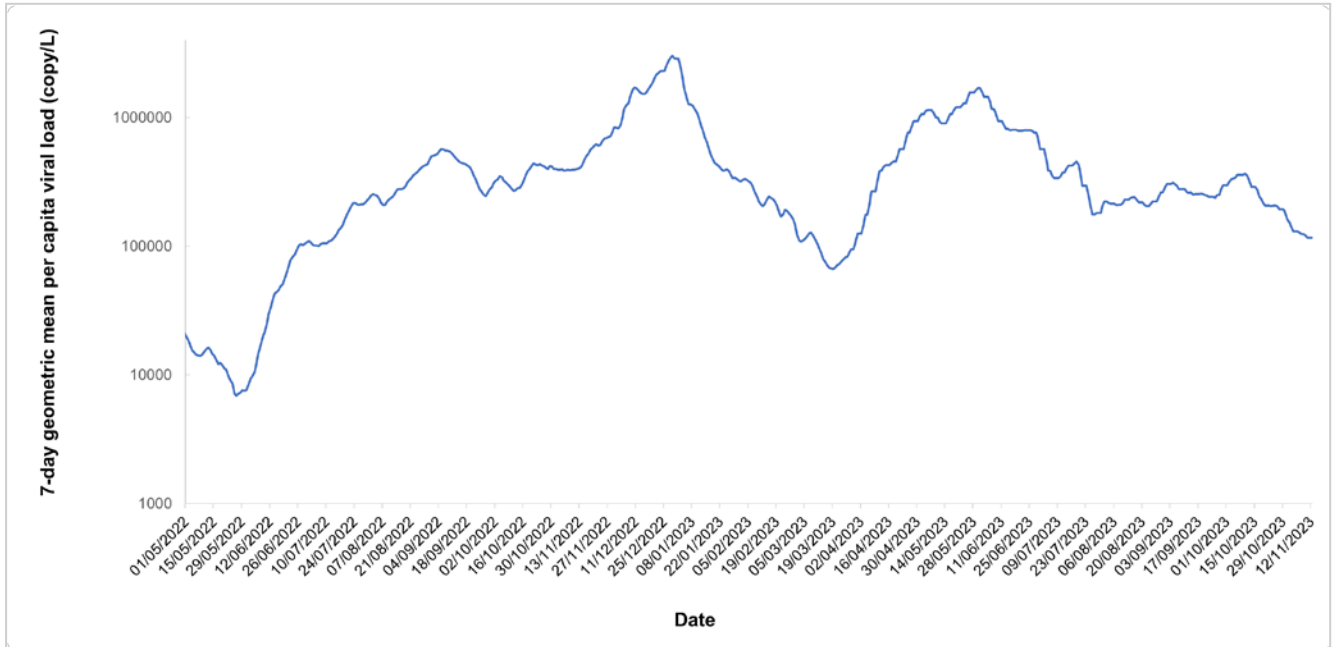


Figure 1.5 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

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

In week 45, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 10.4 (Figure 1.6) and 2.5 (Figure 1.7) COVID-19 cases per 1,000 consultations, respectively.

