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COVID-19 & FLU EXPRESS

衞生防護中心 Centre for Health Protection
保障市民健康 Protecting Hong Kong's health

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 Jan 17, 2024)

Reporting period: Jan 7 – Jan 13, 2024 (Week 2)

- The latest surveillance data showed that the overall local activity of COVID-19 has increased over the past weeks.
- Concerning the monitoring of SARS-CoV-2 variants, the latest surveillance data showed that JN.1 has become the most prevalent variant. However, the current evidence does not suggest JN.1 will cause a more severe disease than the previous prevalent XBB and its descendant lineages.
- 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 (e.g. persons with underlying medical conditions or persons who are immunocompromised) should adopt additional measures to protect themselves such as wearing mask properly when going to public places. For other 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).
- 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 2, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 579 as compared to 538 in the preceding week. (Figure 1.1)

In the first 4 days of week 3 (Jan 14 – Jan 17), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 64 to 89.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 50,325 (as of Jan 17, 2024).

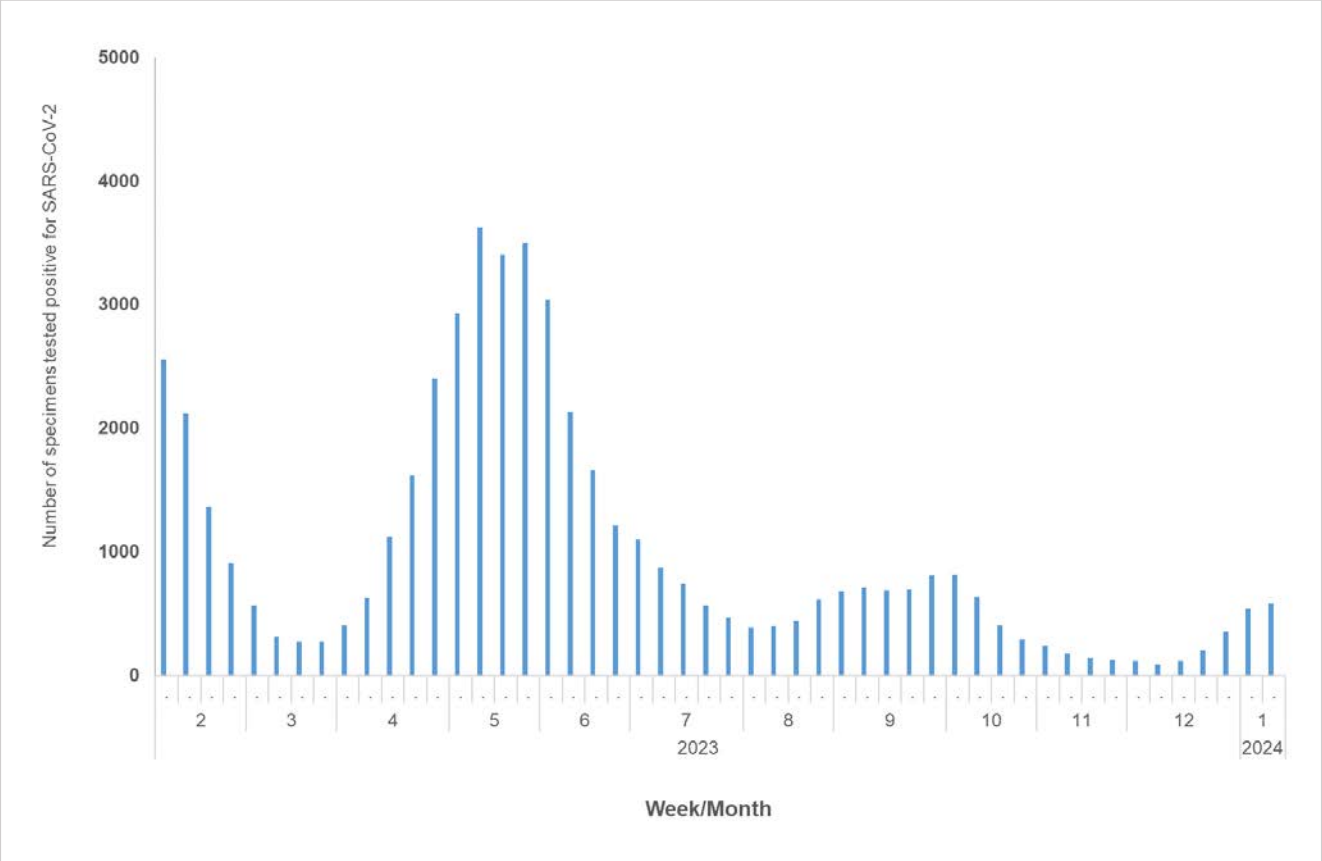

Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

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

Among the 7,400 respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 2, 542 (7.32%) were tested positive for SARS-CoV-2 virus as compared to 483 (6.80%) in the preceding week. (Figure 1.2)

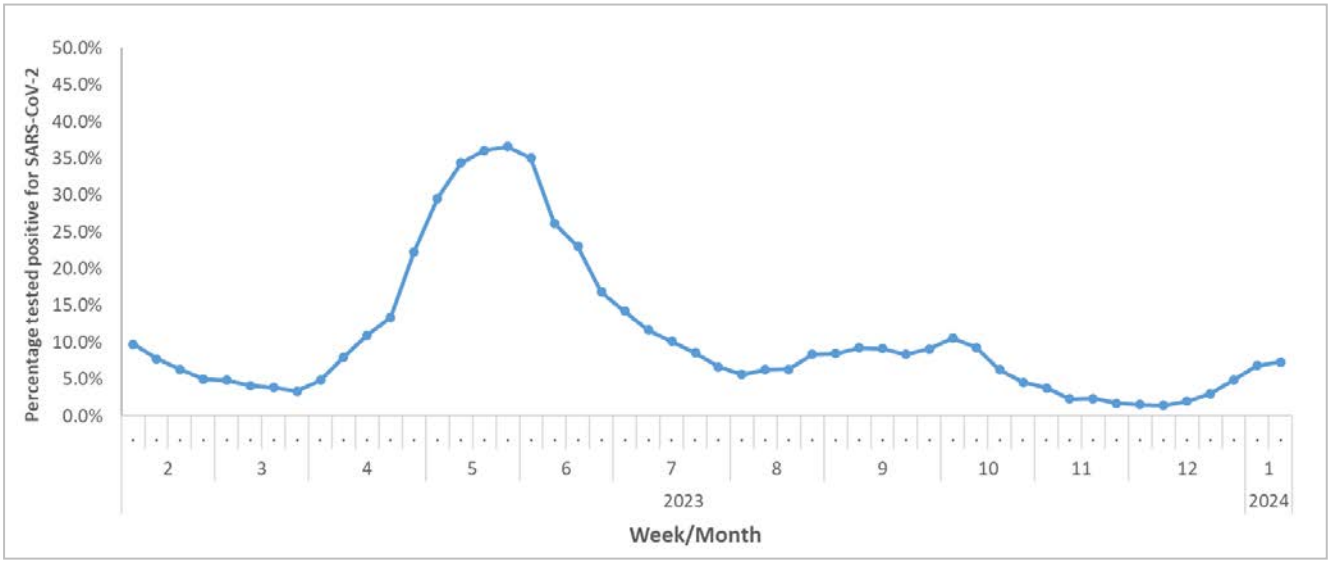

Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

COVID-19 outbreak surveillance

In week 2, 9 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 43 persons), as compared to 6 outbreaks recorded in the previous week (affecting 29 persons). (Figure 1.3)

In the first 4 days of week 3 (Jan 14– Jan 17), 7 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 25 persons).

