

## Chinese Influenza Weekly Report

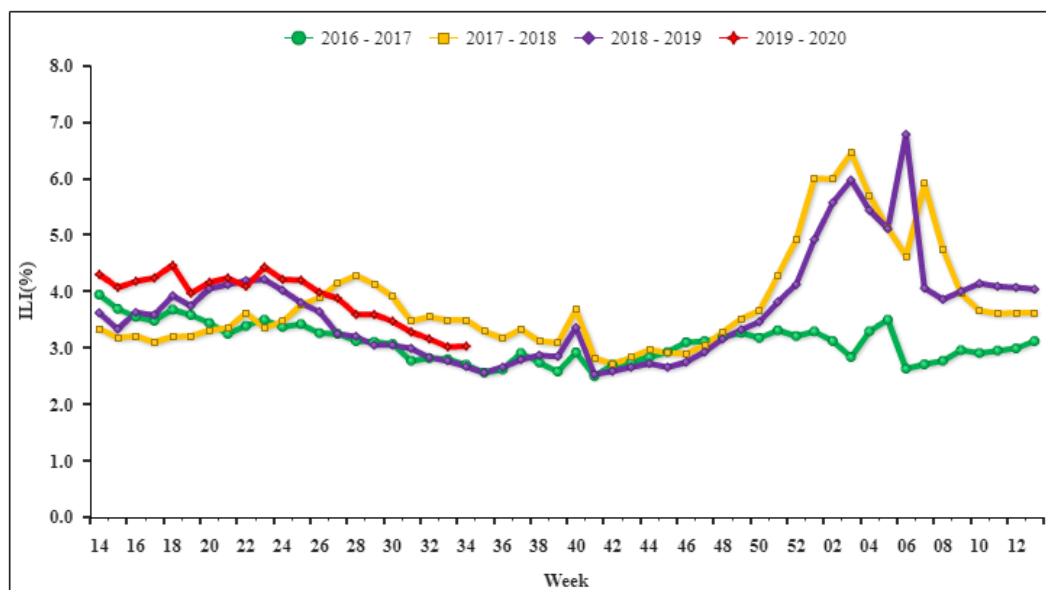
(All data are preliminary and may change as more reports are received)

### Summary

- During week 34, influenza activity remained at inter-seasonal level in mainland China. A small number of B-Victoria lineage and A(H3N2) viruses were detected in southern provinces, few influenza viruses could be detected sporadically in northern provinces.
- Among influenza viruses antigenically characterized by CNIC since October 1<sup>st</sup>, 2018, 2166(97.6%) influenza A(H1N1)pdm09 viruses were characterized as A/Michigan/45/2015-like; 731(78.7%) influenza A(H3N2) viruses were characterized as A/Singapore/INFIMH-16-0019/2016 (EGG)-like, 901(97%) influenza A(H3N2) viruses were characterized as A/Singapore/INFIMH-16-0019/2016 (CELL)-like; 593(50.5%) influenza B/Victoria viruses were characterized as B/Colorado/06/2017-like; 58(98.3%) influenza B/Yamagata viruses were characterized as B/Phuket/3073/2013-like.
- Among the influenza viruses tested by CNIC for antiviral resistance analysis since October 1<sup>st</sup>, 2018, all influenza A(H1N1)pdm09 and A(H3N2) viruses were resistant to adamantane; All influenza A(H3N2) and B viruses were sensitive to neuraminidase inhibitors. All but 12 influenza A(H1N1)pdm09 were sensitive to neuraminidase inhibitors.

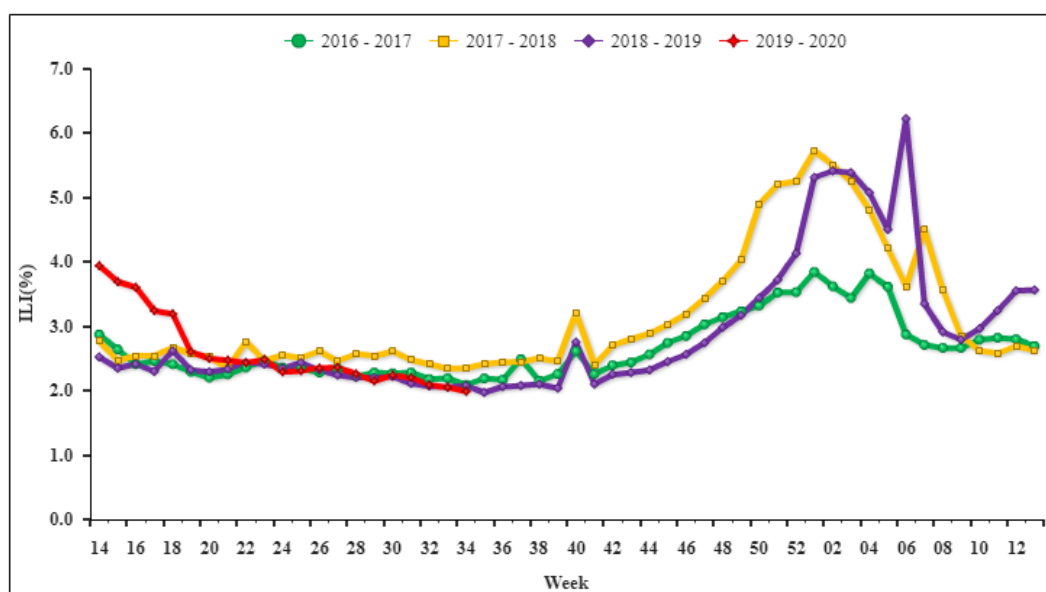
## Surveillance of outpatient or emergency visits for Influenza-like Illness (ILI)

