



Synopsis

Seasonal influenza activity decreased but remained elevated.

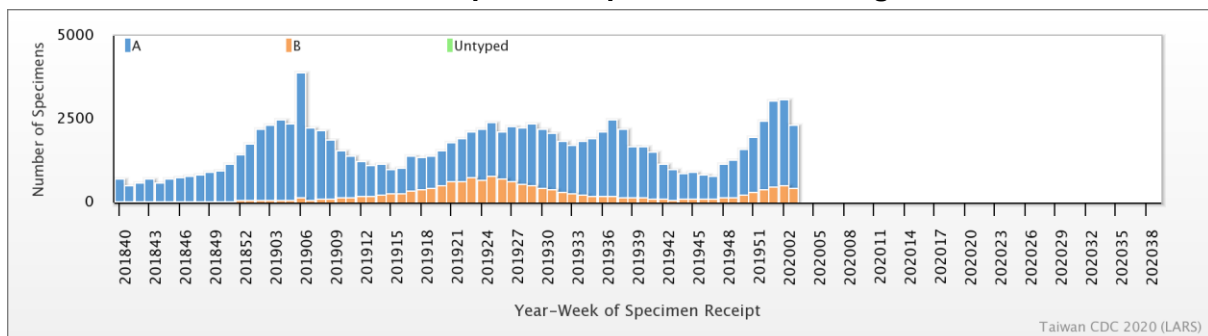
- In the past four weeks, A/H1N1 was the predominant virus type in community.
- The number of medical visits for ILI decreased. The proportion of ER visits for ILI was still above the national baseline.
- During this season, there have been 710 influenza cases with severe complications since October 1, 2019, including 43 deaths.

Laboratory Surveillance¹

Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens decreased, and the proportion of positive specimens for influenza A virus was 81%.

Trend of influenza-positive specimens according to LARS



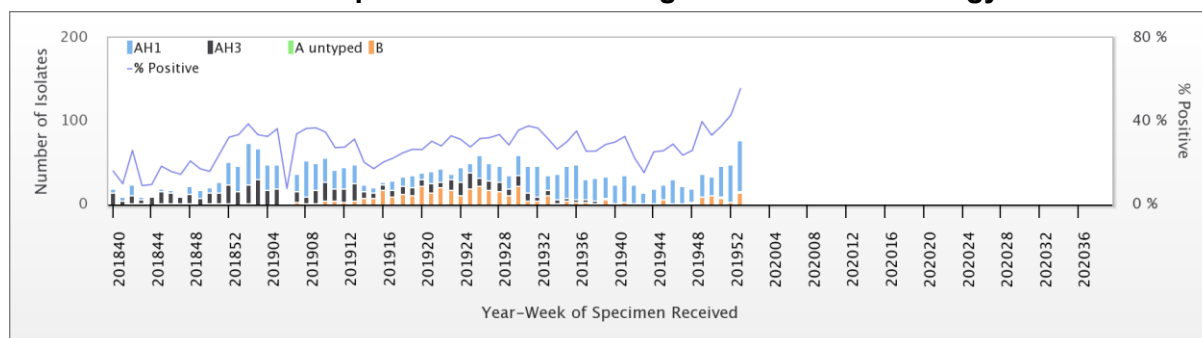
¹ In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



Contracted Virology Laboratories Surveillance

The proportion of influenza-positive specimens was 55.7% during week 1, 2020. In the previous four weeks, the proportions of A/H1N1, B, and A/H3N2 were 81.3%, 17.8%, and 1.0%, respectively. Weekly virus data are available at <http://nidss.cdc.gov.tw/>.

Influenza isolates and positive rate according to Contracted Virology Laboratories



Antigenicity

A/H1N1 was the predominant virus type in community. During week 52, 2019 to week 3, 2020, among those influenza viruses that were antigenically characterized, 62 (95%) influenza A (H1N1) isolates matched the A (H1N1) component of the 2019-20 influenza vaccine (A/Brisbane/02/2018). All 10 (100%) influenza B isolates belong to B/Victoria lineage, and 1 (10%) of those viruses matched the B component of the 2019-20 influenza vaccine (B/Colorado/06/2017).

Antiviral Resistance

The table below summarized the antiviral resistance to neuraminidase inhibitor (Oseltamivir) of the isolates from October 1, 2019.

