

Chinese Influenza Weekly Report

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

Summary

- During week 40, the influenza activity in mainland China was still at a very low level, there was almost no positive specimen detected.
- Among influenza viruses antigenically characterized by CNIC since March 30th, 2020, 98(95.1%) influenza A(H1N1)pdm09 viruses were characterized as A/Guangdong-Maonan/SWL1536/2019-like; 45(80.4%) influenza A(H3N2) viruses were characterized as A/Hong Kong/2671/2019 (EGG)-like, 53(94.6%) influenza A(H3N2) viruses were characterized as A/Hong Kong/45/2019 (CELL)-like; 59(88.1%) influenza B/Victoria viruses were characterized as B/Washington/02/2019-like.
- Among the influenza viruses tested by CNIC for antiviral resistance analysis since March 30th, 2020, all influenza A(H1N1)pdm09 and A(H3N2) viruses were resistant to adamantane; All influenza A(H1N1)pdm09, A(H3N2) and B viruses were sensitive to neuraminidase inhibitors.

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

During week 40 (Sep 28st –Oct 4th 2020) , the percentage of outpatient or emergency visits for ILI (ILI%) at national sentinel hospitals in southern provinces was 3.6%, higher than the last week (3.4%), lower than the same week of 2017(3.7%), higher than the same week of 2018 and 2018 (3.4% and 3.5%). (Figure 1)

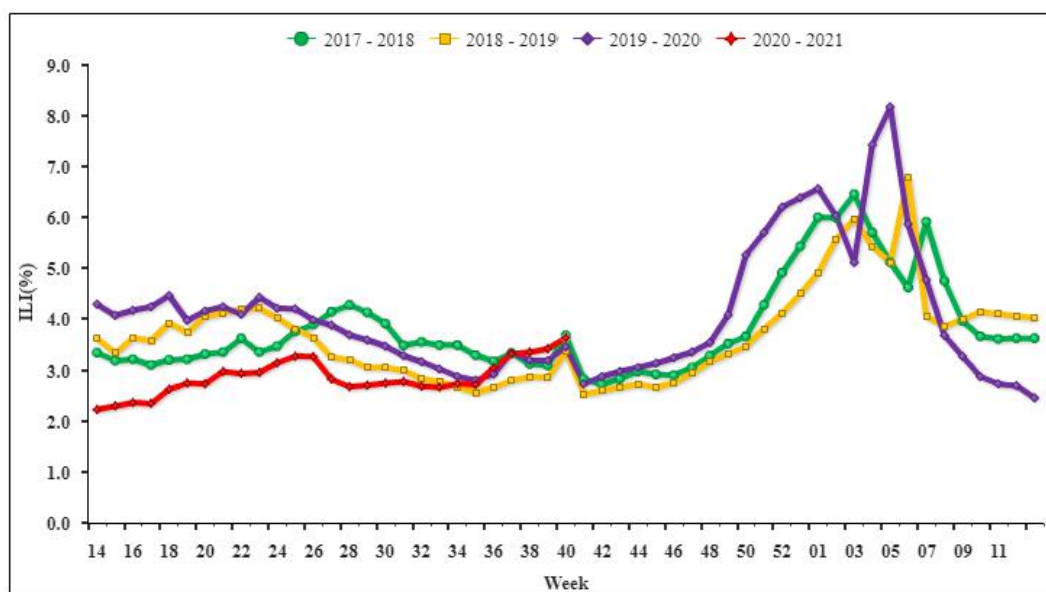
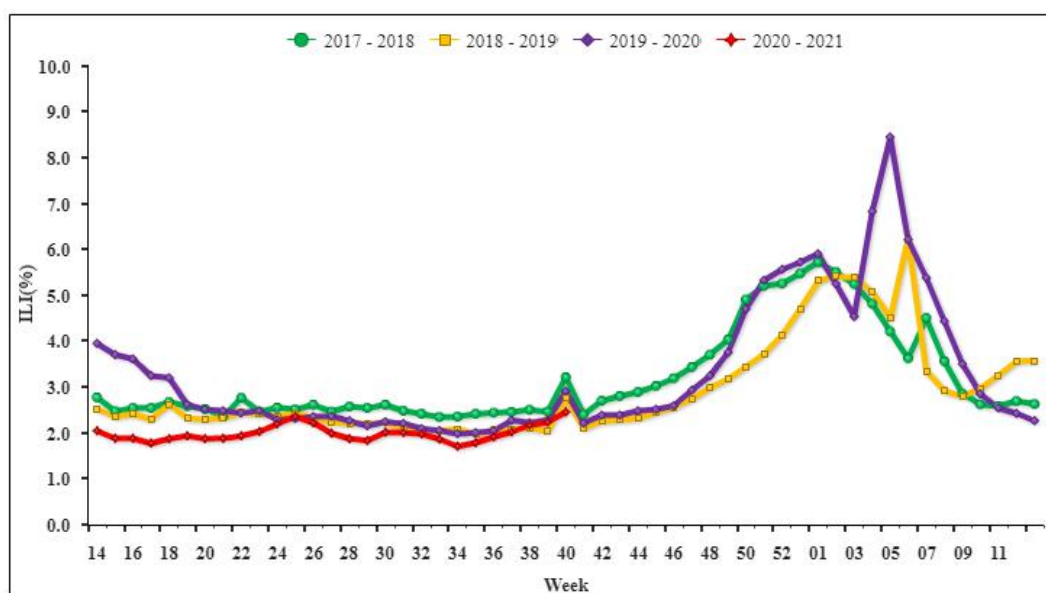


