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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 Oct 30, 2024)

Reporting period: Oct 20 – Oct 26, 2024 (Week 43)

- The latest surveillance data showed that the overall local activity of COVID-19 remains at a low level.
- The Centre for Health Protection (CHP) has been closely monitoring the local prevalence of SAR-CoV-2 variants based on the World Health Organization (WHO)'s Tracking SAR-CoV-2 Variants list. The latest surveillance data showed that JN.1 is the most prevalent variant. At the same time, KP.2 and KP.3 are also detected in the sewage surveillance and human infection cases. However, the current information does not suggest JN.1 or KP.2 or KP.3 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, regardless of the number of doses received previously. For more details, please visit (https://www.chp.gov.hk/files/pdf/consensus_interim_recommendations_on_use_of_covid19_vaccines_in_hong_kong_17jul.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 43, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 38 as compared to 34 in the preceding week. (Figure 1.1)

In the first 4 days of week 44 (Oct 27 – Oct 30), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 3 to 5.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 74,266 (as of Oct 30, 2024).

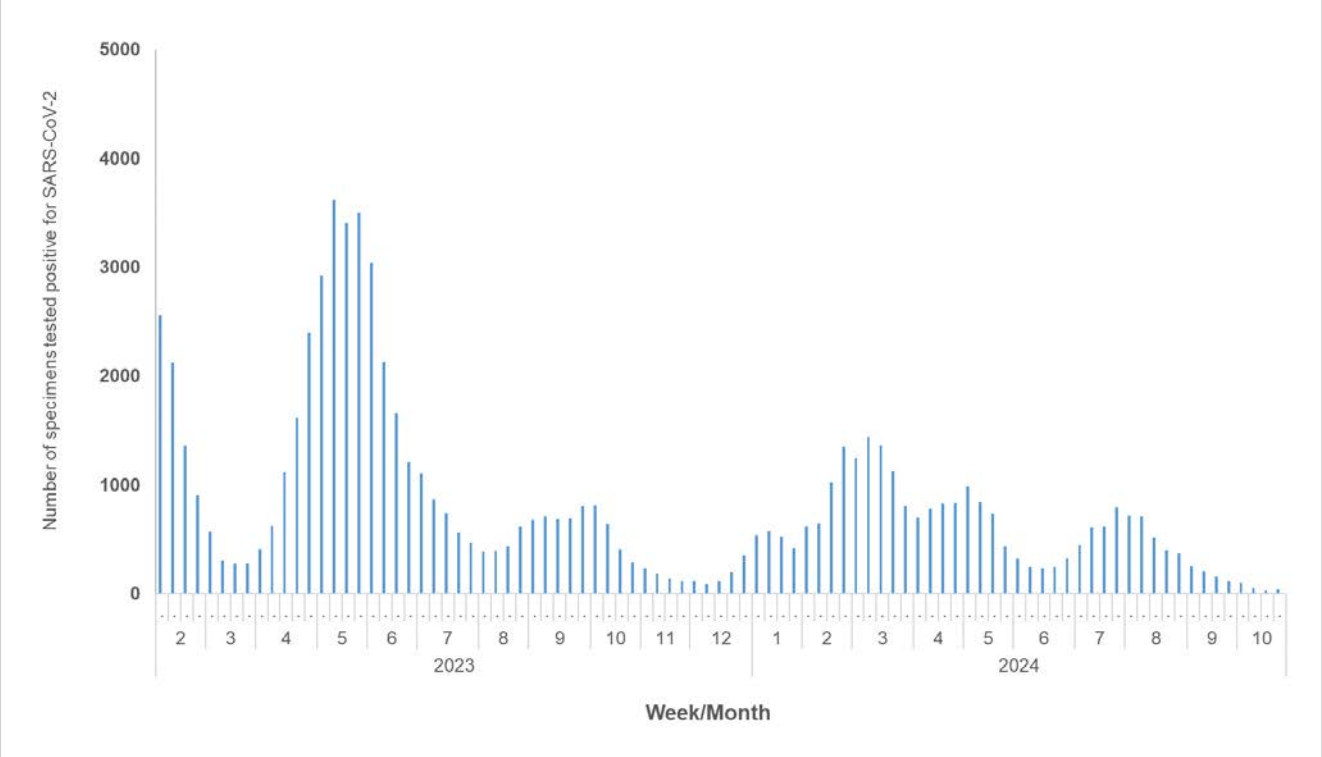

Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

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

Among the 6,431 respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 43, 50 (0.78%) were tested positive for SARS-CoV-2 virus as compared to 41 (0.60%) in the preceding week. (Figure 1.2)

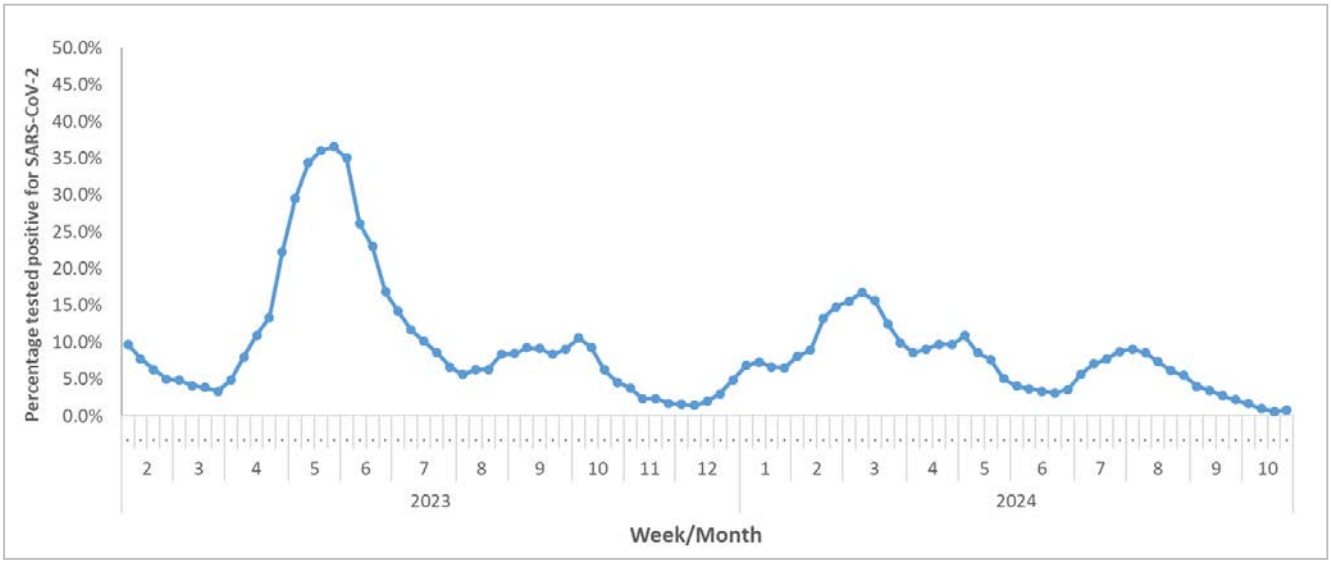

Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

COVID-19 outbreak surveillance

In week 43, 0 COVID-19 outbreak occurring in schools/institutions was recorded (affecting 0 person), as compared to 0 outbreak recorded in the previous week (affecting 0 person). (Figure 1.3)

In the first 4 days of week 44 (Oct 27 – Oct 30), 1 COVID-19 outbreak occurring in schools/institutions was recorded (affecting 3 persons).