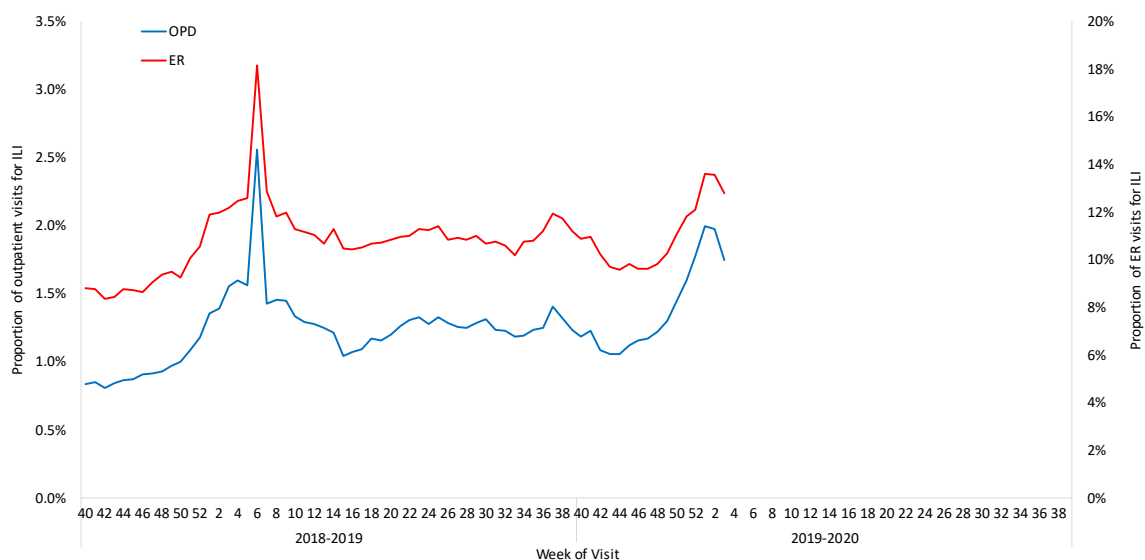
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	133	2 (1.5%)
Influenza A (H3N2)	8	0
Influenza B	35	0



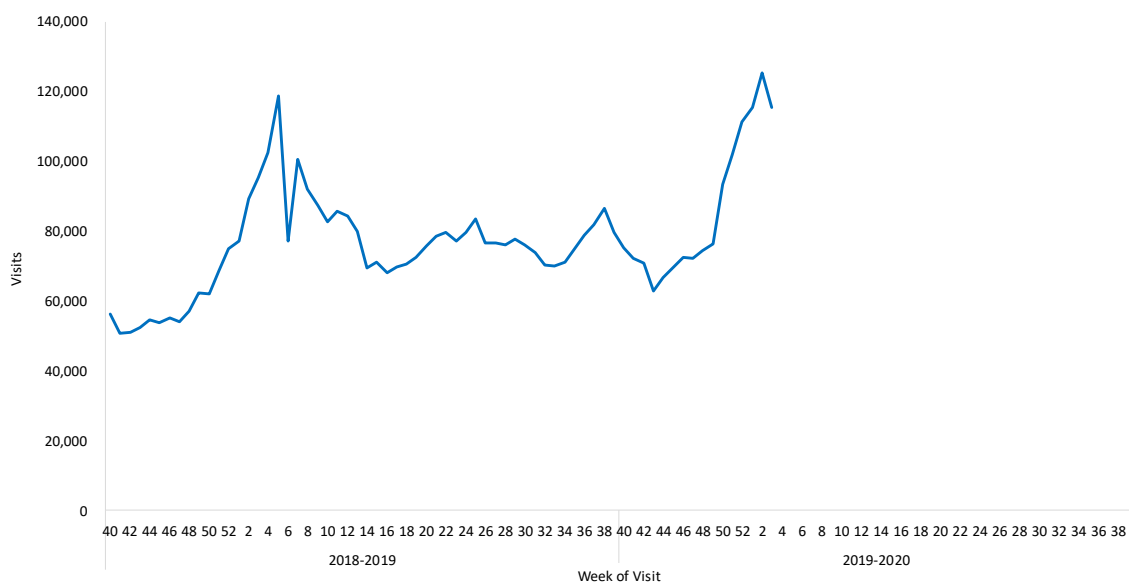
Influenza-like Illness (ILI) Surveillance

During week 3, the percentage of ER visits for ILI was 12.8% and above the national baseline of 11.5%. The total number of visits for ILI in outpatient and ER was lower than the previous week.

