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## **FEATURE IN FOCUS**

# Summary of the 2024/2025 winter influenza season in Hong Kong

Reported by Ms Vera CHOW, Scientific Officer, Respiratory Disease Section, Communicable Disease Branch, CHP

Hong Kong experienced the 2024/25 winter influenza season from January to March this year, lasting about 11 weeks. The timing of arrival of this season was similar to that of previous typical winter influenza seasons in Hong Kong, and the duration was within the usual range.

## Laboratory surveillance

Among respiratory specimens received by the Hospital Authority (HA) and Public Health Laboratory Services Branch (PHLSB) of the Centre for Health Protection (CHP), the weekly percentage tested positive for seasonal influenza viruses started to increase in late December 2024 and exceeded the baseline threshold of 4.94% in early January 2025. It continued to increase and reached the peak level of 9.77% – 10.54% in the three weeks between January 19 to February 8, and then gradually decreased to a low level in late March (Figure 1). The peak level of 10.54% was lower than 15.16% recorded in the last season, and was significantly lower than 29.95% recorded in the 2018/19 winter season (which was the previous typical winter influenza season predominated by influenza A(H1) virus).

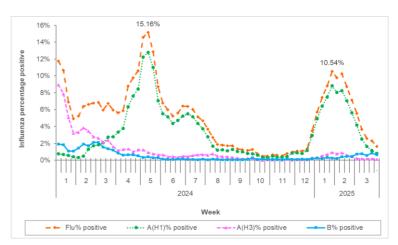


Figure 1 – Percentage of respiratory specimens tested positive for influenza viruses and their subtypes, 2024 – March 2025.

The predominating virus in this season was influenza A(H1) virus, constituting about 85% of positive influenza detections, whereas circulation of influenza A(H3) and B viruses remained low (Figure 1). In this season, the locally circulating influenza viruses matched the reference strains of the 2024/25 seasonal influenza vaccines (SIV).

#### Influenza-associated hospital admission rates in public hospitals

The influenza-associated admission rate in public hospitals exhibited a trend similar to that observed in laboratory surveillance in this season (Figure 2a). The weekly admission rate with principal diagnosis of influenza started to increase in late December 2024. It exceeded the baseline threshold of 0.27 per 10 000 population in early January and remained at a high level of 0.73 – 0.85 per 10 000 population in the three weeks between late January 19 to February 8. It then gradually decreased and reached a low level in late March. Similarly, the peak rate was lower than that recorded last year (1.22) and was about half of the peak level (1.58) recorded during the 2018/19 winter season which was also predominated by influenza A (H1).

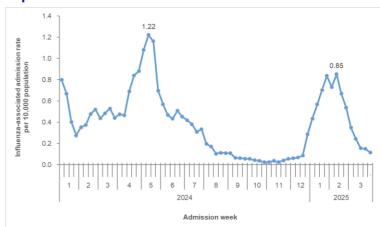


Figure 2a — Weekly admission rates with principal diagnosis of influenza in public hospitals, 2024 — March 2025.

Figure 2b illustrates the weekly influenza-associated admission rates amongst various age groups in 2024-2025. In this winter season, the most affected age groups were young children aged five years or below and elders aged 65 years or above, followed by children aged 6-11 years. The peak rates (Table 1) among young children aged five years or below (3.03) and children aged 6-11 years (0.95) were significantly lower than those of last season (5.85 and 2.10 respectively). The peak rate among elders aged 65 years or above (2.39) was also lower than that of last season (3.10). Of note, the peak admission rates were lower across all age groups when compared with the 2018/19 winter season.

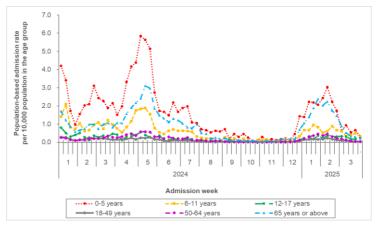


Figure 2b – Weekly admission rates with principal diagnosis of influenza in public hospitals by age groups, 2024 – March 2025.

