

# 2018-2019 Influenza Surveillance Report Week 46

Nov. 11 - Nov. 17, 2018

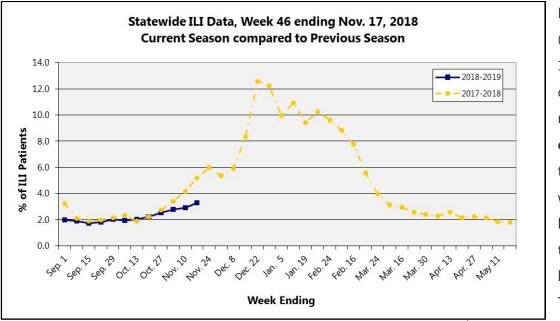
About our flu activity reporting

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 **46** (11/11/18-11/17/18), the overall state ILI rate (**3.3%**) was **comparable** to the previous week (**2.9%**), but was lower than this time last year (**5.2%**). The state ILI has

slowly trended upward since the 2018 – 2019 season began on Sept. 30<sup>th</sup>. | Figure 1

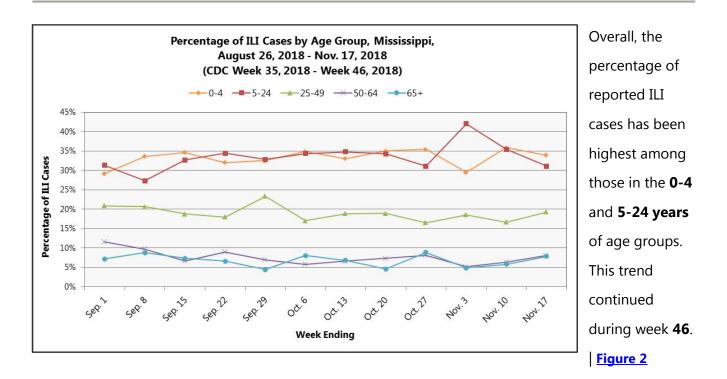
| 2018-2019 Influenza Season |                |  |                |              |              |
|----------------------------|----------------|--|----------------|--------------|--------------|
| CDC Week                   | Week<br>Ending | Number of reports<br>received from<br>Sentinel Providers | Total patients | ILI symptoms | ILI Rate (%) |
| 46                         | Nov. 17        | 161  | 15275          | 499          | 3.3          |
| 45                         | Nov. 10        | 157  | 16192          | 469          | 2.9          |
| 44                         | Nov. 3         | 153  | 15554          | 431          | 2.8          |

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

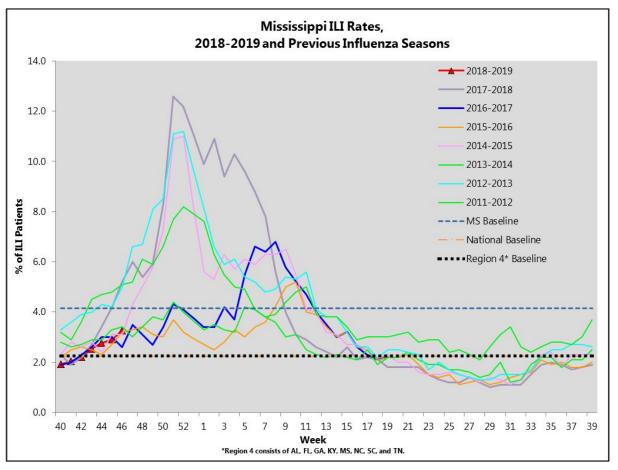
During week **46**, five districts (3, 4, 6, 7, and 9) had an increase in ILI activity, while two districts (1 and 2) had a decrease. The remaining two districts (5 and 8) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2** 

