

# Influenza Surveillance Report

[www.infectiousdisease.dhh.louisiana.gov](http://www.infectiousdisease.dhh.louisiana.gov)

Week 48: 11/27/16 - 12/3/16

**Influenza activity is increasing but in Louisiana but remains below the regional baseline. The most commonly reported other respiratory viruses are Rhino/Enterovirus, Adenovirus, and RSV.**

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](mailto: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.

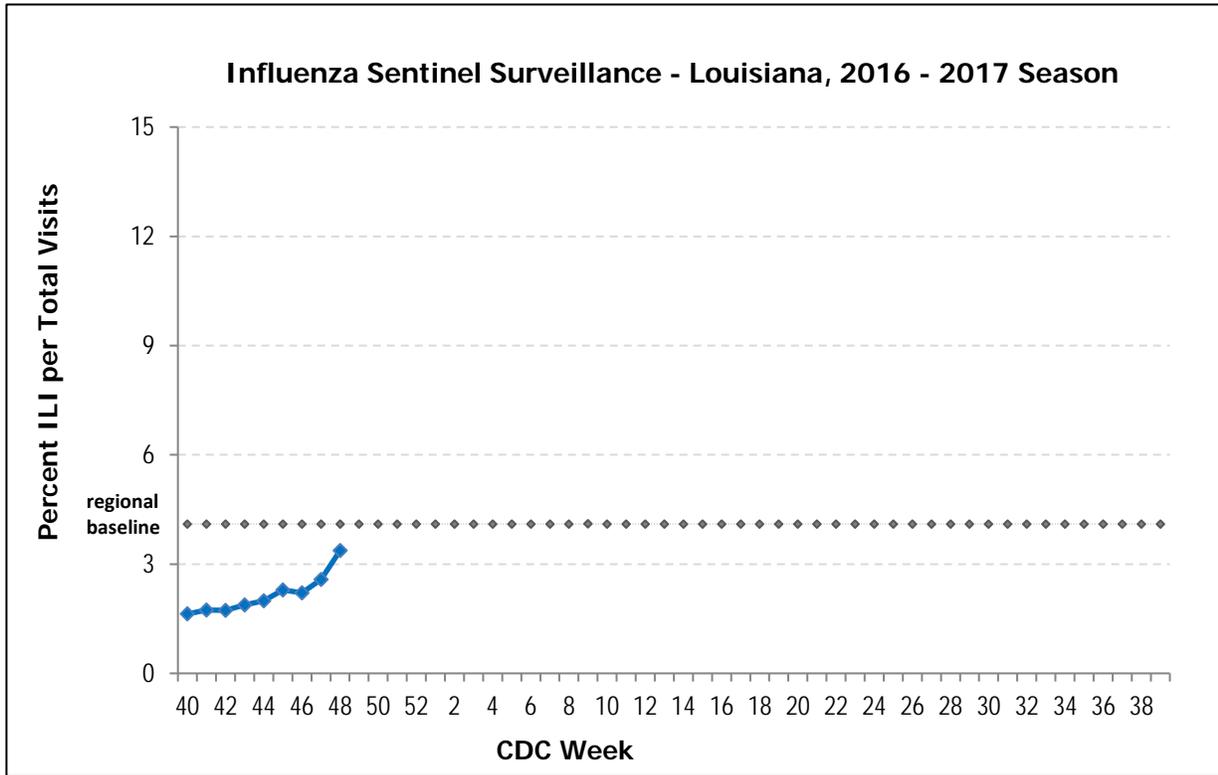


**Laboratory testing:** Not all sentinel sites have access to laboratory testing. However, many hospitals and physicians' offices do perform some influenza testing. Sites that test for influenza report the number of positive tests each week and the total number of tests performed each week. This information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

