



Synopsis

Influenza is in an epidemic period. The epidemic trend decreases recently, with A/H3N2 circulating in the community. However, it is still necessary to be cautious as the epidemic remains higher than the same period in the past four years.

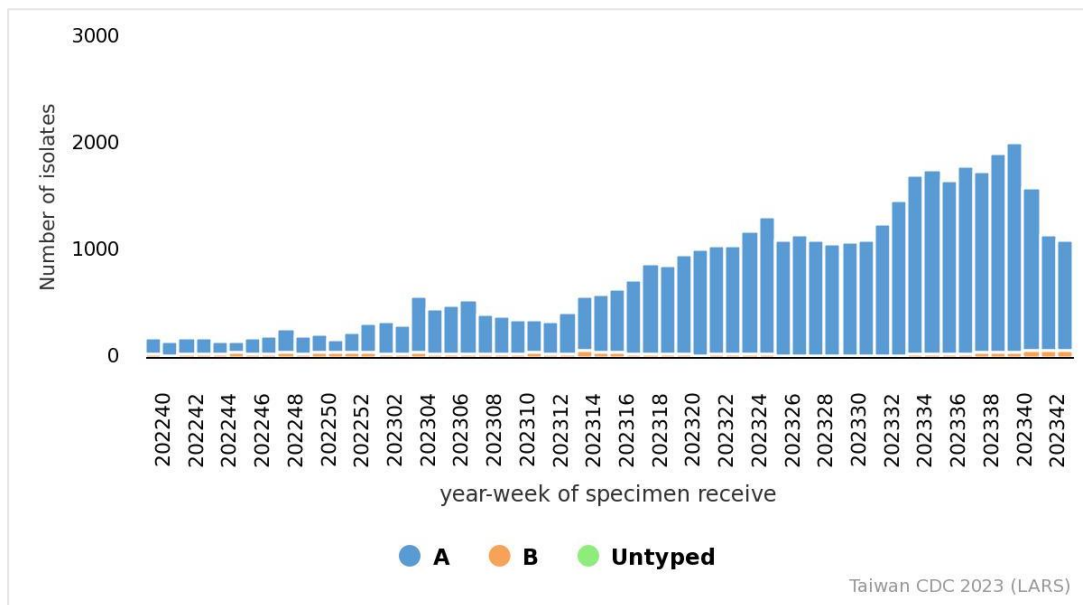
- During the last four weeks, A/H3N2 has been the predominant strain circulating in the community.
- The number of medical visits for influenza-like illness (ILI) in outpatient and ER has showed a decreasing trend recently, but still higher than the same period of 2019 to 2022.
- During 2023-2024 influenza season (since October 1, 2023), there have been 100 influenza cases with severe complications, of which 8 cases were fatal. During 2022-2023 influenza season (from October 1, 2022 to September 30, 2023), there were 803 influenza cases with severe complications, of which 194 cases were fatal.

Laboratory Surveillance¹

Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens is decreasing recently. Over the last four weeks, the proportion of influenza A positive specimens was 96%.

Numbers of influenza-positive specimens from LARS



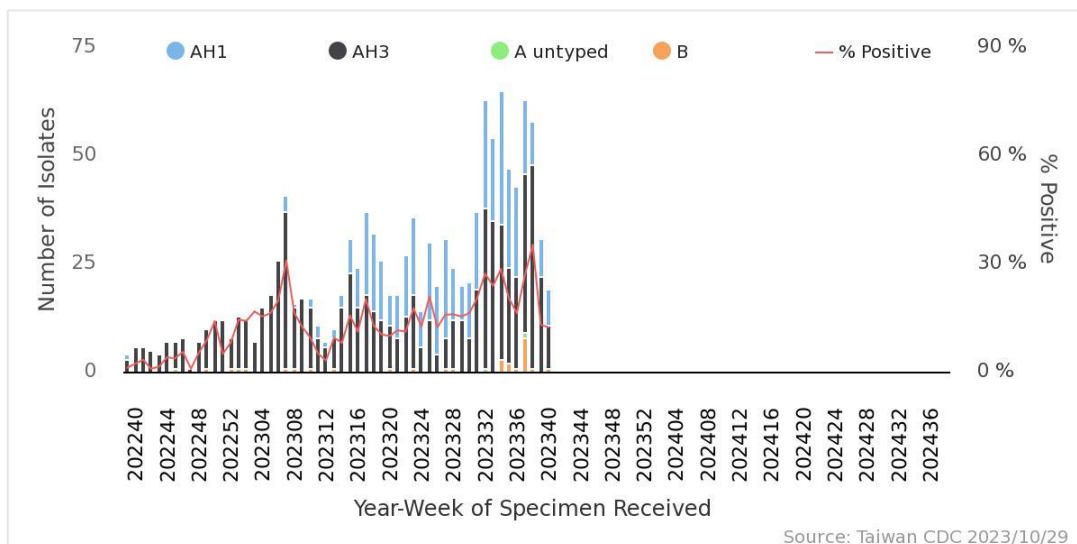
¹ In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



Contracted Virology Laboratories Surveillance

During week 38 to week 41, the predominant isolated influenza virus was A/H3N2 (67.8%), followed by A/H1N1 (25.7%) and influenza B (5.8%). Weekly virus data are available at <https://nidss.cdc.gov.tw/>.

