Influenza Surveillance Report

www.infectiousdisease.dhh.louisiana.gov **Week 44: 10/25/14 - 11/1/14**

Influenza activity remains low in Louisiana this week. The most commonly reported non-influenza respiratory viruses this week are Rhino/Enterovirus. Enterovirus D68-like illness is also low in Louisiana. See page 6 for EV-D68 information.

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 departments (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.

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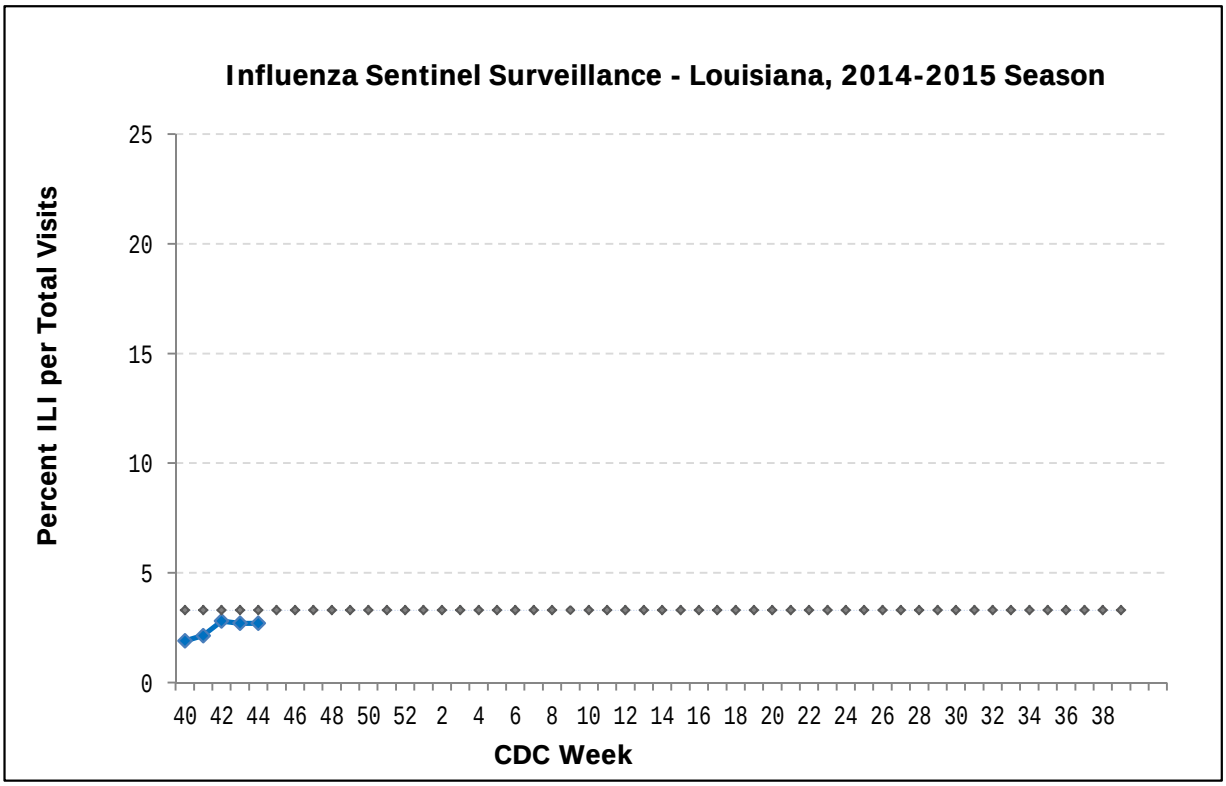
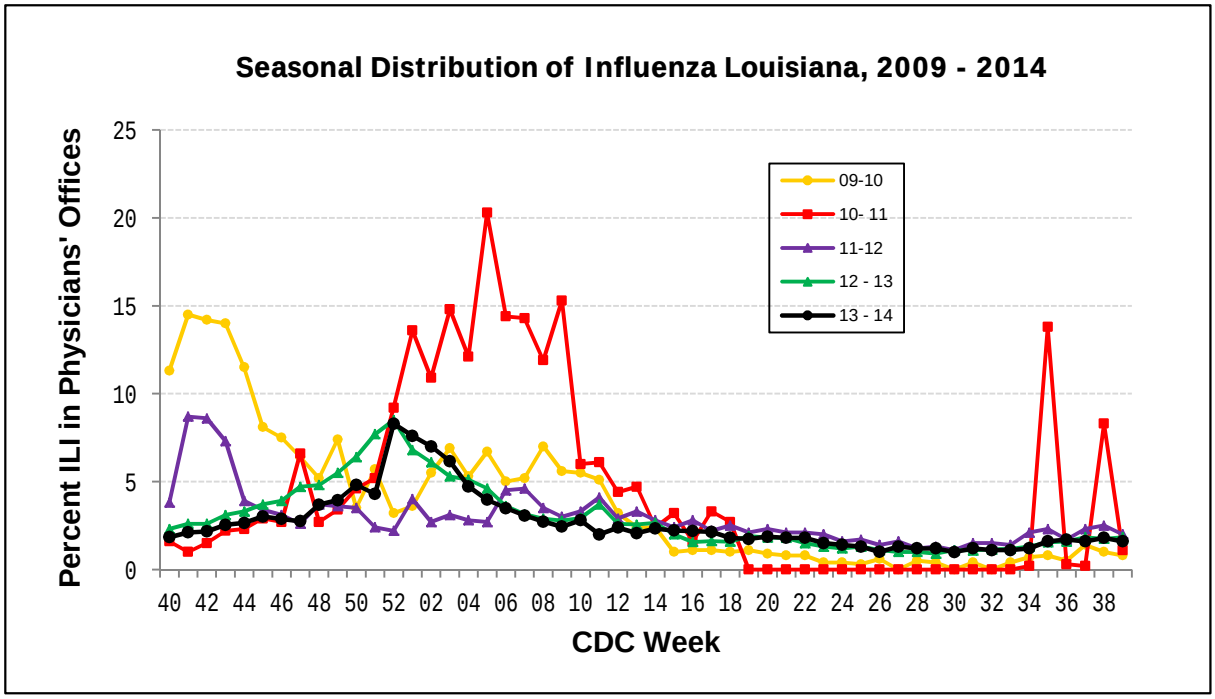
2014-2015 Season

