



2023-2024 Influenza Surveillance Report Week 50

Dec. 10 – Dec. 16, 2023

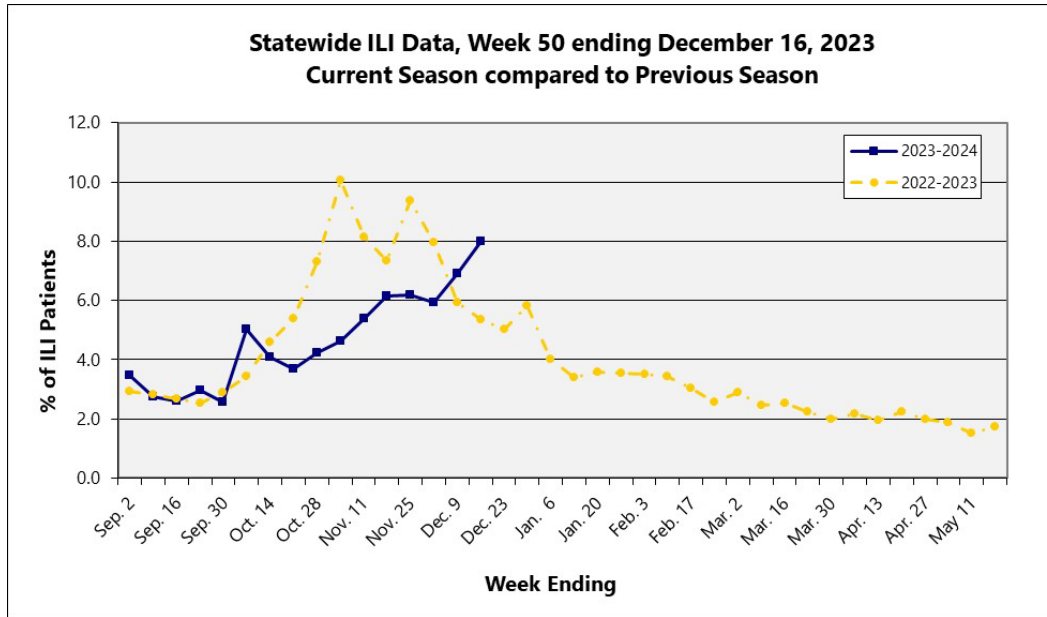
About our flu activity reporting

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

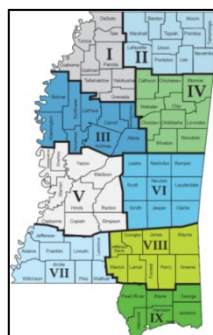


During week 50 (12/10/23-12/16/23), the overall state ILI rate (**8.0%**) **increased** from the previous week (**6.9%**) and was higher than this time last year (**5.3%**). | [Figure 1](#)

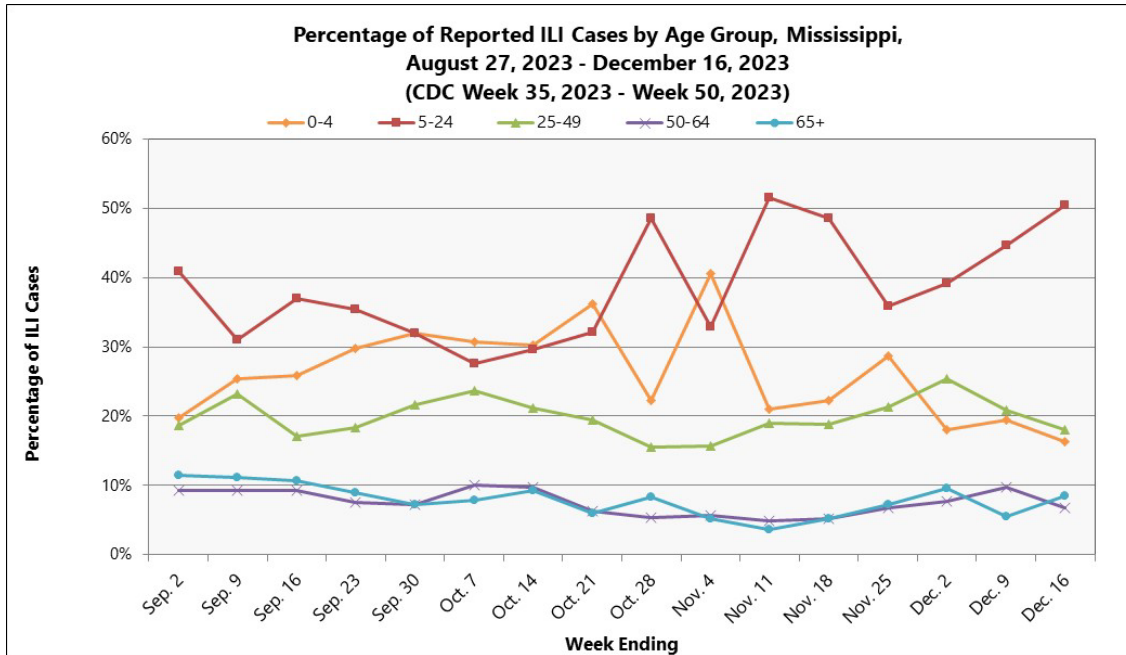
Total number of patients treated by sentinel providers in the last three weeks. | **Table 1**

2023-2024 Influenza Season					
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)
50	Dec. 16	102	16879	1350	8.0
49	Dec. 9	92	15696	1087	6.9
48	Dec. 2	92	15828	938	5.9

During week **50**, six districts (2, 4, 5, 6, 8, and 9) had an increase in ILI activity, while three districts (1, 3, and 7) had a decrease. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



