



Synopsis

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

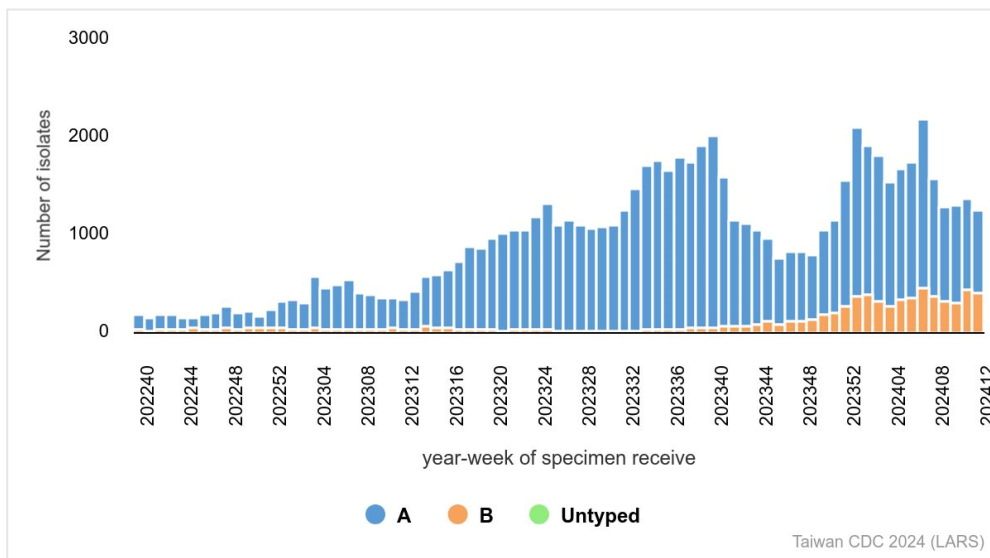
- The number of outpatient and ER visits for ILI was slightly lower than the previous week. The proportion of ER visits was above the threshold.
- During the last four weeks, A/H3N2 has been the predominant influenza strain circulating in the community, followed by influenza B.
- During 2023-2024 influenza season (since October 1, 2023), there have been 667 influenza cases with severe complications, of which 122 cases were fatal.

Laboratory Surveillance¹

Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens has been similar in recent weeks. Over the last four weeks, influenza A positive specimens accounted for 72%, and influenza B positive specimens accounted for 28%, which shows a slight increasing trend. Data are available at <https://nidss.cdc.gov.tw/>.

Numbers of influenza-positive specimens from LARS



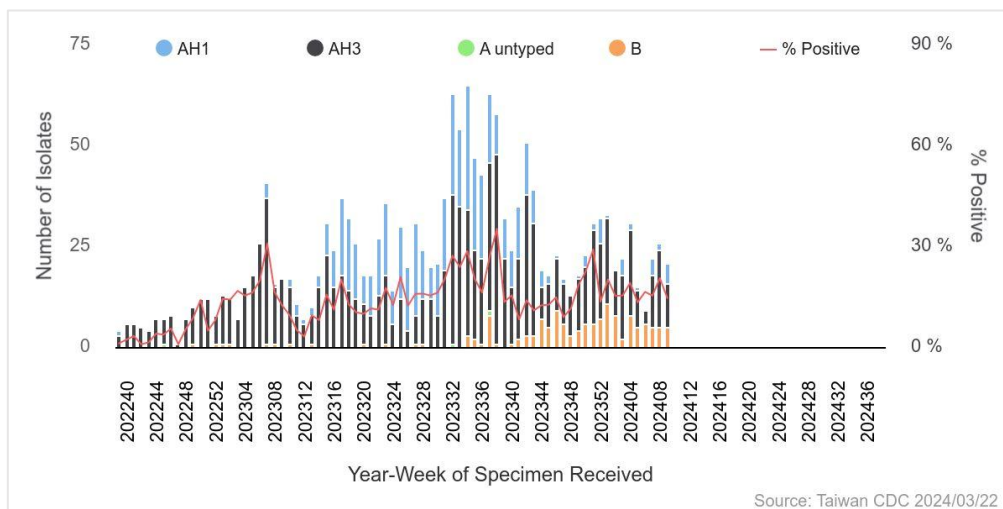
¹ In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



Contracted Virology Laboratories Surveillance

During week 7 to 10, 2024, the predominant isolated influenza virus was A/H3N2 (59.0%), followed by influenza B (26.9%) and A/H1N1 (14.1%). 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), 78 of 80 influenza A/H1N1 viruses (97.5%) were antigenically similar to the vaccine reference strain A/Victoria/4897/2022 (H1N1)pdm09, 227 of 232 influenza A/H3N2 viruses (97.8%) were antigenically similar to the vaccine reference strain A/Darwin/9/2021 (H3N2), and 76 of 76 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	78 (97.5%)	2 (2.5%)
A/Darwin/9/2021 (H3N2)-like virus	227 (97.8%)	5 (2.2%)
B/Austria/1359417/2021 (B/Victoria lineage)-like virus	76 (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.