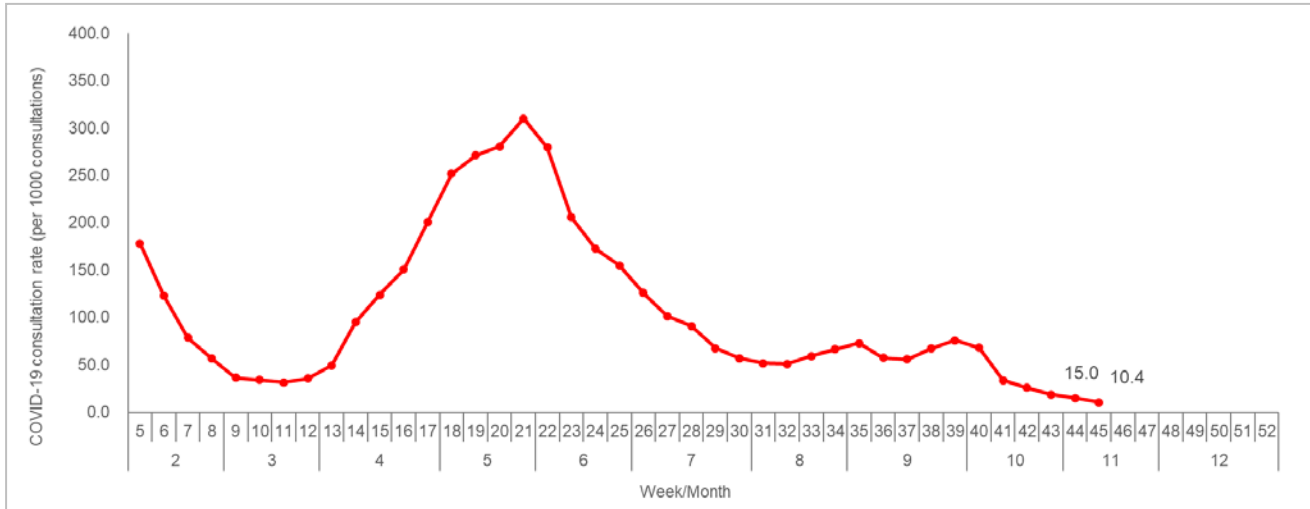


Figure 1.6 Average consultation rate of COVID-19 cases in GOPC

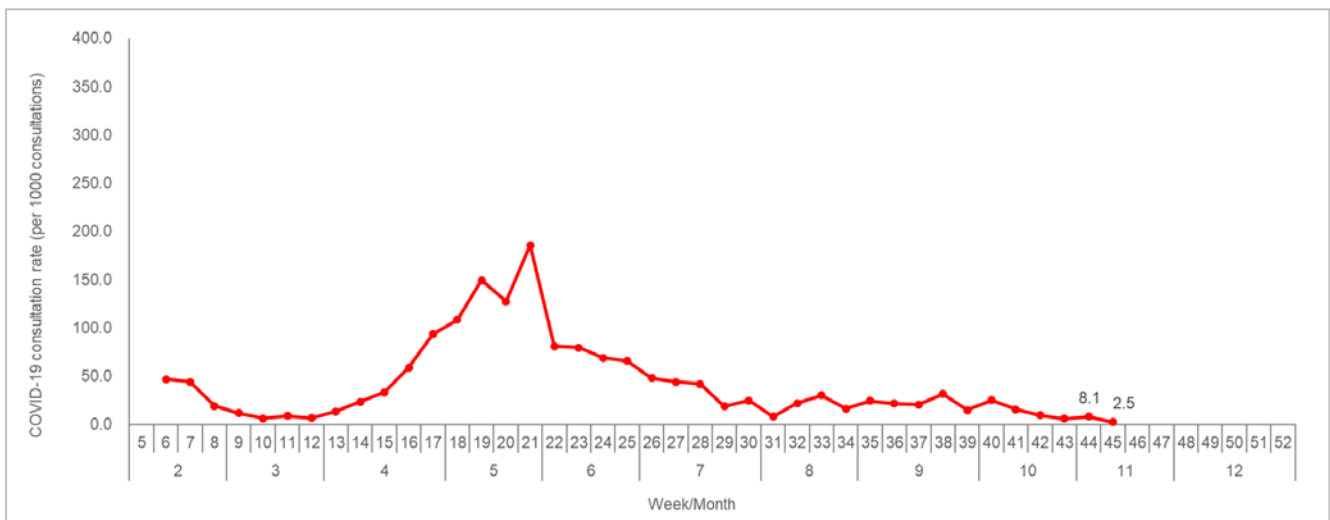


Figure 1.7 Average consultation rate of COVID-19 cases in private medical practitioner clinics

Surveillance on SARS-CoV-2 variants

The Centre for Health Protection (CHP) conducts surveillance on SARS-CoV-2 variants from sewage samples. The latest surveillance data (as of Nov 8, 2023) showed that XBB and its descendant lineages continue to be the most prevalent variant, comprising around 99% of all characterised specimens. These XBB sublineages included XBB.1.9.1, XBB.1.9.2^, XBB.1.5 and others. (Figure 1.8)

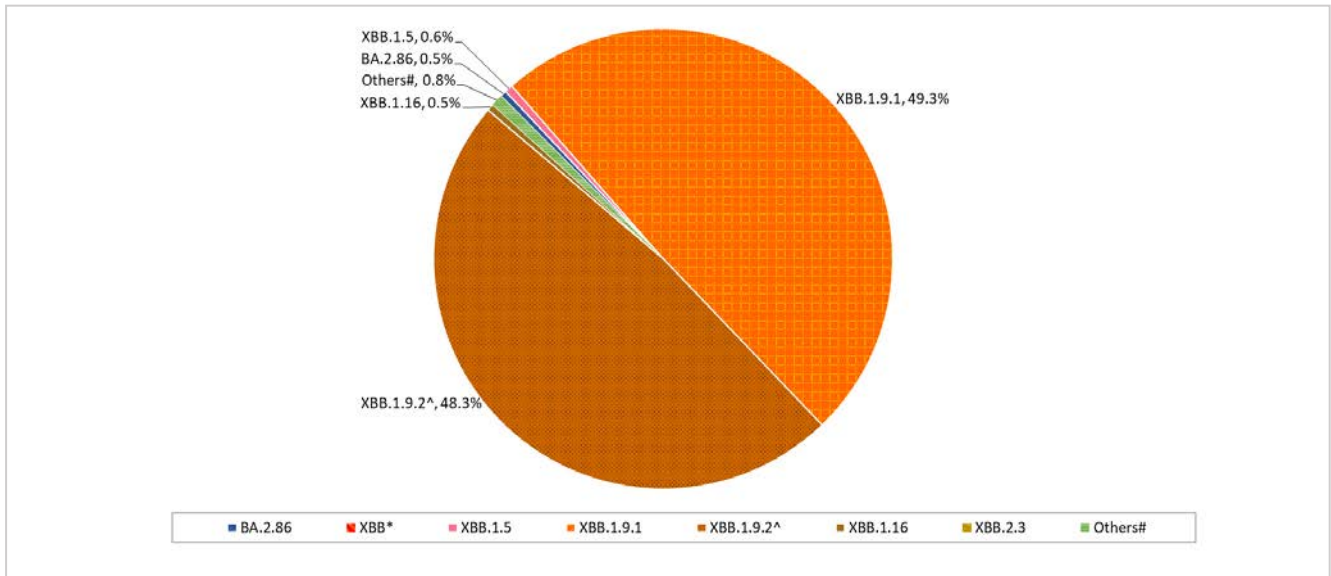


Figure 1.8 Estimated proportion of variants among sewage samples

* Includes descendant lineages, except those individually specified elsewhere in the graph

