



# 2018-2019 Influenza Surveillance Report Week 51

Dec. 16 – Dec. 22, 2018

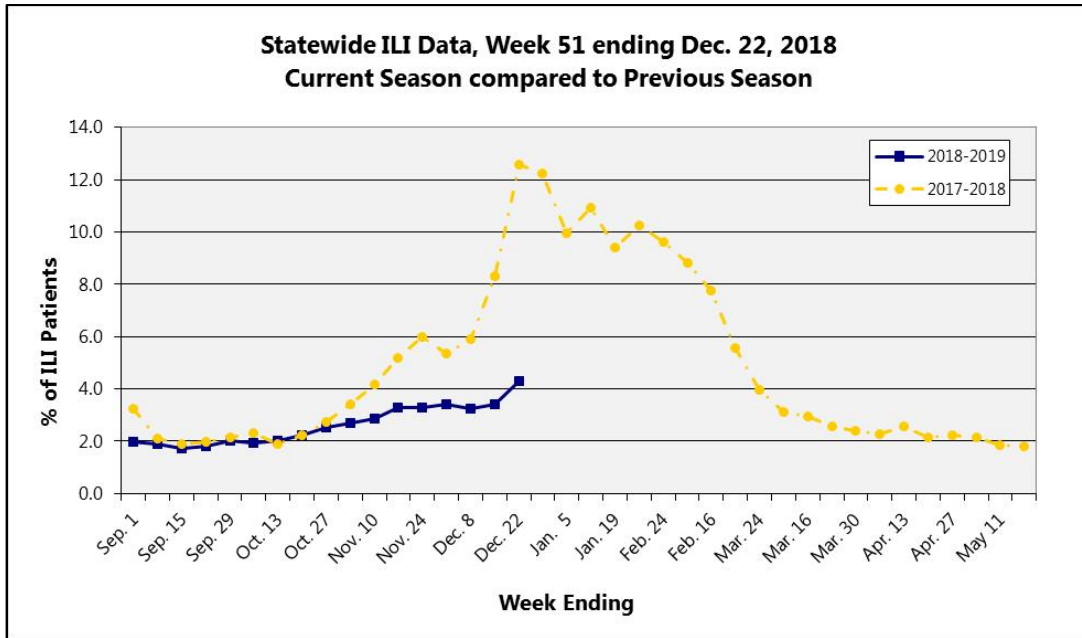
## About our flu activity reporting

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



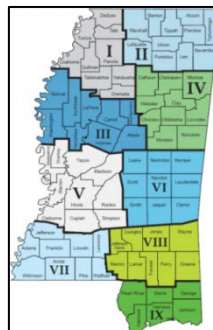
During week **51** (12/16/18-12/22/18), the overall state ILI rate (**4.3%**) **increased** from the previous week (**3.4%**), but was lower than this time last year (**12.6%**). | [Figure 1](#)

[1](#)

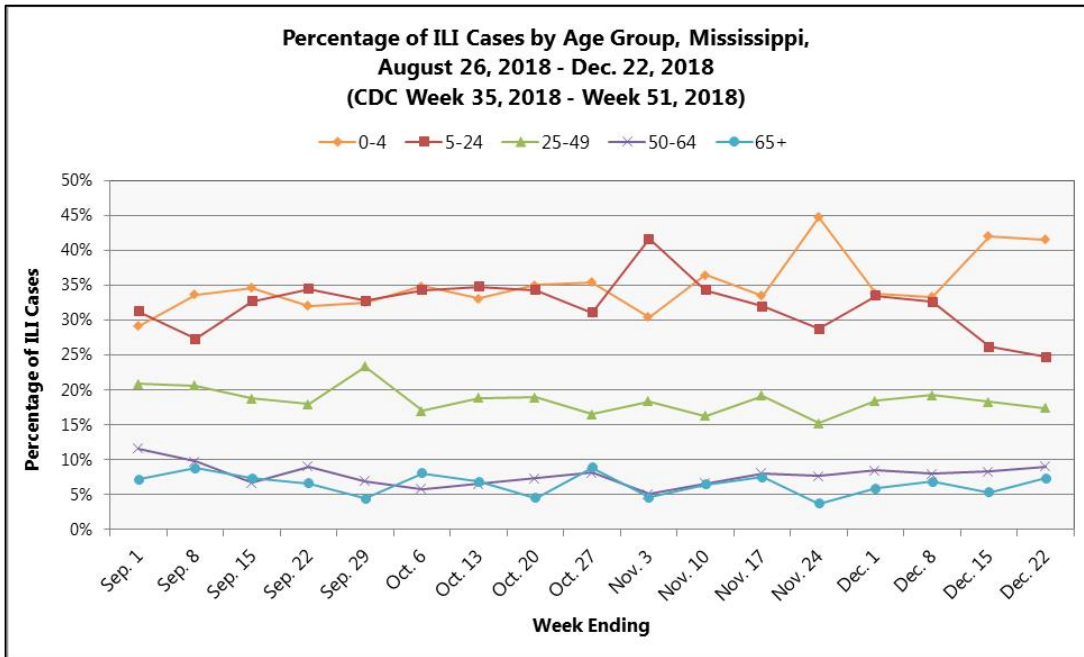
Total number of patients treated by sentinel providers in the last three weeks. | **Table 1**

2018-2019 Influenza Season					
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)
<b>51</b>	<b>Dec. 22</b>	<b>162</b>	<b>16487</b>	<b>708</b>	<b>4.3</b>
50	Dec. 15	163	17052	581	3.4
49	Dec. 8	163	16759	540	3.2

During week **51**, the majority of the districts (3, 4, 5, 6, 7, and 8) had an increase in ILI activity, while only three districts (1, 2, and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



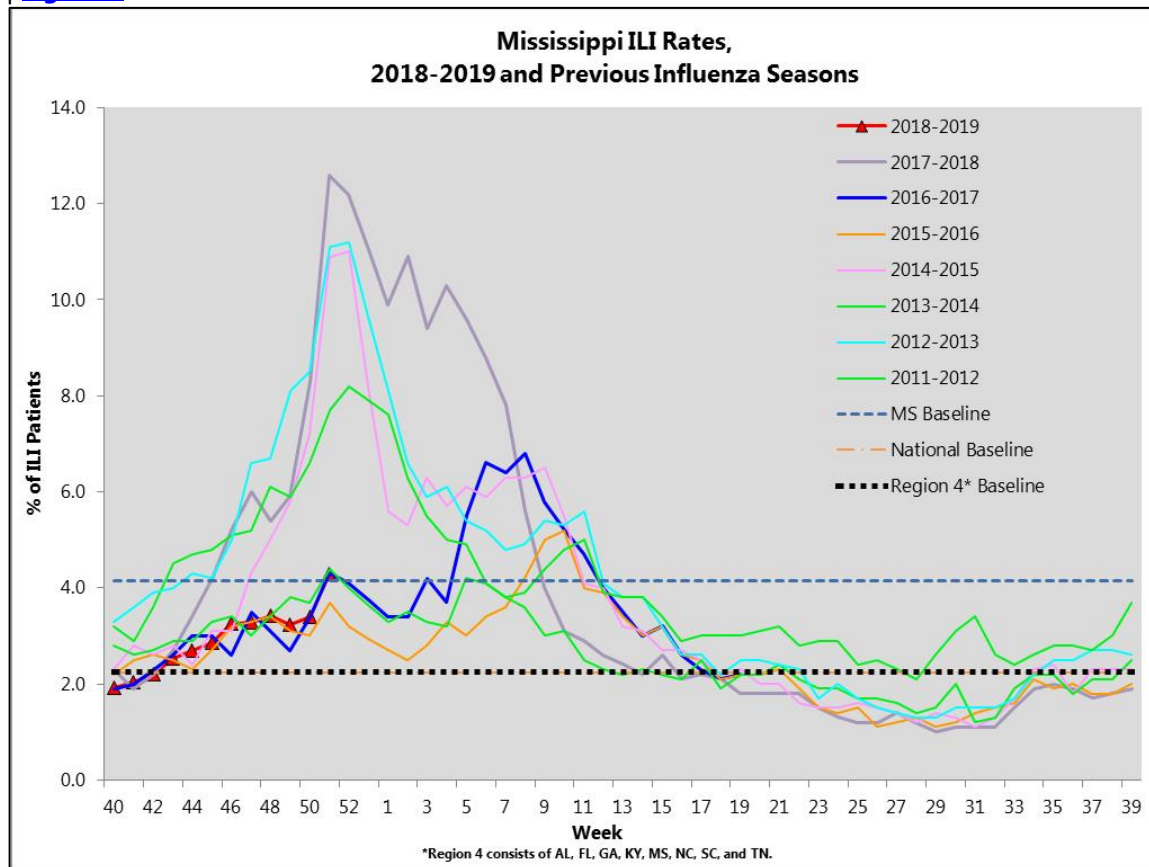
MSDH District ILI Rates (%) 2018-2019		
District	Week 50	Week 51
State	3.4	4.3
I	3.1	3.4
II	2.2	2.2
III	2.7	4.4
IV	3.9	7.9
V	3.5	4.4
VI	3.2	4.2
VII	4.3	5.6
VIII	2.2	3.3
IX	3.8	4.0



