WHO Collaborating Center for Reference and Research on Influenza
Chinese National Influenza Center
National Institute for Viral Disease Control and Prevention, China CDC
Email: whocc-china@cnic.org.cnWebsite:www.cnic.org.cn/eng

Chinese Influenza Weekly Report

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

Summary

- During week 44, 2014, the influenza activity were at low level in both south and north China. Influenza A(H3N2) viruses were predominantly reported in the north China, and influenza B was increasing in the south China.
- Among influenza viruses antigenically characterized by CNIC since April, 2014, 124 (100%) influenza A(H1N1)pdm09 viruses were characterized as A/California/7/2009-like; 969 (99.5%) influenza A(H3N2) viruses were characterized as A/Victoria/361/2011(H3N2)-like; 358 (89.7%) influenza B/Yamagata viruses were characterized as B/Massachusetts/2/2012-like. 15 (44.1%) influenza B/Victoria viruses were characterized as B/Brisbane/60/2008-like.
- Among the influenza viruses tested by CNIC for antiviral resistance analysis since April, 2014, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruses were resistant to adamantine; all but 1 influenza B viruses were sensitive to neuraminidase inhibitors, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruses were sensitive to neuraminidase inhibitors.

Outbreak Surveillance

During week 44 (Oct 27–Nov 2, 2014), two ILI outbreaks were reported nationwide. Both of them were A(H3) outbreaks.

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

During week 44, the percentage of outpatient or emergency visits for ILI (ILI%) at national sentinel hospitals in south China was 2.4%, same as the last week and the same week of 2011 (2.4%)，lower than the same week of 2010 and 2013 (both 2.5%), higher than the same week of 2012 (2.3%) (Figure 1).

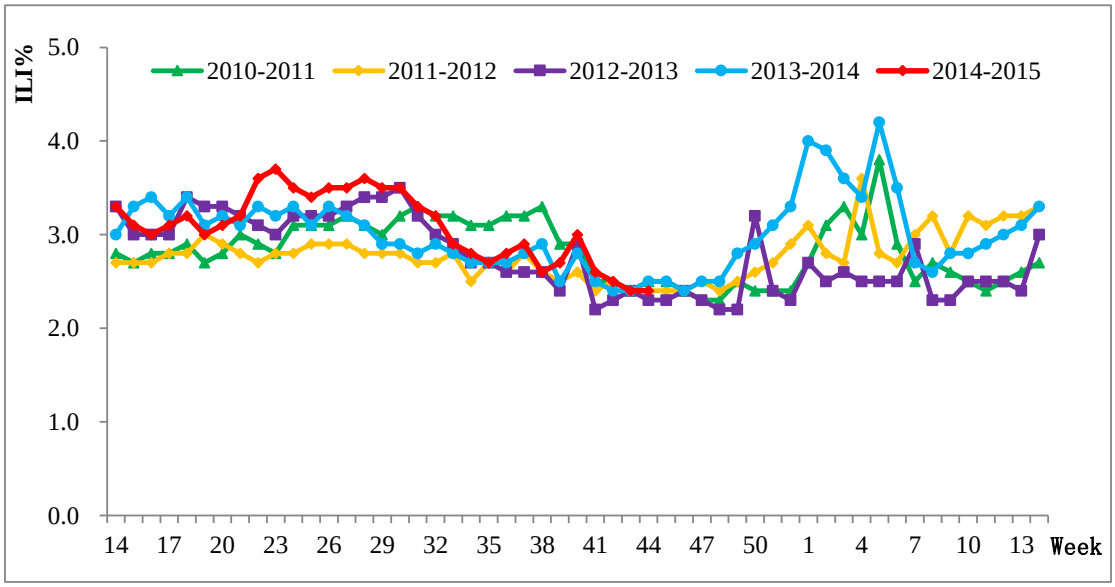

Figure 1. Percentage of Visits for ILI at Sentinel Hospitalsin South China (2010-2015)

During week 44, ILI% at national sentinel hospitals in north China was 2.8%, higher than the last week (2.6%), same as the same week of 2010 (2.8%), higher than the same week of 2011 and 2013 (2.4% and 2.6%), lower than the same week of 2012 (both 2.9%) (Figure 2).