During week 34 (Aug 19<sup>th</sup> 2019 –Aug 25<sup>th</sup> 2019), the percentage of outpatient or emergency visits for ILI (ILI%) at national sentinel hospitals in southern provinces was 3.0%, same as the last week (3.0%), higher than the same week of 2016 and 2018 (both 2.7%), lower than the same week of 2017 (3.5%). (Figure 1)



**Figure 1. Percentage of Visits for ILI at Sentinel Hospitals in South China (2016-2020)**

During week 34, ILI% at national sentinel hospitals in northern provinces was 2.0%, lower than the last week (2.1%), lower than the same week of 2016-2018 (2.1%, 2.4% and 2.1%), (Figure 2)



**Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in North China (2016-2020)**

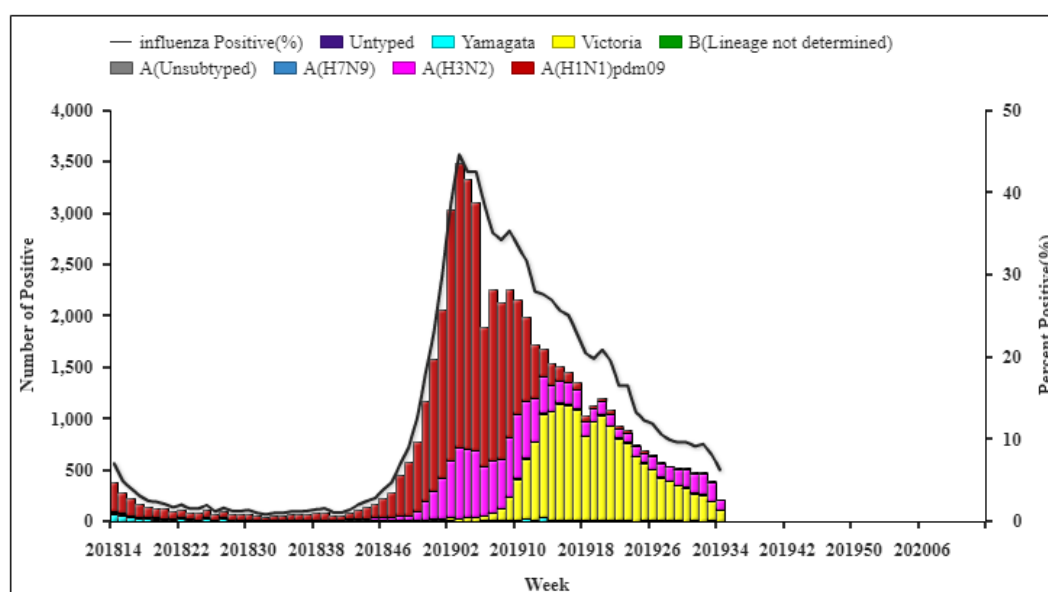
### Virologic Surveillance

During week 34, influenza network laboratories tested 4393 specimens, of which 217(4.9%) were positive for influenza, influenza A and influenza B viruses were 104(47.9%) and 113(52.1%), respectively (Table 1). During week 34, the percentage of specimens that were tested positive for influenza in south China was 6.2%, which was lower than the previous week (8.1%) (Figure 3). During week 34, the percentage of specimens that were tested positive for influenza in north China was 0.5%, which was lower than the previous week (0.6%). (Figure 4).

