2015-2016 Influenza Report

Week 18

May 1 - May 7, 2016

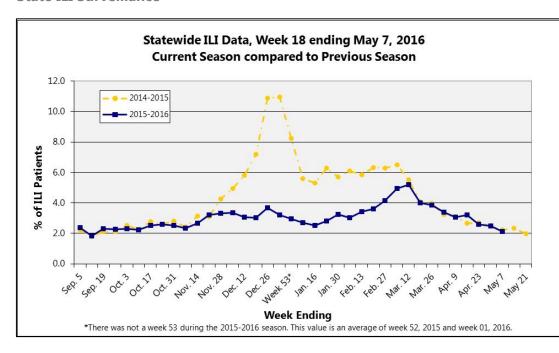
About our flu activity reporting

MSDH relies upon selected sentinel health practitioners across the state to report the percentage of total patient visits consistent with an influenza-like illness (ILI: fever of 100°F or higher AND cough and/or sore throat). Also, providers are supplied with specimen collection kits. Samples are submitted to the Mississippi Public Health Laboratory for influenza PCR testing. Reports are used to estimate the state's ILI rate and the magnitude of the state's influenza activity. Reports represent only the distribution of flu in the state, not an actual count of all flu cases statewide. *Information is provisional only and may change depending on additional reporting from sentinel providers.*

Content

- * State ILI Surveillance
- Flu Testing Reports
- **❖** National and Mississippi Pediatric Mortality Surveillance
- **❖** National ILI Surveillance
- * Appendix
 - Figure 1 (Statewide ILI Data, Current Season compared to Previous Season)
 - Figure 2 (Percentage of ILI Cases by Age Group, Mississippi)
 - Figure 3 (Mississippi ILI Rates, 2015-2016 and Previous Seasons)
 - Figure 4 (State ILI/URI Rates 2012-2016 (YTD))
 - <u>Figure 5</u> (Comparison of Statewide ILI Rate to Positive Influenza Isolates by Type and Subtype, Mississippi)
 - <u>Figure 6</u> (Number of Influenza-Associated Pediatric Deaths by Week of Death and Influenza Type, Nationwide)
 - <u>Figure 7</u> (Percentage of Influenza-Associated Pediatric Deaths by Influenza Type, Nationwide)
 - Figure 8 (Comparison of Nationwide ILI Rates to Mississippi ILI Rates)
 - Figure 9 (CDC FluView Weekly Influenza Activity Map)

State ILI Surveillance



During week **18** (05/01/16-05/07/16), the overall state ILI rate (**2.1%**) was **comparable** to the previous week (**2.5%**), and to this time last year (**2.2%**).

Figure 1

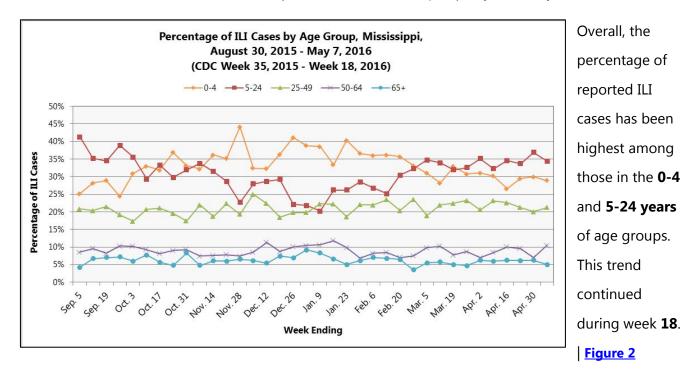
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2015-2016 Influenza Season						
CDC Week	Week Ending	Number of ILI Reports	Total patients	ILI symptoms	ILI Rate (%)	
18	May 7	136	18920	401	2.1%	
17	Apr. 30	146	20779	515	2.5%	
16	Apr. 23	143	20273	523	2.6%	

