2016-2017 Influenza Report

Week 15

April 9 – April 15, 2017

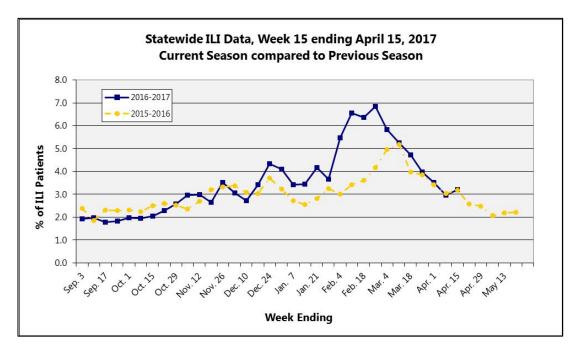
About our flu activity reporting

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 15 (04/09/17 - 04/15/17), the state ILI rate (3.2%) was comparable to the previous week (3.0%), and to this time last year (3.2%).

| Figure 1

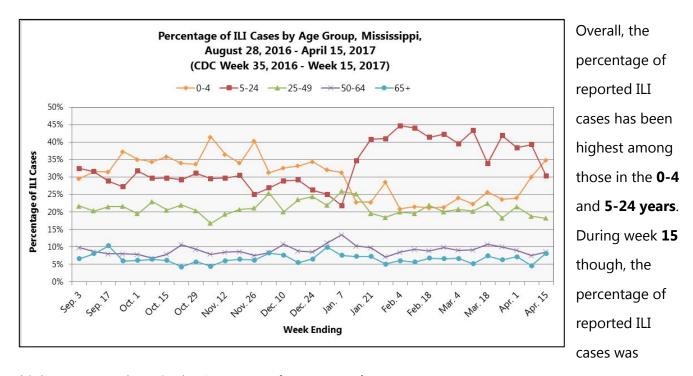
Total number of patients seen by sentinel providers in the last three weeks. | Table 1

| 2016-2017 Influenza Season | | | | | | |
|----------------------------|----------------|--------------------------|----------------|--------------|--------------|--|
| CDC Week | Week Ending | Number of ILI Reports | Total patients | ILI symptoms | ILI Rate (%) | |
| 15 | Apr. 15 | 132 | 16812 | 540 | 3.2% | |
| 14 | Apr. 08 | 136 | 18554 | 550 | 3.0% | |
| 13 | Apr. 01 | 135 | 18338 | 643 | 3.5% | |

During week **15**, **one** district (5) had a slight increase in ILI activity, while **two** districts (1 and 3) had a slight decrease. **Five** districts (2, 6, 7, 8, and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**

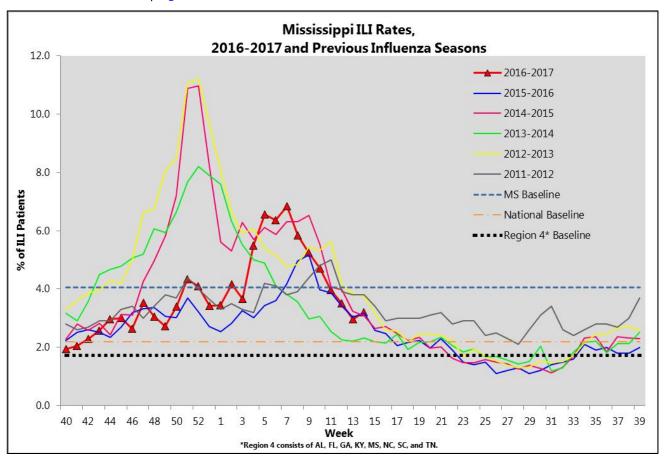


| MSDH District ILI Rates (%) 2016-2017 | | | | | |
|--|---------|-------------------|--|--|--|
| District | Week 14 | Week 15 | | | |
| State | 3.0 | 3.2 | | | |
| I | 3.5 | 2.9 | | | |
| II | 1.9 | 2.1 | | | |
| III | 1.6 | 0.7 | | | |
| IV | 1.4 | No data available | | | |
| ٧ | 1.9 | 2.6 | | | |
| VI | 4.0 | 4.1 | | | |
| VII | 3.9 | 4.0 | | | |
| VIII | 2.5 | 2.5 | | | |
| IX | 4.0 | 3.9 | | | |