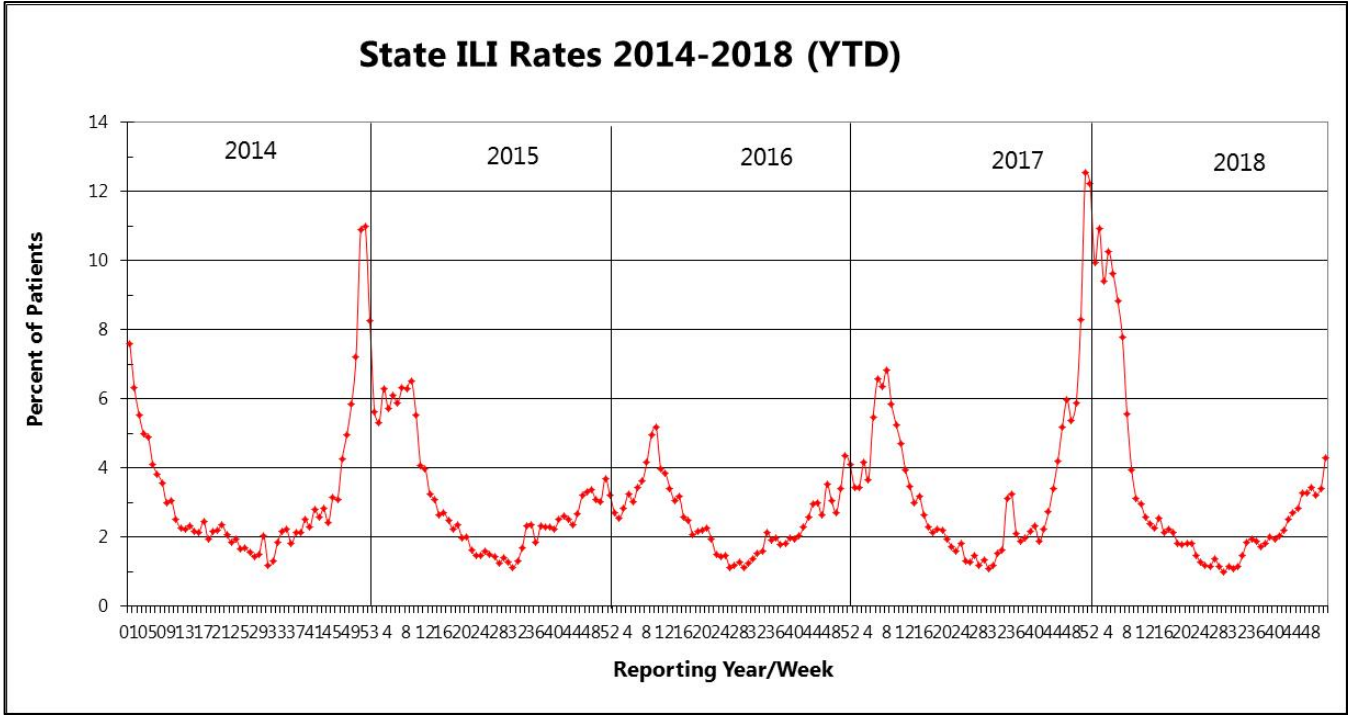
Overall, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24 years** of age groups. This trend continued into week **51**; however, the

percentage of ILI cases in all of the age groups remained constant when compared to the previous week. | [Figure 2](#)

The 2018-19 state ILI rate was **above** the national, Region 4, and Mississippi baselines during week **51**. | [Figure 3](#)

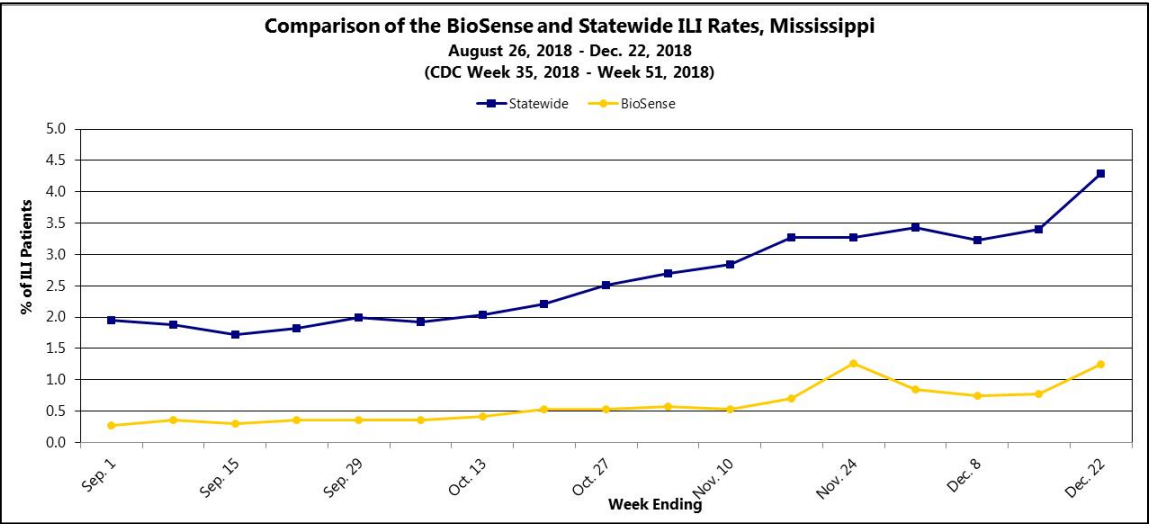


Mississippi ILI Rates 2014-2018 | [Figure 4](#)



### 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.



The percentage of patients with a chief complaint or diagnosis of influenza-like illness

during week **51** increased from the previous week, as did the statewide ILI rate. | [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 [MSDH List of Reportable Diseases and Conditions](#).

One influenza outbreak was reported to MSDH during week **51** (week ending December 22<sup>nd</sup>). MSDH investigates all reported outbreaks; however, complete information on this outbreak was not available at the time of this report.

