



Synopsis

The number of influenza-like illness (ILI) visits to outpatient and emergency room (ER) is showing a slow downward trend, with the proportion of ER visits slightly below the epidemic threshold. It is still necessary to observe subsequent changes in the epidemic situation. In the community, the predominant influenza strain is A/H3N2, with an increasing proportion of influenza B. The risk of influenza cases with severe complications remains and should be noted.

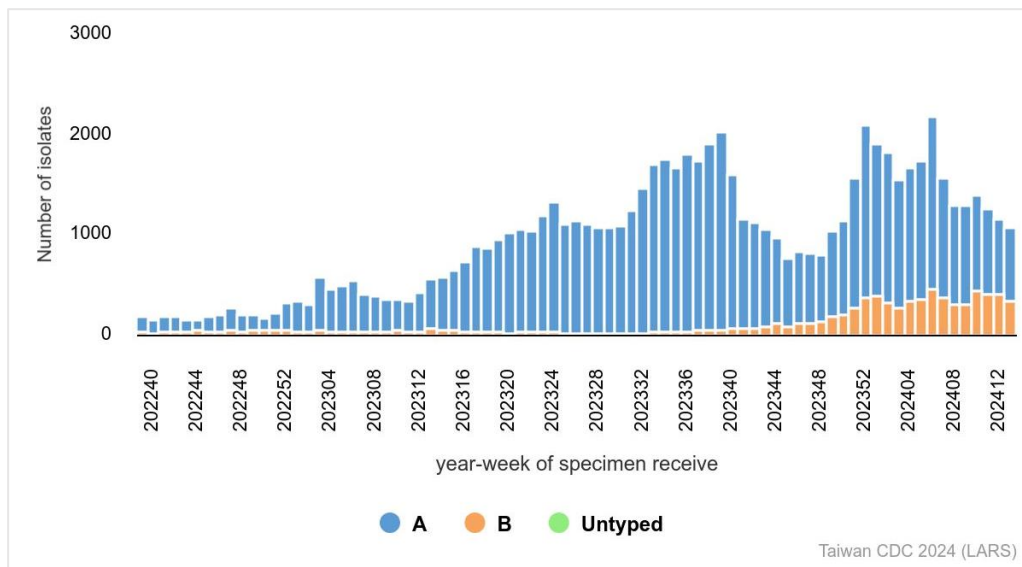
- The number of visits to outpatient and ER for ILI has markedly decreased compared to the previous week, probably due to the impact of consecutive holidays and outpatient clinic closures. The proportion of ER visits is slightly below the epidemic threshold. The epidemic is showing a gradual decline.
- During the last four weeks, A/H3N2 has been the predominant influenza strain circulating in the community, with an increasing proportion of influenza B.
- During 2023-2024 influenza season (since October 1, 2023), there have been 705 influenza cases with severe complications, of which 130 cases were fatal.

Laboratory Surveillance¹

Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens has shown a decreasing trend recently. Over the last four weeks, influenza A positive specimens accounted for 67%, and influenza B positive specimens accounted for 33%, with the latter showing an increase. Data are available at <https://nidss.cdc.gov.tw/>.

Numbers of influenza-positive specimens from LARS



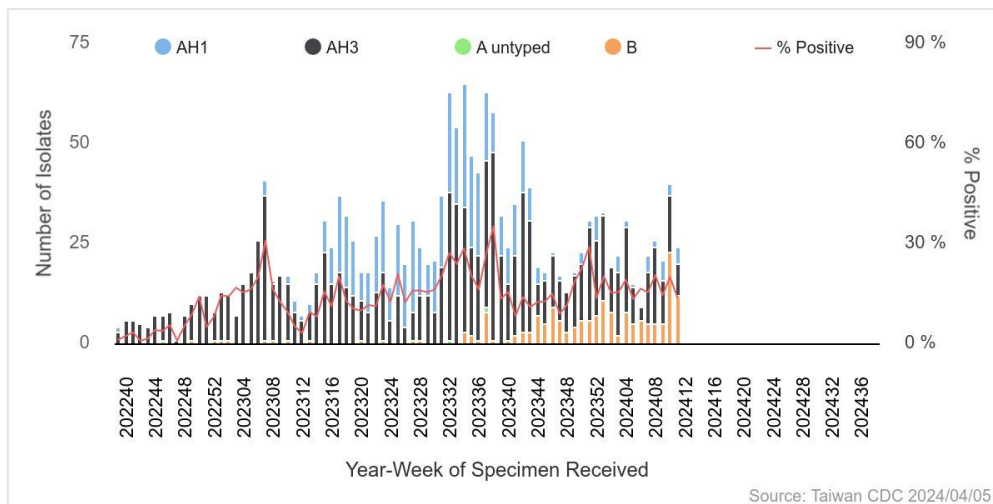
¹ In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



Contracted Virology Laboratories Surveillance

During week 9 to 12, 2024, the predominant isolated influenza virus was A/H3N2 (46.8%), followed by influenza B (40.5%) and A/H1N1 (12.6%). 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), 88 of 90 influenza A/H1N1 viruses (97.8%) were antigenically similar to the vaccine reference strain A/Victoria/4897/2022 (H1N1)pdm09, 259 of 268 influenza A/H3N2 viruses (96.6%) were antigenically similar to the vaccine reference strain A/Darwin/9/2021 (H3N2), and 91 of 91 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	88 (97.8%)	2 (2.2%)
A/Darwin/9/2021 (H3N2)-like virus	259 (96.6%)	9 (3.4%)
B/Austria/1359417/2021 (B/Victoria lineage)-like virus	91 (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.

