



# 2019-2020 Influenza Surveillance Report

## Week 49

Dec. 1 – Dec. 7, 2019

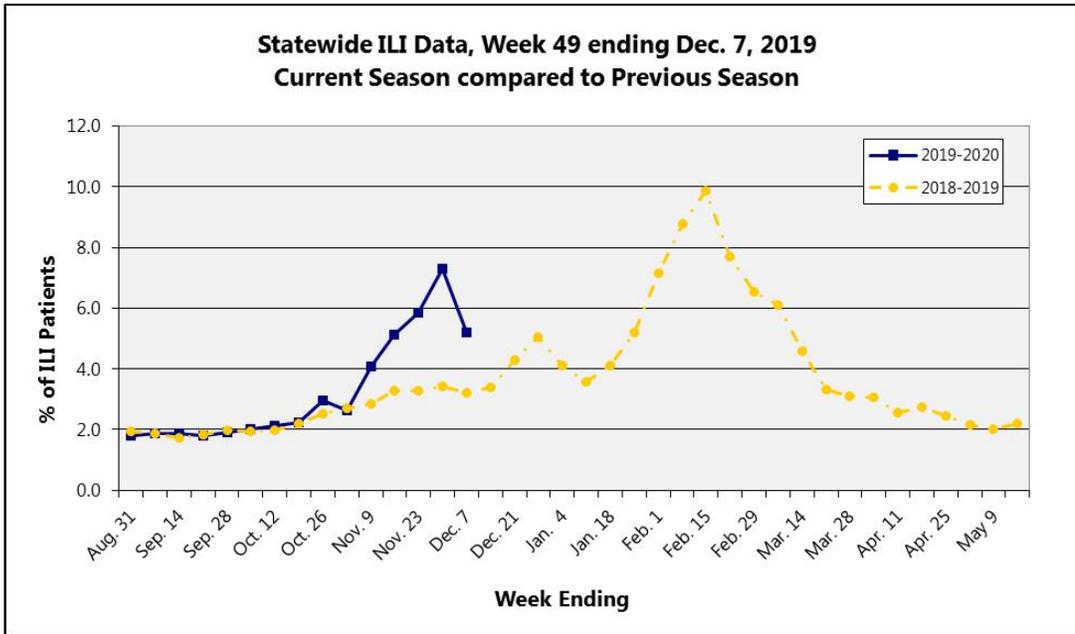
### About our flu activity reporting

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**



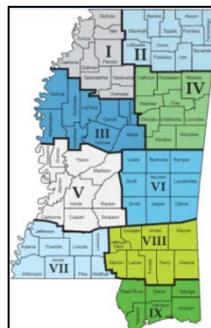
During week **49** (12/01/19-12/07/19), the overall state ILI rate (**5.2%**) **decreased** from the previous week (**7.3%**), but higher than this time last year (**3.2%**). The state ILI began

trending upward during week 45 (ending Nov. 9, 2019). | [Figure 1](#)

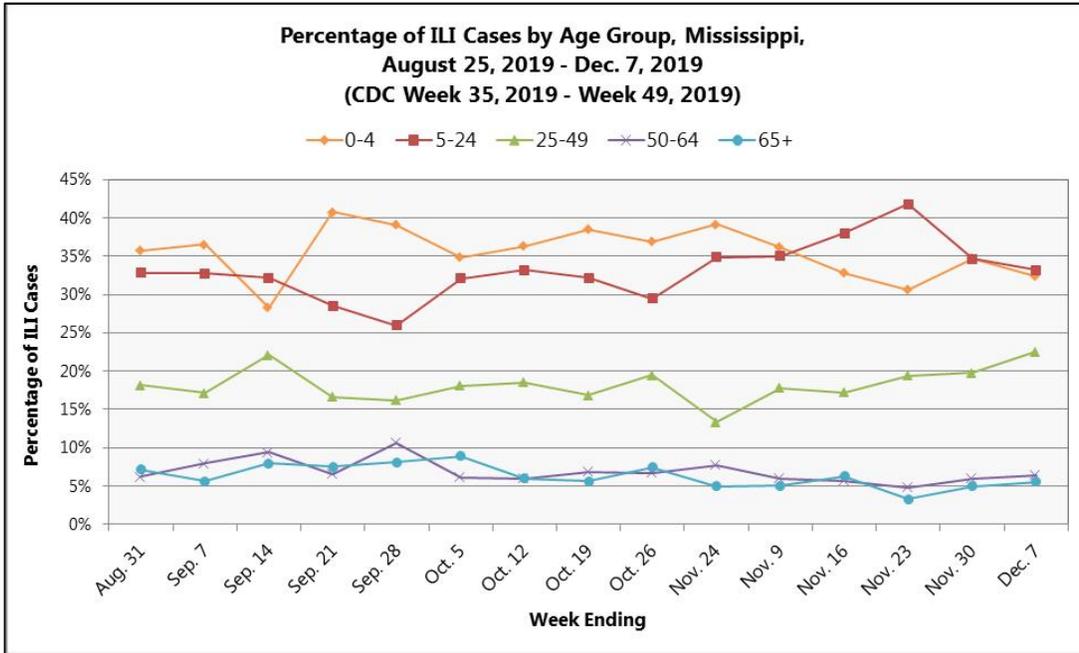
Total number of patients treated by sentinel providers in the last three weeks. | **Table 1**

2019-2020 Influenza Season					
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)
<b>49</b>	<b>Dec. 7</b>	<b>146</b>	<b>19129</b>	<b>995</b>	<b>5.2</b>
48	Nov. 30	143	17129	1251	7.3
47	Nov. 23	150	20232	1181	5.8

During week **49**, two districts (3 and 5) had an increase in ILI activity, while four districts (1, 6, 7, and 9) had a decrease. The remaining three districts (2, 4, and 8) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



