2016-2017 Influenza Report

Week 13

March 26 – April 1, 2017

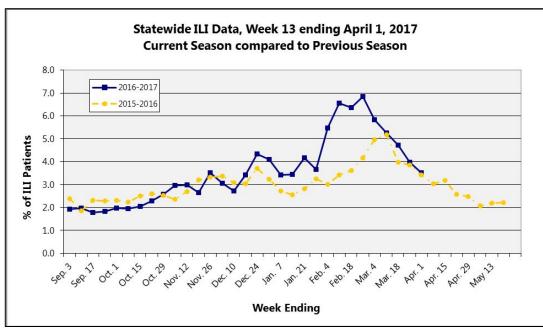
About our flu activity reporting

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.*

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State ILI Surveillance



During week 13 (03/26/17 - 04/01/17), the state ILI rate (3.5%) decreased from the previous week (4.0%), and was comparable to this time last year (3.4%).

Figure 1

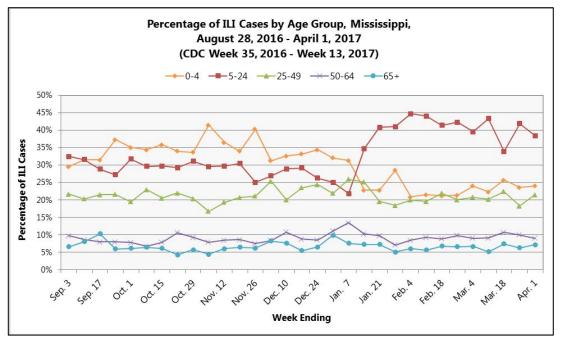
Total number of patients seen by sentinel providers in the last three weeks. | Table 1

2016-2017 Influenza Season						
CDC Week	Week Ending	Number of ILI Reports	Total patients	ILI symptoms	ILI Rate (%)	
13	Apr. 01	135	18338	643	3.5%	
12	Mar. 25	137	20391	810	4.0%	
11	Mar. 18	137	17470	823	4.7%	

During week **13**, **three** districts (2, 3, and 4) had an increase in ILI activity, while **four** districts (1, 6, 8, and 9) had a decrease. **Two** districts (5 and 7) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



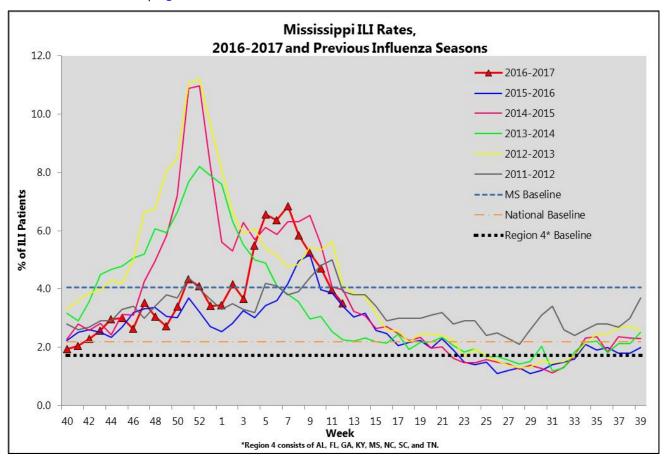
MSDH District ILI Rates (%) 2016-2017					
District	Week 12	Week 13			
State	4.0	3.5			
I	5.8	3.9			
II	2.0	3.9			
III	3.0	3.9			
IV	2.4	3.1			
V	2.2	2.3			
VI	6.7	4.6			
VII	3.3	3.6			
VIII	3.4	2.7			
IX	5.4	4.3			



