# 2023-2024 Influenza Surveillance Report

# Week 51

Dec. 17 – Dec. 23, 2023

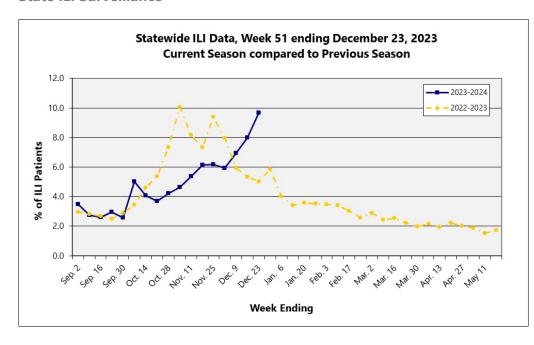
## About our flu activity reporting

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 51 (12/17/23-12/23/23), the overall state ILI rate (9.7%) increased from the previous week (8.0%) and was higher than this time last year (5.0%). |

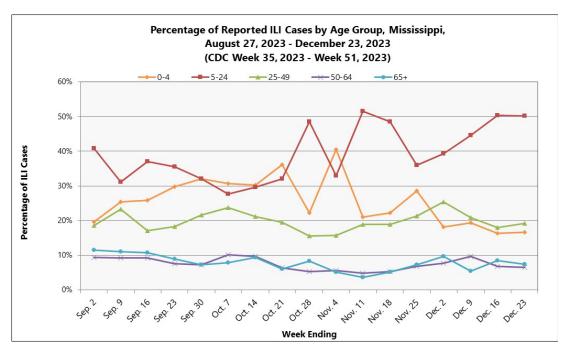
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2023-2024 Influenza Season						
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)	
51	Dec. 23	97	17098	1652	9.7	
50	Dec. 16	102	16879	1350	8.0	
49	Dec. 9	92	15696	1087	6.9	

During week **51**, seven districts (1, 2, 3, 5, 7, 8, and 9) had an increase in ILI activity, while two districts (4 and 6) had a decrease. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2** 



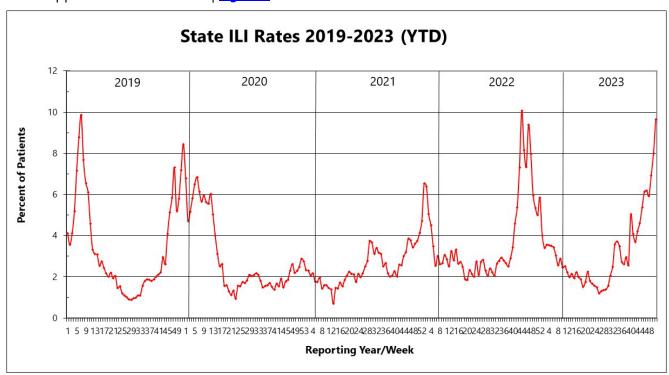
MSDH District ILI Rates (%) 2023-2024					
District	Week 50	Week 51			
State	8.0	9.7			
-	3.5	9.5			
=	13.3	19.9			
III	30.0	36.1			
IV	9.7	8.9			
V	7.8	9.5			
VI	17.3	10.3			
VII	11.1	11.7			
VIII	5.4	6.8			
IX	4.7	6.0			



Overall, the percentage of reported ILI cases has been highest among those in the **5-24 years** of age group. During week **51**, the percentage of ILI cases in the 0-4 and 25-49

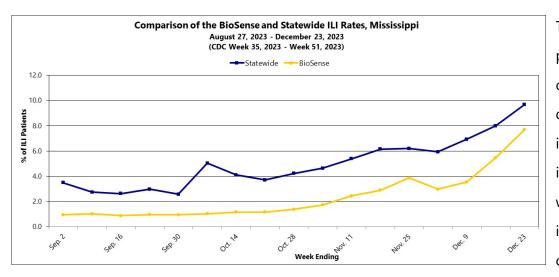
years of age groups increased. However, the percentage of ILI cases decreased in the 65+ age group when compared to the previous week. The percentage of ILI cases in the 5-24 and 50-64 years of age groups remained about the same. | Figure 2

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.



