



Synopsis

Influenza is in an epidemic period and shows an increasing trend recently, with A/H1N1 and A/H3N2 co-circulating in the community.

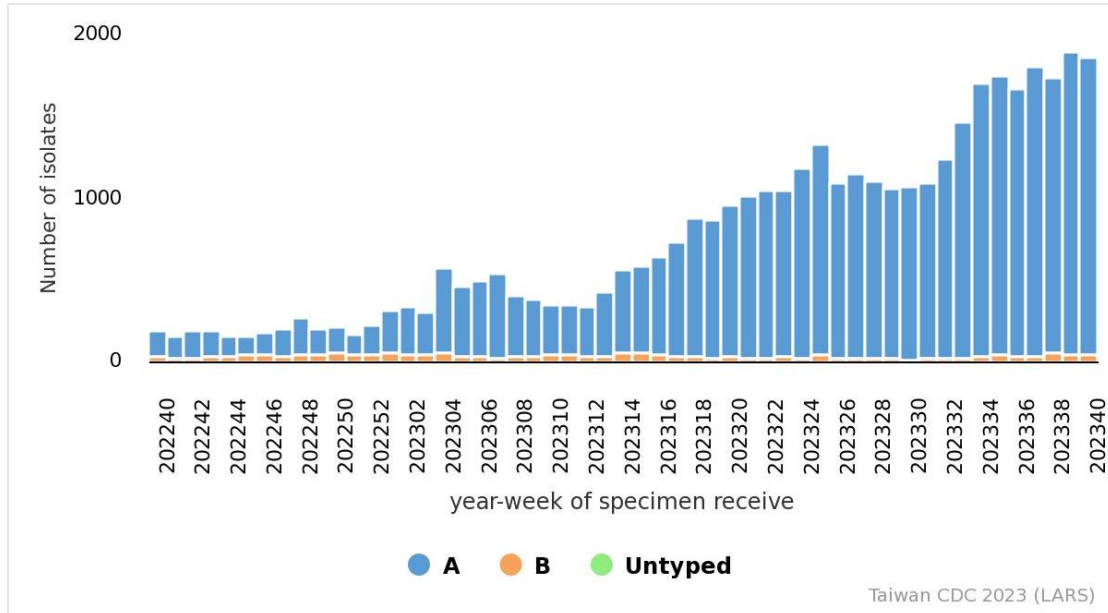
- Influenza A virus is circulating in the community. During the last four weeks, H1N1 and H3N2 were co-circulating.
- The number of medical visits for influenza-like illness (ILI) in outpatient and ER is similar to the previous week. However, the epidemic shows an increasing trend recently.
- During 2023-2024 influenza season (since October 1, 2023), there have been 15 influenza cases with severe complications. During 2022-2023 influenza season (from October 1, 2022 to September 30, 2023), there were 801 influenza cases with severe complications, and among them, 182 cases were fatal.

Laboratory Surveillance¹

Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens shows an increasing trend recently. Over the last four weeks, the proportion of influenza A positive specimens was 98%.

Numbers of influenza-positive specimens from LARS



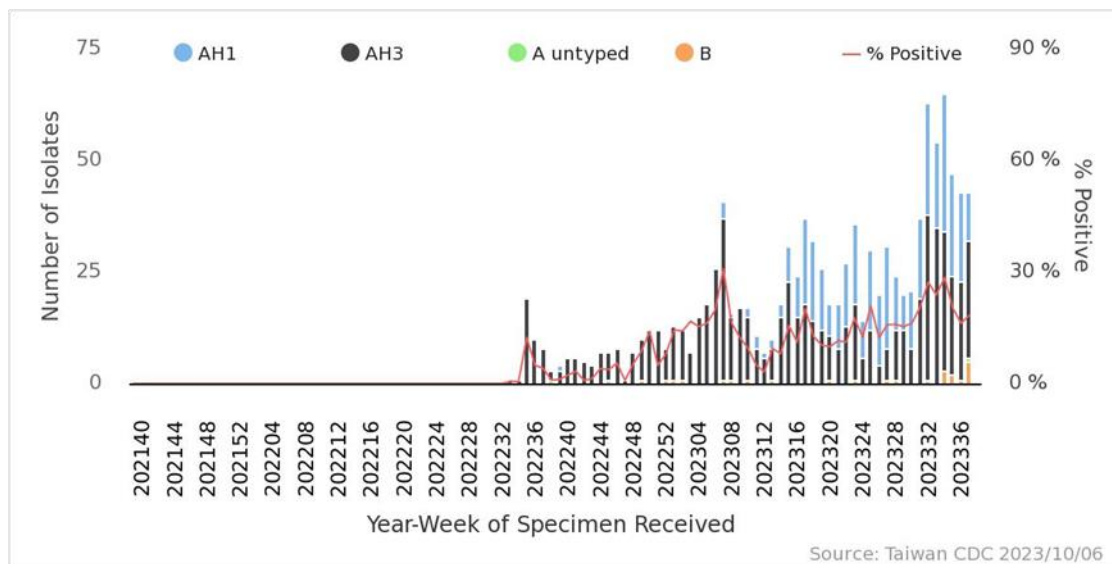
¹ In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