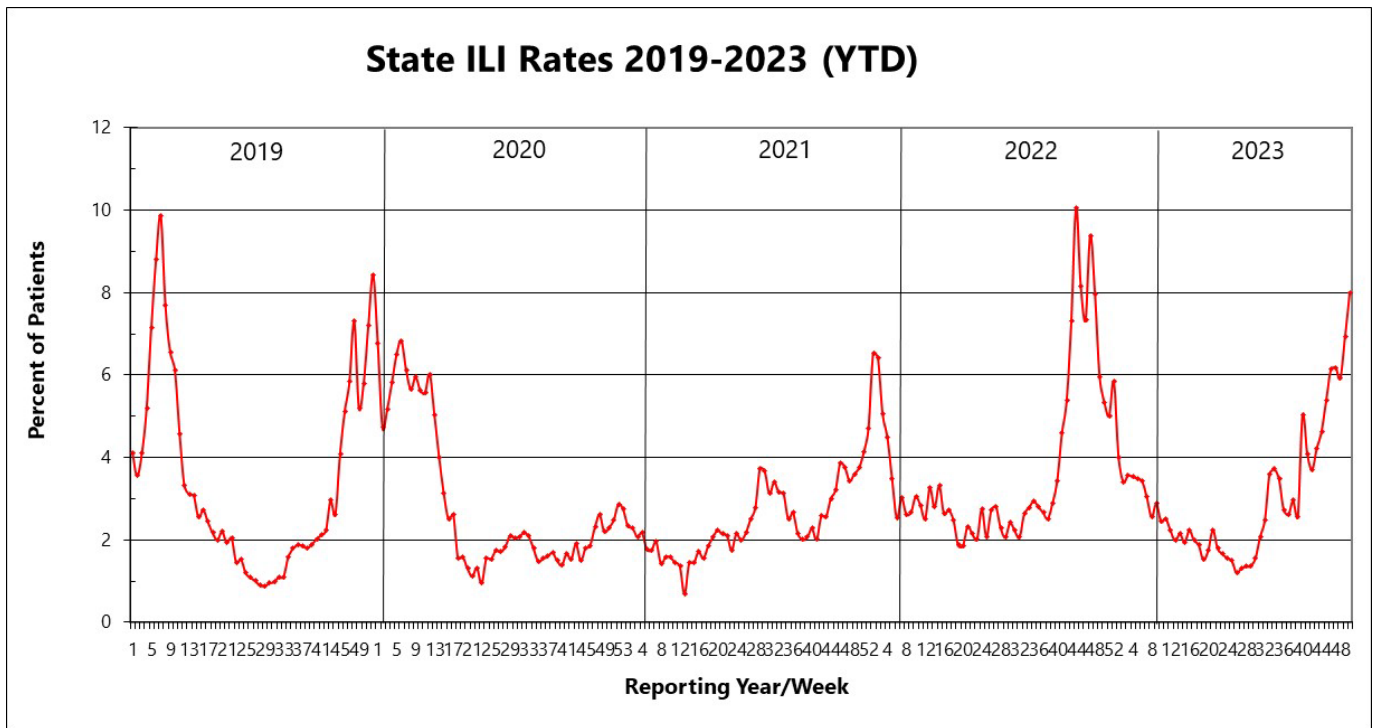
MSDH District ILI Rates (%) 2023-2024		
District	Week 49	Week 50
State	6.9	8.0
I	5.7	3.5
II	10.2	13.3
III	30.7	30.0
IV	5.4	9.7
V	6.3	7.8
VI	15.6	17.3
VII	14.5	11.1
VIII	3.7	5.4
IX	3.6	4.7



Overall, the percentage of reported ILI cases has been highest among those in the **5-24 years** of age group. During week **50**, the percentage

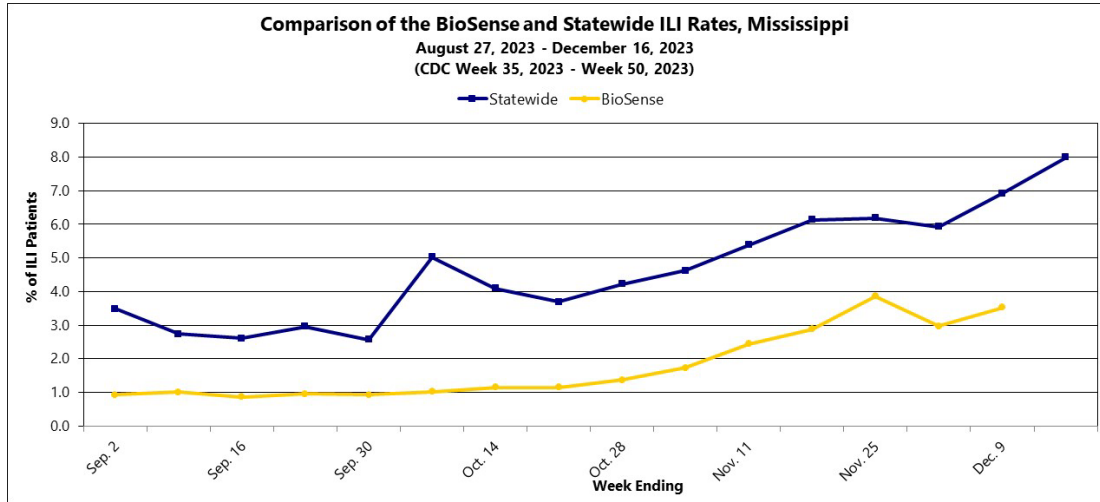
of ILI cases in the 5-24 and 65+ years of age groups increased. However, the percentage of ILI cases decreased in the 0-4, 25-49, and 50-64 age groups when compared to the previous week. | [Figure 2](#)

Mississippi ILI Rates 2019-2023 | [Figure 3](#)



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.



(Note: BioSense ILI data was unavailable for week 50.) The percentage of patients with a chief complaint or diagnosis of influenza-like illness during week 49 increased when compared to the previous week. In addition, the statewide ILI rate increased from the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate. | [Figure 4](#)