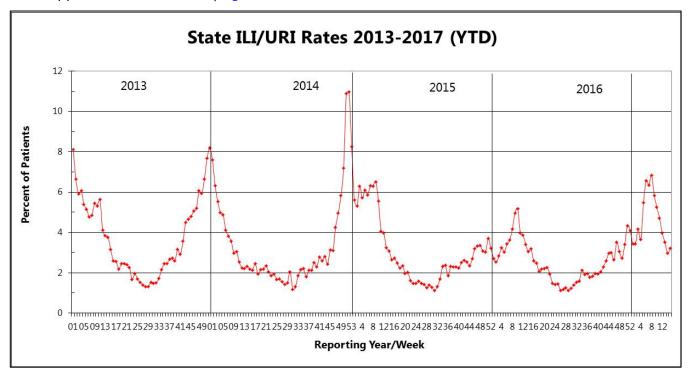


highest among those in the **0-4 years** of age group. | Figure 2

The 2016-17 state ILI rate was **above** the national and Region 4 baselines, but was **below** the state baseline, for week **15**. | Figure 3

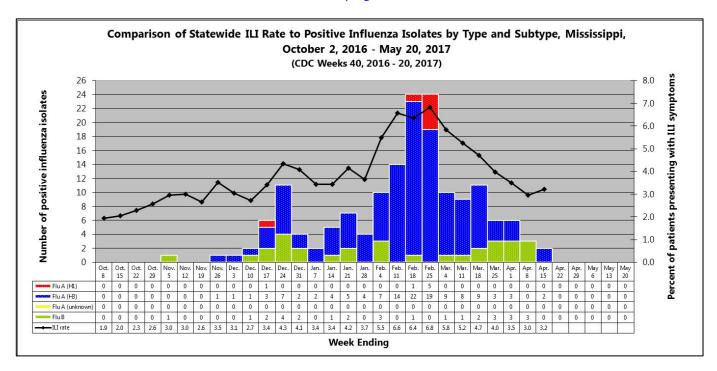


Mississippi ILI Rates 2013-2017 | Figure 4



Flu Testing Reports

From week **40** (week ending Oct. 8th) through week **15** (week ending April 15th), **163** laboratory confirmed influenza samples were identified by the MSDH Public Health Laboratory. One hundred twenty-six (77%) samples were identified as influenza A (H3), 30 (18%) were identified as influenza B, and seven (4%) were identified as influenza A (H1). | Figure 5



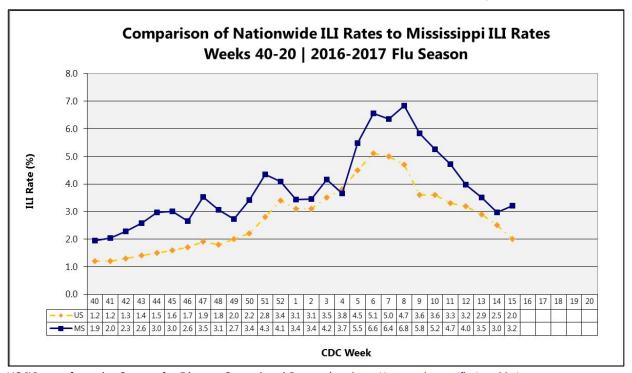
The influenza cases were identified from the following counties: Alcorn (3), Attala (4), Choctaw (2), Coahoma (9), Copiah (4), Covington (2), DeSoto (1), Forrest (3), George (3), Harrison (2), Hinds (5), Holmes (2), Jackson (2), Jones (3), Lafayette (5), Lauderdale (3), Lawrence (1), Leake (2), Lee (4), 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 (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, **five** influenza-associated pediatric deaths were reported to CDC during week **15**. Four deaths were associated with an influenza A (H3) virus and occurred during weeks 10, 14 and 15 (weeks ending March 11th, April 8th, and April 15th, 2017, respectively). One death was associated with an influenza B virus and occurred during week 48 (week ending December 3rd, 2016). **77** influenza-associated pediatric deaths have been reported during the 2016-2017 season.