Contracted Virology Laboratories Surveillance

The proportion of influenza-positive specimens of week 38 was 18.3%. During the last four weeks (week 35 to week 38), influenza A was the predominant virus type, with H3N2 and H1N1 accounting for 51.0% and 42.9%, respectively, and the proportion of influenza B (5.6%) showed a slight increase. Weekly virus data are available at <https://nidss.cdc.gov.tw/>.

Influenza isolates according to Contracted Virology Laboratories



Antigenicity

During the 2022-2023 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 2022-2023 influenza season.

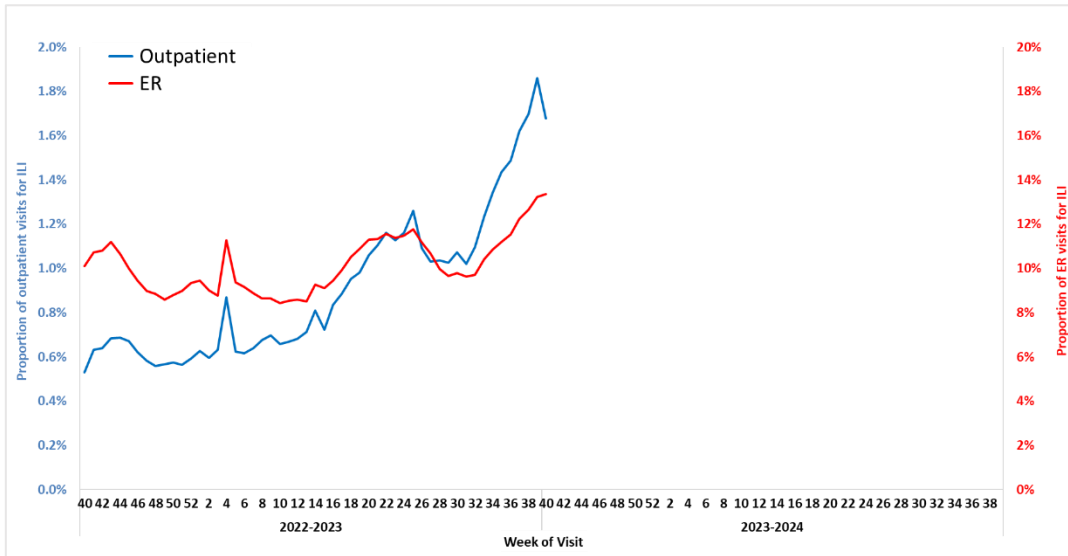
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
A (H1N1)	350	2 (0.6%)
A (H3N2)	655	0
B	20	0



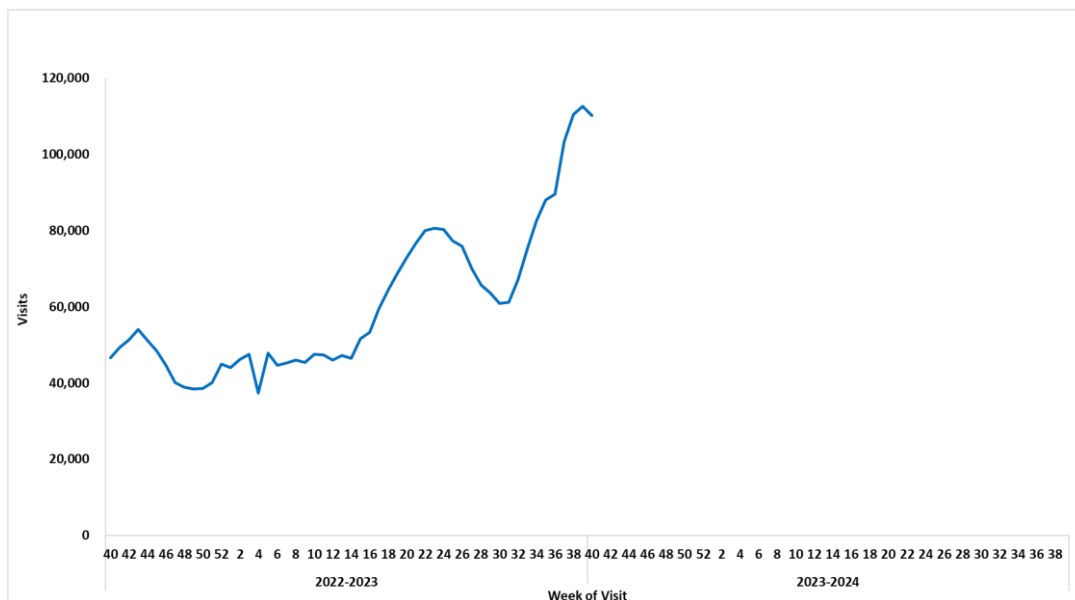
Influenza-like Illness (ILI) Surveillance

During week 40, the proportions of ILI visits were 1.7% and 13.4% in outpatient and ER, respectively. The total number of visits for ILI in outpatient and ER was 110,210 in week 40, which is similar to the previous week. However, the epidemic shows an increasing trend recently.