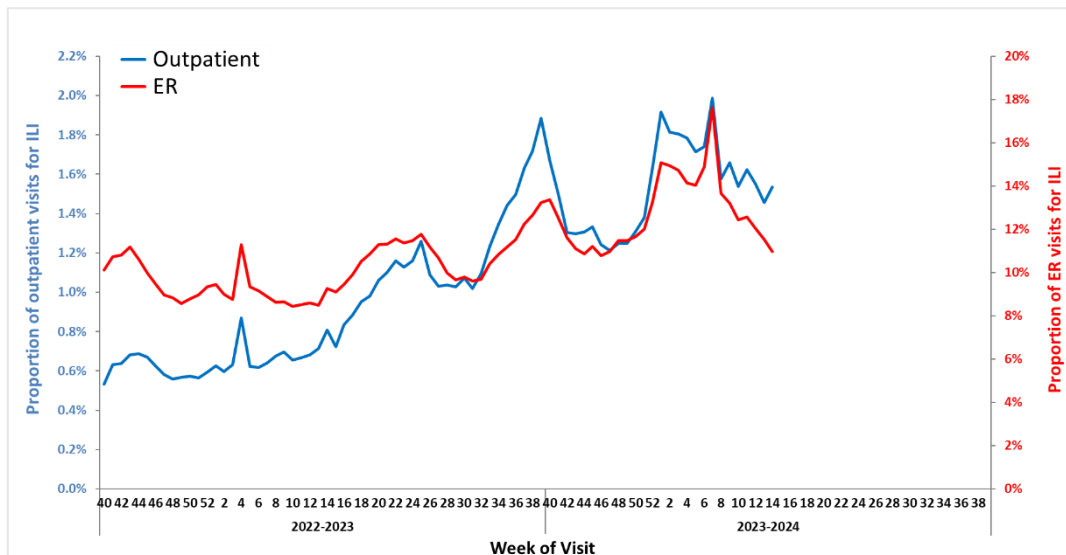
	No. of isolates tested	Resistance Viruses, n (%)
A (H1N1)	85	1 (1.2%)
A (H3N2)	335	0 (0%)
B	112	0 (0%)



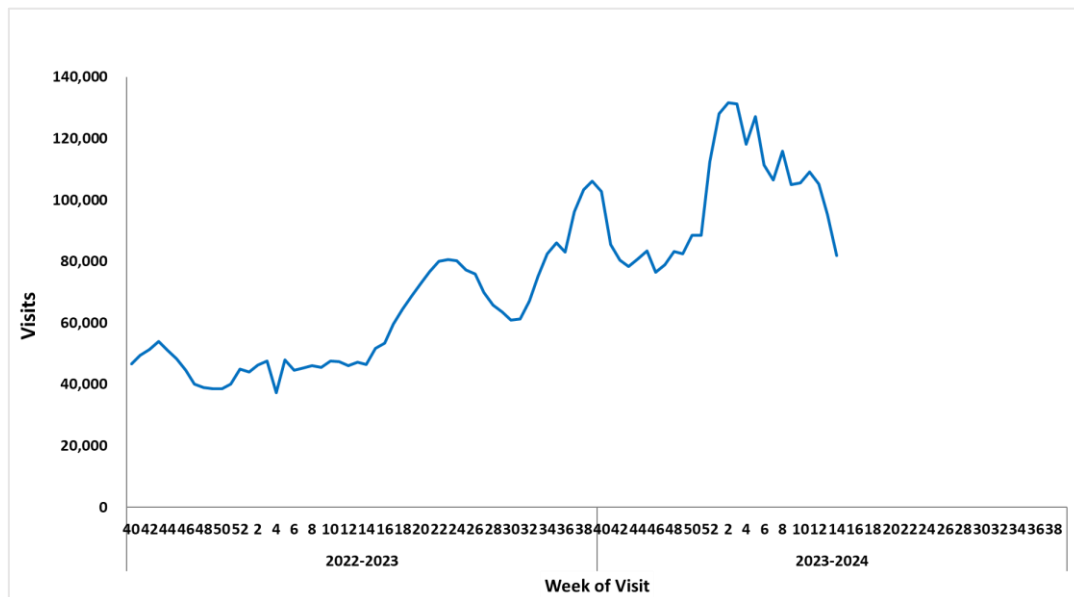
Influenza-like Illness (ILI) Surveillance

During week 14, the proportions of ILI visits were 1.5% in outpatient and 10.97% in the ER, with the latter percentage slightly below the threshold of 11.0%. The total number of visits for ILI was 81,921, with the larger decrease probably due to the closure of some outpatient services during the consecutive holiday. It is necessary to monitor the changes in the epidemic afterward. Data are available at <https://nidss.cdc.gov.tw/>.