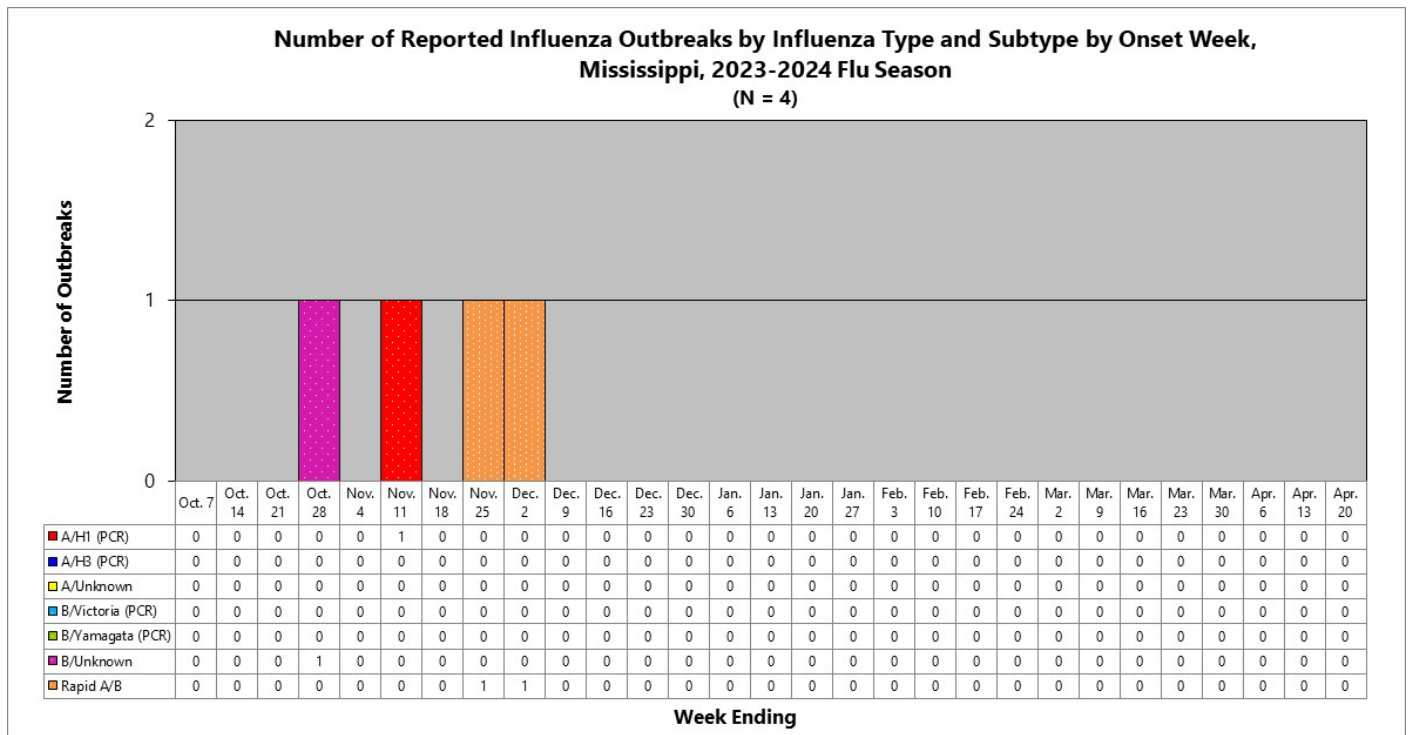
illness during week 49 increased when compared to the previous week. In addition, the statewide ILI rate increased from the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate. | [Figure 4](#)

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](#).

Between week 40 (ending October 7, 2023) and week 50 (week ending Dec. 16, 2023), eight outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the eight reported outbreaks, complete information was available for four of them. One was attributed to an influenza B virus, unknown subtype, one was attributed to influenza A/H1, and two were attributed to an influenza Rapid A/B.

The influenza outbreaks have occurred in the following week counties: Alcorn (1), Harrison (2), Humphreys (1), Marion (1), Prentiss (1), Simpson (1), and Wilkinson (1). | [Figure 5](#)

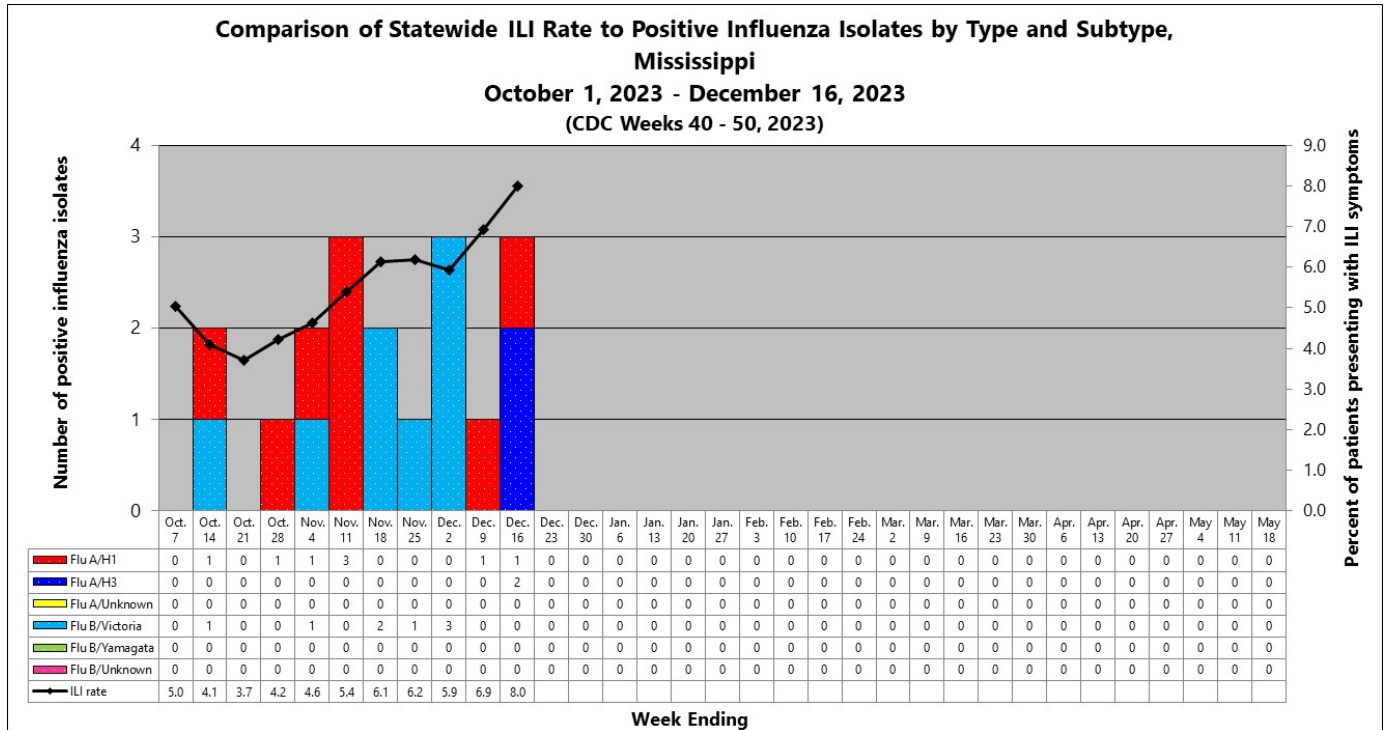


For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: <https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm> and <https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>,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

Flu Testing Reports

Since week 41 (week ending October 14, 2023), 18 laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. Eight (44%) were identified as influenza A/H1, two (11%) were identified as influenza A/H3 and eight (44%) were identified as influenza B/Victoria.