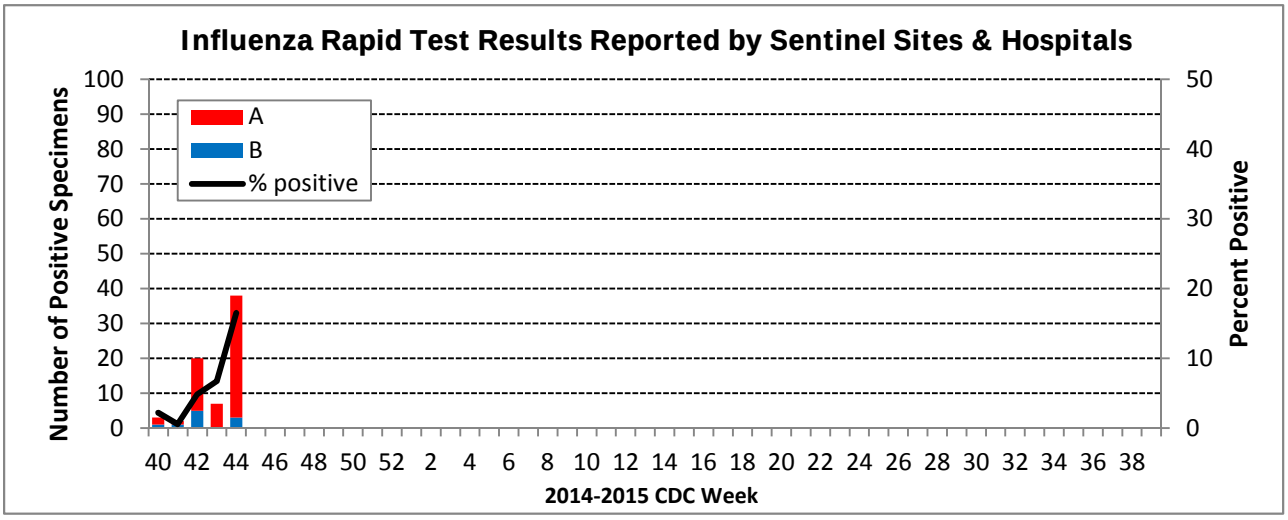
This graph shows the percentage of visits for ILI over the total number of visits for sentinel surveillance sites. This is the best approach to estimate the magnitude of influenza transmission. ILI counts do include some viral infections other than influenza, but experience over the last 50 years has 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.