Table 1 – Peak weekly admission rates recorded during 2024/25 winter influenza seasons, as compared with the 2024 season and 2018/19 winter season.

Season	Peak weekly admission rate (per 10 000 population)						
(predominating virus)	0-5	6-11	12-17	18-49	50-64	≥65	All ages
2024/25 winter (HI)	3.03	0.95	0.37	0.23	0.45	2.39	0.85
2024 season (H3, then H1)	5.85	2.10	0.56	0.27	0.59	3.10	1.22
2018/19 winter (HI)	11.66	2.00	1.14	0.57	1.04	2.96	1.58

# Influenza-like illness (ILI) outbreaks in schools and institutions

An increase in the number of institutional ILI outbreaks was observed since early January. The weekly number peaked at 28 outbreaks in late January and then gradually dropped, returning to a low level in late March (Figure 3).

A total of 171 ILI outbreaks were recorded during the season, which was much lower than those reported last year (616) and in 2018/19 winter season (862). Roughly half of the outbreaks were reported from schools (including kindergartens/ child care centres (KG/CCC), primary schools (PS) and secondary schools (SS)), and the rest from other institutions such as residential care homes for the elderly (RCHE).

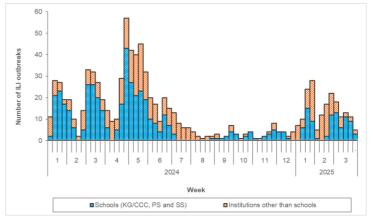


Figure 3 – The weekly number of ILI outbreaks by type of institutions, 2024 – March 2025.

#### Severe influenza cases

For adult severe cases, the CHP collaborates with the HA and private hospitals to monitor intensive care unit (ICU) admissions and deaths with laboratory confirmation of influenza among adult patients. For surveillance purpose, these cases include all laboratory-confirmed influenza patients who require ICU admission or die within the same admission of influenza infection.

From January 5 to March 22, CHP recorded 488 adult severe cases, of which 332 were fatal. Among these cases, their ages ranged from 18 to 103 (median 76 years), and most (72%) affected elders aged 65 years or above. For adult fatal cases, 89% of them affected elders aged 65 years or above. Most (85%) of them had influenza A(HI) virus infection, and majority (66%) were not known to have received the 2024/25 SIV. As compared with the 2018/19 winter influenza season, the 488 adult severe cases recorded this season were about 20% lower than the 601 cases recorded in the 2018/19 season.

Separately, 10 paediatric cases of influenza-associated severe complication/death were reported, in which none of them was fatal. Their ages ranged from 10 months to 14 years (median seven years). Seven cases had influenza A(H1) virus infection, two cases had influenza B virus infection, and one case had influenza A(H3) virus infection. The complications developed included severe pneumonia (4), sepsis (3), shock (3), neurological complications (3), and myocarditis (1) (note: a case may have more than one complications). Eight cases enjoyed good past health, and seven cases did not receive the 2024/25 SIV. The number of severe paediatric cases recorded this season was nearly 60% lower than 24 cases (including one death) recorded during the 2018/19 season.

#### Effectiveness of SIV in 2024/25 season

The CHP has been collaborating with private medical practitioners (PMPs) participating in the sentinel surveillance system to estimate vaccine effectiveness (VE) for the SIV in local primary care settings using the test-negative case-control method. In the 2024/25 winter influenza season, among 133 respiratory specimens submitted by sentinel PMPs from November 2024 to February 2025, 35.3% tested positive for influenza viruses. The overall VE among all ages was 64.8% against all influenza viruses and 72% against influenza A(H1) virus. The results showed that the 2024/25 SIV remained moderately effective against laboratory-confirmed influenza at the primary care level.

The CHP also analysed the relationship between SIV and severe paediatric cases recorded. It was found that the risk of children aged between 6 months and I7 years who had not received the SIV for this season and subsequently contracted influenza with severe complications or deaths was 4.0 times that of vaccinated children. Analysis of surveillance data on severe adult cases in this season also showed the risk of becoming a severe case among RCHE residents who did not receive the SIV for this season was 2.3 times that of the vaccinated group.

