



## Synopsis

### Seasonal influenza activity decreased but remained elevated.

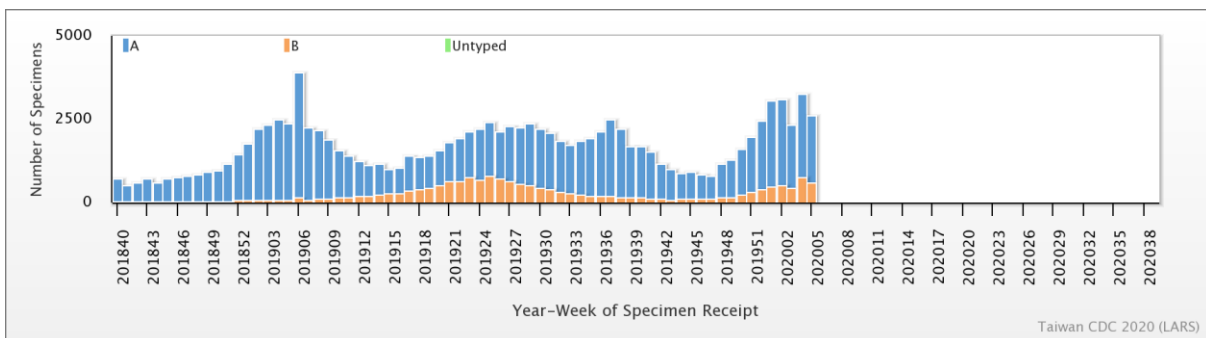
- In the past four weeks, A/H1N1 was the predominant virus type in community.
- Due to most outpatient services closed during Lunar New Year holidays, the proportion of ER visits for ILI significantly increased. The number of medical visits for ILI was lower than last week.
- During this season, there have been 858 influenza cases with severe complications since October 1, 2019, including 61 deaths.

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

### Laboratory Automated Reporting System (LARS)

The number of influenza-positive specimens increased, and the proportion of positive specimens for influenza A virus was 77% this week.

Trend of influenza-positive specimens according to LARS



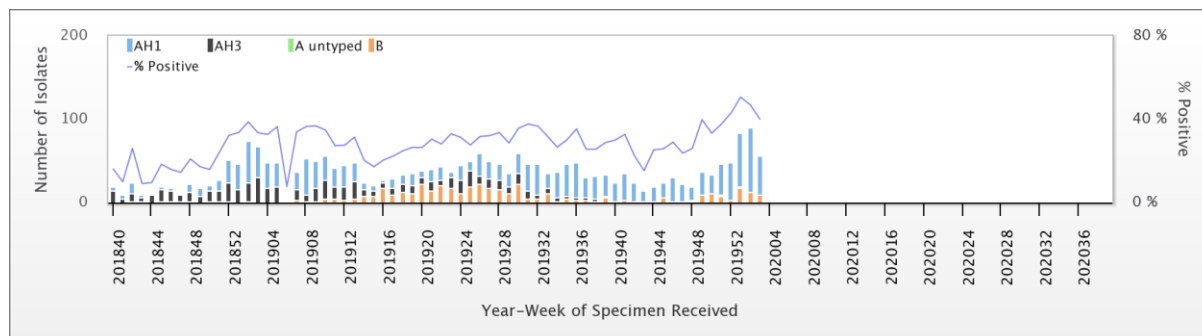
<sup>1</sup> In terms of the surveillance systems in Taiwan, please see: Jian, S. W., Chen, C. M., Lee, C. Y., & Liu, D. P. (2017). Real-Time Surveillance of Infectious Diseases: Taiwan's Experience. Health security, 15(2), 144-153.



## Contracted Virology Laboratories Surveillance

The proportion of influenza-positive specimens was 40% during week 3, 2020. In the previous four weeks, the proportions of A/H1N1, B, and A/H3N2 were 84.3%, 15.4%, and 0.4%, 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 1 to week 4, 2020, among those influenza viruses that were antigenically characterized, 59 (95%) influenza A (H1N1) isolates matched the A (H1N1) component of the 2019-20 influenza vaccine (A/Brisbane/02/2018). All 12 (100%) influenza B isolates belong to B/Victoria lineage, and 1 (8%) 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.

