2016-2017 Influenza Report

Week 20

May 14 - May 20, 2017

Note: This is the final influenza surveillance report for the 2016-2017 season.

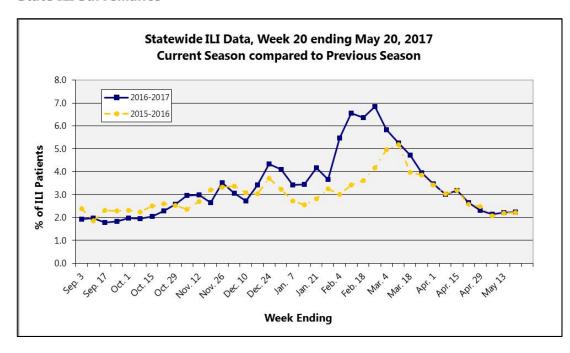
About our flu activity reporting

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, 2016-2017 and Previous Seasons)
 - Figure 4 (State ILI/URI Rates 2013-2017 (YTD))
 - <u>Figure 5</u> (Comparison of Statewide ILI Rate to Positive Influenza Isolates by Type and Subtype, Mississippi)
 - Figure 6 (Comparison of Nationwide ILI Rates to Mississippi ILI Rates)
 - Figure 7 (CDC FluView Weekly Influenza Activity Map)

State ILI Surveillance



During week 20 (05/14/17 - 05/20/17), the state ILI rate (2.2%) was comparable to the previous week (2.2%) and to this time last year (2.2%).

Figure 1

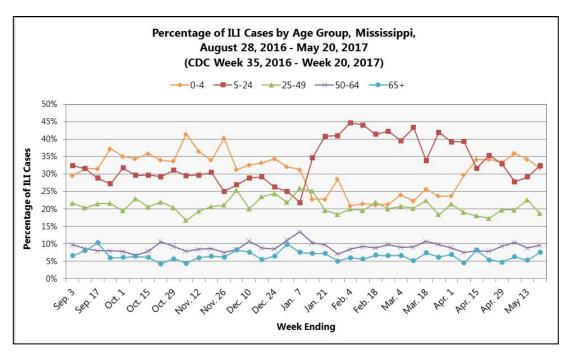
Total number of patients seen by sentinel providers in the last three weeks. | Table 1

2016-2017 Influenza Season						
CDC Week	Week Ending	Number of ILI Reports	Total patients	ILI symptoms	ILI Rate (%)	
20	May 20	131	17239	385	2.2%	
19	May 13	141	18523	412	2.2%	
18	May 6	138	18442	396	2.1%	

During week **20**, **one** district (8) had a slight increase in ILI activity, while **one** district (5) had a slight decrease. **Seven** districts (1, 2, 3, 4, 6, 7, and 9) remained about the same. Information is provisional only and may change depending on additional reporting from sentinel providers. | **Table 2**



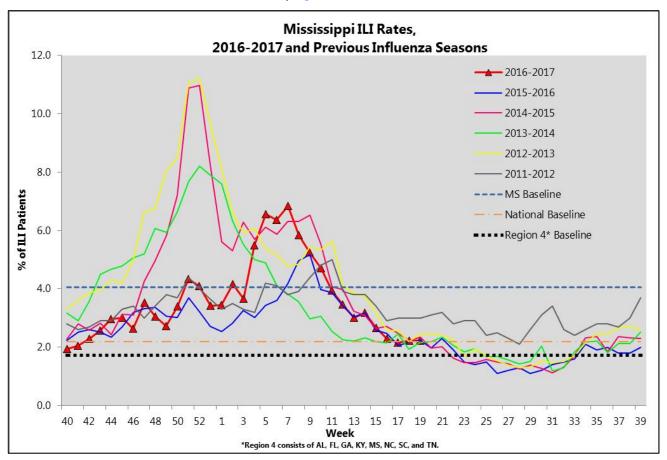
MSDH District ILI Rates (%) 2016-2017					
District	Week 19	Week 20			
State	2.2	2.2			
I	2.3	2.6			
II	1.0	0.5			
III	0.5	0.2			
IV	1.5	1.4			
V	2.5	1.8			
VI	3.9	4.0			
VII	3.1	3.3			
VIII	1.4	2.1			
IX	2.5	2.3			



