



## Synopsis

### Seasonal influenza activity continued to decrease and ended this week.

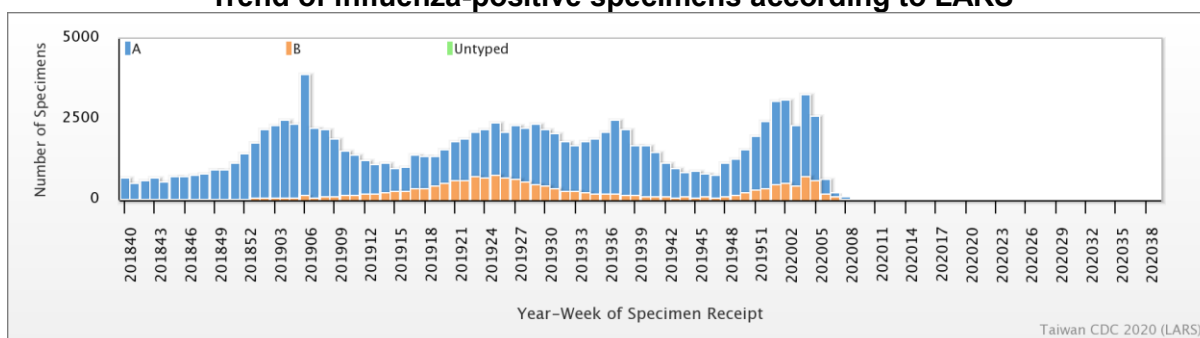
- A/H1N1 was the predominant virus type in community.
- The numbers of outpatient and ER patient-visits for ILI have been decreasing. The ILI visits for week 8 and 9 were both below the number of ILI visits in the calendar week that the season ended during the previous four influenza seasons.
- The number of influenza cases with severe complication decreased in recent weeks. During this season, there have been 965 influenza cases with severe complications since October 1, 2019, including 112 deaths.

## Laboratory Surveillance<sup>1</sup>

### Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens continued to decrease.

#### Trend of influenza-positive specimens according to LARS



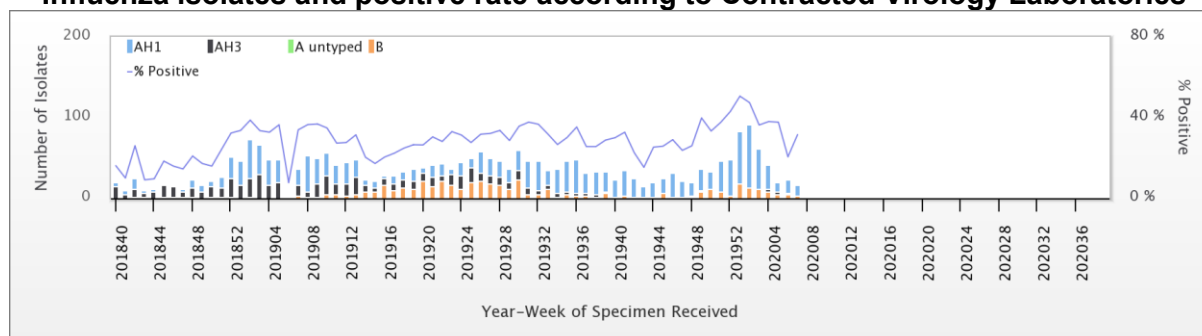
<sup>1</sup> In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



## Contracted Virology Laboratories Surveillance

The proportion of influenza-positive specimens was 31.5% during week 7, 2020. The proportions of A/H1N1, B, and A/H3N2 were 76.5%, 17.6%, and 5.9%, 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 6 to week 9, 2020, among those influenza viruses that were antigenically characterized, 31 (79%) influenza A (H1N1) isolates matched the A (H1N1) component of the 2019-20 influenza vaccine (A/Brisbane/02/2018). None of 6 influenza A (H3N2) isolates matched the A (H3N2) component of the 2019-20 influenza vaccine (A/Kansas/14/2017). 21 (100%) influenza B isolates belong to B/Victoria lineage, and 3 (14%) 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.