^ Including EG.5 and its descendant lineages

Those SARS-CoV-2 variants not classified as variants of interest (VOIs)/variants under monitoring (VUMs) by World Health Organisation (WHO)

CHP also conducted genetic characterisation of 107 specimens obtained from reported severe and fatal cases of COVID-19 between Sep 26 and Oct 24, 2023. The result showed that XBB and its descendant lineages continue to be the most prevalent variant, comprising over 99% of all characterised specimens. These XBB sublineages included XBB*, XBB.1.9.2^ and XBB.1.9.1. (Figure 1.9)

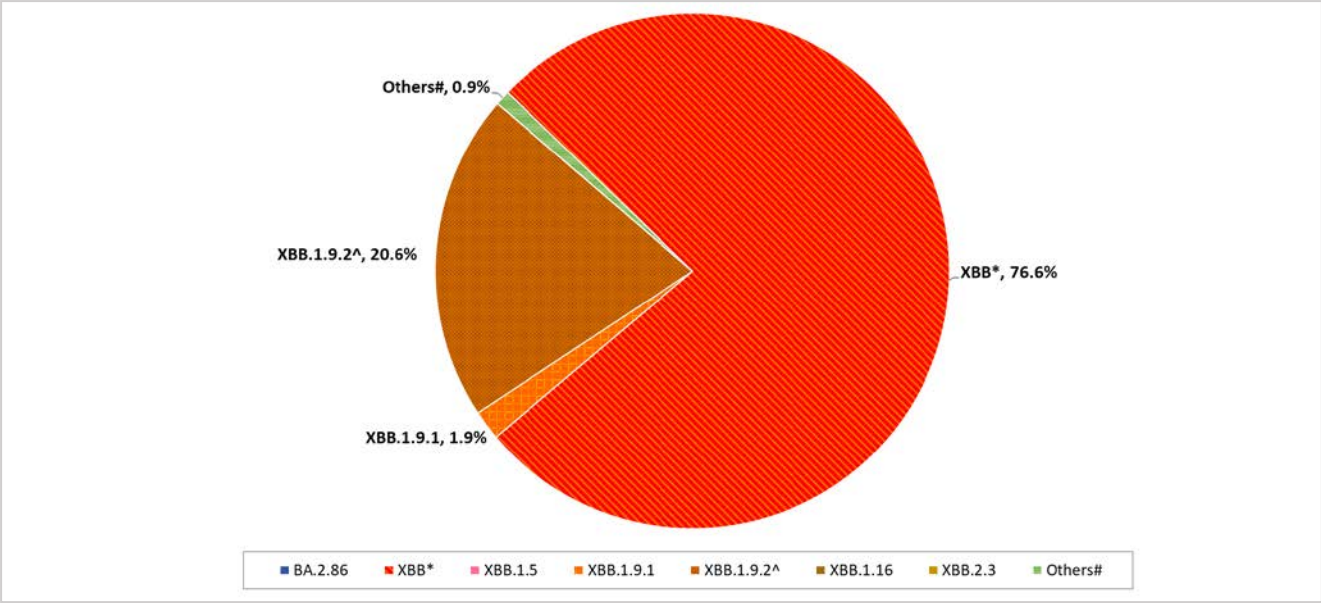


Figure 1.9 Proportion of variants among specimens obtained from reported severe and death cases for COVID-19

* Includes descendant lineages, except those individually specified elsewhere in the table.

^ Including EG.5 and its descendant lineages

Those SARS-CoV-2 variants not classified as VOIs/VUMs by WHO

Global situation of COVID-19 activity

- Globally, as of Nov 8, 2023, there have been 771,820,937 confirmed cases of COVID-19, including 6,978,175 deaths, reported to WHO.
- According to WHO COVID-19 weekly epidemiological update last published on Oct 27, 2023,
 - ◆ Over 500 000 new cases and over 4700 deaths were reported in the last 28 days (Sep 25 to Oct 22, 2023) globally.
 - ◆ The highest numbers of new 28-day cases were reported from Italy, Russia, Singapore, the United Kingdom (UK) and Romania. The highest numbers of new 28-day deaths were reported from India (primarily due to retrospective adjustment), Italy, Russia, Sweden 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.
 - ◆ Currently, WHO is monitoring three VOIs, which are EG.5, XBB.1.5 and XBB.1.16, and six VUMs, which are BA.2.86, DV.7, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3.
 - ◆ On 23 October 2023, BA.2.75 was removed from the list of VUMs due to its low global prevalence over the past eight weeks. Similarly, CH.1.1 has been replaced on the list of VUMs by one of its descendent lineages, DV.7, as it has shown an increase in its global prevalence over the last five weeks.
 - ◆ Between Oct 2 and Oct 8, 2023, EG.5 is the most prevalent variant globally, accounting for 45.8% compared to 38.8% between Sep 4 and Sep 10, 2023. During the same period, the prevalence of XBB.1.16 and XBB.1.5 decreased from 20.2% and 9.7% to 16.7% and 9.0% respectively. Among the VUMs, the prevalence of BA.2.86 and DV.7 showed slight increase while other VUMs have shown decreasing or stable trends.