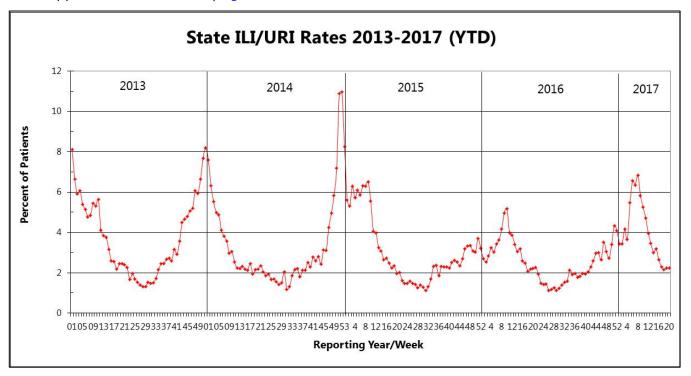
Overall, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24 years** age groups. This trend continued during week **20**.

Figure 2

The 2016-17 state ILI rate was **above** the Region 4 baseline, **comparable** to the national baseline, but was **below** the state baseline, for week **20**. | Figure 3

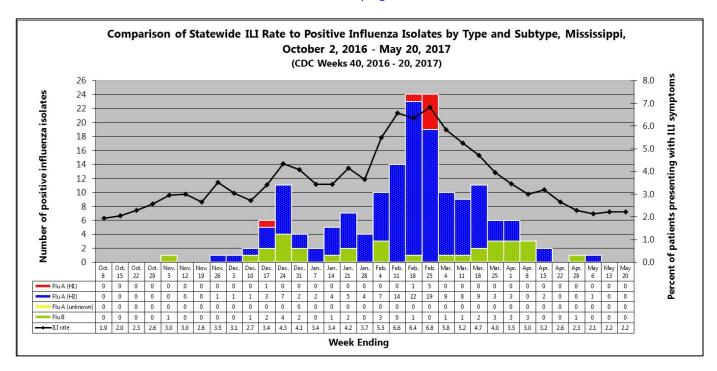


Mississippi ILI Rates 2013-2017 | Figure 4



Flu Testing Reports

From week **40** (week ending Oct. 8th) through week **20** (week ending May 20th), **165** laboratory confirmed influenza samples were identified by the MSDH Public Health Laboratory. One hundred twenty-seven (77%) samples were identified as influenza A (H3), 31 (19%) 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 (4), 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), Lamar (1), Lauderdale (3), Lawrence (1), Leake (2), Lee (4), Leflore (3), Lincoln (14), Lowndes (9), Madison (2), Marion (2), Marshall (6), Monroe (5), Neshoba (7), Newton (5), Oktibbeha (10), Pearl River (2), Perry (1), Pike (5), Pontotoc (3), Quitman (1), Rankin (4), Sharkey (1), Simpson (2), Tallahatchie (3), Tate (2), Tippah (4), Warren (2), Washington (4), Webster (2), and Winston (5).

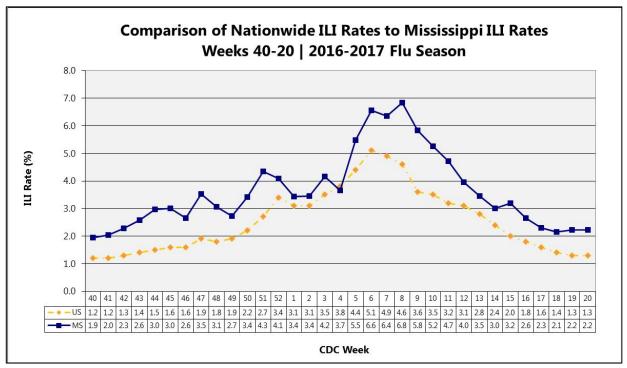
National and Mississippi Pediatric Mortality Surveillance

Nationally, **three** influenza-associated pediatric deaths were reported to CDC during week **20**. Two deaths were associated with an influenza A (H3) virus and occurred during weeks 51 and 16 (weeks ending December 24th and April 22nd, respectively). One death was associated with an influenza B virus and occurred during week 18 (week ending May 6th). **95** influenza-associated pediatric deaths have been reported during the 2016-2017 season.