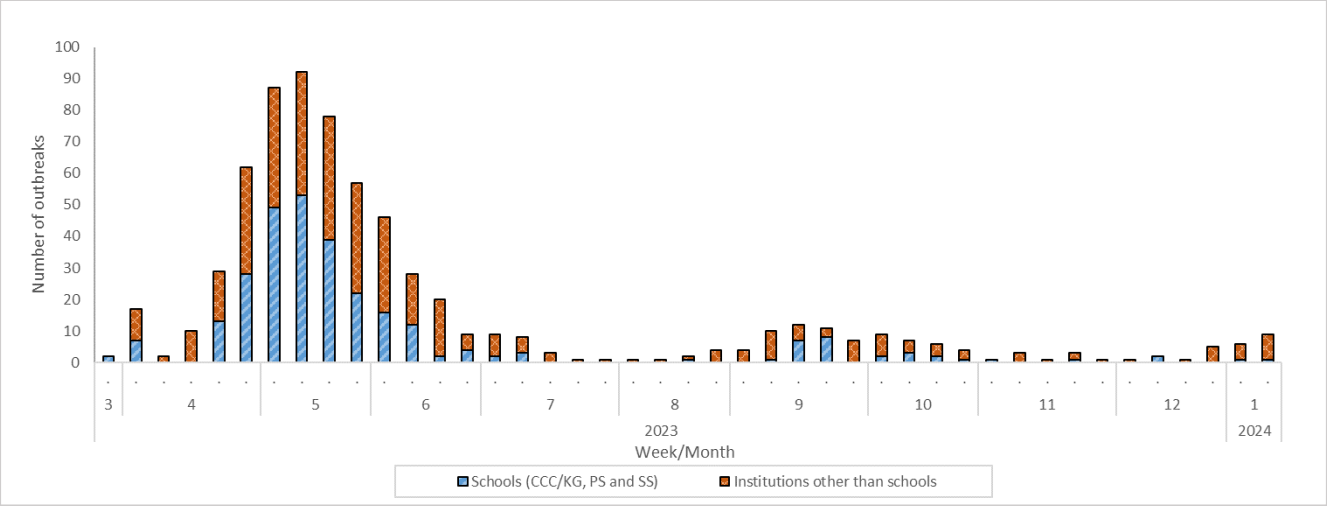

Figure 1.3 COVID-19 outbreaks in schools/institutions

Type of institutions	Week 1	Week 2	First 4 days of week 3 (Jan 14 – Jan 17)
Child care centre/ kindergarten (CCC/KG)	0	0	0
Primary school (PS)	0	0	1
Secondary school (SS)	1	1	0
Residential care home for the elderly	4	6	4
Residential care home for persons with disabilities	1	2	1
Others	0	0	1
Total number of outbreaks	6	9	7
Total number of persons affected	29	43	25

Surveillance of severe and fatal COVID-19 cases

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

In week 2, 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 30 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 1,022 (as of Jan 13, 2024).

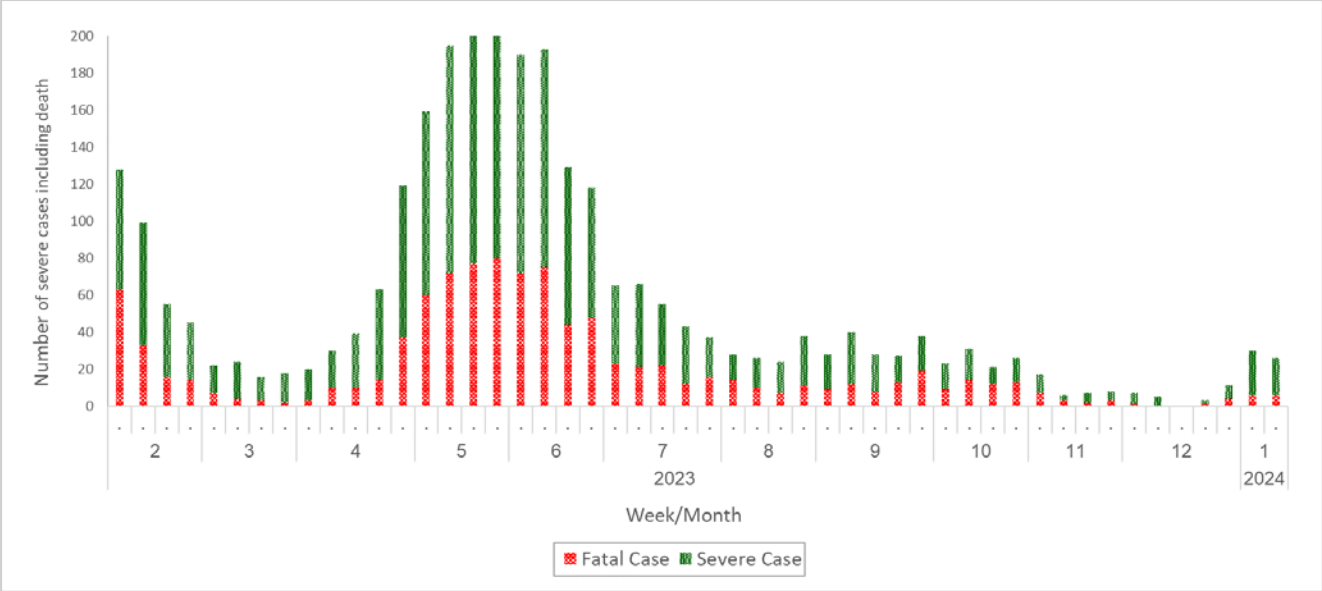

Figure 1.4 Weekly number of severe COVID-19 cases including deaths

Sewage surveillance of SARS-CoV-2 virus

In week 2, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 261,000 copy/L as compared to around 268,000 copy/L in the preceding week. (Figure 1.5)

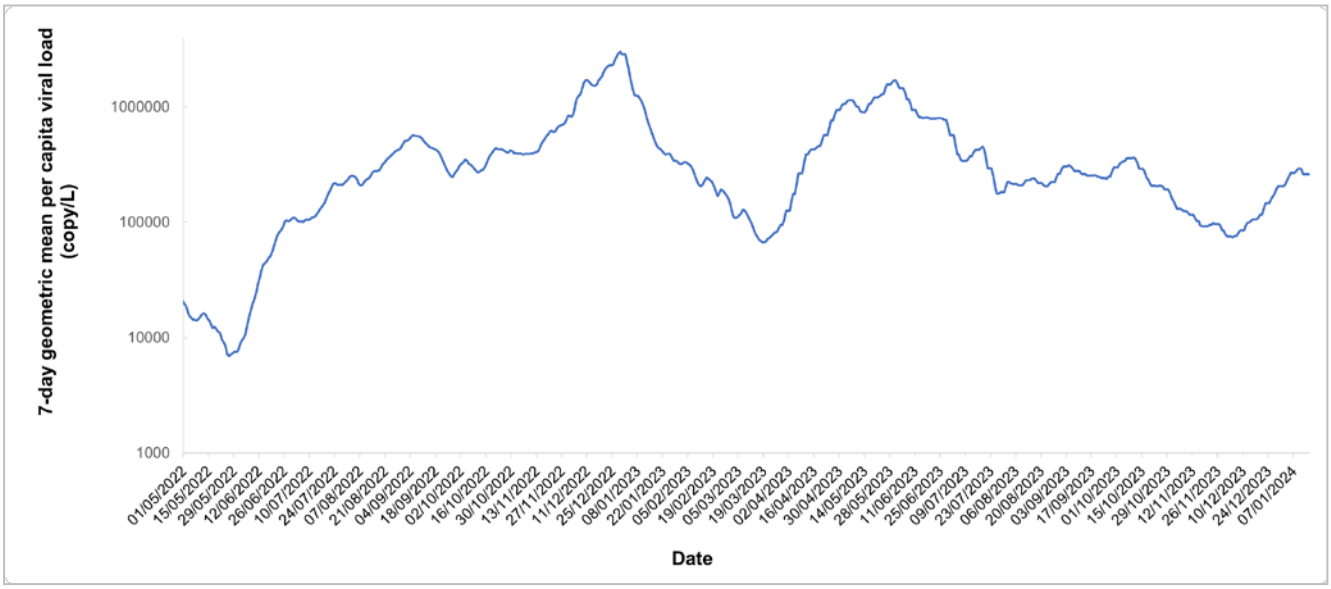

Figure 1.5 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

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

In week 2, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 28.0 (Figure 1.6) and 17.6 (Figure 1.7) COVID-19 cases per 1,000 consultations, respectively.