Influenza isolates according to Contracted Virology Laboratories



Antigenicity

During the 2022-23 influenza season (from October 1, 2022 to September 30, 2023), among those influenza isolates that were antigenically characterized, 100% of the influenza A (H1N1) virus isolates matched the A (H1N1) component of the 2022-23 influenza vaccine (A/Victoria/2570/2019 (H1N1)pdm09), and 98% of influenza A (H3N2) virus isolates matched the A (H3N2) component of the 2022-23 influenza vaccine (A/Darwin/9/2021). Among influenza B isolates, 100% were B/Victoria lineage, and 100% of those isolates matched the B component of the 2022-23 influenza vaccine (B/Austria/1359417/2021).

Antiviral Resistance

The table below summarized the antiviral resistance to neuraminidase inhibitor (Oseltamivir) of the isolates during the 2022-23 influenza season.

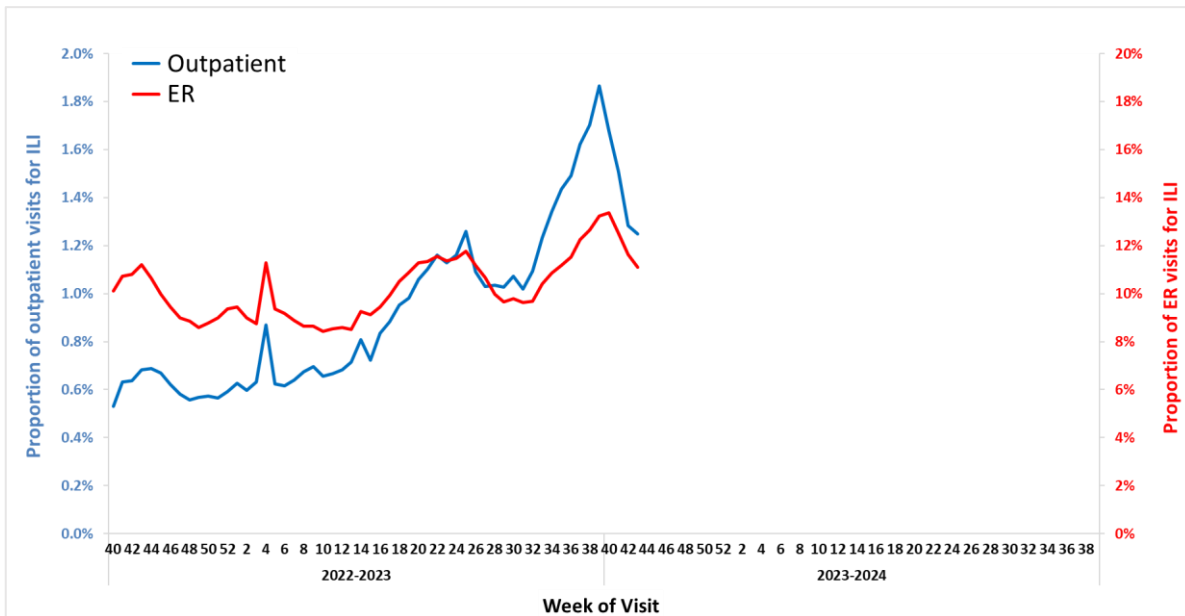
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
A (H1N1)	371	2 (0.5%)
A (H3N2)	698	0
B	28	0



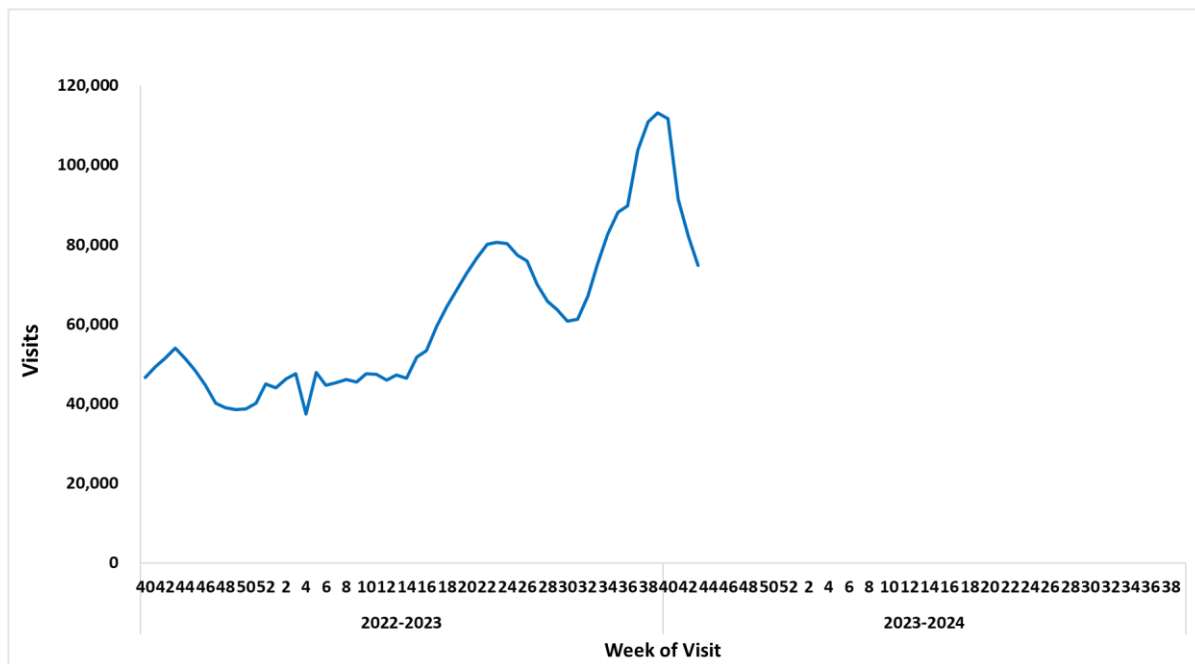
Influenza-like Illness (ILI) Surveillance