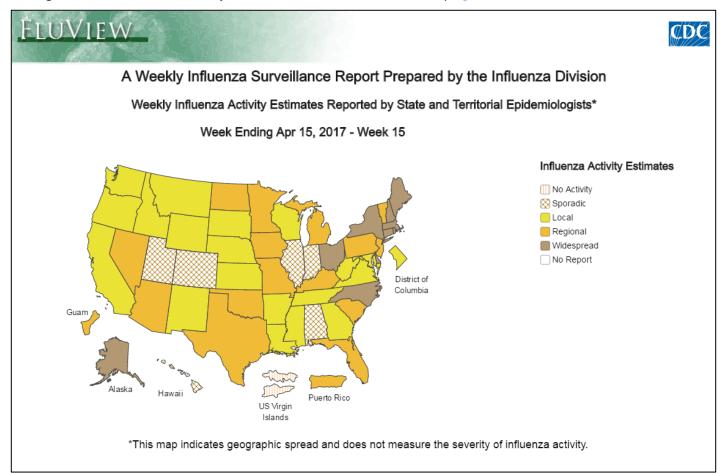
Mississippi has had **two** influenza-associated pediatric deaths reported during this influenza season. For additional information on influenza-associated pediatric deaths, please refer to the <u>CDC's FluView</u>.

For week **15**, the MS ILI rate (3.2%) was **above** the national ILI rate (2.0%). | Figure 6



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

During week **15**, 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 "Local" for the influenza activity during week 15. | 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