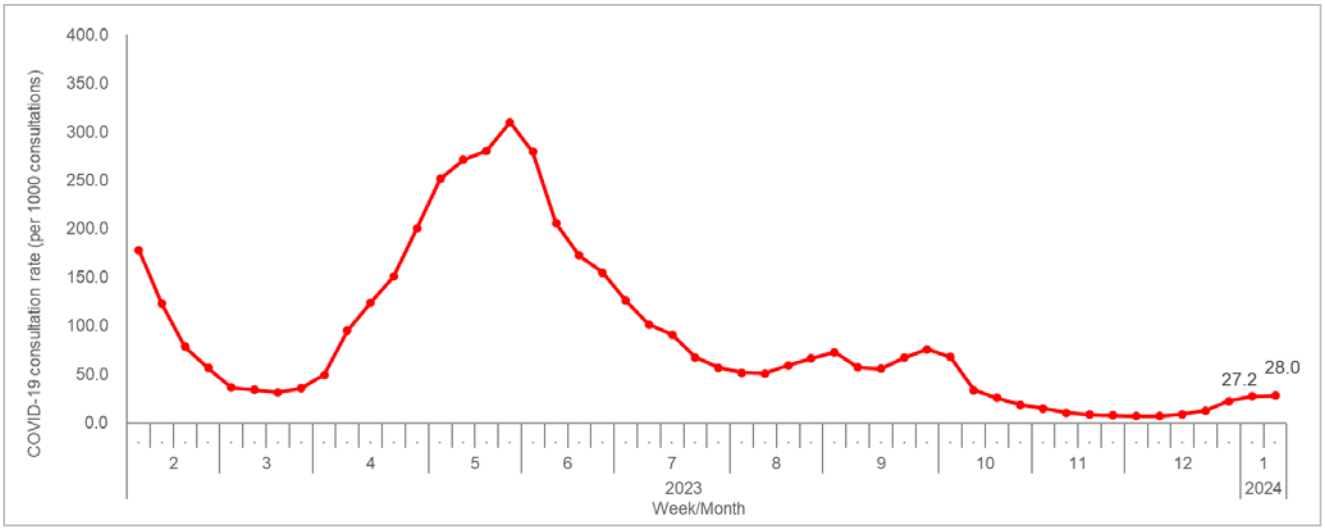

Figure 1.6 Average consultation rate of COVID-19 cases in GOPC

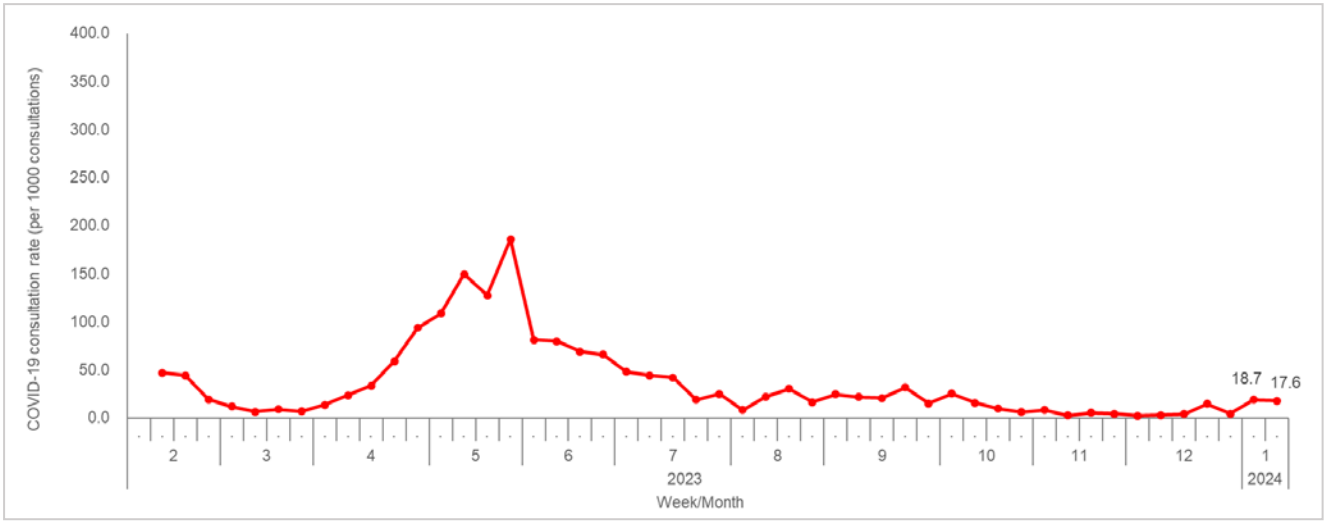

Figure 1.7 Average consultation rate of COVID-19 cases in private medical practitioner clinics

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 Jan 17, 2024) showed that JN.1 and its descendant lineages has become the most prevalent variant, comprising around 94% of all characterised specimens. At the same time, the prevalence of XBB and its descendant lineages decreased, comprising about 5% of all specimens. These XBB sublineages include XBB.1.9.1 and XBB.1.9.2^. (Figure 1.8)

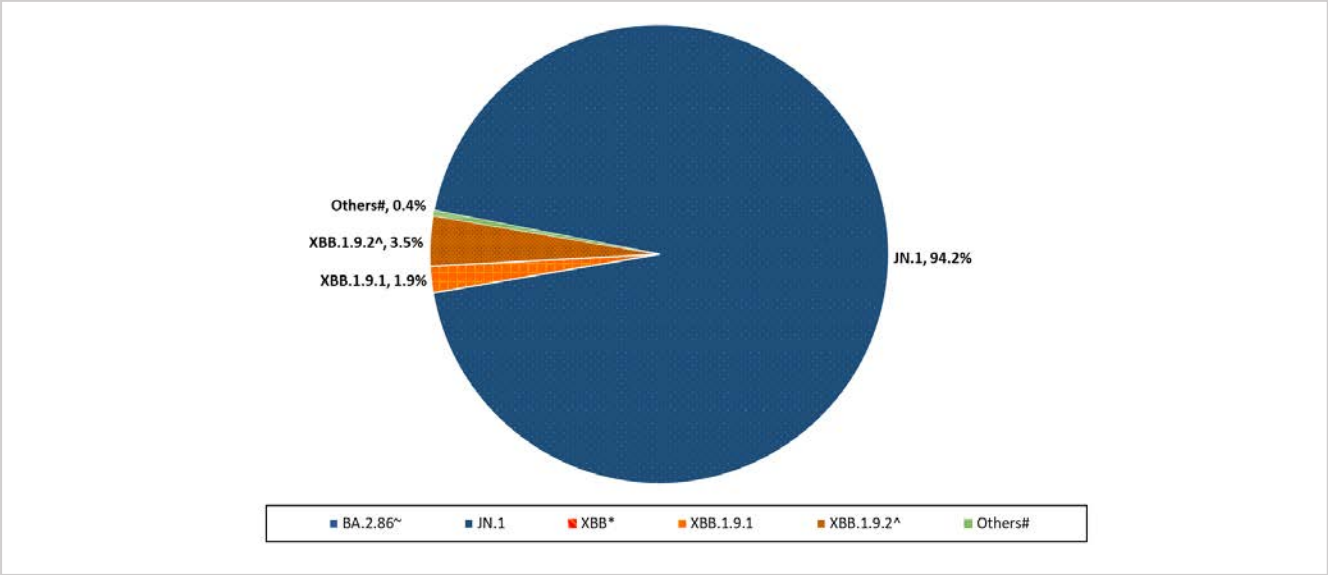

Figure 1.8 Estimated proportion of variants among sewage samples

~ Excluding JN.1 and its descendant lineages

** 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 VOIs/ Variants Under Monitoring (VUMs) by WHO

CHP also conducted genetic characterisation of 33 specimens obtained from reported severe and fatal cases of COVID-19 between Jan 3, 2024 and Jan 16, 2024. The results showed that JN.1 and its descendant lineages has become the most prevalent variant, comprising about 90% of all characterised specimens (30 cases). At the same time, the prevalence of XBB and its descendant lineages decreased, comprising around 10% of all specimens. (Figure 1.9)