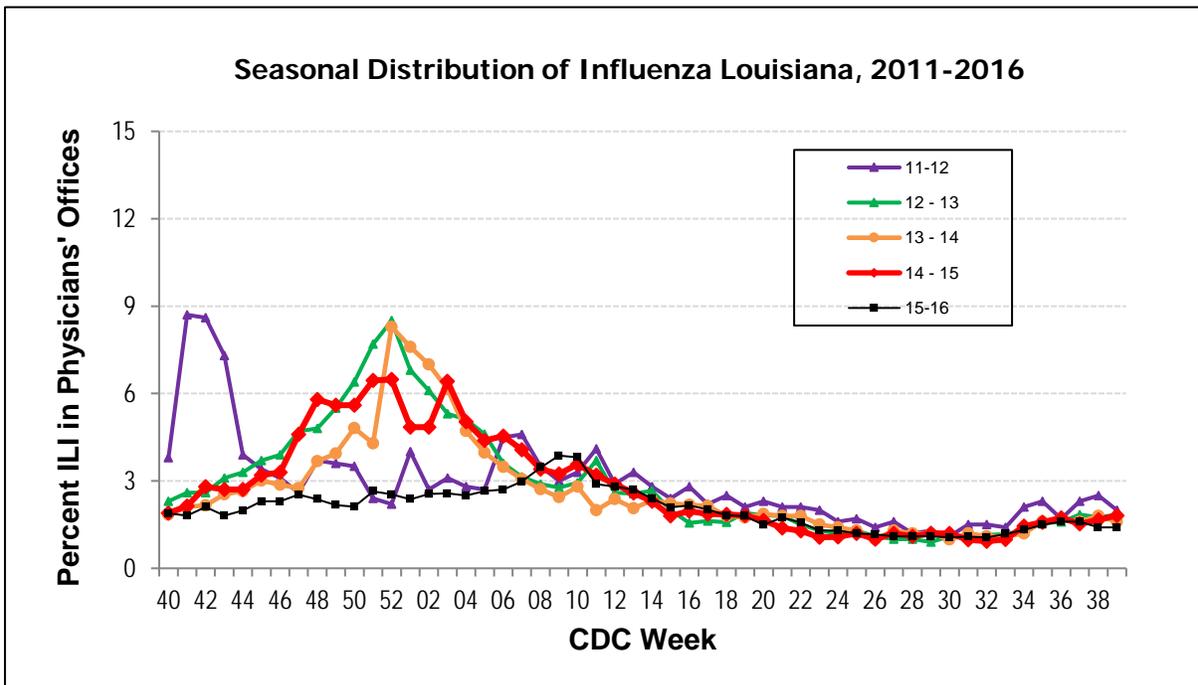
Page 2 : ILI Activity  
Page 3: Virologic Surveillance  
Page 4: Geographic Distribution  
Page 5-6: Regional & National Data

