2015-2016 Influenza Report

Week 12

March 20 – March 26, 2016

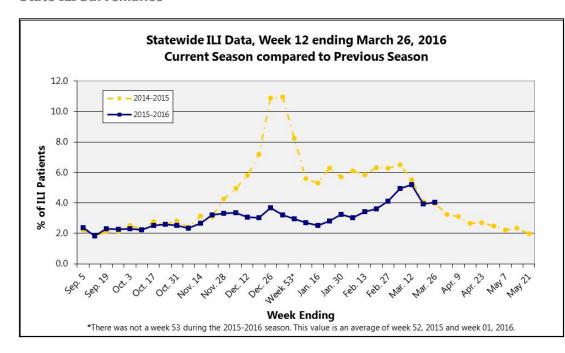
About our flu activity reporting

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.*

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State ILI Surveillance



During week **12** (03/20/16-03/26/16), the overall state ILI rate (**4.1%**) was **comparable** to the previous week (**3.9%**) and to this time last year (**4.0%**).

Figure 1

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

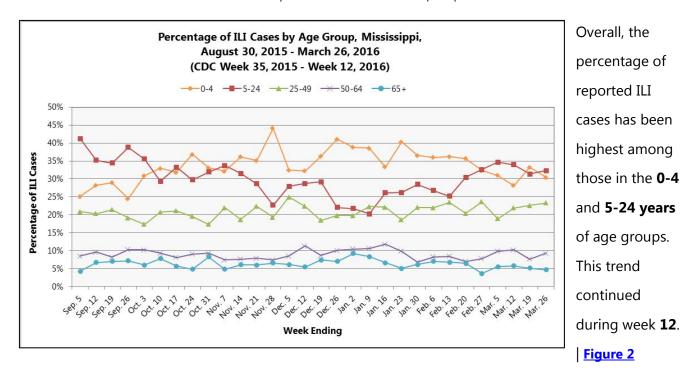
| 2015-2016 Influenza Season | | | | | | |
|----------------------------|----------------|--------------------------|----------------|--------------|--------------|--|
| CDC Week | Week Ending | Number of ILI Reports | Total patients | ILI symptoms | ILI Rate (%) | |
| 12 | Mar. 26 | 146 | 18079 | 733 | 4.1% | |
| 11 | Mar. 19 | 155 | 20188 | 797 | 3.9% | |
| 10 | Mar. 12 | 148 | 20969 | 1090 | 5.2% | |

During week 12, one district (6) had a slight increase in ILI activity, while two districts (2 and 3) had a

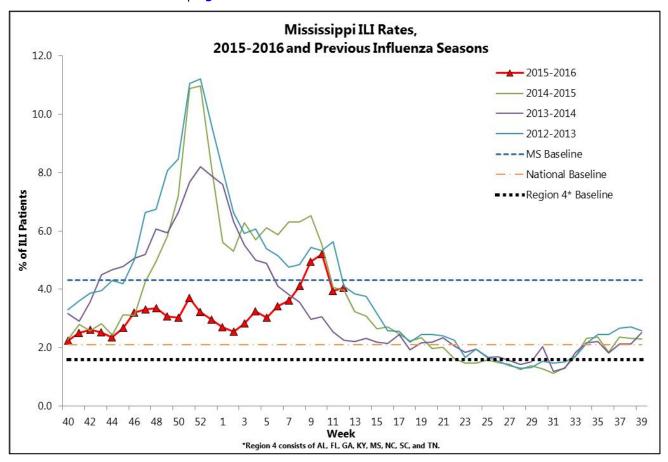
decrease. **Six** districts (1, 4, 5, 7, 8, and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