The percentage of patients with a chief complaint or diagnosis of influenza-like illness during week **51** increased when compared to the

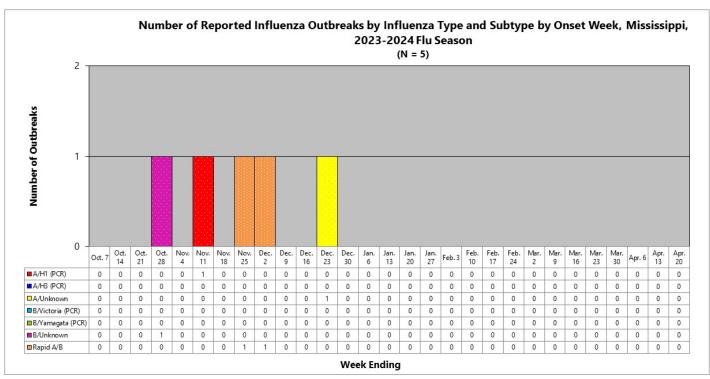
previous week. In addition, the statewide ILI rate increased from the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate. | Figure 4

#### **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 51 (week ending Dec. 23, 2023), 12 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 12 reported outbreaks, complete information was available for five of them. One was attributed to an influenza B virus, unknown subtype, one was attributed to an influenza A/H1, two were attributed to an influenza Rapid A/B, and one was attributed to an influenza A virus, unknown subtype.

The influenza outbreaks have occurred in the following counties: Alcorn (1), Calhoun (1), Harrison (2), Humphreys (1), Lamar (1), Lauderdale (1), Marion (1), Pontotoc (1), Prentiss (1), Simpson (1), and Wilkinson (1). Figure 5

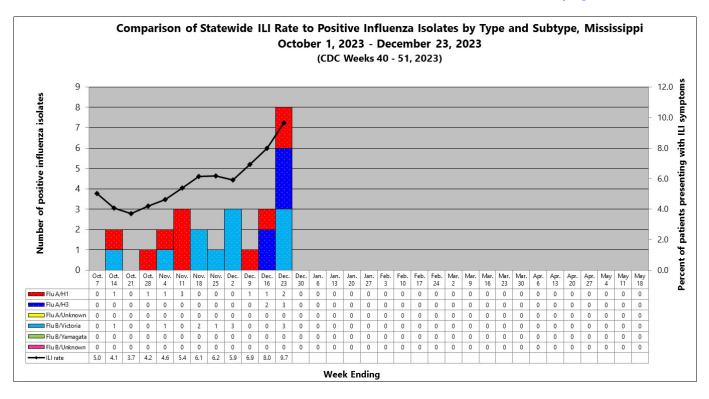


For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: <a href="https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm">https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm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

## **Flu Testing Reports**

Since week 41 (week ending October 14, 2023), 26 laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. 10 (38%) were identified as influenza A/H1, five (19%) were identified as influenza A/H3, and 11 (42%) were identified as influenza B/Victoria.

The influenza cases were identified from the following counties: Calhoun (1), Harrison (1), Hinds (12), Lowndes (4), Marshall (2), Pontotoc (2), Pearl River (1), Prentiss (2), and Wilkinson (1). | Figure 6



# **National and Mississippi Pediatric Mortality Surveillance**

Nationally, **one** influenza-associated pediatric death that occurred during the 2022-2023 season was reported to CDC during week **51**. The death was associated with an influenza B virus (not subtyped). This death brings the total number of reported influenza-associated deaths occurring during that season to 183.

Nationally, **20** influenza-associated pediatric deaths have been reported to CDC for the 2023-2024 season. Three deaths were associated with an influenza A virus (not subtyped), seven deaths were associated with influenza A(H1N1) viruses, one death was associated with an influenza A(H3) virus, and nine deaths were associated with an influenza B virus (not subtyped).

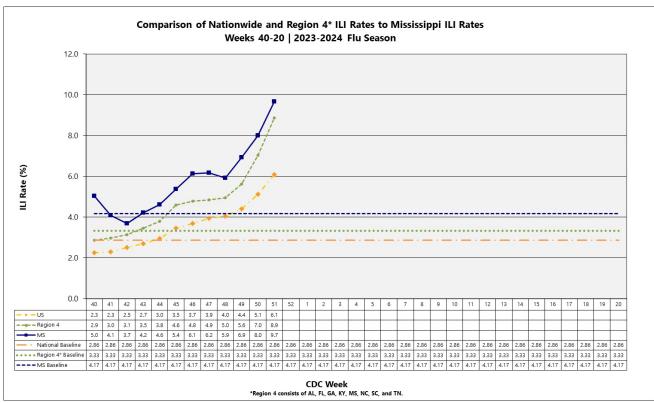
Mississippi has had **one** influenza-associated pediatric death reported during this influenza season.