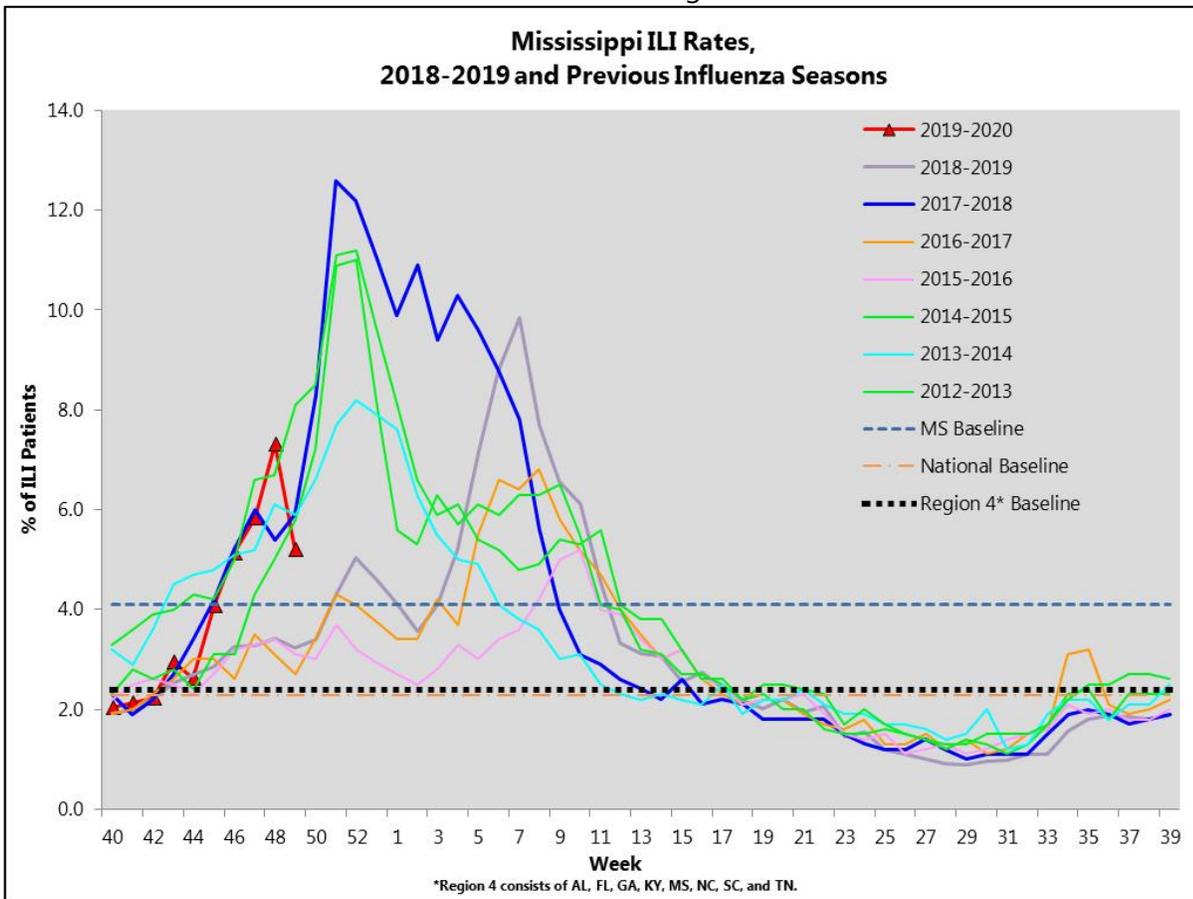
MSDH District ILI Rates (%) 2019-2020		
District	Week 48	Week 49
State	7.3	5.2
I	8.4	7.0
II	3.2	3.7
III	1.5	2.8
IV	4.2	4.4
V	2.7	3.8
VI	4.4	2.5
VII	12.9	6.6
VIII	2.2	2.6
IX	10.7	7.2



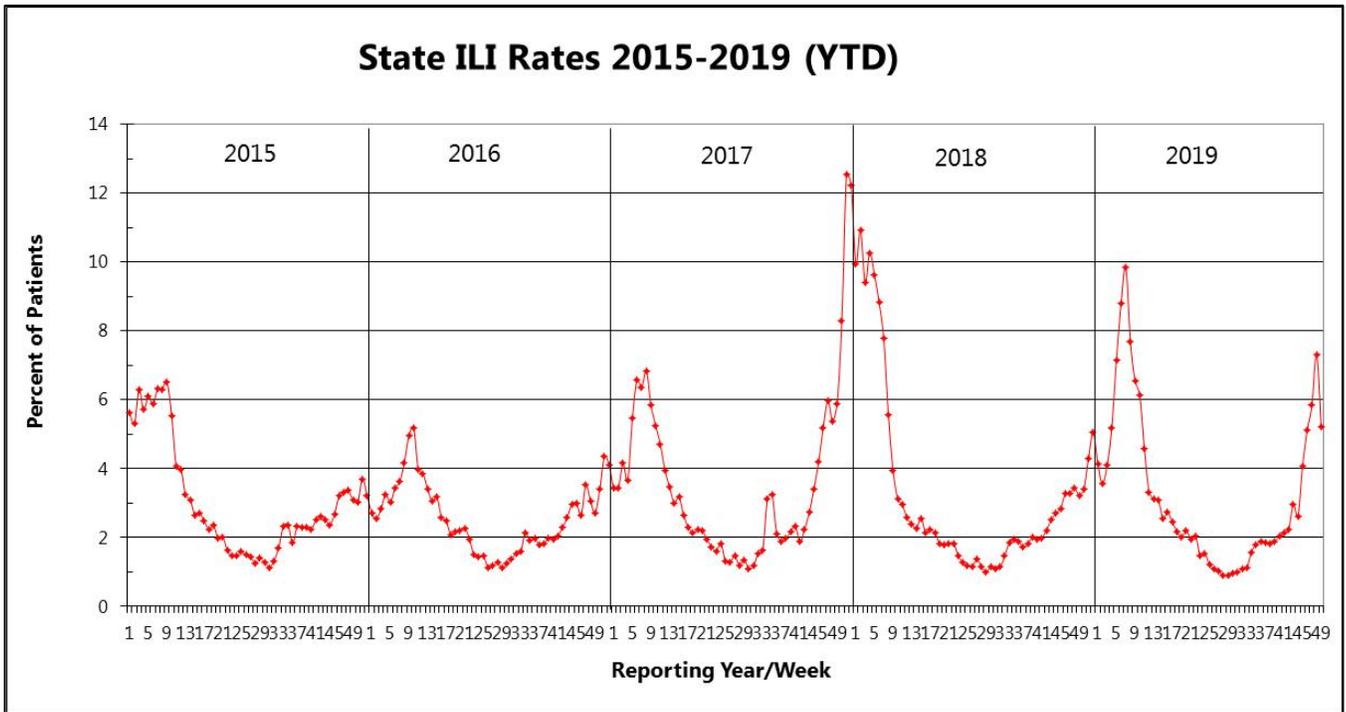
Overall, the percentage of reported ILI cases has been highest among those in the **0-4** and **5-24 years** of age groups. This trend continued into week **49**. The percentage of

ILI cases the 25-49 years of age group increased while the percentage in the two remaining age groups remained constant when compared to the previous week. | [Figure 2](#)

The 2019-20 state ILI rate was **above** the national, Region 4, and state baselines for week **49**. | [Figure 3](#)

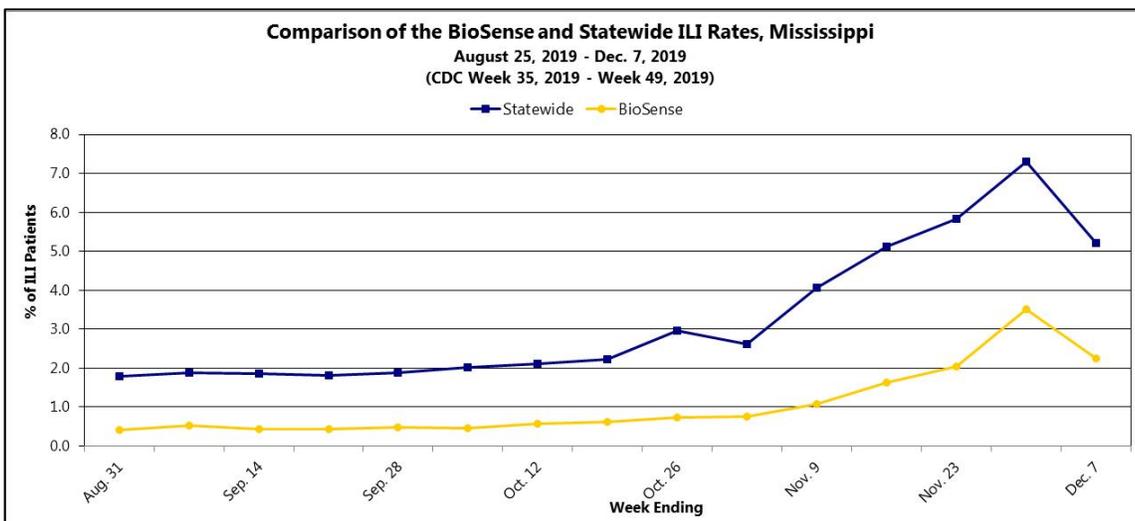


Mississippi ILI Rates 2015-2019 | [Figure 4](#)



**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 **49** decreased from the previous week, as did the statewide ILI rate. The BioSense ILI rate appears to be following the same trend as 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](#).