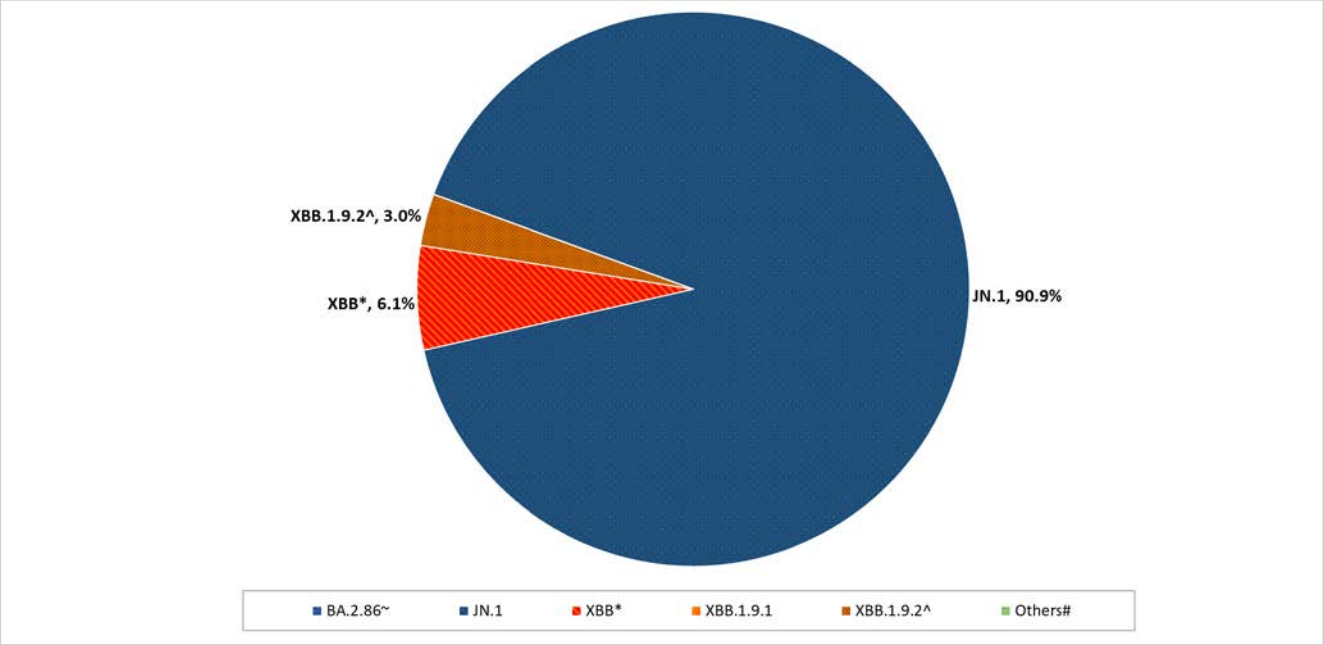

Figure 1.9 Proportion of variants among specimens obtained from reported severe and death cases for COVID-19

~ Excluding JN.1 and its descendant lineages

** 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

Besides, CHP conducted genetic characterisation for the specimens obtained from some non-severe cases of COVID-19 during the same period. The results showed that JN.1 and its descendant lineages are the most prevalent variant, comprising around 87% of all characterised specimens. At the same time, the prevalence of XBB and its descendant lineages decreased, comprising about 13% of all characterised specimens.

Global situation of COVID-19 activity

- Globally, as of Dec 31, 2023, there have been 773,819,856 confirmed cases of COVID-19, including 7,010,568 deaths, reported to WHO.

- According to WHO COVID-19 epidemiological update last published on Dec 22, 2023,
  - Over 850,000 new cases and over 3,000 deaths were reported in the last 28 days (Nov 20 to Dec 17, 2023) globally.
  - The highest numbers of new 28-day cases were reported from Russia, Singapore, Italy, Poland and Australia. The highest numbers of new 28-day deaths were reported from Italy, Sweden, Russia, Australia and Poland.
  - 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 five VOIs, which are BA.2.86, EG.5, JN.1, XBB.1.5 and XBB.1.16, and five VUMs, which are DV.7, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3.
  - On 18 December 2023, JN.1, a sub-lineage of the BA.2.86 Omicron variant, was designated a separate VOI, apart from its parent lineage BA.2.86, due to its rapid increase in prevalence in recent weeks. The available evidence on JN.1 does not suggest additional public health risk or a higher associated disease severity relative to other currently circulating Omicron descendant lineages. Protection by XBB.1.5 monovalent vaccines are likely to be effective against JN.1.
  - Between Nov 27 and Dec 3, 2023, EG.5 is the most prevalent variant globally, accounting for 36.3% compared to 53.7% between Oct 30 and Nov 5, 2023. During the same period, the prevalence of JN.1 and BA.2.86 increased from 3.3% and 4.4% to 27.1% and 5.9% respectively. On the other hand, the prevalence of XBB.1.16 and XBB.1.5 decreased from 9.6% and 8.2% to 4.2% and 7.3% respectively. All VUMs showed decreasing trends over the reporting period.

Sources:

1. WHO COVID-19 dashboard, accessed on Jan 18,2024
2. World Health Organization COVID-19 epidemiological update

Local Situation of Influenza Activity (as of Jan 17, 2024)

Reporting period: Jan 7 – 13, 2024 (Week 2)

- Hong Kong has entered winter influenza season since early January. The latest surveillance data showed that the overall local seasonal influenza activity remained elevated.
- 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.
- The Seasonal Influenza Vaccination Subsidy Scheme (VSS) 2023/24 has been launched since September 28, 2023, 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, 2023. 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, 2020-24

In week 2, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 9.0 ILI cases per 1,000 consultations, which was lower than 10.1 recorded in the previous week (Figure 2.1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 61.7 ILI cases per 1,000 consultations, which was higher than 48.3 recorded in the previous week (Figure 2.1, right).

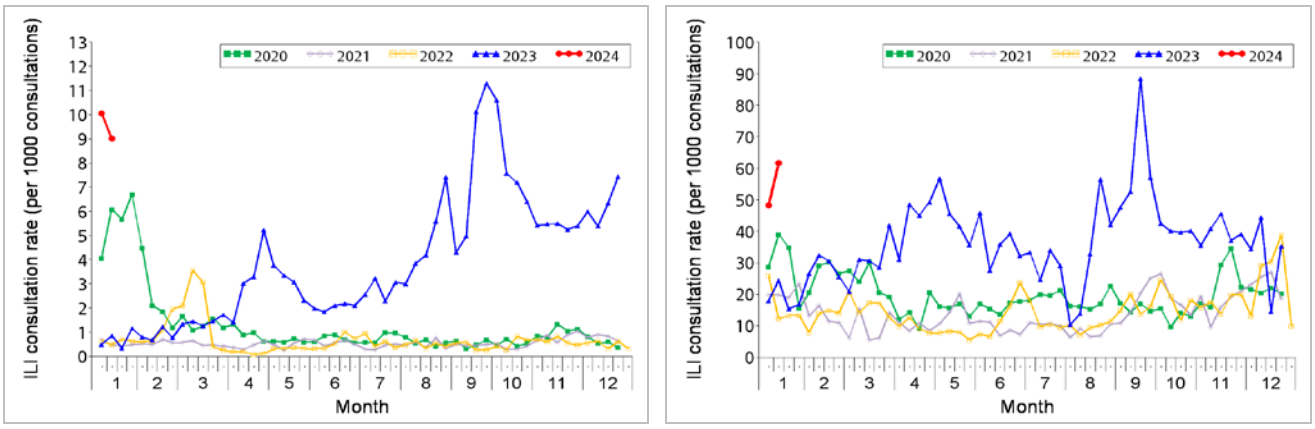

Figure 2.1 ILI consultation rates at sentinel GOPC (left) and PMP clinics (right), 2020-24
Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

Laboratory surveillance, 2020-24

Among the 8,885 respiratory specimens received in week 2*, 948 (10.67%) were tested positive for seasonal influenza A or B viruses. Among the subtyped influenza detections, there were 61 (7%) influenza A(H1), 699 (76%) influenza A(H3) and 163 (18%) influenza B viruses. The positive percentage (10.67%) was above the baseline threshold of 9.21% but was lower than 11.77% recorded in the previous week (Figure 2.2).