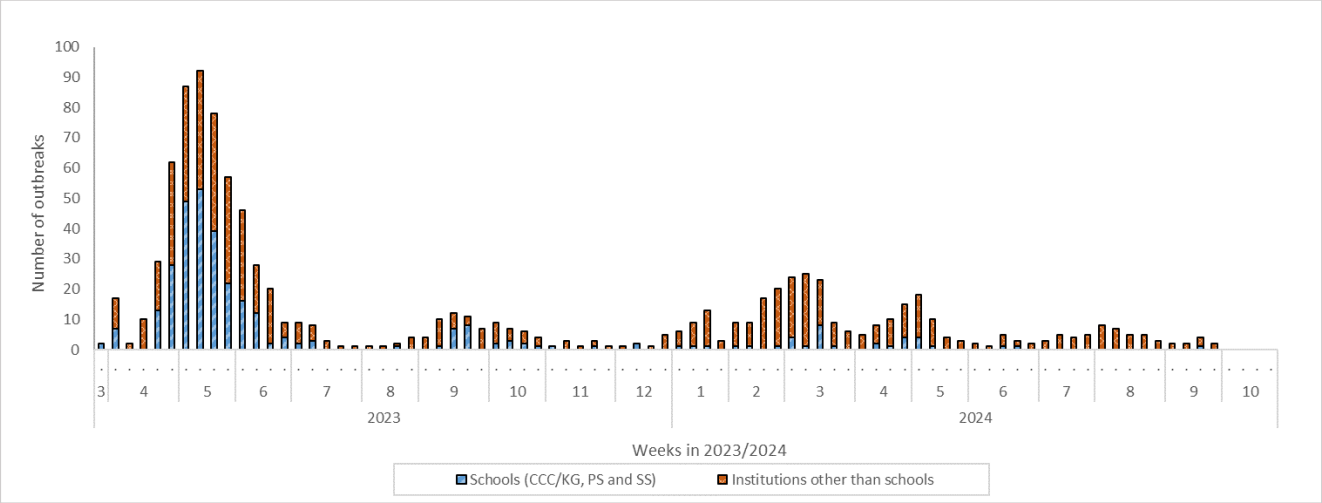

Figure 1.3 COVID-19 outbreaks in schools/institutions

Type of institutions	Week 42	Week 43	First 4 days of week 44 (Oct 27 – Oct 30)
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	1
Others	0	0	0
Total number of outbreaks	0	0	1
Total number of persons affected	0	0	3

Surveillance of severe and fatal COVID-19 cases

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

In week 43, the weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 1 as compared to 3 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 1,391 (as of Oct 26, 2024).

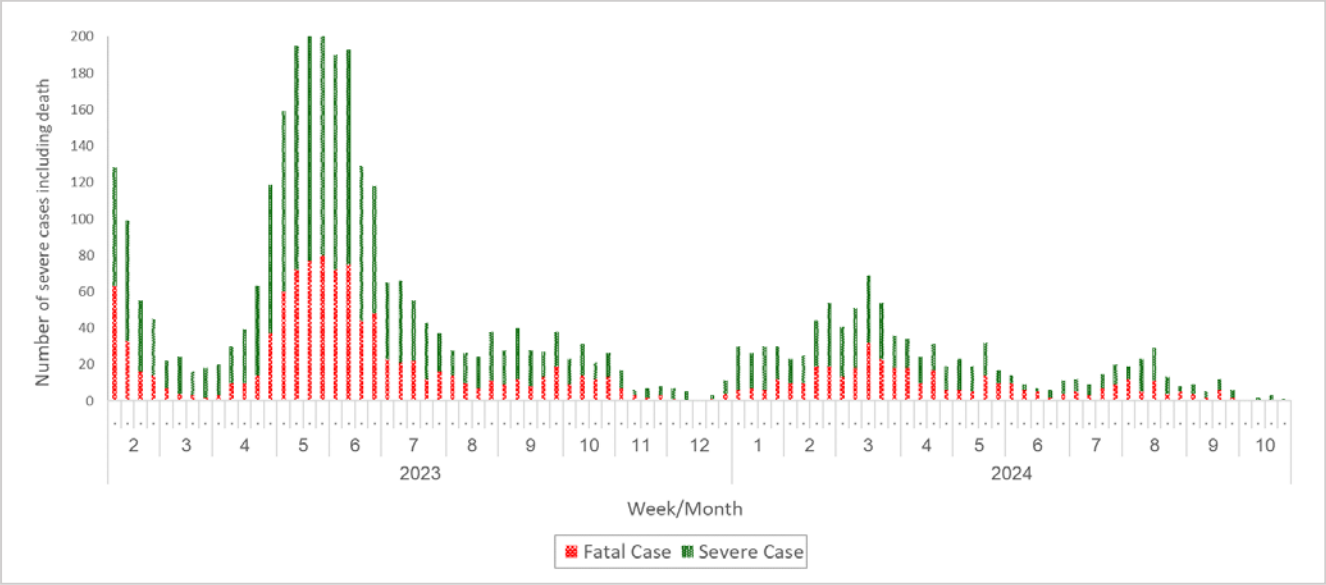

Figure 1.4 Weekly number of severe COVID-19 cases including deaths

Note: Severe and fatal cases are recorded according to their initial reporting dates.

