### 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 Jun 4, 2025)

Reporting period: May 25, 2025 - May 31, 2025 (Week 22)

- The latest surveillance data showed that the overall local activity of COVID-19 has declined, but is still at a relatively high level.
- The Centre for Health Protection (CHP) has been closely monitoring the local prevalence of SAR-CoV-2 variants. The latest sewage surveillance data and genetic analysis of positive respiratory specimens showed that NB.1.8.1 has become the dominating variant strains in Hong Kong. NB.1.8.1 is one of the descendant lineages of XDV, in turn a descendent of JN.1. The World Health Organization (WHO) listed NB.1.8.1 as a variant under monitoring (VUM) on May 23, 2025, and stated that NB.1.8.1 poses a low risk to global public health based on the available evidence, and that the currently approved COVID-19 vaccines are expected to be effective against NB.1.8.1, and there is no evidence to suggest that NB.1.8.1 will cause more serious diseases.
- 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
  (<a href="https://www.chp.gov.hk/files/pdf/consensus">https://www.chp.gov.hk/files/pdf/consensus</a> interim recommendations on use of covi
  d19 vaccines in hong kong 17jul.pdf).
- For the latest information on COVID-19 and prevention measures, please visit the thematic website of COVID-19 (<a href="https://www.coronavirus.gov.hk/eng/index.html">https://www.coronavirus.gov.hk/eng/index.html</a>).

#### **Laboratory surveillance for COVID-19 cases**

### <u>Positive nucleic acid test laboratory detections for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus</u>

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

In week 22, the weekly number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus was 644 as compared to 846 in the preceding week. (Figure 1.1)

In the first 4 days of week 23 (Jun 1 - Jun 4), the daily number of newly recorded positive nucleic acid test laboratory detections for SARS-CoV-2 virus ranged from 68 to 81.

Since Jan 30, 2023, the cumulative number of positive nucleic acid test laboratory detections was 82,125 (as of Jun 4, 2025).

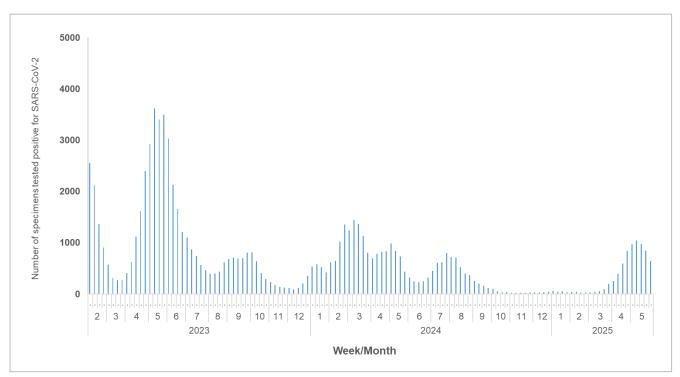


Figure 1.1 Weekly number of positive nucleic acid test laboratory detections for SARS-CoV-2 virus

# 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 8,238, respiratory specimens received by the Public Health Laboratory Services Branch (PHLSB) in week 22, 764 (9.27%) were tested positive for SARS-CoV-2 virus as compared to 986 (11.12%) in the preceding week. (Figure 1.2)

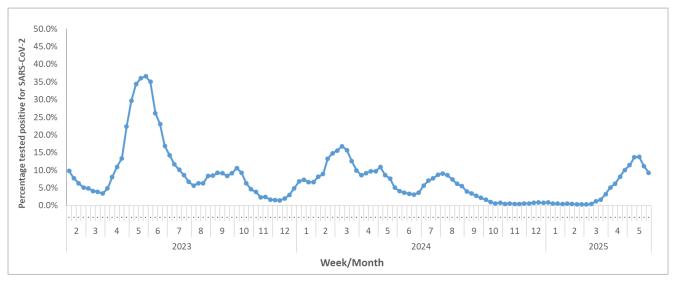


Figure 1.2 Percentage of specimens tested positive for SARS-CoV-2 virus at PHLSB

#### **COVID-19 outbreak surveillance**

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

In week 22, 6 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 38 persons), as compared to 15 outbreaks recorded in the previous week (affecting 86 persons). (Figure 1.3)

In the first 4 days of week 23 (Jun 1 – Jun 4), 2 COVID-19 outbreaks occurring in schools/institutions were recorded (affecting 6 persons).