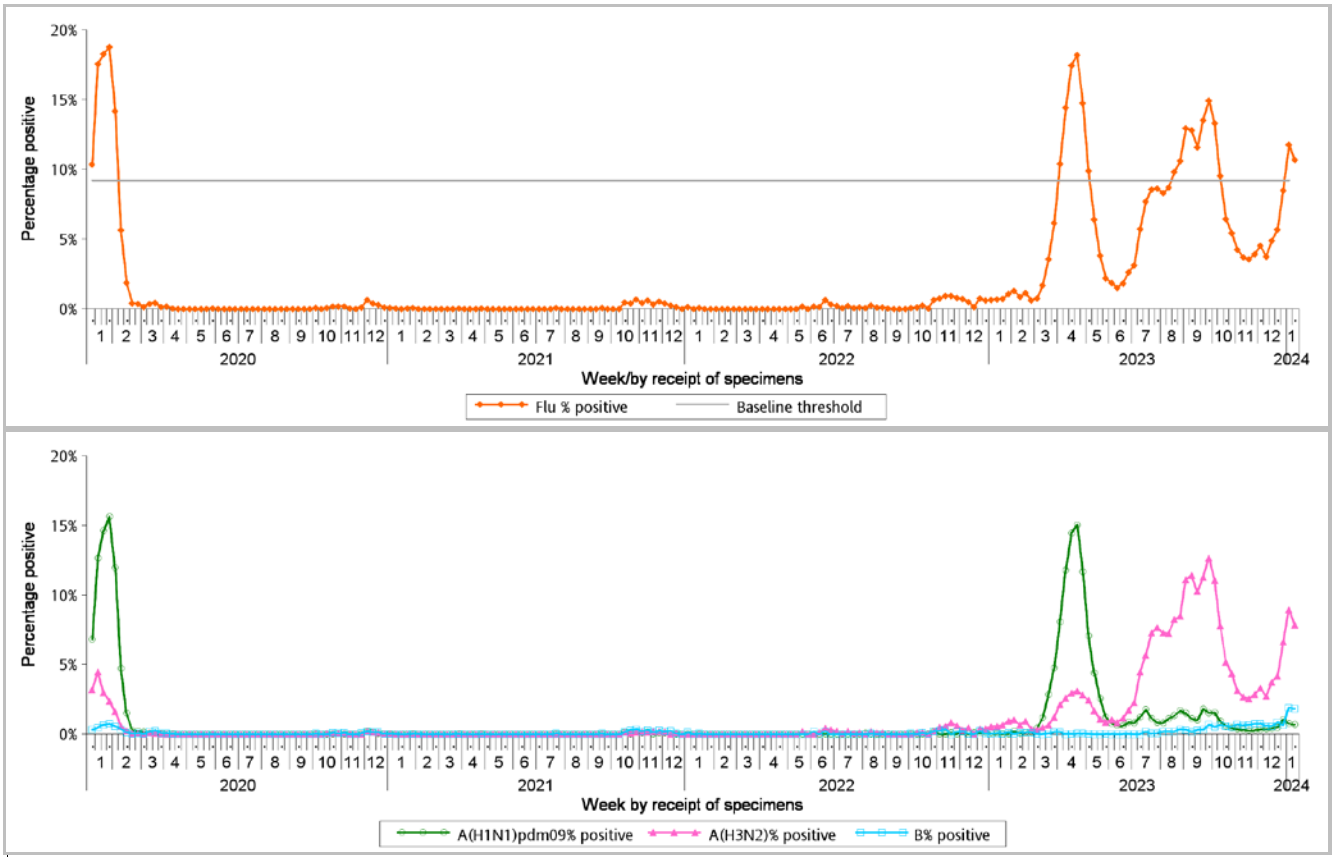

Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2020-24 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 November 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 7,400 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 1,485 specimens received by the Hospital Authority

Influenza-like illness outbreak surveillance, 2020-24

In week 2, 28 ILI outbreaks occurring in schools/institutions were recorded (affecting 115 persons), as compared to 11 outbreaks recorded in the previous week (affecting 56 persons) (Figure 2.3). The overall number was at the low intensity level currently (Figure 2.4*). In the first 4 days of week 3 (Jan 14 to 17), 24 ILI outbreaks occurring in schools/institutions were recorded (affecting 100 persons). Since the start of this influenza season in week 2, 52 outbreaks were recorded (as of Jan 17).

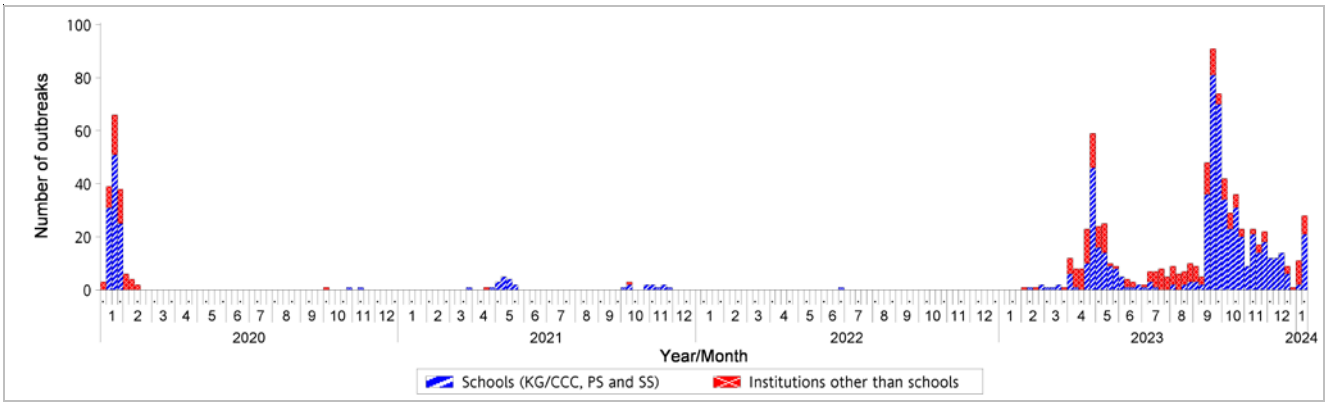

Figure 2.3 ILI outbreaks in schools/institutions, 2020-24

Type of institutions	Week 2	Week 3	Cumulative number of outbreaks in week 2 – 3 (as of Jan 17)
Child care centre/ kindergarten (CCC/KG)	3	3	6
Primary school (PS)	16	16	32
Secondary school (SS)	2	1	3
Residential care home for the elderly	4	1	5
Residential care home for persons with disabilities	1	2	3
Others	2	1	3
Total number of outbreaks	28	24	52
Total number of persons affected	115	100	215

In comparison, 26, 6, 8 and 10 outbreaks were recorded in the same duration of surveillance (1 complete week) in the 2017/18 winter, 2018/19 winter, 2023 April and 2023 summer seasons respectively, as compared with 28 outbreaks in the current season (Figure 2.5).

