

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 Apr 23, 2025)

Reporting period: Apr 13, 2025 – Apr 19, 2025 (Week 16)

- The latest surveillance data showed that the overall local activity of COVID-19 has remained at a high level, with the weekly number of positive nucleic acid test laboratory detections for the SARS-CoV-2 virus reaching a six-month high. The Centre for Health Protection (CHP) expects the local activity of COVID-19 will continue to increase in the coming few weeks.
- The 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 and the circulating variants in the neighboring regions of Hong Kong. The latest sewage surveillance data showed an increasing trend in the prevalence of XDV in Hong Kong. XDV is a JN.1-related variant. Latest information does not suggest XDV will cause a more severe disease than JN.1, XBB and their 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 16, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 593 as compared to 391 in the preceding week. (Figure 1.1)

In the first 4 days of week 17 (Apr 20 – Apr 23), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 98 to 132.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 76,957 (as of Apr 23, 2025).

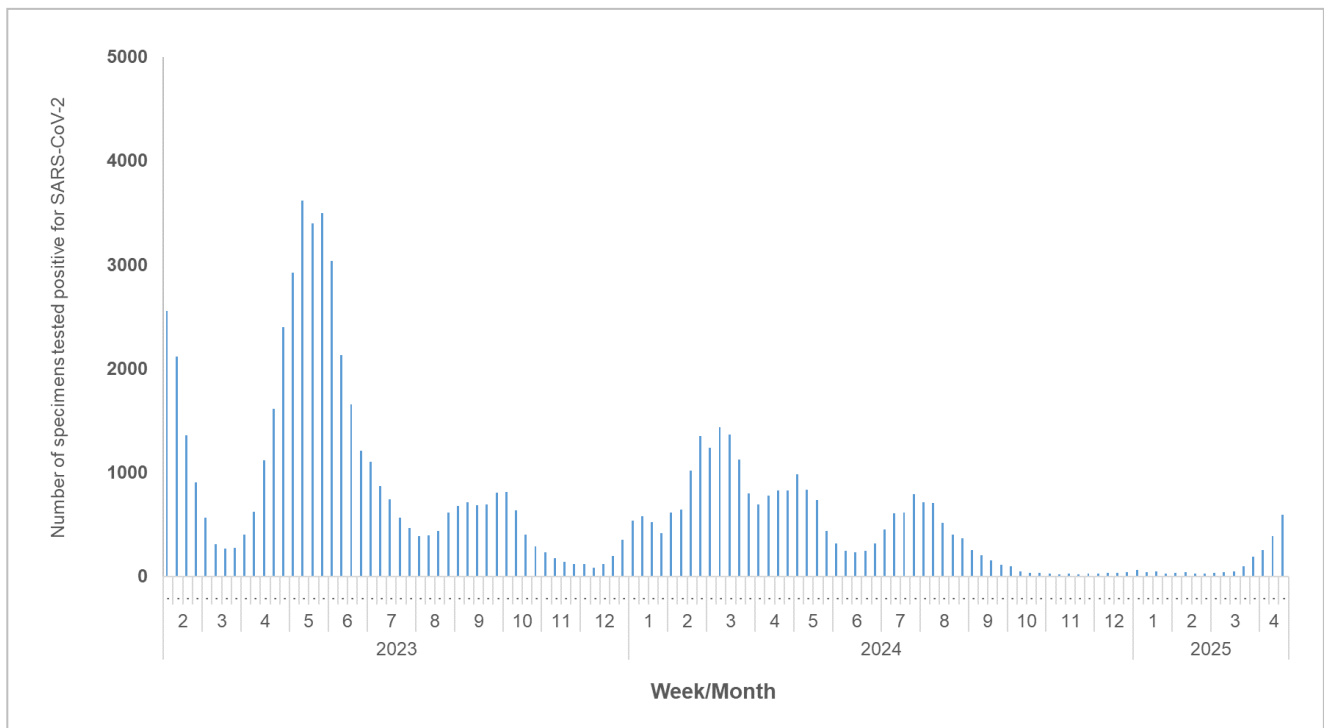


Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

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

Among the 8,504, respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 16, 698 (8.21%) were tested positive for SARS-CoV-2 virus as compared to 537 (6.21%) in the preceding week. (Figure 1.2)

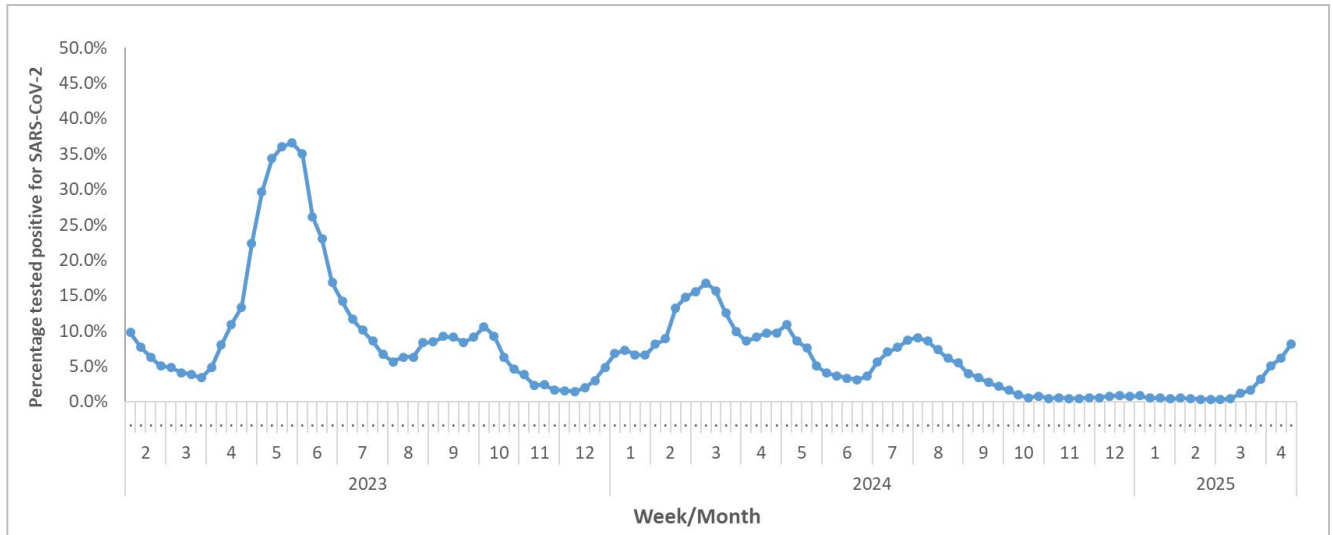


Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

COVID-19 outbreak surveillance

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

In week 16, 7 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 38 persons), as compared to 11 outbreaks recorded in the previous week (affecting 51 persons). (Figure 1.3)

In the first 4 days of week 17 (Apr 20 – Apr 23), 7 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 34 persons).

