



Chinese Weekly Influenza Surveillance Report

December 11 to December 17, 2023 (Week 50)

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

Summary

- Influenza detections were increasing slightly in the southern provinces, and decreasing in the northern provinces in this week, predominated by A(H3N2), and followed by B/Victoria. There were 213 ILI outbreaks reported in week 50.
- Among influenza viruses antigenically characterized by CNIC since April 3, 2023, 1829(97.3%) influenza A(H1N1)pdm09 viruses were characterized as A/Victoria/4897/2022-like; 770(47.3%) influenza A(H3N2) viruses were characterized as A/Darwin/9/2021(egg)-like, 760(46.7%) influenza A(H3N2) viruses were characterized as A/Darwin/6/2021(cell)-like; 260(96.7%) influenza B/Victoria viruses were characterized as B/Austria/1359417/2021-like.
- Among the influenza viruses tested by CNIC for antiviral resistance analysis since April 3, 2023, all but 4 influenza A(H1N1)pdm09 were sensitive to neuraminidase inhibitors, all A(H3N2) and B viruses were sensitive to neuraminidase inhibitors; all A(H1N1)pdm09, A(H3N2) and B viruses were sensitive to endonuclease inhibitors.

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

During week 50, the percentage of outpatient or emergency visits for ILI (ILI%) at national sentinel hospitals in southern provinces was 8.6%, lower than the last week (9.1%), lower than the same week of 2020 ~ 2021(3.5% and 3.9%), lower than the same week of 2022(9.2%) . (Figure 1)

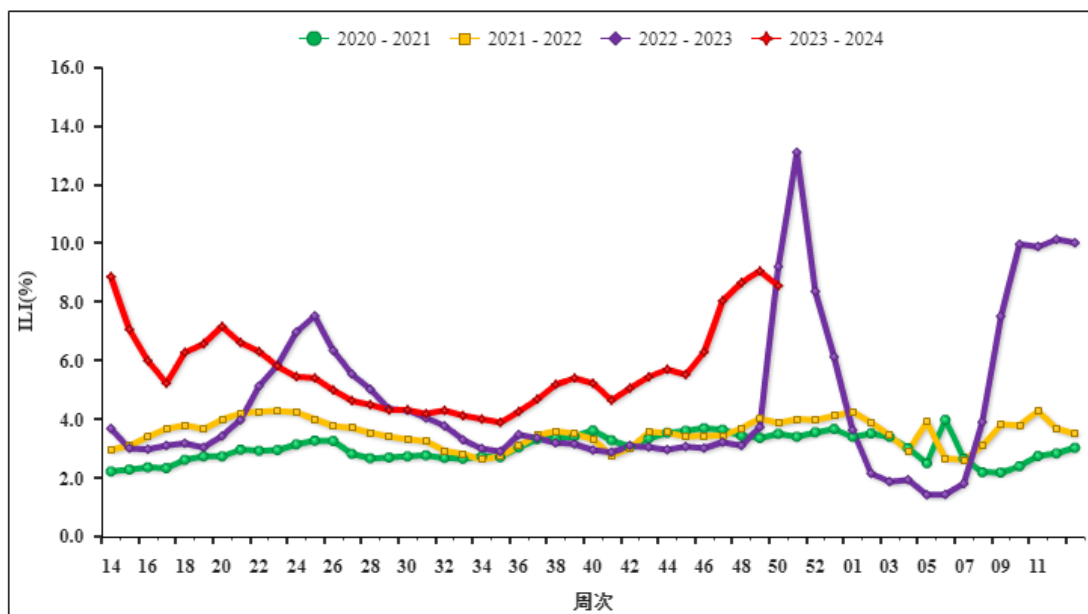


Figure 1. Percentage of Visits for ILI at Sentinel Hospitals in Southern Provinces

Note: Analysis in this part was based on data from sentinel hospitals belong to national influenza surveillance network.