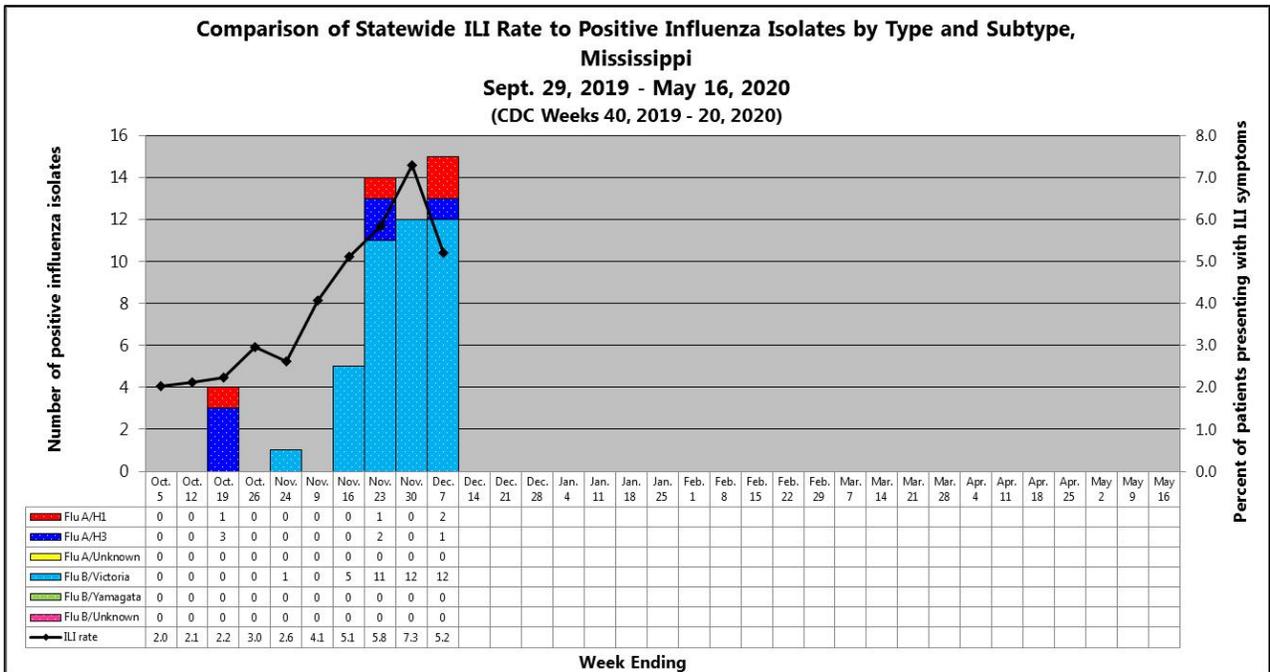
No influenza outbreaks were reported between weeks 40 and 49, 2019 to MSDH for the 2019 – 2020 influenza season.

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

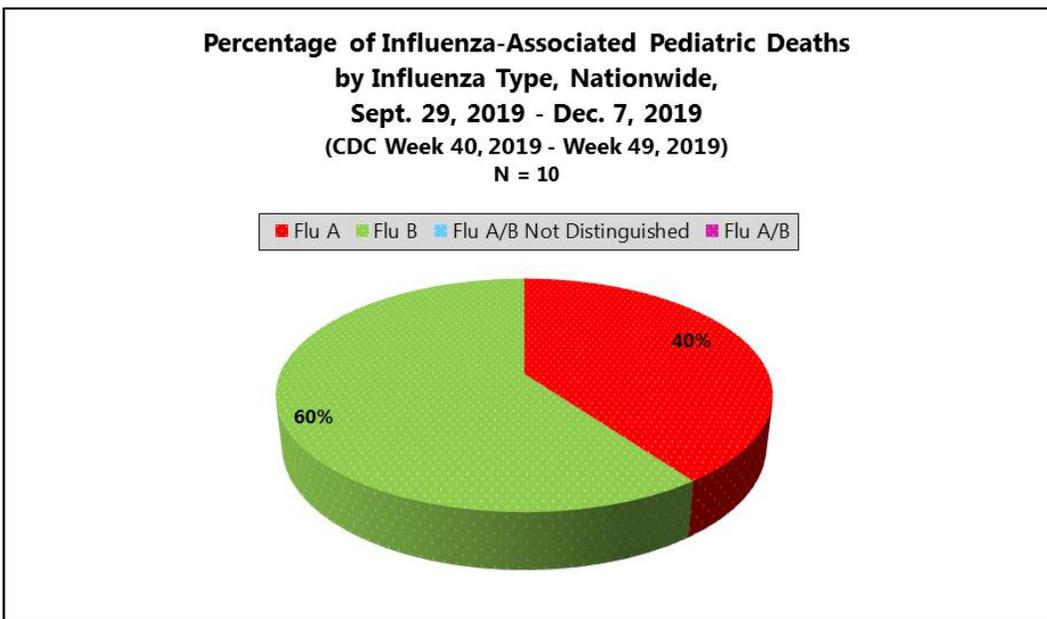
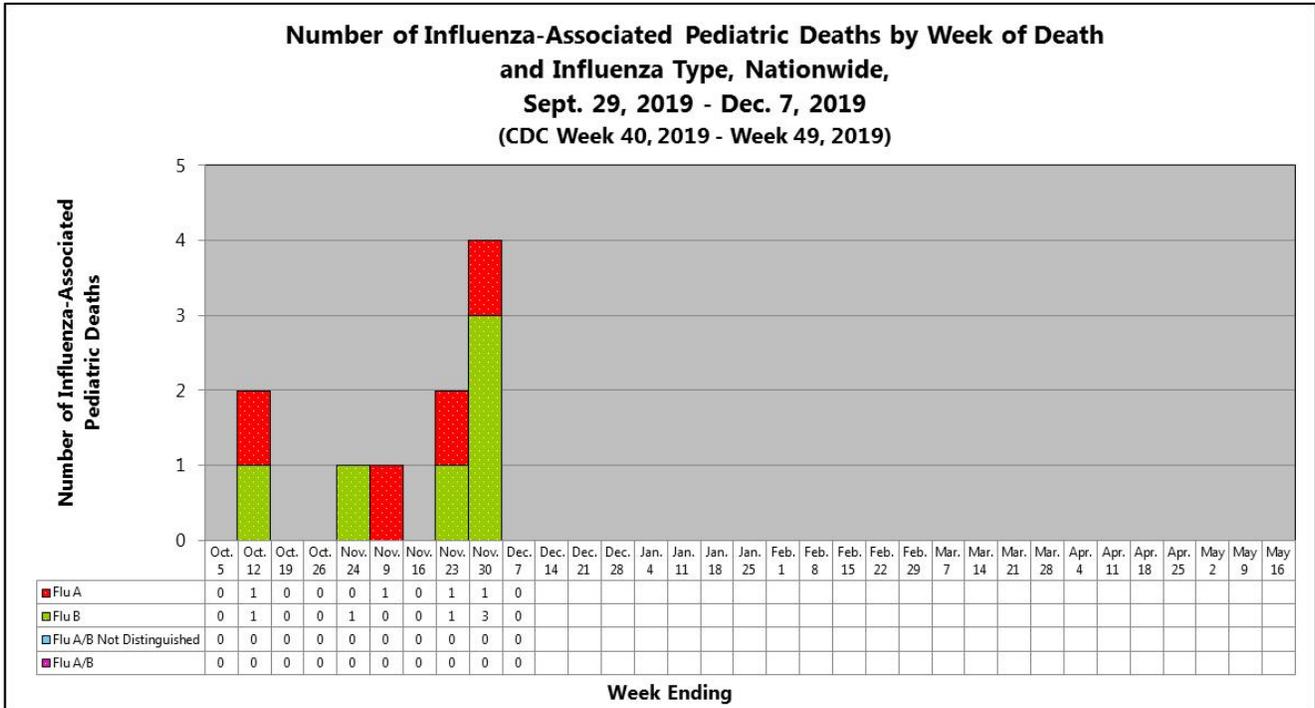
Since week 40 (week ending October 5<sup>th</sup>), **51** laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. Four (8%) were identified as influenza A/H1, six (12%) were identified as influenza A/H3, and 41 (80%) was identified as an influenza B/Victoria. | [Figure 6](#)



The influenza cases were identified from the following counties: Adams (2), Coahoma (2), Covington (1), DeSoto (1), Forrest (2), George (1), Harrison (2), Hinds (6), Jackson (9), Jefferson (2), Jones (1), Lauderdale (1), Lawrence (1), Madison (1), Marion (1), Neshoba (1), Oktibbeha (2), Panola (5), Pearl River (1), Pike (2), Rankin (4), Walthall (1), and Winston (1). The county of residence for one of the cases was unknown.