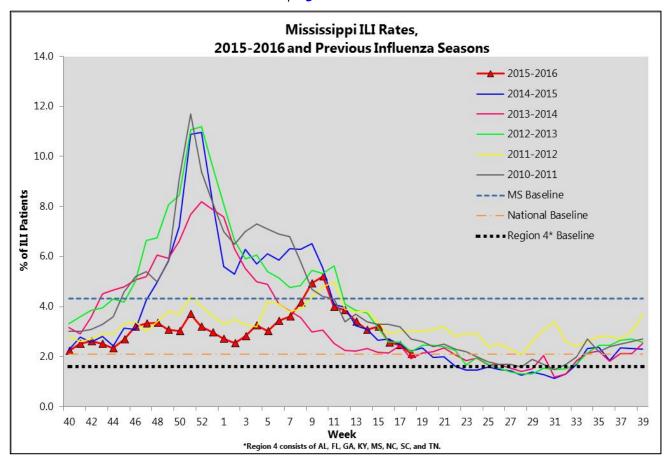
During week **18**, **one** district (4) had an increase in ILI activity, while **four** districts (1, 2, 5, and 8) had a decrease. **Four** districts (3, 6, 7, and 9) remained about the same. *Information* is provisional only and may change depending on additional reporting from sentinel providers. | **Table 2**



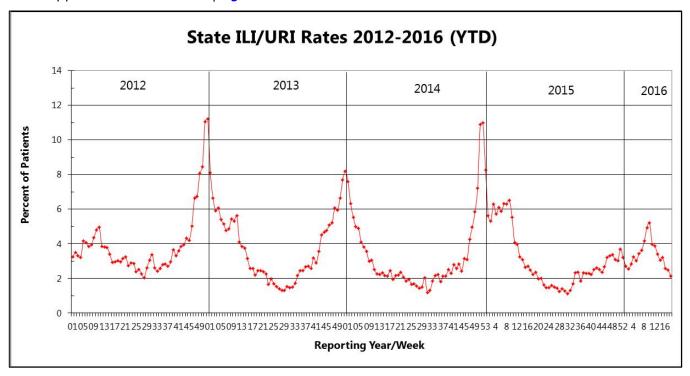
MSDH District ILI Rates (%) 2015-2016					
District	Week 17	Week 18			
State	2.5	2.1			
I	1.7	0.9			
II	4.3	2.7			
III	2.7	3.0			
IV	2.1	2.9			
V	2.0	1.3			
VI	4.6	4.5			
VII	1.9	1.7			
VIII	3.4	2.2			
IX	2.5	2.2			



The 2015-16 state ILI rate was **above** the Region 4 baseline, comparable to the national baseline, but was **below** the state baseline, for week **18**. | Figure 3



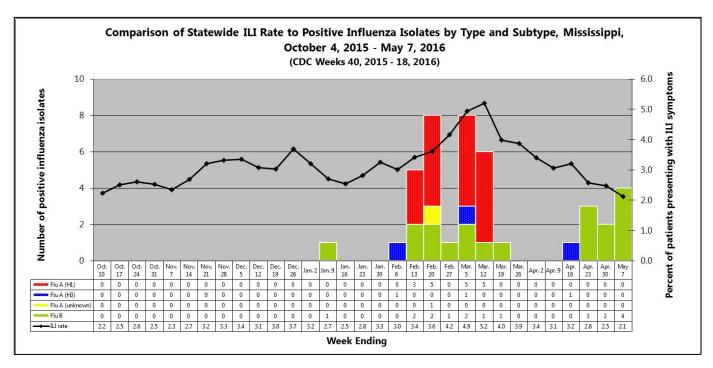
Mississippi ILI Rates 2012-2016 | Figure 4