Mississippi had **two** influenza-associated pediatric deaths reported during 2016-2017 influenza season. For additional information on influenza-associated pediatric deaths, please refer to the <u>CDC's FluView</u>.

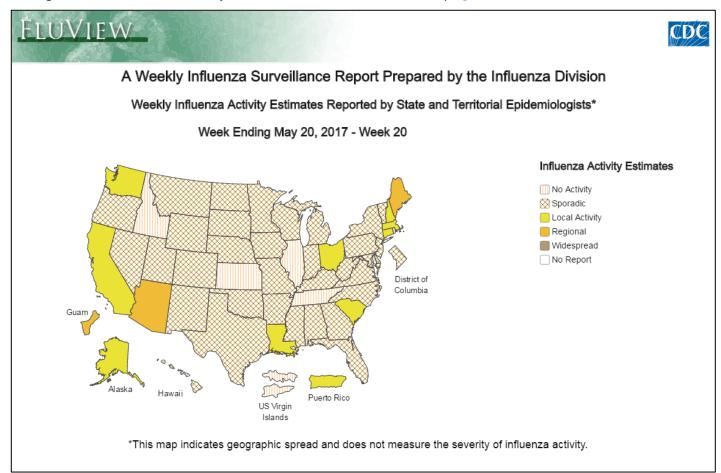
National ILI Surveillance

For week **20**, the MS ILI rate (2.2%) was **above** the national ILI rate (1.3%), but continued to follow national trends. | Figure 6



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

During week **20**, influenza activity **decreased** in the United States. ¹ | 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 "Sporadic" for the influenza activity during week 20. | 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

