

## Chinese Influenza Weekly Report

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

### Summary

- During week 34, influenza activity level in south China was still in summer influenza season, A(H3N2) viruses were mainly detected. Influenza activity level in north China has been gradually rising, but a few influenza virus were detected.
- Among influenza viruses antigenically characterized by CNIC since March, 2015, 17(100%) influenza A(H1N1)pdm09 viruses were characterized as A/California/7/2009-like; 54(24.8%) influenza A(H3N2) viruses were characterized as A/Switzerland/9715293/2013 (H3N2)(EGG)-like; 560(89.5%) influenza B/Yamagata viruses were characterized as B/Massachusetts/2/2012-like. 30(63.8%) influenza B/Victoria viruses were characterized as B/Brisbane/60/2008-like.
- Among the influenza viruses tested by CNIC for antiviral resistance analysis since March, 2015, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruses were resistant to adamantane; all but 4 influenza A(H3N2) viruses were sensitive to neuraminidase inhibitors, all but 2 influenza B viruses were sensitive to neuraminidase inhibitors, all influenza A(H1N1)pdm09 viruses were sensitive to neuraminidase inhibitors.

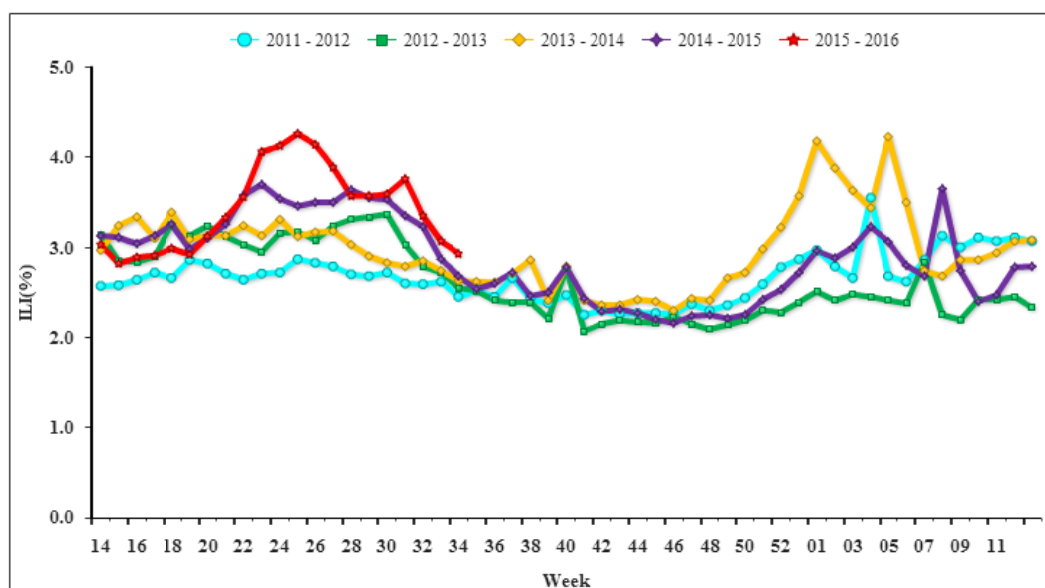
### Outbreak Surveillance

During week 34 (August 17–23, 2015), there was no ILI outbreak reported nationwide.

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

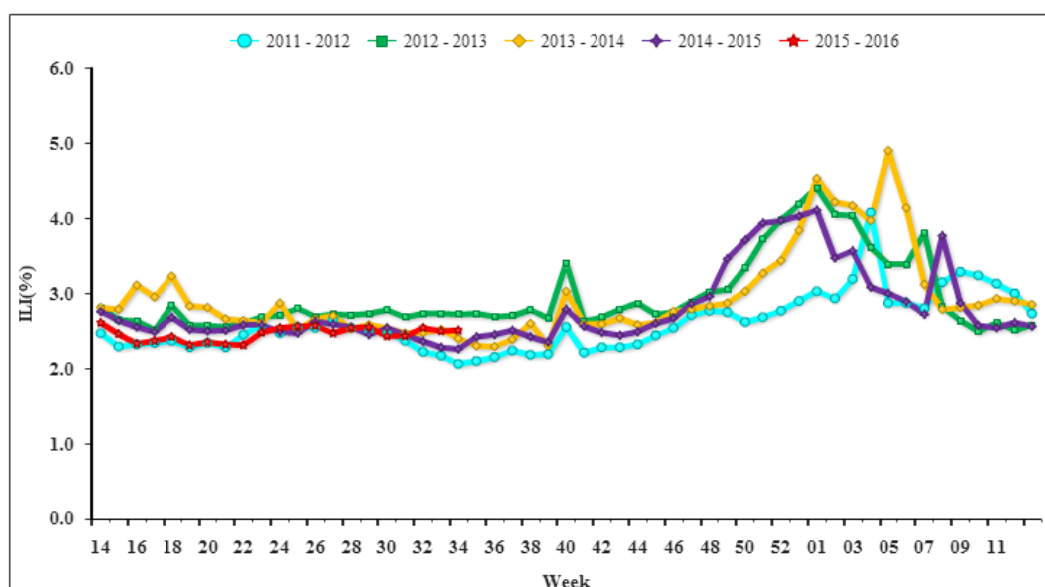
During week 34, the percentage of outpatient or emergency visits for ILI (ILI %) at national sentinel hospitals in south China was 2.9%, lower than last week (3.1%), higher than the same week of 2011–2014 (2.5%, 2.6%, 2.6% and 2.7%). (Figure