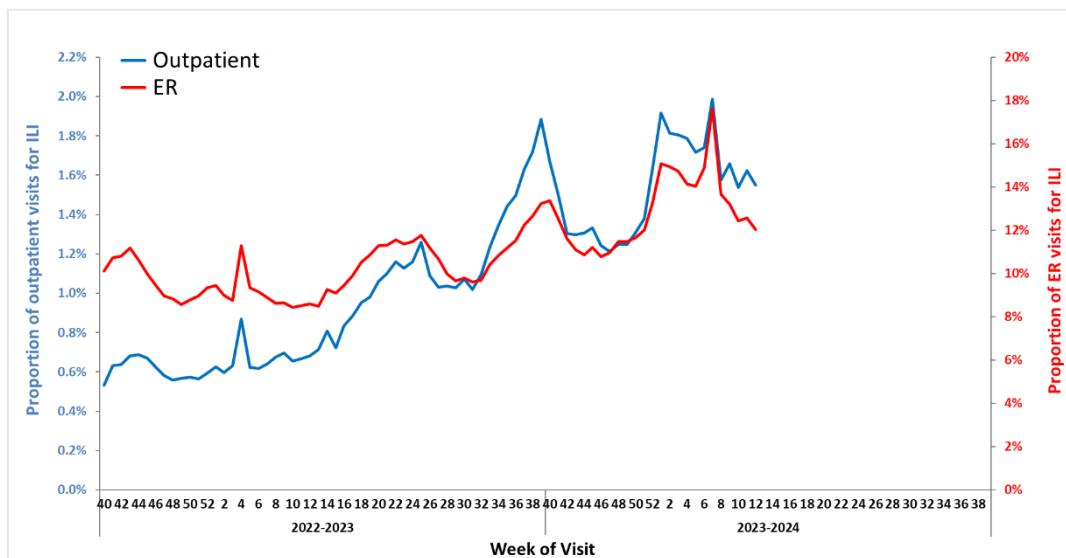
	No. of isolates tested	Resistance Viruses, n (%)
A (H1N1)	81	0 (0%)
A (H3N2)	321	0 (0%)
B	102	0 (0%)



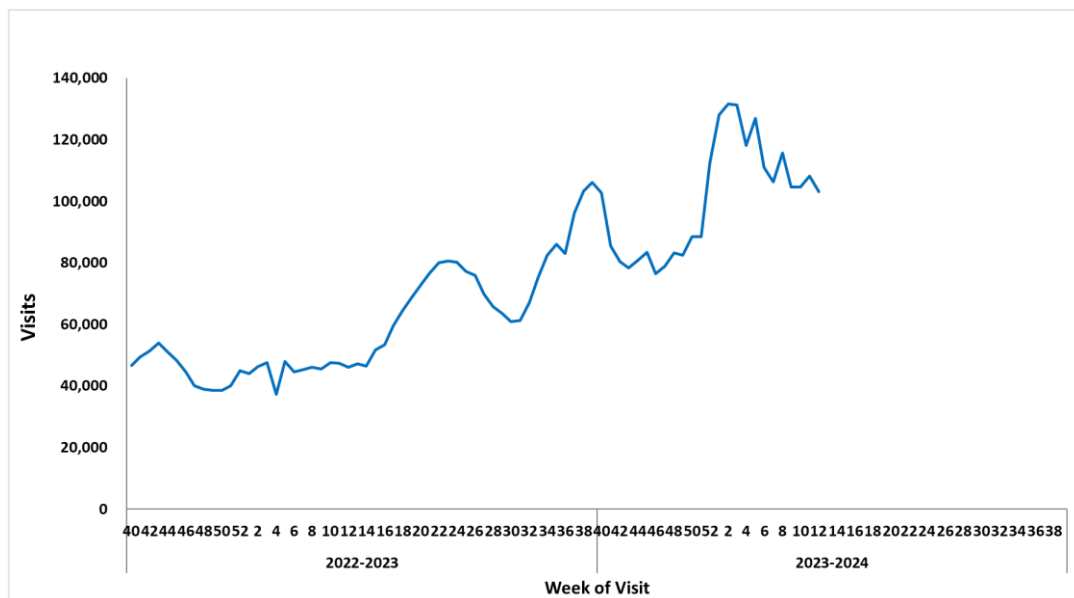
Influenza-like Illness (ILI) Surveillance

During week 12, the proportions of ILI visits were 1.6% in outpatient and 12.0% in the ER, with the latter percentage remaining above the threshold of 11.0%. The total number of visits for ILI was 103,099, 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



