

Influenza Surveillance Report

www.infectiousdisease.dhh.louisiana.gov

Week 41: 10/7/12 - 10/13/12

The Influenza Surveillance Summary Report describes the results of the tracking done by the Louisiana Office of Public Health Infectious Disease Epidemiology Section (IDEpi). This report relies on data supplied by sentinel surveillance sites, including hospital emergency department (ED), laboratories and physicians' offices. Sentinel sites provide weekly data on Influenza Like Illness (ILI) and/or laboratory confirmed cases.

Taken together, ILI surveillance and laboratory surveillance provide a clear picture of the influenza activity occurring in Louisiana each week. If you have any questions about our surveillance system or would like more information, please contact Julie Hand at 504-568-8298 or julie.hand@la.gov.

ILI is defined as an illness characterized by cough and/or cold symptoms and a fever of 100° F or greater in the absence of a known cause. While not every case of ILI is a case of influenza, the CDC has found that trends in ILI from sentinel sites are a good proxy measure of the amount of influenza activity in an area. For this reason, all states and territories participating in the national surveillance program monitor weekly ILI ratios from their sentinel surveillance sites.



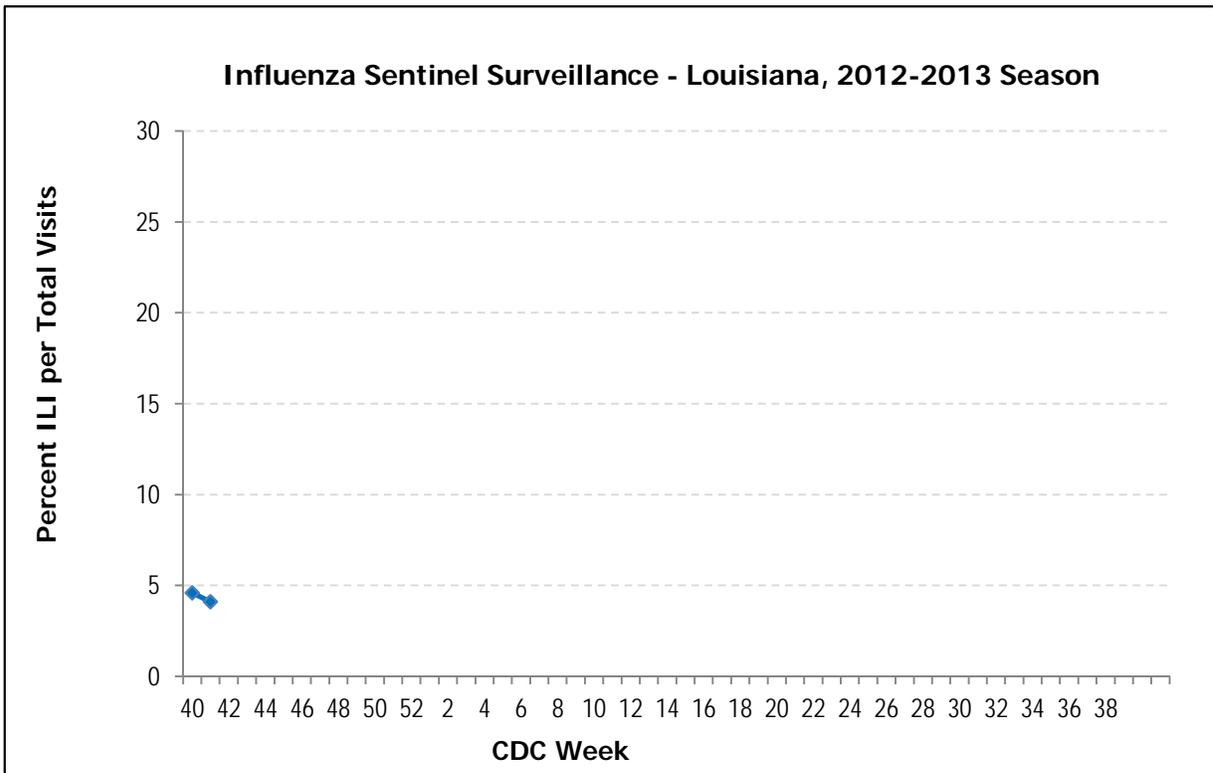
Laboratory testing: Not all sentinel sites have access to laboratory testing. However, many hospitals and physicians' offices do perform some influenza testing. Sites that test for influenza report the number of positive tests each week and the total number of tests performed each week. This information is included on page 3 of this report.