Sewage surveillance of SARS-CoV-2 virus

In week 43, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 42,000 copy/L as compared to around 50,000 copy/L in the preceding week. (Figure 1.5)

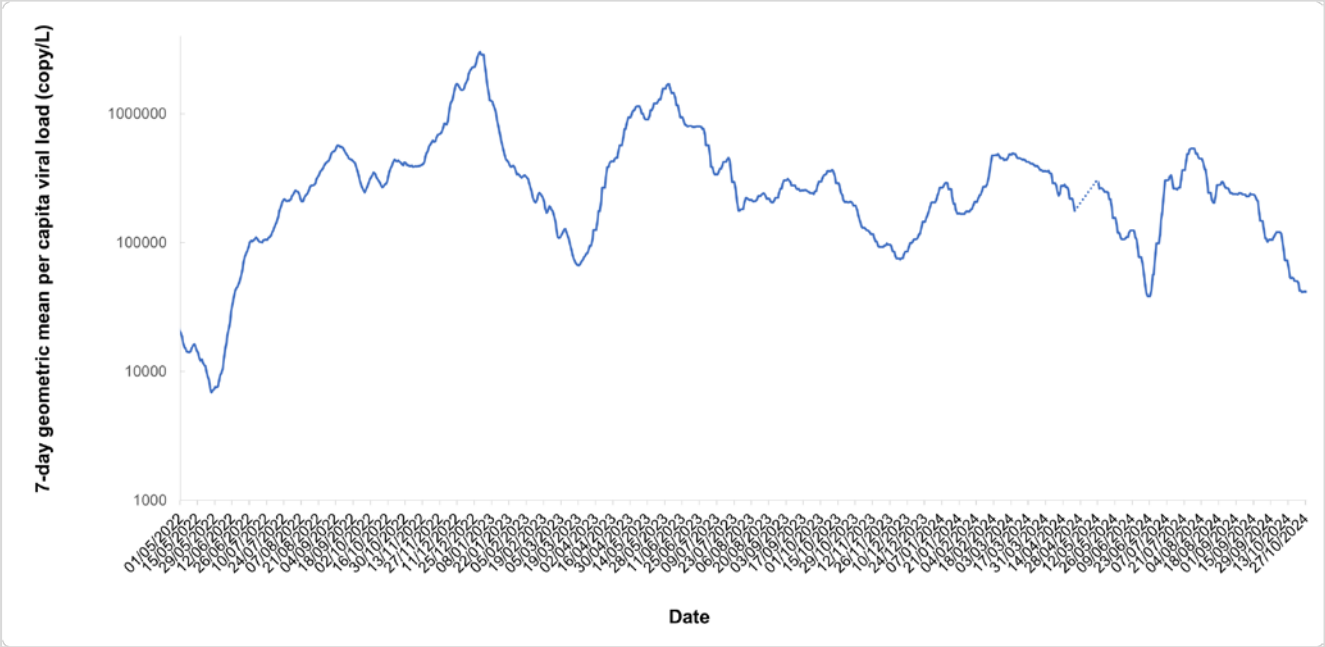

Figure 1.5 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

Note: The dotted line refers to the temporary sewage sampling suspension for a safety review by the Drainage Services Department.

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

In week 43, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 2.1 (Figure 1.6) and 1.5 (Figure 1.7) COVID-19 cases per 1,000 consultations, respectively.

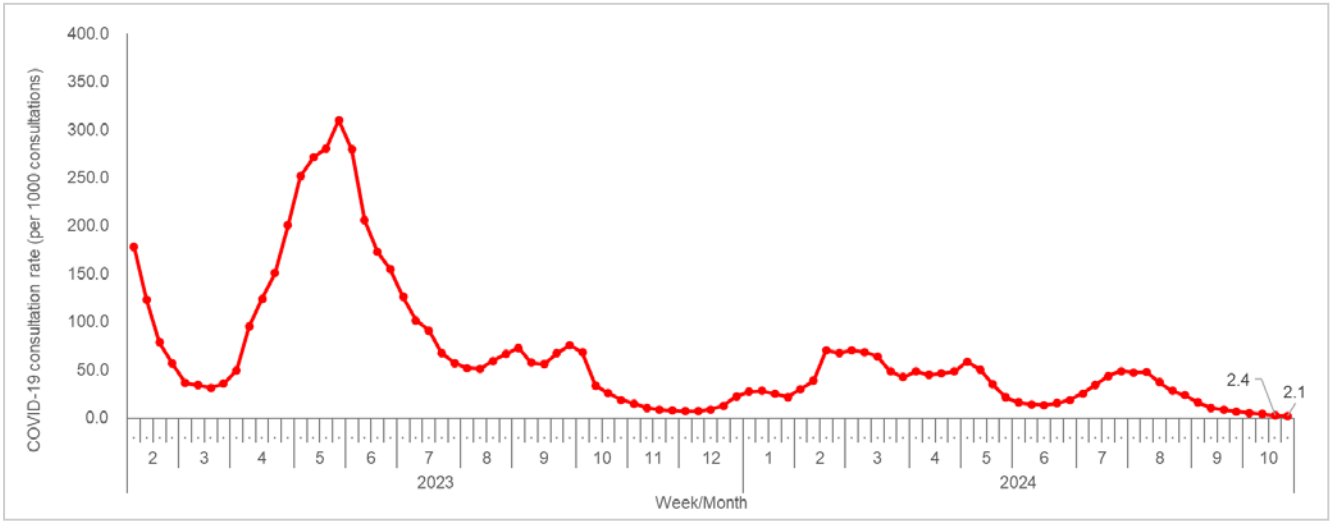

Figure 1.6 Average consultation rate of COVID-19 cases in GOPC

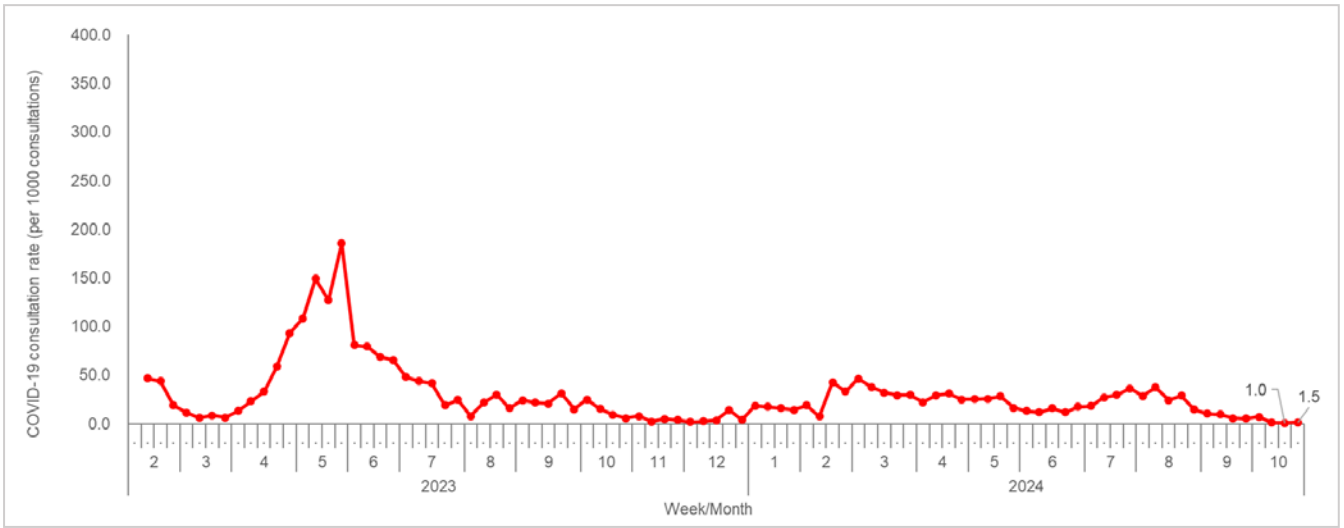

Figure 1.7 Average consultation rate of COVID-19 cases in private medical practitioner clinics