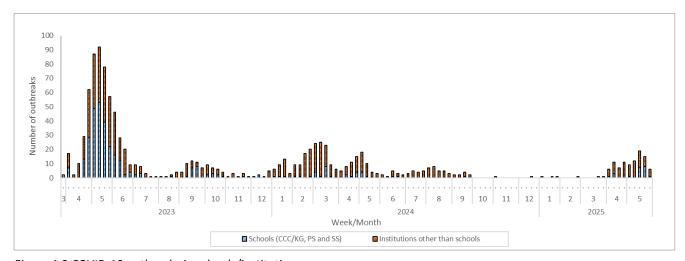


Figure 1.3 COVID-19 outbreaks in schools/institutions

Type of institutions	Week 21	Week 22	First 4 days of week 23 (Jun 1 – Jun 4)
Child care centre/ kindergarten (CCC/KG)	1	0	0
Primary school (PS)	4	0	0
Secondary school (SS)	3	1	0
Residential care home for the elderly	4	5	2
Residential care home for persons with disabilities	2	0	0
Others	1	0	0
Total number of outbreaks	15	6	2
Total number of persons affected	86	38	6

#### Surveillance of severe and fatal COVID-19 cases

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

In week 22, the weekly number of severe COVID-19 cases including deaths with cause of death preliminarily assessed to be related to COVID-19 was 30 as compared to 35 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 1,464 (as of May 31, 2025).

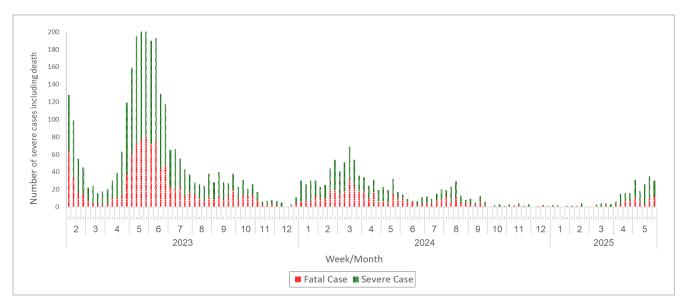


Figure 1.4 Weekly number of severe COVID-19 cases including deaths

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

### Sewage surveillance of SARS-CoV-2 virus

In week 22, the 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance was around 380,000 copy/L as compared to around 500,000 copy/L in the preceding week. (Figure 1.5)

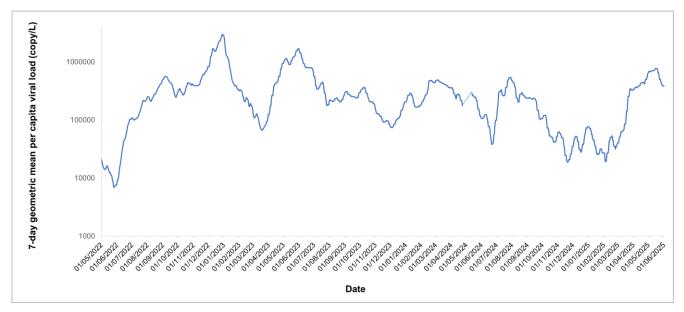


Figure 1.5 7-day geometric mean per capita viral load of SARS-CoV-2 virus from sewage surveillance since May 1, 2022

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 22, the average consultation rate for COVID-19 among sentinel general out-patient clinics (GOPC) and sentinel private medical practitioner clinics were 38.2 (Figure 1.6) and 35.0 (Figure 1.7) COVID-19 cases per 1,000 consultations, respectively.

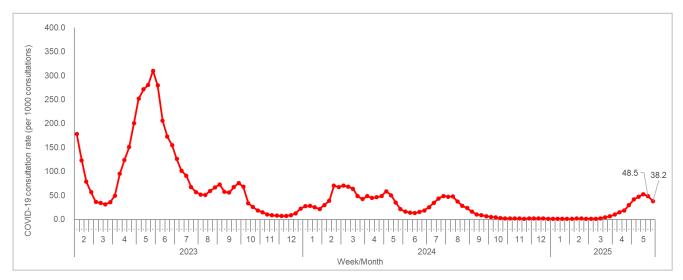


Figure 1.6 Average consultation rate of COVID-19 cases in GOPC

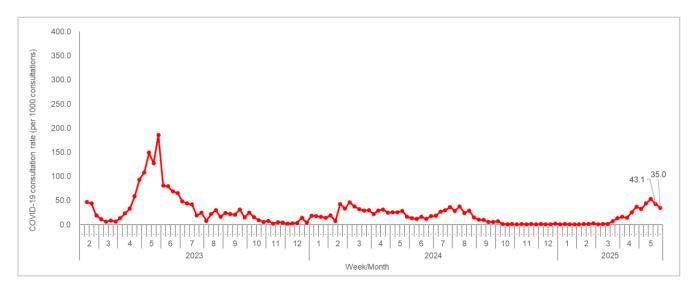


Figure 1.7 Average consultation rate of COVID-19 cases in private medical practitioner clinics