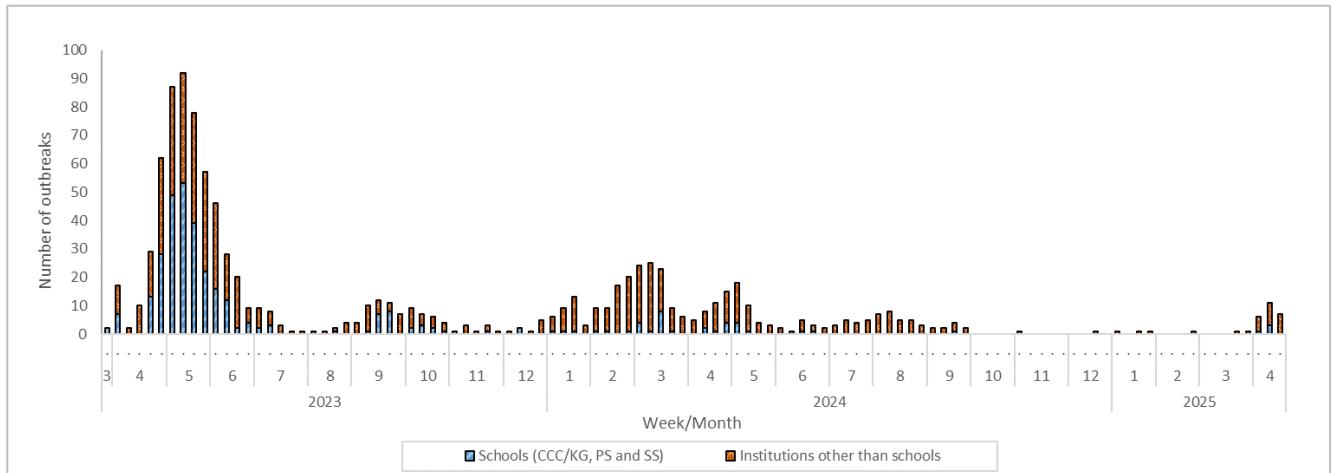


Figure 1.3 COVID-19 outbreaks in schools/institutions

Type of institutions	Week 15	Week 16	First 4 days of week 17 (Apr 20 – Apr 23)
Child care centre/ kindergarten (CCC/KG)	0	0	0
Primary school (PS)	1	0	0
Secondary school (SS)	2	0	0
Residential care home for the elderly	8	6	6
Residential care home for persons with disabilities	0	0	0
Others	0	1	1
<i>Total number of outbreaks</i>	11	7	7
<i>Total number of persons affected</i>	51	38	34

Surveillance of severe and fatal COVID-19 cases

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

In week 16, the weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 16 as compared to 15 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 1,412 (as of Apr 19, 2025).

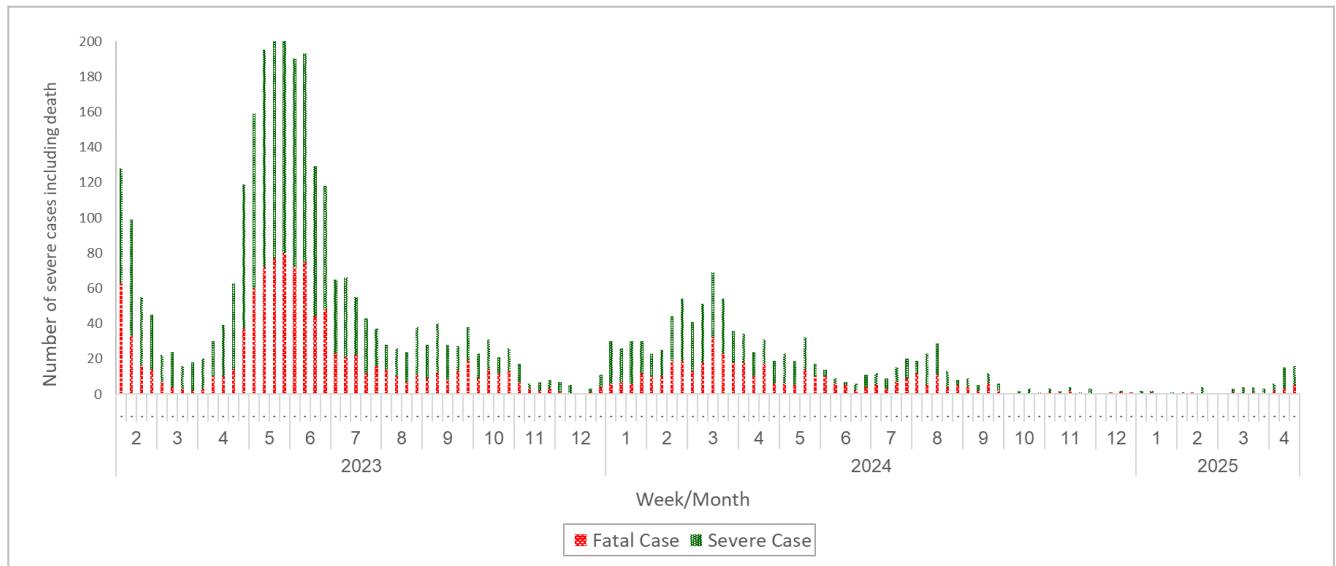


Figure 1.4 Weekly number of severe COVID-19 cases including deaths

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

Sewage surveillance of SARS-CoV-2 virus

In week 16, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 440,000 copy/L as compared to around 390,000 copy/L in the preceding week. (Figure 1.5)