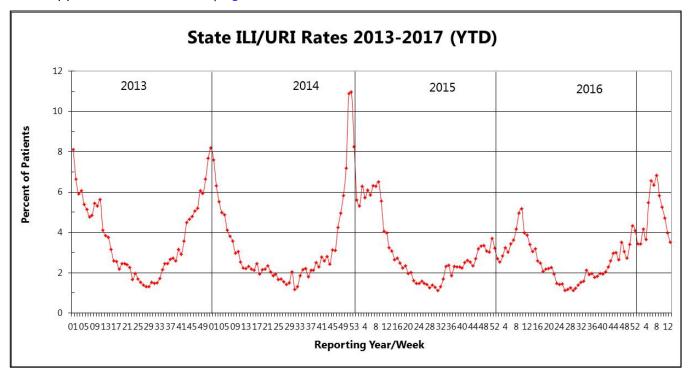
Overall, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24 years**. During week **13** though, the percentage of reported ILI cases continued

to be highest among those in the 5-24 years of age group. | Figure 2

The 2016-17 state ILI rate was **above** the national and Region 4 baselines, but was **below** the state baseline for week **13**. | Figure 3

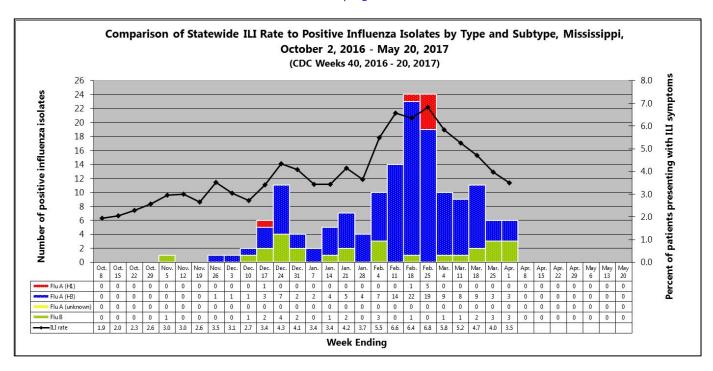


Mississippi ILI Rates 2013-2017 | Figure 4



Flu Testing Reports

From week **40** (week ending Oct. 8th) through week **13** (week ending April 1st), **158** laboratory confirmed influenza samples were identified by the MSDH Public Health Laboratory. One hundred twenty-four (78%) samples were identified as influenza A (H3), 27 (17%) were identified as influenza B, and seven (4%) were identified as influenza A (H1). | Figure 5



The influenza cases were identified from the following counties: Alcorn (3), Attala (2), Choctaw (2), Coahoma (9), Copiah (4), Covington (2), DeSoto (1), Forrest (3), George (3), Harrison (2), Hinds (5), Holmes (2), Jackson (2), Jones (3), Lafayette (5), Lauderdale (3), Lawrence (1), Leake (2), Lee (4), Leflore (3), Lincoln (14), Lowndes (9), Madison (2), Marion (2), Marshall (5), Monroe (5), Neshoba (7), Newton (4), Oktibbeha (10), Pearl River (2), Perry (1), Pike (4), Pontotoc (3), Quitman (1), Rankin (3), Sharkey (1), Simpson (2), Tallahatchie (3), Tate (2), Tippah (4), Warren (2), Washington (4), Webster (2), and Winston (5).

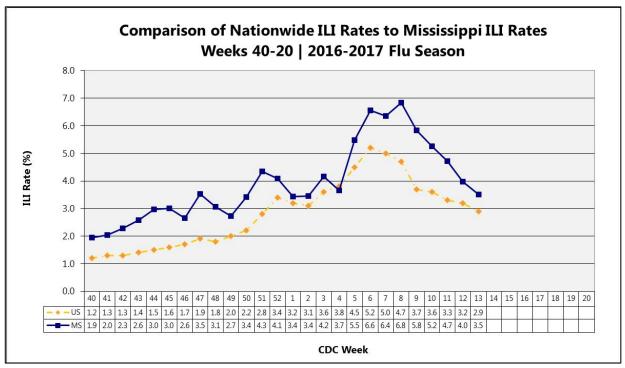
National and Mississippi Pediatric Mortality Surveillance

