



## Synopsis

Both the proportion and the total number of influenza-like illness (ILI) visits in outpatient and emergency room (ER) have shown an increasing trend recently and were higher than the same period over the past three years. The predominant influenza strain is A/H3N2.

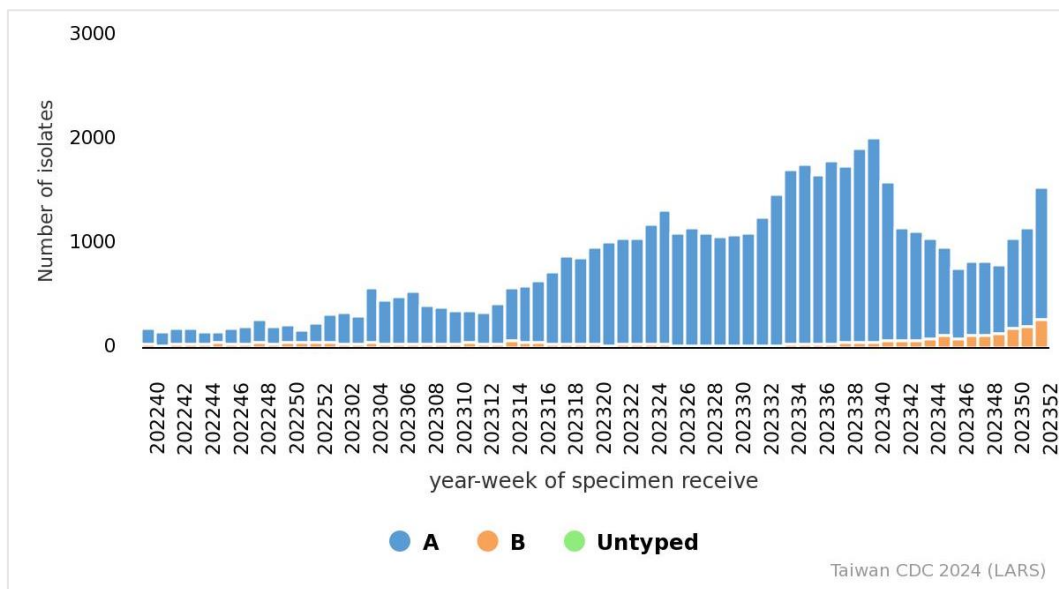
- During the last four weeks, A/H3N2 has been the predominant influenza strain circulating in the community, followed by influenza B. The proportions of each strain have remained similar in recent weeks.
- Both the proportion and the total number of ILI visits in outpatient and ER have shown an increasing trend recently and were higher than the same period over the past three years.
- During 2023-2024 influenza season (since October 1, 2023), there have been 252 influenza cases with severe complications, of which 36 cases were fatal.

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

### Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens has been increasing in recent weeks. Over the last four weeks, the proportion of influenza A positive specimens was 83%, and the proportion of influenza B was 17%.

Numbers of influenza-positive specimens from LARS



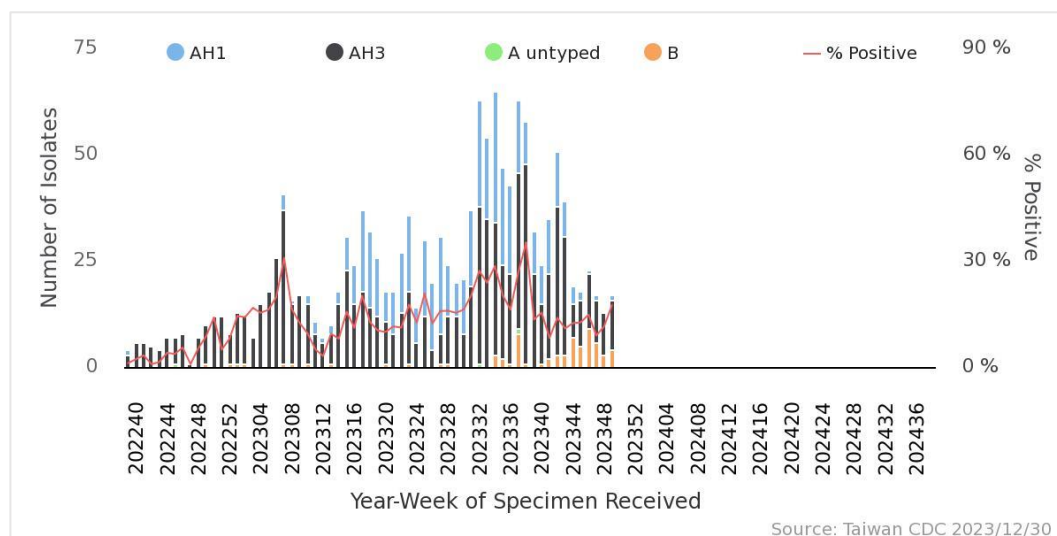
<sup>1</sup> In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



## Contracted Virology Laboratories Surveillance

During week 47 to 50, the predominant isolated influenza virus was A/H3N2 (64.3%), followed by influenza B (31.4%). Weekly virus data are available at <https://nidss.cdc.gov.tw/>.