The influenza cases were identified from the following counties: Harrison (1), Hinds (10), Lowndes (3), Pearl River (1), Prentiss (2), and Wilkinson (1). | [Figure 6](#)



National and Mississippi Pediatric Mortality Surveillance

Nationally, **14** influenza-associated pediatric deaths have been reported to CDC for the 2023-2024 season. One death was associated with an influenza A virus (not subtyped), five deaths were associated with influenza A(H1N1) viruses, one death was associated with an influenza A(H3) virus, and seven deaths were associated with an influenza B virus (not subtyped).

Mississippi has had **one** influenza-associated pediatric death reported during this influenza season.

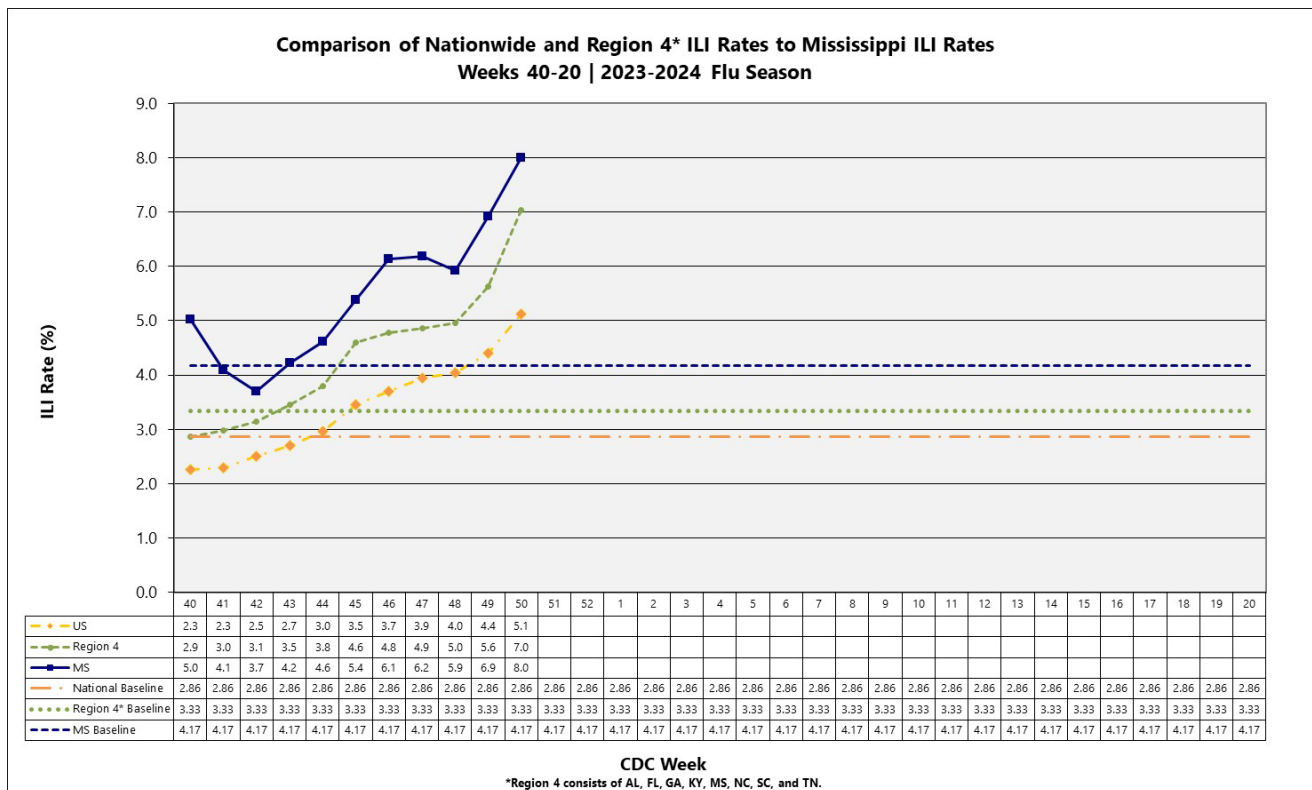
For additional information on influenza-associated pediatric deaths, please refer to the [CDC's FluView](#).

National ILI Surveillance

During week **50**, influenza activity **increased** in the United States. 5.1% of patients reported through ILINet presented with ILI symptoms. This was an increase when compared to week 49 and above the national baseline (2.9%).

Region 4's (Southeast) ILI rate (7.0%) **increased**, and continues to trend upward, when compared to the previous week. It was also above the regional baseline (3.3%). Mississippi is included in Region 4. |

Figure 7



For additional information on flu activity nationwide, please refer to the CDC's website: <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>.

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/
MSDH Flu	http://msdh.ms.gov/msdhsite/_static/14,0,199.html
World Health Organization FluNet	https://www.who.int/tools/flunet/flunet-summary