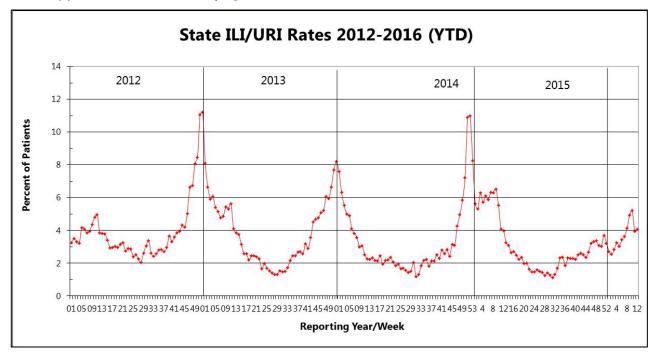
| MSDH District ILI Rates (%) 2015-2016 | | | | | |
|---------------------------------------|---------|---------|--|--|--|
| District | Week 11 | Week 12 | | | |
| State | 3.9 | 4.1 | | | |
| I | 4.0 | 4.1 | | | |
| II | 8.8 | 7.3 | | | |
| III | 9.7 | 5.5 | | | |
| IV | 4.2 | 4.3 | | | |
| V | 2.9 | 2.8 | | | |
| VI | 4.1 | 4.9 | | | |
| VII | 3.3 | 3.2 | | | |
| VIII | 3.4 | 3.7 | | | |
| IX | 4.1 | 4.5 | | | |



The 2015-16 state ILI rate was **above** the national and Region 4 baselines, but was **comparable** to the state baseline, for week **12**. | Figure 3



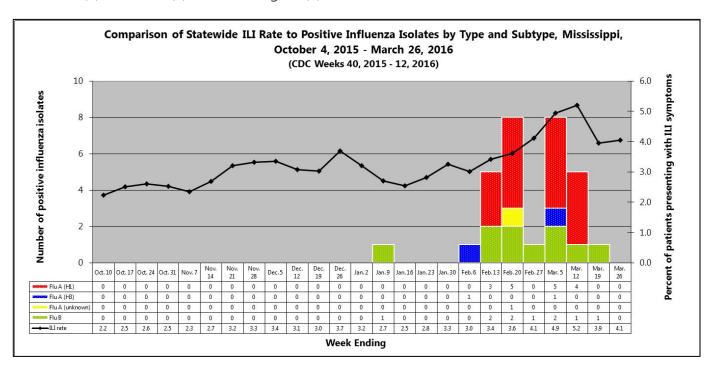
Mississippi ILI Rates 2012-2016 | Figure 4



Flu Testing Reports

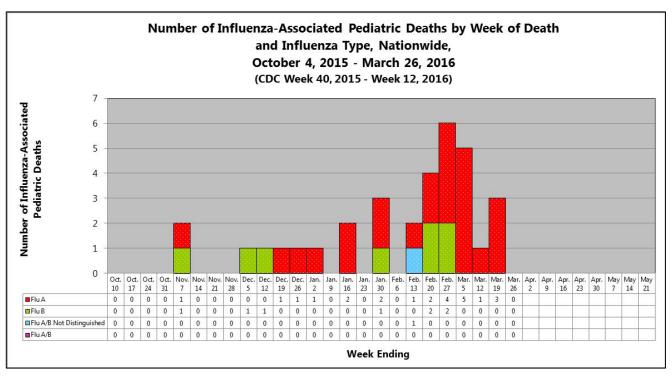
From week **40** (week ending October 10th) through week **12** (week ending March 26th), 30 positive influenza samples were identified by MSDH. Seventeen (57%) samples were identified as influenza A (H1), two (7%) as influenza A (H3), one as influenza A (unknown) (3%), and ten (33%) were identified as influenza B. | Figure 5

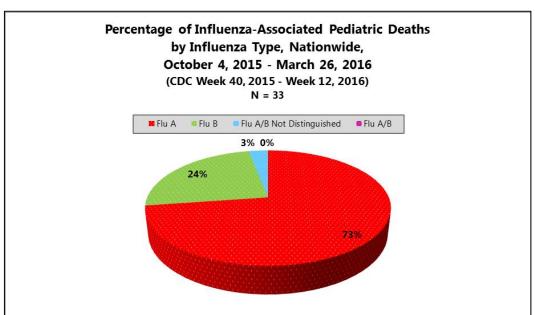
The influenza cases were identified from the following counties: Chickasaw (1), Covington (1), Forrest (1), Humphreys (3), Jones (2), Lafayette (6), Lawrence (1), Leake (2), Lee (1), Marshall (5), Monroe (2), Oktibbeha (1), Pontotoc (3), and Washington (1).