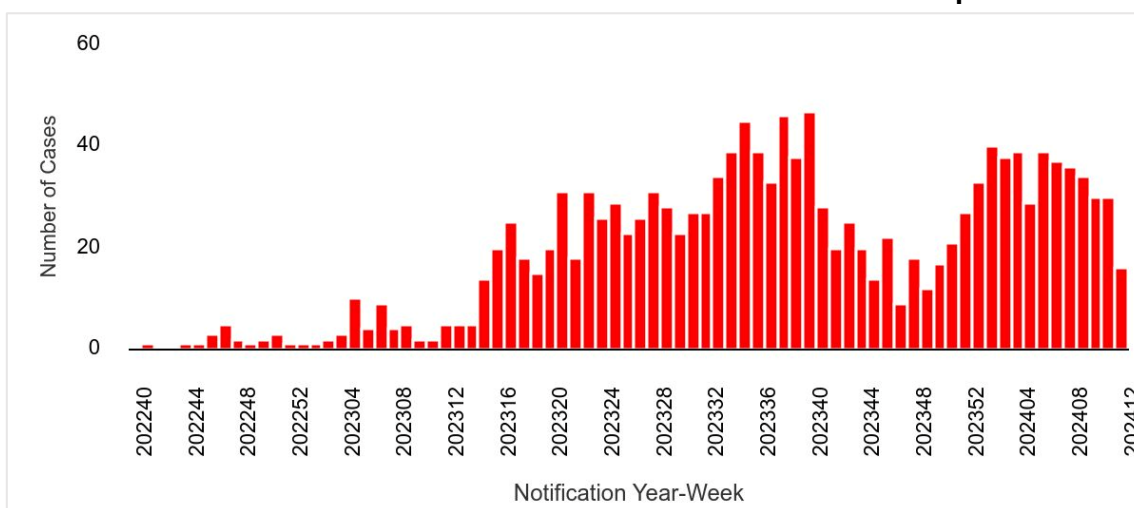
Total number of ILI visits in outpatient and ER



Influenza Case with Severe Complications

There were 19 newly confirmed influenza cases with severe complications (11 of H1N1 and 8 of H3N2), and 6 fatal cases (2 of H1N1, 3 of H3N2, and 1 of influenza B). During 2023-2024 influenza season, a total of 667 influenza cases with severe complications (193 of H1N1, 417 of H3N2, 7 of untyped influenza A, and 50 of influenza B) were confirmed, of which 122 cases were fatal (37 of H1N1, 74 of H3N2, 2 of untyped influenza A, and 9 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

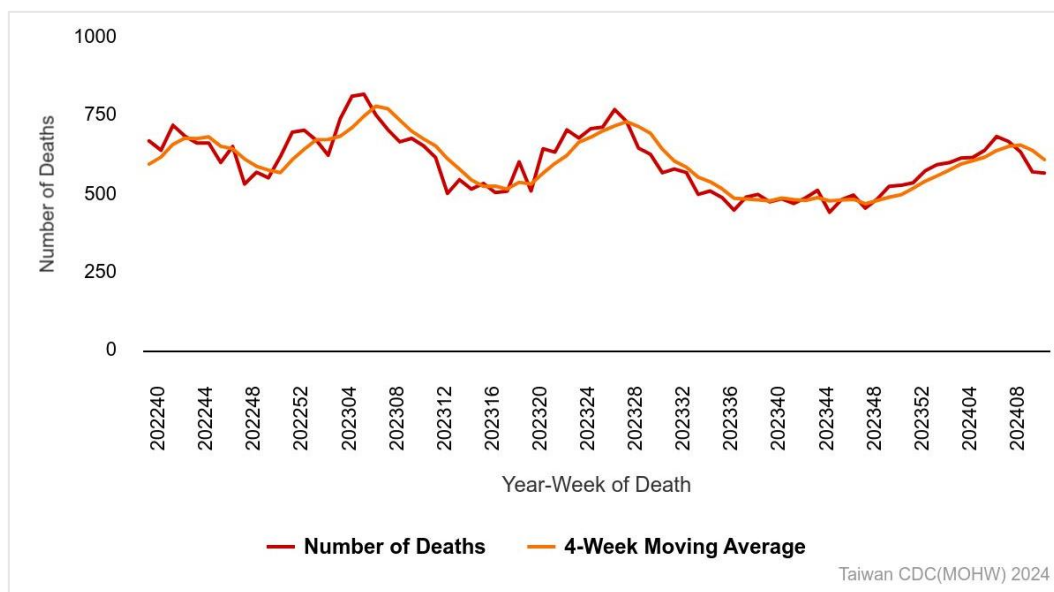
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	5	1	1.13	0.23
3-6 y	14	1	1.88	0.13
7-18 y	33	1	1.35	0.04
19-24 y	5	1	0.32	0.06
25-49 y	104	14	1.19	0.16
50-64 y	124	15	2.34	0.28
65 +	382	89	9.12	2.12
Total	667	122	2.85	0.52



Pneumonia and Influenza (P&I) Mortality Surveillance

Based on the Internet System for Death Reporting (ISDR)² data, the trend of deaths attributed to pneumonia and influenza (P&I) has slightly decreased 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



² 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.