Flu Testing Reports

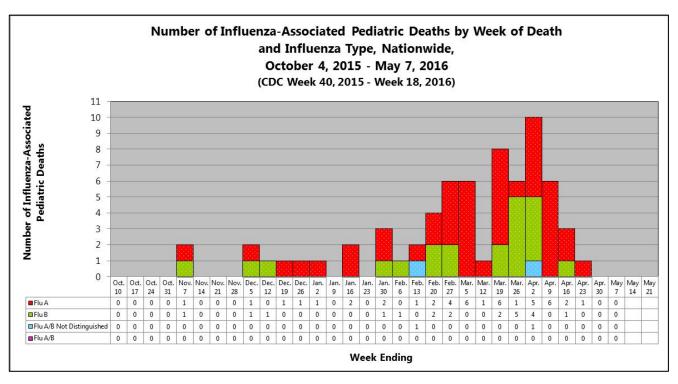
From week **40** (week ending October 10th) through week **18** (week ending May 7th), 41 positive influenza samples were identified by MSDH. Eighteen (44%) samples were identified as influenza A (H1), three (7%) as influenza A (H3), one (2%) as influenza A (unknown), and 19 (46%) were identified as influenza B. | Figure 5

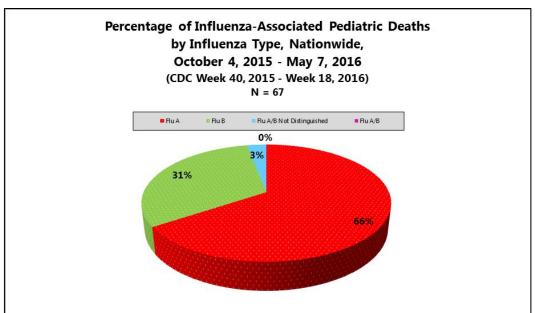
The influenza cases were identified from the following counties: Chickasaw (1), Copiah (1), Covington (1), Forrest (1), Humphreys (3), Jones (2), Lafayette (7), Lawrence (1), Leake (2), Lee (1), Marion (3), Marshall (8), Monroe (2), Oktibbeha (1), Pontotoc (3), Prentiss (3), and Washington (1).



National and Mississippi Pediatric Mortality Surveillance

Nationally, **three** influenza-associated pediatric deaths were reported to CDC during week **18**. Two deaths were associated with an influenza A (H1N1)pdm09 virus and occurred during weeks 09 and 13 (weeks ending March 5th and April 2nd). One death was associated with an influenza A virus for which no subtyping was performed and occurred during week 48 (week ending December 5th, 2015). **Sixty-seven** influenza-associated pediatric deaths have been reported during the 2015-2016 season. | **Figure 6**





Of the **67** influenza-associated pediatric deaths reported nationally during the 2015-2016 season, 44 (66%) have been attributed to influenza A viruses, 21 (31%) to influenza B viruses, and two (3%) to an influenza A/B virus.

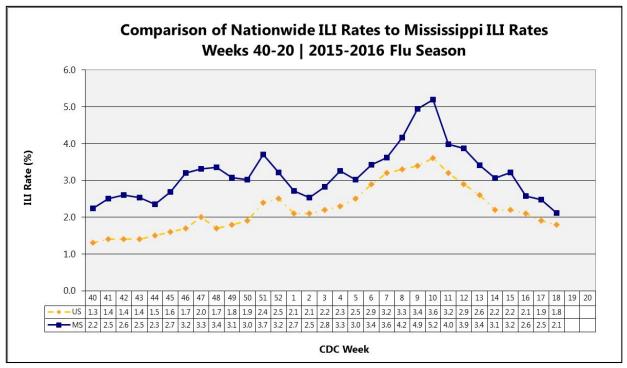
| Figure 7

Mississippi has had

one influenza-associated pediatric death reported during this influenza season. For additional information on influenza-associated pediatric deaths, please refer to the <u>CDC's FluView</u>.