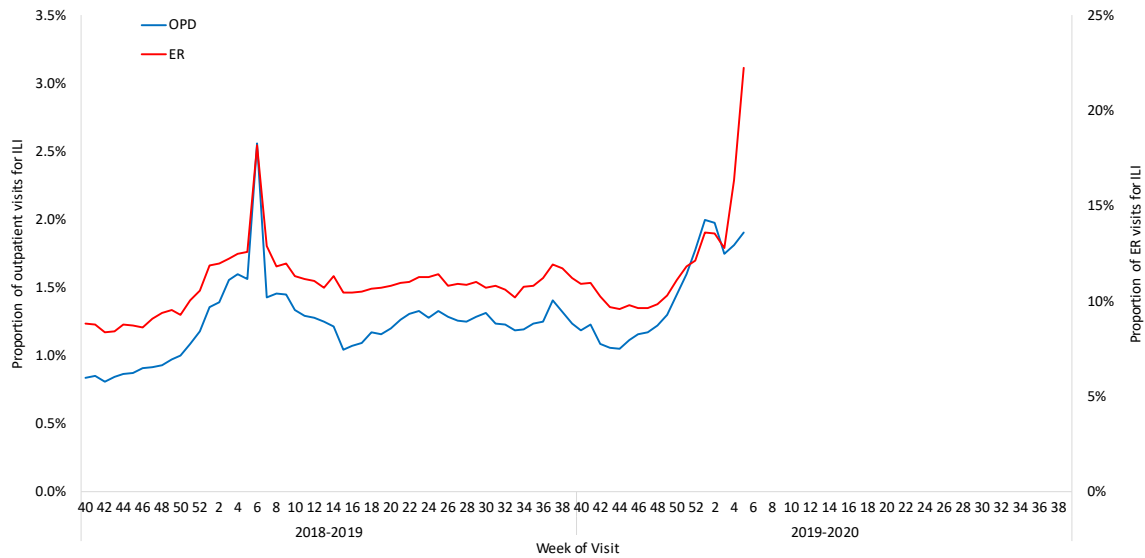
	Isolates tested (n)	Resistance Viruses, n (%)
		Oseltamivir
<b>Influenza A (H1N1)</b>	142	3 (2.1%)
<b>Influenza A (H3N2)</b>	8	0
<b>Influenza B</b>	37	0



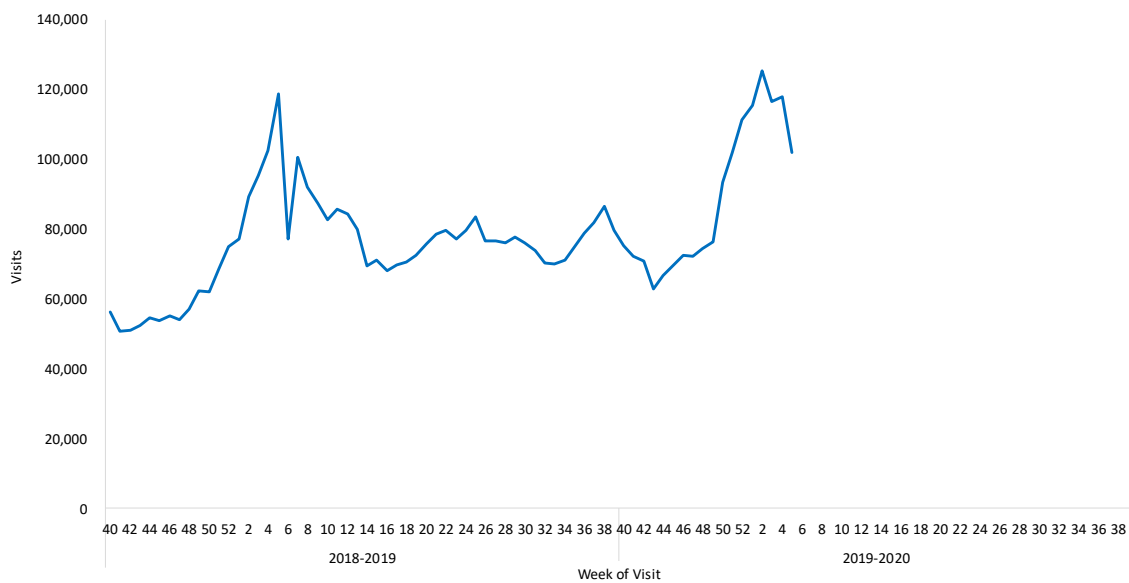
## Influenza-like Illness (ILI) Surveillance

Due to most outpatient services closed during Lunar New Year holidays, the percentage of ER visits for ILI increased significantly to 22.2% this week and was 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



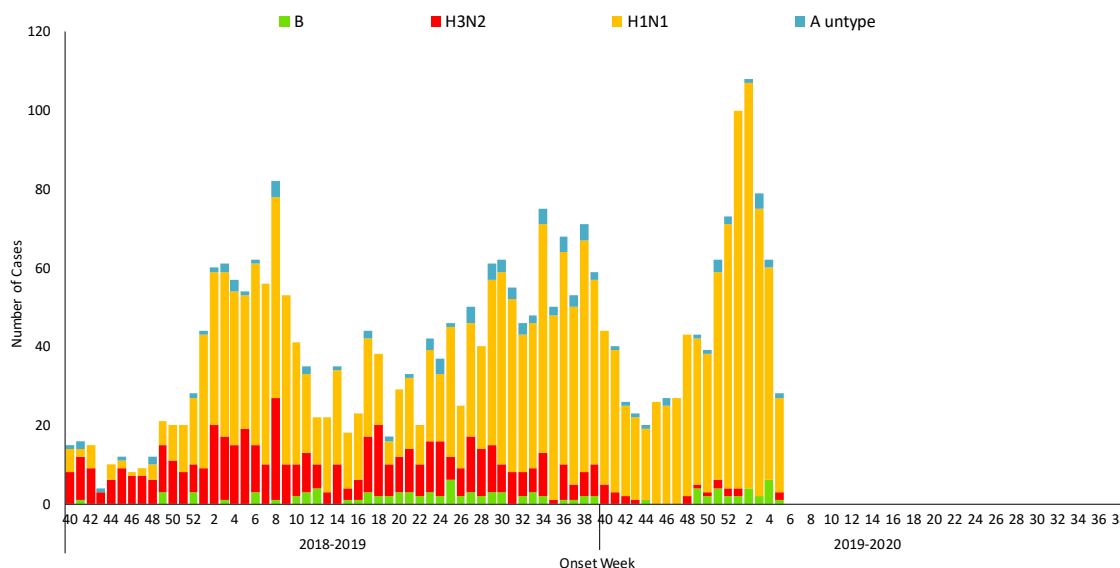
\* The number of visits was incomplete during week 43, 2019.