Sources:

1. [WHO COVID-19 dashboard](#), accessed on Nov 16, 2023
2. [World Health Organization COVID-19 weekly epidemiological update](#)

Local Situation of Influenza Activity (as of Nov 15, 2023)

Reporting period: Nov 5 – 11, 2023 (Week 45)

- The latest surveillance data showed that the overall local seasonal influenza activity continued to decrease and remained at a low level.
- Influenza can cause serious illnesses in high-risk individuals and even healthy persons. Although this summer influenza season has ended, based on historical data, influenza season usually arrives in winter months (in late 2023 to early 2024). 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.
- The Seasonal Influenza Vaccination Subsidy Scheme (VSS) 2023/24 has been launched since September 28, whereas the Government Vaccination Programme (GVP), Seasonal Influenza Vaccination School Outreach (Free of Charge) Programme and the Residential Care Home Vaccination Programme have been launched since October 5. The public may visit the CHP's Vaccination Schemes page for more details of the vaccination programmes (<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 45, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 5.5 ILI cases per 1,000 consultations, which was higher than 5.4 recorded in the previous week (Figure 2.1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 40.9 ILI cases per 1,000 consultations, which was higher than 35.5 recorded in the previous week (Figure 2.1, right).

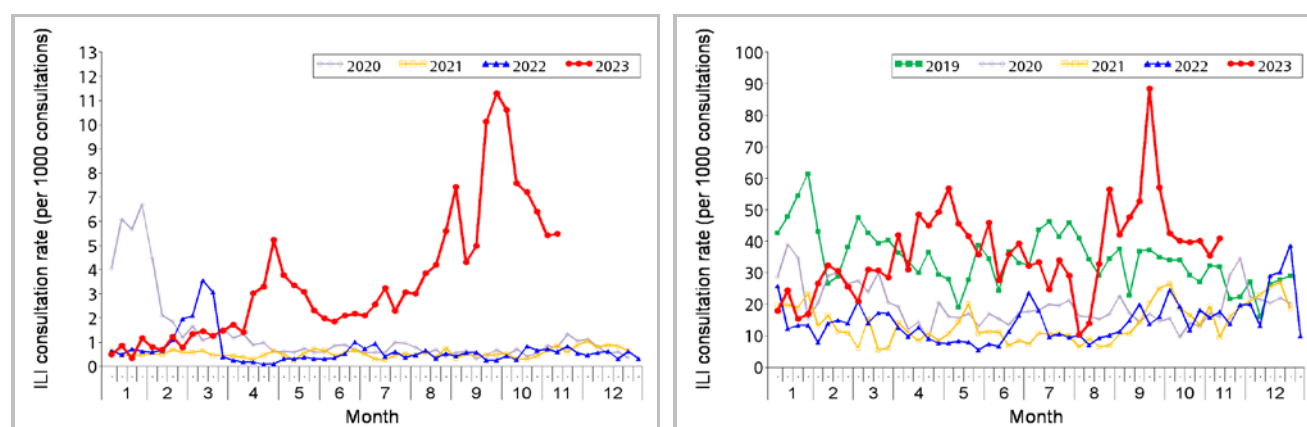


Figure 2.1 ILI consultation rates at sentinel GOPC (2020-23) (left) and PMP clinics (2019-23) (right)

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 7,228 respiratory specimens received in week 45, 267 (3.69%) were tested positive for seasonal influenza A or B viruses. These positive detections include 23 (9%) influenza A(H1), 194 (74%) influenza A(H3) and 45 (17%) influenza B viruses. The positive percentage (3.69%) was below the baseline threshold of 9.21% and was lower than 4.24% recorded in the previous week (Figure 2.2).