#### **Summary**

Hong Kong experienced a typical winter influenza season this year, with timing and duration comparable to the winter seasons before the COVID-19 pandemic. Increases in disease burden which reflected in influenza admissions, institutional ILI outbreaks and severe illnesses were seen during this winter season. However, when compared with the previous season in 2024 and the 2018/19 winter season predominated by influenza A (HI), both the influenza admission rate and number of severe cases were lower this season, especially among the paediatric age groups. This may be attributable to increase in SIV coverage rate among children, owing to very high participation rates (>97%) of schools for SIV outreach programme.

Data from this season demonstrated the protective effects of SIV against severe influenza. Given that SIVs are safe and effective, all persons aged six months or above except those with known contraindications are recommended to receive SIV to protect themselves against seasonal influenza and its complications, as well as related hospitalisations and deaths.

## Review of HIV/AIDS epidemiology in 2024

Reported by Dr Nicholas YUNG, Medical and Health Officer and Dr Lisa YIP, Senior Medical and Health Officer, Special Preventive Programme, Public Health Services Branch, CHP

In 1984, the Department of Health (DH) implemented a voluntary and anonymous case-based HIV/AIDS reporting system following the first report of HIV infection. In 2024, the DH has received 397 newly HIV reports and 74 AIDS reports, bringing to a cumulative total of I2 403 reports of HIV infection and 2 557 AIDS cases as of the end of 2024 (Figure I). The number of newly reported HIV infection has decreased for nine consecutive years since the peak in 2015, reflecting the success of Hong Kong's prevention and control efforts.

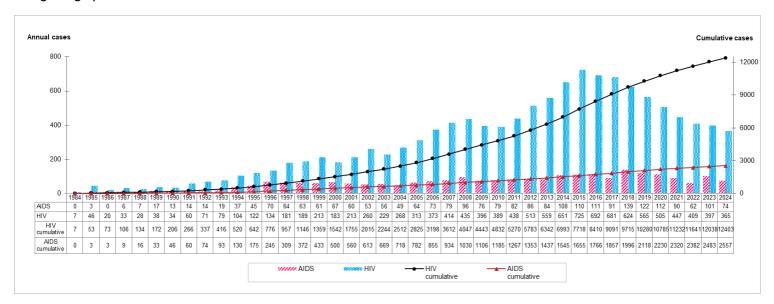


Figure I – HIV infection and AIDS reports (1984-2024).

The majority of the newly reported HIV infection in 2024 were men (81.4%), Chinese (71.8%) and diagnosed at the age between 20 and 49 years old (69.6%).

As in previous years, sexual contact remained the predominated route of transmission among newly reported HIV cases (Figure 2). Sexual contact accounted for 98.7% of all newly reported cases with a reported route of transmission. The remaining 1.3% consisted of four cases acquired through mother-to-child transmission outside Hong Kong. The routes of transmission of 49 cases were yet to be determined due to incomplete information. Regarding the place of infection, two-thirds (66.4%) of newly reported HIV cases with an ascertained place of infection reported contracting the virus in Hong Kong. Specifically, 71.1% of men who have sex with men (MSM) and 61.3% of heterosexual cases contracted the virus in Hong Kong.

MSM cases included men who acquired HIV infection through homosexual or bisexual contact. MSM contributed to the surge of newly reported HIV cases in the 2010s, and it remains a concentrated epidemic which warrants attention. While the number of new cases among MSM has decreased from 471 in 2015 to 216 in 2024, they still accounted for nearly 70% of new reports with a reported route of transmission in 2024, and the rate of decline has moderated in recent years.

Heterosexual;
30.4%

Homosexual;
60.8%

Bisexual;
7.6%

Figure 2 – Suspected route of transmission (2024). Note: Cases without a known route of transmission were excluded. Percentages may not add up to 100% due to rounding.

route of transmission in 2024, and the rate of decline has moderated in recent years. Meanwhile, the number of newly reported infection among heterosexual men has not dropped in tandem with the overall number of newly infected persons.