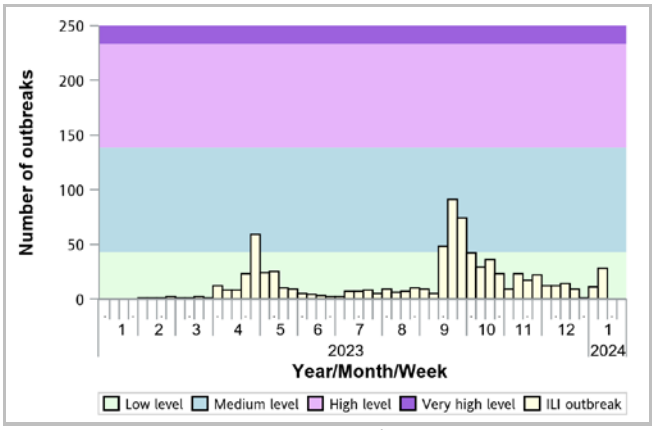

Figure 2.4 ILI outbreaks in schools/institutions, 2023-24

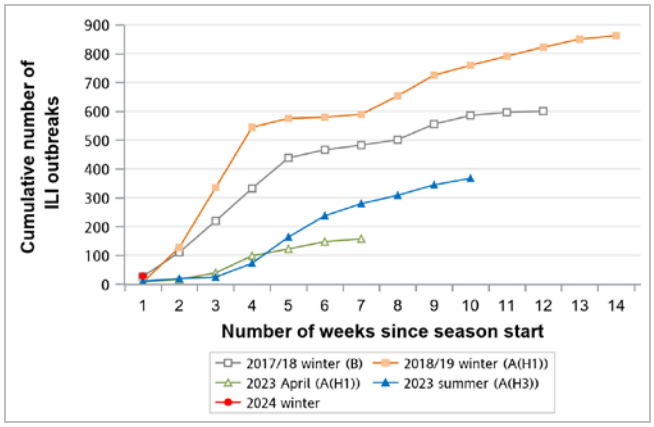

Figure 2.5 Cumulative numbers of ILI outbreaks reported during major influenza seasons, 2018–19 and 2023–24
Note: The predominating virus was shown in bracket.

** Various intensity levels applicable for this year were calculated with the moving epidemic method (MEM) based on the relevant historical data recorded from 2010 week 49 to 2019 week 48. For details, please refer to this webpage: https://www.chp.gov.hk/files/pdf/explanatory_note_for_flux_mem_eng.pdf*

Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2020-24

In week 2, the overall admission rate in public hospitals with principal diagnosis of influenza was 0.55 (per 10,000 population) as compared to 0.77 recorded in the previous week (Figure 2.6). It was above the baseline threshold of 0.25 and was at the low intensity level (Figure 2.7*). 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 2.67, 1.85, 0.54, 0.25, 0.18 and 0.95 cases (per 10,000 people in the age group) respectively, as compared to 4.06, 1.30, 0.80, 0.28, 0.25 and 1.67 cases in the previous week (Figure 2.6).

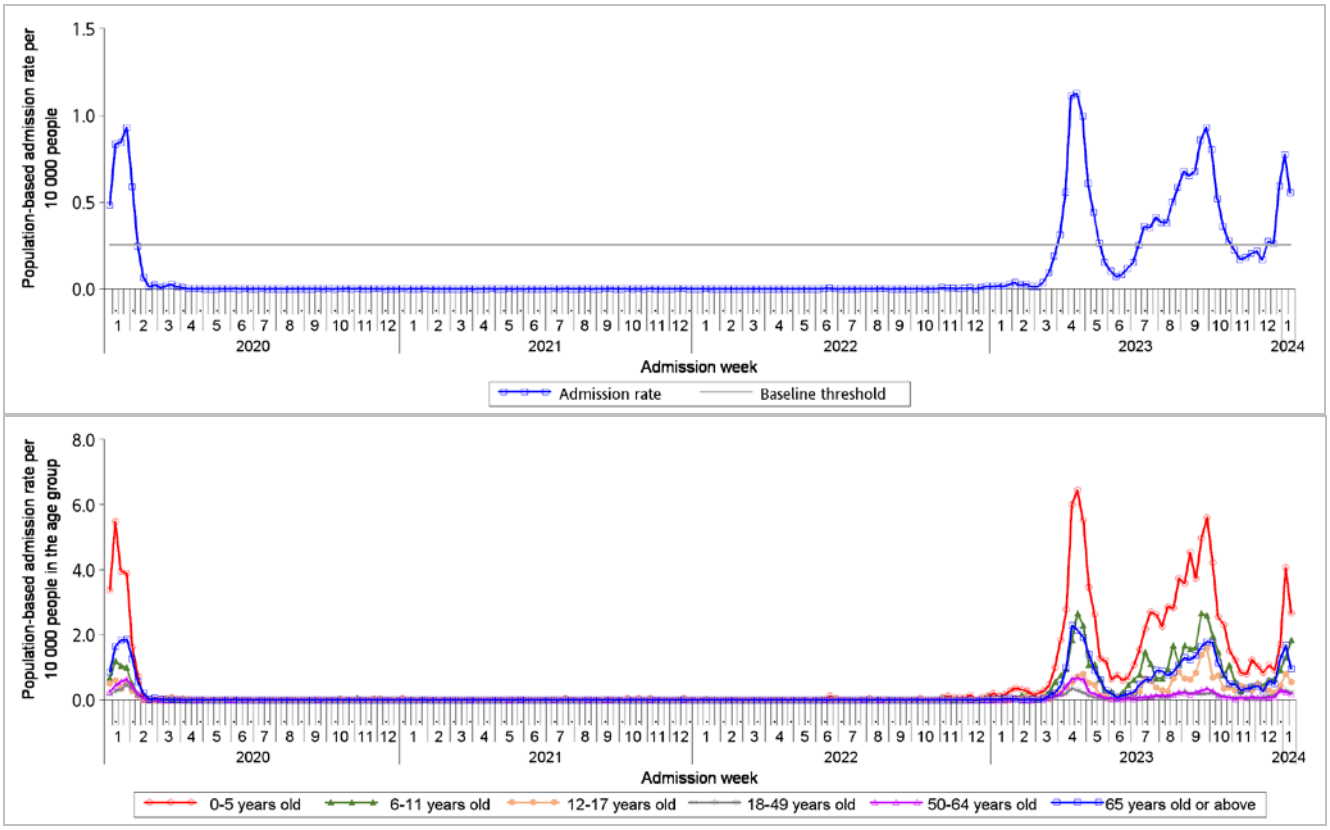

Figure 2.6 Influenza-associated hospital admission rates, 2020-24 (upper: overall rate, lower: rates by age groups)
[Note: The baseline threshold is 1.96 standard deviation above the average weekly admission rate during non-season periods from 2014 week 49 to 2019 week 48.]

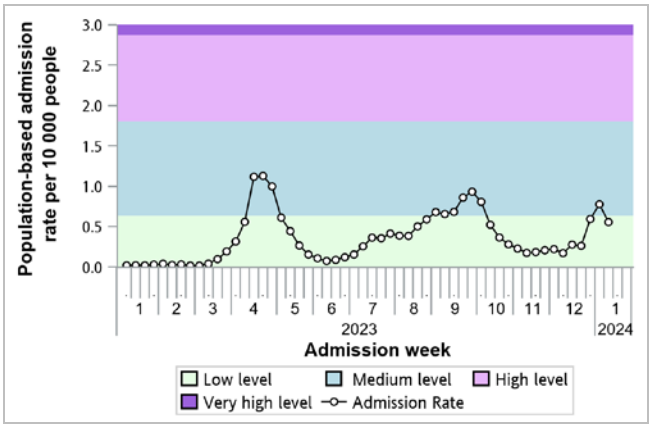

Figure 2.7 Influenza-associated hospital admission rates, 2023-24

**Various intensity levels applicable for this year were calculated with the moving epidemic method (MEM) based on the relevant historical data recorded from 2010 week 49 to 2019 week 48. For details, please refer to this webpage: https://www.chp.gov.hk/files/pdf/explanatory_note_for_flux_mem_eng.pdf*

Rate of ILI syndrome group in accident and emergency departments, 2020-24#

In week 2, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 199.8 (per 1,000 coded cases), which was lower than the rate of 217.9 in the previous week (Figure 2.8).

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

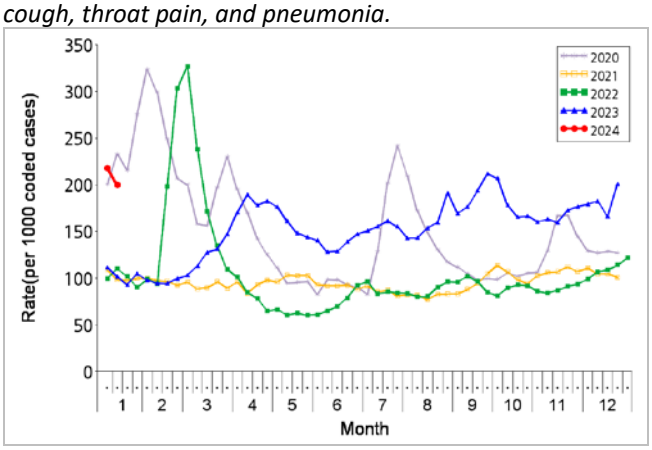

Figure 2.8 Rate of ILI syndrome group in AEDs, 2020-24

Fever surveillance at sentinel child care centres/ kindergartens, 2020-24

In week 2, 1.16% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 1.21% recorded in the previous week (Figure 2.9).