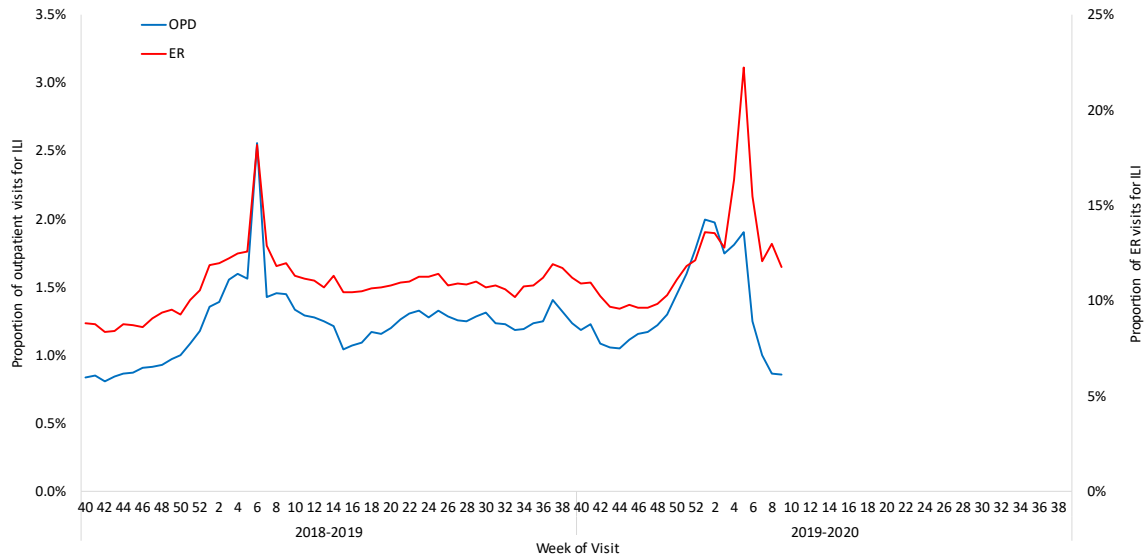
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
Influenza A (H1N1)	213	3 (1.4%)
Influenza A (H3N2)	8	0
Influenza B	58	0



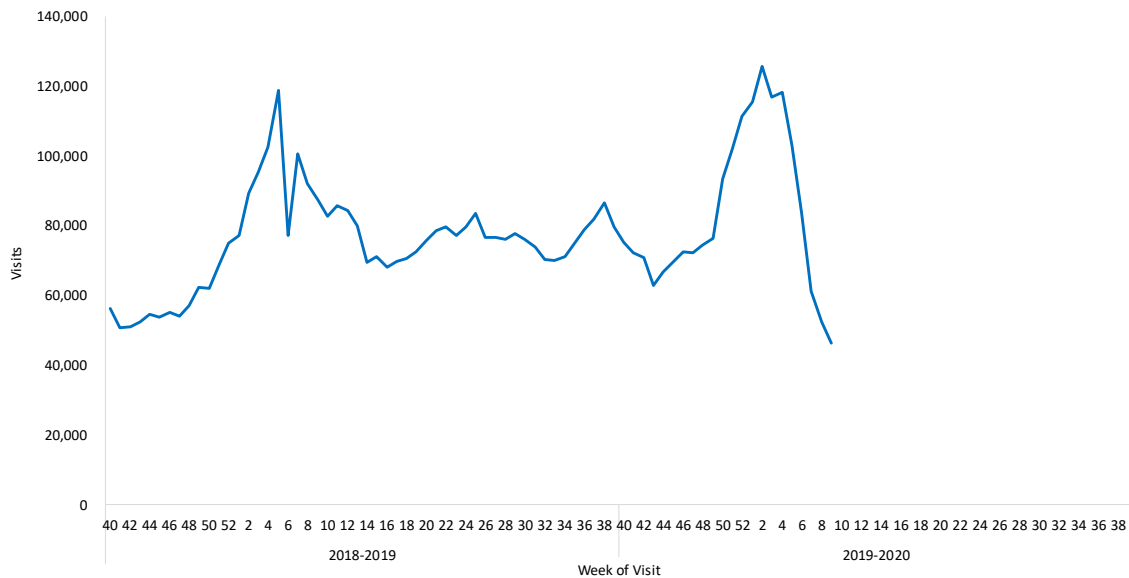
# Influenza-like Illness (ILI) Surveillance

The percentage of ER visits for ILI decreased to 11.7% this week. Both numbers of visits for ILI in outpatient and ER continued to decrease.

### Percentages of outpatient and ER visits for ILI



### Total number of outpatient and ER visits for ILI



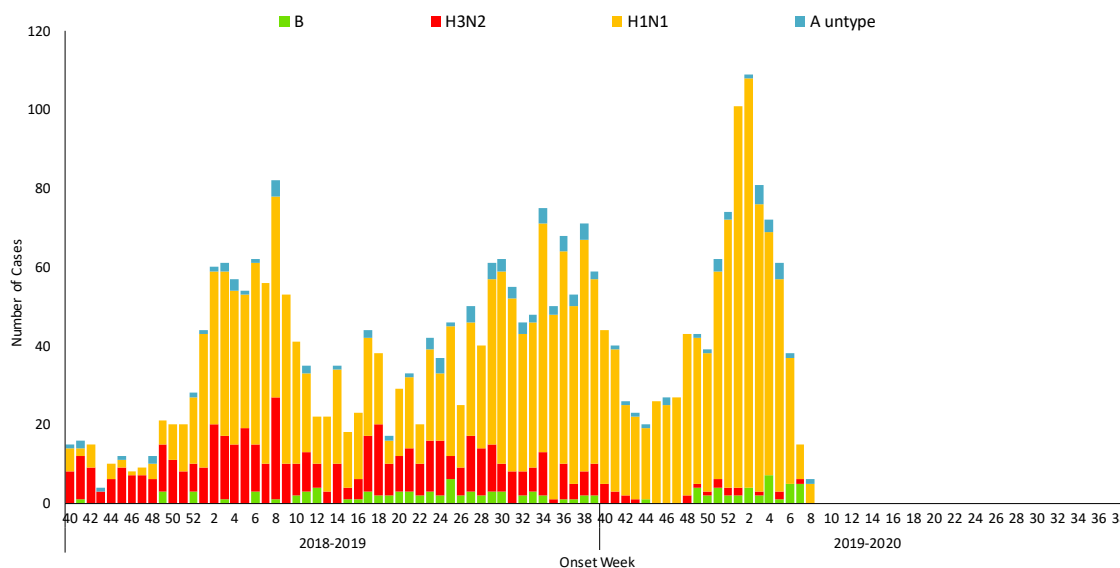
\* The number of visits was incomplete during week 43, 2019.