While high-risk populations, including MSM, transgender people, sex workers, and people who inject drugs, continue to represent a significant portion of the HIV epidemic, there has been a rise in the proportion of cases without these risk factors in recent years. In 2024, 30.7% of newly reported HIV cases did not belong to high-risk populations, up from 23.7% in 2015. Furthermore, they are at a higher risk of presenting late for HIV diagnosis. Late presentation (defined as having a baseline CD4 cell count less than 200 cells/mm3 or progression to AIDS at the time of HIV diagnosis) can lead to increased risk of opportunistic infections, decreased rate of immune restoration, higher mortality, and increased risk of transmission in the community. The proportion of late presenters among newly reported HIV cases has risen from 34.1% in 2015 to 46.7% in 2024, with particularly high rates among those not belonging to high-risk populations (61.4%), compared with 39.5% among high-risk populations. This indicates that many individuals, especially those not belonging to high-risk populations, were not diagnosed and put on treatment in a timely manner at an earlier stage of infection.

## Test early, treat early

Advances in antiretroviral therapy have transformed HIV infection from a fatal condition to a manageable chronic disease. Early treatment with antiretroviral therapy, being one of the core components of the HIV care continuum, is critical for maintaining the health of people with HIV and preventing transmission as a result of "Treatment as Prevention". This continuum includes critical elements such as early diagnosis, timely linkage to care, treatment initiation, support for long-term adherence, and the achievement of viral suppression. Notably, HIV testing marks the beginning of this continuum, and plays a vital role in achieving the UNAIDS goal of ending the HIV epidemic by 2030.

The increasing proportion of late presenters among the new HIV reports, especially among individuals not belonging to high-risk populations, underscores the urgent need to scale up HIV testing and promote its normalisation. The Scientific Committee on AIDS and STI has issued its recommendation in November 2024 that people who have had sex should get HIV testing at least once to keep track of their health status. In addition, high-risk populations should undergo HIV testing regularly, at least once a year. Any positive HIV result must be confirmed by laboratory-based testing with a venous blood sample. People with HIV should seek specialist care and HIV treatment as soon as possible for viral suppression and health restoration.

There are community resources available that enable members of the public to undergo HIV antibody testing. Members of the public can reserve a free, anonymous and confidential HIV antibody test by visiting the HIV Testing Service website or calling the AIDS Hotline (2780 2211). They can also order HIV self-test kits (oral fluid-based and blood-based (finger prick) testing kits) on the HIV Testing Service website, and collect the self-test kits at various pick-up locations in Hong Kong.

The public may visit the following pages for more information on HIV/AIDS: the Virtual AIDS Office (https://www.aids.gov.hk/english/index.html), the Red Ribbon Centre (https://www.rrc.gov.hk/english/index.html), the HIV Testing Service website (https://www.hivtest.gov.hk/en/index.html) and the Gay Men HIV Information website (https://www.21171069.gov.hk/en/index.html).



Figure 3 – Dr Bonnie Wong (right) summarised the situation of HIV infection in Hong Kong during the press conference on April 3, 2025.