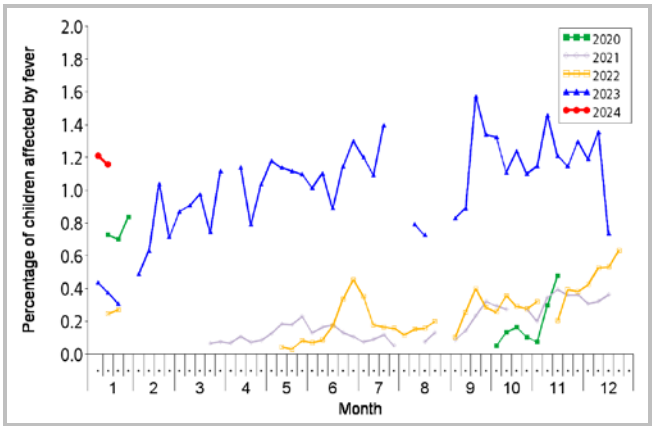

Figure 2.9 Percentage of children with fever at sentinel CCCs/KGs, 2020-24

Fever surveillance at sentinel residential care homes for the elderly, 2020-24

In week 2, 0.17% of residents in the sentinel residential care homes for the elderly (RCHEs) had fever (38°C or above), compared to 0.13% recorded in the previous week (Figure 2.10).

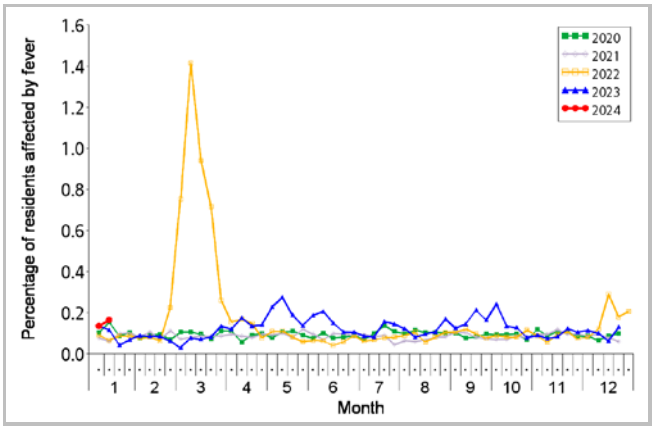

Figure 2.10 Percentage of residents with fever at sentinel RCHEs, 2020-24

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2020-24

In week 2, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.18 ILI cases per 1,000 consultations as compared to 1.69 recorded in the previous week (Figure 2.11).

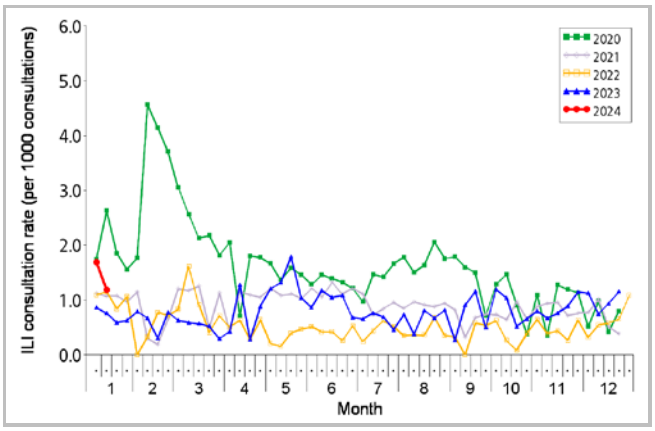

Figure 2.11 ILI consultation rate at sentinel CMPs, 2020-24

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 2, 44 adult cases of ICU admission/death with laboratory confirmation of influenza were recorded, in which 25 of them were fatal. Among the 44 adult cases, 16 were known to have received the 2023/24 seasonal influenza vaccine (SIV). In the first 4 days of week 3 (Jan 14 – 17), 25 cases were recorded, in which 12 of them were fatal.

Week	Influenza type				
	A(H1)	A(H3)	B	A (pending subtype)	C
Week 2	7	22	6	8	1
First 4 days of week 3 (Jan 14 – 17)	2	17	1	5	0

- Since the start of 2023-24 winter influenza season in week 2, 69 adult cases of ICU admission/death with laboratory confirmation of influenza were recorded, in which 37 of them were fatal. Among them, 9 patients had influenza A(H1) infection, 39 patients with influenza A(H3), 13 patients with influenza A (pending subtype), 7 patients with influenza B and 1 patient with influenza C.

- In comparison, 23, 37, 26 and 15 adult cases were recorded in the same duration of surveillance (1 complete week) in the 2017/18 winter, 2018/19 winter, 2023 April and 2023 summer seasons respectively, as compared with 44 cases in the current season (Figure 2.12, left). The corresponding figures for deaths were 17, 17, 12 and 10 in the above seasons, as compared with 25 deaths in the current season (Figure 2.12, right).

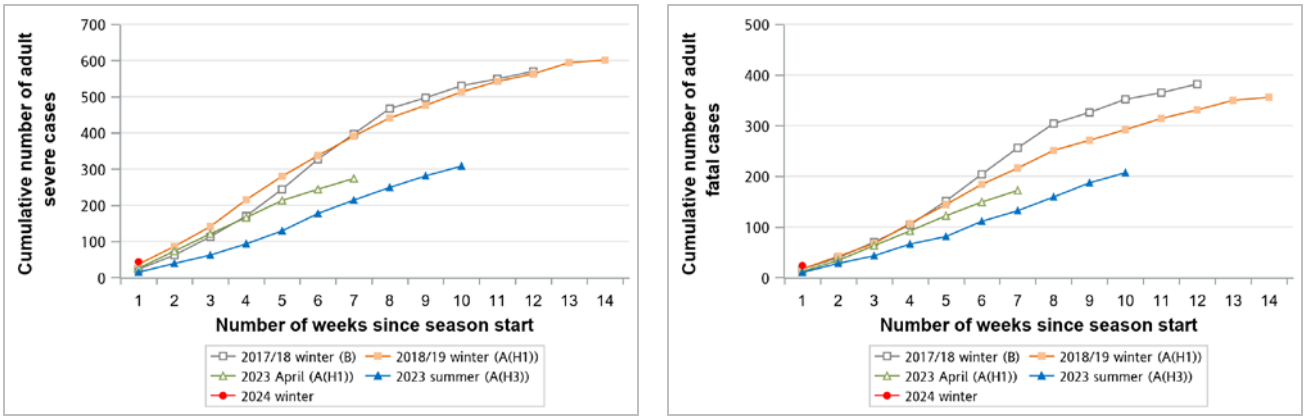

Figure 2.12 Cumulative numbers of adult severe influenza cases reported during major influenza seasons, 2018–19 and 2023–24 (left: ICU admission/death cases; right: deaths)

Note: The predominating virus was shown in bracket.

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

- In week 2 and the first 4 days of week 3 (Jan 14 – 17), there were 2 cases of severe paediatric influenza-associated complication/death.

Reporting week	Age	Sex	Complication	Fatal case?	Influenza subtype	History of receiving 2023/24 influenza vaccine
2	11 years	Male	Severe pneumonia	No	Influenza A(H3)	No
2	3 years	Male	Severe pneumonia	No	Influenza A(H3)	No

- Since the start of 2023-24 winter influenza season in week 2, 2 paediatric cases of influenza-associated complication/death were reported, in which none of them were fatal. All cases had infections with influenza A(H3). None of them received the 2023/24 SIV. In 2024, 3 paediatric cases of influenza-associated complication/death were recorded, in which none of them were fatal (as of Jan 17).