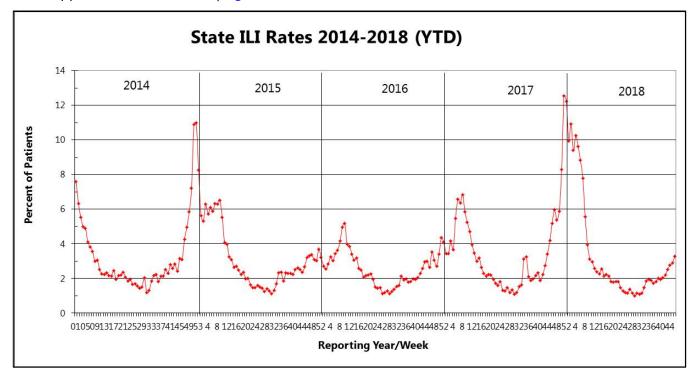


| MSDH District ILI Rates (%)<br>2018-2019 |         |         |  |  |
|--|---------|---------|--|--|
| District                                 | Week 45 | Week 46 |  |  |
| State                                    | 2.9     | 3.3     |  |  |
| Ι  | 6.2     | 2.9     |  |  |
| Π  | 3.0     | 1.5     |  |  |
| III                                      | 2.1     | 3.3     |  |  |
| IV                                       | 2.8     | 8.2     |  |  |
| V  | 2.5     | 2.5     |  |  |
| VI                                       | 2.1     | 3.4     |  |  |
| VII                                      | 3.4     | 3.9     |  |  |
| VIII                                     | 2.2     | 2.5     |  |  |
| IX                                       | 3.2     | 3.8     |  |  |



The 2018-19 state ILI rate was **above** the national and Region 4 baselines, but was **below** the state baseline, for week **46**. | <u>Figure 3</u>

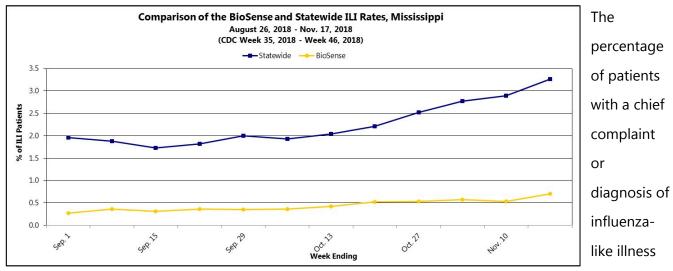




Mississippi ILI Rates 2014-2018 | Figure 4

### Syndromic ILI Surveillance

The Mississippi State Department of Health also collects influenza syndromic surveillance data through the CDC BioSense Platform. This data is comprised of chief complaints and diagnosis codes and is submitted electronically by participating hospitals and clinics throughout the state in near real-time. The BioSense data is an additional tool to monitor influenza activity in Mississippi.



has remained steady thus far in the 2018 – 2019 season, while the statewide ILI rate has slightly increased since week 41. | Figure 5

#### Influenza Outbreaks

Outbreaks are reportable in Mississippi as a Class 1A event and must be reported by telephone within **24 hours** of first knowledge or suspicion to the Mississippi State Department of Health. For more information on reportable diseases and conditions, please refer to the <u>MSDH List of Reportable Diseases and Conditions</u>.

No influenza outbreaks were reported to MSDH during week **46** (week ending November 17<sup>th</sup>).

For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: <u>https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm</u> and <u>https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm</u>, respectively.

Flu Testing Reports

During week **46** (week ending November 17<sup>th</sup>), one laboratory confirmed influenza sample was identified by the MSDH Public Health Laboratory. It was identified as an influenza A, H3.

National and Mississippi Pediatric Mortality Surveillance

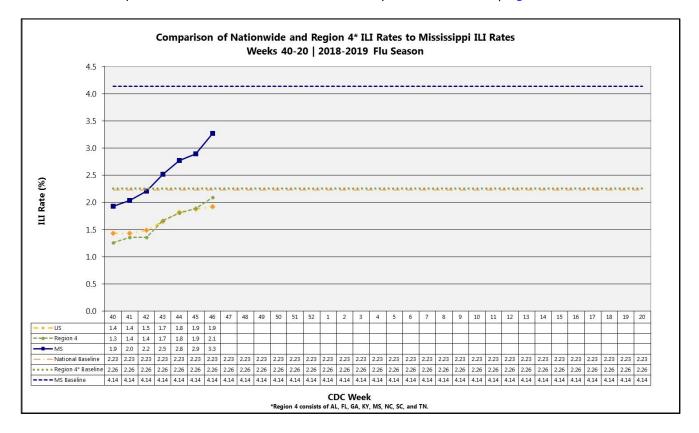
Nationally, **one** influenza-associated pediatric death was reported to CDC during week **46**. This death was associated with an influenza A(H1N1)pdm09 virus and occurred during week 46 (week ending November 17, 2018). **Three** influenza-associated pediatric deaths have been reported to CDC for the 2018-2019 season.