#### **NEWS IN BRIEF**

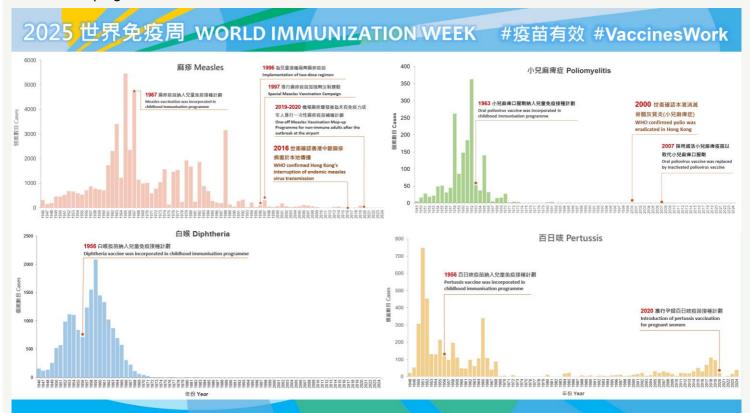
#### **World Immunization Week 2025**

World Immunization Week (WIW) is an annual global event in the last week of April (April 24-30) to highlight and promote the importance of immunisation. This year's theme "Immunization for All is Humanly Possible" reminds us that through collective efforts, it is possible to have less disease and more life if people and their communities protect themselves and their loved ones from vaccine-preventable diseases (VPDs) through immunisation.

Immunisation is one of the safest and most effective public health interventions in history, saving at least 154 million lives in the past five decades (one life saved per 10 seconds). Thanks to vaccines, life-threatening diseases that once claimed millions of lives such as poliomyelitis, measles, and smallpox are now under control or completely eradicated. In Hong Kong, a comprehensive childhood immunisation programme has been in place for decades, through a well-established service network supported by the Maternal and Child Care Centres and School Immunisation Teams, to provide children with different types of vaccines and boosters for free for protection against various VPDs. In addition to the childhood vaccines, the Government also provides free or subsidised immunisation against influenza, pneumococcal disease and COVID-19 for populations at risk.



The following figure illustrates the dramatic decrease in the notifications of four VPD examples after launching of the respective immunisation programme.



In Hong Kong, with continued support from parents, schools and healthcare workers on childhood immunisations, the immunisation coverage rates among children are maintained at a very high level (overall ≥95%). Nonetheless, the declined vaccination rates in many overseas countries during the COVID-19 pandemic, which was yet to recover to pre-pandemic level, has resulted in recent resurgence of measles in some parts of North America, Europe and Asia, underscoring the importance of maintaining high vaccination coverage to sustain herd immunity. As delays in vaccination will weaken the protection against relevant infectious diseases, members of the public are reminded to maintain up-to-date immunisation for timely and comprehensive protection.

Get vaccinated on time to build a healthier future for all! For more information on the WIW, please visit the CHP thematic webpage: <a href="https://www.chp.gov.hk/en/features/108774.html">https://www.chp.gov.hk/en/features/108774.html</a>

## A local sporadic case of Streptococcus suis infection

On March 31, 2024, the CHP recorded a sporadic case of *Streptococcus suis* infection affecting a 67-year-old retired man with underlying illnesses residing in North District. He developed fever and multiple joint pain on March 27, and was admitted to a public hospital on March 28. The joint aspirates, blood and cerebrospinal fluid were all cultured positive for *Streptococcus suis*. He was treated with surgical drainage and antibiotics and his condition was stable. During the incubation period, he sustained a cut on his finger while handling raw pork without protective gloves at home. Otherwise, there was no other known exposure to livestock, farm or abattoir before onset of symptoms. His home contacts were asymptomatic.

## Two local sporadic cases of listeriosis

The CHP recorded two local sporadic cases of listeriosis on March 29 and April 5, 2025 respectively.

The first case involved an 85-year-old retired man with underlying illnesses residing in Sha Tin. He presented with fever, diarrhoea and malaise on March 22, and was admitted to a public hospital on March 26. Blood collected on March 27 grew Listeria monocytogenes. Although his condition had improved with antibiotic treatment, he passed away on April 7 due to underlying medical condition. According to his relatives, he had no recent travel but had consumed leftover meat that was not thoroughly reheated during the incubation period. His household contacts remained asymptomatic.

The second case involved a 76-year-old woman with underlying illness residing in Tuen Mun. She developed abdominal pain, diarrhoea and vomiting in mid-March and was admitted to a public hospital for her underlying illness on April 1. The peritoneal swab collected on April 1 grew *Listeria monocytogenes*. She was treated with antibiotics and was in stable condition. She had travelled to Thailand during incubation period, and had consumed partially cooked dried beef in Hong Kong that was bought from Thailand. Her household contact remained asymptomatic.

COMMUNICABLE DISEASES WATCH