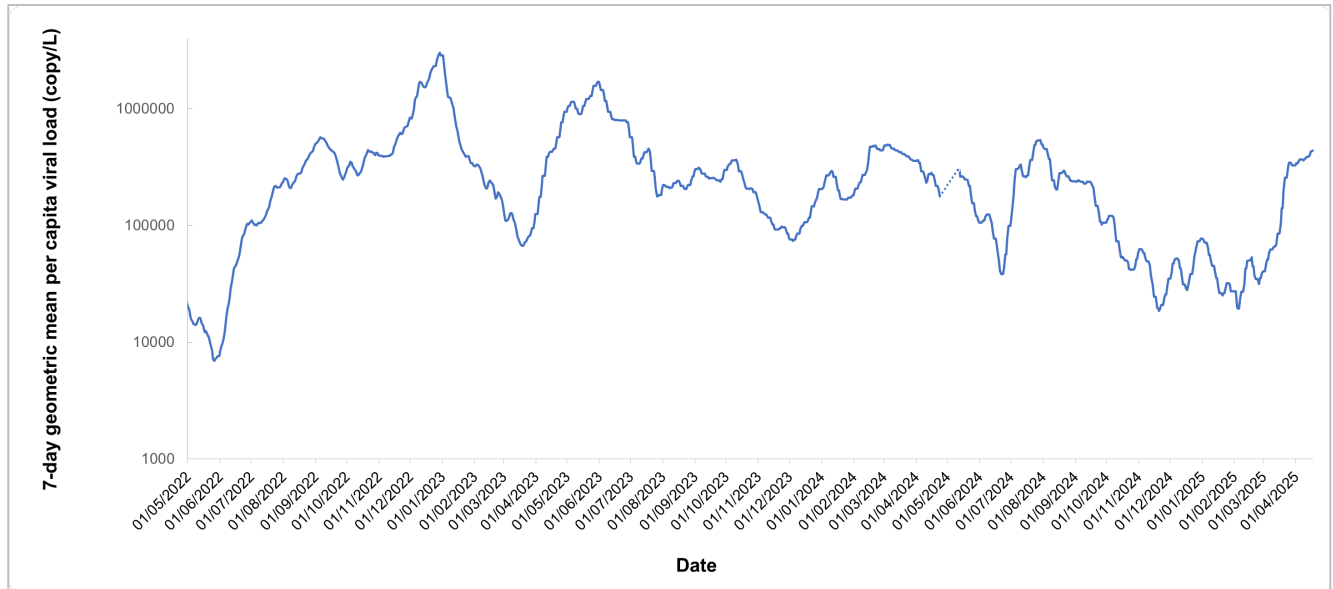


Figure 1.5 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

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 16, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 18.7 (Figure 1.6) and 25.6 (Figure 1.7) COVID-19 cases per 1,000 consultations, respectively.

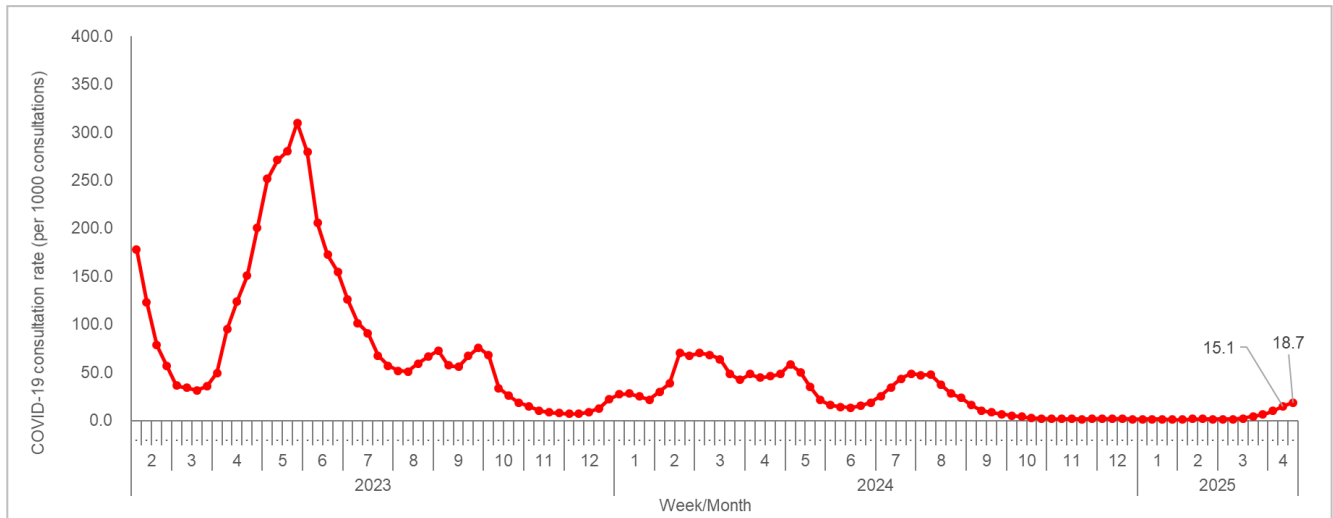


Figure 1.6 Average consultation rate of COVID-19 cases in GOPC

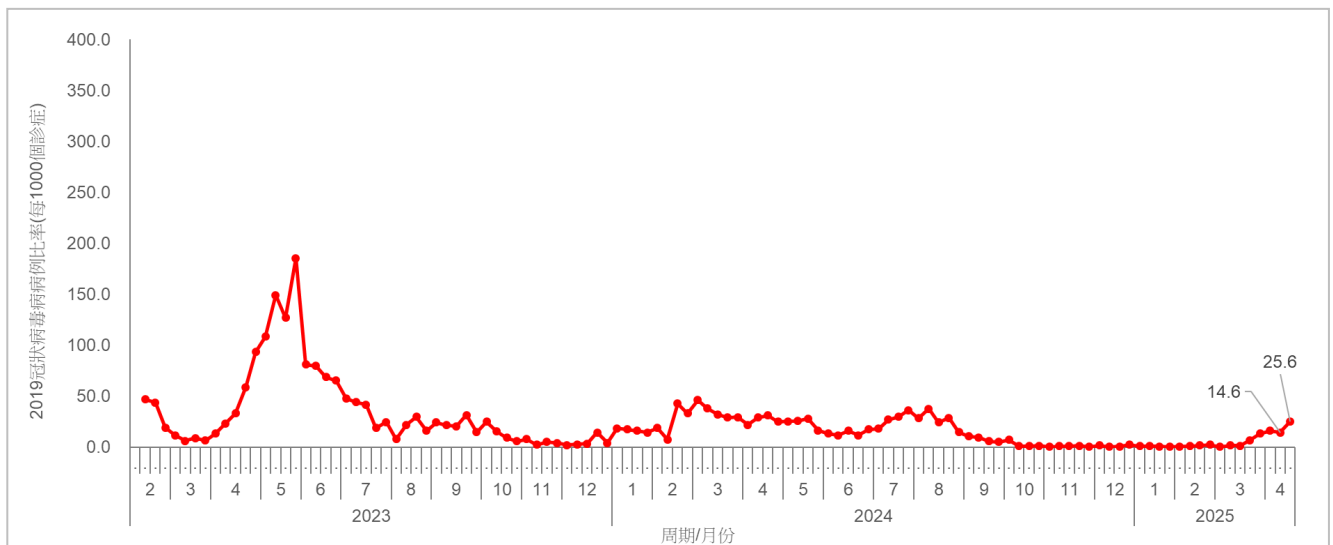


Figure 1.7 Average consultation rate of COVID-19 cases in private medical practitioner clinics