Proportions of ILI visits in outpatient and ER



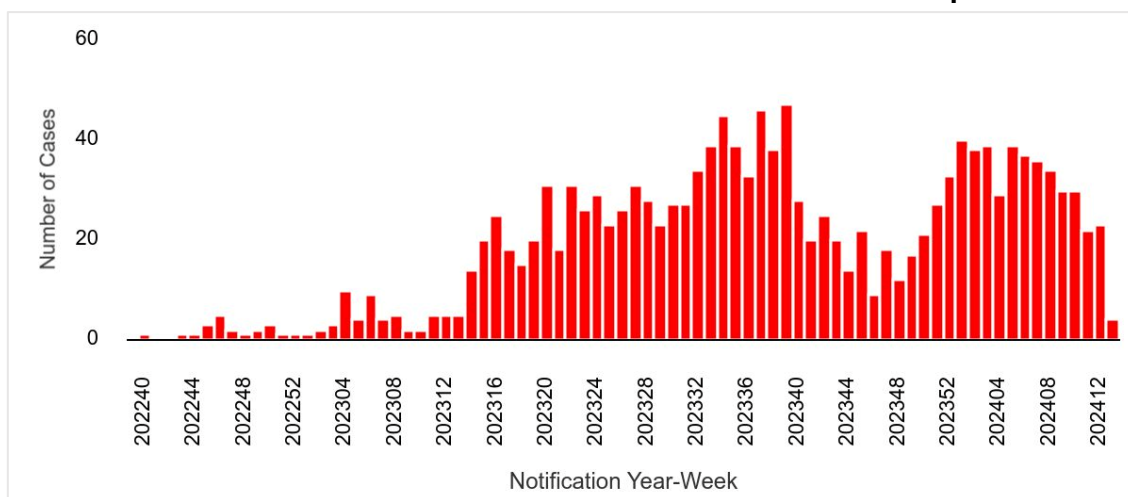
Total number of ILI visits in outpatient and ER



Influenza Case with Severe Complications

There were 16 newly confirmed influenza cases with severe complications (7 of H1N1, 7 of H3N2, 1 of untyped influenza A, and 1 of influenza B), and 2 fatal cases (all of H3N2). During 2023-2024 influenza season, a total of 705 influenza cases with severe complications (207 of H1N1, 431 of H3N2, 9 of untyped influenza A, and 58 of influenza B) were confirmed, of which 130 cases were fatal (38 of H1N1, 80 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

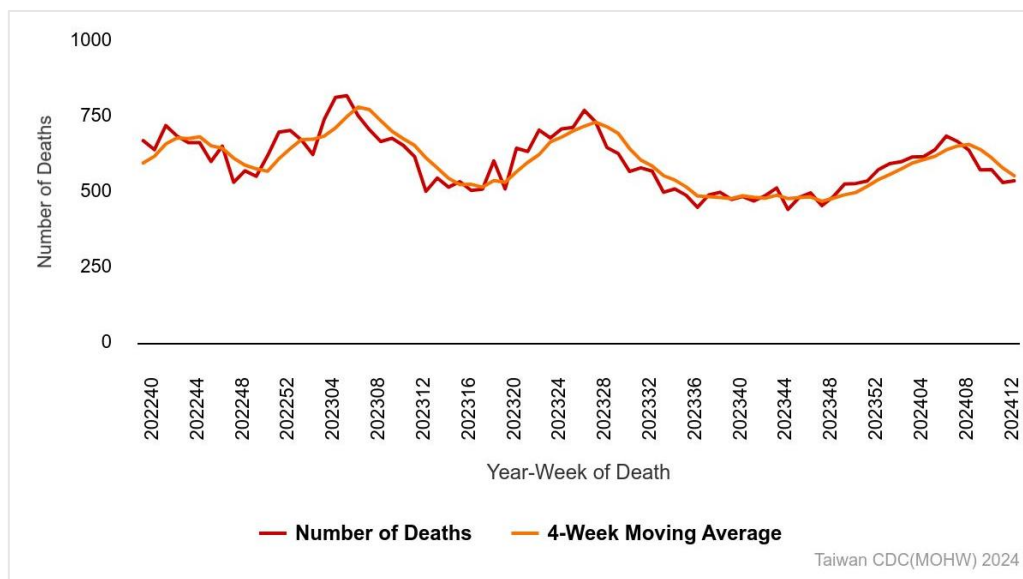
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	5	1	1.13	0.23
3-6 y	17	1	2.28	0.13
7-18 y	37	1	1.51	0.04
19-24 y	6	1	0.39	0.06
25-49 y	108	14	1.24	0.16
50-64 y	130	16	2.46	0.30
65 +	402	96	9.60	2.29
Total	705	130	3.02	0.56



Pneumonia and Influenza (P&I) Mortality Surveillance

Based on the Internet System for Death Reporting (ISDR)² data, the number of deaths attributed to pneumonia and influenza (P&I) was similar to the previous week. 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.