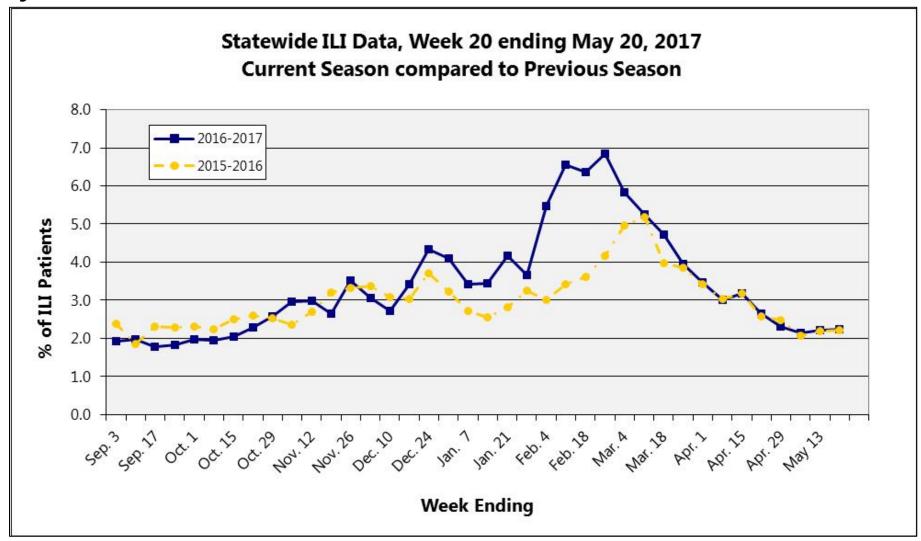


Figure 2

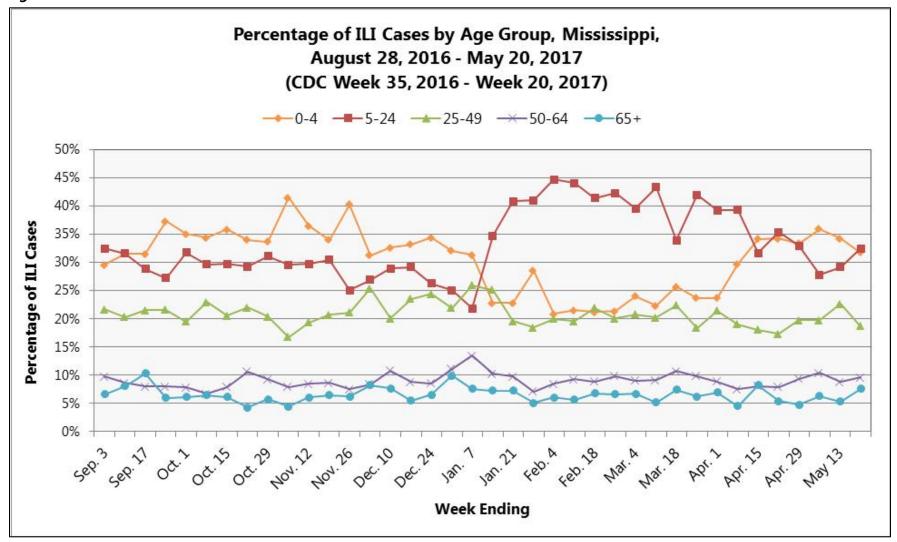


Figure 3

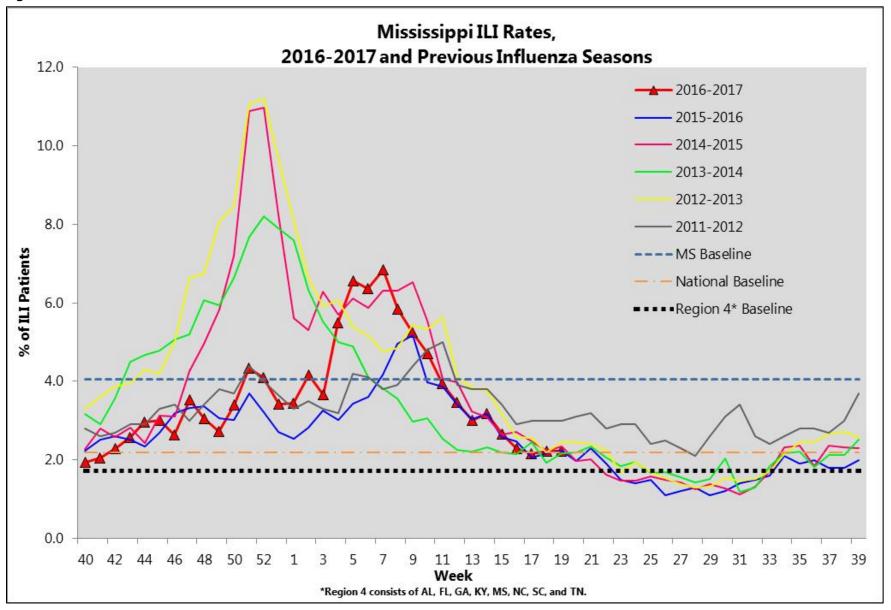


Figure 4