## Influenza Case with Severe Complications

There have been 965 influenza cases with severe complications (874 H1N1) since October 1, 2019, including 112 fatal cases. Most of these cases were adults aged 65 and older.

Number of influenza cases with severe complications by week of onset



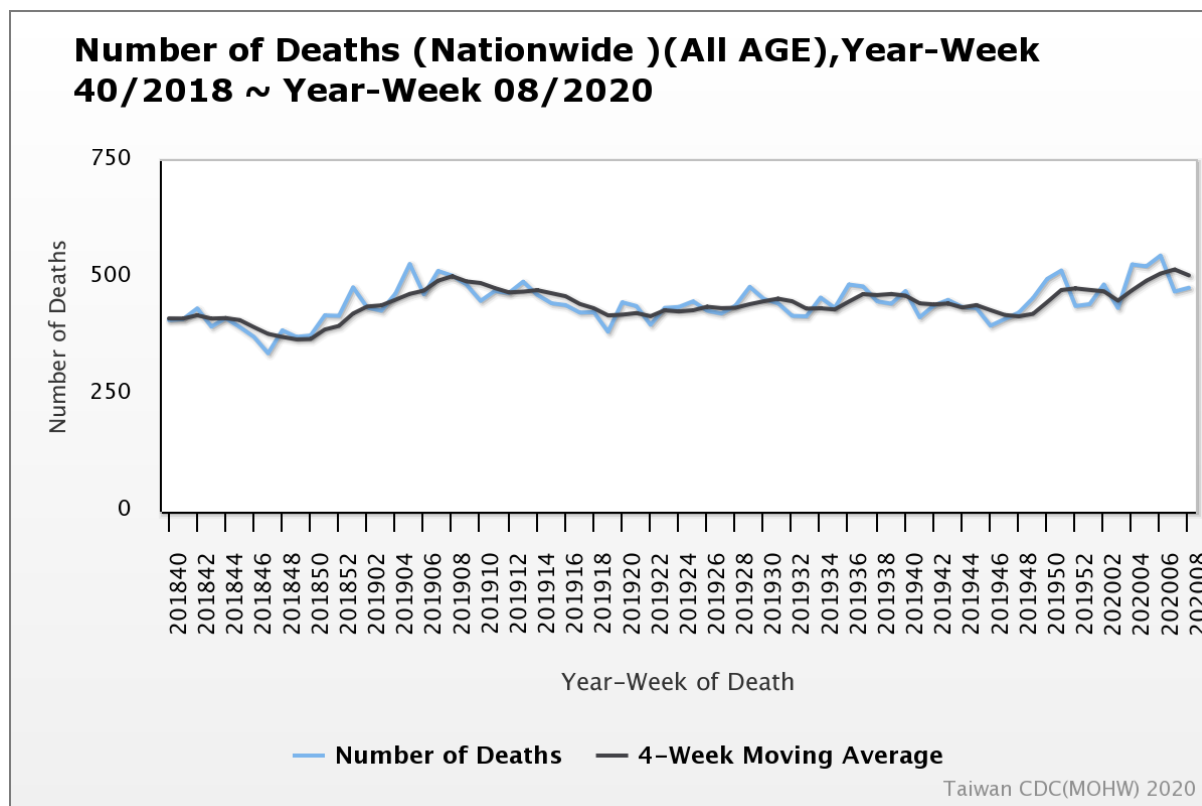
Incidence of influenza cases with severe complications and mortality rate  
October 1, 2019, to March 2, 2020

Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	14	0	2.5	0.0
3-6 y	22	0	2.6	0.0
7-18 y	18	0	0.7	0.0
19-24 y	11	1	0.6	0.1
25-49 y	174	15	1.9	0.2
50-64 y	308	31	5.8	0.6
65 +	418	65	11.8	1.8
Total	965	112	4.1	0.5



## Pneumonia and Influenza (P&I) Mortality Surveillance

Based on the Internet System for Death Reporting (ISDR)<sup>2</sup> data, the number of deaths attributed to pneumonia and influenza (P&I) increased slightly 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/>.



<sup>2</sup> 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.