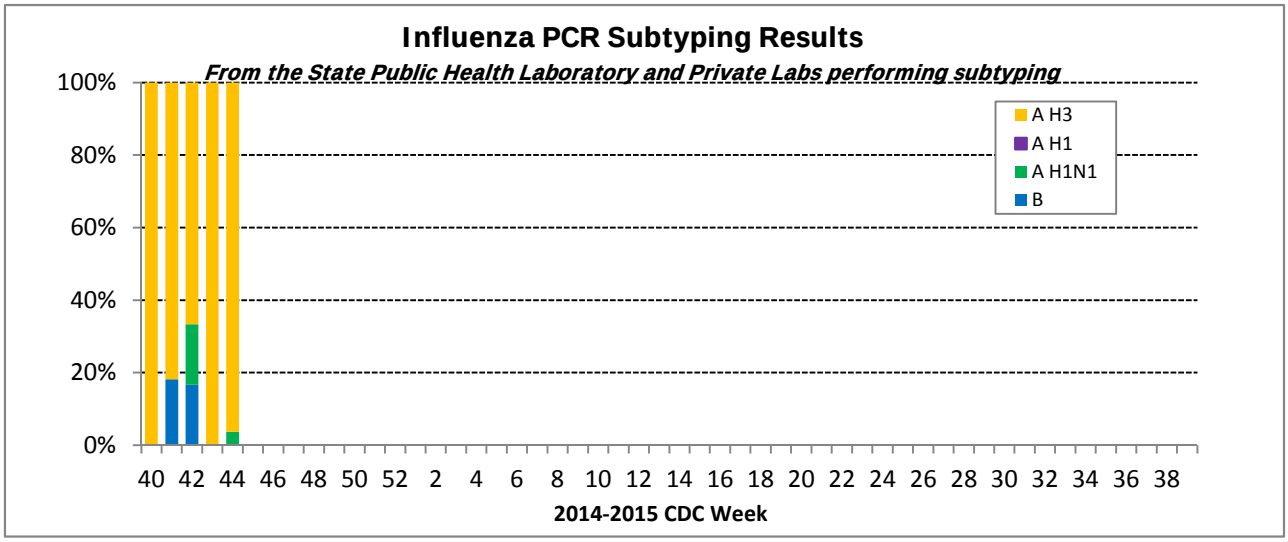


This graph shows the data on ILI surveillance among sentinel physicians' over the past 5 seasons to enable comparisons with previous years and better estimate the amplitude of this season's influenza transmission.

