



## Synopsis

The percentage of influenza-like illness (ILI) visits to emergency department (ER) has been below the epidemic threshold for two consecutive weeks, indicating that the epidemic period has ended. In the community, influenza B is the predominant strain, co-circulating with A/H3N2. It is still necessary to monitor subsequent changes in the epidemic situation and be aware of the risk of severe illness.

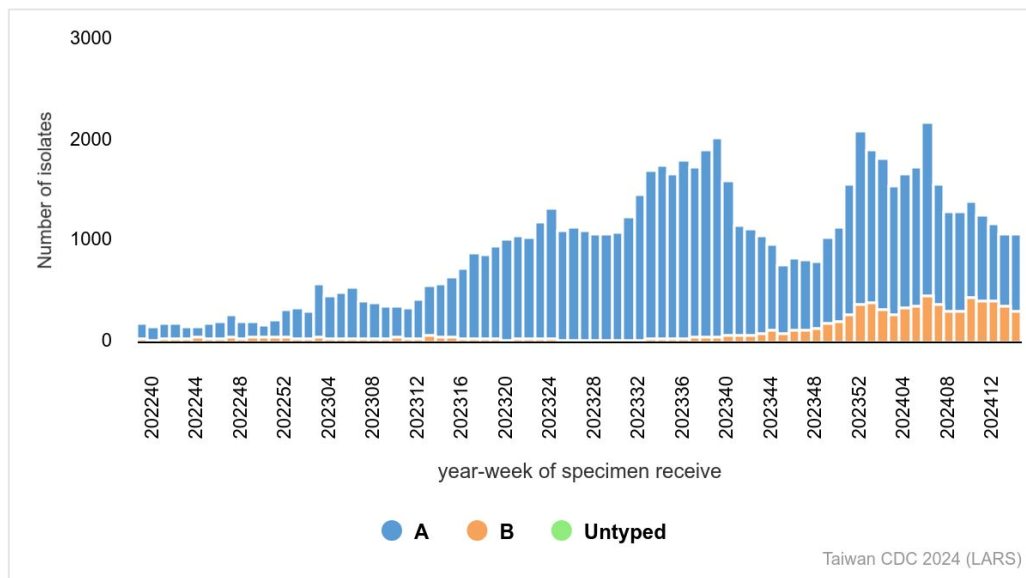
- The number of visits to outpatient and ER for ILI has recently decreased, and the percentage of ER visits has been below the epidemic threshold for two consecutive weeks, indicating that the epidemic period has ended.
- During the past four weeks, the result of Contracted Virology Laboratories surveillance indicates that Influenza B viruses has predominated and co-circulated with A/H3N2.
- During 2023-2024 influenza season (since October 1, 2023), there have been 731 influenza cases with severe complications, of which 133 cases were fatal.

## Laboratory Surveillance<sup>1</sup>

### Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens has shown a slightly decreasing trend recently. Over the last four weeks, influenza A positive specimens accounted for 68%, and influenza B positive specimens accounted for 32%. Data are available at <https://nidss.cdc.gov.tw/>.

Numbers of influenza-positive specimens from LARS



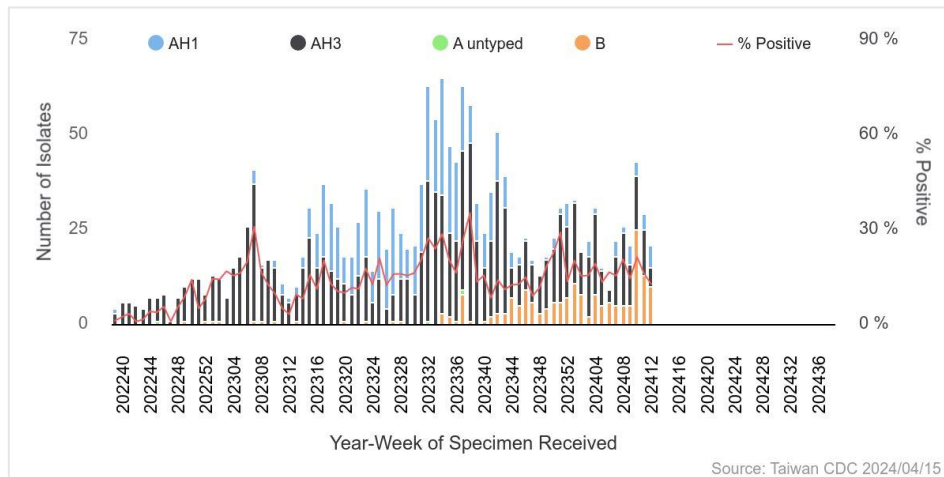
<sup>1</sup> In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