Nationally, **seven** influenza-associated pediatric deaths were reported to CDC during week **13**. Two deaths were associated with an influenza A (H3) virus and occurred during weeks 50 and 11 (weeks ending December 17th, 2016, and March 18th, 2017, respectively). One death was associated with an influenza A virus for which no subtyping was performed and occurred during week 13 (week ending April 1st). Four deaths were associated with an influenza B virus and occurred during weeks 01, 07, 10, and 12 (weeks ending January 7th, February 18th, March 11th, and March 25th, respectively). **68** influenza-associated pediatric deaths have been reported during the 2016-2017 season.

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>.

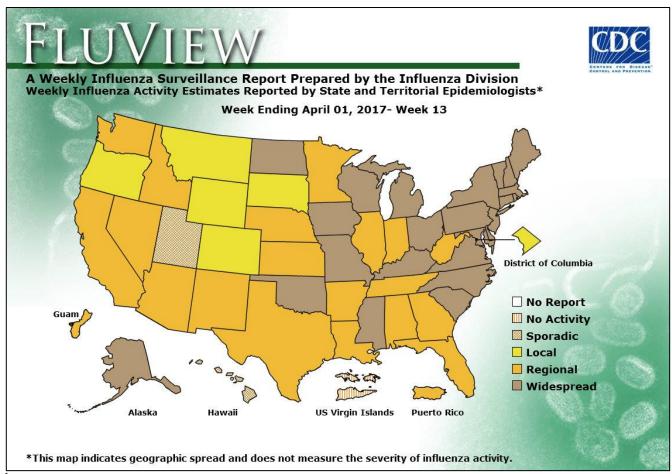
National ILI Surveillance

For week **13**, the MS ILI rate (3.5%) was **slightly above** the national ILI rate (2.9%), but continued to follow the downward trend. | Figure 6



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

During week 13, influenza activity decreased but remained elevated in the United States. | Figure 7



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 "Widespread" for the influenza activity during week 13. | 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