National and Mississippi Pediatric Mortality Surveillance

Nationally, **three** influenza-associated pediatric deaths were reported to CDC during week **12**. One death was associated with an influenza A (H1N1)pdm09 virus and occurred during week 11 (week ending March 19th) and one death was associated with an influenza A virus for which no subtyping was performed and occurred during week 11. One death was associated with an influenza B virus and occurred during week 08 (week ending February 27th). **Thirty-three** influenza-associated pediatric deaths have been reported during the 2015-2016 season. | **Figure 6**





Of the **33** influenza-associated pediatric deaths reported nationally during the 2015-2016 season, 24 (73%) have been attributed to influenza A viruses, 8 (24%) to influenza B viruses, and one (3%) to an influenza A/B virus.

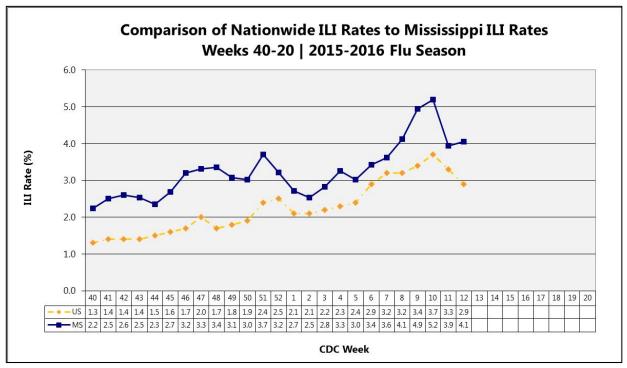
| Figure 7

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>.

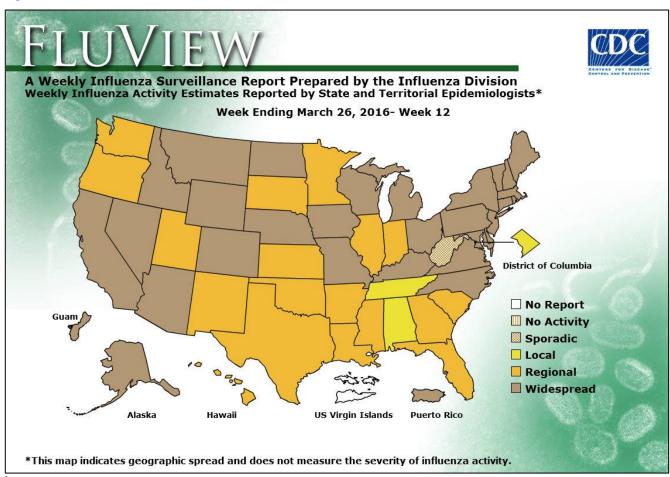
National ILI Surveillance

For week **12**, the MS ILI rate (4.1%) was **above** the national ILI rate (2.9%). | Figure 8



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

During week **12**, influenza activity **decreased slightly**, but **remained elevated** in the United States.¹ | 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 "Regional" for the influenza activity during week 12. | 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

