



## Synopsis

The number of outpatient and emergency department (ER) visits for influenza-like illness (ILI) was slightly higher than the previous week, and it is the second highest in the same period over the past decade. In the community, the predominant influenza strain is A/H3N2. The number of influenza cases with severe complications continues to be high, and the risk of severe illness should be noted.

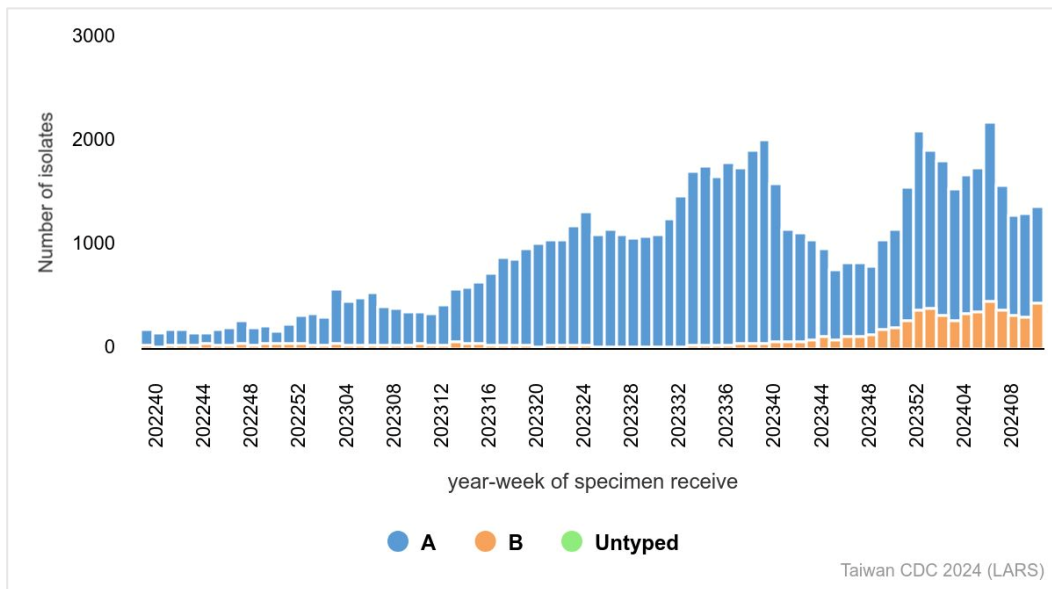
- The number of outpatient and ER visits for ILI was slightly higher than the previous week, and the proportion of ER visits was above the threshold.
- During the last four weeks, A/H3N2 has been the predominant influenza strain circulating in the community, followed by influenza B.
- During 2023-2024 influenza season (since October 1, 2023), there have been 648 influenza cases with severe complications, of which 116 cases were fatal.

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

### Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens was slightly higher than the previous week. Over the last four weeks, influenza A positive specimens accounted for 74%, and influenza B positive specimens accounted for 26%, which shows a slight increasing trend. Data are available at <https://nidss.cdc.gov.tw/>.

Numbers of influenza-positive specimens from LARS



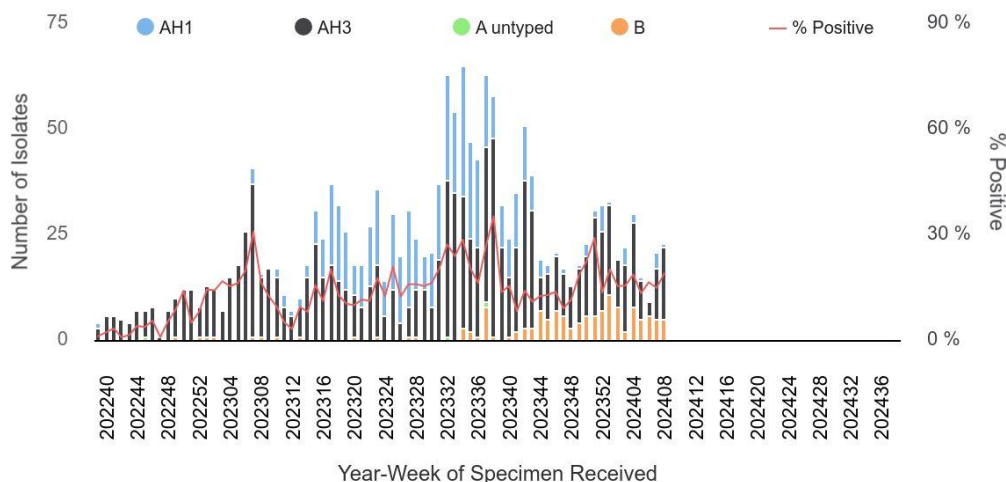
<sup>1</sup> In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