Appendix

Figure 1

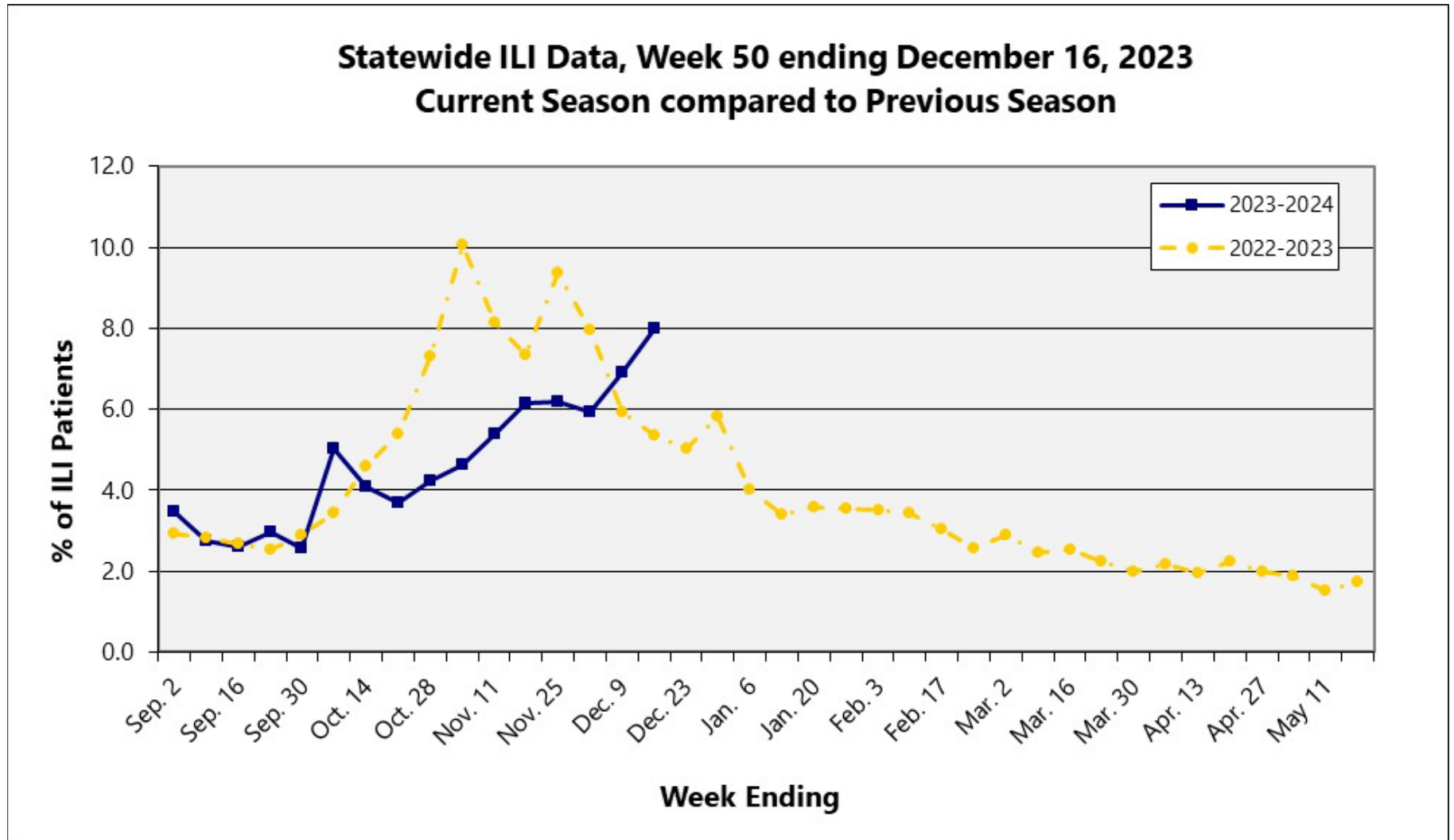


Figure 2

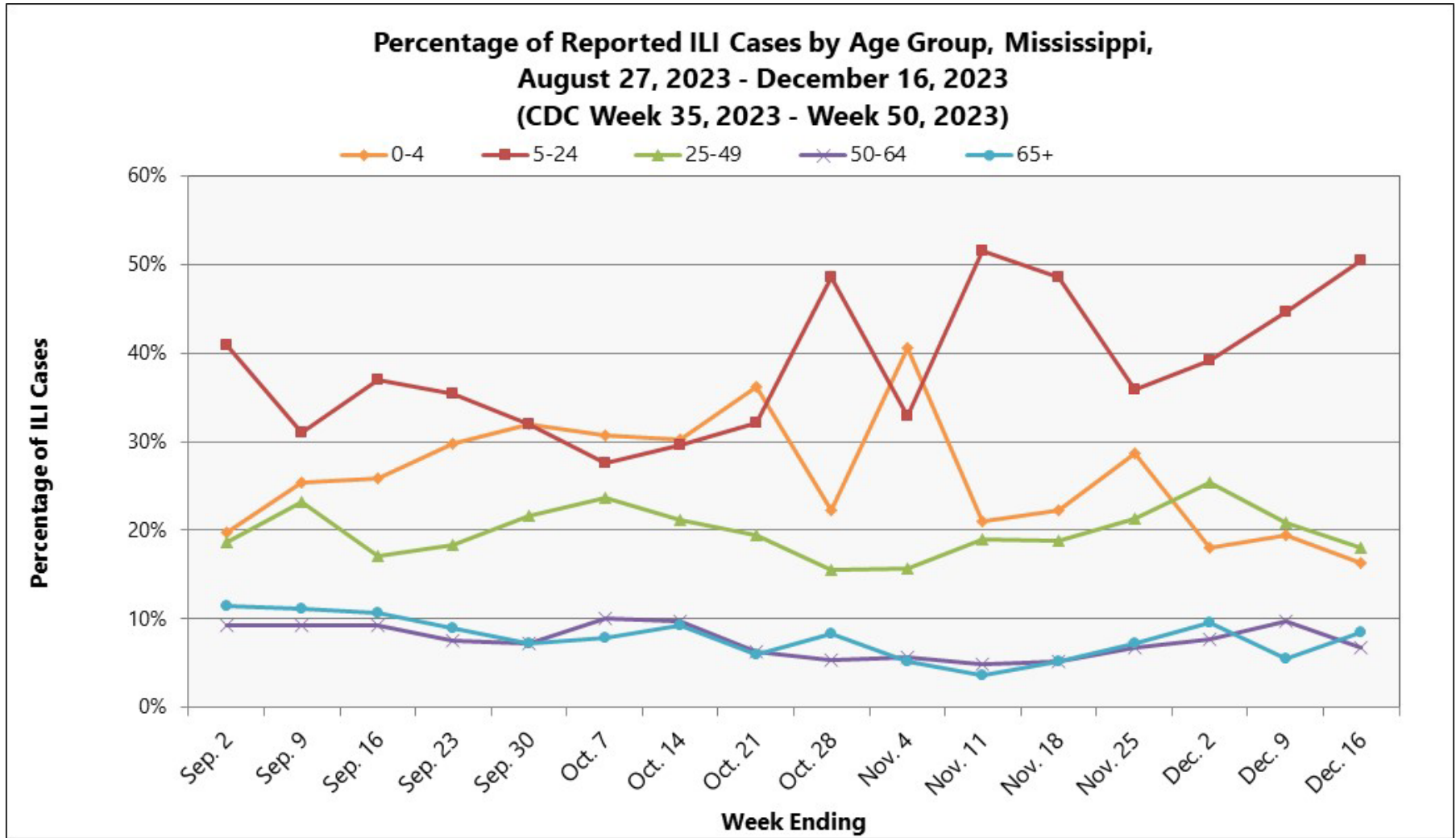