Figure 1. Percentage of Visits for ILI at Sentinel Hospitals in South China (2017-2021)

Note: Since the outbreak of COVID-19, patients with fever are required to go to the fever clinics in separate areas of hospitals for treatment, which may enhance the sensitivity of surveillance. And some network hospitals admitted more ILI cases than before, with ILI% increased accordingly. The data cannot be compared with the same period in previous years.

During week 40, ILI% at national sentinel hospitals in northern provinces was 2.5%, , higher than the last week (2.2%), lower than the same week of 2017-2019 (3.2%, 2.8% and 2.3%). (Figure 2)



**Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in North China
(2017-2021)**

Virologic Surveillance

During week 40, influenza network laboratories tested 7668 specimens, there were five positive detection for influenza. The number and proportion of influenza types and subtypes detected in southern and northern provinces are shown in Table 1.

Table 1 Laboratory Detections of ILI Specimens (Week 40, 2020)

	Week 40		
	South China	North China	Total
No. of specimens tested	4348	3320	7668
No. of positive specimens (%)	5(0.1%)	0	5(0.1%)
Influenza A	2(40%)	0	2(40%)
A(H3N2)	0	0	0
A(H1N1)pdm09	1(50%)	0	1(50%)
A (subtype not determined)	1(50%)	0	1(50%)
Influenza B	3(60%)	0	3(60%)
B (lineage not determined)	0	0	0
Victoria	3(100%)	0	3(100%)
Yamagata	0	0	0