Surveillance on SARS-CoV-2 variants

CHP conducts surveillance on SARS-CoV-2 variants from sewage samples. The latest surveillance data (as of Apr 16, 2025) showed that KP.3 comprised 53.4% of all characterised specimens, while XDV accounted for 46.1%. (Figure 1.8)

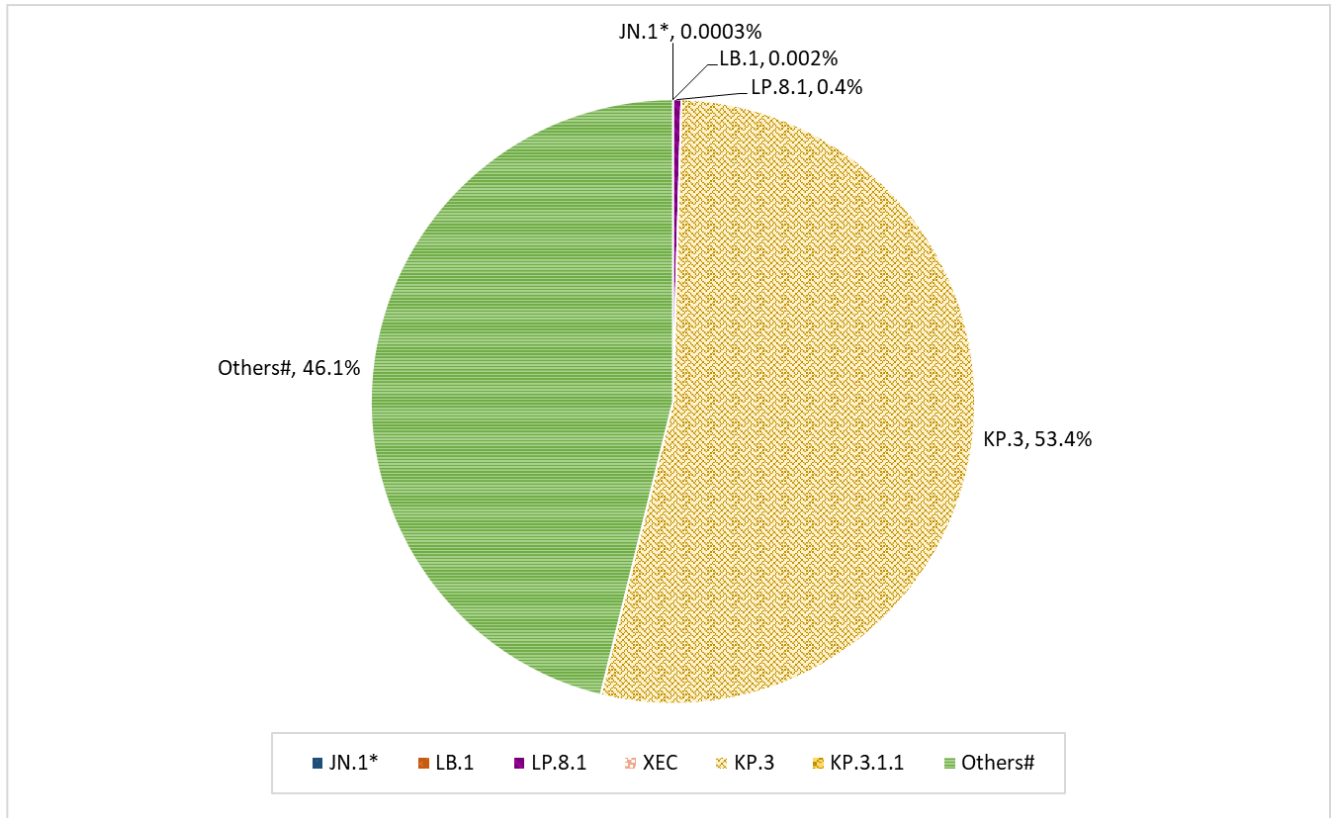


Figure 1.8 Estimated proportion of variants among sewage samples

*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 at the time of reporting. In the latest surveillance, all of them belongs to XDV and its descendant lineages.

Note: KP.3, KP.3.1.1, LB.1, LP.8.1 and XEC are the descendant lineages of JN.1

CHP also conducted genetic characterisation on 7 specimens obtained from reported severe and fatal cases of COVID-19 between Apr 9 and Apr 22, 2025. The results showed that all specimens belonged to JN.1 and its related variants.

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 all specimens belonged to JN.1 and its related variants.

Global situation of COVID-19 activity

- Globally, as of Mar 30, 2025, there have been 777,691,501 confirmed cases of COVID-19, including 7,093,267 deaths, reported to WHO.
- According to WHO COVID-19 epidemiological update last published on Mar 17, 2025,
 - ◆ Over 147,000 new cases and more than 4,500 new deaths were reported in the last 28 days (Jan 6 to Feb 2, 2025) globally.
 - ◆ The highest numbers of new 28-day cases were reported from Russia, Greece, Italy, the UK, and Malaysia. The highest numbers of new 28-day deaths were reported from the USA, Brazil, Sweden, Russia, Greece, and Italy.
 - ◆ 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 one VOI, which is JN.1, and seven VUMs, which are JN.1.18, KP.2, KP.3, KP.3.1.1, LB.1, LP.8.1 and XEC.
 - ◆ Between Jan 27 and Feb 2, 2025, the prevalence of JN.1 was 16.3%, showed a small increase from a prevalence of 14.1% between Jan 6 and Jan 12, 2025. 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. The prevalence of two VUMs showed an increasing trend, including LP.8.1 (8.0% to 13.9%) and LB.1 (0.2% to 1.2%) while the rest had their prevalence in decreasing trends or remained stable, including XEC (45.8% to 42.7%), KP.3.1.1 (23.9% to 20.3%), KP.3 (4.8% to 4.0%), KP.2 (0.8% to 0.5%) and JN.1.18 (0.1% to 0.0%).