Figure 3

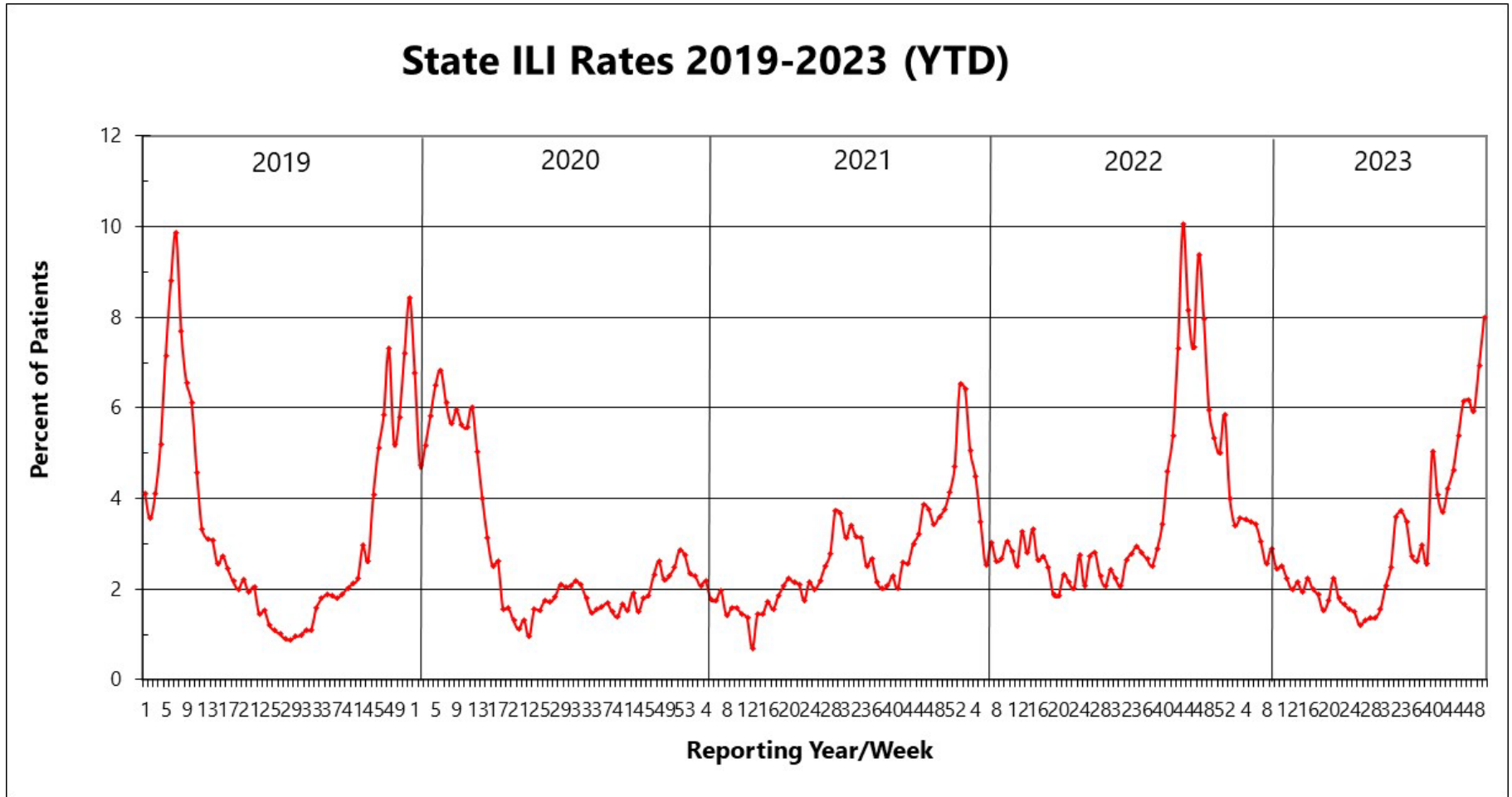


Figure 4

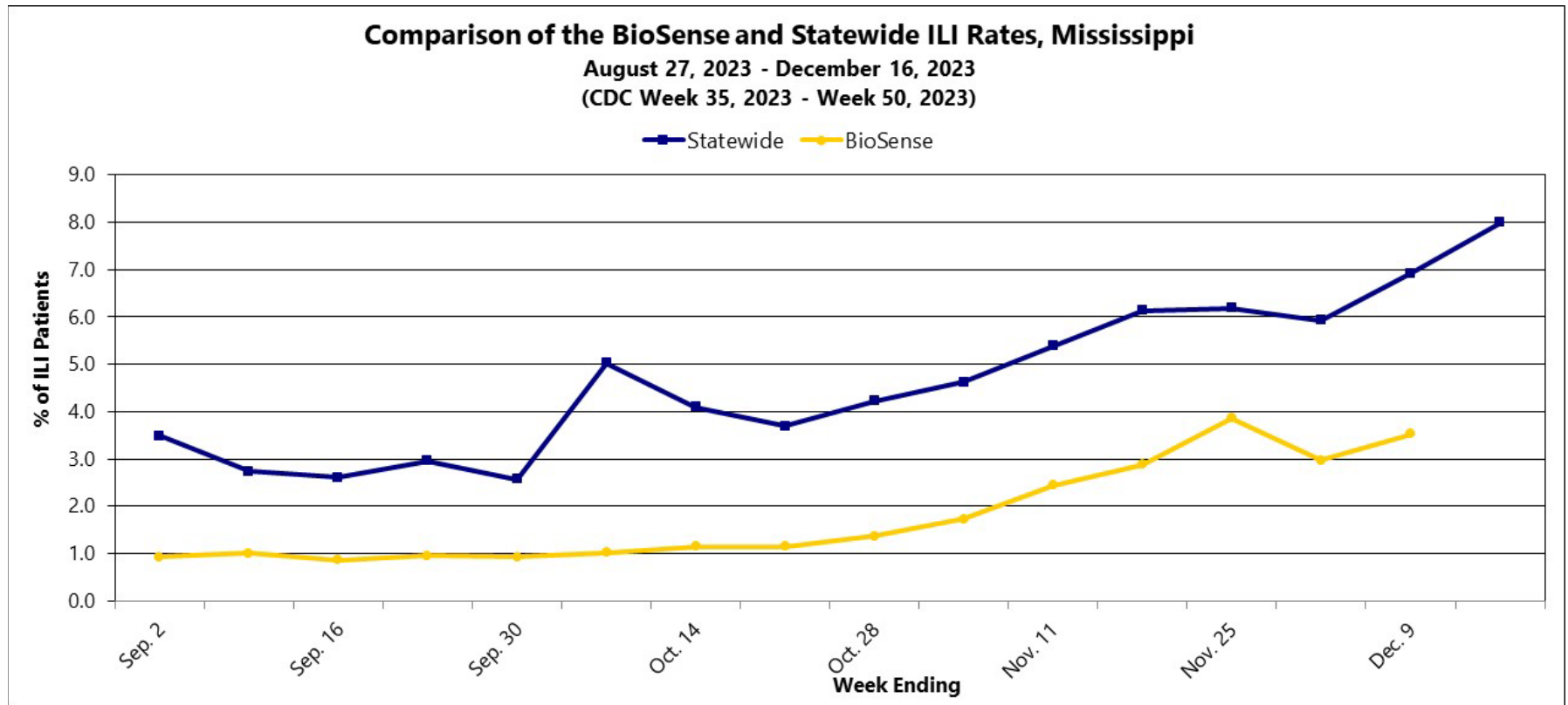