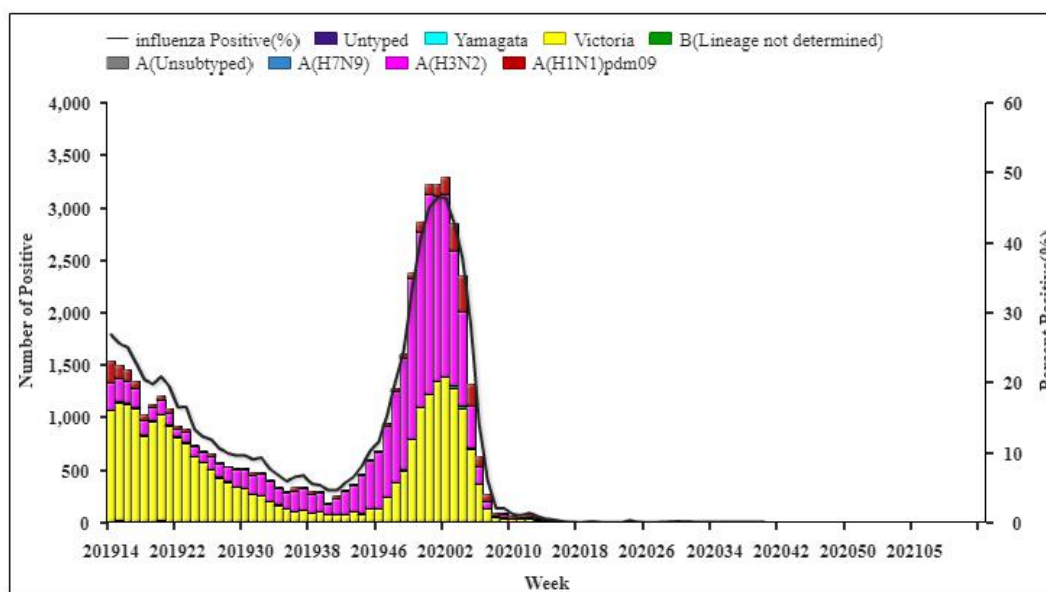


Figure 3. Influenza Positive Tests Reported by Southern Network Laboratories (Week 14, 2019–Week 13, 2021)

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.

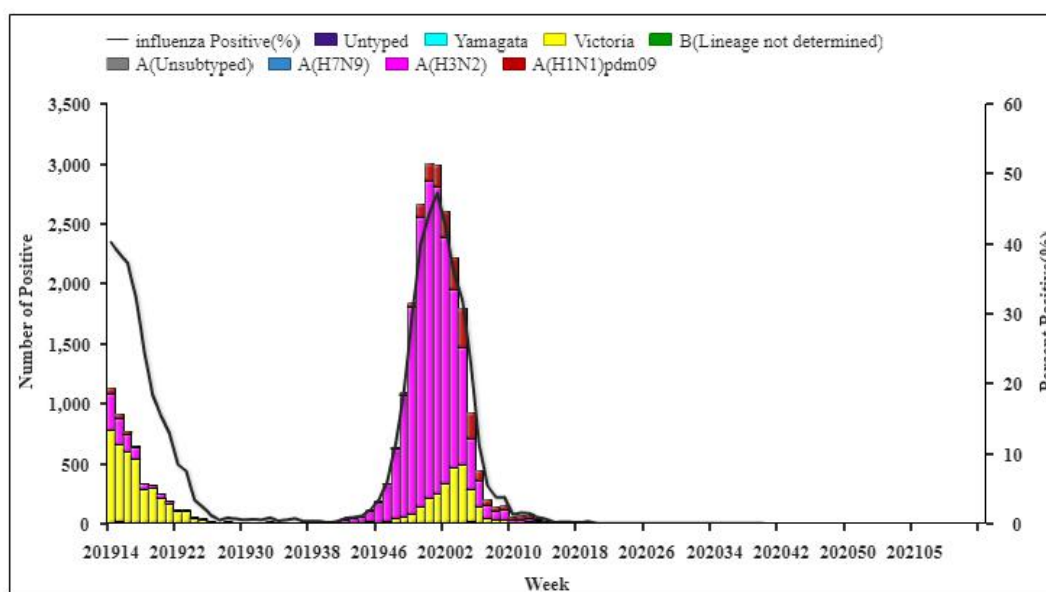


Figure 4. Influenza Positive Tests Reported by Northern Network Laboratories (Week 14, 2019–Week 13, 2021)

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 March 30th, 2020, 98(95.1%) influenza A(H1N1)pdm09 viruses were

characterized as A/Guangdong-Maonan/SWL1536/2019-like; 45(80.4%) influenza A(H3N2) viruses were characterized as A/Hong Kong/2671/2019 (EGG)-like, 53(94.6%) influenza A(H3N2) viruses were characterized as A/Hong Kong/45/2019 (CELL)-like; 59(88.1%) influenza B/Victoria viruses were characterized as B/Washington/02/2019-like.

Antiviral Resistance

Since March 30th, 2020, 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(H1N1)pdm09, A(H3N2) and B viruses were sensitive to neuraminidase inhibitors.

Outbreak Surveillance

During week 40(Sep 28th –Oct 4th 2020), there was one ILI outbreak reported nationwide, which was negative for Flu.

H7N9 Case Report

During week 40, no new human infection with novel reassortant influenza A(H7N9) virus was reported.