## Contracted Virology Laboratories Surveillance

During week 6 to 9, 2024, the predominant isolated influenza virus was A/H3N2 (59.4%), followed by influenza B (30.4%) and A/H1N1 (8.7%). Data are available at <https://nidss.cdc.gov.tw/>.

### Influenza isolates according to Contracted Virology Laboratories



Source: Taiwan CDC 2024/03/18

## Antigenicity

During the 2023-2024 influenza season (since Oct 1, 2023), 77 of 79 influenza A/H1N1 viruses (97.5%) were antigenically similar to the vaccine reference strain A/Victoria/4897/2022 (H1N1)pdm09, 224 of 229 influenza A/H3N2 viruses (97.8%) were antigenically similar to the vaccine reference strain A/Darwin/9/2021 (H3N2), and 70 of 70 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	77 (97.5%)	2 (2.5%)
A/Darwin/9/2021 (H3N2)-like virus	224 (97.8%)	5 (2.2%)
B/Austria/1359417/2021 (B/Victoria lineage)-like virus	70 (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.

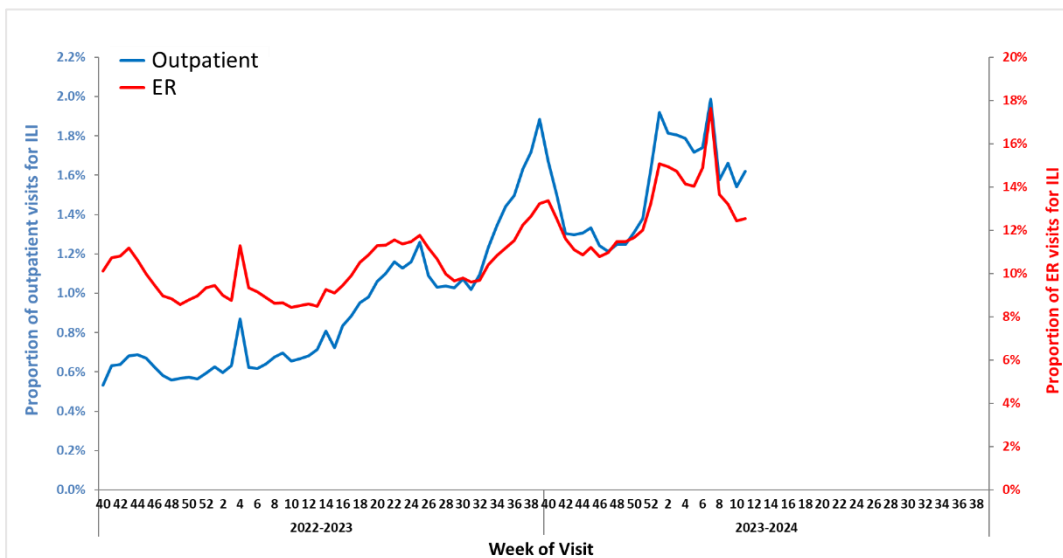
	No. of isolates tested	Resistance Viruses, n (%)
<b>A (H1N1)</b>	79	0 (0%)
<b>A (H3N2)</b>	310	0 (0%)
<b>B</b>	95	0 (0%)