Sources:

1. [WHO COVID-19 dashboard](#), accessed on Apr 24, 2025
2. [Tracking SARS-CoV-2 variants](#)
3. [World Health Organization COVID-19 epidemiological update](#)

Local Situation of Influenza Activity (as of Apr 23, 2025)

Reporting period: Apr 13 – 19, 2025 (Week 16)

- The latest surveillance data showed that the local influenza activity was at a low level.
- 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, 2021-25

In week 16, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 5.7 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 41.0 ILI cases per 1,000 consultations, which was higher than 40.9 recorded in the previous week (Figure 2.1, right).

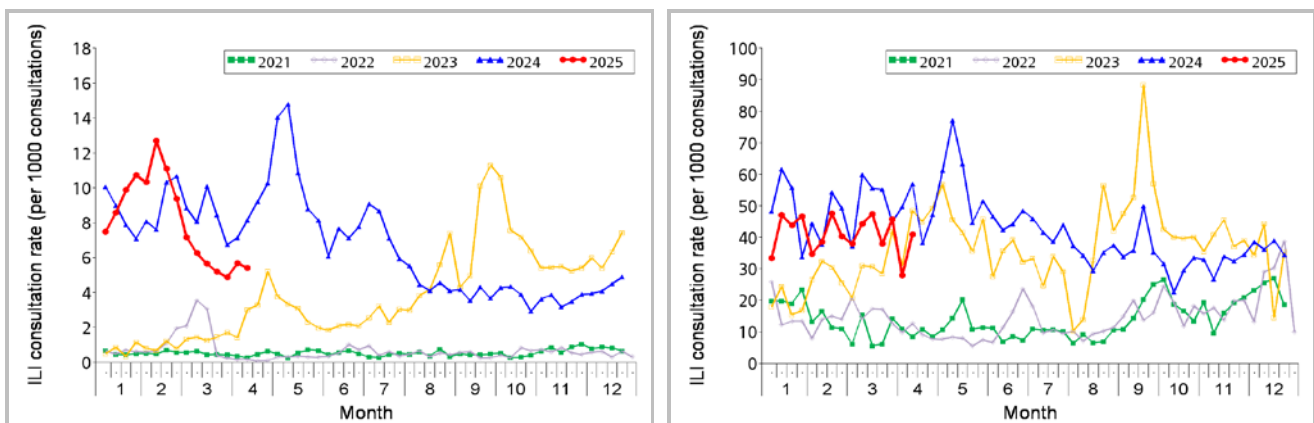


Figure 2.1 ILI consultation rates at sentinel GOPC (left) and PMP clinics (right), 2021-25

Laboratory surveillance, 2021-25

Among the 9,530 respiratory specimens* received in week 16, 100 (1.05%) were tested positive for seasonal influenza A or B viruses. Among the subtyped influenza detections, there were 44 (44%) influenza A(H1), 6 (6%) influenza A(H3) and 50 (50%) influenza B viruses. The positive percentage (1.05%) was below the baseline threshold of 4.94% and was lower than 1.06% recorded in the previous week (Figure 2.2).

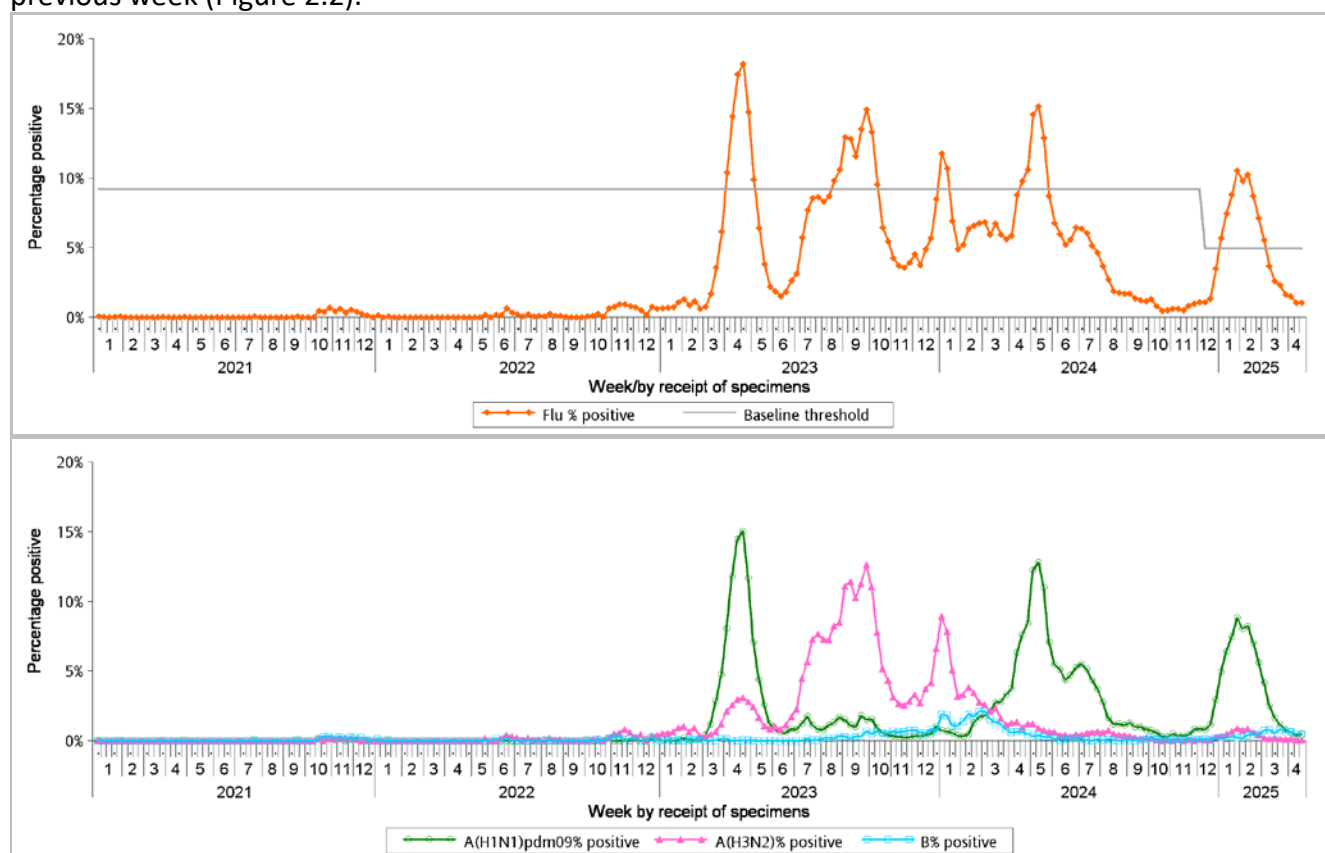


Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2021-25 (upper: overall positive percentage, lower: positive percentage by subtypes)