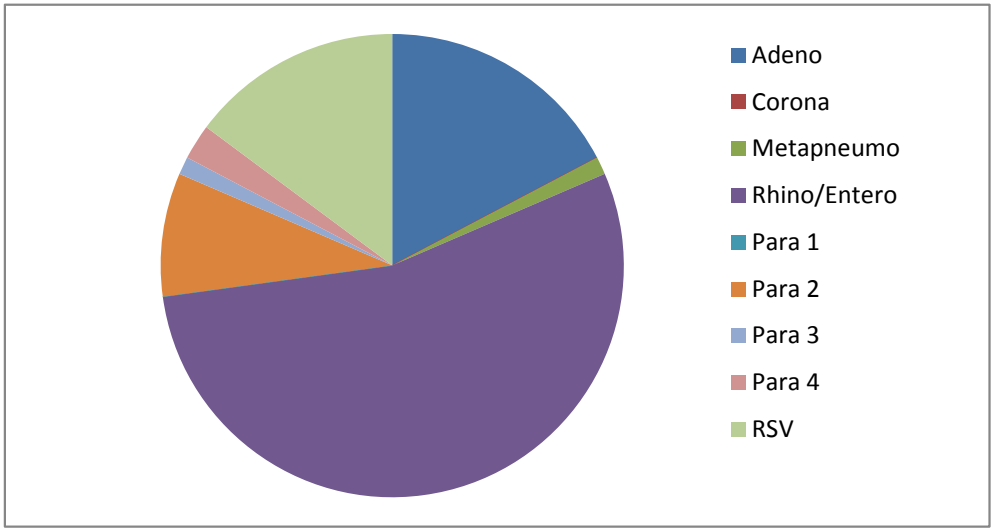


Virologic Surveillance



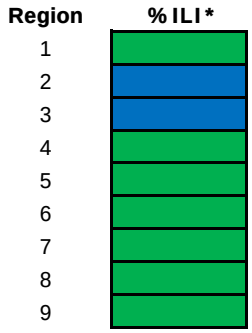


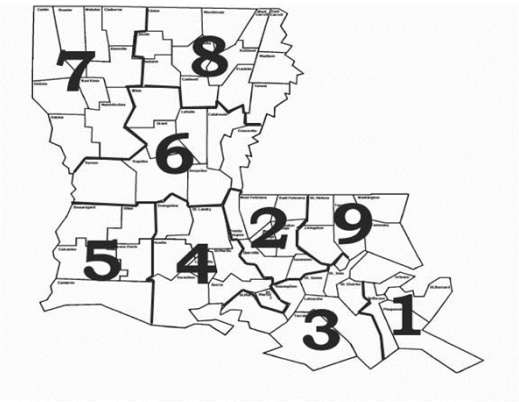
Other Respiratory Viruses*



*Based on results from the State Public Heatlh Laboratory Respiratory Virus Panel (RVP) Testing and other labs reporting RVP results during the current reporting week.