Percentages of outpatient and ER visits for ILI



Total number of outpatient and ER visits for ILI



Influenza Case with Severe Complications

In week 40, there were 34 newly confirmed influenza cases with severe complications (18 of H1N1, 14 of H3N2, 1 of untyped influenza A and 1 of influenza B), and 11 fatal cases (9 of H1N1 and 2 of H3N2). During 2023-2024 influenza season, a total of 15 influenza cases with severe complications (8 of H1N1 and 7 of H3N2) have been confirmed. Throughout the 2022-2023 influenza season, there were 801 influenza cases with severe complications (510 of H1N1, 271 of H3N2, 11 of untyped influenza A, and 9 of influenza B), and among them, 182 cases were fatal (134 of H1N1, 43 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 9, 2023)

Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	1	0	0.21	0
3-6 y	0	0	0.00	0
7-18 y	1	0	0.04	0
19-24 y	0	0	0.00	0
25-49 y	3	0	0.03	0
50-64 y	4	0	0.08	0
65 +	6	0	0.15	0
Total	15	0	0.06	0

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

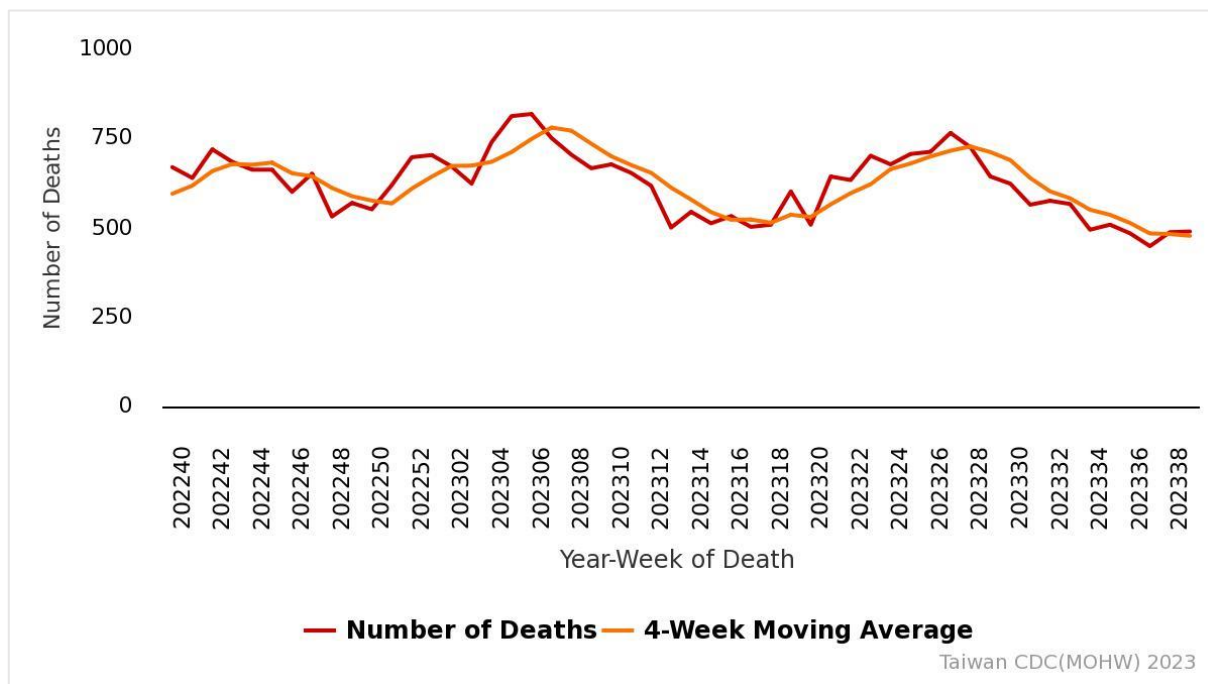
Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	8	0	1.7	0
3-6 y	18	2	2.3	0.3
7-18 y	41	3	1.7	0.1
19-24 y	6	0	0.4	0
25-49 y	105	16	1.2	0.2
50-64 y	186	41	3.6	0.8
65 +	437	120	11.0	3.0
Total	801	182	3.5	0.8



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.