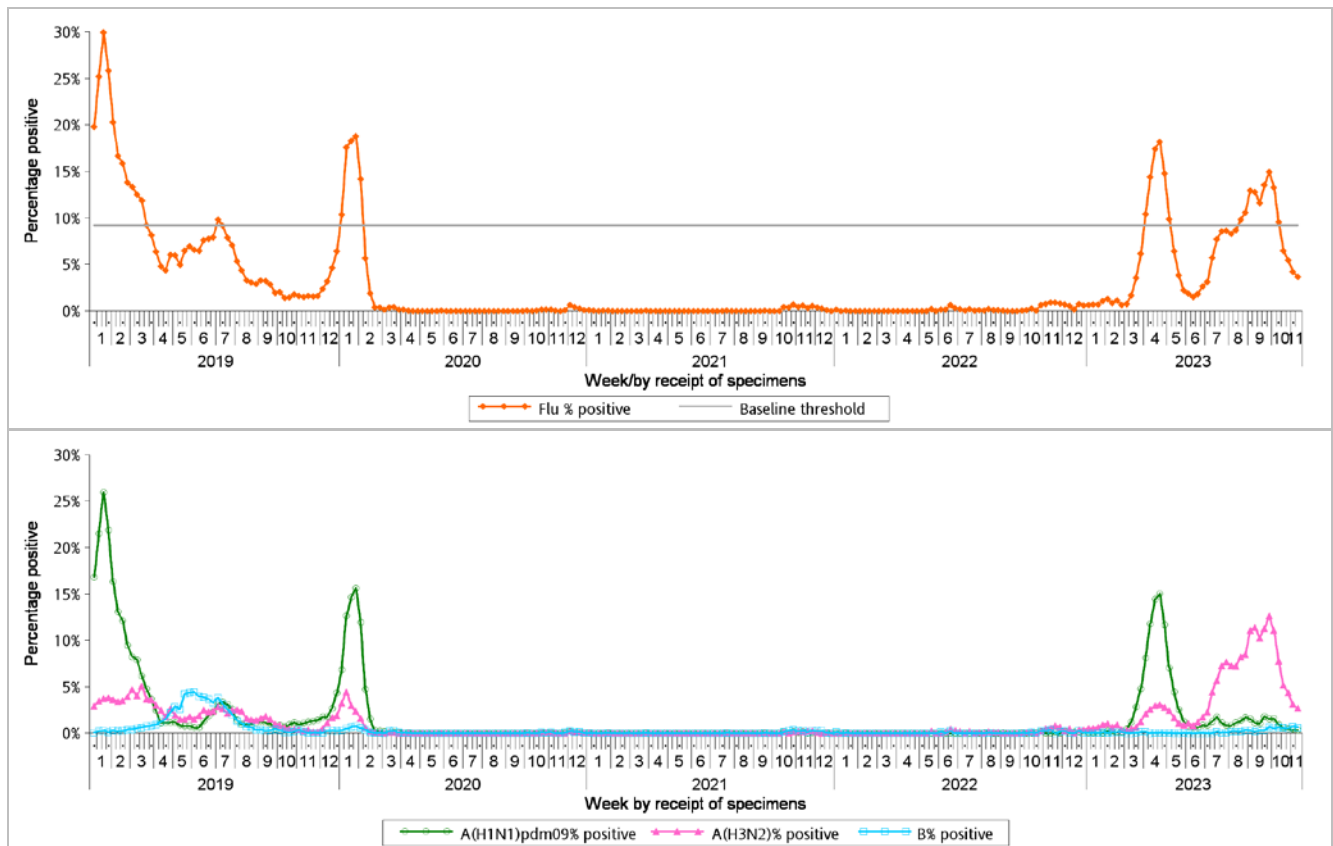


Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2019-23 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 September 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 6,188 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 1,040 specimens received by the Hospital Authority

Influenza-like illness outbreak surveillance, 2019-23

In week 45, 24 ILI outbreaks occurring in schools/institutions were recorded (affecting 107 persons), as compared to 9 outbreaks recorded in the previous week (affecting 42 persons) (Figure 2.3). In the first 4 days of week 46 (Nov 12 to 15), 13 ILI outbreaks occurring in schools/institutions were recorded (affecting 64 persons).

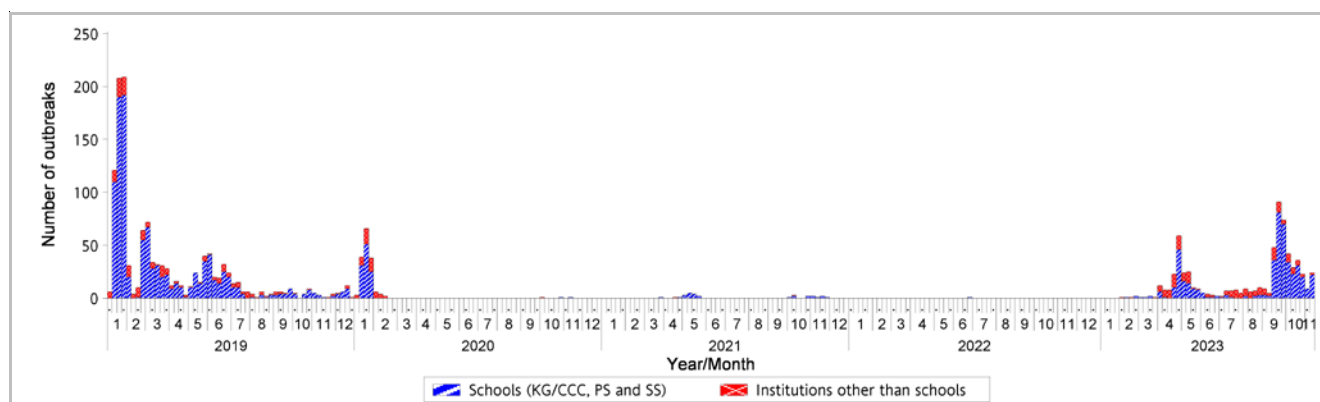


Figure 2.3 ILI outbreaks in schools/institutions, 2019-23

| Type of institutions | Week 44 | Week 45 | First 4 days of week 46 (Nov 12 – 15) |
|---|---------|---------|--|
| Child care centre/ kindergarten (CCC/KG) | 1 | 1 | 1 |
| Primary school (PS) | 7 | 17 | 9 |
| Secondary school (SS) | 1 | 4 | 1 |
| Residential care home for the elderly | 0 | 2 | 0 |
| Residential care home for persons with disabilities | 0 | 0 | 0 |
| Others | 0 | 0 | 2 |
| <i>Total number of outbreaks</i> | 9 | 24 | 13 |
| <i>Total number of persons affected</i> | 42 | 107 | 64 |