During week 41 (October 7 - October 13, 2012) influenza activity was low in Louisiana.

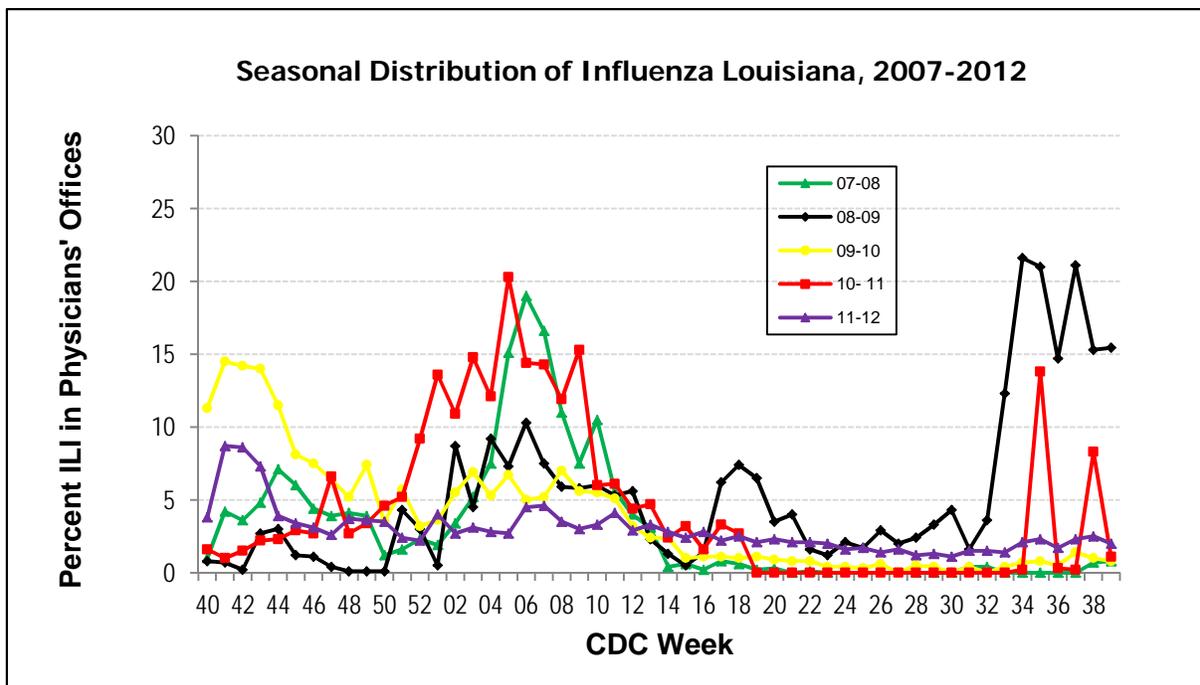
Page 2 : ILI Activity
Page 3: Louisiana Activity
Page 4: US Activity
Page 5: US Activity Maps

2012-2013 Season

This graph shows the percentage of visits for ILI over the total number of visits for sentinel surveillance sites. This is the best approach to estimate the magnitude of influenza transmission. ILI counts do include some viral infections other than influenza, but experience over the last 50 years has shown that this approach is a reliable method to estimate influenza transmission. It does not show which strain of influenza virus is responsible. The page on lab surveillance does show the proportion of specimens attributable to each virus strain.