## Influenza Case with Severe Complications

There have been 858 influenza cases with severe complications (787 H1N1) since October 1, 2019, including 61 fatal cases. Most of these cases were adults aged 65 and older.

Number of influenza cases with severe complications by week of onset



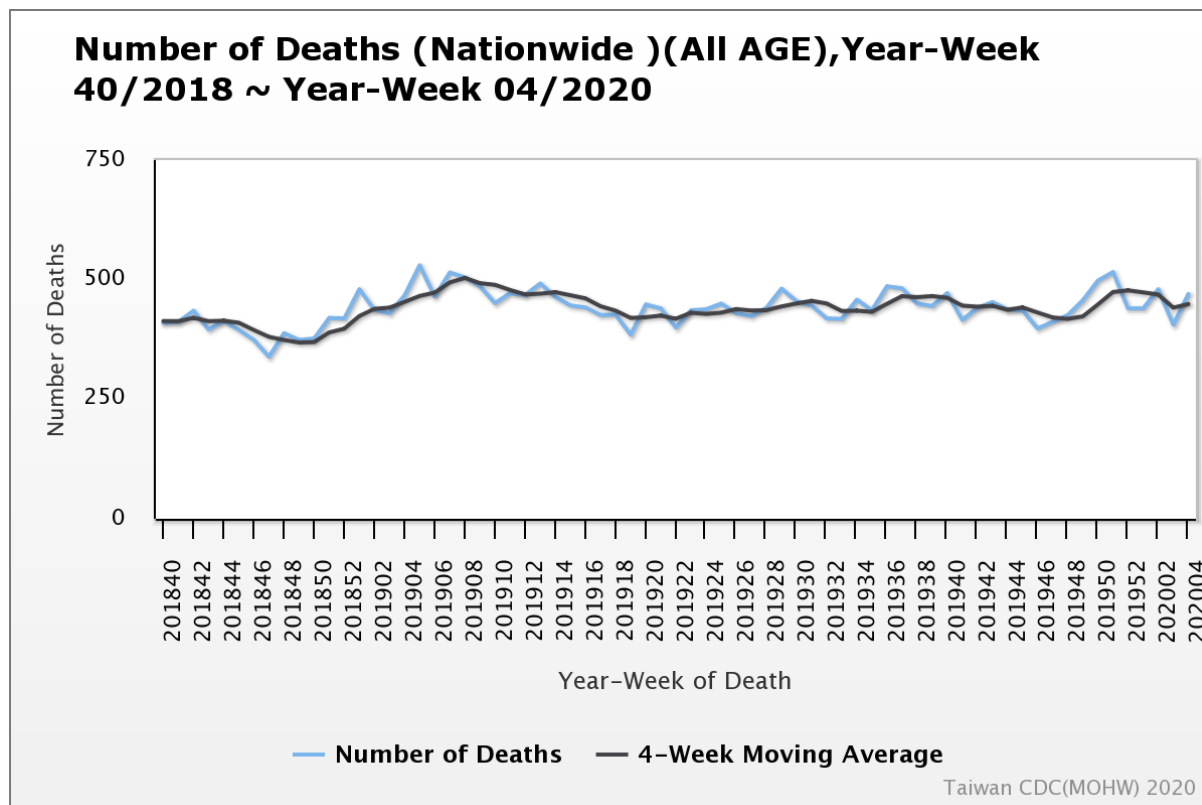
Incidence of influenza cases with severe complications and mortality rate  
October 1, 2019, to February 3, 2020

Age Group	Cases	Deaths	Cumulative incidence per 100,000 population	Cumulative mortality per 100,000 population
< 3 y	13	0	2.3	0.0
3-6 y	20	0	2.3	0.0
7-18 y	17	0	0.7	0.0
19-24 y	11	0	0.6	0.0
25-49 y	153	7	1.7	0.1
50-64 y	274	18	5.2	0.3
65 +	370	36	10.4	1.0
Total	858	61	3.6	0.3



## 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) remained the same in recent two 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.