[Notes: The Centre for Health Protection (CHP) of the Department of Health closely monitors the local seasonal influenza activity through a series of surveillance systems. Among them, the CHP sets threshold levels for two important influenza indicators, including the positive percentage of influenza detections among respiratory specimens and the admission rate of patients diagnosed with influenza in public hospitals. These threshold levels are calculated statistically based on data collected for both indicators in the past years during non-season periods. Using these thresholds, the CHP assesses the current local situation of seasonal influenza with higher accuracy and determines whether Hong Kong enters influenza season. The CHP annually reviews and analyses the latest surveillance data, and updates these threshold levels where appropriate. The sensitivity of the surveillance system is enhanced with the updated thresholds of positive percentage of influenza detection and admission rate of higher coherence.]

Remarks: Some specimens may contain vaccine strains from people with recent history of receiving live-attenuated influenza vaccine

* Including 8,504 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 1,026 specimens received by the Hospital Authority

Surveillance of oseltamivir resistant influenza A and B viruses

- Public Health Laboratory Services Branch, Centre for Health Protection tests influenza virus isolates obtained from cell culture for antiviral susceptibility.
- In February 2025, 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/10/641/695/7088.html>
- Low detection rates of oseltamivir (Tamiflu) resistant influenza A and B viruses from latest surveillance data of overseas countries (less than 5%).
- CHP will continue laboratory surveillance on oseltamivir (Tamiflu) resistance of influenza viruses to monitor the trend.

Influenza-like illness outbreak surveillance, 2021-25

In week 16, 6 ILI outbreaks occurring in schools/institutions were recorded (affecting 30 persons), as compared to 6 outbreaks recorded in the previous week (affecting 25 persons) (Figure 2.3). In the first 4 days of week 17 (Apr 20 to 23), 1 ILI outbreak in an institution was recorded (affecting 3 persons).

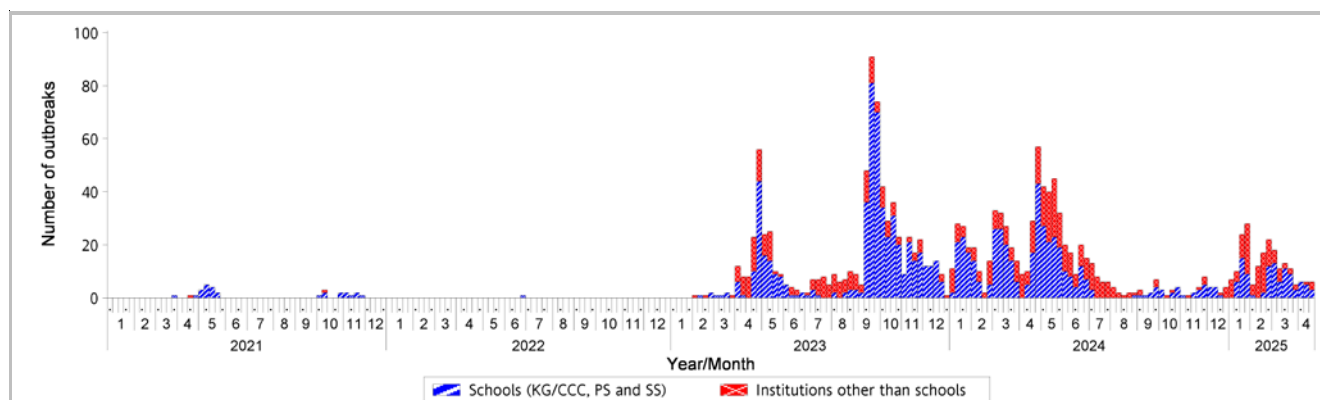


Figure 2.3 ILI outbreaks in schools/institutions, 2021-25

Type of institutions	Week 15	Week 16	First 4 days of week 17 (Apr 20 – 23)
Child care centre/ kindergarten (CCC/KG)	0	1	0
Primary school (PS)	3	2	0
Secondary school (SS)	2	0	0
Residential care home for the elderly	0	3	0
Residential care home for persons with disabilities	0	0	0
Others	1	0	1
<i>Total number of outbreaks</i>	6	6	1
<i>Total number of persons affected</i>	25	30	3

Influenza-associated hospital admission rates in public hospitals based on discharge coding, 2021-25

In week 16, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.06 (per 10,000 population), which was below the baseline threshold of 0.27 and was lower than 0.08 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 0.34, 0.06, 0.14, 0.02, 0.02 and 0.11 cases (per 10,000 people in the age group) respectively, as compared to 0.51, 0.37, 0.11, 0.02, 0.03 and 0.13 cases in the previous week (Figure 2.4).