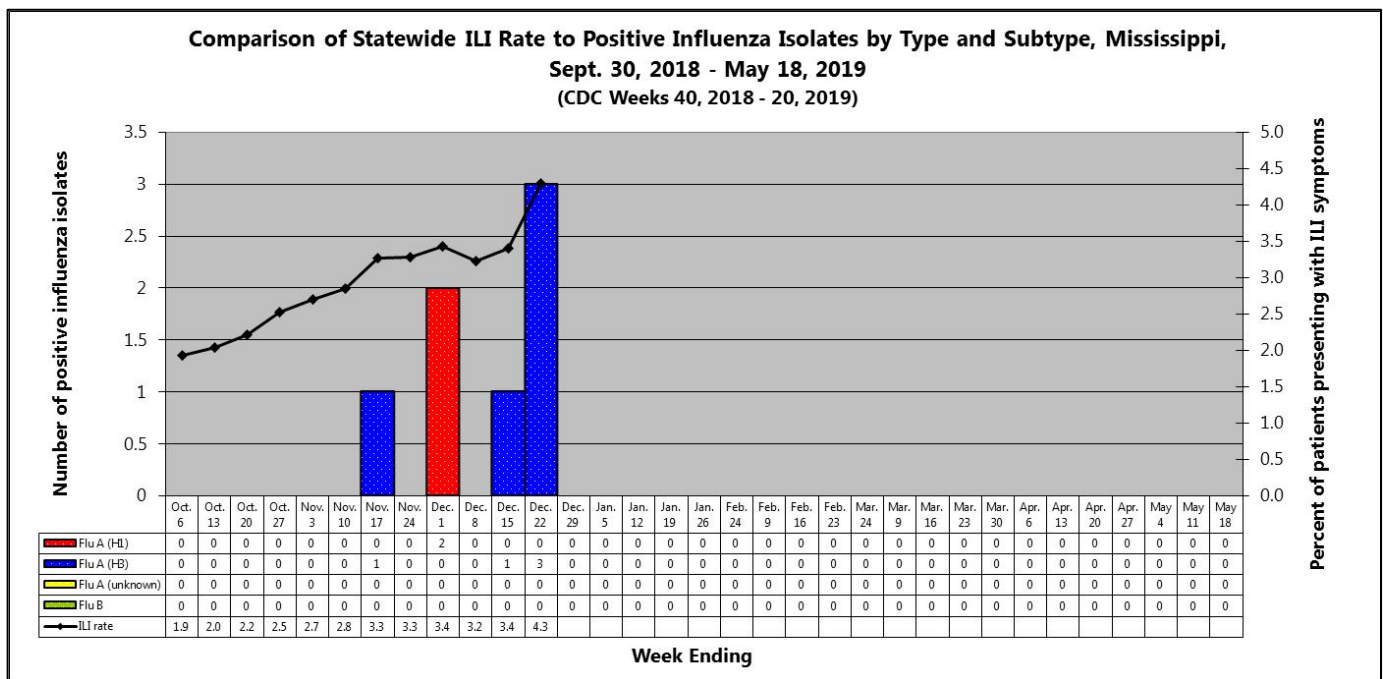
For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages:

<https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm> and

<https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>, respectively.

## Flu Testing Reports

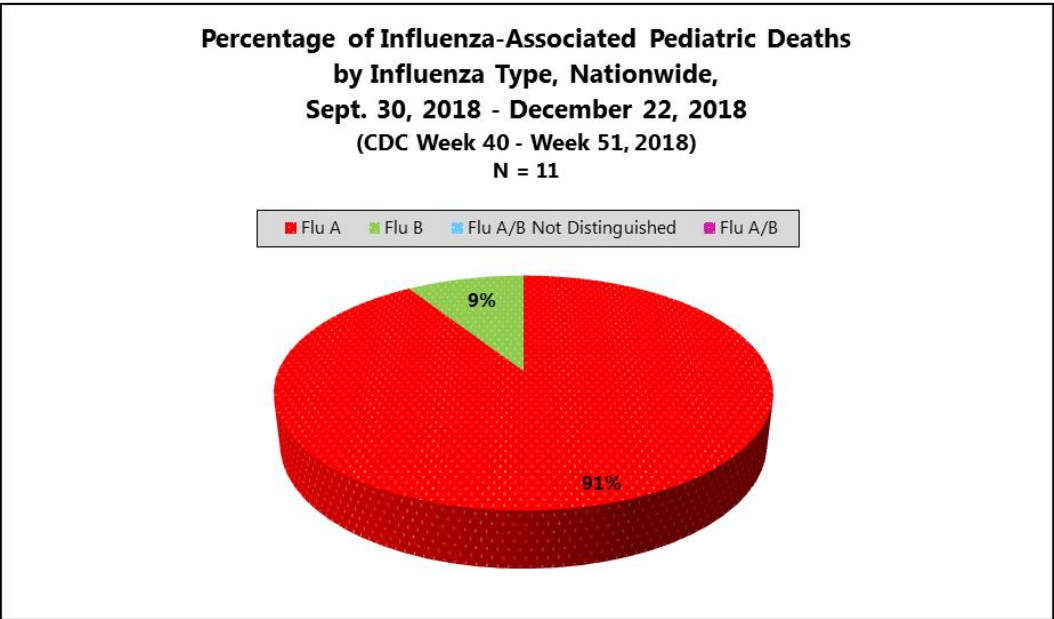
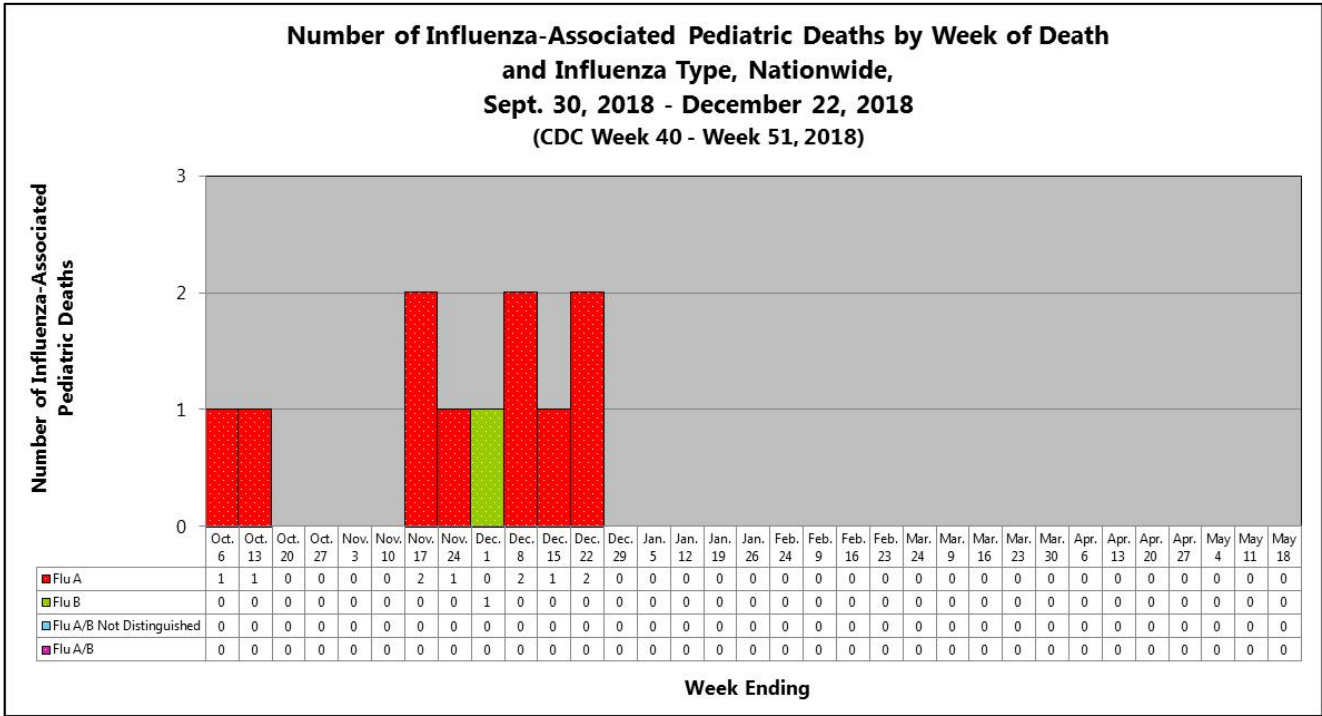
Since week 40 (week ending October 6<sup>th</sup>), **seven** laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. Two were identified as influenza A (H1) and five were identified as influenza A, H3. | [Figure 6](#)



The influenza cases were identified from the following counties: Copiah (1), Harrison (2), Marion (1), Neshoba (1), and Rankin (2).