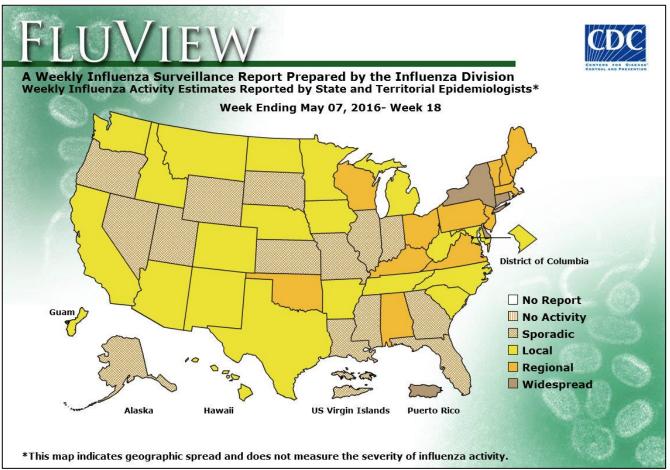
National ILI Surveillance

For week **18**, the MS ILI rate (2.1%) was **comparable** to the national ILI rate (1.8%). | Figure 8



US ILI rates from the Centers for Disease Control and Prevention: http://www.cdc.gov/flu/weekly/.

During week 18, influenza activity decreased in the United States. | Figure 9



¹For up-to-date information on flu activity nationwide, please refer to the CDC's website: http://www.cdc.gov/flu/weekly/fluactivitysurv.htm.

Mississippi reported "Sporadic" for the influenza activity during week 18. | Table 3

Level of Flu Activity	Definition	
No Activity	Overall clinical activity remains low and there are no lab confirmed cases.	
Sporadic	Isolated cases of lab confirmed influenza in the state; ILI activity is not increased <u>OR</u> A lab-confirmed outbreak in a single institution in the state; ILI activity is not increased.	
Local	Increased ILI within a single region AND recent (within the past 3 weeks) laboratory evidence of influenza in that region. ILI activity in other regions is not increased <u>OR</u> two of more institutional outbreaks (ILI or lab confirmed) within a single region AND recent (within the past 3 weeks) lab confirmed influenza in that region. Other regions do not have increased ILI and virus activity is no greater than sporadic in those regions	
Regional	Increased ILI in at least 2 regions but fewer than half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions <u>OR</u> Institutional outbreaks (ILI or lab confirmed) in at least 2 regions but fewer than half of the regions AND recent lab confirmed influenza in the affected regions.	
Widespread	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state.	

Additional influenza information:

Centers for Disease Control and Prevention	http://cdc.gov/flu/
Centers for Disease Control and Prevention FluView	http://www.cdc.gov/flu/weekly/
Flu.gov	http://www.flu.gov/
MSDH Flu and Pneumonia	http://msdh.ms.gov/msdhsite/_static/14,0,199.html
World Health Organization FluNet	http://www.who.int/influenza/gisrs laboratory/flunet/en/