Surveillance on SARS-CoV-2 variants

CHP conducts surveillance on SARS-CoV-2 variants from sewage samples. The latest surveillance data (as of Oct 30, 2024) showed that JN.1 and its descendant lineages remained the most prevalent variant, comprising over 97% of all characterised specimens, where 39.8% belongs to the descendant strain KP.3, 16.4% to KP.3.1.1 and 10.0% to KP.2. (Figure 1.8)

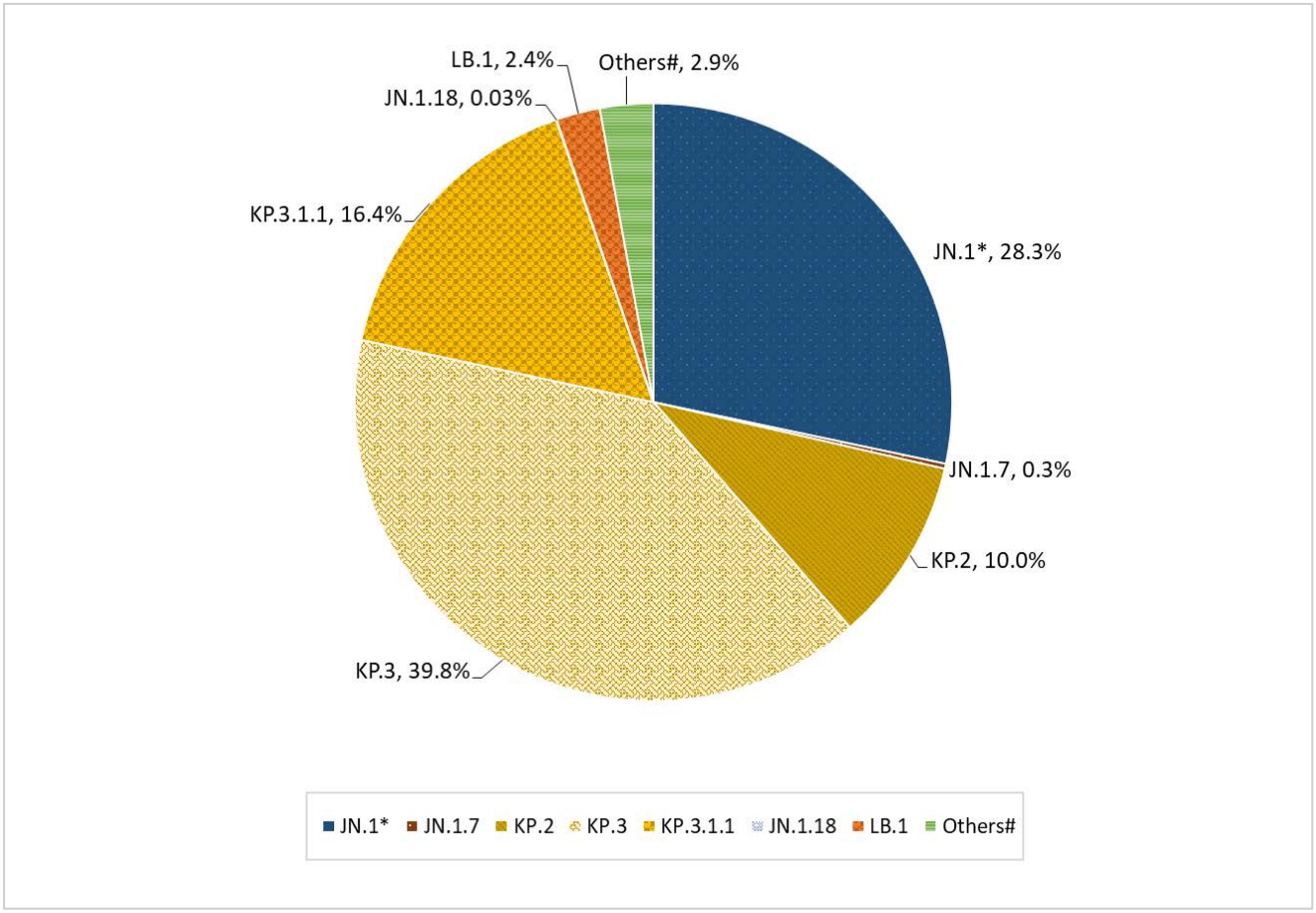

Figure 1.8 Estimated proportion of variants among sewage samples

[*]Including JN.1 and its descendant lineages, except those individually specified elsewhere in the table

[#]Those SARS-CoV-2 variants not classified as variants of interest (VOIs)/ variants under monitoring (VUMs) by WHO

Note: JN.1.7, JN.1.18, KP.2, KP.3, KP.3.1.1 and LB.1 are the descendant lineages of JN.1

CHP also conducted genetic characterisation of 3 specimens obtained from reported severe and fatal cases of COVID-19 between Oct 9 and Oct 22, 2024. The results showed that JN.1 and its descendant lineages remained the most prevalent variant, comprising 100% of all characterised specimens. (Figure 1.9)