### National and Mississippi Pediatric Mortality Surveillance

Nationally, **four** influenza-associated pediatric deaths were reported to CDC during week **49**. One death occurred during week 47 (week ending November 23, 2019) and was associated with an influenza A virus for which no subtyping was performed. Three deaths occurred during week 48 (week ending November 30, 2019). One death was associated with an influenza B/Victoria virus, one was associated with an influenza B virus with no lineage determined, and one was associated with an influenza A(H1N1)pdm09 virus. **Ten** influenza-associated pediatric deaths have been reported to CDC for the 2019-2020 season. | [Figure 7](#)



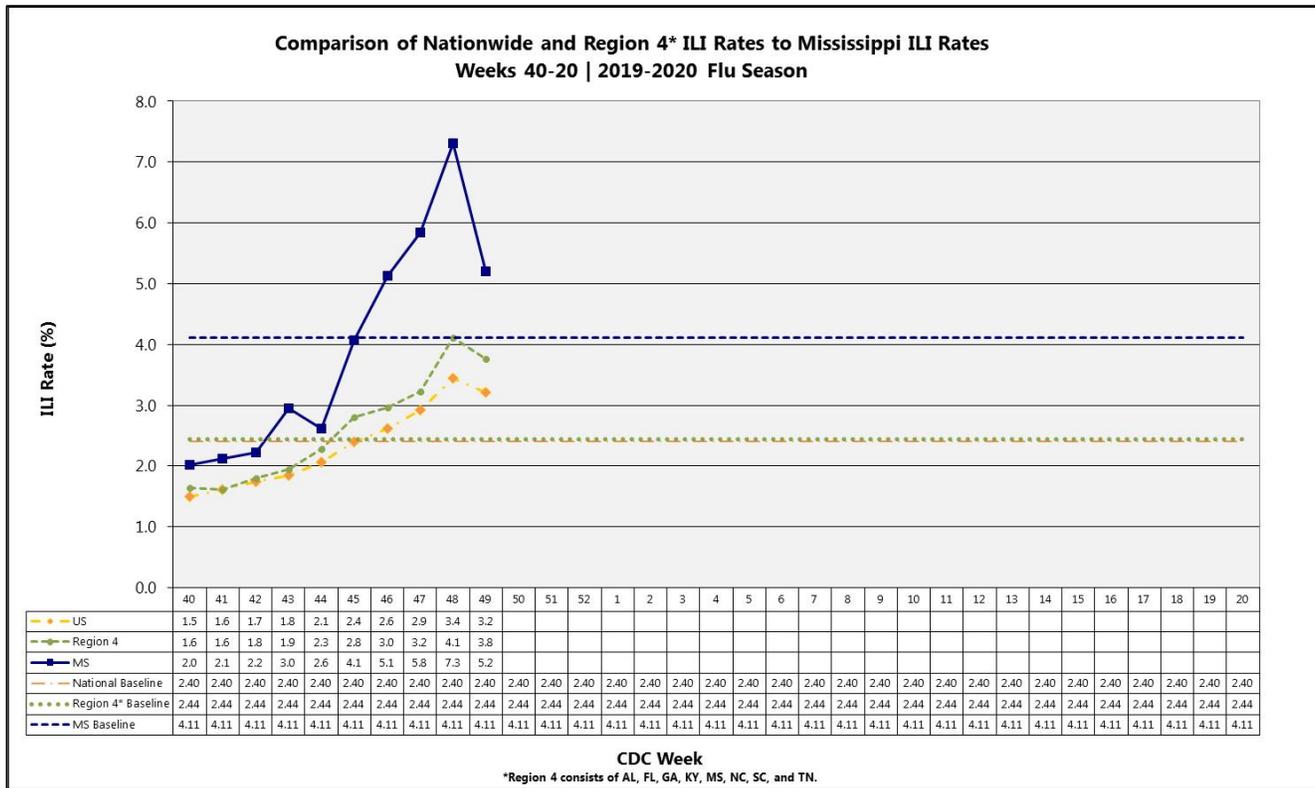
Of the **10** influenza-associated pediatric deaths reported nationally during the 2019-2020 season, four (40%) have been attributed to influenza A viruses and six (60%) to influenza B viruses. | [Figure 8](#)

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

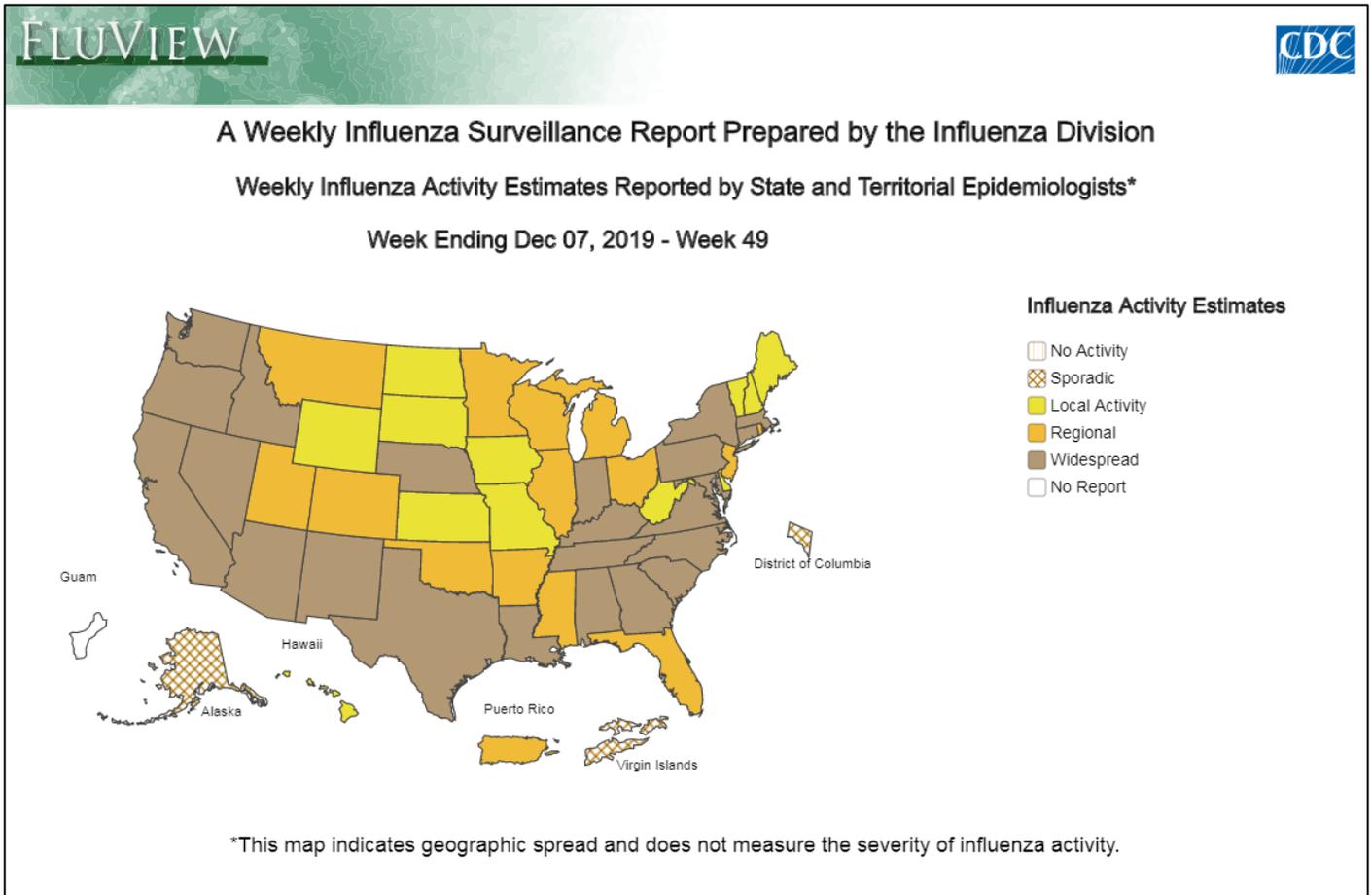
For additional information on influenza-associated pediatric deaths, please refer to the [CDC's FluView](#).