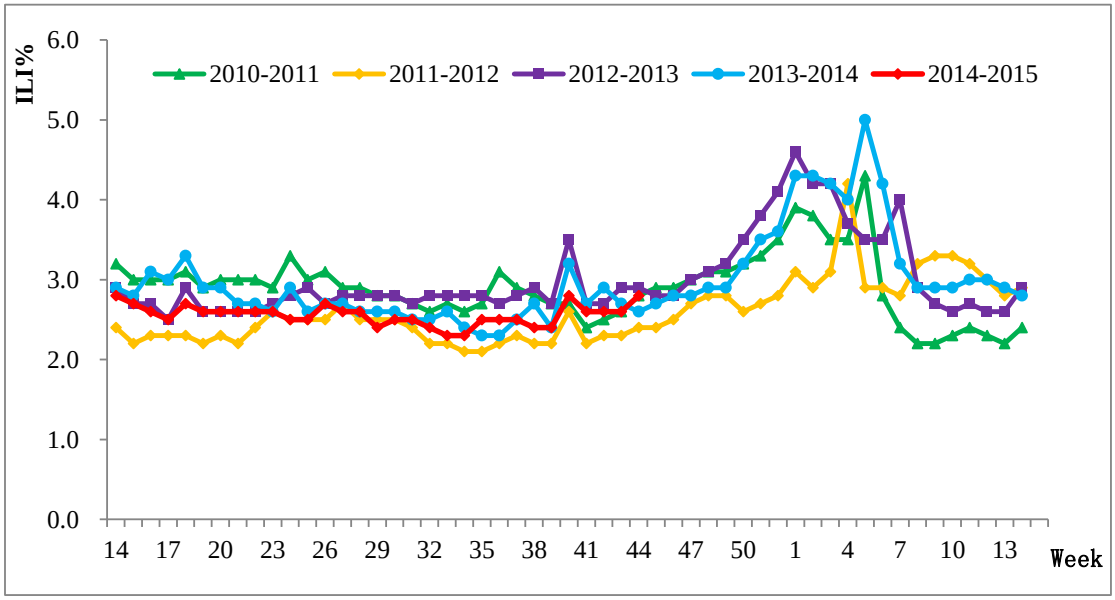

Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in North China (2010-2015)

Virologic Surveillance

During week 44, influenza network laboratories tested 4755 specimens, of which 137 (2.9%) were positive for influenza, influenza A and influenza B virus were 111 (81.0%) and 26 (19.0%)，respectively (Table 1). During week 44, the percentage of specimens that were tested positive for influenza in south China was 1.9%, which was less than the previous week (3.4%) (Figure 3). During week 44, the percentage of specimens that were tested positive for influenza in north China was 4.3%, which was higher than the previous week (3.8%) (Figure 4).

Table 1 Laboratory Detections of ILI Specimens (Week 44, 2014)

	Week 44		
	South China	**North China**	**Total**
No. of specimens tested	**2787**	**1968**	**4755**
No. of positive specimens (%)	**53(1.9%)**	**84(4.3%)**	**137(2.9%)**
Influenza A	**28(52.8%)**	**83(98.8%)**	**111(81.0%)**
A(H3N2)	24(85.7%)	82(98.8%)	106(95.5%)
A(H1N1)pdm09	4(14.3%)	0(0)	4(3.6%)
A (subtype not determined)	0(0)	1(1.2%)	1(0.9%)

Influenza B	**25(47.2%)**	**1(1.2%)**	**26(19.0%)**
B (lineage not determined)	13(52.0%)	1(100%)	14(53.8%)
Yamagata	12(48.0%)	0(0)	12(46.2%)