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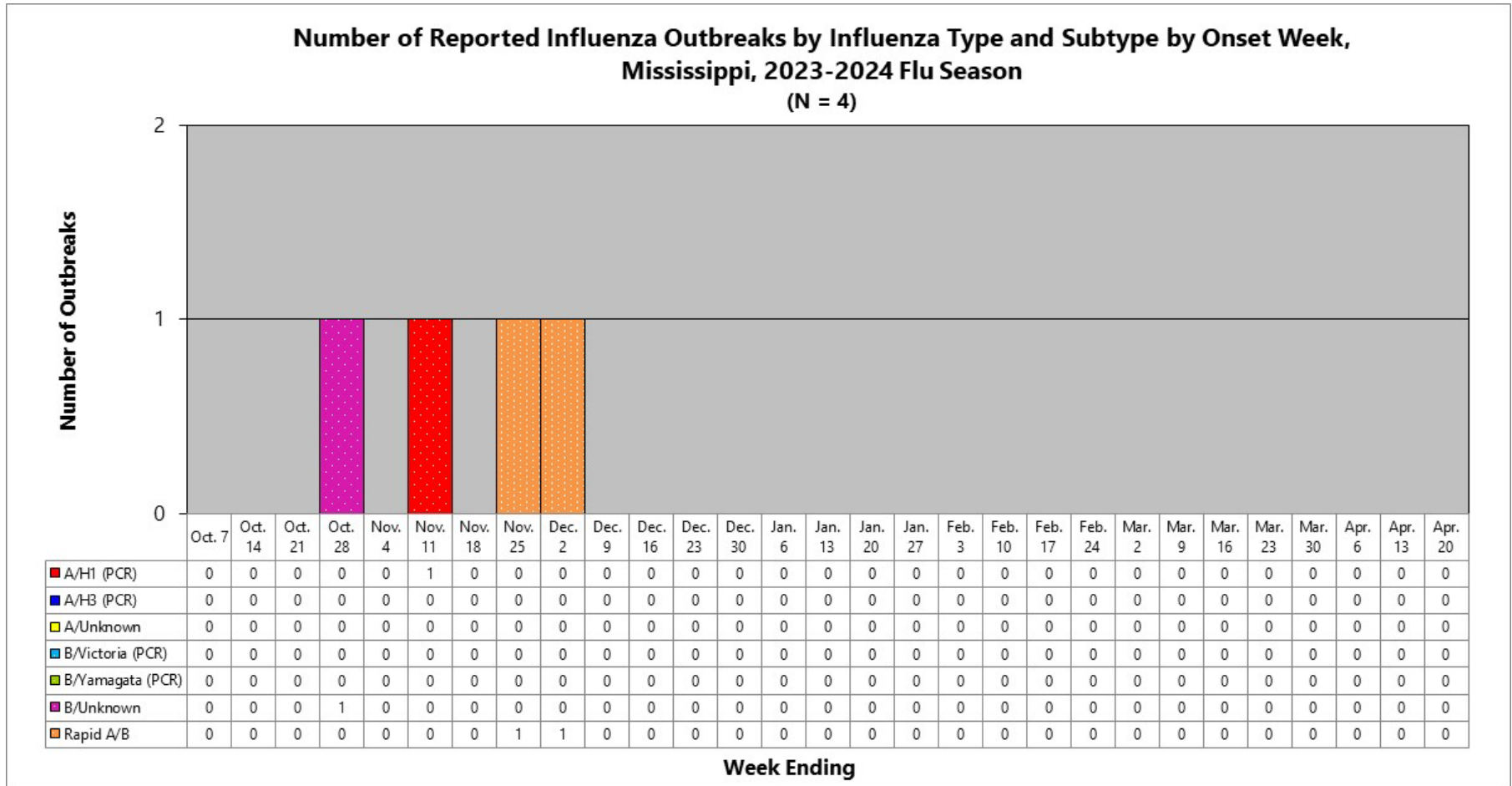