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

In week 45, the overall admission rate in public hospitals with principal diagnosis of influenza was 0.14 (per 10,000 population), which was below the baseline threshold of 0.25 and was lower than 0.22 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 0.68, 0.26, 0.43, 0.06, 0.07 and 0.20 cases (per 10,000 people in the age group) respectively, as compared to 1.35, 0.55, 0.32, 0.08, 0.03 and 0.42 cases in the previous week (Figure 2.4).

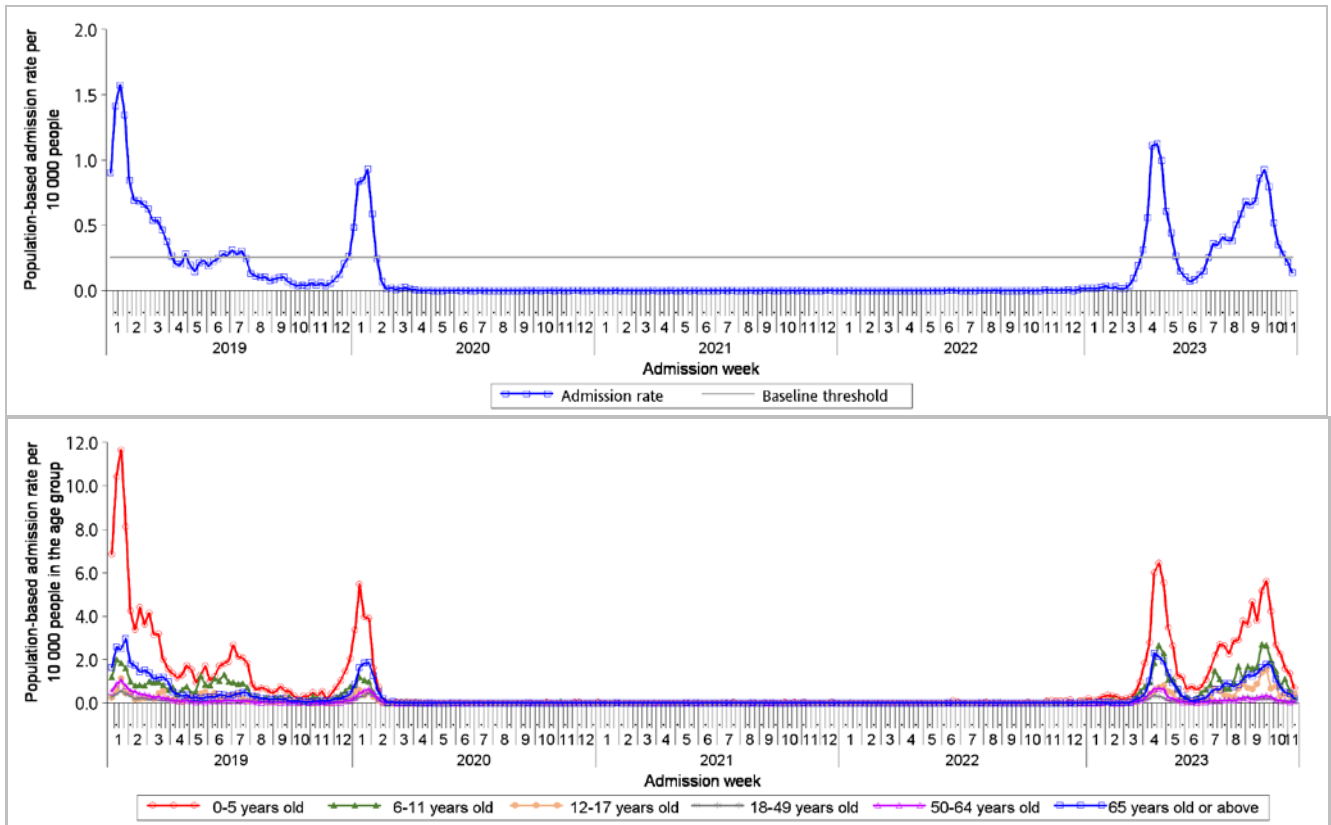


Figure 2.4 Influenza-associated hospital admission rates, 2019-23 (upper: overall rate, lower: rates by age groups)

[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 45, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 162.9 (per 1,000 coded cases), which was higher than the rate of 160.6 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.