#### Surveillance on SARS-CoV-2 variants

Currently, WHO is monitoring one variant of interest (VOI), which is JN.1, and six VUMs, which are KP.3, KP.3.1.1, LB.1, LP.8.1, NB.1.8.1 and XEC. CHP conducts surveillance on SARS-CoV-2 variants from sewage samples. The latest surveillance data (as of May 28, 2025) showed that NB.1.8.1 (one of the descendant lineages of XDV) has become the most prevalent variant, comprising 93.6% of all characterised specimens. (Figure 1.8)

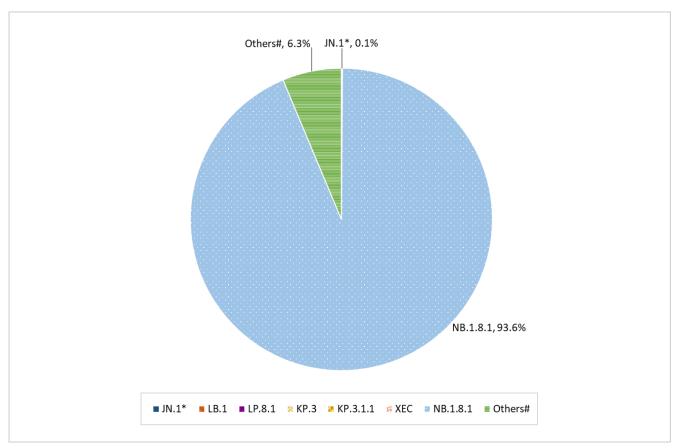


Figure 1.8 Estimated proportion of variants among sewage samples

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 reported severe and fatal cases of COVID-19 between May 21 and Jun 3, 2025. The results showed that all specimens belonged to NB.1.8.1 and its descendent lineages.

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 NB.1.8.1 and its descendent lineages .

 $<sup>^</sup>st$ Including JN.1 and its descendant lineages, except those individually specified elsewhere in the table

<sup>\*</sup>Those SARS-CoV-2 variants not classified as VOIs/VUMs by WHO at the time of reporting. In the latest surveillance, all of them belongs to XDV and its descendant lineages except NB.1.8.1.

#### Global situation of COVID-19 activity

- According to the WHO, there has been an increase in SARS-CoV-2 activity globally, which the
  increase is primarily in the Eastern Mediterranean Region, the South-East Asia Region, and the
  Western Pacific Region. Countries in the African Region, European Region, and the Region of the
  Americas are currently reporting low levels of SARS-CoV-2 activity.
- COVID-19 activity has increased in some of the neighborhood regions, while it has remained stable in North America and Europe.
  - ◆ In Mainland China, the percentage of specimens tested positive for SARS-CoV-2 has been on the rise in April, with that observed in southern provinces being higher than that in northern provinces. The percentage of specimens tested positive for SARS-CoV-2 in some provinces that experienced earlier increases has shown a slowdown in growth. The predominant variant was XDV (including NB.1.8.1) recently.
  - ◆ In Taiwan region (week ending May 31, 2025), the COVID-19 activity continued to increase. The number of COVID-19 outpatient and emergency visits has increased from the previous week. The predominant variant was NB.1.8.1.
  - ◆ In Japan (week ending May 25, 2025), the average number of reported COVID-19 cases per sentinel site decreased to 0.84 from 0.96 in preceding week. The predominant variant was XEC.
  - ◆ In South Korea (week ending May 24, 2025), the weekly detection rate for SARS-CoV-2 increased to 8.8% from 8.6% in preceding week. The predominant variant was LP.8.1.
  - ◆ Thailand experienced an increase of COVID-19 outbreak associated with XEC. As of week ending May 24, 2025, the number of new COVID-19 cases continued to increase after the Songkran Festival.
  - ◆ In Singapore (week ending May 24, 2025), the positivity rate for COVID-19 among acute respiratory infection (ARI) samples in the community increased to 21% as compared with 20% in preceding week.
  - ◆ In the United States (week ending May 24, 2025), the percent positivity of COVID-19 decreased to 2.7% from 2.8% in preceding week. The predominant variant was LP.8.1.
  - ◆ In Canada (week ending May 24, 2025), most indicators of COVID-19 activity are at low levels. Percentage of tests positive for COVID-19 is low and stable at 2.6%. The predominant variant was NB.1.8.1.
  - ◆ In the United Kingdom (week ending May 18, 2025), COVID-19 activity was broadly stable, circulating at baseline levels. COVID-19 PCR positivity in hospital settings increased slightly to 5.6% as compared with 5.2% in preceding week. The predominant variant was LP.8.1.1.
  - In Europe (week ending May 18, 2025), SARS-CoV-2 positivity from sentinel specimens was 5% compared to 3% in the prior week. The predominant variant was LP.8.1.
  - ♦ In Australia (fortnight ending May 18, 2025), test positivity for SARS-CoV-2 has increased this fortnight. The predominant variant was XEC.