### National ILI Surveillance

During week **49**, the Mississippi (5.2%), national (3.2%) and Region 4 (3.8%) ILI rates were all above their respective baselines. | [Figure 9](#)



During week **49**, influenza activity **has been elevated for five weeks and continues to increase** 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 "**Regional**" for the influenza activity during week **49**. | **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

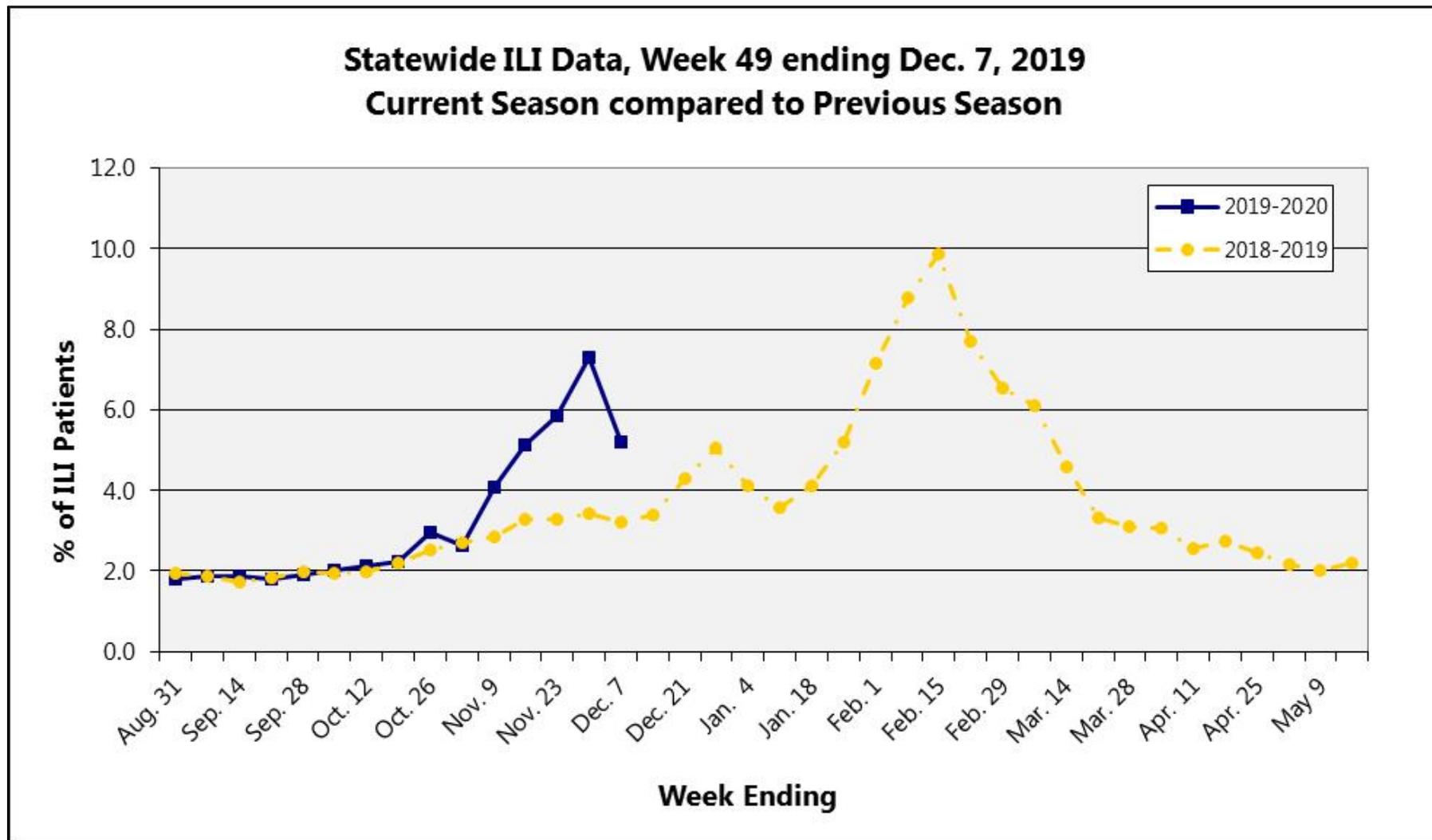
	<b>AND</b> recent (within the past 3 weeks) lab confirmed influenza in the state.
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**Additional influenza information:**