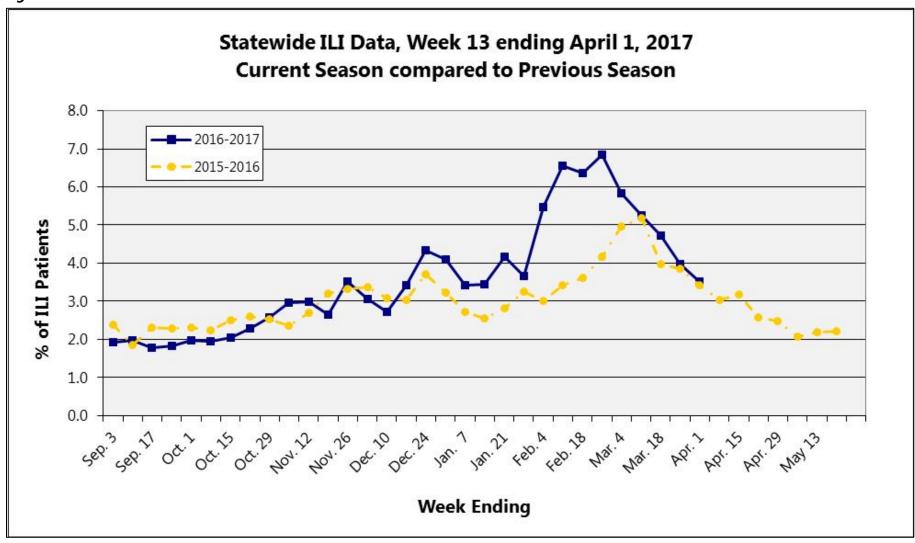


Figure 2

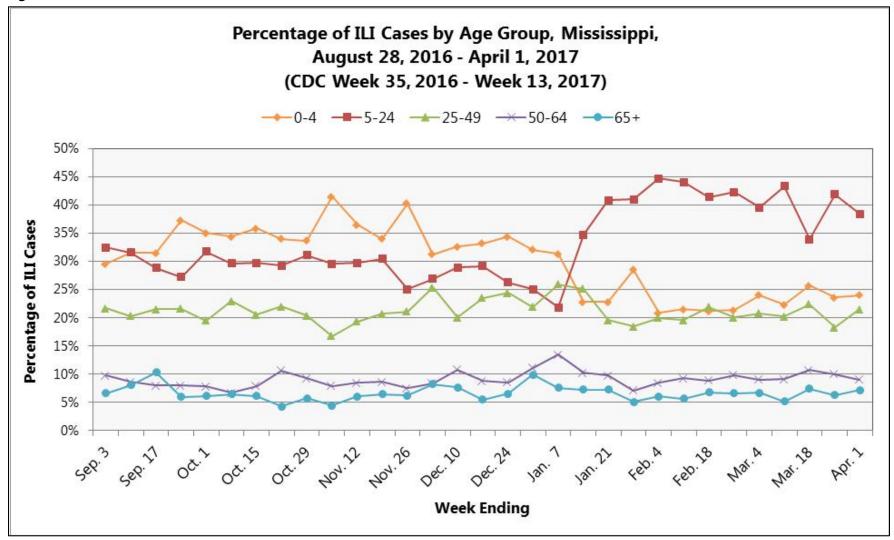


Figure 3

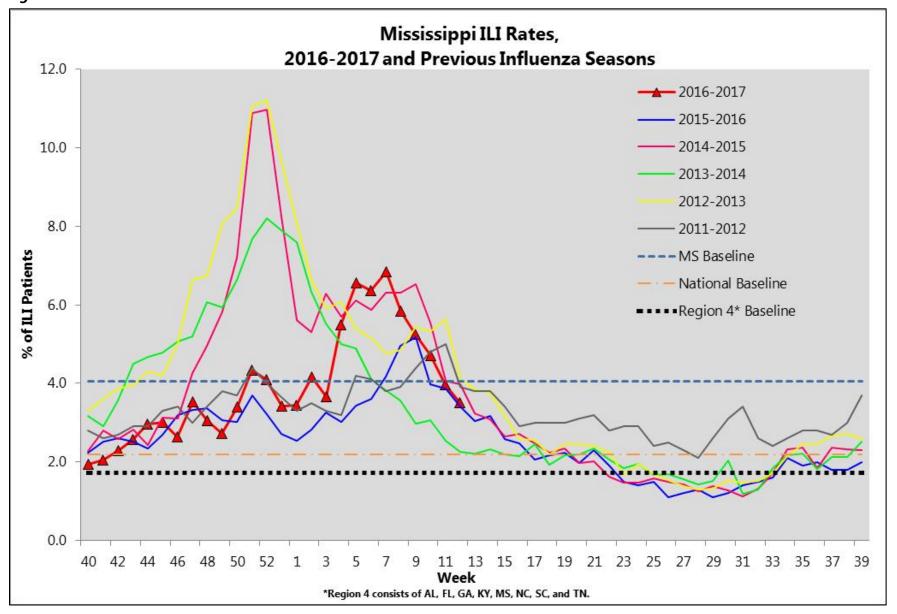


Figure 4