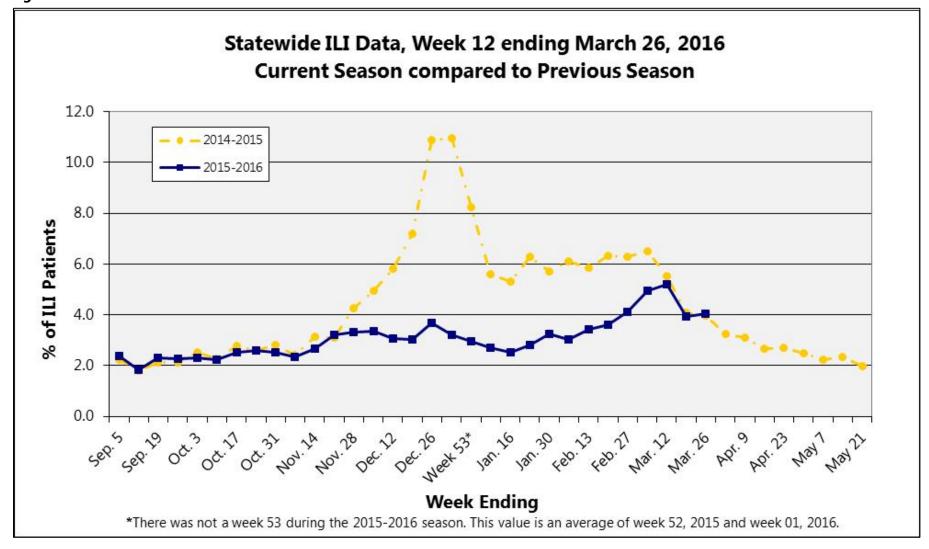


Figure 2

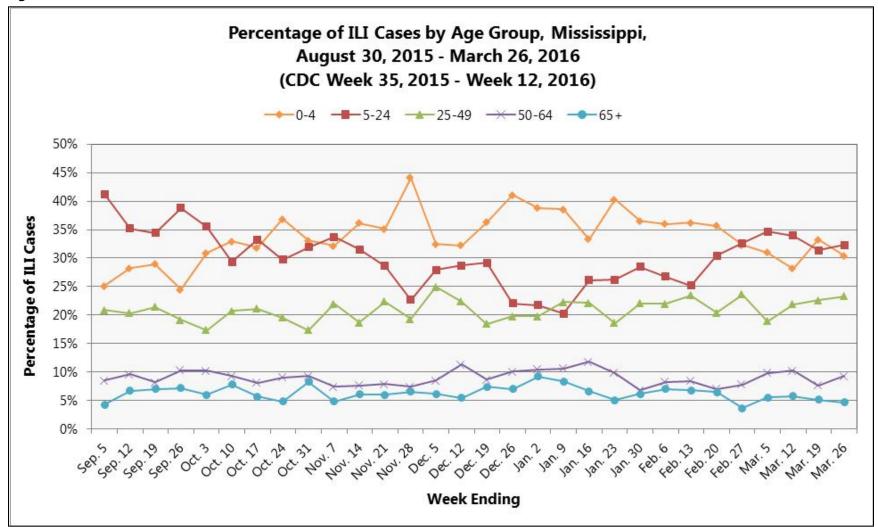


Figure 3

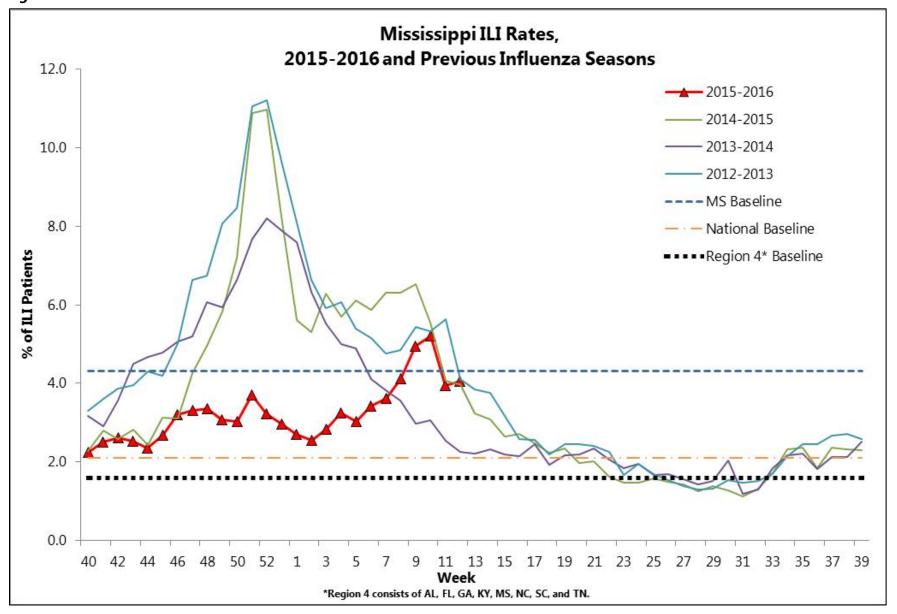