Appendix

Figure 1

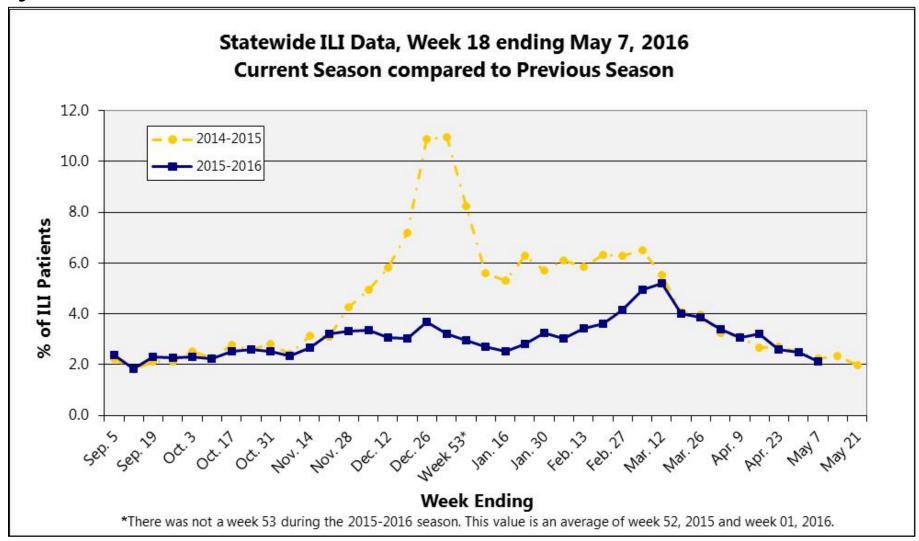


Figure 2

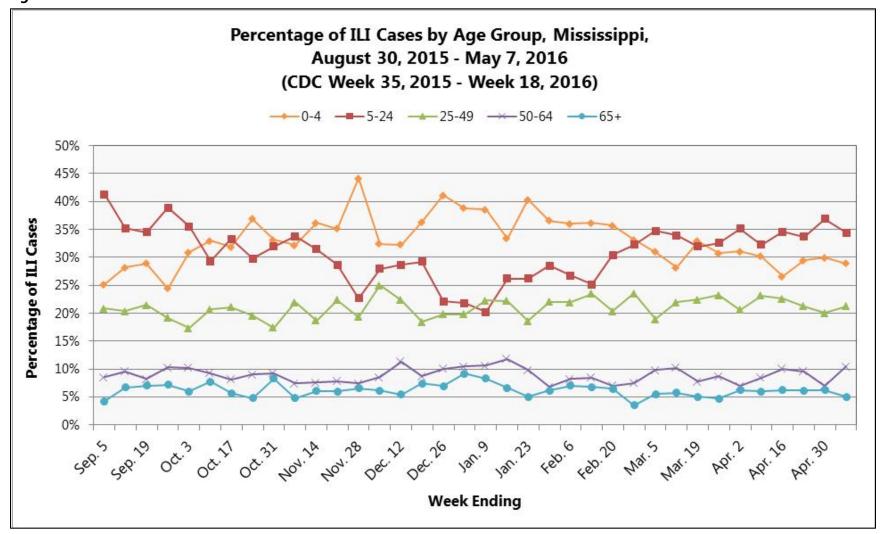


Figure 3

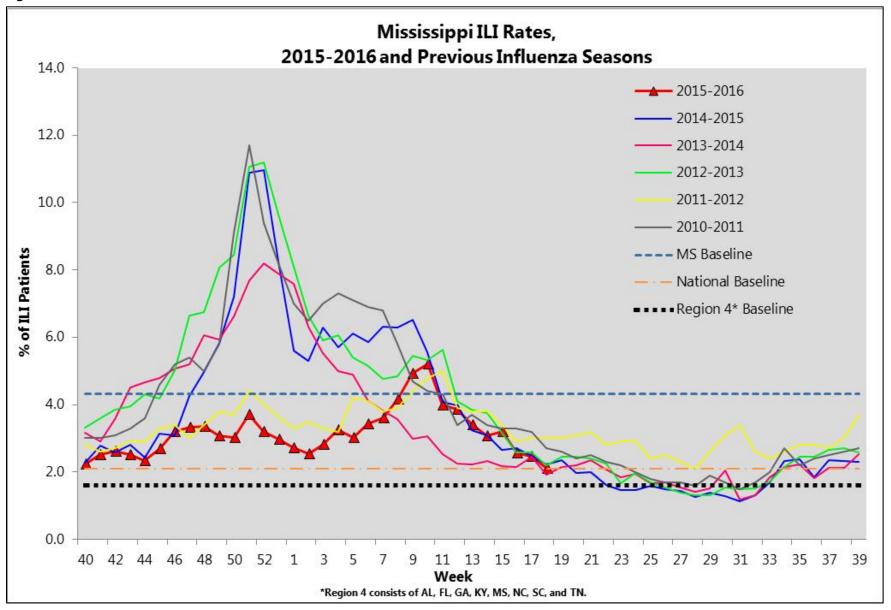