Percentages of outpatient and ER visits for ILI



Total number of outpatient and ER visits for ILI



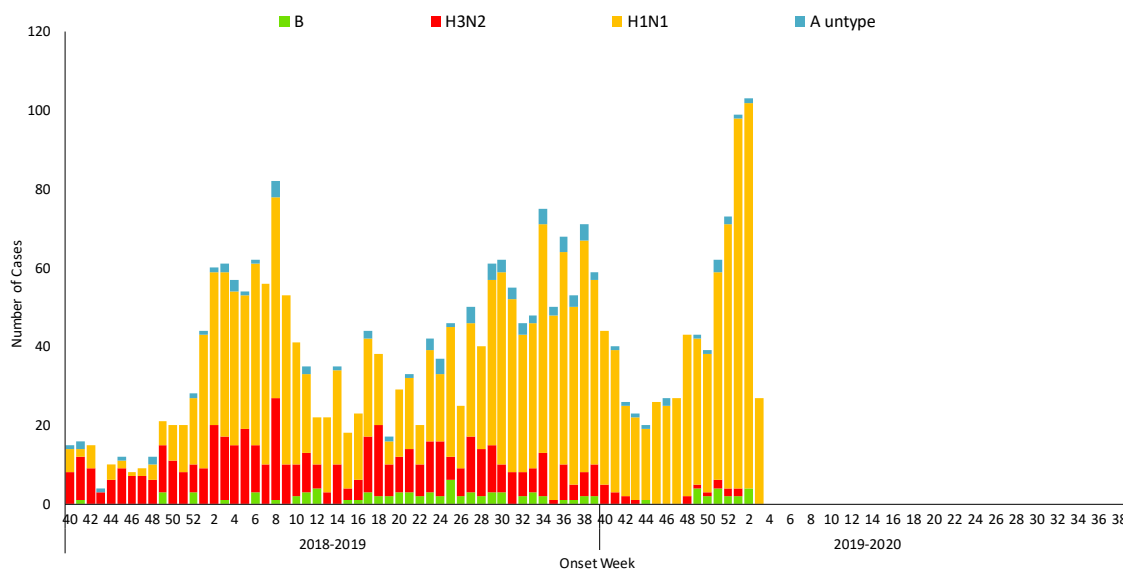
* The number of visits was incomplete during week 43, 2019.



Influenza Case with Severe Complications

There have been 710 influenza cases with severe complications (656 H1N1) since October 1, 2019, including 43 fatal cases. Most of these cases were adults aged 65 and older.

Number of influenza cases with severe complications by week of onset



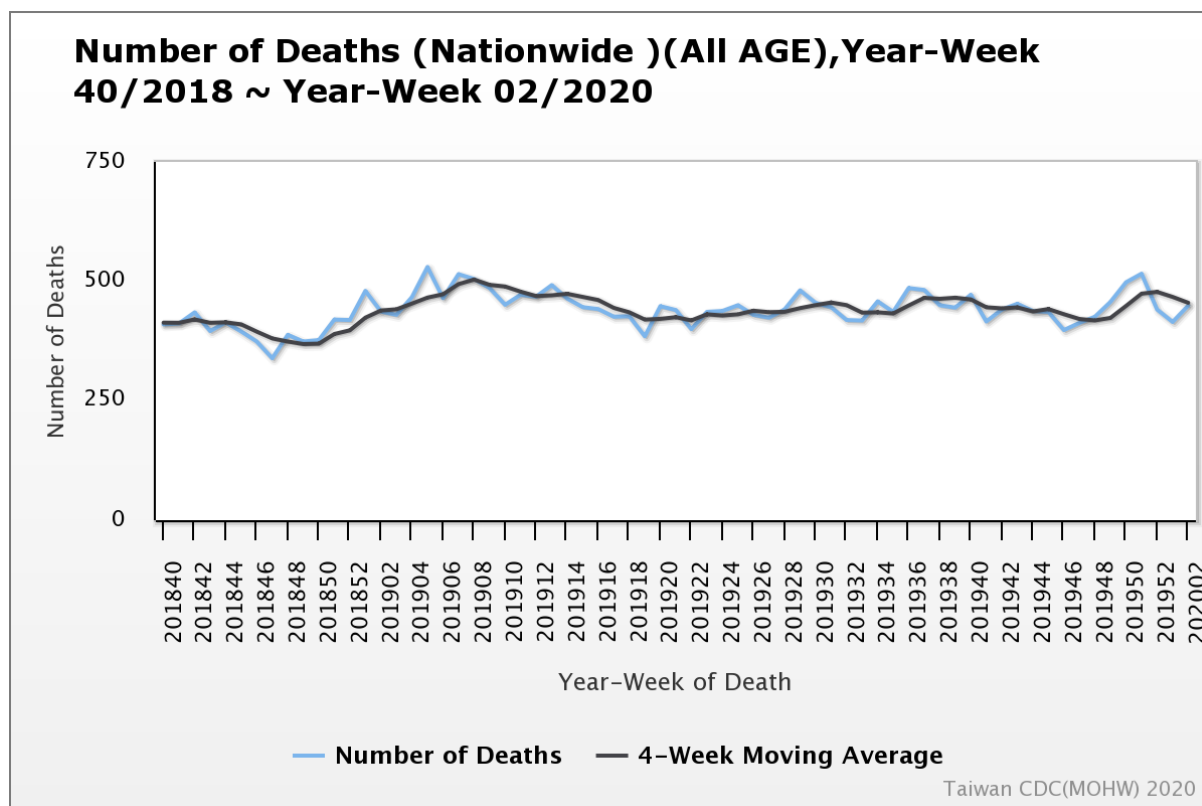
Incidence of influenza cases with severe complications and mortality rate
October 1, 2019, to January 20, 2020

Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	10	0	1.8	0.0
3-6 y	18	0	2.1	0.0
7-18 y	16	0	0.6	0.0
19-24 y	8	0	0.4	0.0
25-49 y	130	5	1.5	0.1
50-64 y	224	13	4.2	0.2
65 +	304	25	8.6	0.7
Total	710	43	3.0	0.2



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) slightly decreased 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 <http://nidss.cdc.gov.tw/>.



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.