## Contracted Virology Laboratories Surveillance

During week 10 to 13, 2024, the predominant isolated influenza virus was influenza B (46.5%), followed by A/H3N2 (36.8%) and A/H1N1 (16.7%). Data are available at <https://nidss.cdc.gov.tw/>.

### Influenza isolates according to Contracted Virology Laboratories



## Antigenicity

During the 2023-2024 influenza season (since Oct 1, 2023), 91 of 96 influenza A/H1N1 viruses (94.8%) were antigenically similar to the vaccine reference strain A/Victoria/4897/2022 (H1N1)pdm09, 264 of 274 influenza A/H3N2 viruses (96.4%) were antigenically similar to the vaccine reference strain A/Darwin/9/2021 (H3N2), and 102 of 102 influenza B/Victoria viruses (100%) were antigenically similar to the vaccine reference strain B/Austria/1359417/2021 (B/Victoria lineage).

WHO recommended vaccine strains for the northern hemisphere in the 2023-2024 influenza season	Vaccine-like (%)	Low reactor (%)
A/Victoria/4897/2022 (H1N1)pdm09-like virus	91 (94.8%)	5 (5.2%)
A/Darwin/9/2021 (H3N2)-like virus	264 (96.4%)	10 (3.6%)
B/Austria/1359417/2021 (B/Victoria lineage)-like virus	102 (100%)	0 (0.0%)

Note: The hemagglutination inhibition (HI) method was used to investigate the antigenicity, and the titer of the isolated virus was at least 8-fold lower than that of the reference virus, identifying it as a low reactor.

## Antiviral Resistance

The table below summarizes the antiviral resistance to neuraminidase inhibitor (Oseltamivir) of the isolates during the 2023-2024 influenza season.

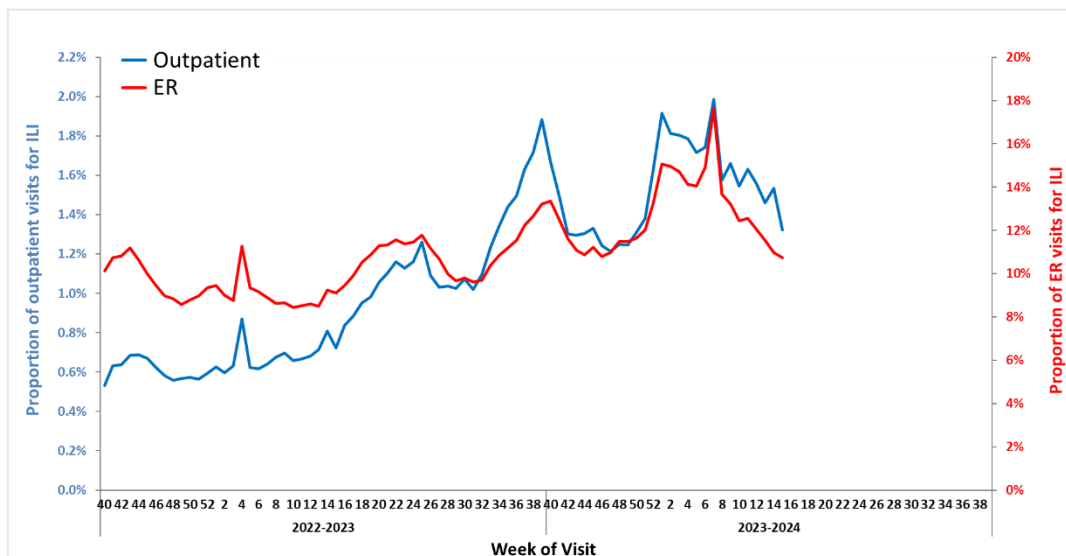
	No. of isolates tested	Resistance Viruses, n (%)
<b>A (H1N1)</b>	90	1 (1.1%)
<b>A (H3N2)</b>	345	0 (0%)
<b>B</b>	120	0 (0%)