Figure 6

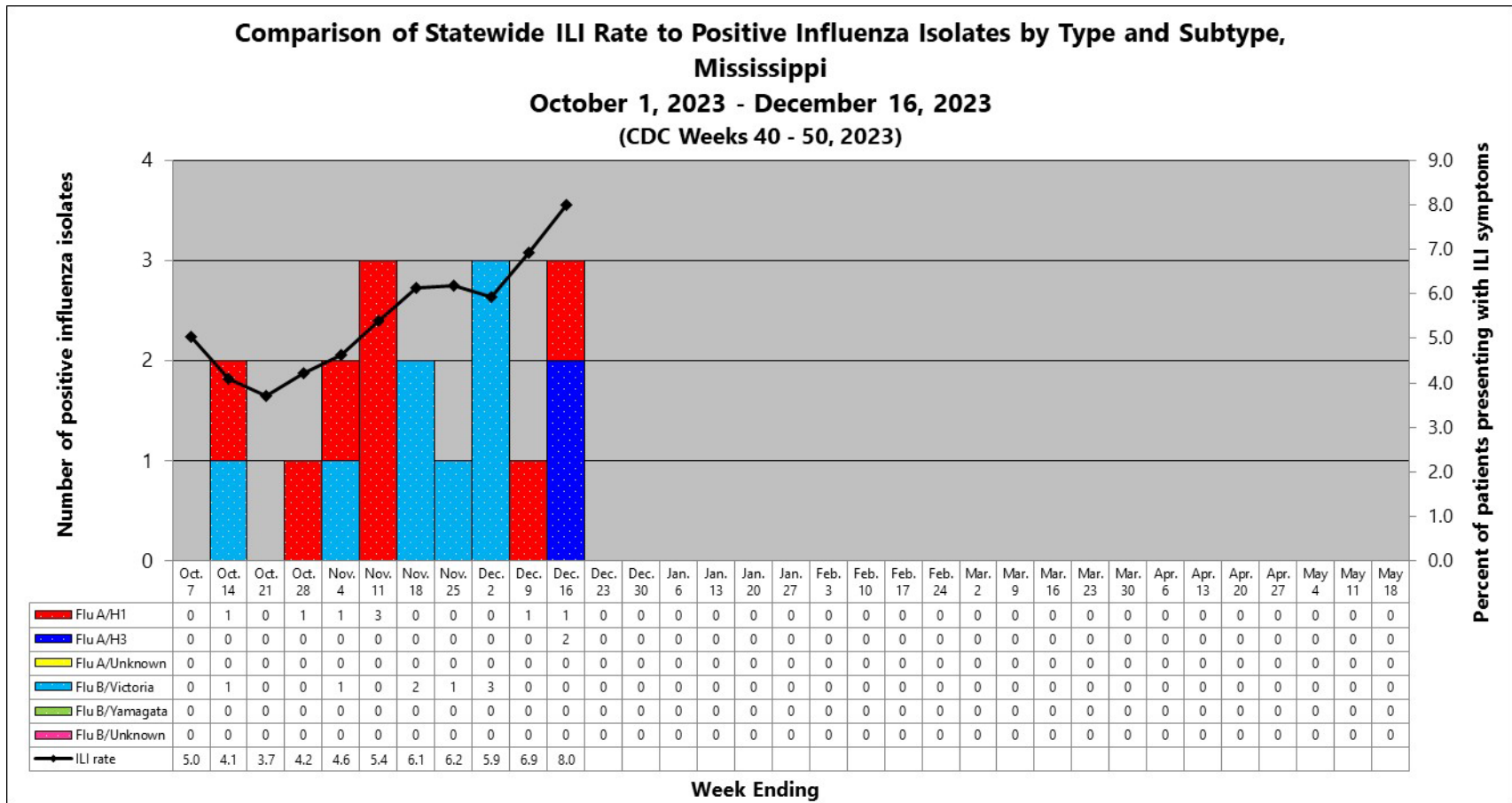
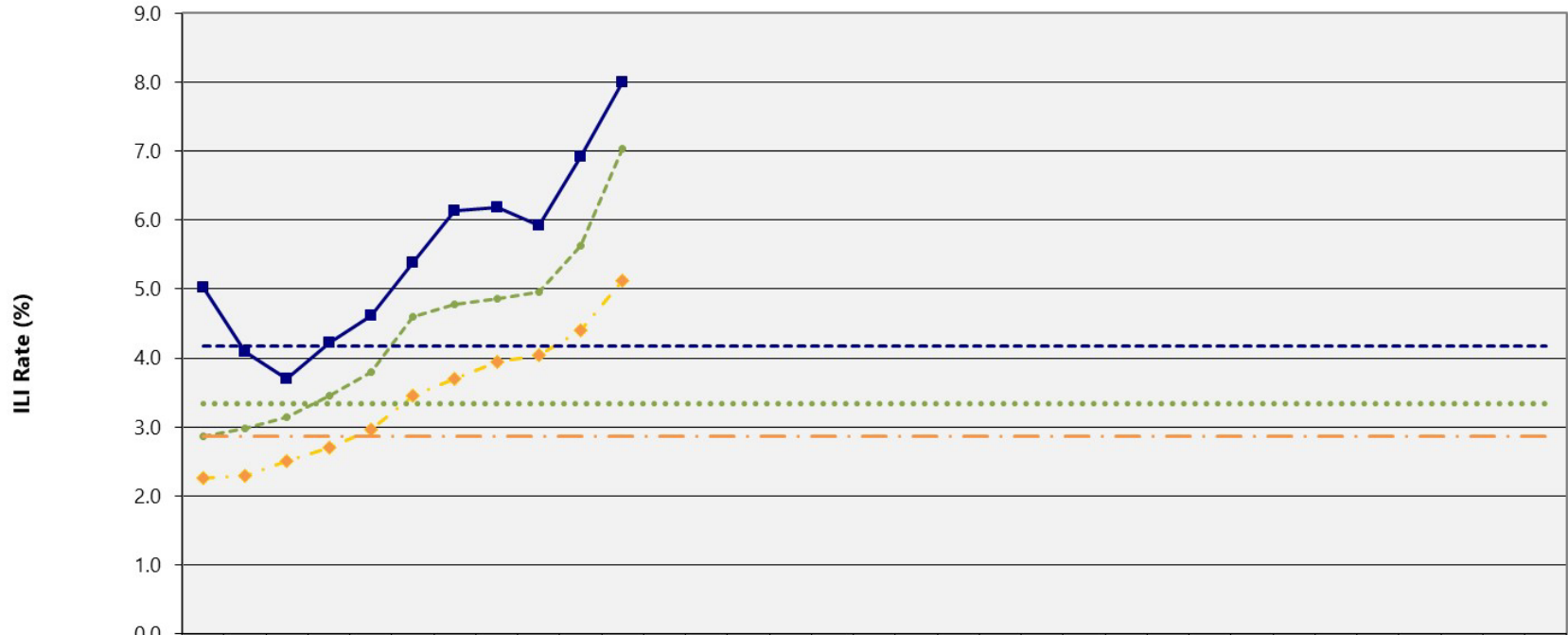


Figure 7

**Comparison of Nationwide and Region 4* ILI Rates to Mississippi ILI Rates
Weeks 40-20 | 2023-2024 Flu Season**



	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20						
US	2.3	2.3	2.5	2.7	3.0	3.5	3.7	3.9	4.0	4.4	5.1																												
Region 4	2.9	3.0	3.1	3.5	3.8	4.6	4.8	4.9	5.0	5.6	7.0																												
MS	5.0	4.1	3.7	4.2	4.6	5.4	6.1	6.2	5.9	6.9	8.0																												
National Baseline	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Region 4* Baseline	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
MS Baseline	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17

CDC Week

*Region 4 consists of AL, FL, GA, KY, MS, NC, SC, and TN.