Geographical Distribution of ILI

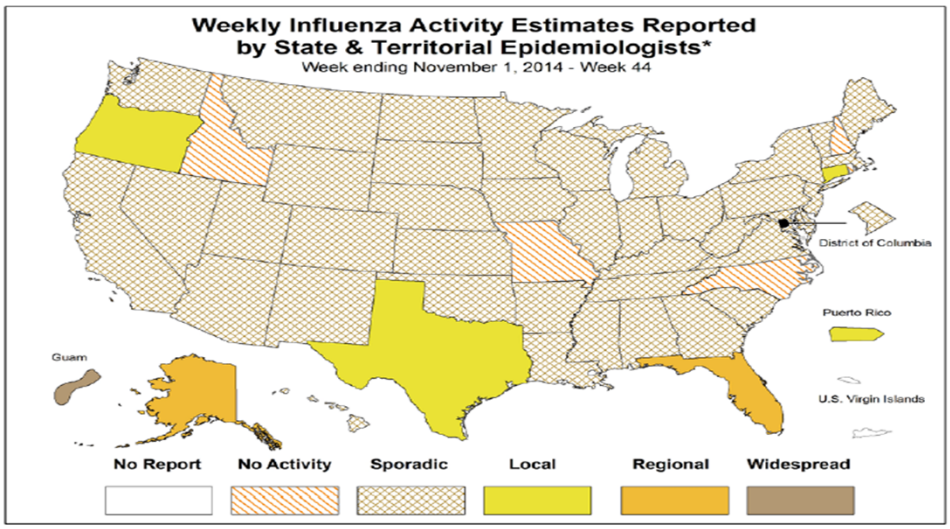




Low <2%	
MedLow 2-5%	
MedHigh 5-10%	
Very High >10%	

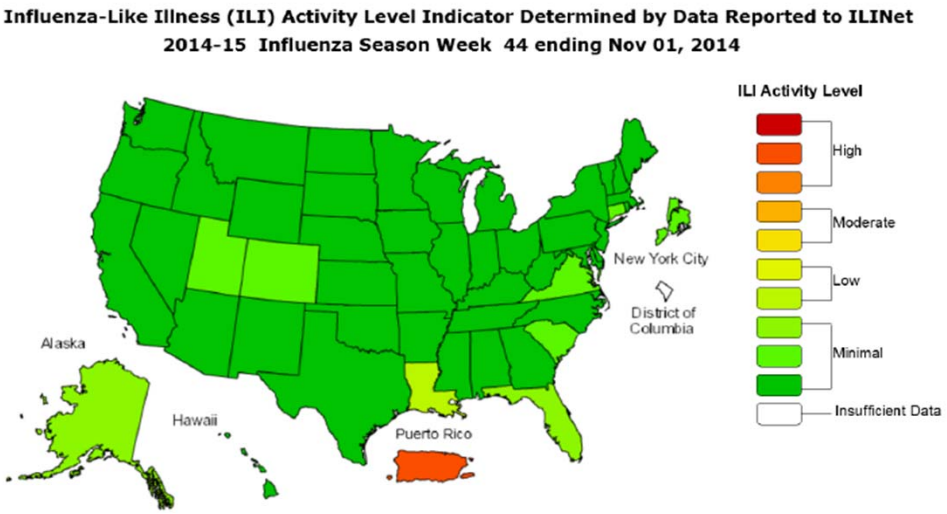
** %ILI over the last 4 weeks based on sentinel surveillance data*

Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists



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

ILINet Activity Indicator Map



National Surveillance

During week 43, influenza activity was low in the United States.

The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.

No influenza-associated pediatric deaths were reported.

Proportion of outpatient visits for influenza-like illness (ILI) was 1.5% which is below the national baseline of

	Week 44
Specimens tested	**8,439**
Positive specimens	**504 (6.0%)**
Positive specimens by type/subtype	
Influenza A	**394 (78.2%)**
A (2009 H1N1)	1 (0.2%)
A (H3)	120 (30.5%)
A (subtyping not performed)	273 (69.3%)
Influenza B	**110 (21.8%)**

Antiviral Resistance:

Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2014

	Viruses tested (n)	Resistant Viruses, Number (%)	Viruses tested (n)	Resistant Viruses, Number (%)
		Oseltamivir		Zanamivir
Influenza A (H3N2)	6	0 (0.0%)	6	0 (0.0%)
Influenza B	0	0 (0.0%)	0	0 (0.0%)
2009 Influenza A (H1N1)	0	0 (0.0%)	0	0 (0.0%)

The majority of currently circulating viruses are susceptible to the neuraminidase inhibitor antiviral medications oseltamivir and zanamivir; however, rare sporadic cases of oseltamivir-resistant 2009 influenza A (H1N1) and A (H3N2) viruses have been detected worldwide. Antiviral treatment with oseltamivir or zanamivir is recommended as early as possible for patients with confirmed or suspected influenza who have severe, complicated, or progressive illness; who require hospitalization; or who are at greater risk for serious influenza-related complications. Additional information on recommendations for treatement and chemoprophylaxis of influenza virus infection with antiviral agents is available at http://www.cdc.gov/flu/antivirals/index.htm