During week 50, ILI% at national sentinel hospitals in northern provinces was 7.5%, lower than the last week (7.7%), and higher than the same week of 2020~2022(2.7%, 3.5% and 6.2%). (Figure 2)

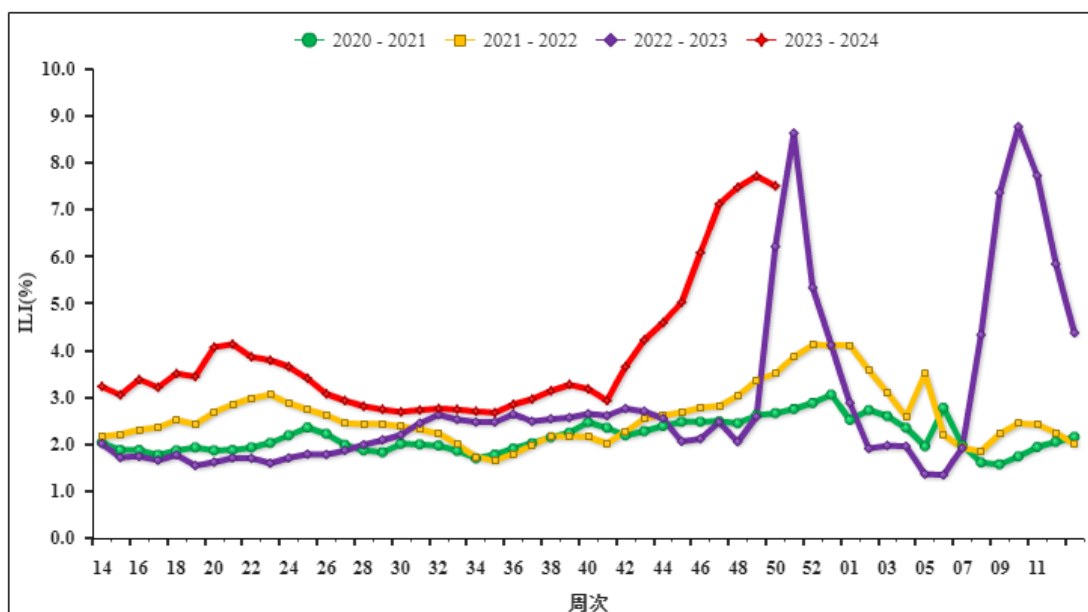


Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in Northern Provinces

Note: Analysis in this part was based on data from sentinel hospitals belong to national influenza surveillance network.



Virologic Surveillance

During week 50, influenza network laboratories tested 12186 specimens, there were 5795 positive detections for influenza. The number and proportion of influenza types and subtypes detected in southern and northern provinces were shown in Table 1.

Table 1 Laboratory Detections of ILI Specimens (Week 50, 2023)

	Week 50		
	Southern provinces	Northern provinces	Total
No. of specimens tested	5886	6300	12186
No. of positive specimens (%)	3251(55.2%)	2544(40.4%)	5795(47.6%)
Influenza A	2680(82.4%)	1947(76.5%)	4627(79.8%)
A(H3N2)	2673(99.7%)	1895(97.3%)	4568(98.7%)
A(H1N1)pdm09	7(0.3%)	52(2.7%)	59(1.3%)
A (subtype not determined)	0	0	0
Influenza B	571(17.6%)	597(23.5%)	1168(20.2%)
B (lineage not determined)	1(0.2%)	0	1(0.1%)
Victoria	570(99.8%)	597(100%)	1167(99.9%)
Yamagata	0	0	0