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

#### **National ILI Surveillance**

During week **51**, influenza activity **increased** in the United States. 6.1% of patients reported through ILINet presented with ILI symptoms. This was an increase when compared to week 50 and above the national baseline (2.9%).

Region 4's (Southeast) ILI rate (8.9%) **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

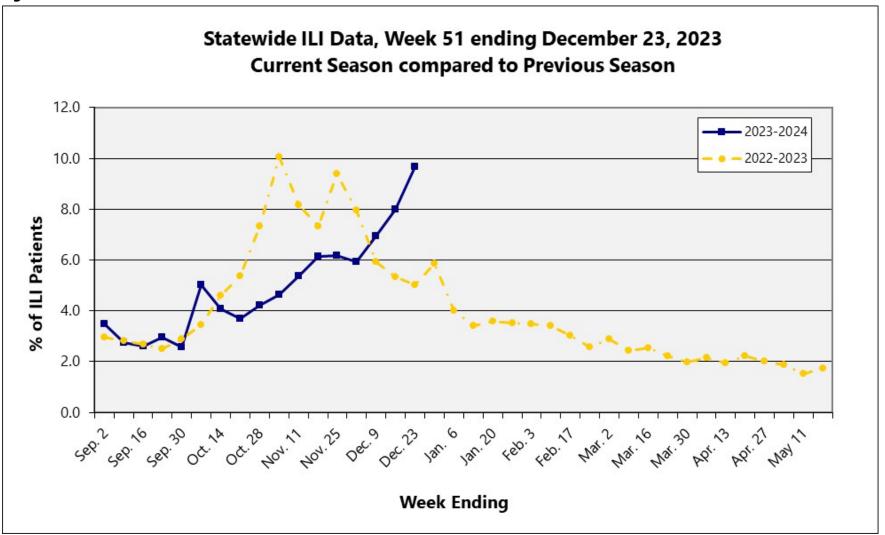


Figure 2

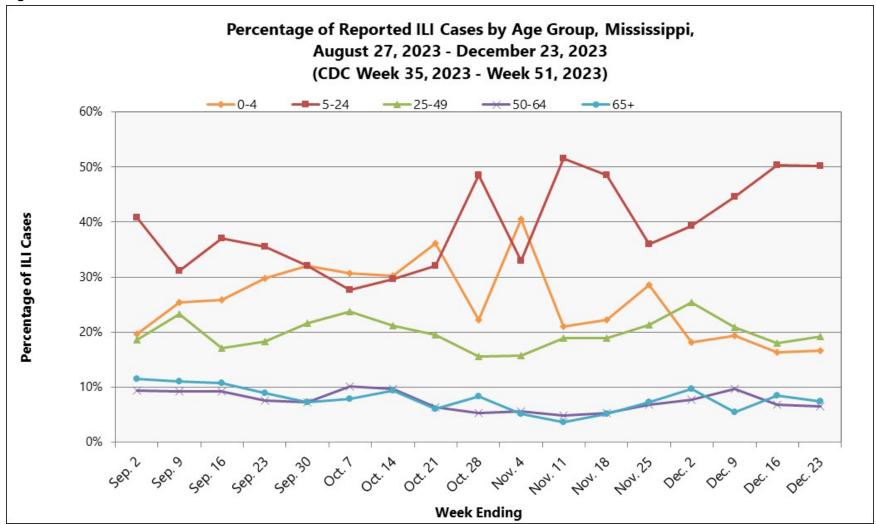


Figure 3

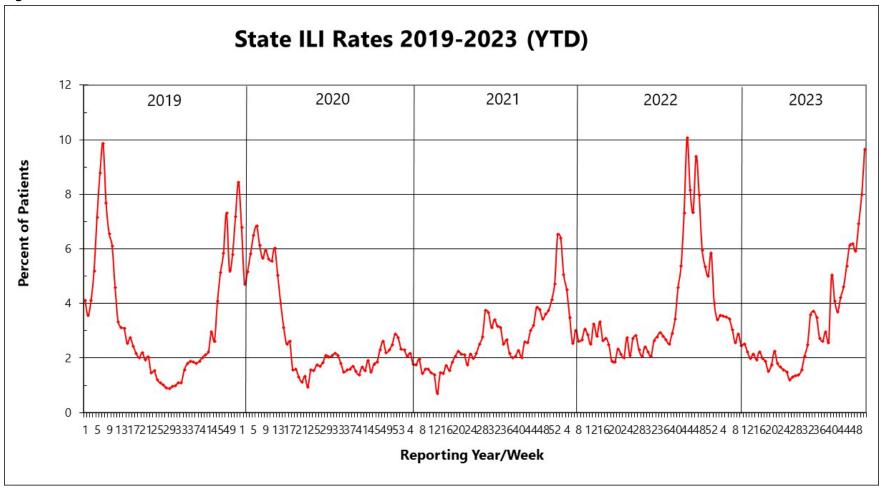


Figure 4

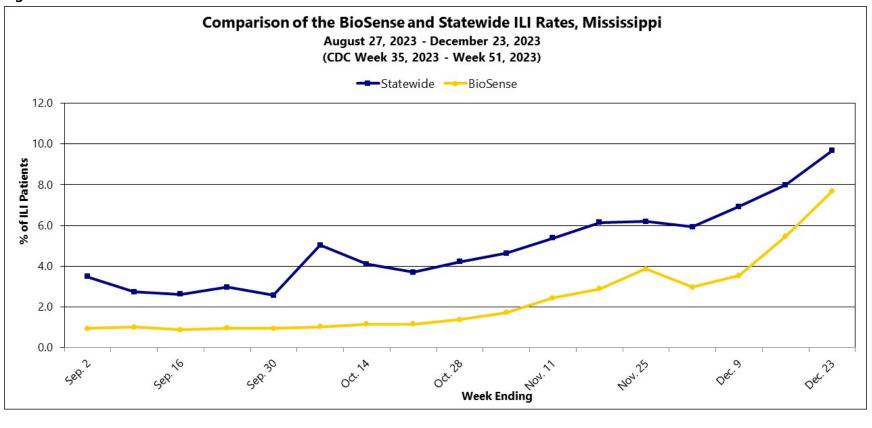


Figure 5

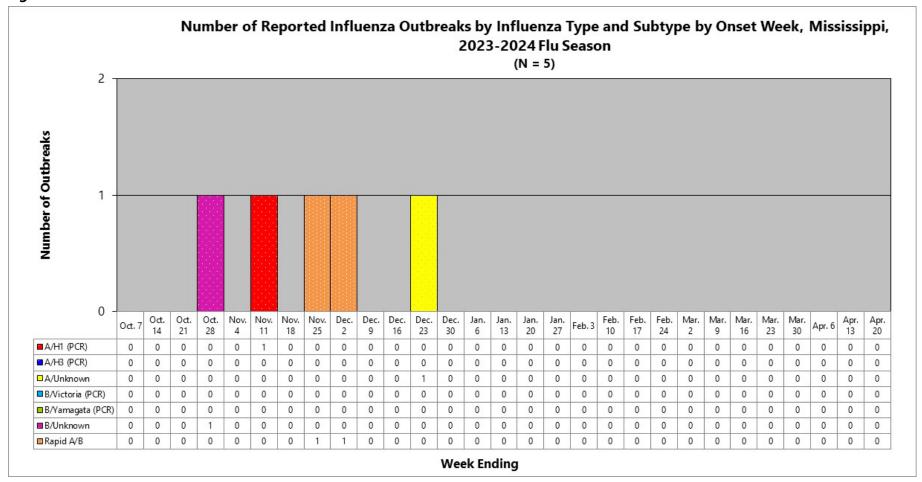


Figure 6

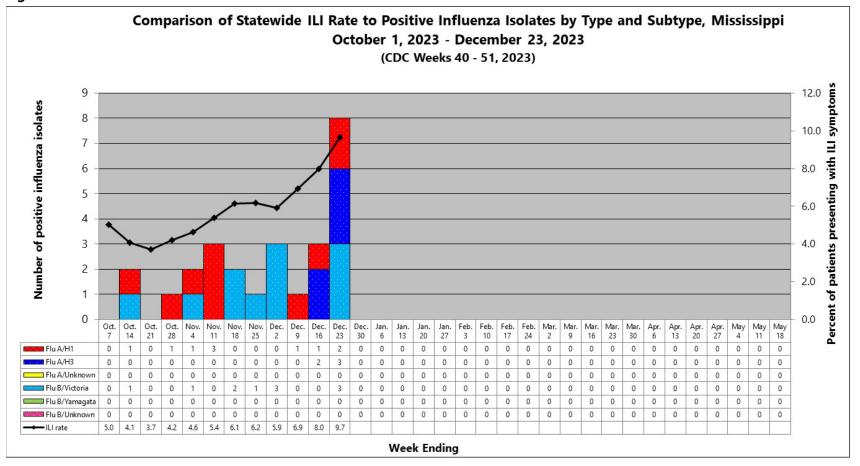


Figure 7