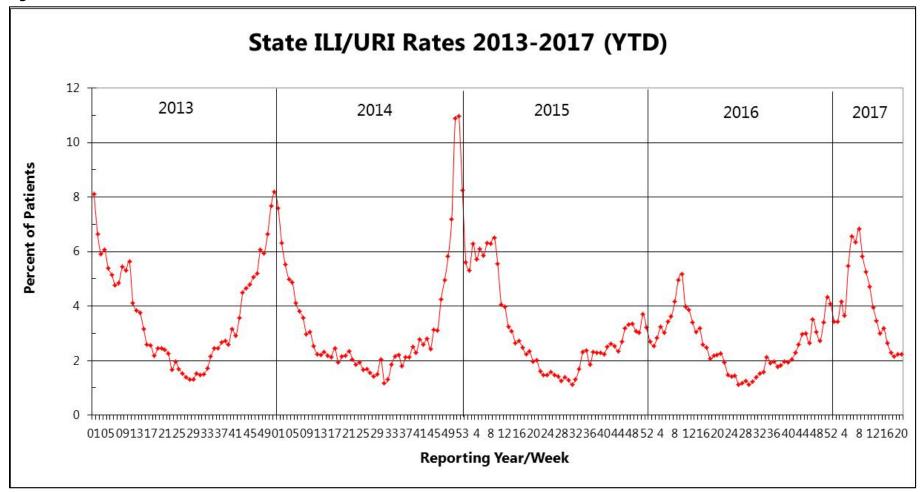


Figure 5

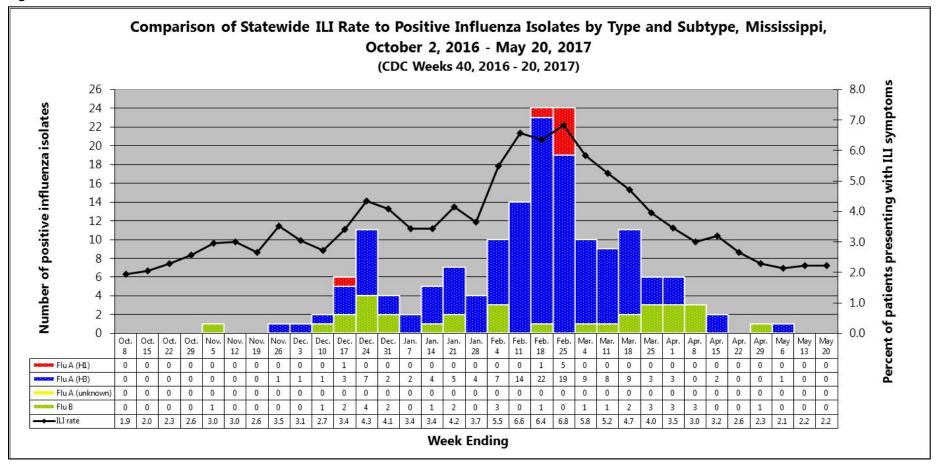


Figure 6

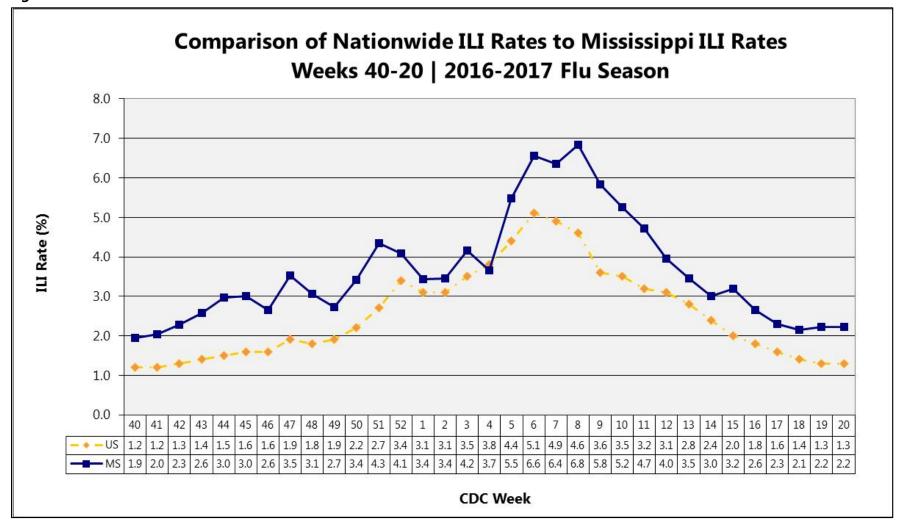


Figure 7