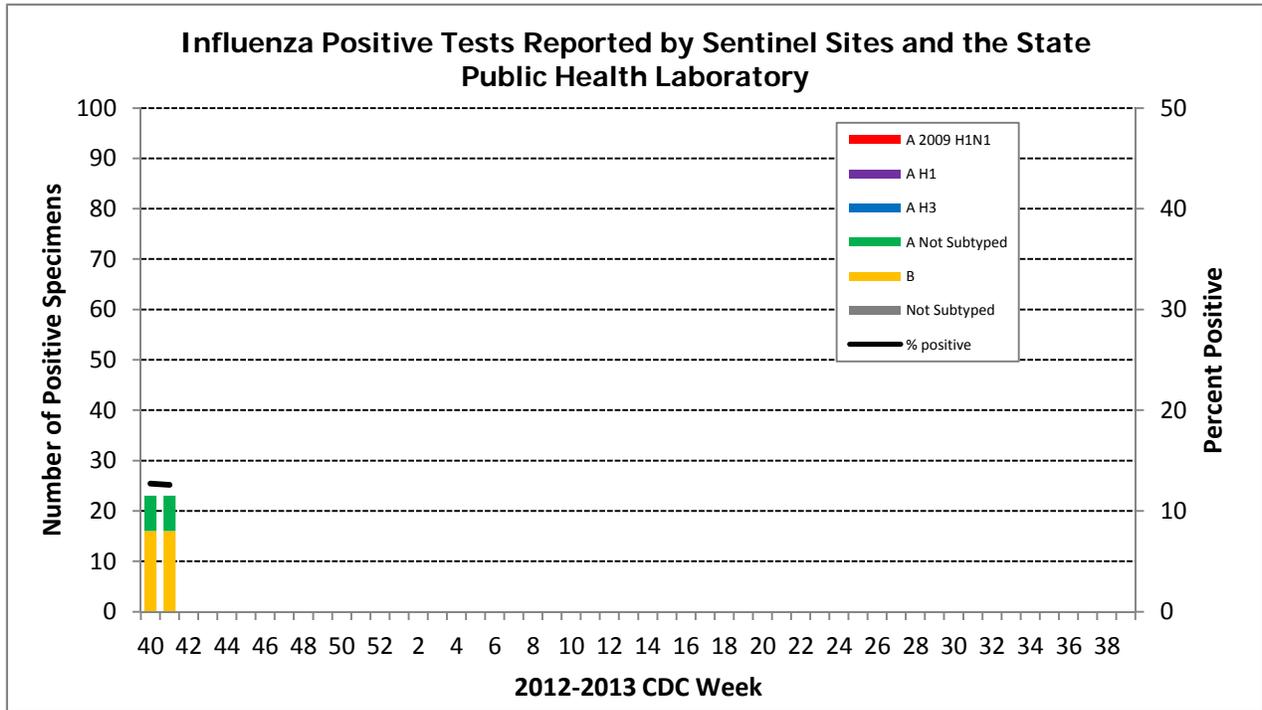


This graph shows the data on ILI surveillance among sentinel physicians' over the past 5 seasons to enable comparisons with previous years and better estimate the amplitude of this season's influenza transmission.



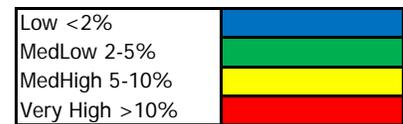
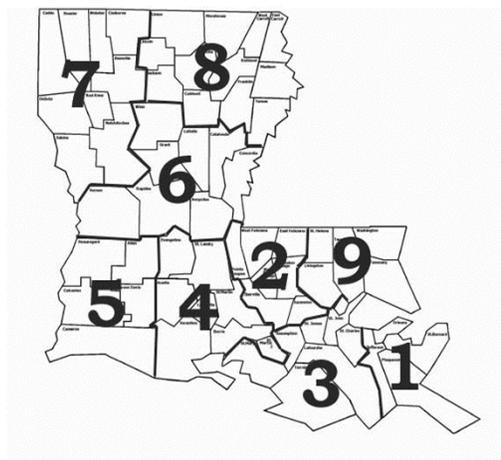
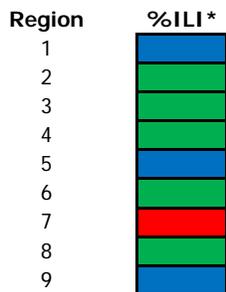
2012-2013 Season

Virologic Surveillance



Sentinel site testing is based on rapid test results. All subtyping is done by PCR at the State Lab.

Geographical Distribution of ILI



* %ILI over the last 4 weeks based on sentinel surveillance data

2012-2013 Season

During week 41, influenza activity remained low in the United States.

Proportion of deaths attributed to pneumonia and influenza (P&I) was at the epidemic threshold.

One influenza-associated pediatric death was reported and was associated with an influenza virus for which the subtype was not determined.

Proportion of outpatient visits for influenza-like illness (ILI) was 1.1%, which is below the national baseline of 2.2%.