National and Mississippi Pediatric Mortality Surveillance

Nationally, **four** influenza-associated pediatric deaths were reported to CDC during week **51**. One death was associated with an influenza A virus for which no subtyping was performed and occurred during week 49 (week ending December 8, 2018). Three deaths were associated with an influenza A(H1N1)pdm09 virus and occurred during weeks 50 and 51 (weeks ending December 15 and December 22, 2018, respectively). **Eleven** influenza-associated pediatric deaths have been reported to CDC for the 2018-2019 season. | [Figure 7](#)



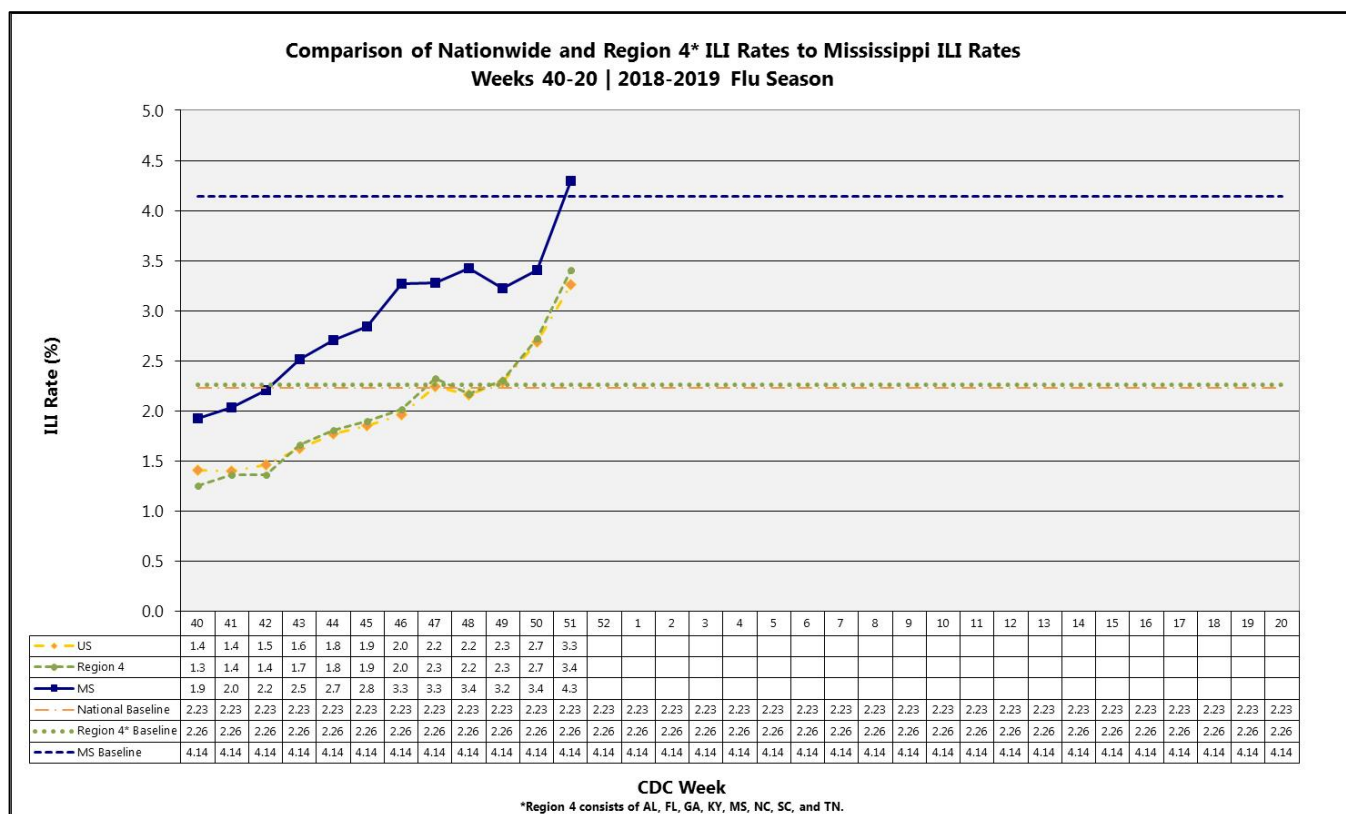
Of the **11** influenza-associated pediatric deaths reported nationally during the 2018-2019 season, ten (91%) have been attributed to influenza A viruses and one (9%) to an influenza B virus. | [Figure 8](#)

Mississippi has had **one** influenza-associated

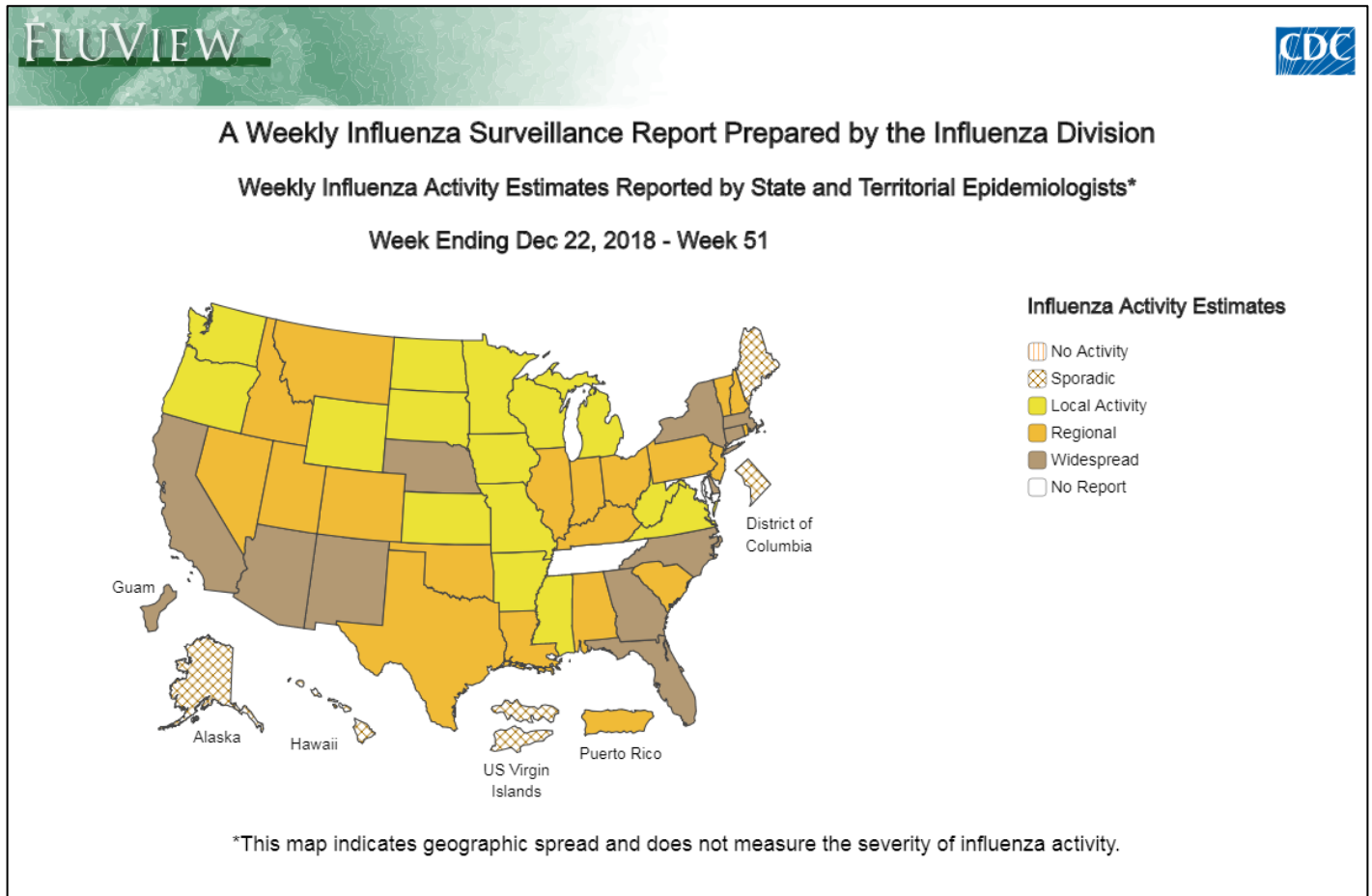
pediatric death reported during this influenza season.