1)



**Figure 1. Percentage of Visits for ILI at Sentinel Hospitals in South China (2011-2016)**

During week 33, ILI% at national sentinel hospitals in north China was 2.5%, the same as last week (2.5%), higher than the same week of 2011, 2013 and 2014 (2.1%, 2.4% and 2.3%), lower than the same week of 2012 (2.7%). (Figure 2)



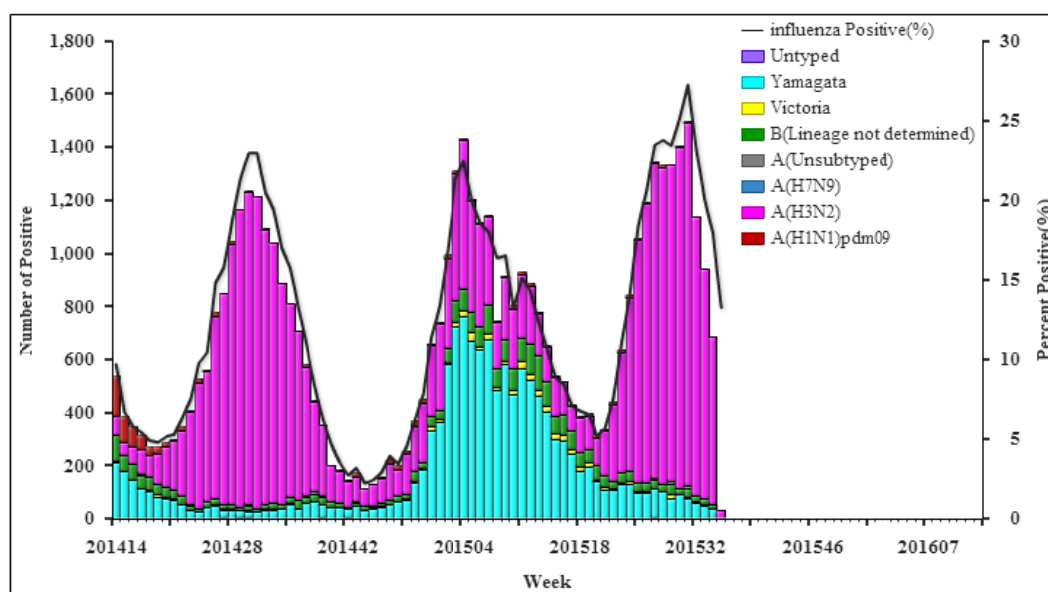
**Figure 2. Percentage of Visits for ILI at Sentinel Hospitals in North China (2011-2016)**

## Virologic Surveillance

During week 34, influenza network laboratories tested 4784 specimens, of which 749 (15.7%) were positive for influenza, influenza A and influenza B virus were 700 (93.5%) and 49 (6.5%), respectively (Table 1). During week 34, the percentage of specimens that were tested positive for influenza in south China was 17.9%, which was lower than the previous week (20.1%) (Figure 3). During week 34, the percentage of specimens that were tested positive for influenza in north China was 6.8%, which was higher than the previous week (4.5%) (Figure 4).