During week 43, the proportions of ILI visits were 1.2% and 11.1% in outpatient and ER, respectively, and the total number of visits for ILI in outpatient and ER was 74,743, which has showed a decreasing trend recently, but is still at a high level.

Percentages of outpatient and ER visits for ILI



Total number of outpatient and ER visits for ILI



Influenza Case with Severe Complications

There were 24 newly confirmed influenza cases with severe complications (11 of H1N1 and 13 of H3N2), and 3 fatal cases (all of H1N1). During 2023-24 influenza season, a total of 100 influenza cases with severe complications (53 of H1N1, 46 of H3N2 and 1 of influenza B) were confirmed, of which 8 cases were fatal (3 of H1N1 and 5 of H3N2). Throughout the 2022-23 influenza season, there were 803 influenza cases with severe complications (512 of H1N1, 272 of H3N2, 10 of untyped influenza A, and 9 of influenza B), of which 194 cases were fatal (142 of H1N1, 47 of H3N2, 3 of untyped influenza A, and 2 of influenza B).

Incidence of influenza cases with severe complications and mortality rate

2023-2024 influenza season (from October 1, 2023, to October 30, 2023)

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	0	0	0.00	0.00
7-18 y	4	0	0.16	0.00
19-24 y	0	0	0.00	0.00
25-49 y	12	1	0.14	0.01
50-64 y	26	3	0.49	0.06
65 +	55	3	1.31	0.07
Total	100	8	0.43	0.03

2022-2023 influenza season (from October 1, 2022, to September 30, 2023)

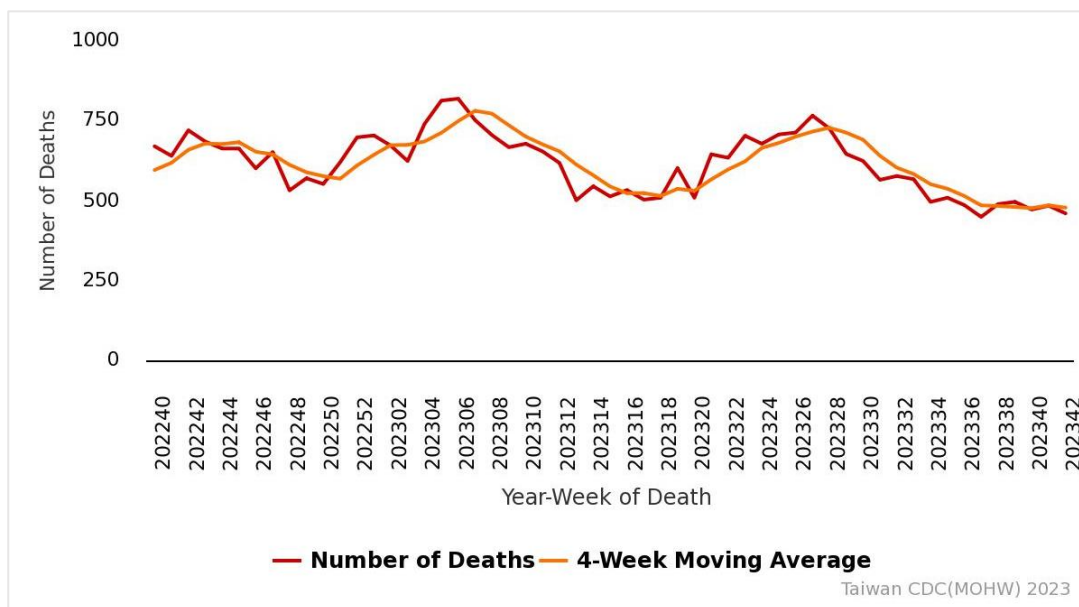
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	8	0	1.70	0.00
3-6 y	18	2	2.32	0.26
7-18 y	41	3	1.69	0.12
19-24 y	6	0	0.37	0.00
25-49 y	105	16	1.21	0.18
50-64 y	187	41	3.57	0.78
65 +	438	132	10.99	3.31
Total	803	194	3.46	0.83



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 in recent weeks. 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



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.