### Influenza isolates according to Contracted Virology Laboratories



## Antigenicity

The antigenic characterization of the 2023-2024 influenza season is shown in the table below. The hemagglutination inhibition (HI) method is used to compare the similarity between presently circulating influenza viruses and the reference viruses recommended by WHO for the 2023-2024 Northern Hemisphere vaccines.

2023-2024 influenza season vaccine	No. of isolates tested	LR*, n (%)
A/Victoria/4897/2022 (H1N1)pdm09-like virus	62	2 (3.2%)
A/Darwin/9/2021 (H3N2)-like virus	131	1 (0.8%)
B/Austria/1359417/2021 (B/Victoria lineage)-like virus	31	0 (0.0%)

\* The titer of the isolated virus was at least 8-fold lower than that of the reference virus, identifying it as a low-reactor (LR).

## Antiviral Resistance

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

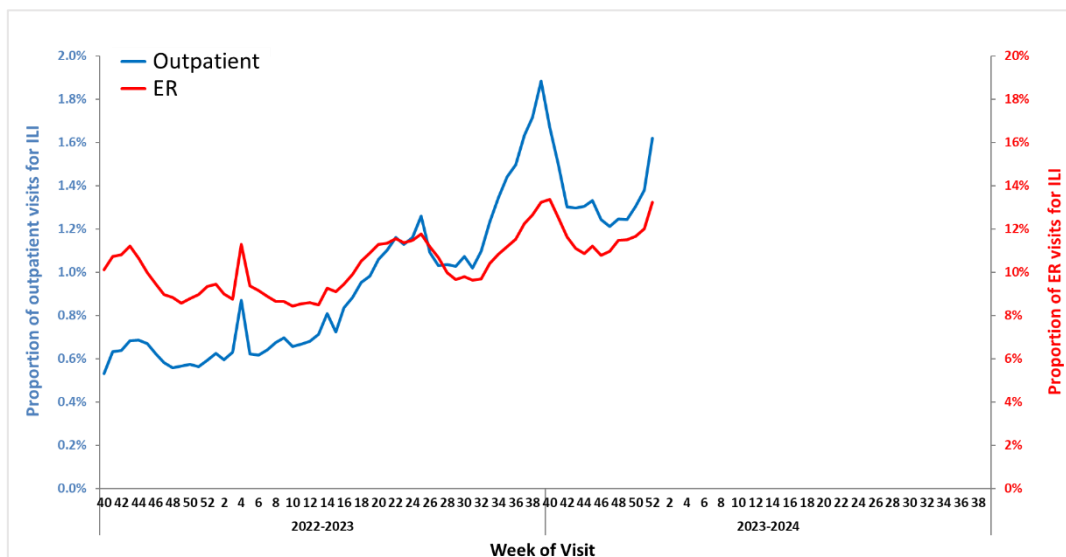
	No. of isolates tested	Resistance Viruses, n (%)
<b>A (H1N1)</b>	59	0 (0%)
<b>A (H3N2)</b>	136	0 (0%)
<b>B</b>	23	0 (0%)



