Influenza Surveillance Report

www.infectiousdisease.dhh.louisiana.gov **Week 1 From 1/2/2011 - 1/8/2011**

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 504-219-4563 or julie.hand@la.gov.

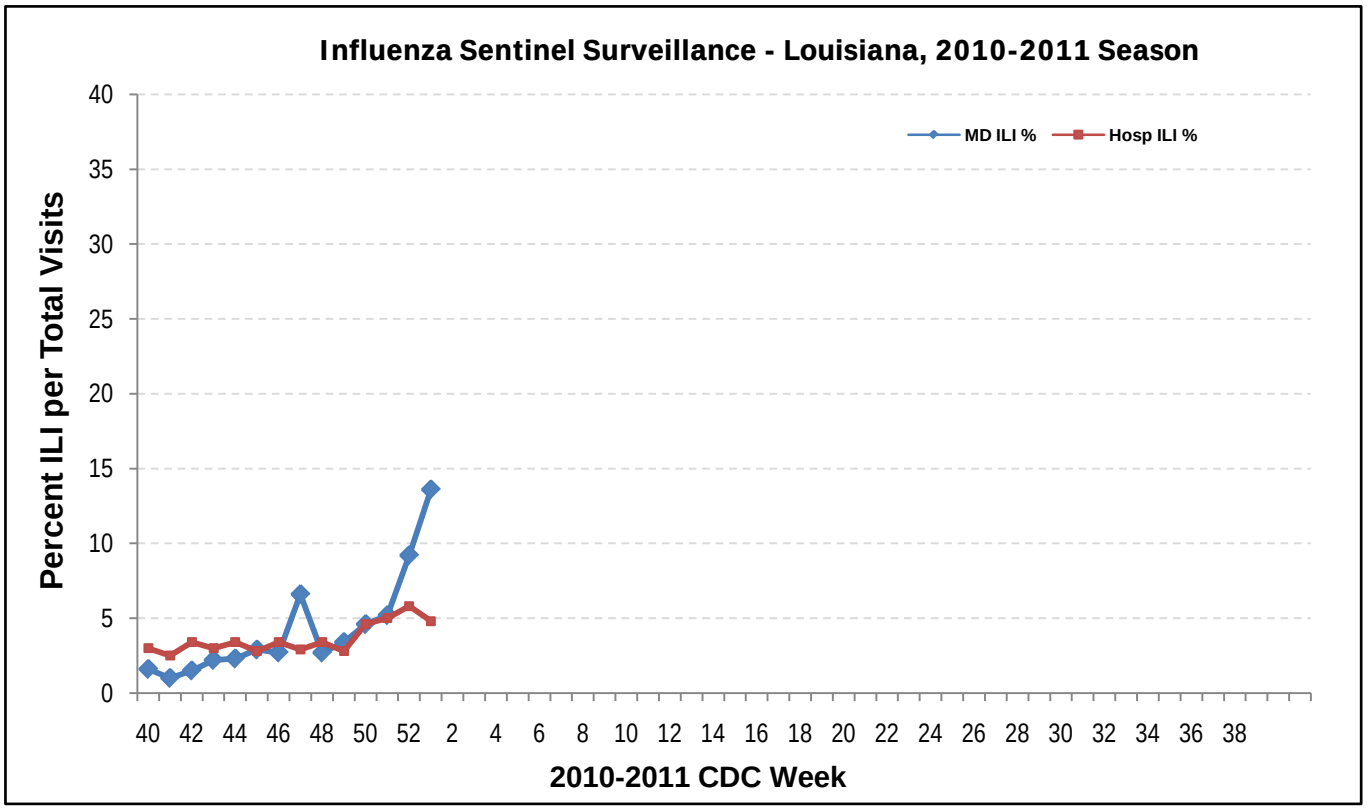
ILI is defined as an illness characterized by cough and/or cold symptoms and a fever of 100˚ F or greater in the absence of a known cause. While not every case of ILI is a case of influenza, the CDC has found that trends in ILI from sentinel sites are a good proxy measure of the amount of influenza activity 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 4 of this report.