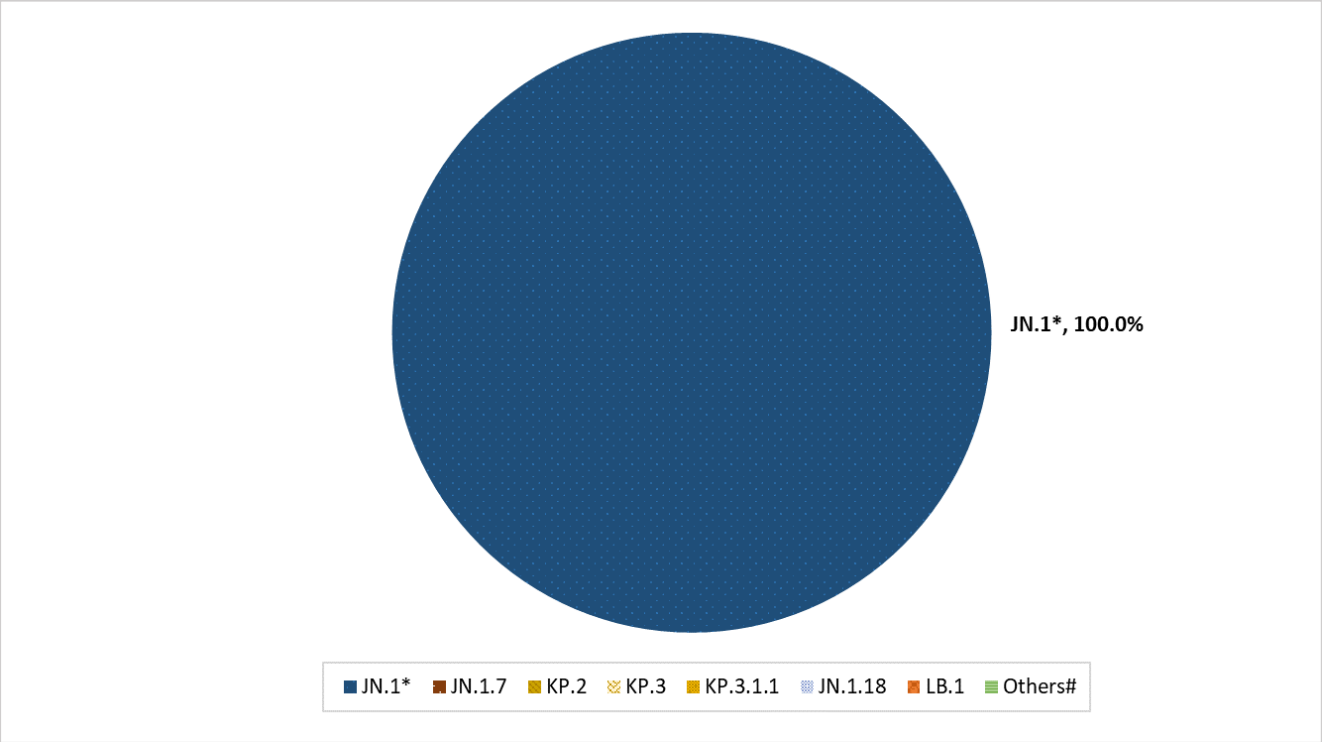

Figure 1.9 Proportion of variants among specimens obtained from reported severe and death cases for COVID-19

**Including JN.1 and its descendant lineages, except those individually specified elsewhere in the table*

#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 remained the most prevalent variant, comprising 100% of all characterised specimens, of which 7.5% belonged to the descendant lineage KP.2 and 32.5% belonged to the descendant lineage KP.3.

Global situation of COVID-19 activity

- Globally, as of Oct 13, 2024, there have been 776,618,091 confirmed cases of COVID-19, including 7,071,324 deaths, reported to WHO.
- According to WHO COVID-19 epidemiological update last published on Oct 9, 2024,
  - Over 270,000 new cases and more than 5,700 new deaths were reported in the last 28 days (Aug 19 to Sep 15, 2024) globally.
  - The highest numbers of new 28-day cases were reported from Russia, Poland, Greece, Romania and Lithuania. The highest numbers of new 28-day deaths were reported from the USA, Sweden, Greece, Russia and New Zealand.
  - 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 two VOIs, which are BA.2.86 and JN.1, and seven VUMs, which are JN.1.7, JN.1.18, KP.2, KP.3, KP.3.1.1, LB.1 and XEC.
  - Between Sep 9 and Sep 15, 2024, JN.1 is the most reported VOI globally, accounting for 16.0% and having declined from a prevalence of 19.4% between Aug 19 and Aug 25, 2024. The risk evaluation for JN.1 published on Apr 15, 2024 suggests an overall low public health risk at the global level based on available evidence. During the same period, the prevalence of BA.2.86 decreased from 0.2% to 0.1%. Among the VUMs, the prevalence of two variants showed increasing trends, including KP.3.1.1 (34.6% to 46.6%) and XEC (2.0% to 4.8%). Meanwhile, the prevalence of the other five VUMs were declining, including KP.3 (18.8% to 14.4%), KP.2 (12.0% to 8.1%), JN.1.18 (2.3% to 1.2%), LB.1 (6.9% to 6.3%) and JN.1.7 (0.1% to 0.1%).

Sources:

1. WHO COVID-19 dashboard, accessed on Oct 31, 2024
2. Tracking SARS-CoV-2 variants
3. World Health Organization COVID-19 epidemiological update

Local Situation of Influenza Activity (as of Oct 30, 2024)

Reporting period: Oct 20 – 26, 2024 (Week 43)

- The latest surveillance data showed that the overall influenza activity 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.
- 2024/25 Seasonal Influenza Vaccination Programmes, including the Seasonal Influenza Vaccination School Outreach Programme and the Residential Care Home Vaccination Programme (RVP), has been launched on September 26, 2024. 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 43, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 2.9 ILI cases per 1,000 consultations, which was lower than 3.9 recorded in the previous week (Figure 2.1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 33.5 ILI cases per 1,000 consultations, which was higher than 29.6 recorded in the previous week (Figure 2.1, right).

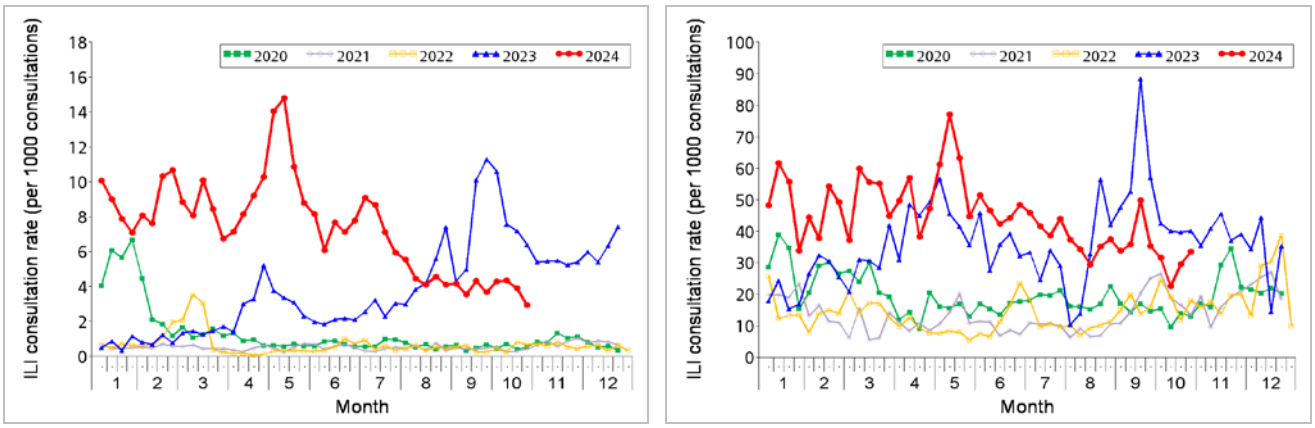

Figure 2.1 ILI consultation rates at sentinel GOPC (left) and PMP clinics (right), 2020-24
Note: The CHP has started to use electronic data on diagnosis coding of patients of the Hospital Authority's GOPC for sentinel surveillance since January 2020, replacing manual data collection in the past.