Figure 4

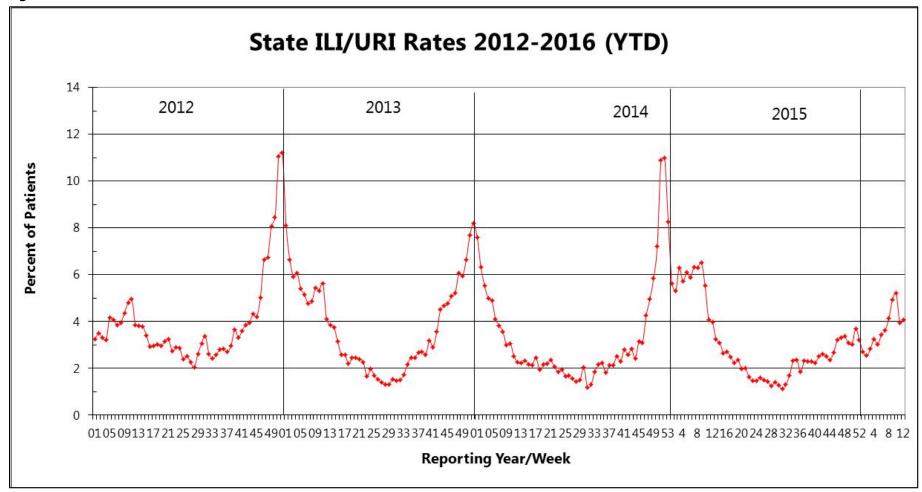


Figure 5

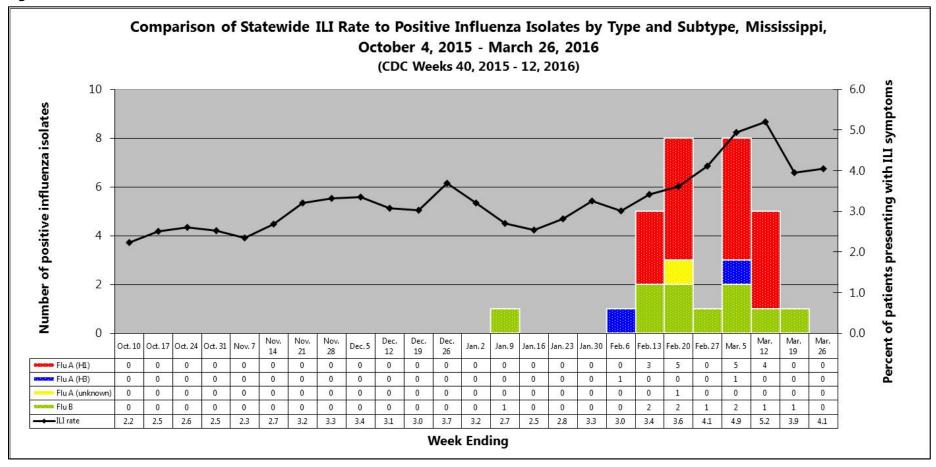


Figure 6