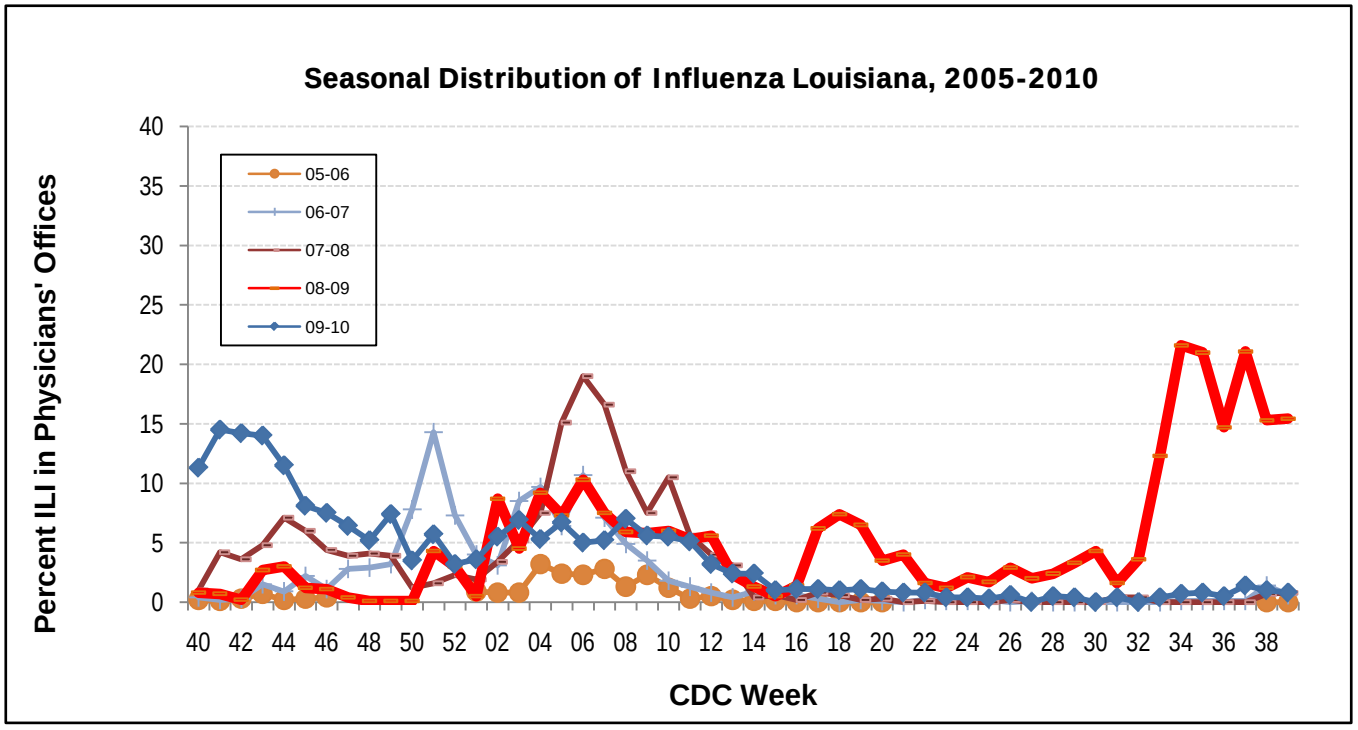
Influenza activity continues to increase in physician's offices but slightly decreased in hospitals in Louisiana. The number of positive samples reported from sentinel sites also continues to increase and Influenza B remains the predominant strain; 64% of all positives reported are type B.

ILI Surveillance

This graph shows the percentage of visits for ILI over the total number of visits for sentinel physicians' offices and emergency departments. 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.