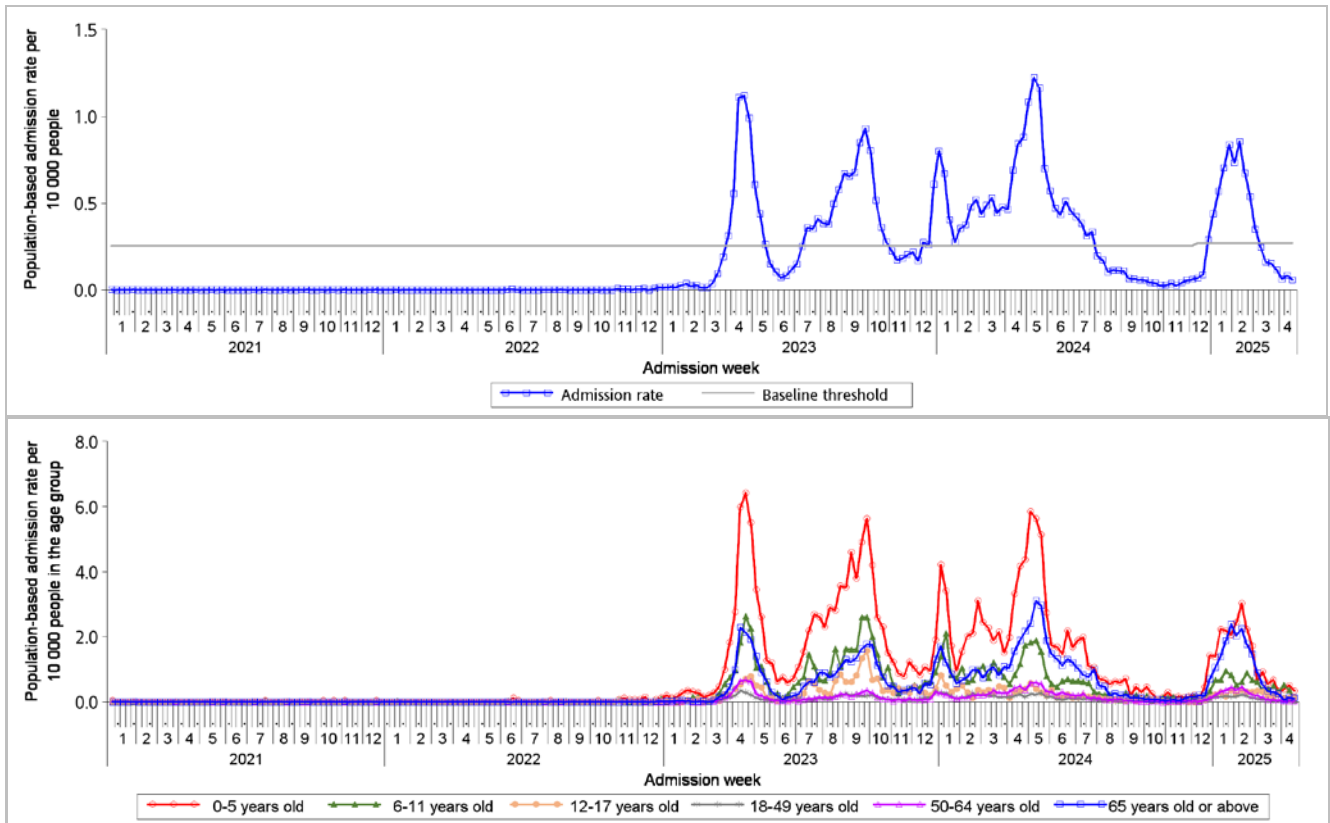


Figure 2.4 Influenza-associated hospital admission rates, 2021-25 (upper: overall rate, lower: rates by age groups)

[Notes: The Centre for Health Protection (CHP) of the Department of Health closely monitors the local seasonal influenza activity through a series of surveillance systems. Among them, the CHP sets threshold levels for two important influenza indicators, including the positive percentage of influenza detections among respiratory specimens and the admission rate of patients diagnosed with influenza in public hospitals. These threshold levels are calculated statistically based on data collected for both indicators in the past years during non-season periods. Using these thresholds, the CHP assesses the current local situation of seasonal influenza with higher accuracy and determines whether Hong Kong enters influenza season. The CHP annually reviews and analyses the latest surveillance data, and updates these threshold levels where appropriate. The sensitivity of the surveillance system is enhanced with the updated thresholds of positive percentage of influenza detection and admission rate of higher coherence.]

Rate of ILI syndrome group in accident and emergency departments, 2021-25[#]

In week 16, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 157.4 (per 1,000 coded cases), which was higher than the rate of 149.2 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.

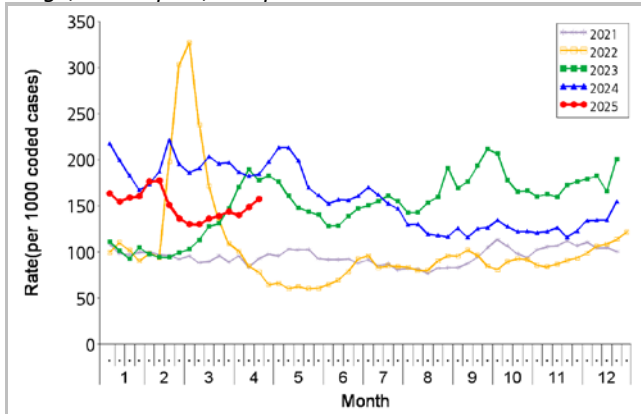


Figure 2.5 Rate of ILI syndrome group in AEDs, 2021-25

Fever surveillance at sentinel child care centres/ kindergartens, 2021-25

In week 16, 0.57% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.65% recorded in the previous week (Figure 2.6).

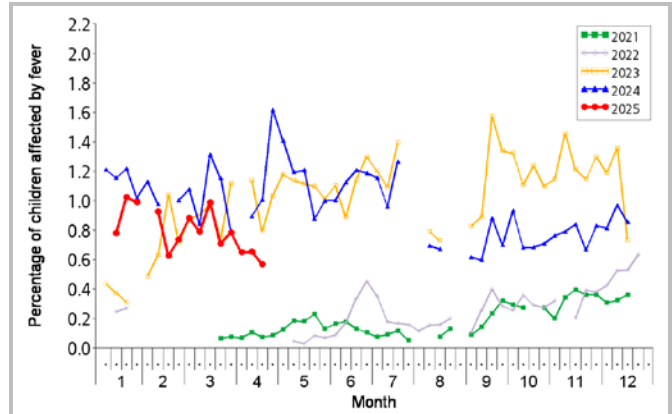


Figure 2.6 Percentage of children with fever at sentinel CCCs/KGs, 2021-25

Fever surveillance at sentinel residential care homes for the elderly, 2021-25

In week 16, 0.14% of residents in the sentinel residential care homes for the elderly (RCHes) had fever (38°C or above), compared to 0.16% recorded in the previous week (Figure 2.7).

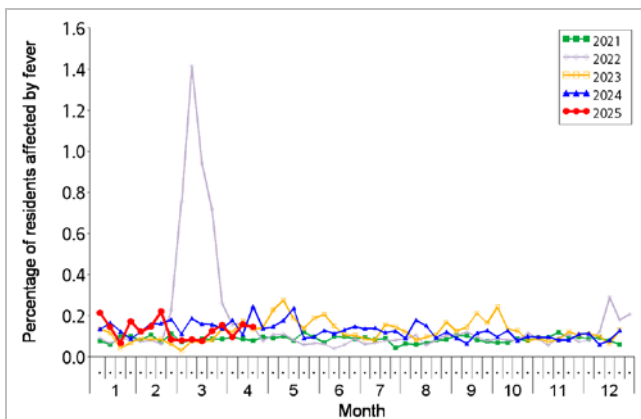


Figure 2.7 Percentage of residents with fever at sentinel RCHes, 2021-25

Influenza-like illness surveillance among sentinel Chinese medicine practitioners, 2021-25

In week 16, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.40 ILI cases per 1,000 consultations as compared to 1.08 recorded in the previous week (Figure 2.8).