<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**

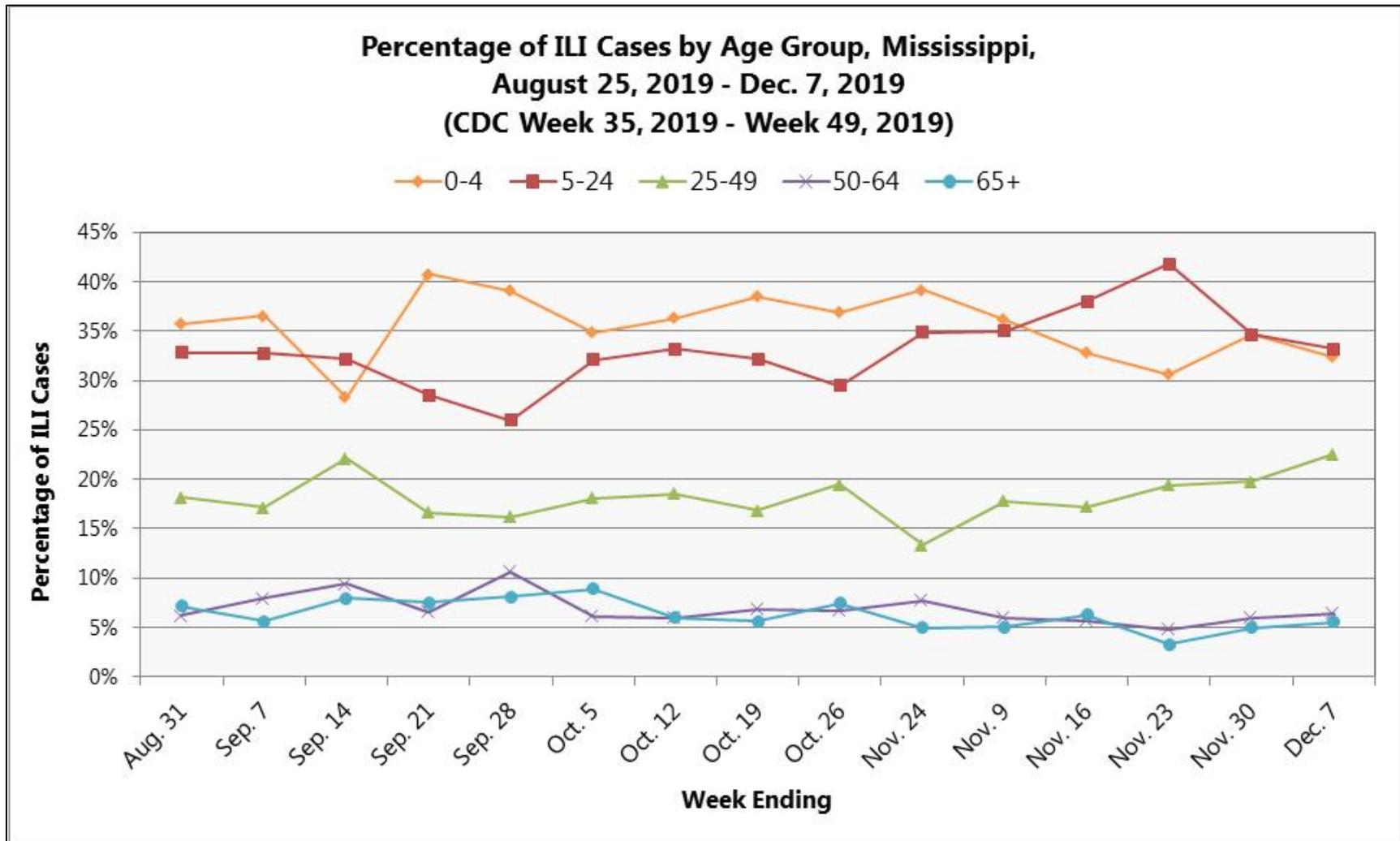
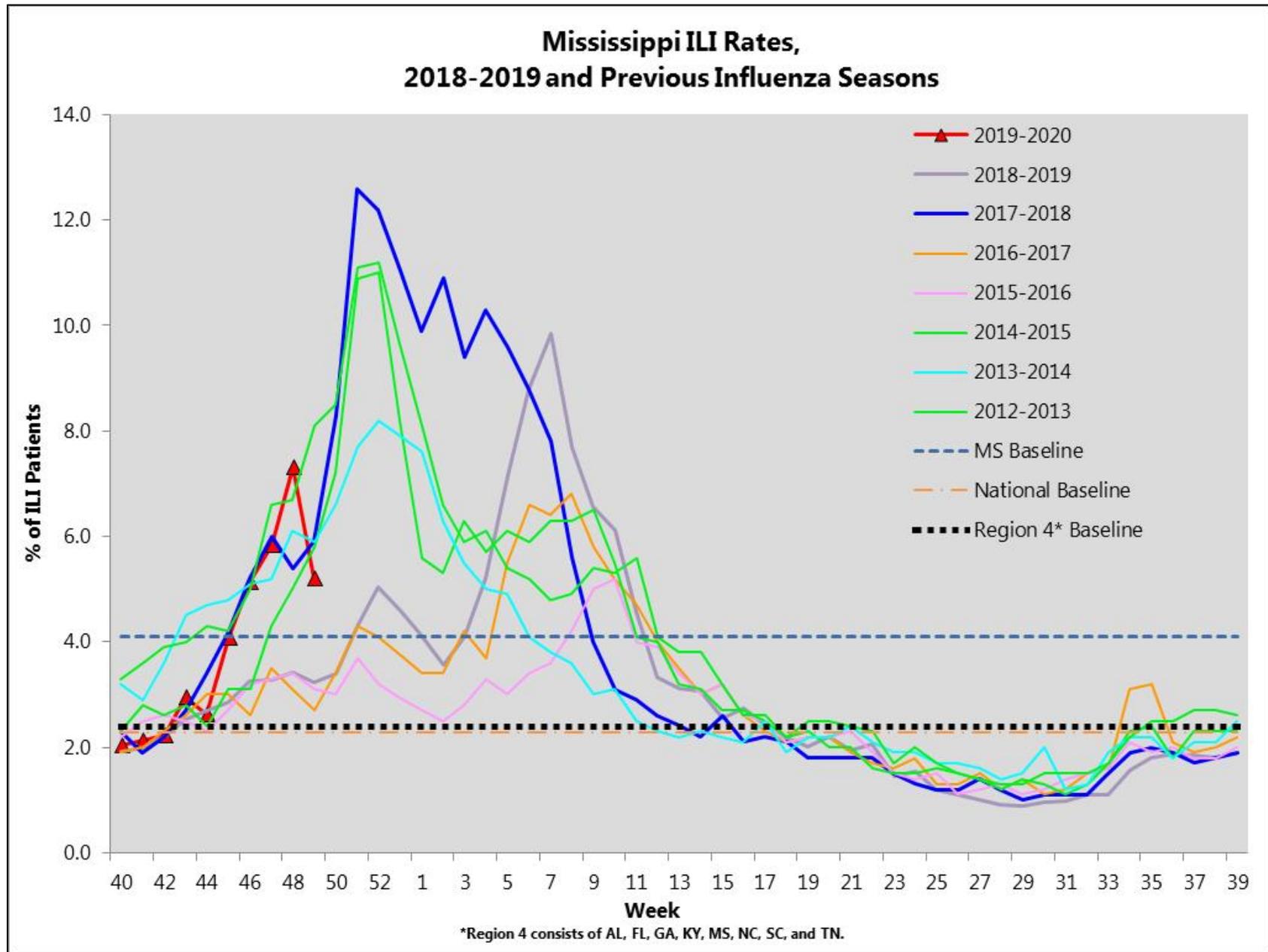