## National ILI Surveillance

During week **51**, the Mississippi (4.3%) national (3.3%), and Region 4 (3.4%) ILI rates increased and all were above their respective baselines. | [Figure 9](#)



During week **51**, influenza activity **increased** in the United States.<sup>1</sup> | [Figure 10](#)



<sup>1</sup>For 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 **51**. | **Table 3**

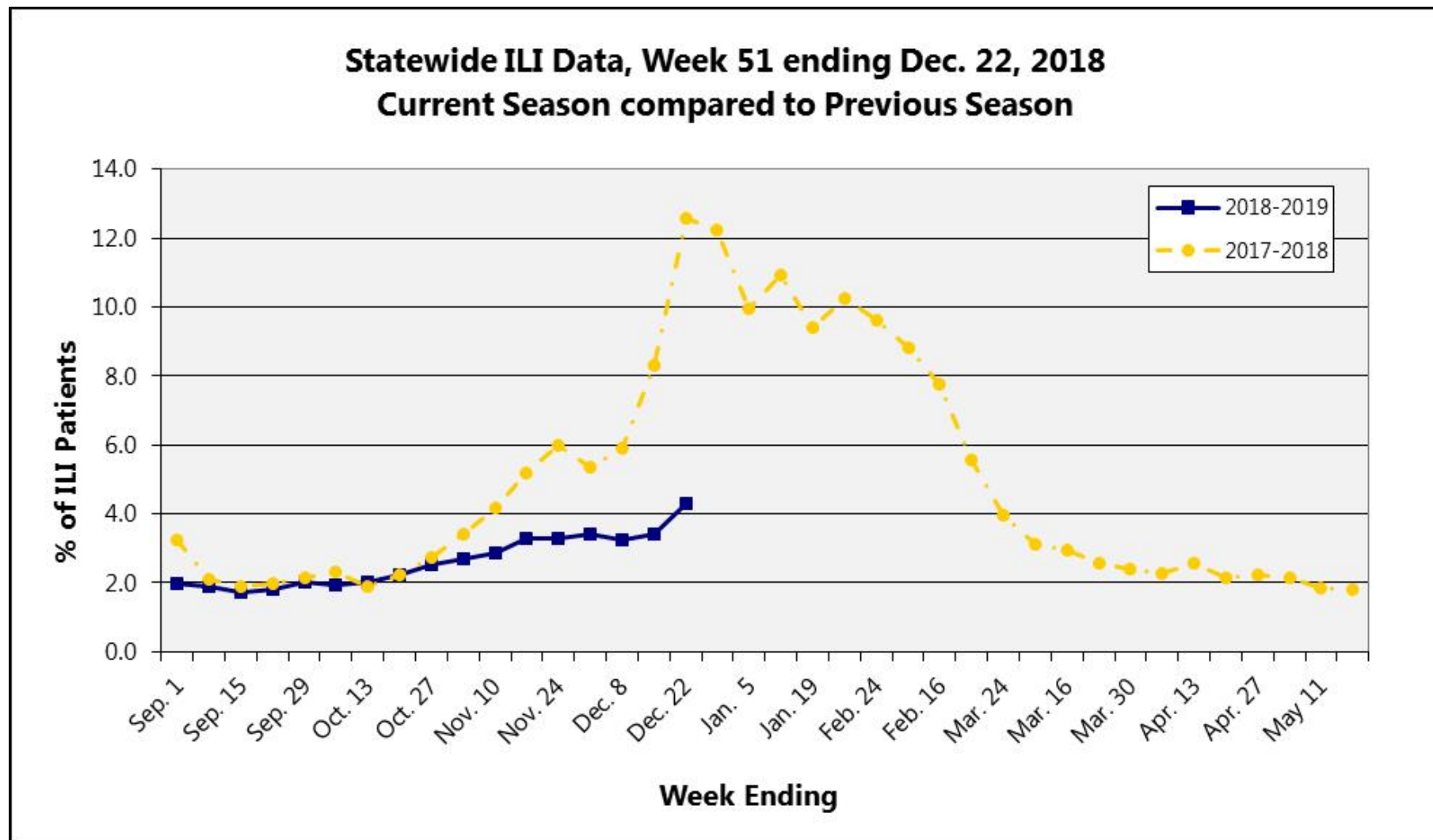
Level of Flu Activity	Definition
<b>No Activity</b>	Overall clinical activity remains low and there are no lab confirmed cases.
<b>Sporadic</b>	Isolated cases of lab confirmed influenza in the state; ILI activity is not increased <u>OR</u> A lab-confirmed outbreak in a single institution in the state; ILI activity is not increased.
<b>Local</b>	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
<b>Regional</b>	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.
<b>Widespread</b>	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions <b>AND</b> recent (within the past 3 weeks) lab confirmed influenza in the state.

**Additional influenza information:**

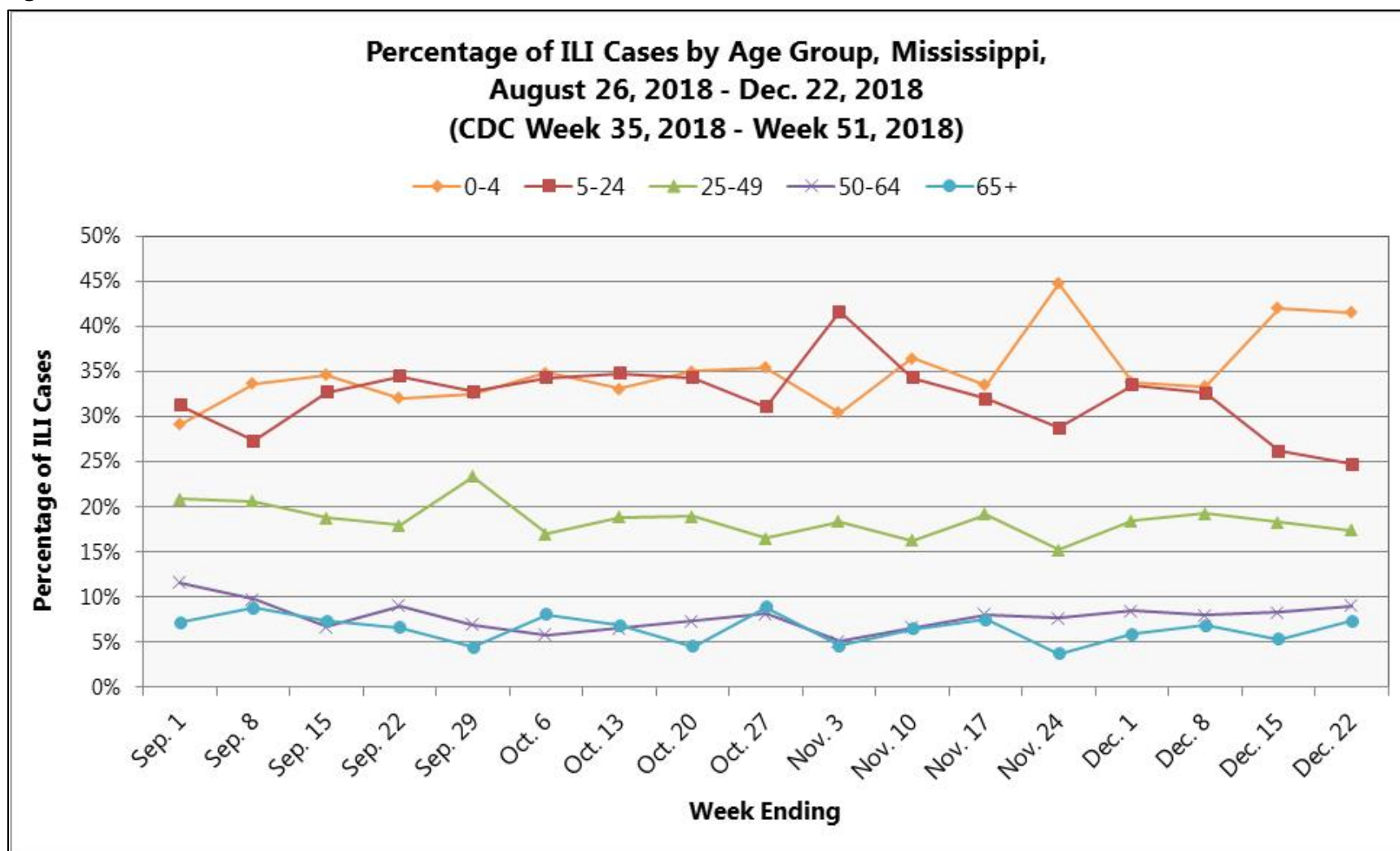
<b>Centers for Disease Control and Prevention</b>	<a href="http://cdc.gov/flu/">http://cdc.gov/flu/</a>
<b>Centers for Disease Control and Prevention FluView</b>	<a href="http://www.cdc.gov/flu/weekly/">http://www.cdc.gov/flu/weekly/</a>
<b>MSDH Flu and Pneumonia</b>	<a href="http://msdh.ms.gov/msdhsite/_static/14,0,199.html">http://msdh.ms.gov/msdhsite/_static/14,0,199.html</a>
<b>World Health Organization FluNet</b>	<a href="http://www.who.int/influenza/gisrs_laboratory/flunet/en/">http://www.who.int/influenza/gisrs_laboratory/flunet/en/</a>