**Table 1 Laboratory Detections of ILI Specimens (Week 34, 2019)**

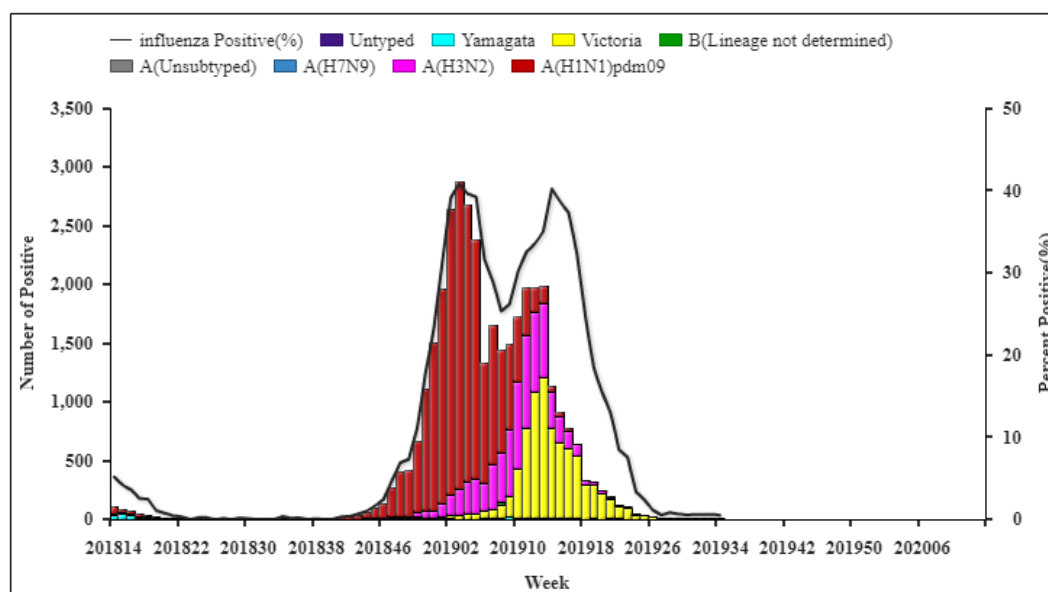
	Week 34		
	South China	North China	Total
No. of specimens tested	3402	991	4393
No. of positive specimens (%)	212(6.2%)	5(0.5%)	217(4.9%)
Influenza A	102(48.1%)	2(40.0%)	104(47.9%)
A(H3N2)	95(93.1%)	2(100.0%)	97(93.3%)
A(H1N1)pdm09	7(6.9%)	0(0)	7(6.7%)

A (subtype not determined)	0(0)	0(0)	0(0)
<b>Influenza B</b>	<b>110(51.9%)</b>	<b>3(60.0%)</b>	<b>113(52.1%)</b>
B (lineage not determined)	1(0.9%)	0(0)	1(0.9%)
Victoria	108(98.2%)	3(100.0%)	111(98.2%)
Yamagata	1(0.9%)	0(0)	1(0.9%)
Yamagata	1(0.9%)	0(0)	1(0.9%)



**Figure 3. Influenza Positive Tests Reported by Southern Network Laboratories (Week 14, 2018–Week 34, 2019)**

**Note:** Analysis in this part was based on the test results of network laboratories. If it were not consistent with the results of CNIC confirmation, the results of CNIC confirmation were used.



**Figure 4. Influenza Positive Tests Reported by Northern Network Laboratories (Week 14, 2018–Week 34, 2019)**

**Note:** Analysis in this part was based on the result of network laboratories. If it were not consistent with the results of CNIC confirmation, the results of CNIC confirmation were used.

### Antigenic Characterization

Since October 1<sup>st</sup>, 2018, 2166(97.6%) influenza A(H1N1)pdm09 viruses were characterized as A/Michigan/45/2015-like; 731(78.7%) influenza A(H3N2) viruses were characterized as A/Singapore/INFIMH-16-0019/2016 (EGG)-like, 901(97%) influenza A(H3N2) viruses were characterized as A/Singapore/INFIMH-16-0019/2016 (CELL)-like; 593(50.5%) influenza B/Victoria viruses were characterized as B/Colorado/06/2017-like; 58(98.3%) influenza B/Yamagata viruses were characterized as B/Phuket/3073/2013-like.

### Antiviral Resistance

Since October 1<sup>st</sup>, 2018, among the influenza viruses tested by CNIC for antiviral resistance, all influenza A(H1N1)pdm09 and A(H3N2) viruses were resistant to adamantane; All influenza A(H3N2) and B viruses were sensitive to neuraminidase inhibitors. All but 12 influenza A(H1N1)pdm09 were sensitive to neuraminidase inhibitors.

### Outbreak Surveillance

During week 34(Aug 19<sup>th</sup> 2019 –Aug 25<sup>th</sup> 2019), there was no outbreak reported nationwide .there were five outbreaks reported nationwide, three of them were B(Victoria), two of them were B (lineage not determined).

### **H7N9 Case Report**

During week 34, no new human infection with novel reassortant influenza A(H7N9) virus was reported.