## 2016-2017 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.

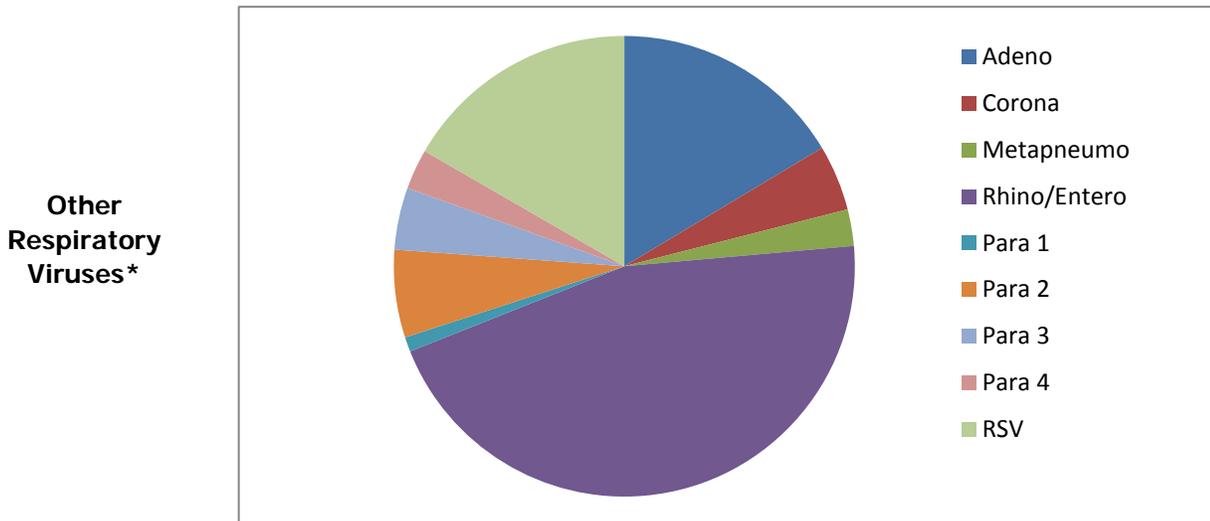
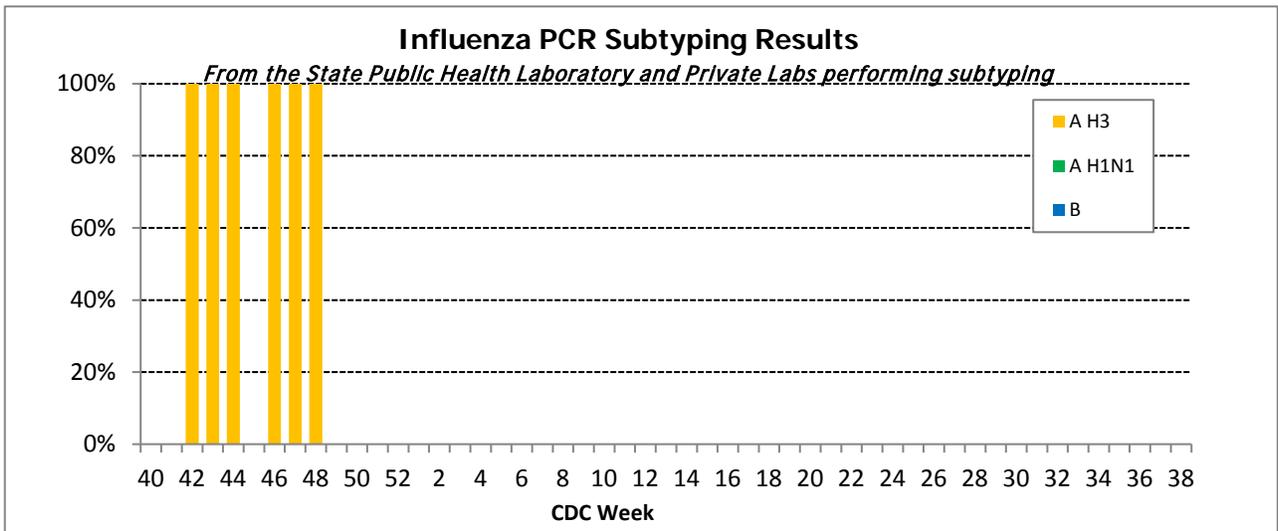
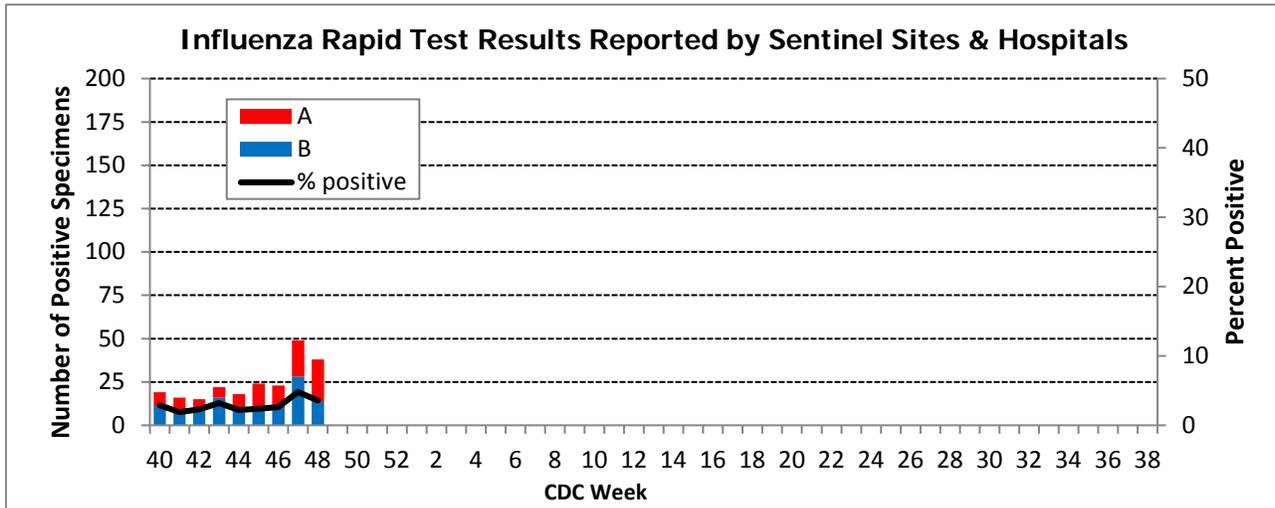