Mississippi has had **no** influenza-associated pediatric deaths reported during this influenza season.

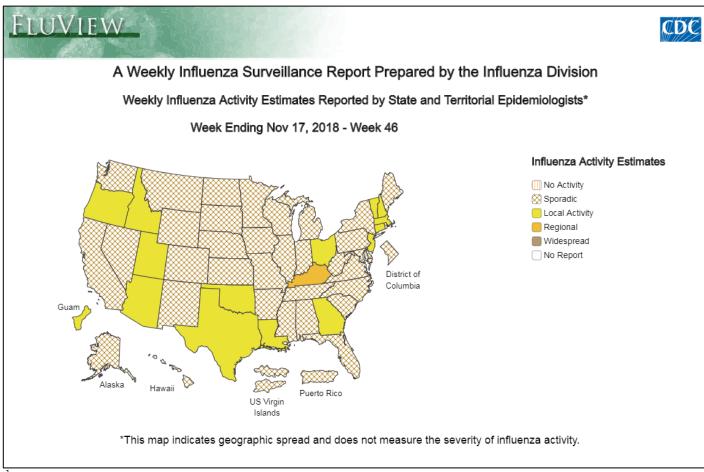
For additional information on influenza-associated pediatric deaths, please refer to the CDC's FluView.

#### National ILI Surveillance

During week **46**, the Mississippi (3.3%), national (1.9%) and Region 4 (2.1%) ILI rates remained about the same as the previous week and were below their respective baselines. | <u>Figure 6</u>



During week **46**, influenza activity **remained low** in the United States, although small increases in activity were reported.<sup>1</sup> | <u>Figure 7</u>



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

| Level of Flu<br>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-<br>confirmed outbreak in a single institution in the state; ILI activity is not increased.  |  |
| Local                    | Increased ILI within a single region <b>AND</b> 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 <b>AND</b> 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 <b>AND</b> 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 <b>AND</b> recent lab confirmed influenza in the affected regions.  |  |

#### Mississippi reported "Sporadic" for the influenza activity during week 46. | Table 3

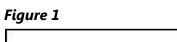
## 2018 – 2019 Influenza Season | Week 46 Influenza Surveillance Report| Nov. 11 – Nov. 17, 2018

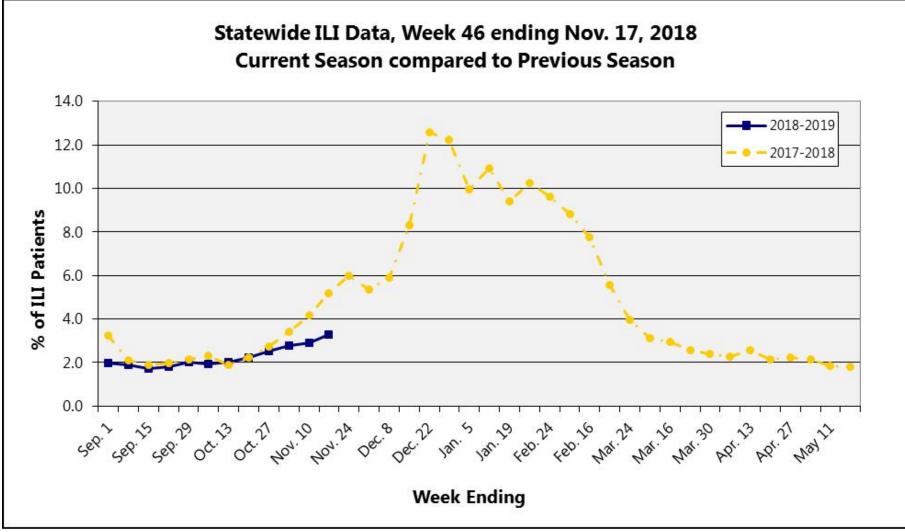
| Widespread | Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the re |  |
|------------|--|--|
|            | <b>AND</b> recent (within the past 3 weeks) lab confirmed influenza in the state.              |  |