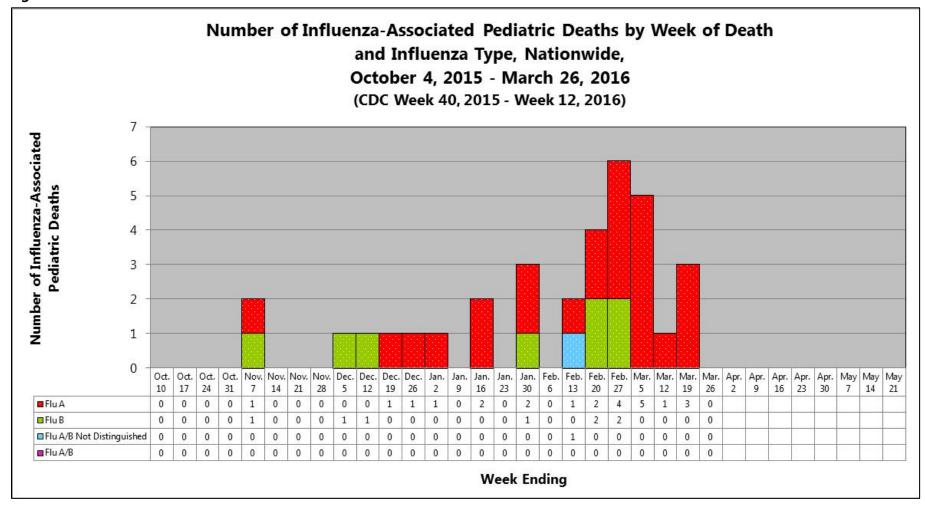


Figure 7

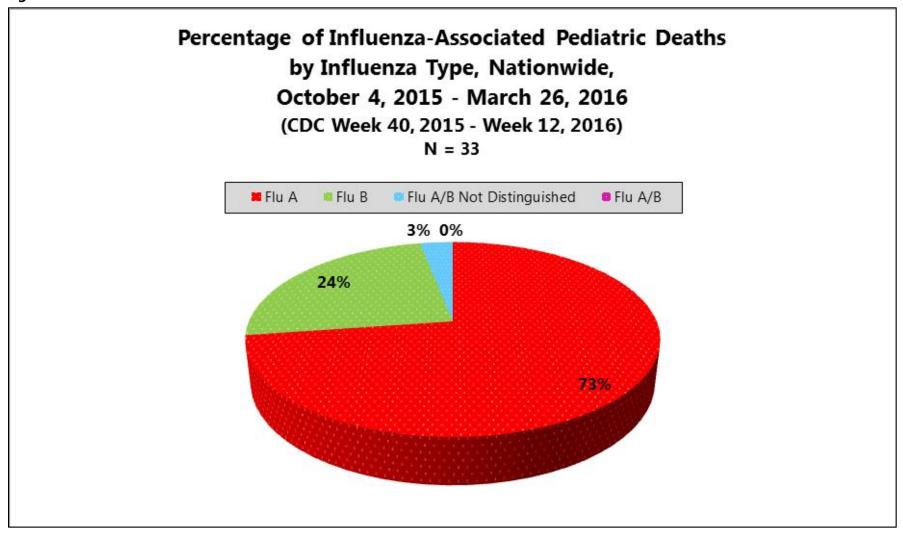


Figure 8

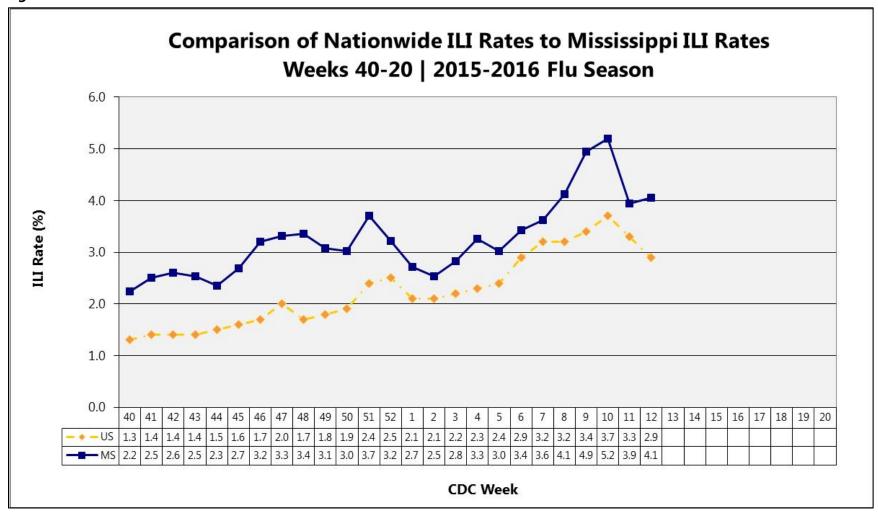


Figure 9