This graph shows the data on ILI surveillance among sentinel physicians' over the past 5 seasons to enable comparisons with previous years and better estimate the amplitude of this season's influenza transmission.



# 2016-2017 Season

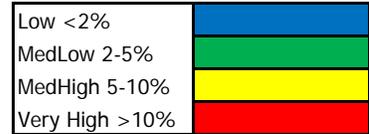
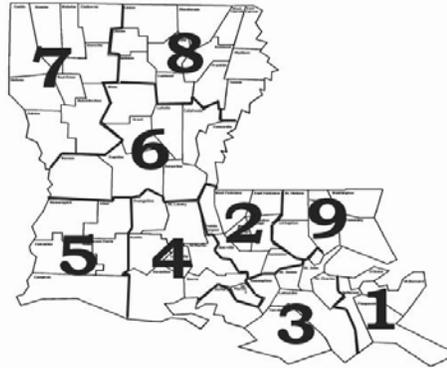
## Virologic Surveillance



\*Based on results from the State Public Health Laboratory Respiratory Virus Panel (RVP) Testing and other labs reporting RVP results over the last 4 weeks.

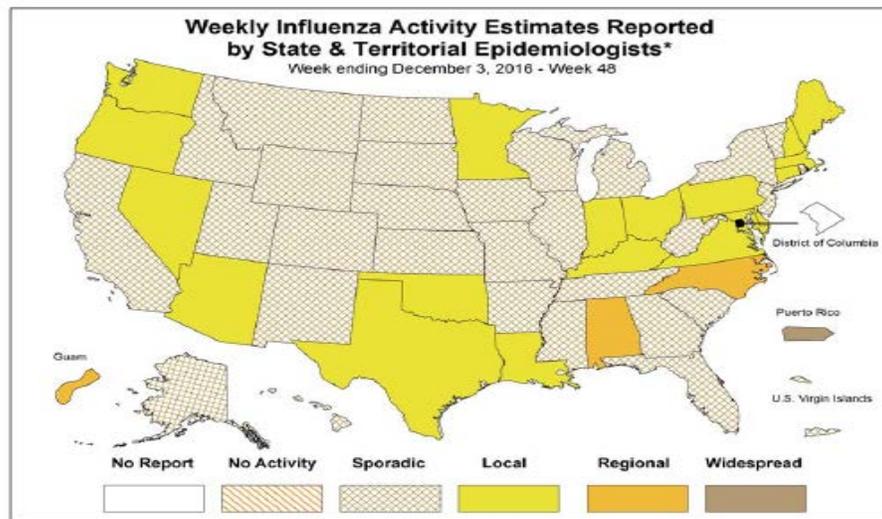
# 2016-2017 Season

## Geographical Distribution of ILI



\* %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



## 2016-2017 Season

### National Surveillance

During week 48, influenza activity increased slightly, but remained low in the United States. Due to data processing problems, the mortality surveillance data was not published this week.

No influenza-associated pediatric deaths were reported.

Proportion of outpatient visits for influenza-like illness (ILI) was 1.8%, which is below the national baseline of 2.2%.