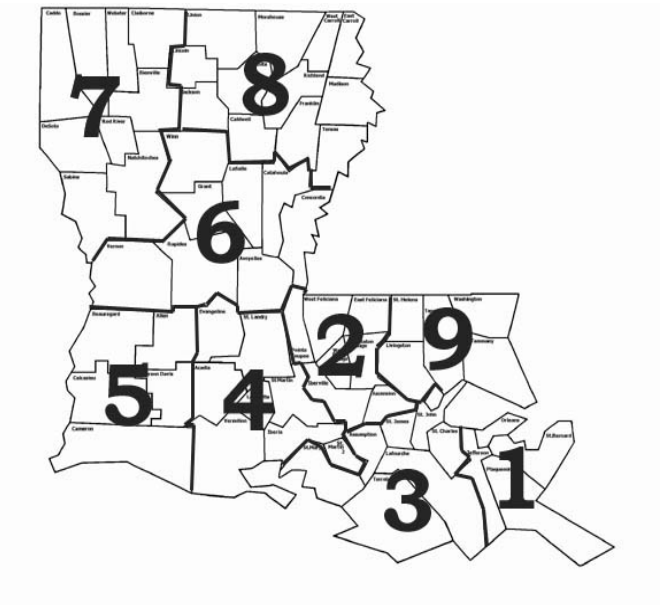
Geographical Distribution of ILI

Region	Parish	% ILI *	
Region 1	Jefferson	0.3	
	Orleans	3.0	
	Plaquemines		
	St Bernard	6.7	
	All Region 1	**2.5**	
Region 2	Ascension		
	East Baton Rouge	6.1	
	East Feliciana	0.0	
	Iberville		
	Pointe Coupee		
	West Baton Rouge		
	West Feliciana		
	All Region 2	**5.3**	
Region 3	Assumption		
	Lafourche	9.2	
	St Charles		
	St James	8.8	
	St. John		
	St. Mary	6.3	
	Terrebonne	7.2	
	All Region 3	**8.1**	
Region 4	Acadia		
	Evangeline		
	Iberia		
	Lafayette	1.8	
	St Landry		
	St Martin		
	Vermilion		
	All Region 4	**1.8**	
Region 5	Allen		
	Beauregard		
	Calcasieu	3.0	
	Cameron		
	Jefferson Davis	8.1	
	All Region 5	**3.7**	
Region 6	Avoyelles		
	Catahoula		
	Concordia		
	Grant		
	LaSalle	13.5	
	Rapides	25.8	
	Vernon	0.3	
	Winn	12.6	
	All Region 6	**15.1**	
Region 7	Bienville		
	Bossier		
	Caddo	15.0	
	Claiborne		
	DeSoto		
	Natchitoches		
	Red River		
	Sabine		
	Webster		
	All Region 7	**15.0**	

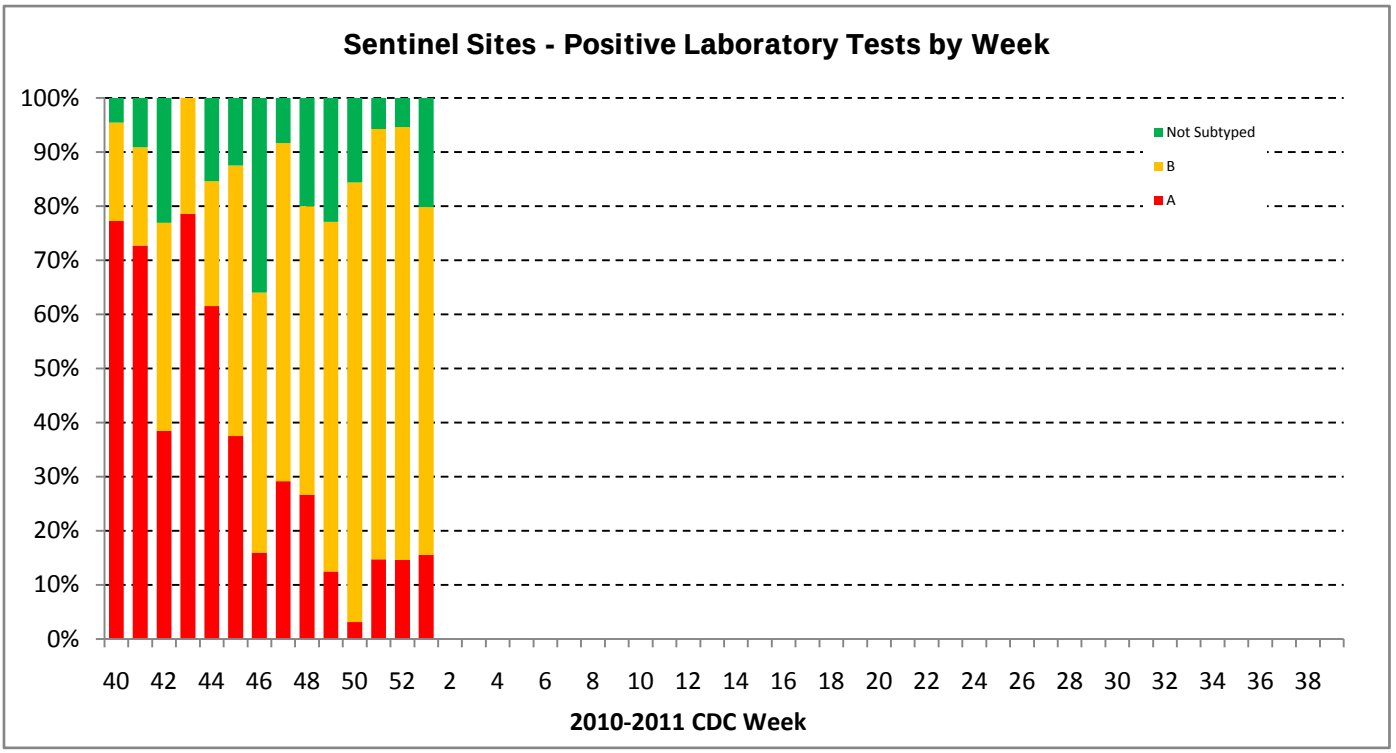
Region	Parish	% ILI *	
Region 8	Caldwell		
	East Carroll		
	Franklin		
	Jackson		
	Lincoln		
	Madison		
	Morehouse	1.9	
	Ouachita	12.2	
	Richland		
	Tensas		
	Union	4.3	
	West Carroll		
	All Region 8	**8.3**	
Region 9	Livingston	8.5	
	St. Helena		
	St Tammany	5.2	
	Tangipahoa	11.9	
	Washington	1.3	
	All Region 9	**5.7**	
Grand Total			