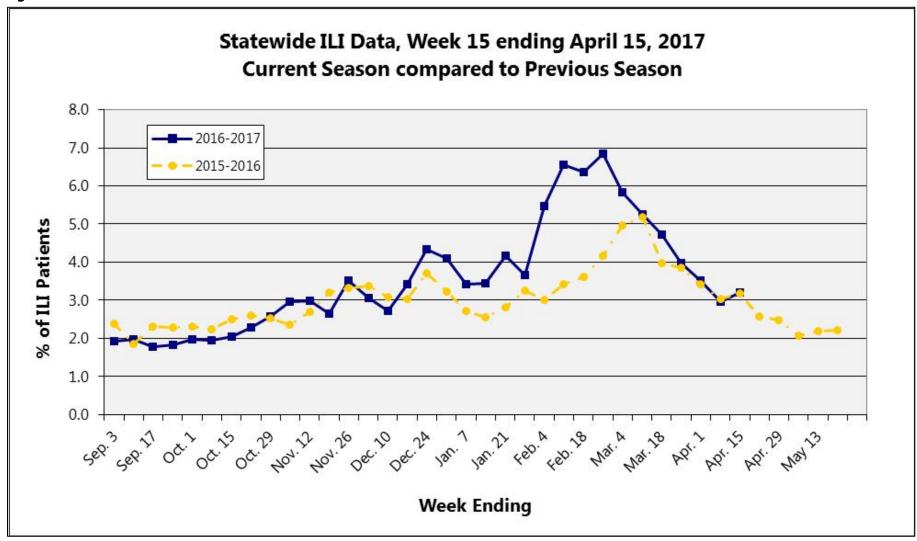


Figure 2

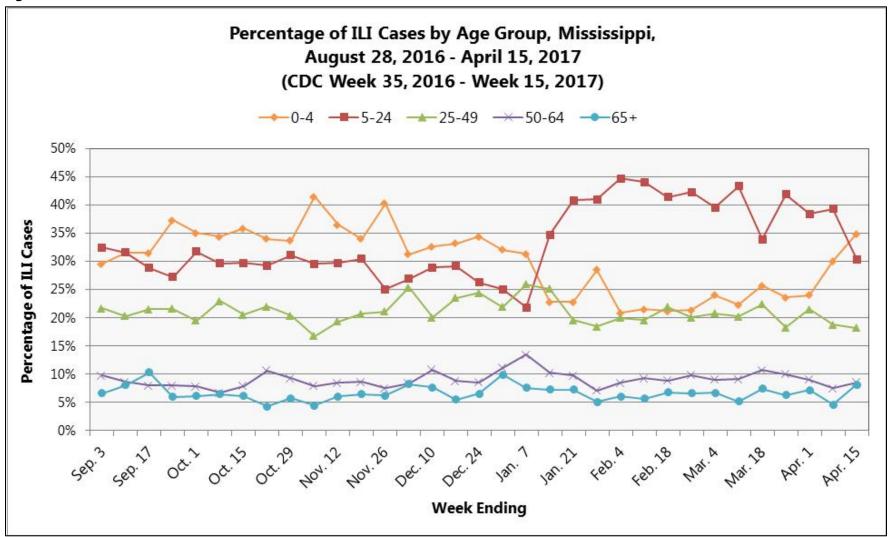


Figure 3

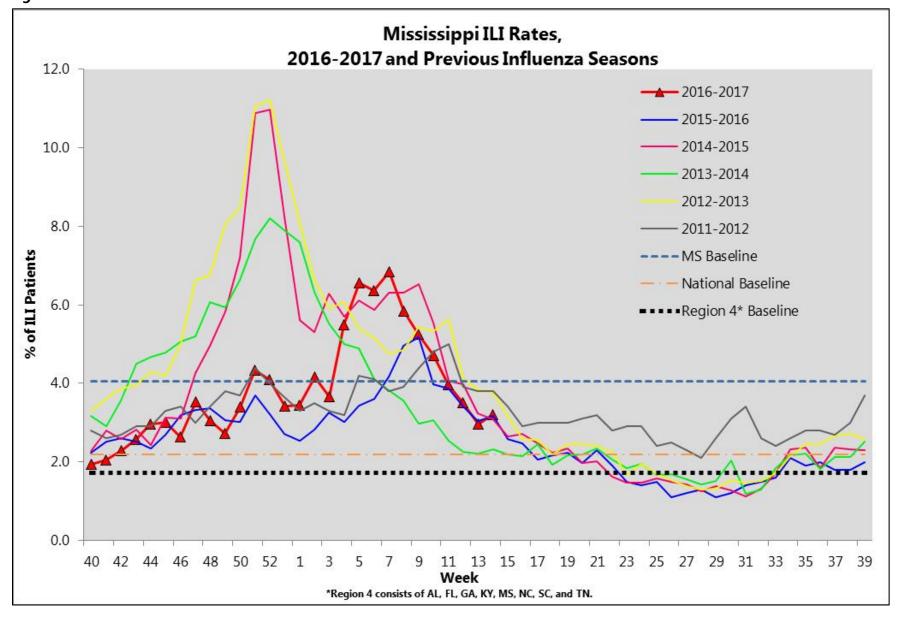


Figure 4