	Week 41
Specimens tested	3,285
Positive specimens	129 (3.9%)
<i>Positive specimens by type/subtype</i>	
Influenza A	61 (47%)
A (2009 H1N1)	4 (6.6%)
A (subtyping not performed)	31 (50.8%)
A (H3)	26 (42.6%)
Influenza B	68 (53%)

Antiviral Resistance:

No antiviral resistance data is available for specimens collected after October 1, 2012. Of specimens collected between May and September 2012 and tested for susceptibility to the neuraminidase inhibitors (oseltamivir and zanamivir), only one virus, a 2009 H1N1 virus, was found to be resistant to oseltamivir. This virus was sensitive to zanamivir.

High levels of resistance to the adamantanes (amantadine and rimantadine) persist among 2009 H1N1 and A (H3N2) viruses (the adamantanes do not have activity against influenza B viruses).

Antigenic Characterization:

No antigenic characterization data is available for specimens collected after October 1, 2012. However, the vast majority of influenza A virus isolates from specimens collected between May and September 2012 were closely related antigenically to the influenza A components of the 2012-2013 influenza vaccine (92% of 2009 influenza A (H1N1) virus isolates and 100% of the influenza A (H3N2) virus isolates). Forty-two percent of influenza B virus isolates were related antigenically to the influenza B component of the 2012-2013 influenza vaccine.

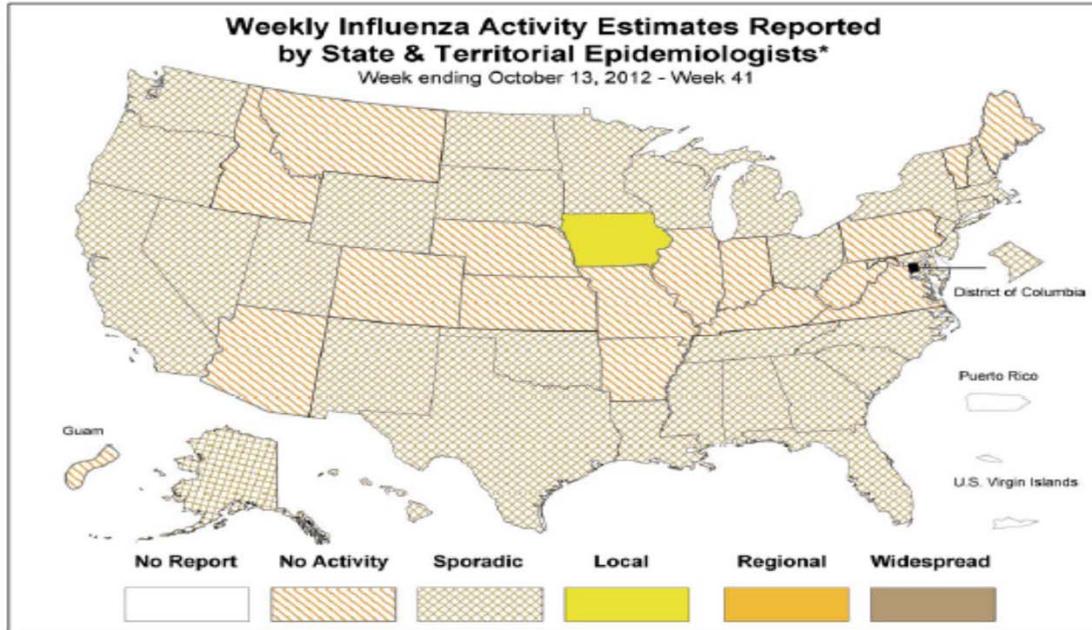
Novel Influenza A Virus:

No novel influenza A virus infections were reported to CDC during week 41. A total of 310 infections with variant influenza viruses (306 H3N2v viruses, 3 H1N2v viruses, and one H1N1v virus) have been reported from 10 states since July 2012. The vast majority of cases have occurred after prolonged swine exposure, though instances of likely human-to-human transmission have been identified. At this time no ongoing human-to-human transmission has been identified.

Additional information on influenza in swine, variant influenza infection in humans, and strategies to interact safely with swine can be found at <http://www.cdc.gov/flu/swineflu/h3n2v-outbreak.htm>.

2012-2013 Season

Graph 1: Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists: The influenza activity reported by state and territorial epidemiologists indicates geographic spread of influenza viruses, but does not measure the severity of influenza activity.



* This map indicates geographic spread & does not measure the severity of influenza activity

Graph 2: ILINet Activity Indicator Map: Data collected in ILINet are used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2012-13 Influenza Season Week 41 ending Oct 13, 2012