### Clinical Laboratory Data

	Week 48	Data Cumulative since October 2, 2016 (week 40)
No. of specimens tested	15,262	135,871
No. of positive specimens (%)	535 (3.5%)	3,087 (2.3%)
<i>Positive specimens by type</i>		
Influenza A	390 (72.9%)	2,052 (66.5%)
Influenza B	145 (27.1%)	1,035 (33.5%)

### Public Health Laboratory Data

	Week 48	Data Cumulative since October 2, 2016 (week 40)
No. of specimens tested	783	9,049
No. of positive specimens*	154	1,160
<i>Positive specimens by type/subtype</i>		
Influenza A	141 (91.6%)	1,050 (90.5%)
A(H1N1)pmd09	6 (4.3%)	73 (7.0%)
H3	112 (79.4%)	899 (85.6%)
Subtyping not performed	23 (16.3%)	78 (7.4%)
Influenza B	13 (8.4%)	110 (9.5%)
Yamagata lineage	2 (15.4%)	23 (20.9%)
Victoria lineage	2 (15.4%)	37 (33.6%)
Lineage not performed	9 (69.2%)	50 (45.5%)

### HHS Surveillance Region Data:

#### Region 6 (AR, LA, NM, OK, TX)

CDC Week	Public Health Labs	Public Health Specimens Tested	AUNK	AH1N1 pdm09	AH3N2	AH3N2v	B	BVic	BYam	Clinical Labs	Clinical Specimens Tested	Clinical Flu Positive	% Positive	A	B
201645	6	64	0	1	1	0	0	2	0	29	2371	41	1.73	20	21
201646	7	98	0	3	4	0	0	0	0	29	2744	67	2.44	40	27
201647	7	55	0	0	6	0	0	0	0	26	2280	45	1.97	31	14
201648	6	65	0	2	4	0	0	0	0	20	1825	27	1.48	19	8
Total	0	603	0	11	24	0	0	5	5	.	18626	349	1.87	197	152

#### U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) 2016-2017 Influenza Season HHS Region 6 (AR, LA, NM, OK, and TX) (Baseline: 4.1%) Data as of Friday, December 9, 2016

CDC Week	# Sites Reporting	ILI 0-4 years	ILI 5-24 years	ILI 25-49 years	ILI 50-64 years	ILI 65 years and older	Total ILI	Total Patient Visits	% Unweighted ILI	% Weighted ILI
201645	239	630	611	343	141	114	1839	89560	2.1	2.1
201646	239	694	702	324	148	125	1993	95187	2.1	2.3
201647	267	693	579	366	167	113	1918	80096	2.4	2.5
201648	264	808	785	522	290	154	2559	89457	2.9	2.5
Totals							16421	832806		

## 2016-2017 Season

### Antiviral Resistance:

#### Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2016

	Oseltamivir		Zanamivir		Peramivir	
	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)
Influenza A (H1N1)pdm09	24	0 (0.0)	24	0 (0.0)	24	0 (0.0)
Influenza A (H3N2)	104	0 (0.0)	104	0 (0.0)	80	0 (0.0)
Influenza B	28	0 (0.0)	28	0 (0.0)	28	0 (0.0)

**Antigenic Characterization:** CDC has antigenically characterized 38 influenza viruses [8 influenza A (H1N1)pdm09, 16 influenza A (H3N2), and 14 influenza B viruses] collected by U.S. laboratories since October 1, 2016.

#### Influenza A Virus [24]

**A (H1N1)pdm09 [8]:** All 8 (100%) influenza A (H1N1)pdm09 viruses were antigenically characterized using ferret post-infection antisera as A/California/7/2009-like, the influenza A (H1N1) component of the 2016-2017 Northern Hemisphere vaccine.

**A (H3N2) [16]:** All 16 (100%) influenza A (H3N2) viruses were antigenically characterized as A/Hong Kong/4801/2014-like, a virus that belongs in genetic group 3C.2a and is the influenza A (H3N2) component of the 2016-2017 Northern Hemisphere vaccine, by HI testing or neutralization testing.

#### Influenza B Virus [14]

**Victoria Lineage [6]:** 5 of 6 (83%) B/Victoria-lineage viruses were antigenically characterized using ferret post-infection antisera as B/Brisbane/60/2008-like, which is included as an influenza B component of the 2016-2017 Northern Hemisphere trivalent and quadrivalent influenza vaccines.

**Yamagata Lineage [8]:** All 8 (100%) B/Yamagata-lineage viruses were antigenically characterized using ferret post-infection antisera as B/Phuket/3073/2013-like, which is included as an influenza B component of the 2016-2017 Northern Hemisphere quadrivalent influenza vaccines.