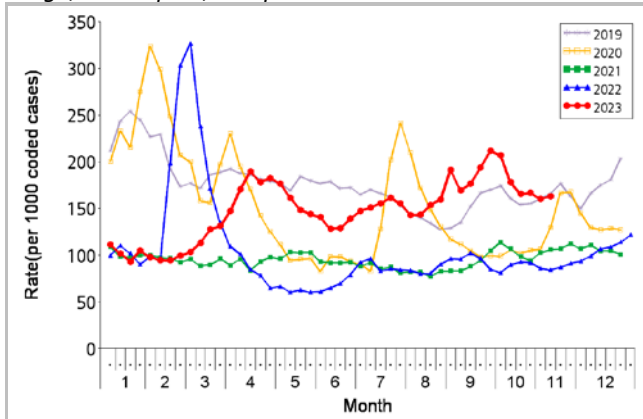


Figure 2.5 Rate of ILI syndrome group in AEDs, 2019-23

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

In week 45, 1.46% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 1.15% recorded in the previous week (Figure 2.6).

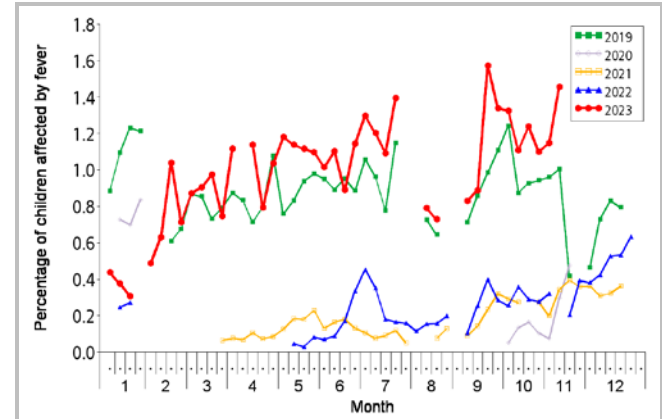


Figure 2.6 Percentage of children with fever at sentinel CCCs/KGs, 2019-23

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

In week 45, 0.07% 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 2.7).

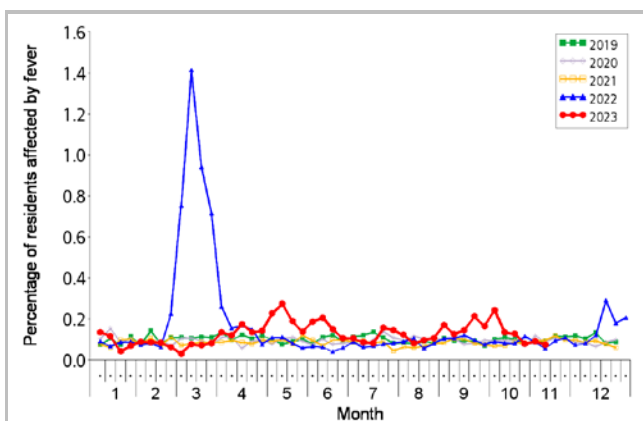


Figure 2.7 Percentage of residents with fever at sentinel RCHes, 2019-23

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

In week 45, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.67 ILI cases per 1,000 consultations as compared to 0.80 recorded in the previous week (Figure 2.8).

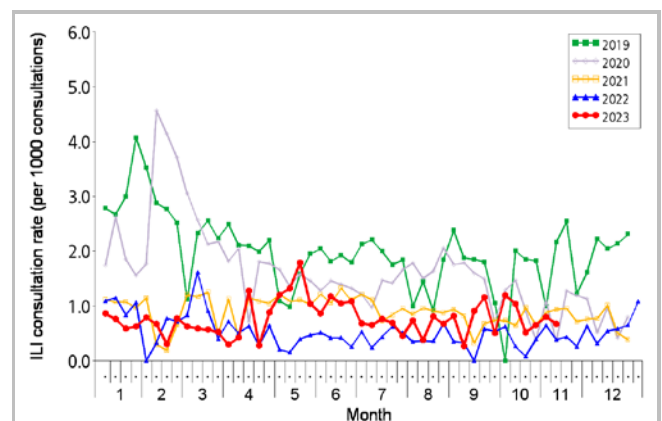


Figure 2.8 ILI consultation rate at sentinel CMPs, 2019-23

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 45, 18 adult cases of ICU admission/death with laboratory confirmation of influenza were recorded (including 10 deaths) as compared to 16 cases (including 10 deaths) recorded in the previous week.

| Week | Influenza type | | | |
|---------|----------------|-------|---|---------------------|
| | A(H1) | A(H3) | B | A (pending subtype) |
| Week 44 | 1 | 13 | 0 | 2 |
| Week 45 | 3 | 13 | 0 | 2 |

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

- In week 45 and the first 4 days of week 46 (Nov 12 – 15), there was 1 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 |
|----------------|----------|------|------------------|-------------|-------------------|--|
| 45 | 15 years | Male | Severe pneumonia | No | Influenza A(H3) | No |

- In 2023, 25 paediatric cases of severe influenza-associated complication/death were recorded, in which 5 of them were fatal (as of Nov 15, 2023).