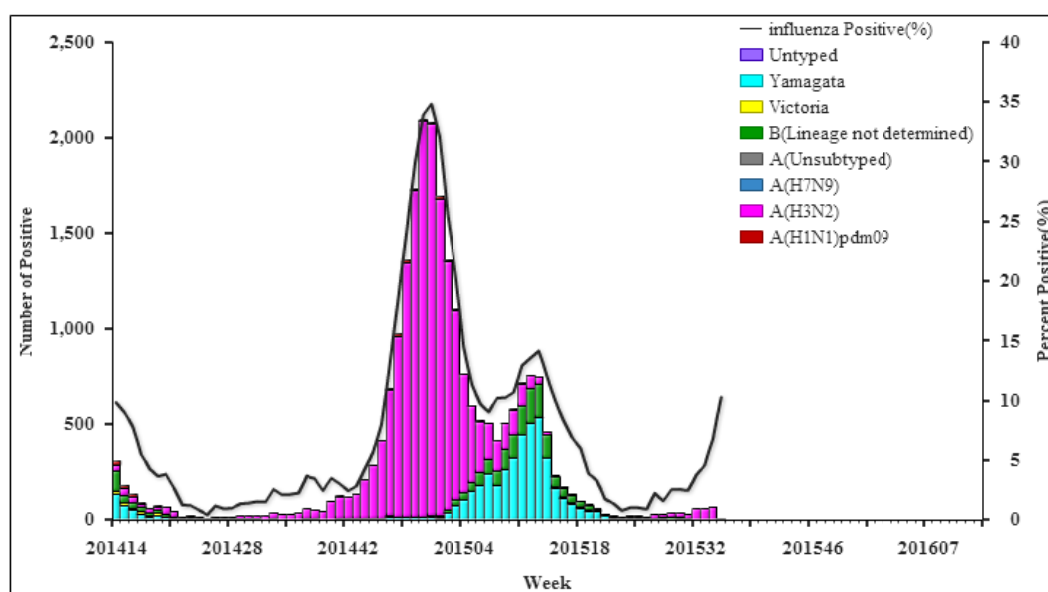
**Table 1 Laboratory Detections of ILI Specimens (Week 34, 2015)**

|                                      | Week 34           |                 |                   |
|--------------------------------------|-------------------|-----------------|-------------------|
|                                      | South China       | North China     | Total             |
| <b>No. of specimens tested</b>       | <b>3807</b>       | <b>977</b>      | <b>4784</b>       |
| <b>No. of positive specimens (%)</b> | <b>683(17.9%)</b> | <b>66(6.8%)</b> | <b>749(15.7%)</b> |
| <b>Influenza A</b>                   | <b>634(92.8%)</b> | <b>66(100%)</b> | <b>700(93.5%)</b> |
| A(H3N2)                              | 619(100%)         | 47(100%)        | 666(100%)         |
| A(H1N1)pdm09                         | 0(0)              | 0(0)            | 0(0)              |
| A (subtype not determined)           | 0(0)              | 0(0)            | 0(0)              |
| <b>Influenza B</b>                   | <b>49(7.2%)</b>   | <b>0(0)</b>     | <b>49(6.5%)</b>   |
| B (lineage not determined)           | 12(24.5%)         | 0(0)            | 12(24.5%)         |
| Victoria                             | 0(0)              | 0(0)            | 0(0)              |
| Yamagata                             | 37(75.5%)         | 0(0)            | 37(75.5%)         |



**Figure 3. Influenza Positive Tests Reported by Southern Network Laboratories (Week 14, 2014–Week 34, 2015)**

**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, 2014–Week 34, 2015)**

**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 2<sup>nd</sup>, 2015, all of the 17 A(H1N1)pdm09 viruses tested were characterized as A/California/7/2009-like; 54(24.8%) of the 218 A(H3N2) influenza viruses tested were characterized as A/Switzerland/9715293/2013 (H3N2)(EGG)-like; 560(89.5%) of the 626 influenza B/Yamagata lineage viruses tested were characterized as B/Massachusetts/2/2012-like; 30(63.8%) of the 47 influenza B/Victoria lineage viruses tested have been characterized as B/Brisbane/60/2008-like.

### **Antiviral Resistance**

Since March 2<sup>nd</sup>, 2015, among the influenza viruses tested by CNIC for antiviral resistance, all influenza A(H1N1)pdm09 and all influenza A(H3N2) viruses were resistant to adamantane ; all but 4 influenza A(H3N2) viruses were sensitive to neuraminidase inhibitors, all but 2 influenza B viruses were sensitive to neuraminidase inhibitors, all influenza A(H1N1)pdm09 viruses were sensitive to neuraminidase inhibitors.