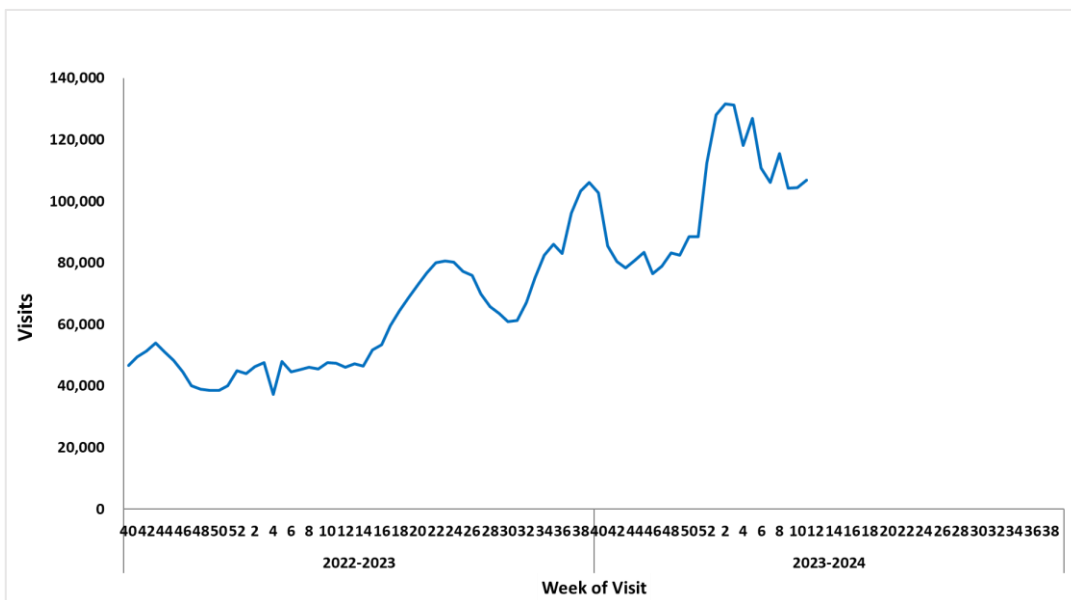
## Influenza-like Illness (ILI) Surveillance

During week 11, the proportions of ILI visits were 1.6% in outpatient and 12.6% in the ER, with the latter percentage remaining above the threshold of 11.0%. The total number of visits for ILI was 106,770, which is the second highest in the same period over the past decade. Data are available at <https://nidss.cdc.gov.tw/>.

### Proportions of ILI visits in outpatient and ER



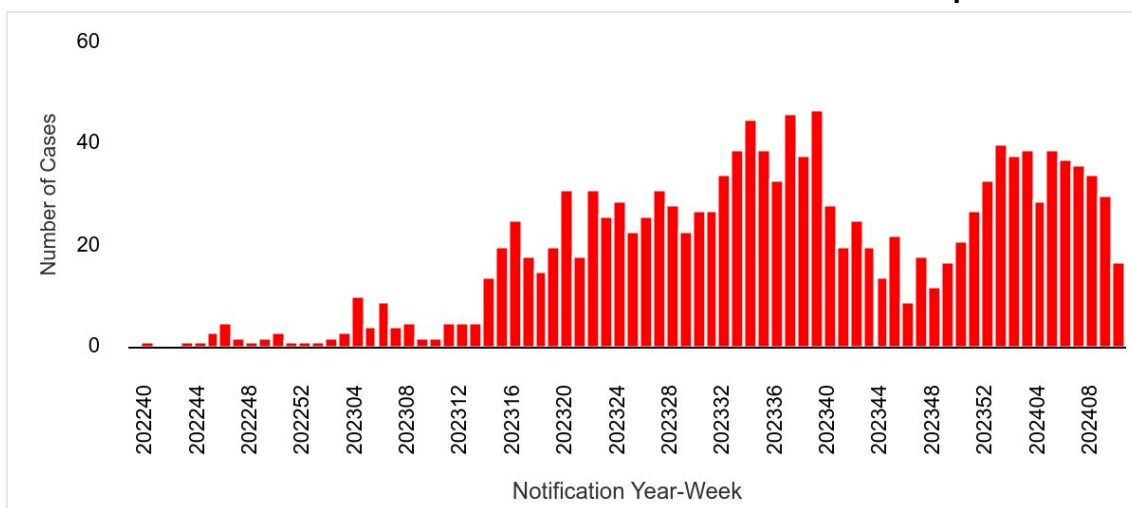
### Total number of ILI visits in outpatient and ER