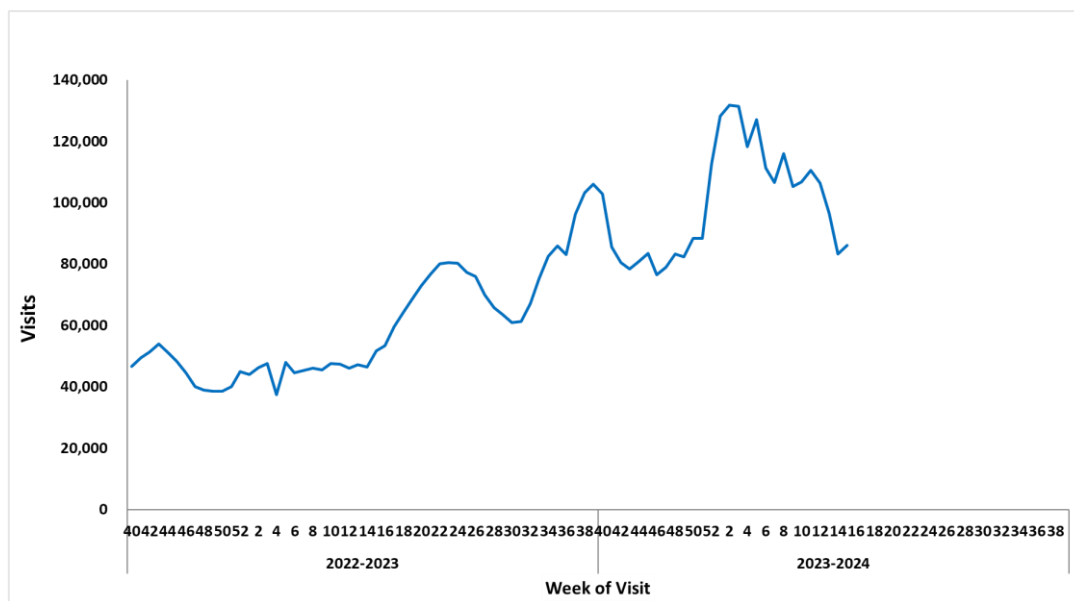
## Influenza-like Illness (ILI) Surveillance

During week 15, the proportions of ILI visits were 1.3% in outpatient and 10.73% in the ER, with the latter percentage being below the epidemic threshold for two consecutive weeks, indicating that the epidemic period has ended. The total number of visits for ILI was 86,051, which has recently shown a decreasing trend. Data are available at <https://nidss.cdc.gov.tw/>.

Proportions of ILI visits in outpatient and ER



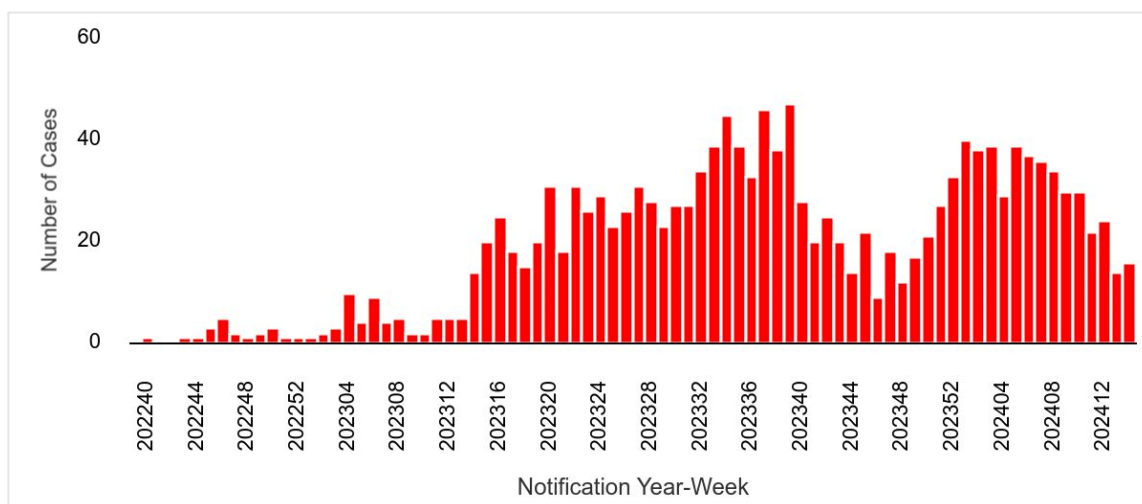
Total number of ILI visits in outpatient and ER