## Appendix

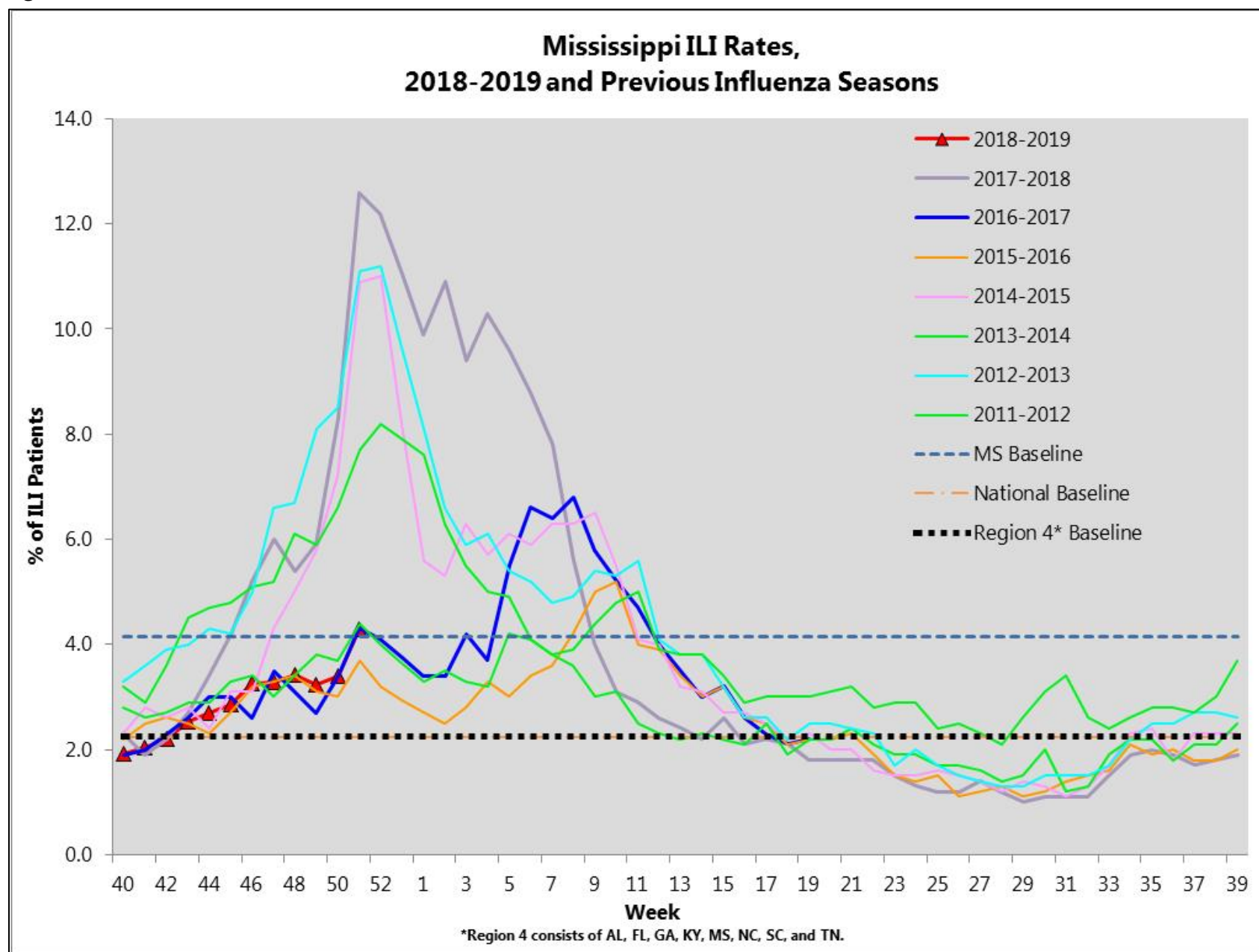
**Figure 1**



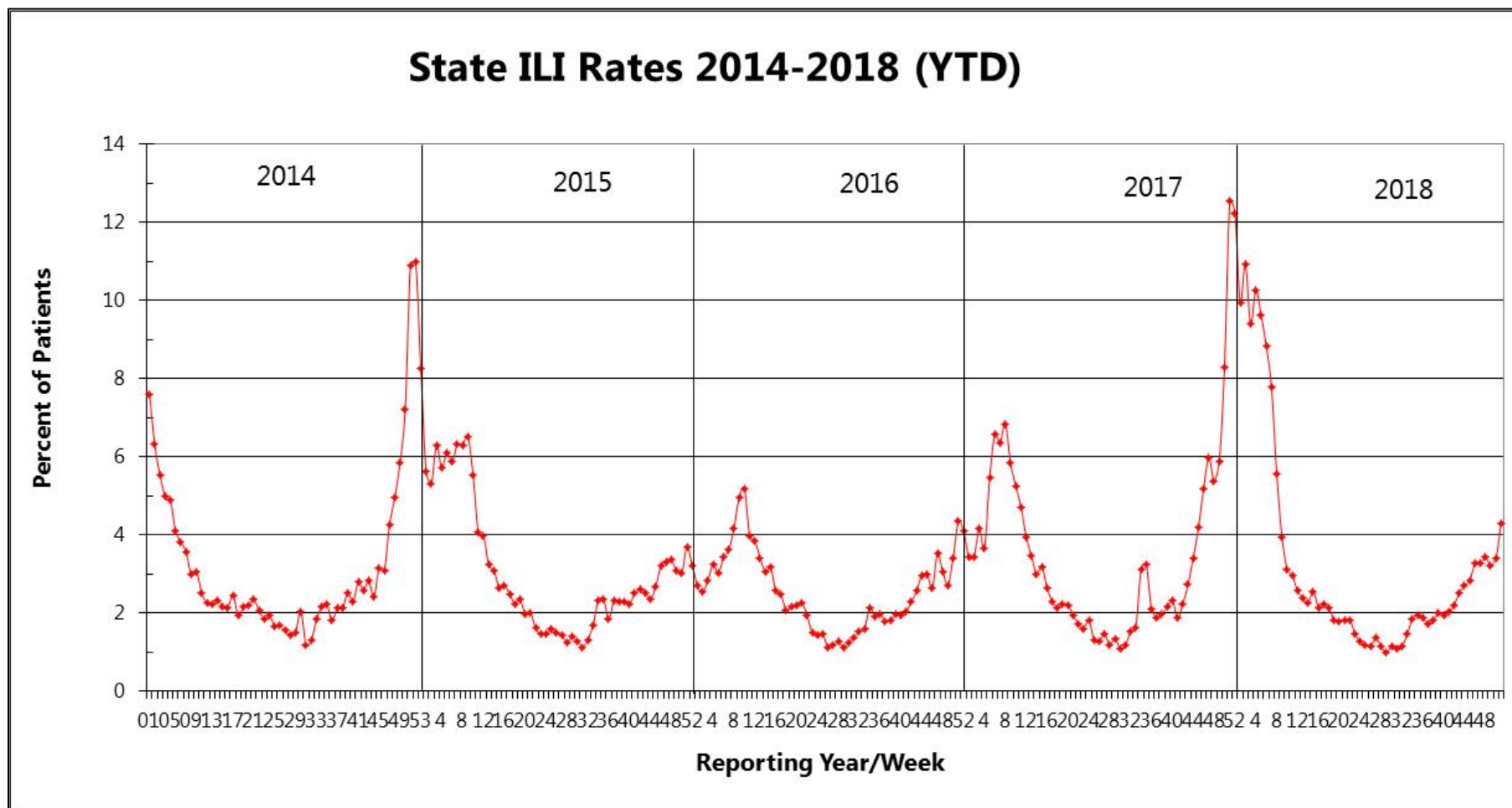
**Figure 2**



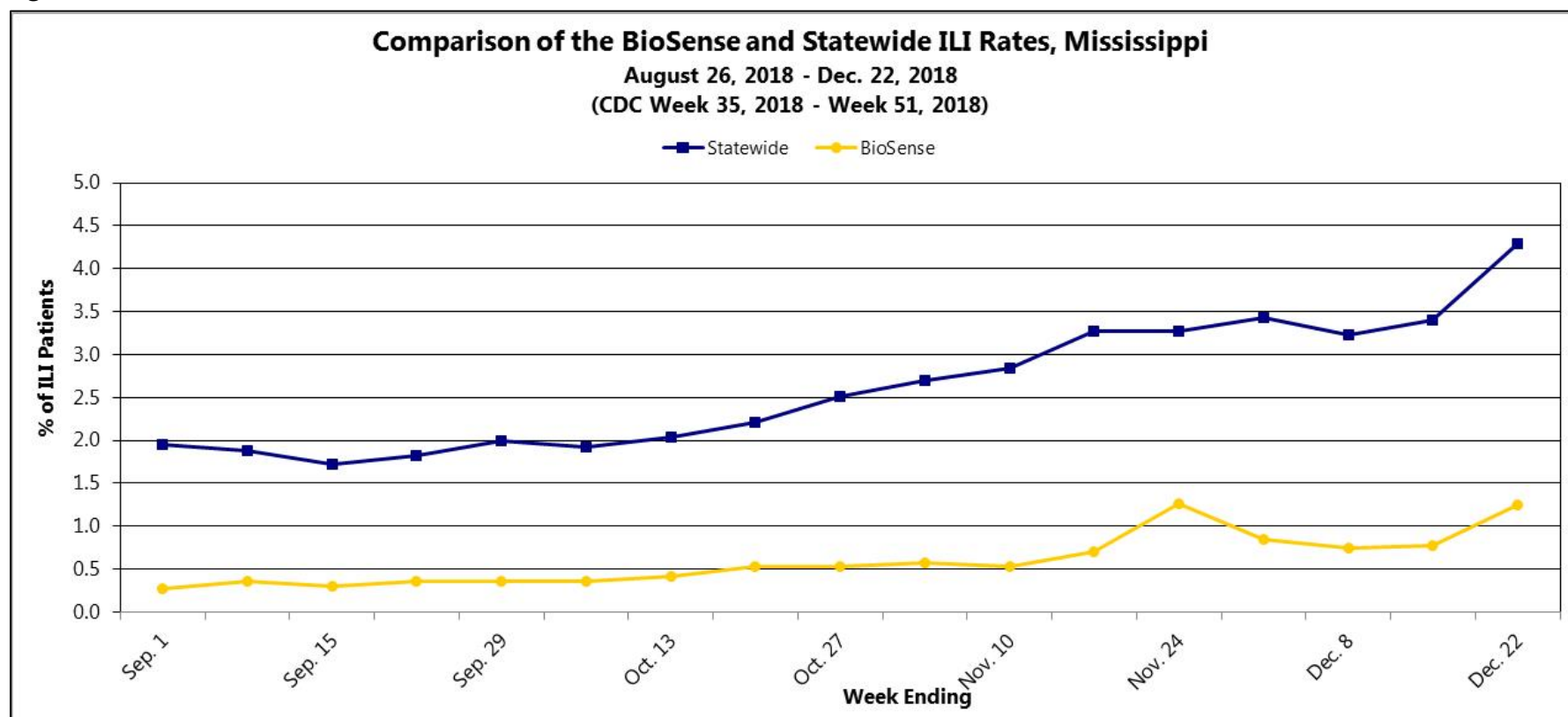
**Figure 3**

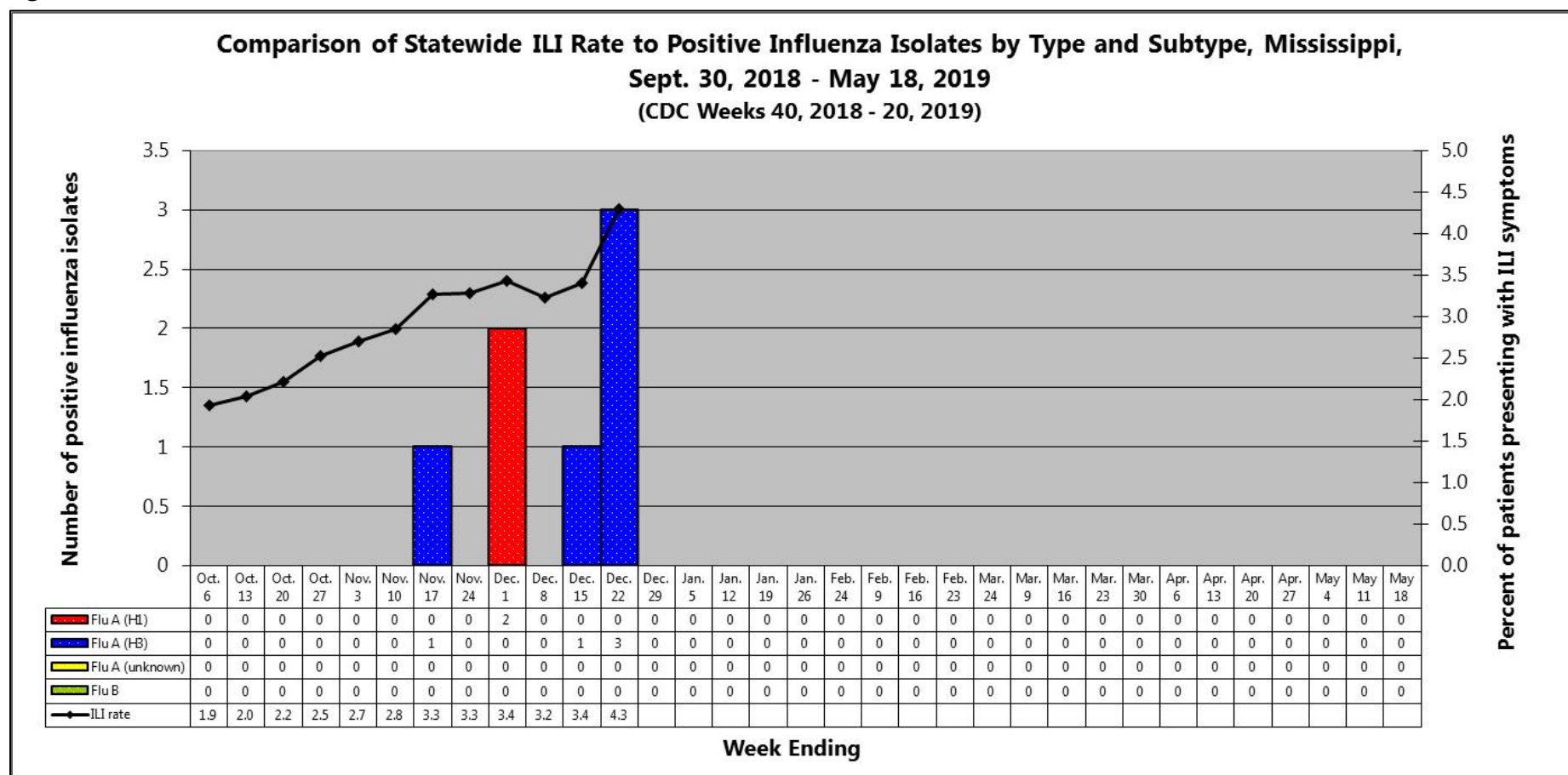