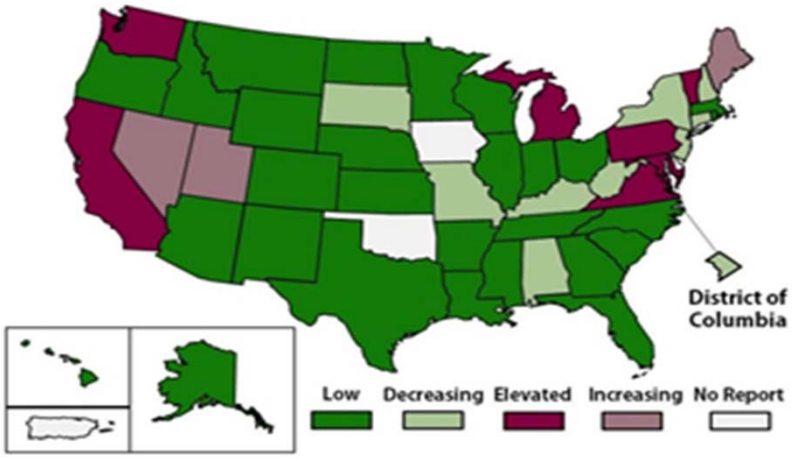
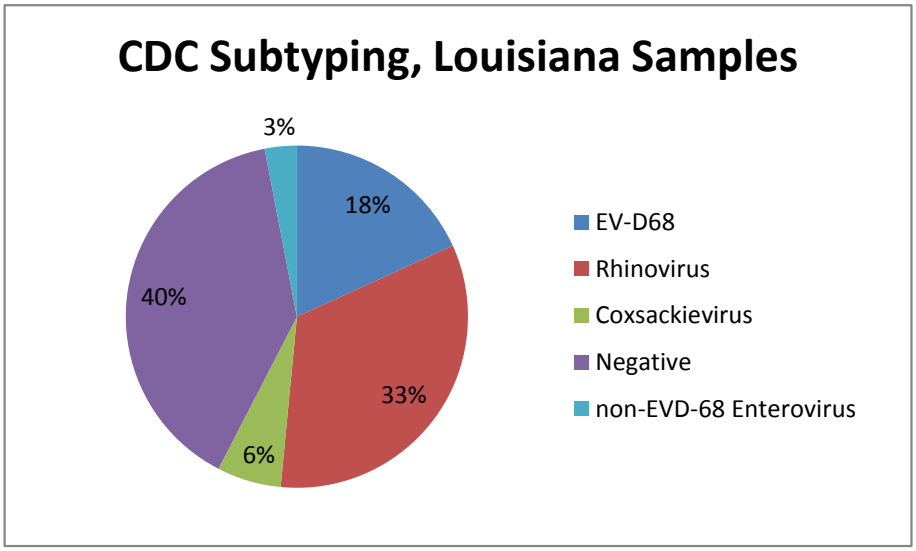
Antigenic Characterization:

Seven (70%) of the 10 influenza A (H3N2) viruses tested have been characterized as A/Texas/50/2012-like, the influenza A (H3N2) component of the 2014-2015 Northern Hemisphere influenza vaccine. Three (30%) viruses showed reduced titers with antiserum raised against A/Texas/50/2012.

Enterovirus D68

From mid - August to November 6, 2014, CDC or state public health laboratories have confirmed a total of 1,116 people in 47 states and the District of Columbia with respiratory illness caused by EV-D68 including Louisiana.

CDC developed and started using on October 14, a new, faster lab test for detecting EV-D68, allowing CDC to rapidly process in about 7-10 days the more than 1,000 remaining specimens received since mid-September. These increases will not reflect actual changes or mean the situation is getting worse.

Below is a map of Activity of Enterovirus D68-like illness in States. This is the first week the map has been posted so a comparison to previous activity cannot be made. State assessments are based on data currently available, which may include: laboratory test results, emergency department syndromic surveillance data, and/or reports from doctors and healthcare facilities.

Activity of Enterovirus D68-like Illness in States