Figure 4

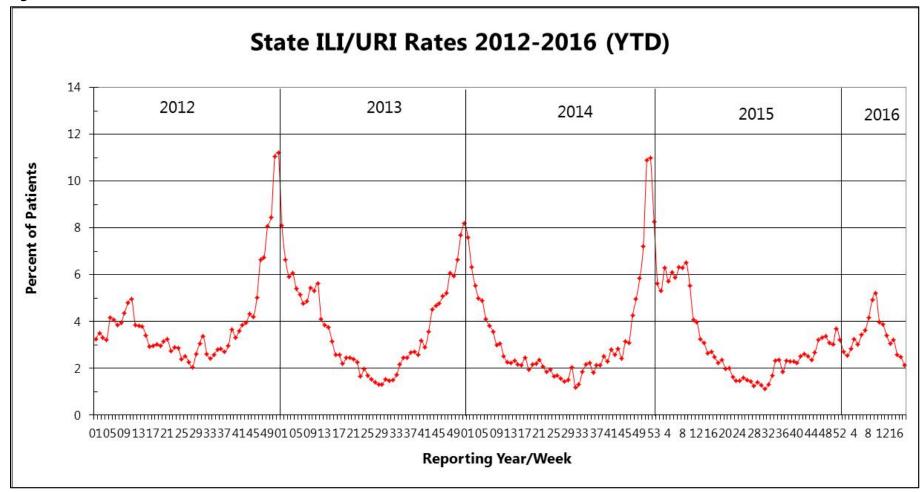


Figure 5

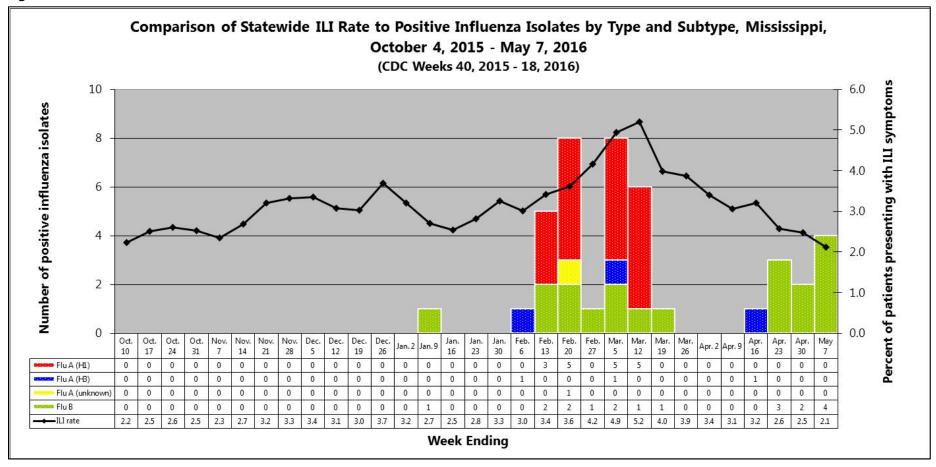


Figure 6