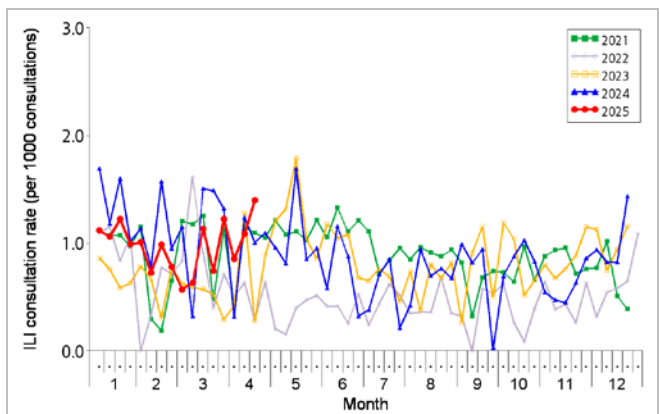


Figure 2.8 ILI consultation rate at sentinel CMPs, 2021-25

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 16, 3 adult cases of ICU admission/death with laboratory confirmation of influenza (including 1 death) were recorded, as compared to 5 cases (including 3 deaths) in the previous week.

Week	Influenza type			
	A(H1)	A(H3)	B	A (pending subtype)
Week 15	1	0	2	2
Week 16	1	0	2	0

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

- In week 16 and the first 4 days of week 17 (Apr 20 – 23), there were no cases of severe paediatric influenza-associated complication/death.
- In 2025, 11 paediatric cases of severe influenza-associated complication/death were recorded, in which none of them were fatal (as of Apr 23).

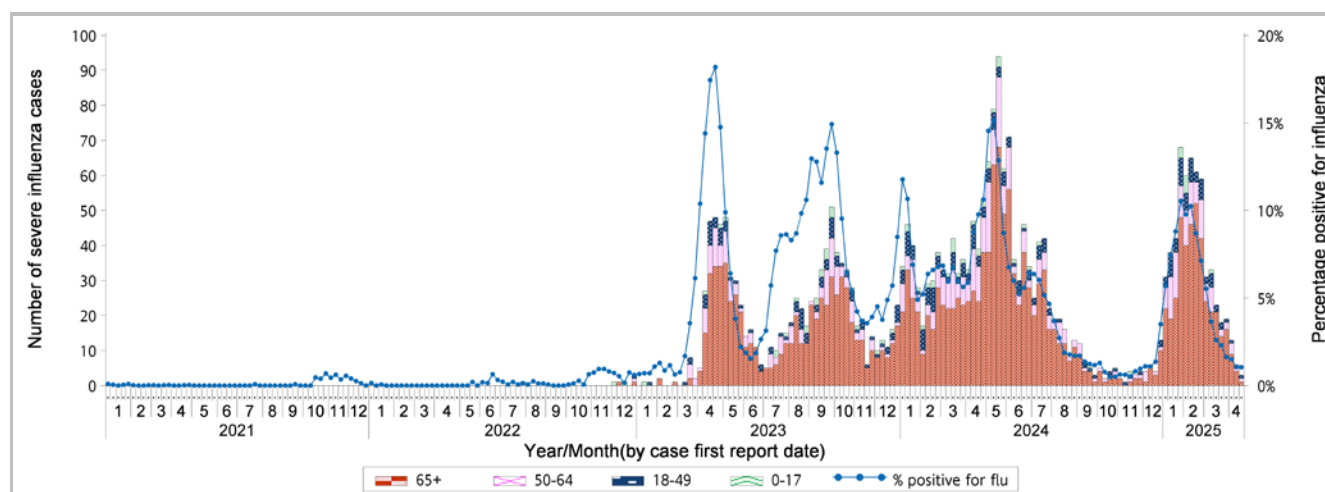


Figure 2.9 Weekly number of severe influenza cases by age groups, 2021-25 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

Global Situation of Influenza Activity

In the Northern Hemisphere, influenza activities continued to decrease or remained at low levels in most countries. In the Southern Hemisphere, influenza activities remained at low levels or decreased (data up to Apr 13, 2025).

- In the United States (week ending Apr 12, 2025), the national influenza activity continued to decline, but several more weeks of flu activity was still expected. This season is classified as a high severity season overall. The percentage of specimens tested positive for influenza decreased to 6.7% from the peak of 31.7%. Influenza A(H1N1)pdm09, A(H3N2) and B viruses were co-circulating.
- In Canada (week ending Apr 12, 2025), indicators of influenza activity decreased. Influenza positivity decreased to 11.9%, but was higher than the threshold of 5%. Laboratory detections are predominantly influenza A and among subtyped influenza A detections, influenza A(H1N1) is predominant (81%).
- In the United Kingdom (week ending Apr 13, 2025), influenza activity decreased across most indicators and was at low activity levels. Influenza positivity in England decreased to 5.3% as compared with 6.2% in preceding week. Influenza A and B viruses were co-circulating.
- In Europe (week ending Apr 6, 2025), influenza activity appears to have peaked in most countries and areas and most influenza indicators are decreasing. Influenza positivity from sentinel specimens was 16% as compared to 22% in preceding week, which was higher than 10% epidemic threshold. Influenza A(H3) and influenza B viruses co-circulate recently.
- In Mainland China (week ending Apr 13, 2025), the percentage of specimens tested positive for influenza in southern and northern provinces decreased, with 2.3% and 2.7% in week 15 respectively. Influenza A(H1N1)pdm09 viruses were predominating.
- In Japan (week ending Apr 13, 2025), the average number of reported ILI cases per sentinel site was 1.19, as compared to 1.20 in preceding week, and was still above the baseline level of 1.00. Most of the influenza detections were influenza B in recent weeks, followed by influenza A(H3) viruses.
- In South Korea (week ending Apr 12, 2025), the weekly ILI rate increased. The rate in week 15 was 21.6 per 1,000 out-patient visits, which was above the seasonal epidemic threshold of 8.6. Influenza B viruses were predominating.

Sources:

Information have been extracted from the following sources when updates are available: [World Health Organization](#), [United States Centers for Disease Control and Prevention](#), [Public Health Agency of Canada](#), [UK Health Security Agency](#), [European Centre for Disease Prevention and Control \(ECDC\)](#) and [WHO Regional Office for Europe \(WHO Euro\)](#), [Chinese National Influenza Center](#) and [Japan Ministry of Health](#) and [Korean Disease Control and Prevention Agency](#).