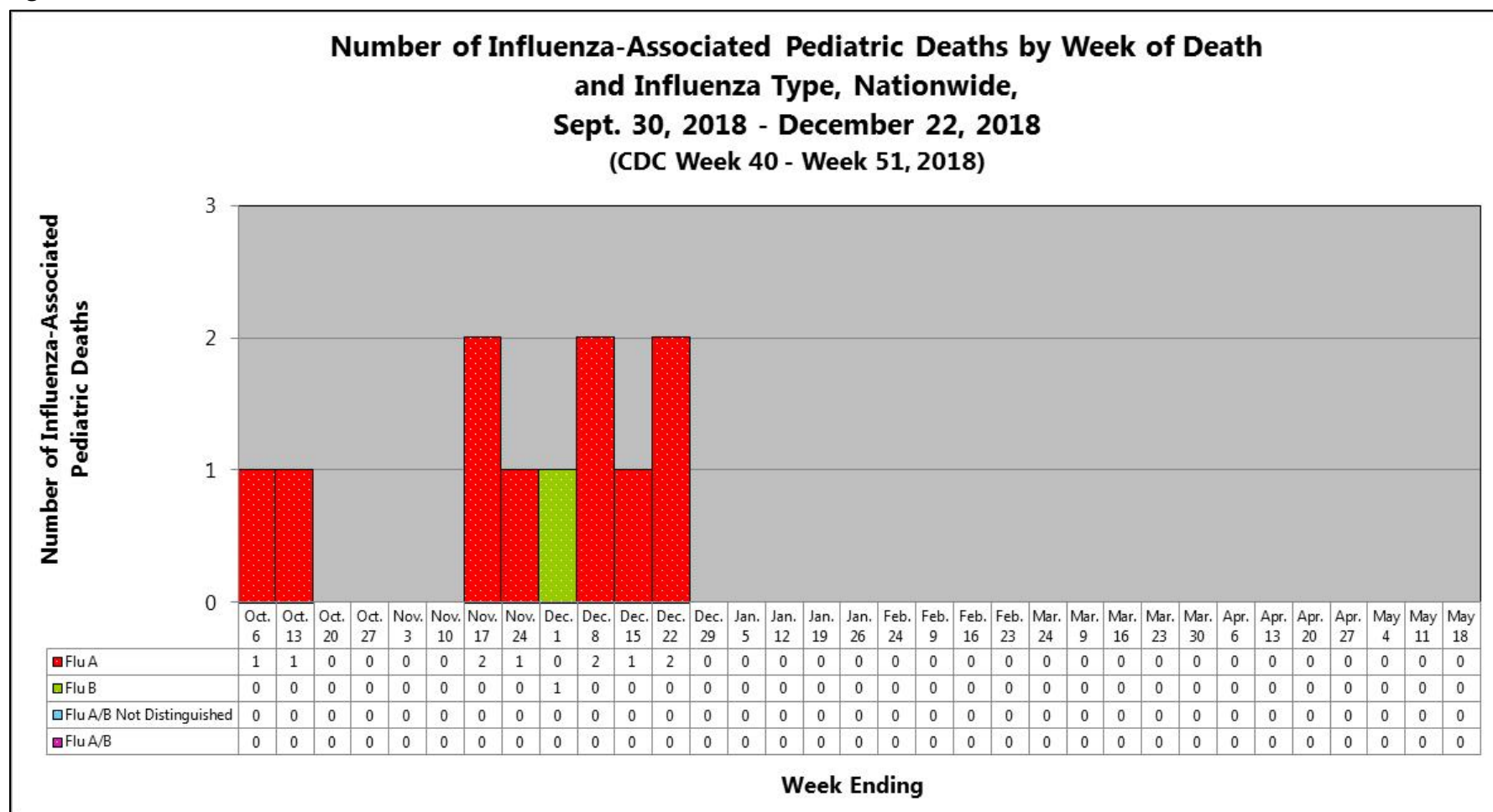
**Figure 4**



**Figure 5**

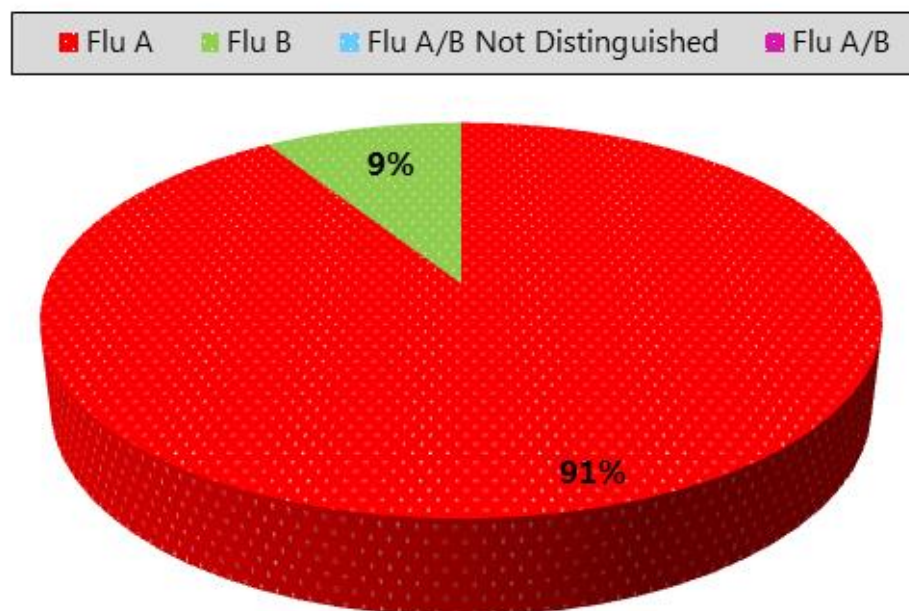


**Figure 6**


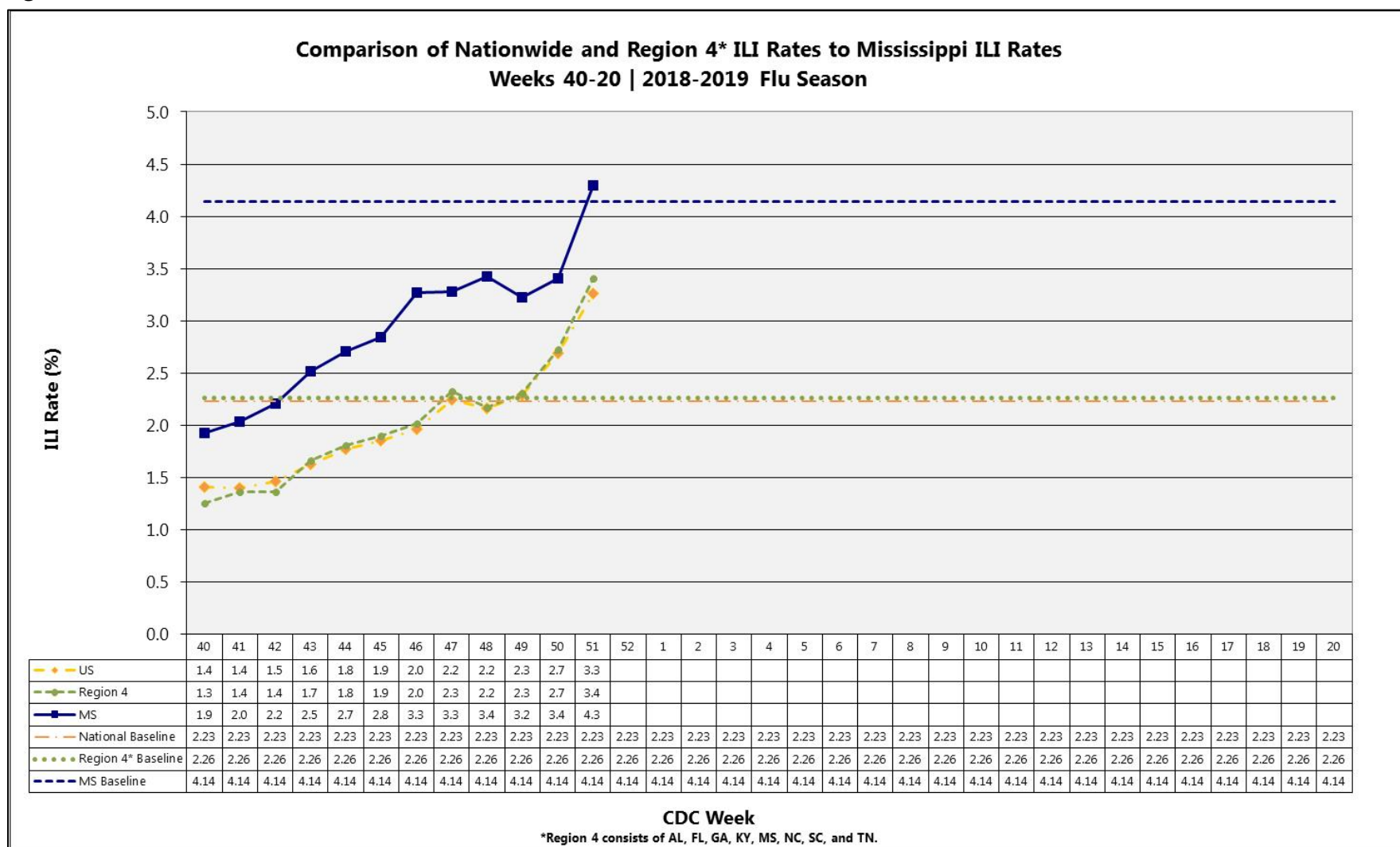
**Figure 7**

**Figure 8**

**Percentage of Influenza-Associated Pediatric Deaths  
by Influenza Type, Nationwide,  
Sept. 30, 2018 - December 22, 2018  
(CDC Week 40 - Week 51, 2018)  
N = 11**



**Figure 9**



**Figure 10**