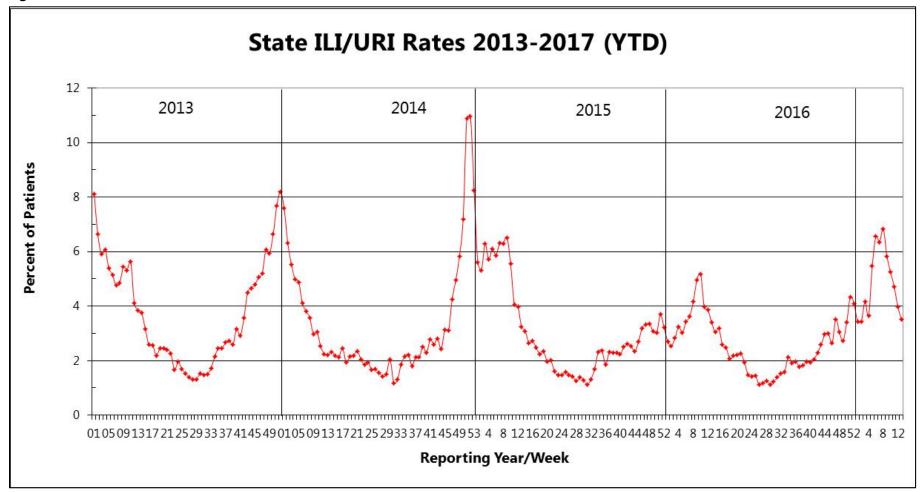


Figure 5

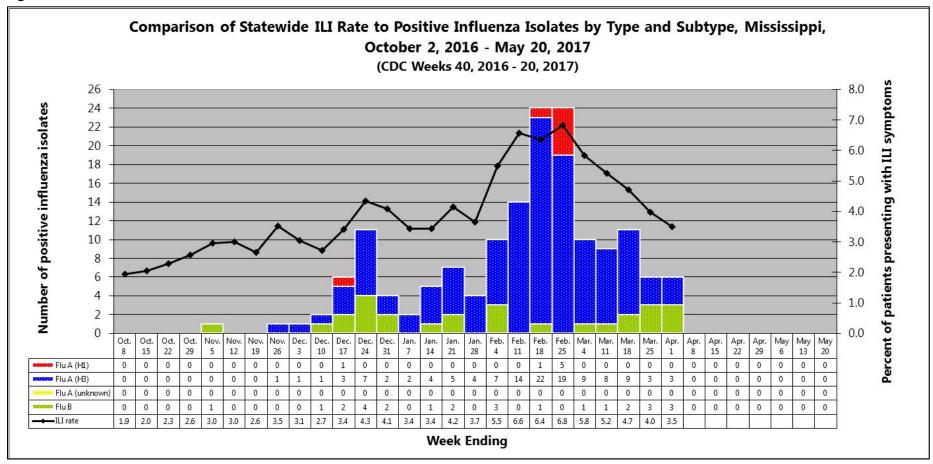


Figure 6

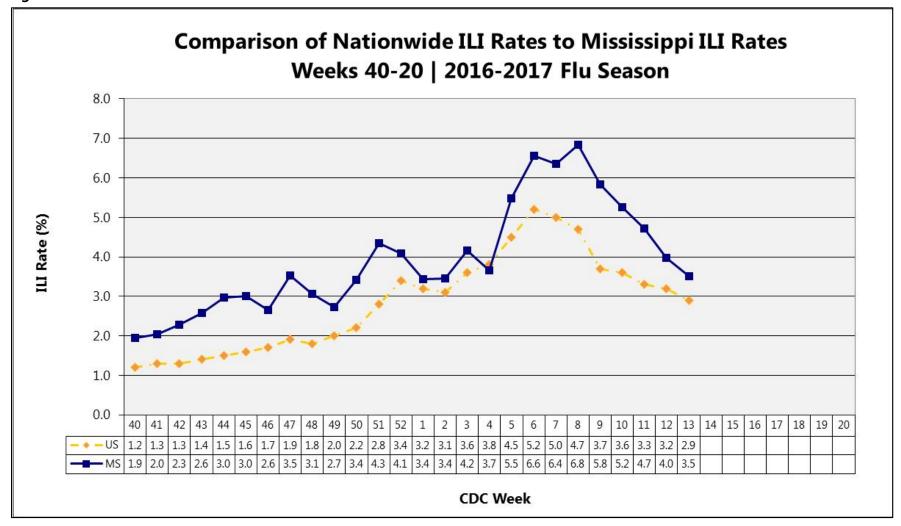


Figure 7