Figure 3



**Figure 4**

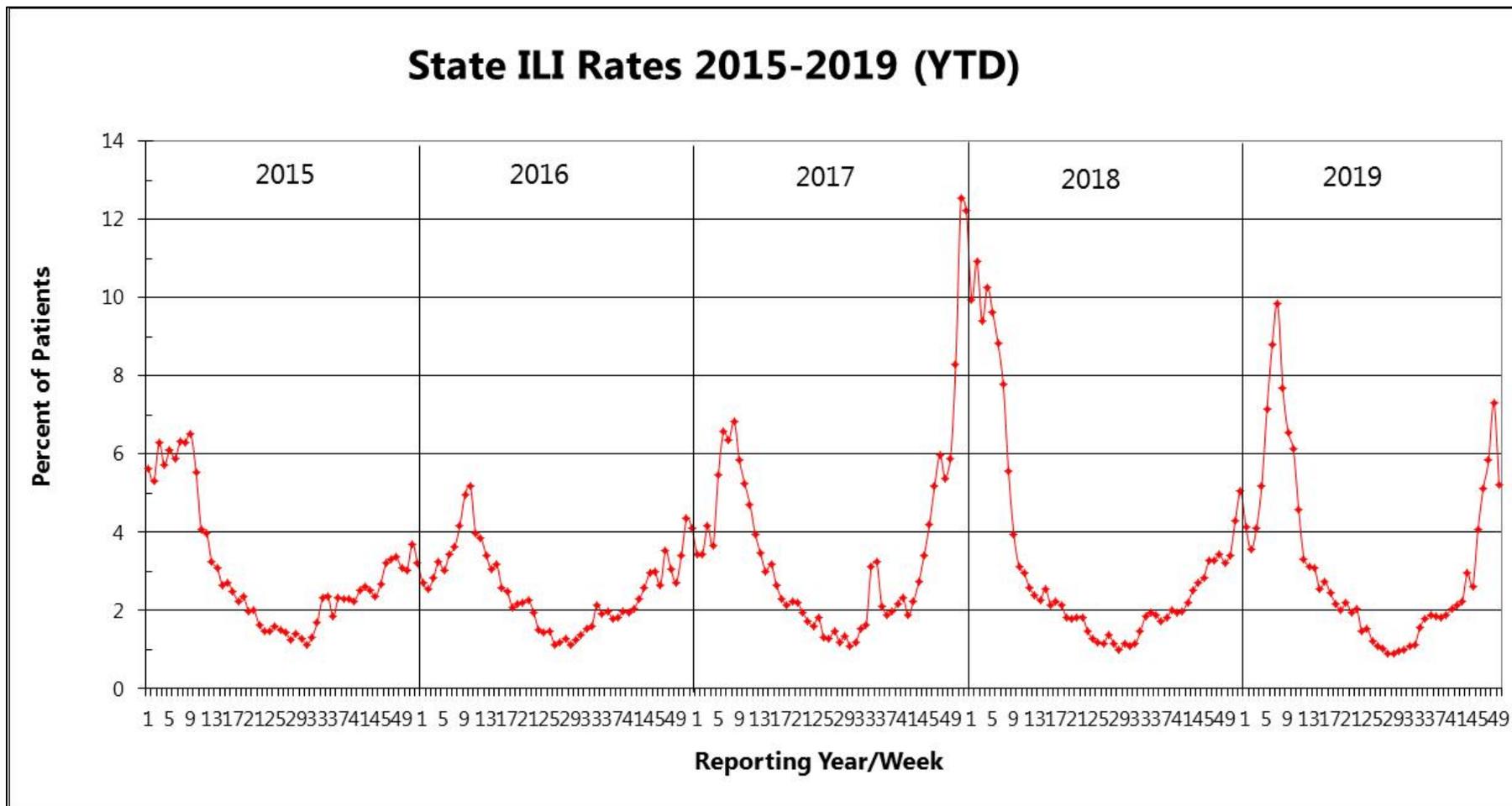


Figure 5

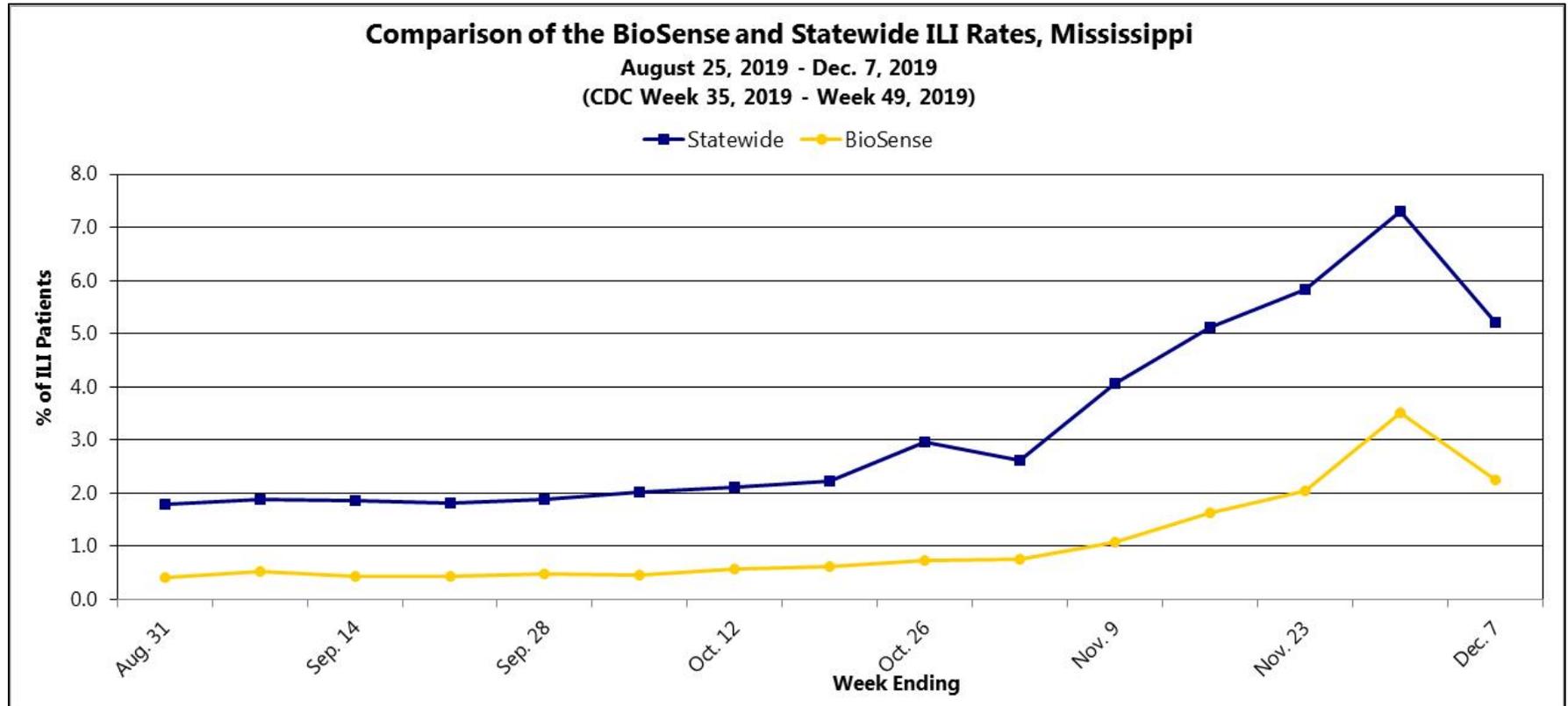
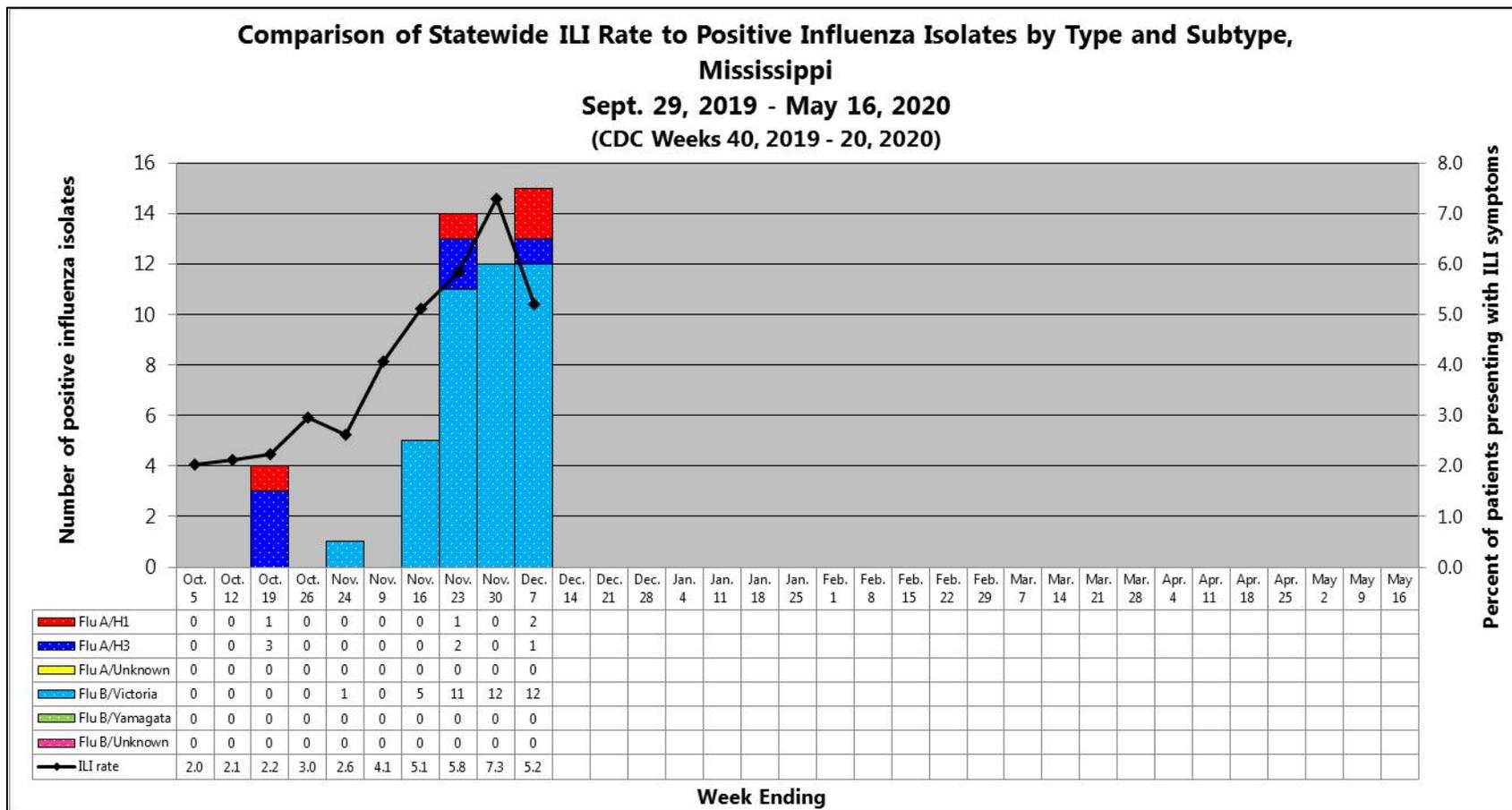
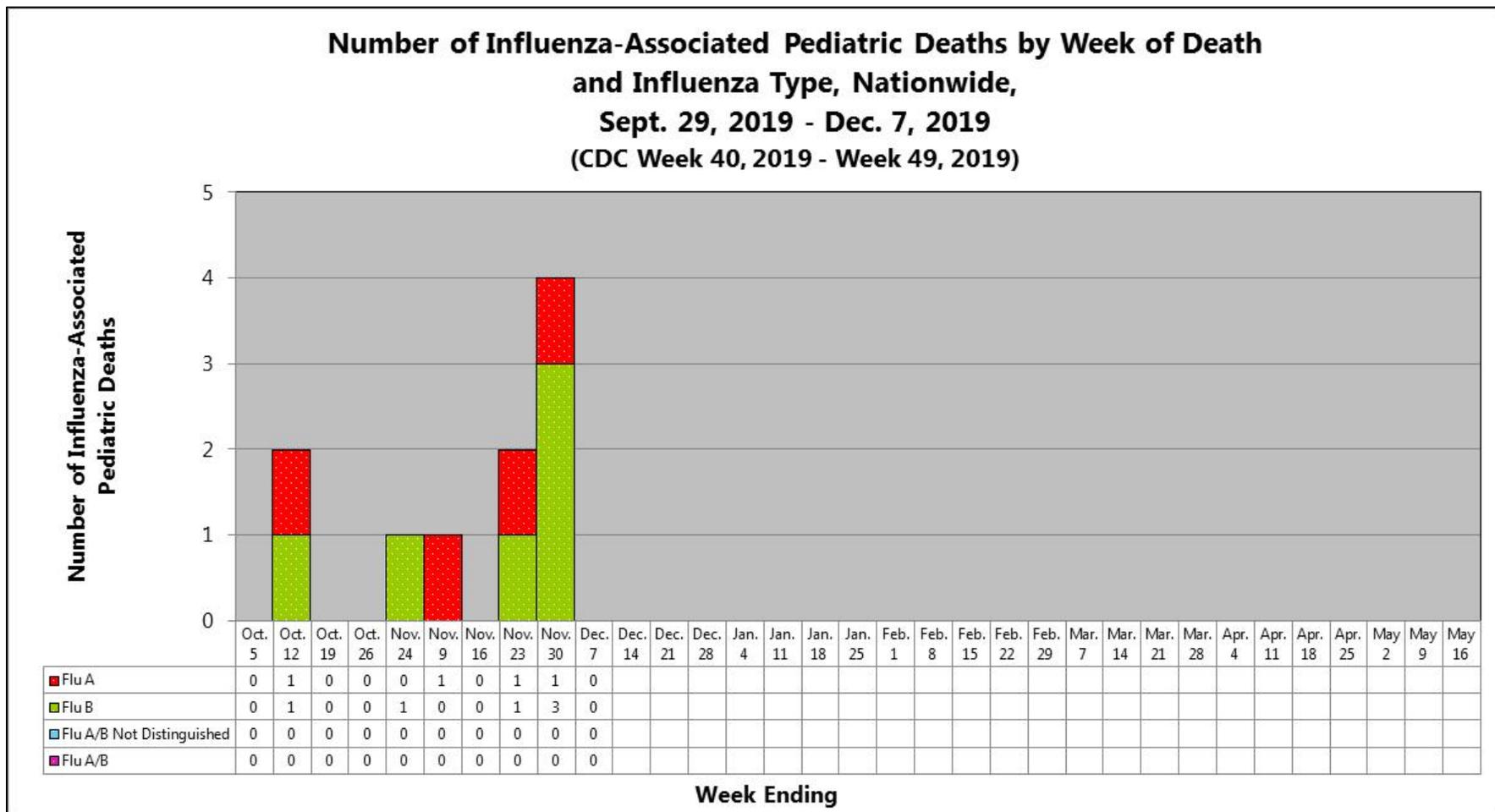


Figure 6



**Figure 7**



**Figure 8**

**Percentage of