#### Sources:

Information have been extracted from the following sources when updates are available: World Health Organization, Chinese Center for Disease Control and Prevention, Taiwan Centers for Disease Control, Japan Ministry of Health, Korean Disease Control and Prevention Agency, Thailand Department of Disease Control, Singapore Communicable Diseases Agency, 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), and Australian Department of Health and Aged Care.

### Local Situation of Influenza Activity (as of Jun 4, 2025)

### Reporting period: May 25 - 31, 2025 (Week 22)

- 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 22, the average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics (GOPC) was 4.8 ILI cases per 1,000 consultations, which was lower than 5.0 recorded in the previous week (Figure 2.1, left). The average consultation rate for ILI among sentinel private medical practitioner (PMP) clinics was 28.4 ILI cases per 1,000 consultations, which was lower than 31.8 recorded in the previous week (Figure 2.1, right).

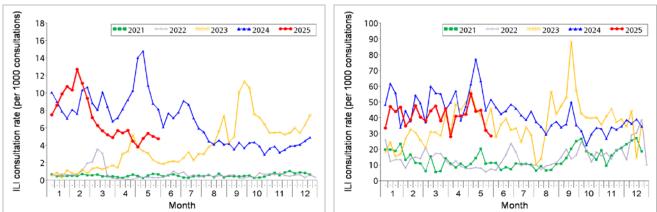


Figure 2.1 ILI consultation rates at sentinel GOPC (left) and PMP clinics (right), 2021-25

#### Laboratory surveillance, 2021-25

Among the 8,766 respiratory specimens received in week 22, 78 (0.89%) were tested positive for seasonal influenza A or B viruses. Among the subtyped influenza detections, there were 39 (52%) influenza A(H1), 6 (8%) influenza A(H3) and 30 (40%) influenza B viruses. The positive percentage (0.89%) was below the baseline threshold of 4.94% but was higher than 0.74% recorded in the previous week (Figure 2.2).

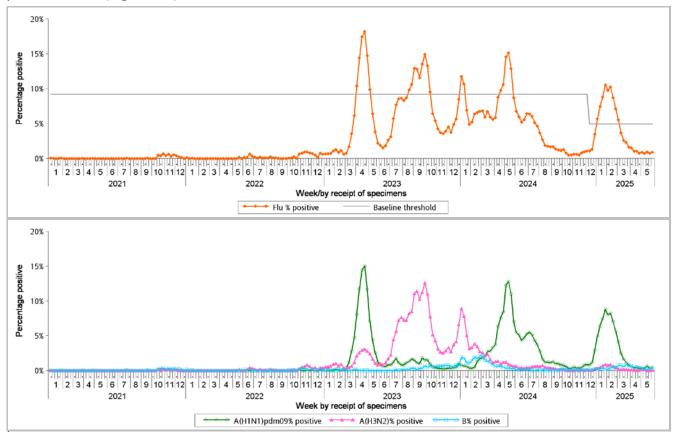


Figure 2.2 Percentage of respiratory specimens tested positive for influenza viruses, 2021-25 (upper: overall positive percentage, lower: positive percentage by subtypes)

[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

#### 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 April 2025, there was one new report of oseltamivir (Tamiflu) resistant influenza A(H1) virus.
- 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.