Laboratory surveillance, 2020-24

Among the 7,066 respiratory specimens* received in week 43, 35 (0.50%) were tested positive for seasonal influenza A or B viruses. Among the subtyped influenza detections, there were 21 (64%) influenza A(H1), 6 (18%) influenza A(H3) and 6 (18%) influenza B viruses. The positive percentage (0.50%) was below the baseline threshold of 9.21% but was higher than 0.48% recorded in the previous week (Figure 2.2).

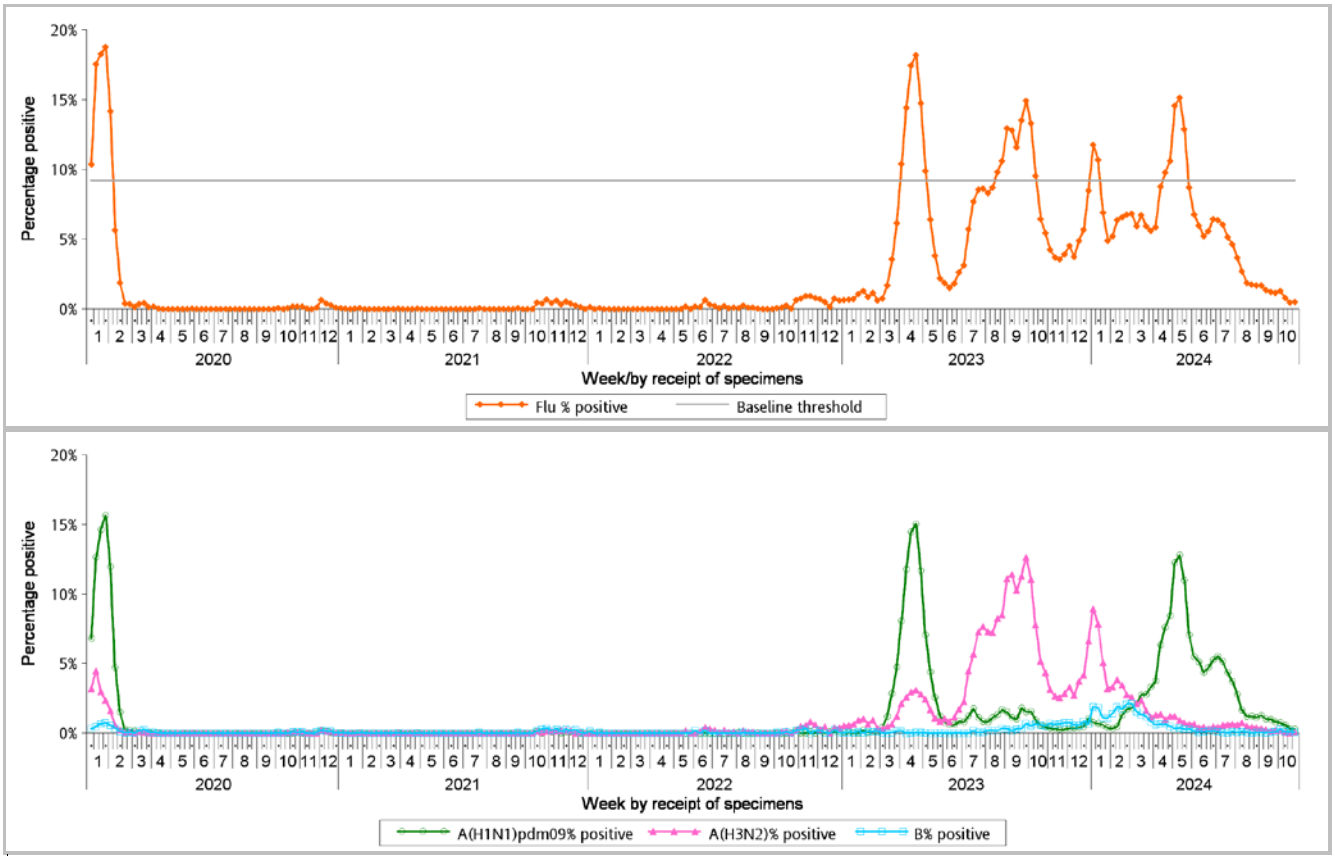

Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2020-24 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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 September 2024, 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/10/641/695/7068.html

* Including 6,431 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 635 specimens received by the Hospital Authority

Influenza-like illness outbreak surveillance, 2020-24

In week 43, 4 ILI outbreaks occurring in schools/institutions were recorded (affecting 17 persons), as compared to 3 outbreaks recorded in the previous week (affecting 11 persons) (Figure 2.3). In the first 4 days of week 44 (Oct 27 to 30), no ILI outbreaks in schools/institutions were recorded.

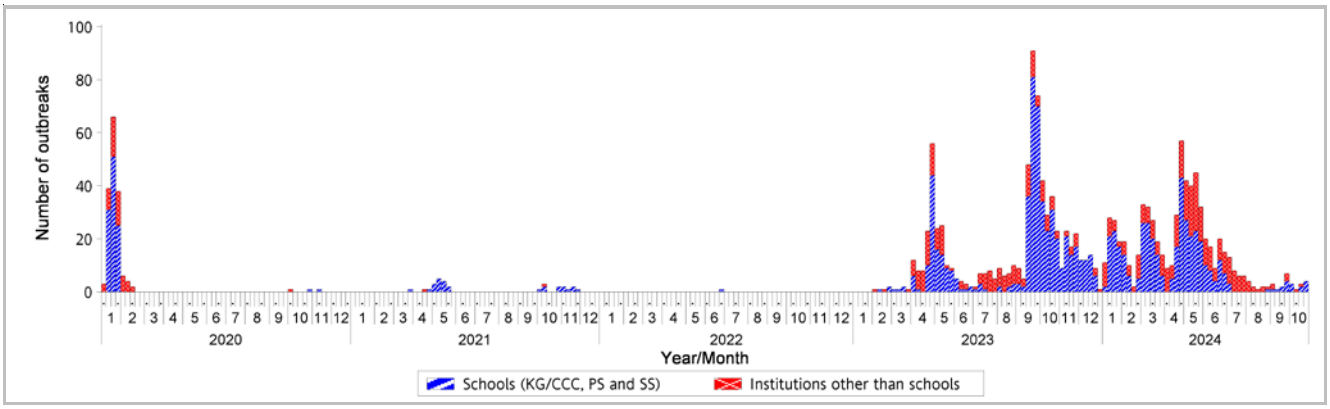

Figure 2.3 ILI outbreaks in schools/institutions, 2020-24

Type of institutions	Week 42	Week 43	First 4 days of week 44 (Oct 27 – 30)
Child care centre/ kindergarten (CCC/KG)	0	0	0
Primary school (PS)	2	2	0
Secondary school (SS)	0	2	0
Residential care home for the elderly	1	0	0
Residential care home for persons with disabilities	0	0	0
Others	0	0	0
Total number of outbreaks	3	4	0
Total number of persons affected	11	17	0

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

In week 43, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.02 (per 10,000 population), which was below the baseline threshold of 0.25 and was lower than 0.03 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 0.08, 0.11, 0.03, 0.00, 0.00 and 0.03 cases (per 10,000 people in the age group) respectively, as compared to 0.08, 0.06, 0.03, 0.01, 0.02 and 0.07 cases in the previous week (Figure 2.4).