- In comparison, 1, 5, 1 and 2 paediatric cases of influenza-associated complication/death were recorded in the same duration of surveillance (1 complete week) in the 2017/18 winter, 2018/19 winter, 2023 April and 2023 summer seasons respectively, as compared with 2 cases in the current season (Figure 2.13, left). The corresponding figures for deaths were 1, 0, 1 and 0 in the above seasons, as compared with 0 death in current season (Figure 2.13, right).

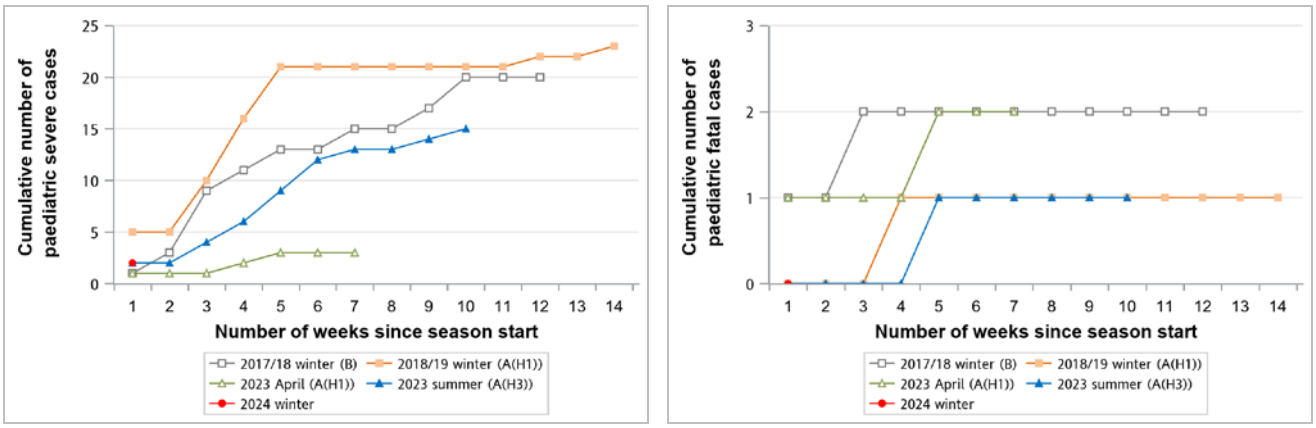

Figure 2.13 Cumulative numbers of cases of paediatric influenza-associated complication/death reported during major influenza seasons, 2018–19 and 2023–24 (left: complication/death cases; right: deaths)

Note: The predominating virus was shown in bracket.

Severe influenza cases of all ages

- Since the start of 2023-24 winter influenza season in week 2, 71 severe influenza cases among all ages have been reported, including 37 deaths (as of Jan 17).

Age group	Cumulative number of cases (death)
0-5	1 (0)
6-11	1 (0)
12-17	0 (0)
18-49	10 (1)
50-64	12 (1)
>=65	47 (35)

- Among the adult fatal cases with available clinical information, about 80% had chronic diseases.
- Among patients with laboratory confirmation of influenza admitted to public hospitals in this season (from Jan 7 to 17, 2023), 2.8% of admitted cases died during the same episode of admission. So far, it was within the historical range between 1.9% (2015/16 winter season) and 3.3% (2015 summer season).

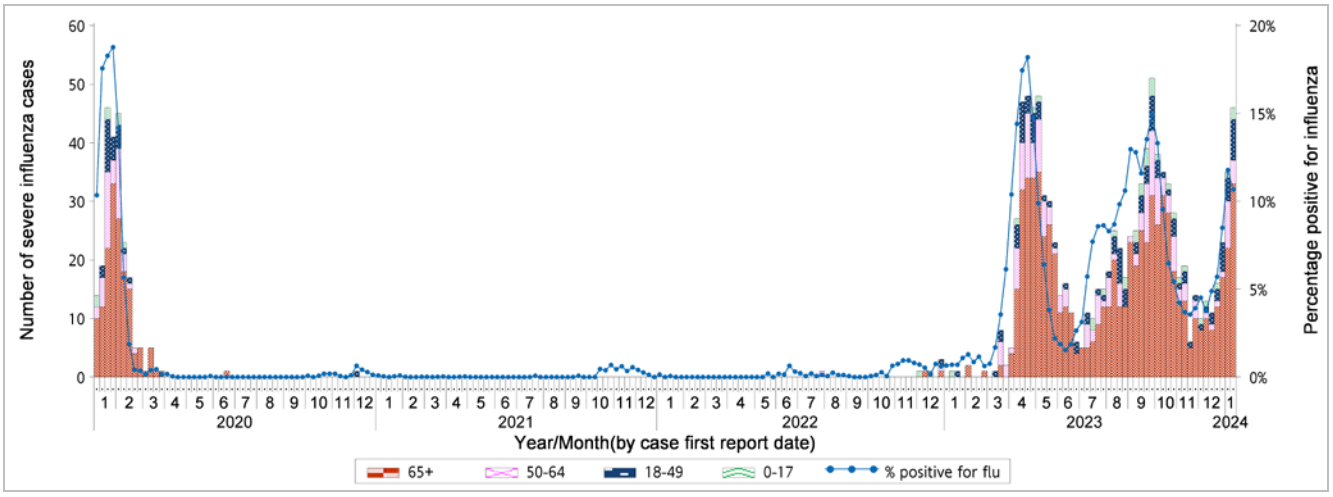

Figure 2.14 Weekly number of severe influenza cases by age groups, 2020-24 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

Global Situation of Influenza Activity

Influenza detections increased due to increases in temperate Northern hemisphere, mainly in parts of Europe, Central Asia and North America (data up to Dec 24, 2023).

- In the United States (week ending Jan 6, 2024), influenza activity remained elevated in most parts of the country. The percentage of specimens tested positive for influenza was 14.0%. The percentage of out-patient visits for ILI was 5.7%, which was above the national baseline of 2.9%. Majority of the influenza detections were influenza A(H1) viruses.
- In Canada (week ending Jan 6, 2024), influenza season started in late November. Influenza activity decreased this week but remain at elevated levels. The weekly percentage of tests positive for influenza was 15.0% in week 1. Majority of the influenza detections were influenza A(H1) viruses.
- In the United Kingdom (week ending Jan 7, 2024), influenza positivity slightly decreased to 9.6% in week 1 as compared to 12.1% in the preceding week. The weekly ILI consultation rate in England increased to 7.5 from 4.9 per 100,000 population in preceding week, and was within baseline activity levels.
- In Europe (week ending Jan 7, 2024), the overall influenza activity continued to increase. The influenza testing positivity in sentinel settings has been above 10% since week 50, indicating the start of the seasonal influenza epidemic in the Region. The percentage of sentinel specimens tested positive for influenza was 21% in week 1.
- In Mainland China (week ending Jan 7, 2024), influenza surveillance data showed influenza detections in southern and northern provinces decreased. The percentage of specimens tested positive for influenza in the southern and northern provinces were 52.5% and 36.1% respectively. Influenza A(H3) and B(Victoria) viruses were co-circulating.
- In Taiwan (week ending Jan 6, 2024), the number of influenza-like illness consultation continued to increase. The percentage of specimens tested positive for influenza in week 52 was 28%. Most of the influenza detections in the 4 weeks from week 48 to 51 were influenza A(H3N2) (65.7%), followed by influenza B (27.1%) viruses.
- In Japan (week ending Jan 7, 2024), the average number of reported ILI cases per sentinel site decreased to 12.66 from 21.65 in the preceding week, but was above the baseline level of 1.00. Influenza A(H3) viruses predominated, and followed by influenza A(H1).
- In Korea (week ending Jan 6, 2024), the weekly ILI rate remained elevated. The rate in week 1 was 51.9 per 1,000 out-patient visits, which was above the season epidemic threshold of 6.5. In week 1, 40.9% of tests were positive for influenza (including 19.6% influenza B, 14.5% influenza A(H3N2) and 6.8% influenza A(H1N1)pdm09).

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, European Centre for Disease Prevention and Control (ECDC) and WHO Regional Office for Europe (WHO Euro), Chinese National Influenza Center, Taiwan Centers for Disease Control, Japan Ministry of Health, Labour and Welfare and Korean Disease Control and Prevention Agency.