## Influenza Case with Severe Complications

There were 26 newly confirmed influenza cases with severe complications (16 of H1N1, 4 of H3N2, and 6 of influenza B), and 3 fatal cases (2 of H1N1 and 1 of H3N2). During 2023-2024 influenza season, a total of 731 influenza cases with severe complications (224 of H1N1, 435 of H3N2, 8 of untyped influenza A, and 64 of influenza B) were confirmed, of which 133 cases were fatal (40 of H1N1, 81 of H3N2, 2 of untyped influenza A, and 10 of influenza B).

**Notification trend of confirmed influenza cases with severe complications**



Data are available at <https://nidss.cdc.gov.tw/>.

### Incidence of influenza cases with severe complications and mortality rate during 2023-2024 influenza season

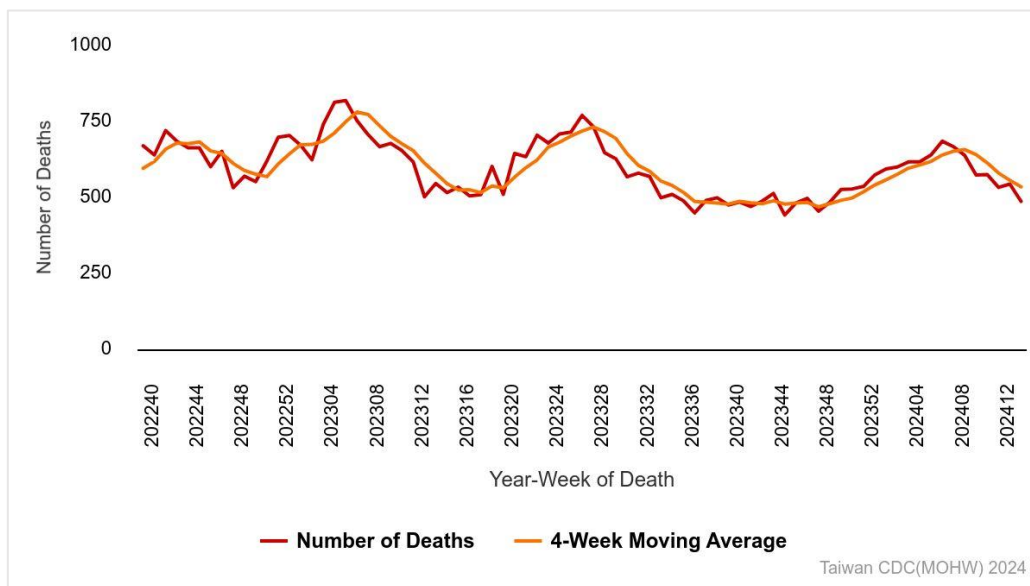
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	5	1	1.13	0.23
3-6 y	17	1	2.28	0.13
7-18 y	42	1	1.72	0.04
19-24 y	6	1	0.39	0.06
25-49 y	112	15	1.29	0.17
50-64 y	135	17	2.55	0.32
65 +	414	97	9.88	2.32
Total	731	133	3.13	0.57



## Pneumonia and Influenza (P&I) Mortality Surveillance

Based on the Internet System for Death Reporting (ISDR)<sup>2</sup> data, the number of deaths attributed to pneumonia and influenza (P&I) is slightly decreasing. The proportion of deaths attributed to P&I for adults aged 65 and older was the highest among the three age groups (0-49, 50-64, and 65+). Weekly data are available at <https://nidss.cdc.gov.tw/>.

**Weekly Number of Deaths from Pneumonia and Influenza**



<sup>2</sup> Medical institutions are required to report any mortality case to the Ministry of Health and Welfare (MOHW) within 7 days after a death certificate is issued through the Internet System for Death Reporting (ISDR). Either the immediate cause of death or the underlying cause of death was used to identify P&I death cases. Only those with keyword texts containing 'pneumonia', 'influenza' or 'common cold' were counted as a P&I death.