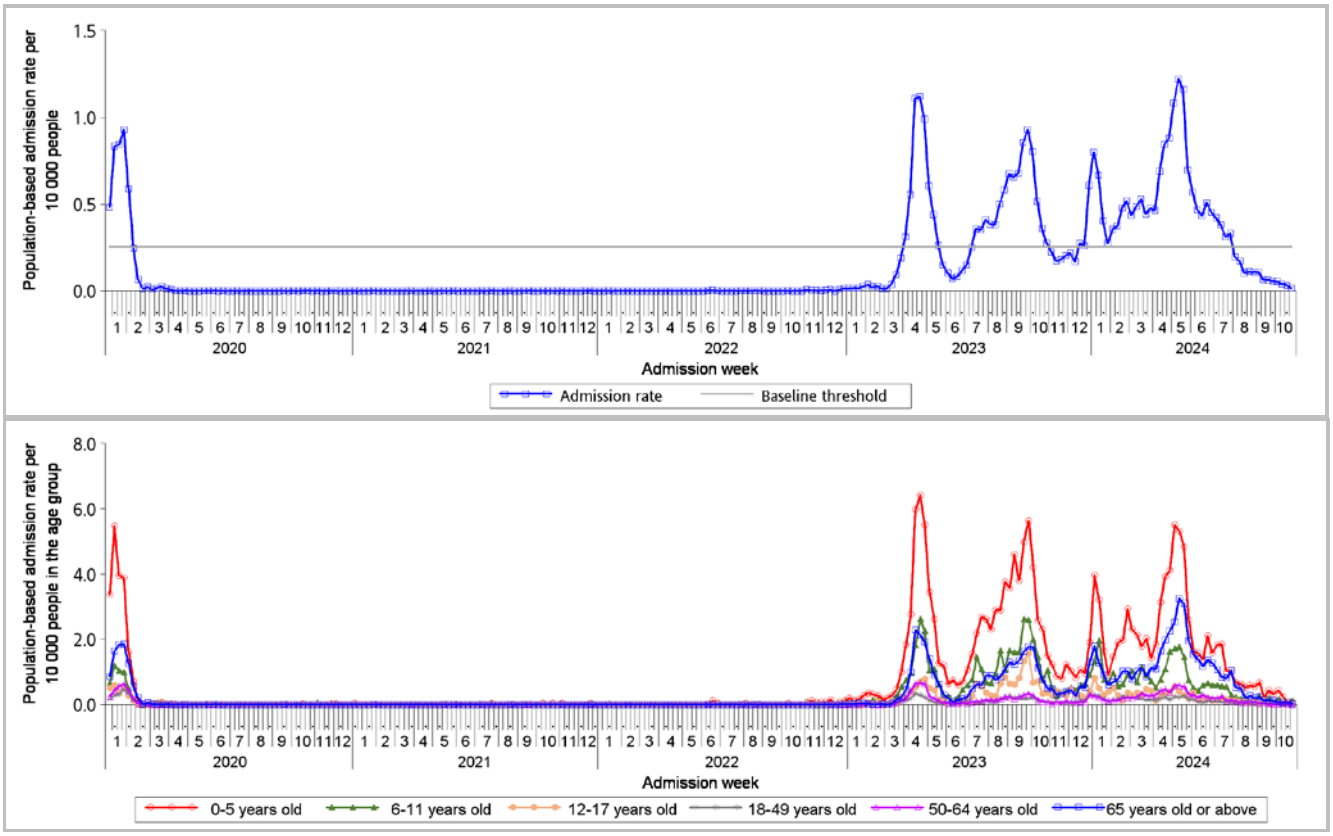

Figure 2.4 Influenza-associated hospital admission rates, 2020-24 (upper: overall rate, lower: rates by age groups)
[Note: The baseline threshold is 1.96 standard deviation above the average weekly admission rate during non-season periods from 2014 week 49 to 2019 week 48.]

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

In week 43, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 123.0 (per 1,000 coded cases), which was higher than the rate of 122.5 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.

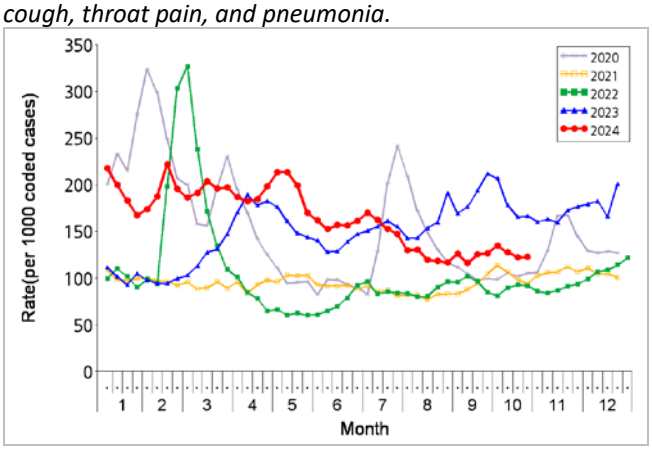

Figure 2.5 Rate of ILI syndrome group in AEDs, 2020-24

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

In week 43, 0.71% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.68% recorded in the previous week (Figure 2.6).

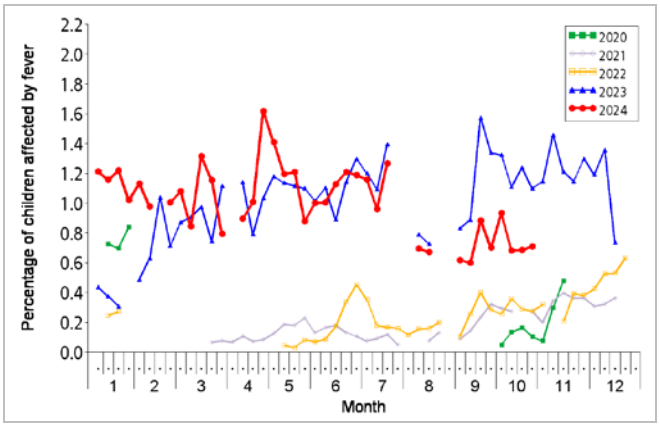

Figure 2.6 Percentage of children with fever at sentinel CCCs/KGs, 2020-24

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

In week 43, 0.10% 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 2.7).