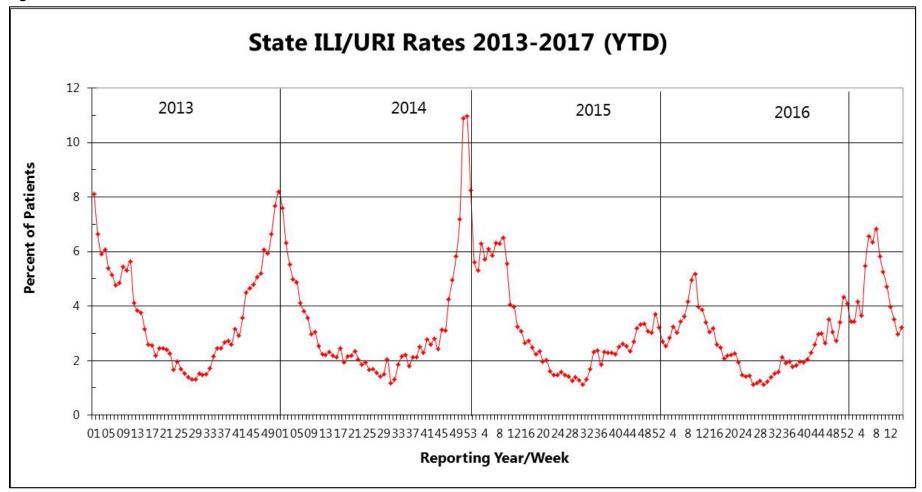


Figure 5

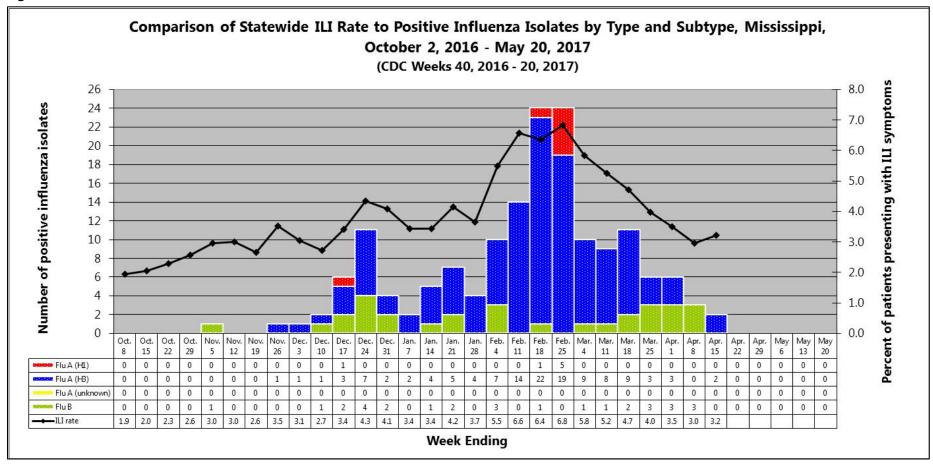


Figure 6

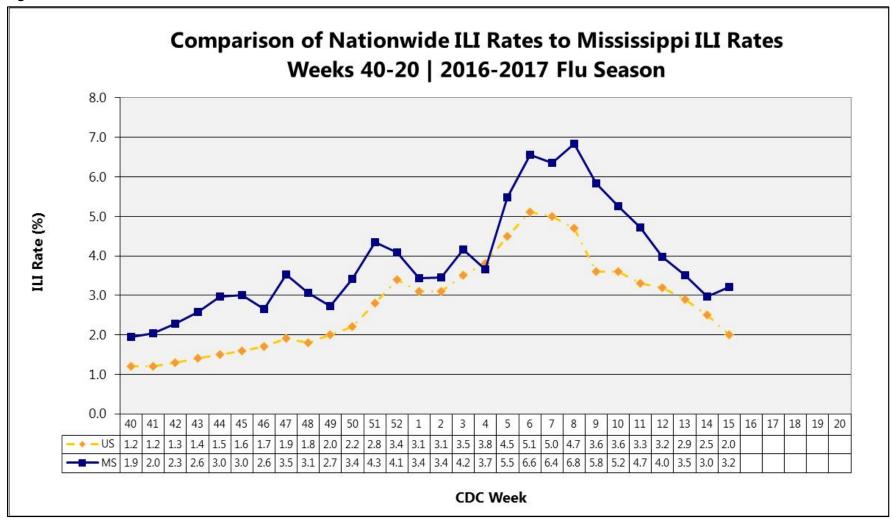


Figure 7