<sup>\*</sup> Including 8,238 specimens received by Public Health Laboratory Services Branch, Centre for Health Protection and 528 specimens received by the Hospital Authority

#### Influenza-like illness outbreak surveillance, 2021-25

In week 22, 7 ILI outbreaks occurring in schools/institutions were recorded (affecting 24 persons), as compared to 3 outbreaks recorded in the previous week (affecting 19 persons) (Figure 2.3). In the first 4 days of week 23 (Jun 1 to 4), 1 ILI outbreak in a school was recorded (affecting 3 persons).

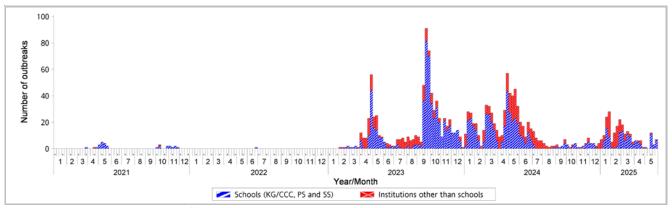


Figure 2.3 ILI outbreaks in schools/institutions, 2021-25

Type of institutions	Week 21	Week 22	First 4 days of week 23 (Jun 1 – 4)
Child care centre/ kindergarten (CCC/KG)	0	2	0
Primary school (PS)	2	3	1
Secondary school (SS)	1	1	0
Residential care home for the elderly	0	1	0
Residential care home for persons with disabilities	0	0	0
Others	0	0	0
Total number of outbreaks	3	7	1
Total number of persons affected	19	24	3

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

In week 22, the overall admission rates in public hospitals with principal diagnosis of influenza was 0.05 (per 10,000 population), which was below the baseline threshold of 0.27 and was higher than 0.04 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 0.25, 0.15, 0.00, 0.02, 0.02 and 0.08 cases (per 10,000 people in the age group) respectively, as compared to 0.13, 0.09, 0.06, 0.01, 0.02 and 0.09 cases in the previous week (Figure 2.4).

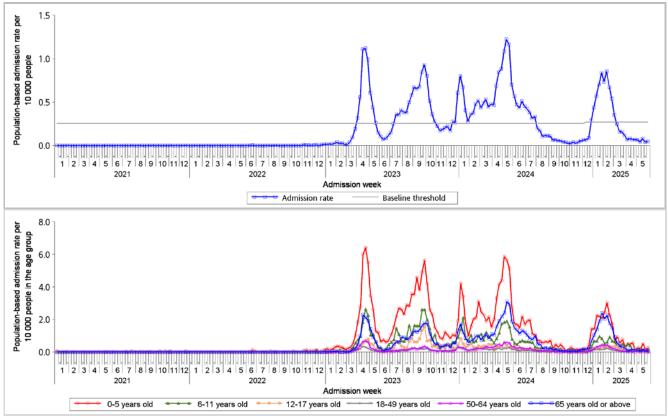


Figure 2.4 Influenza-associated hospital admission rates, 2021-25 (upper: overall rate, lower: rates by age groups)

[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 22, the rate of the ILI syndrome group in the accident and emergency departments (AEDs) was 130.8 (per 1,000 coded cases), which was lower than the rate of 135.1 in the previous week (Figure 2.5).

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

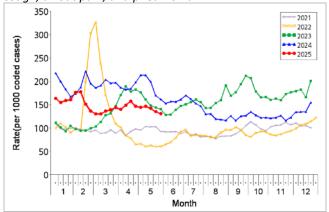


Figure 2.5 Rate of ILI syndrome group in AEDs, 2021-25

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

In week 22, 0.10% 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 2.7).

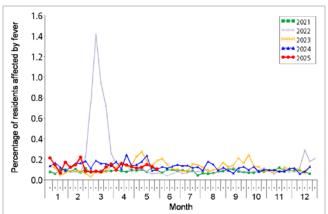


Figure 2.7 Percentage of residents with fever at sentinel RCHEs, 2021-25

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

In week 22, 0.62% of children in the sentinel child care centres / kindergartens (CCCs/KGs) had fever (38°C or above) as compared to 0.74% recorded in the previous week (Figure 2.6).

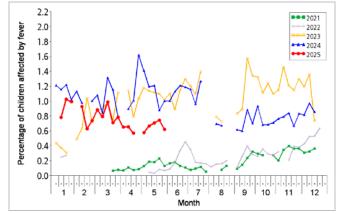


Figure 2.6 Percentage of children with fever at sentinel CCCs/KGs, 2021-25

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

In week 22, the average consultation rate for ILI among Chinese medicine practitioners (CMPs) was 1.32 ILI cases per 1,000 consultations as compared to 1.08 recorded in the previous week (Figure 2.8).