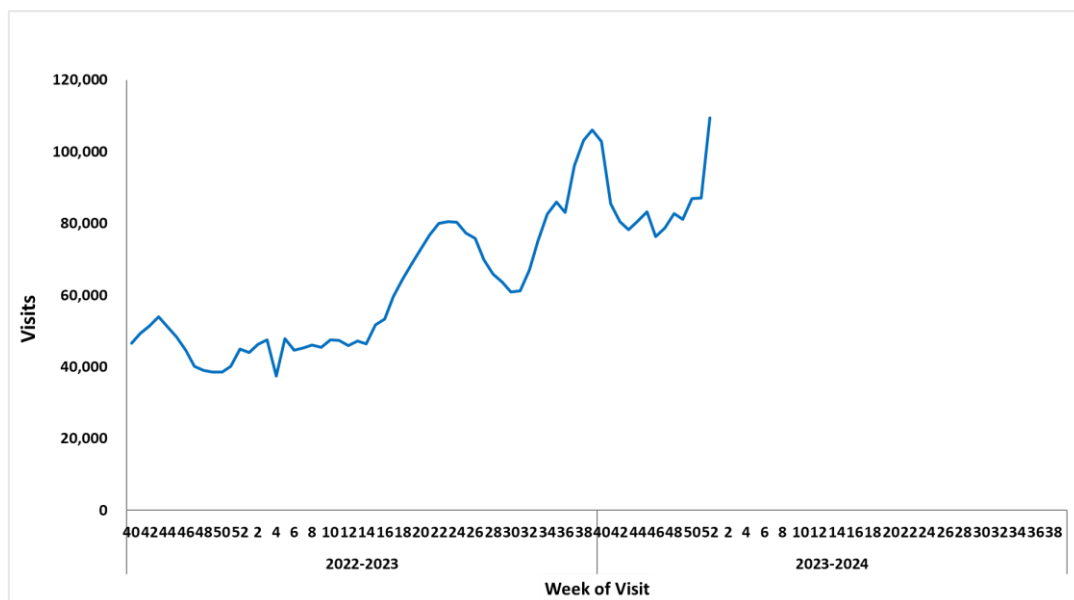
## Influenza-like Illness (ILI) Surveillance

During week 52, the proportions of ILI visits were 1.62% in outpatient and 13.2% in the ER, respectively, with a total of 109,394 visits. Both the proportion and the total number of ILI visits have shown an increasing trend recently and were higher than the same period over the past three years.

Proportions of ILI visits in outpatient and ER



Total number of ILI visits in outpatient and ER



## Influenza Case with Severe Complications

There were 20 newly confirmed influenza cases with severe complications (10 of H1N1, 8 of H3N2, and 2 of untyped influenza A), and 4 fatal cases (1 of H1N1, 1 of H3N2, and 2 of untyped influenza A). During 2023-2024 influenza season, a total of 252 influenza cases with severe complications (101 of H1N1, 134 of H3N2, 7 of untyped influenza A, and 10 of influenza B) were confirmed, of which 36 cases were fatal (19 of H1N1, 14 of H3N2, 2 of untyped influenza A, and 1 of influenza B).

### Incidence of influenza cases with severe complications and mortality rate

2023-2024 influenza season (from Oct 1, 2023, to Jan 1, 2024)

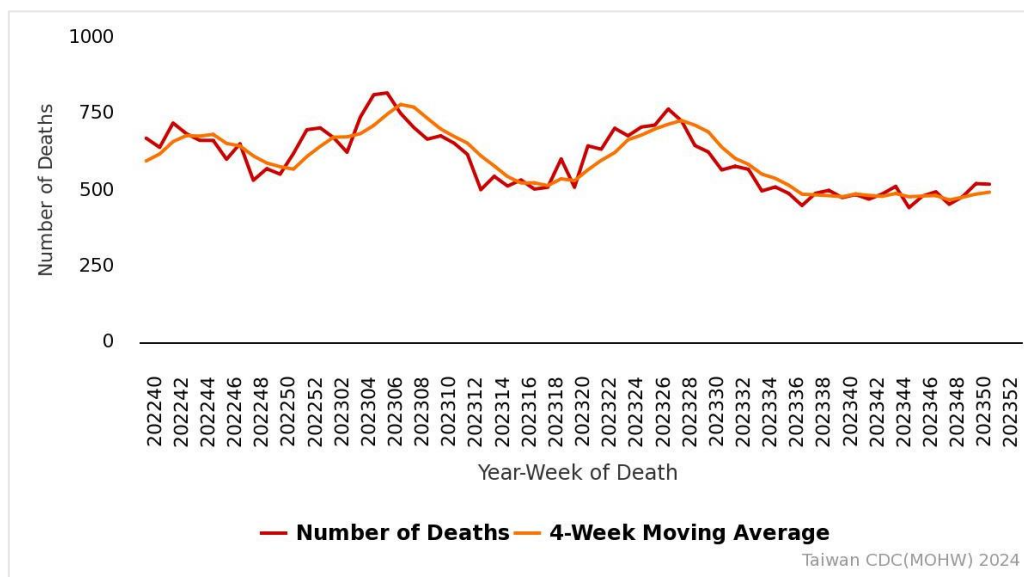
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	3	1	0.68	0.23
3-6 y	1	0	0.13	0.00
7-18 y	9	0	0.37	0.00
19-24 y	1	0	0.06	0.00
25-49 y	33	3	0.38	0.03
50-64 y	54	8	1.02	0.15
65 +	151	24	3.61	0.57
Total	252	36	1.08	0.15



## 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) has shown a slight increase 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 P&I data are available at <https://nidss.cdc.gov.tw/>.

Weekly Number of Deaths due to 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.