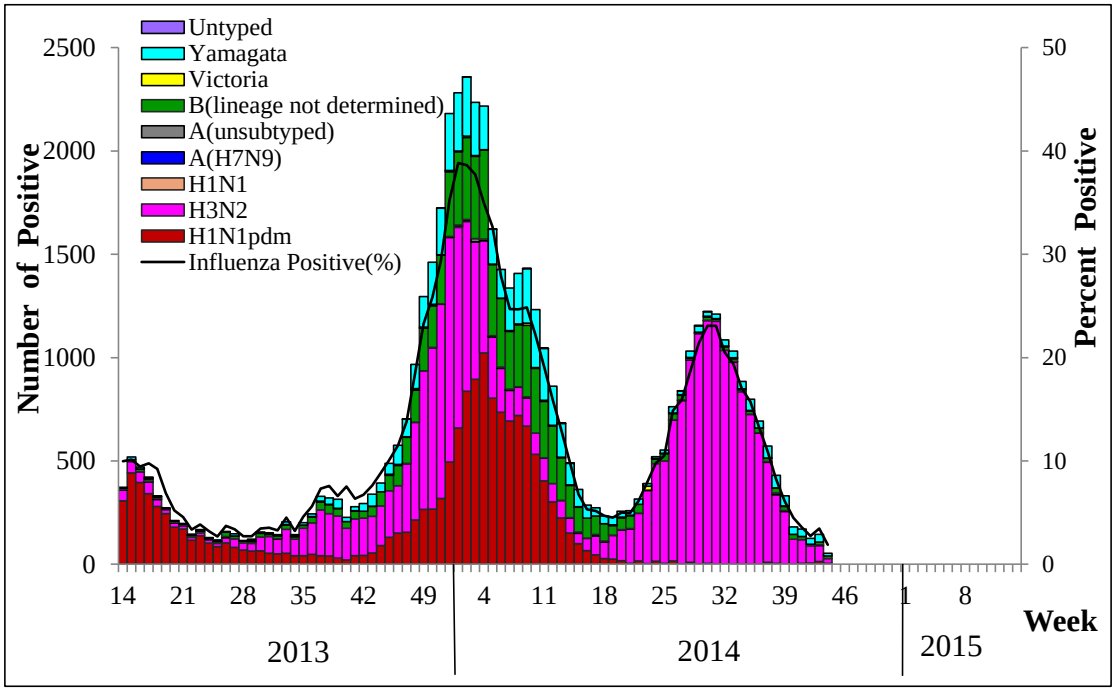

Figure 3. Influenza Positive Tests Reported by Southern Network Laboratories (Week 14, 2013–Week 44, 2014)

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.

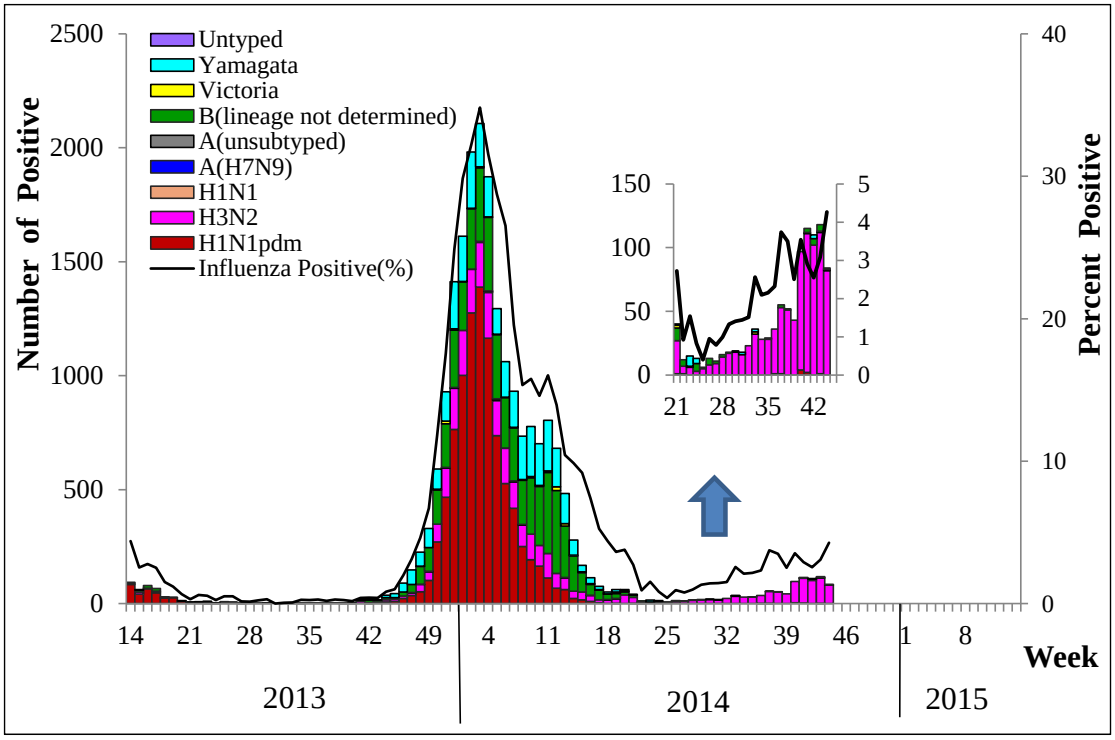

Figure 4. Influenza Positive Tests Reported by Northern Network Laboratories (Week 14, 2013–Week 44, 2014)

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 1st, 2014, 124 (100%) of the 124 A(H1N1)pdm09 viruses tested were characterized as A/California/7/2009-like; 969 (99.5%) of the 975 H3N2 influenza viruses tested were characterized as A/Victoria/361/2011-like; 358 (89.7%) of the 399 influenza B/Yamagata lineage viruses tested were characterized as B/Massachusetts/2/2012-like; 15 (44.1%) of the 34 influenza B/Victoria lineage viruses tested have been characterized as B/Brisbane/60/2008-like.

Antiviral Resistance

Since April 1st, 2014, among the influenza viruses tested by CNIC for antiviral resistance, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruses were resistant to adamantine ; all but 1 influenza B viruses were sensitive toneuraminidase inhibitors, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruseswere sensitive to neuraminidase inhibitors.