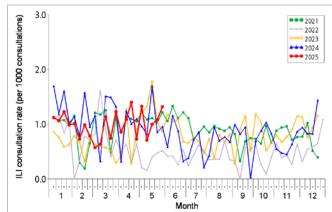


Figure 2.8 ILI consultation rate at sentinel CMPs, 2021-25

#### Surveillance of severe influenza cases

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

### <u>Surveillance for intensive care unit (ICU) admission/death with laboratory</u> 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 22, 2 adult cases of ICU admission/death with laboratory confirmation of influenza (no deaths) were recorded, as compared to 3 cases (including 2 deaths) in the previous week.

Week	Influenza type				
	A(H1)	A(H3)	В	A (pending subtype)	
Week 21	1	0	1	1	
Week 22	1	1	0	0	

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

- In week 22 and the first 4 days of week 23 (Jun 1 to 4), 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 Jun 4).

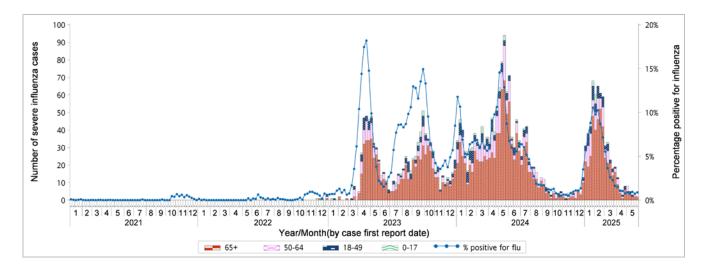


Figure 2.9 Weekly number of severe influenza cases by age groups, 2021-25 (the percentage positive for influenza viruses in Figure 2.2 is also shown in this graph)

#### **Global Situation of Influenza Activity**

In the Northern Hemisphere, influenza activities continued to decline or remained stable in most countries. In the Southern Hemisphere, influenza positivity was elevated in Oceania with influenza A(H1N1) predominating (data up to May 18, 2025).

- In the United States (week ending May 24, 2025), the seasonal influenza activity is low. The percentage of specimens tested positive for influenza was 1.9%.
- In Canada (week ending May 24, 2025), influenza season ended in early May. Indicators of influenza activity decreased. Influenza positivity continued to decrease to 2.1%. Influenza A and B viruses were co-circulating. Among subtyped influenza A detections, influenza A(H1N1) is predominant (80%).
- In the United Kingdom (week ending May 18, 2025), influenza activity was at baseline levels. Influenza positivity in England decreased to 1.5% as compared with 1.7% in preceding week. Since April, the majority of influenza A detections have been influenza A(H3N2).
- In Europe (week ending May 18, 2025), influenza positivity from sentinel specimens remained below the 10% epidemic threshold at 2% compared to 5% in the prior week. Influenza A(H1), A(H3) and B viruses co-circulated recently.
- In Mainland China (week ending May 25, 2025), the percentage of specimens tested positive for influenza in southern and northern provinces were at low levels, with 0.5% and 2.4% in week 21 respectively.
- In South Korea (week ending May 24, 2025), the weekly ILI rate decreased to 7.3 per 1,000 out-patient visits, which was below the seasonal epidemic threshold of 8.6. Influenza B viruses were predominating.
- In Australia (fortnight ending May 18, 2025), the number of influenza cases remained low and was consistent with the number of cases seen at the same time in previous years and the five-year average.
- In New Zealand (week ending May 18, 2025), the national ILI rate increased. Eight (19.5%) out of 41 sentinel samples were tested positive for influenza in week 21. Most of the influenza detections were influenza A(H1) viruses.

#### Sources:

Information have been extracted from the following sources when updates are available: <u>World Health Organization</u>, <u>United States Centers for Disease Control and Prevention</u>, <u>Public Health Agency of Canada</u>, <u>UK Health Security Agency</u>, <u>European Centre for Disease Prevention and Control (ECDC) and WHO Regional Office for Europe (WHO Euro)</u>, <u>Chinese National Influenza Center, Korean Disease Control and Prevention Agency and Australian Department of Health and Aged Care and New Zealand Ministry of Health.</u>