Additional influenza information:

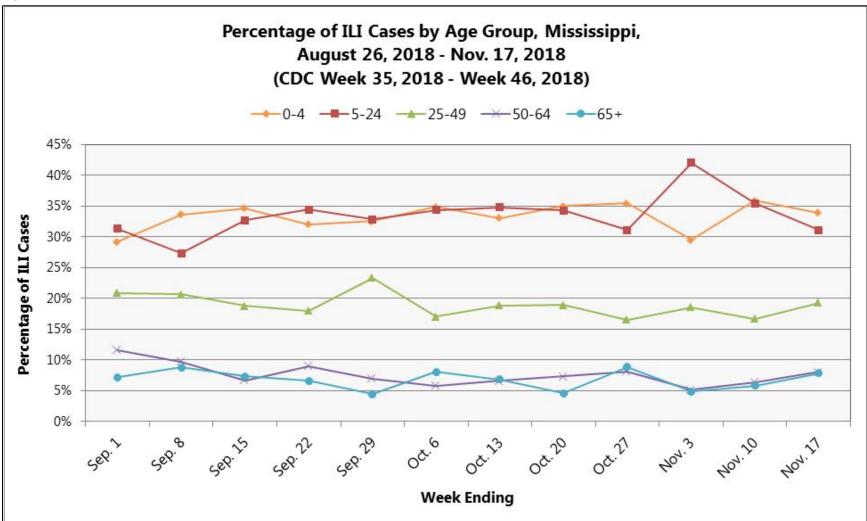
| Centers for Disease Control and<br>Prevention         | http://cdc.gov/flu/                                      |
|---|--|
| Centers for Disease Control and<br>Prevention FluView | http://www.cdc.gov/flu/weekly/                           |
| MSDH Flu and Pneumonia                                |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