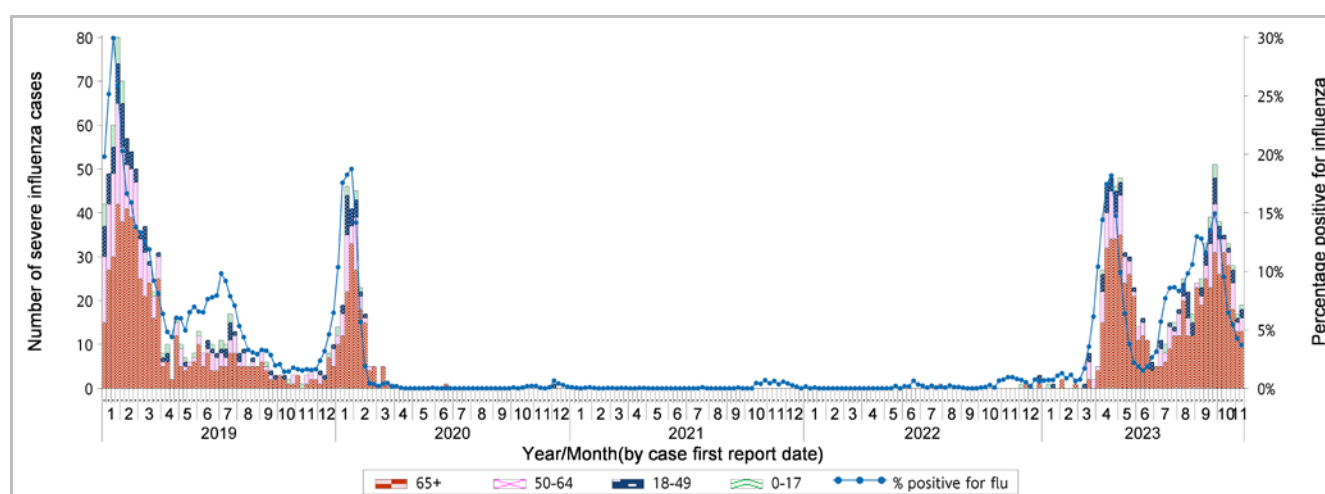


Figure 2.9 Weekly number of severe influenza cases by age groups, 2019-23 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

Global Situation of Influenza Activity

Globally, influenza detections remained low. In the temperate zones of the northern hemisphere, indicators of influenza activity were reported at low levels or below seasonal threshold in most reporting countries. But increased influenza activity was reported in parts of Eastern and Western Asia. Detections were predominantly influenza A(H3N2) followed by influenza A(H1N1)pdm09 and B viruses. (data up to Oct 15, 2023).

- In the United States (week ending Nov 4, 2023), influenza activity was increasing in most parts of the country. The percentage of specimens tested positive for influenza was 3.0%. The percentage of out-patient visits for ILI increased to 2.9%, which was at the national baseline.
- In Canada (week ending Nov 4, 2023), influenza activity remained low and below seasonal threshold levels. The weekly percentage of tests positive for influenza was 2.3% in week 44.
- In the United Kingdom (week ending Oct 29, 2023), influenza activity remained low and stable. Influenza positivity was 1.3% as compared to 1.2% in the previous week. The weekly ILI consultation rate in England slightly decreased to 3.2 from 3.5 per 100,000 population in preceding week, and was within baseline activity levels.
- In Europe (week ending Nov 5, 2023), the influenza activity remained low. The percentage of sentinel specimens tested positive for influenza remained below the 10% epidemic threshold and stable at 1% as compared to 2% in preceding week.
- In Mainland China (week ending Nov 5, 2023), influenza surveillance data showed that influenza detections in southern and northern provinces continued to increase. Influenza A(H3) viruses were predominating and co-circulating with influenza B/Victoria viruses. The percentage of specimens tested positive for influenza in the southern and northern provinces were 22.5% and 11.4% respectively.
- In Taiwan (week ending Nov 4, 2023), influenza was in an epidemic period. Influenza activity was on an decreasing trend. The percentage of specimens tested positive for influenza in week 43 was 13.1%. Most of the influenza detections in the past 4 weeks were influenza A(H3) (69.7%), followed by influenza A(H1) (27.6%) and influenza B (2.6%) viruses.
- In Japan (week ending Nov 5, 2023), the average number of reported ILI cases per sentinel site continued to increase to 21.13 from 19.68 in the preceding week, which was above the baseline level of 1.00. Influenza A(H3) viruses were predominating.
- In Korea (week ending Nov 4, 2023), the weekly ILI rate increased and remained high. The rate in week 44 was 39.0 per 1,000 out-patient visits, which was above the season epidemic threshold of 6.5. In week 44, 105 out of 347 respiratory specimens (30.3%) were tested positive for influenza (including 90 influenza A(H1N1)pdm09, 13 influenza A(H3N2) and 2 influenza B).
- In Singapore (week ending Nov 4, 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 12.3% in the past 4 weeks. Majority of the influenza detections in October were influenza A(H3N2) viruses (57.9%), followed by influenza A(H1N1) (26.9%), and influenza B viruses (14.6%).

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 Disease Control and Prevention Agency](#) and [Singapore Ministry of Health](#).