## Influenza Case with Severe Complications

There were 31 newly confirmed influenza cases with severe complications (9 of H1N1, 15 of H3N2, 1 of untyped influenza A, and 6 of influenza B), and 9 fatal cases (2 of H1N1, 6 of H3N2, and 1 of influenza B). During 2023-2024 influenza season, a total of 648 influenza cases with severe complications (181 of H1N1, 409 of H3N2, 8 of untyped influenza A, and 50 of influenza B) were confirmed, of which 116 cases were fatal (35 of H1N1, 71 of H3N2, 2 of untyped influenza A, and 8 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

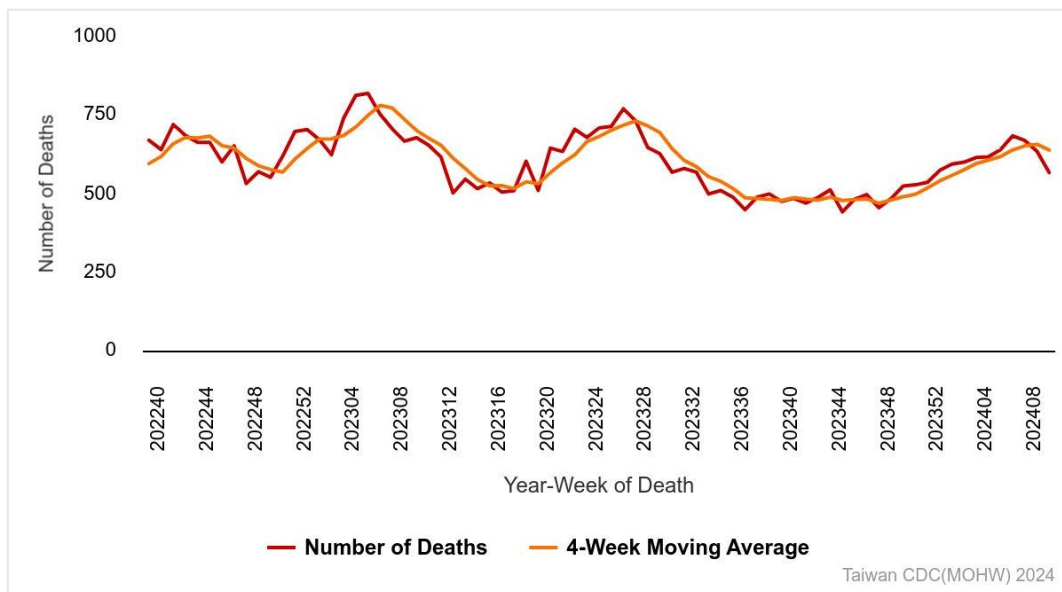
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	5	1	1.13	0.23
3-6 y	14	1	1.88	0.13
7-18 y	32	1	1.31	0.04
19-24 y	4	1	0.26	0.06
25-49 y	102	14	1.17	0.16
50-64 y	119	14	2.25	0.26
65 +	372	84	8.88	2.01
Total	648	116	2.77	0.50



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

Based on the Internet System for Death Reporting (ISDR)<sup>2</sup> data, the 4-week moving average number of deaths attributed to pneumonia and influenza (P&I) has remained similar recently. 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.