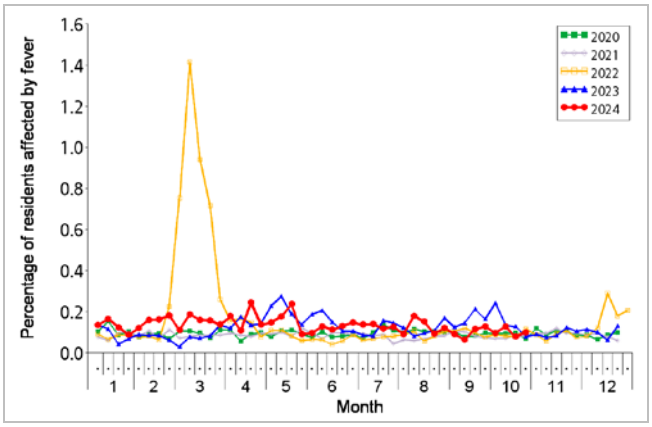

Figure 2.7 Percentage of residents with fever at sentinel RCHEs, 2020-24

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

In week 43, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 0.83 ILI cases per 1,000 consultations as compared to 1.03 recorded in the previous week (Figure 2.8).

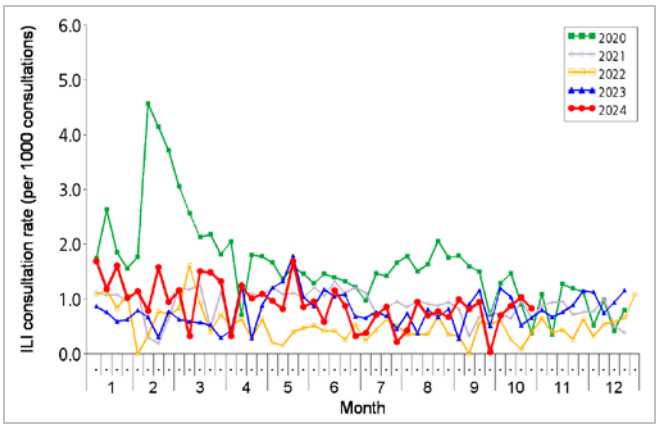

Figure 2.8 ILI consultation rate at sentinel CMPs, 2020-24

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 43, 5 adult cases of ICU admission/death with laboratory confirmation of influenza (including 3 deaths) were recorded, as compared to 4 cases (including 3 deaths) in the previous week.

Week	Influenza type			
	A(H1)	A(H3)	B	A (pending subtype)
Week 42	3	1	0	0
Week 43	4	1	0	0

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

- In week 43 and the first 4 days of week 44 (Oct 27 – 30), there were no cases of severe paediatric influenza-associated complication/death.
- In 2024, 34 paediatric cases of severe influenza-associated complication/death were recorded, in which six of them were fatal (as of Oct 30, 2024).

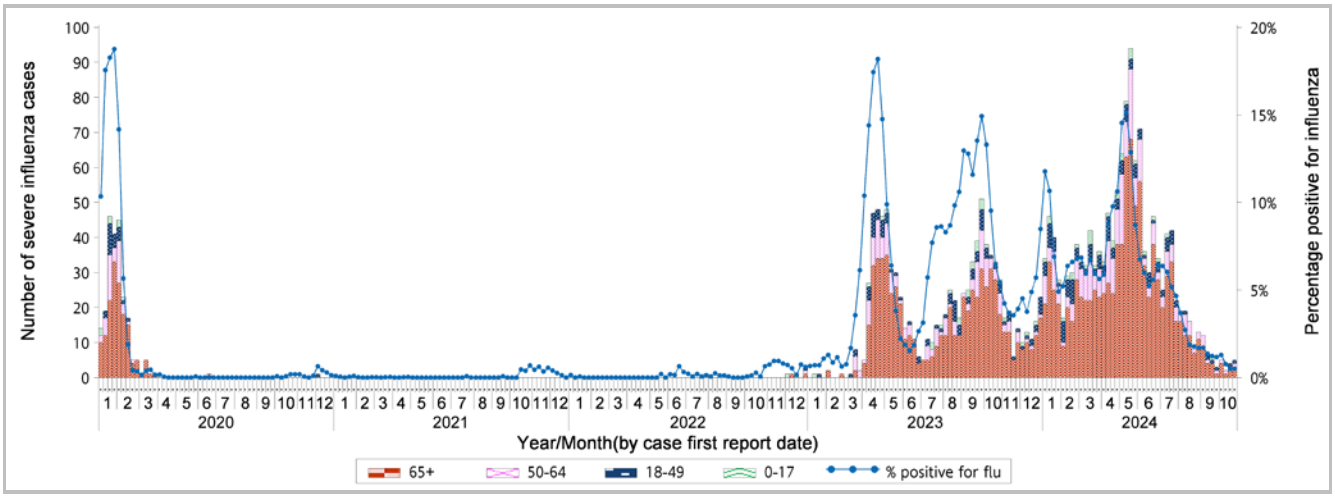

Figure 2.9 Weekly number of severe influenza cases by age groups, 2020-24 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

Global Situation of Influenza Activity

In the Northern hemisphere, influenza activity in temperate countries remained at interepidemic levels. Influenza A(H1N1)pdm09 predominated in South East Asia. In the Southern Hemisphere, influenza activity in some countries remained elevated (data up to Oct 20, 2024).

- In the United States (week ending Oct 19, 2024), seasonal influenza activity remained low nationally. The percentage of specimens tested positive for influenza was 0.7%.
- In Canada (week ending Oct 19, 2024), indicators of influenza activity were stable and remained at interseasonal levels. The weekly percentage of tests positive for influenza was 0.5% in week 42.
- In the United Kingdom (week ending Oct 20, 2024), influenza activity increased slightly across some indicators but remained at low levels. Influenza positivity in England decreased slightly to 2.3% as compared with 2.8% in preceding week.
- In Europe (week ending Oct 20, 2024), influenza activity remained below the 10% positivity epidemic threshold at 2%.
- In Mainland China (week ending Oct 20, 2024), influenza surveillance data showed the percentage of specimens tested positive for influenza in southern provinces decreased while that in northern provinces slightly increased though remained at low level, with 3.5% and 1.2% in week 42 respectively. Influenza A(H1N1)pdm09 viruses predominated.
- In Australia (fortnight ending Oct 20, 2024), influenza activity has decreased considerably since July, and has now returned to interseasonal level.
- In New Zealand (week ending Oct 27, 2024), influenza detections in community and hospital settings are now at low inter-seasonal levels.

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, Australian Department of Health and Aged Care and New Zealand Ministry of Health.