Influenza-Associated Pediatric Deaths  
by Influenza Type, Nationwide,  
Sept. 29, 2019 - Dec. 7, 2019  
(CDC Week 40, 2019 - Week 49, 2019)  
N = 10**

■ Flu A ■ Flu B ■ Flu A/B Not Distinguished ■ Flu A/B

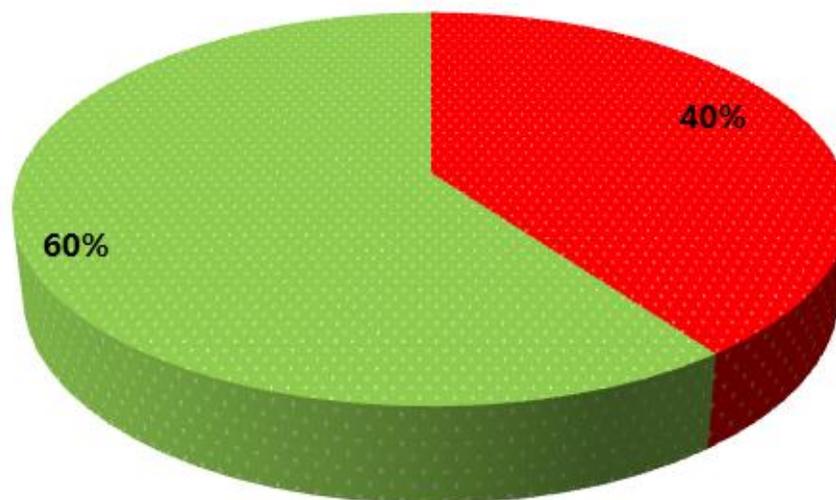




Figure 10