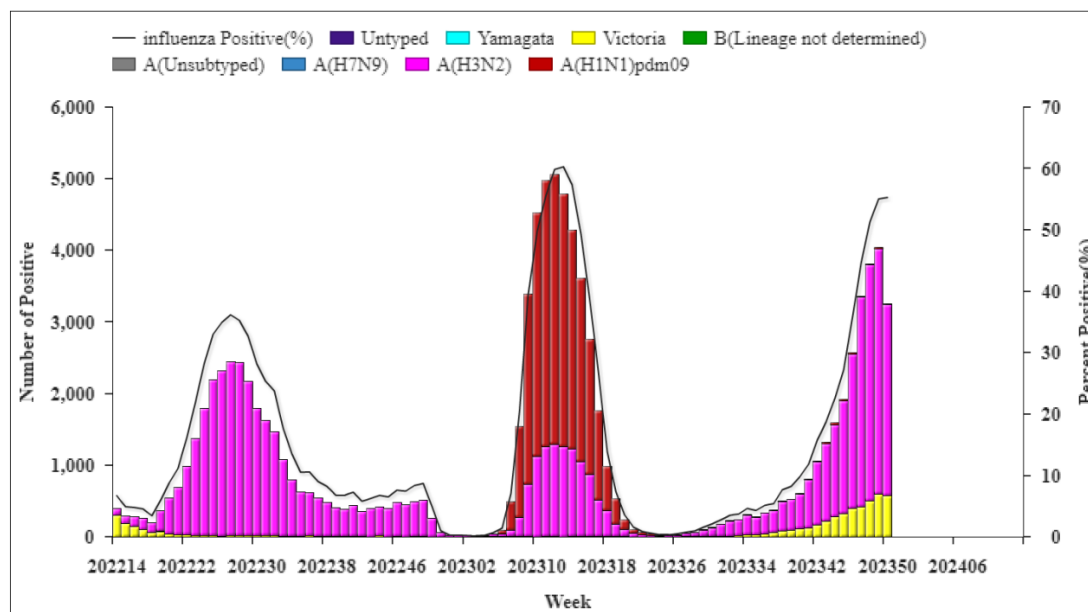


Figure 3. Influenza Positive Tests Reported by Southern Network Laboratories (Week 14, 2022–Week 13, 2024)

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.

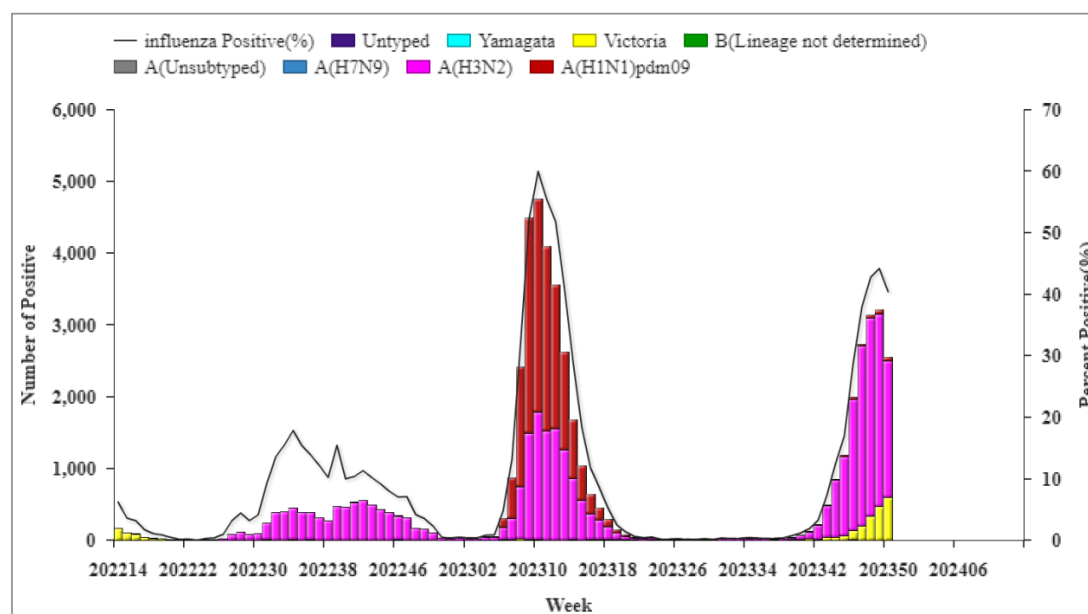


Figure 4. Influenza Positive Tests Reported by Northern Network Laboratories (Week 14, 2022–Week 13, 2024)

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 April 3, 2023, 1829(97.3%) influenza A(H1N1)pdm09 viruses were characterized as A/Victoria/4897/2022-like; 770(47.3%) influenza A(H3N2) viruses were characterized as A/Darwin/9/2021(egg)-like, 760(46.7%) influenza A(H3N2) viruses were characterized as A/Darwin/6/2021(cell)-like; 260(96.7%) influenza B/Victoria viruses were characterized as B/Austria/1359417/2021-like.

Antiviral Resistance

Since April 3, 2023, among the influenza viruses tested by CNIC for antiviral resistance, all but 4 influenza A(H1N1)pdm09 were sensitive to neuraminidase inhibitors, all A(H3N2) and B viruses were sensitive to neuraminidase inhibitors; all A(H1N1)pdm09, A(H3N2) and B viruses were sensitive to endonuclease inhibitors.

Outbreak Surveillance

During week 50, there were 213 ILI outbreaks reported nationwide. Among them, 131 were A(H3N2), 5 were A(subtype not determined), 2 were A(H1N1)pdm09, 7 were B/Victoria, 2 were B (lineage not determined), 47 were mixed, 8 were negative for flu, 11 had not obtained the testing results.