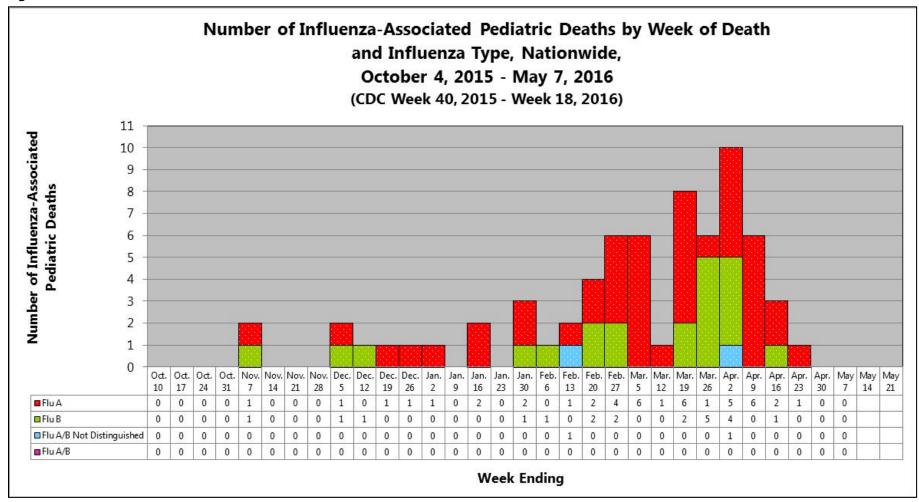


Figure 7

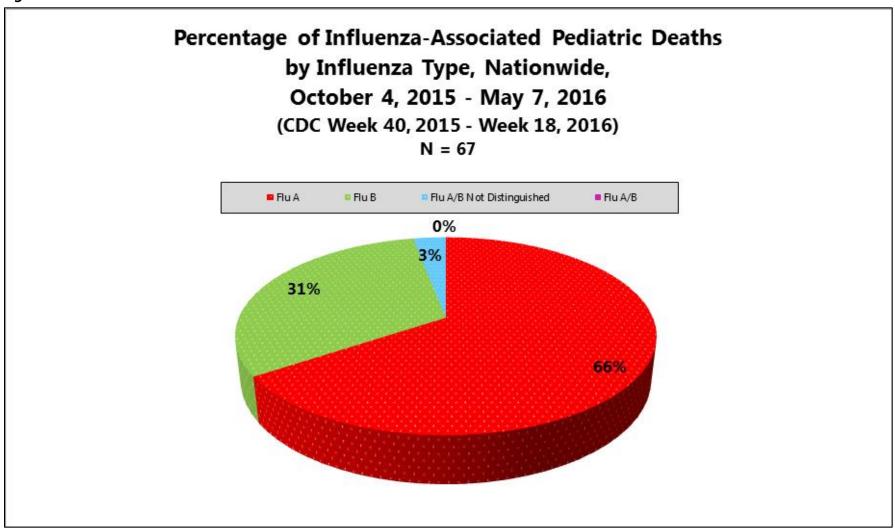


Figure 8

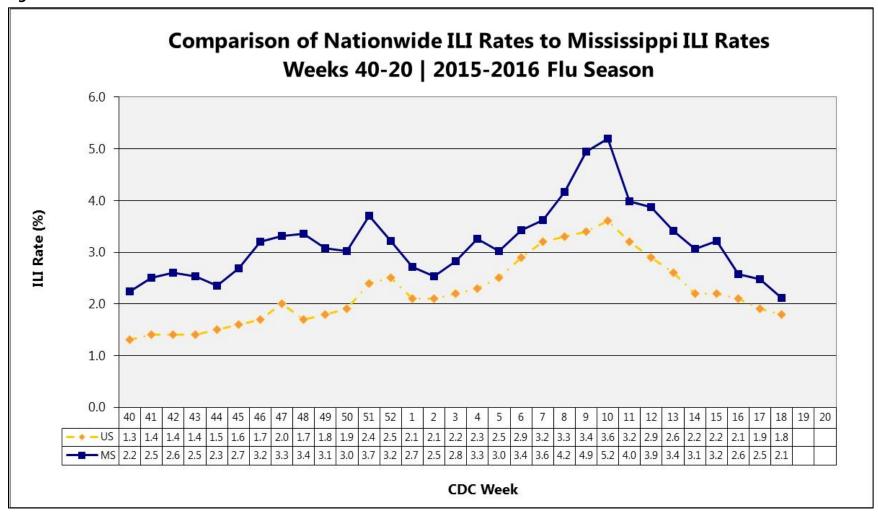


Figure 9