# Appendix

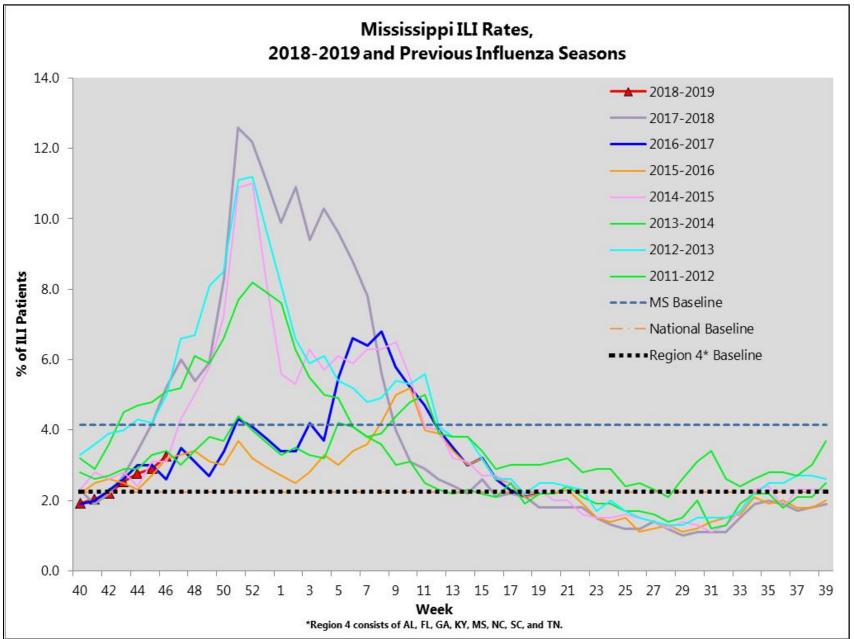












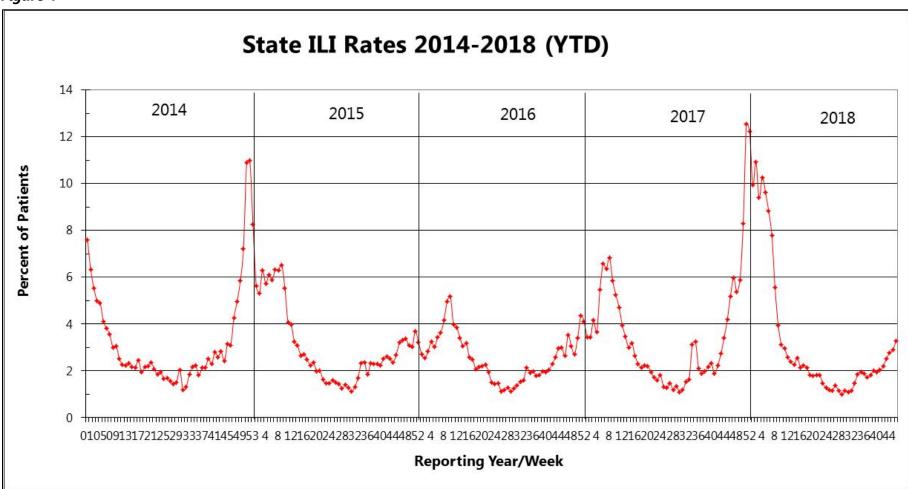
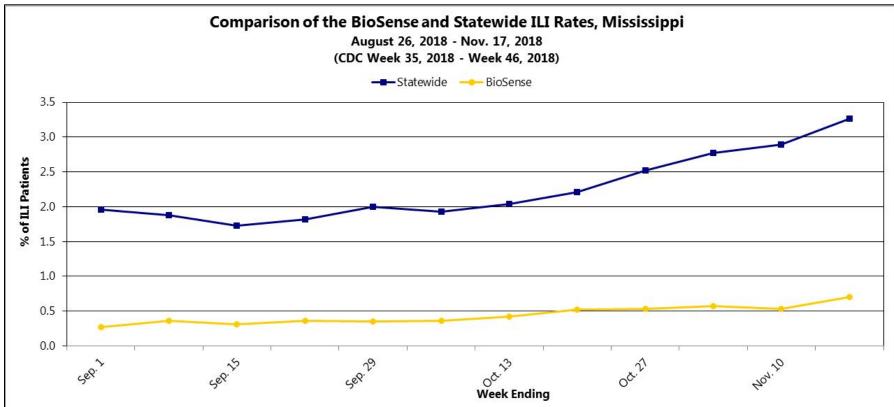
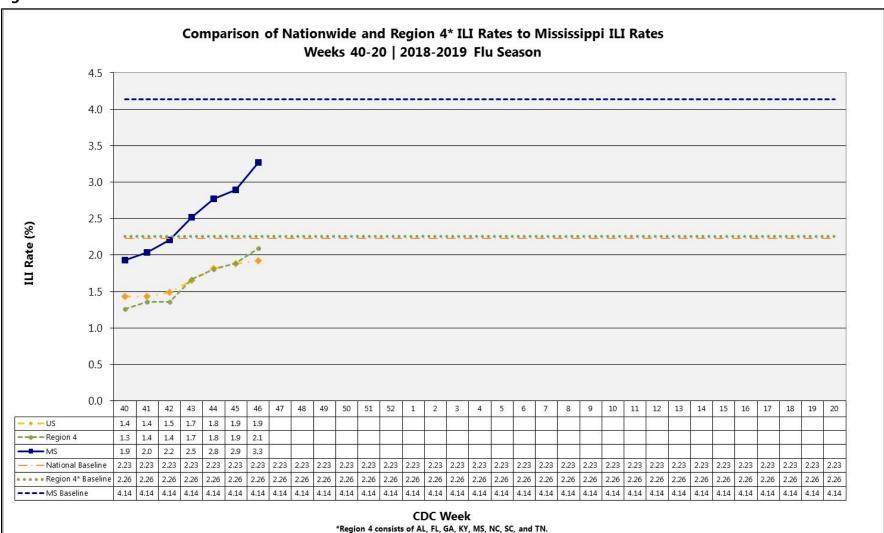


Figure 4







### Figure 7