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

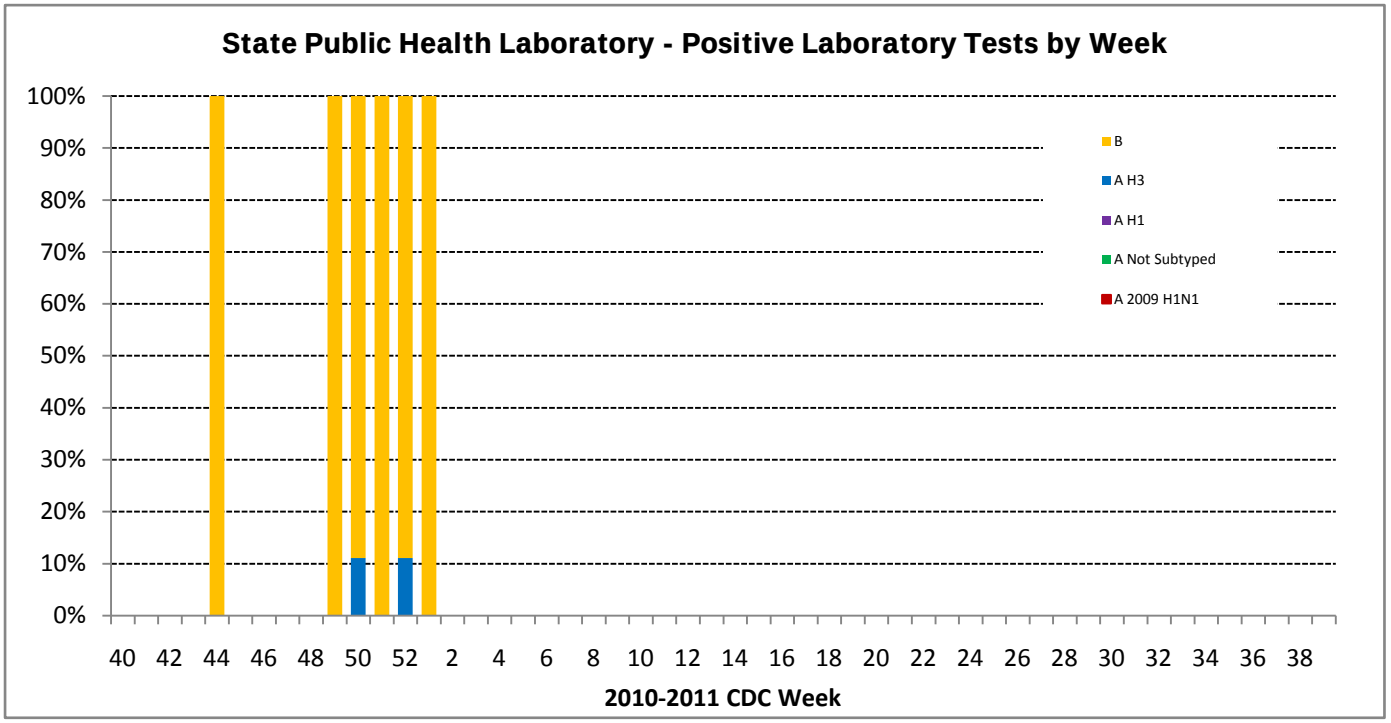
* %ILI over the last 4 weeks based on sentinel surveillance data



Laboratory Surveillance



These graphs show the distribution by virus type. Sentinel site testing is based on rapid test results. The State Public Health Laboratory performs PCR testing on all samples.



National Data Summary

During week 1, influenza activity in the United States decreased in several indicators, but it is unlikely that influenza activity for this season has peaked.

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

Four influenza-associated pediatric deaths were reported. Two of these deaths were associated with Influenza A (H3) viruses and two were associated with influenza B virus infection.

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

Lab Data:

4,331	Specimens tested
706 (16.3%)	Influenza positive
521 (73.8%)	Influenza A
185 (26.2%)	Influenza B

Influenza A:

40 (7.7%)	2009 H1N1
0 (0.0%)	Seasonal H1
164 (31.5%)	Seasonal H3
317 (60.8%)	Unsubtyped

Antiviral Resistance Data on Samples Collected since October 1, 2010:

	2009 Influenza A (H1N1)	Seasonal Influenza A (H1N1)	Influenza A (H3N2)	Influenza B
# tested	31	0	109	91
Oseltamivir	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
# tested	21	0	109	91
Zanamivir	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)