# 2023-2024 Influenza Surveillance Report

# Week 01

Dec. 31, 2023 – Jan. 6, 2024

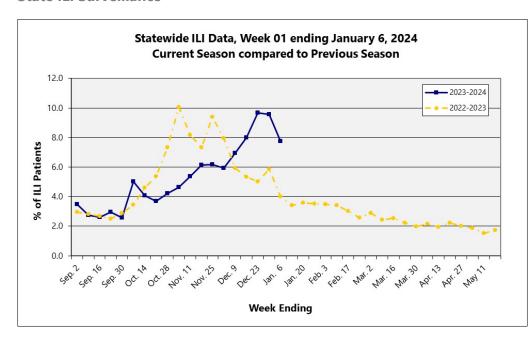
## About our flu activity reporting

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 01 (12/31/23-1/6/24), the overall state ILI rate (**7.7%**) **decreased** from the previous week (**9.5%**) and was higher than this time last year (**4.0%**). | Figure 1

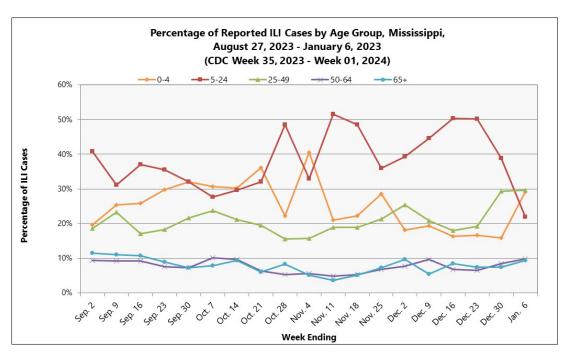
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2023-2024 Influenza Season						
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)	
01	Jan. 6	75	16067	1243	7.7	
52	Dec. 30	99	17795	1699	9.5	
51	Dec. 23	97	17098	1652	9.7	

During week **01**, eight districts (1, 2, 3, 4, 5, 6, 8, and 9) had a decrease in ILI activity, while one district (7) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2** 



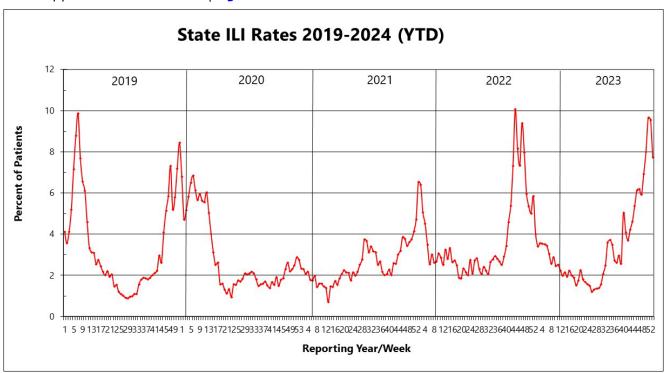
MSDH District ILI Rates (%) 2023-2024					
District	Week 52	Week 01			
State	9.5	7.7			
- [	8.1	5.9			
П	15.1	6.7			
III	42.2	39.4			
IV	12.9	10.4			
V	8.6	6.0			
VI	8.6	5.6			
VII	11.4	11.4			
VIII	5.6	4.5			
IX	5.9	5.3			



Overall, the percentage of reported ILI cases has been highest among those in the **5-24 years** of age group. During week **01**, the percentage of ILI cases in the 0-4, 25-49, 50-

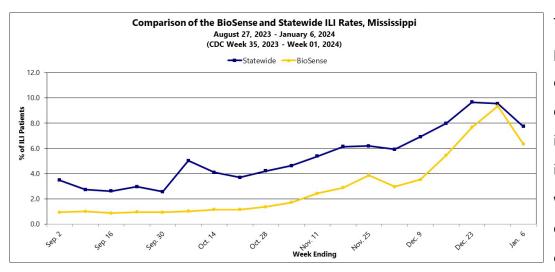
64, and 65+ years of age groups increased. However, the percentage of ILI cases decreased in the 5-24 years of age group when compared to the previous week. | Figure 2

Mississippi ILI Rates 2019-2024 | 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 **01** decreased when compared to the

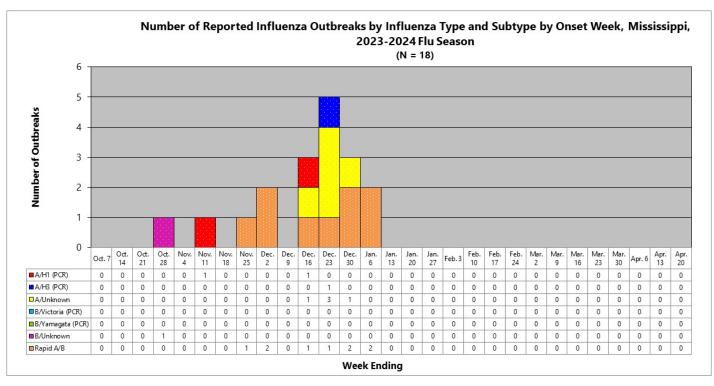
previous week. In addition, the statewide ILI rate decreased from the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate. | Figure 4

#### **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 01 (week ending Jan. 6, 2024), 25 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 25 reported outbreaks, complete information was available for 18 of them. One was attributed to an influenza B virus, unknown subtype, two were attributed to an influenza A/H1, one was attributed to an influenza A/H3, nine were attributed to an influenza Rapid A/B, and five were attributed to an influenza A virus, unknown subtype.

The influenza outbreaks have occurred in the following counties: Alcorn (2), Calhoun (1), Harrison (2), Humphreys (1), Jackson (1), Jefferson (1), Lafayette (2), Lamar (1), Lauderdale (1), Marion (2), Newton (1), Pontotoc (2), Prentiss (1), Rankin (2), Simpson (1), Stone (1), Webster (1), Wilkinson (1), and Yazoo (1). | Figure 5

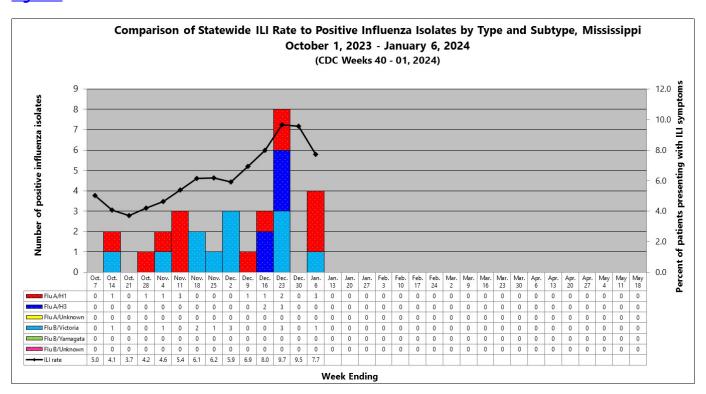


For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: <a href="https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm">https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm</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), 29 laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. 13 (43%) were identified as influenza A/H1, five (19%) were identified as influenza A/H3, and 12 (42%) were identified as influenza B/Victoria. One sample was co-infected with two influenza strains: influenza A(H1) and influenza B/Victoria.

The influenza cases were identified from the following counties: Calhoun (1), Harrison (1), Hinds (14), Lowndes (4), Marshall (2), Pontotoc (2), Pearl River (1), Prentiss (2), Rankin (1) and Wilkinson (1). | Figure 6



# **National and Mississippi Pediatric Mortality Surveillance**

Nationally, **40** influenza-associated pediatric deaths have been reported to CDC for the 2023-2024 season. Nine deaths were associated with an influenza A virus (not subtyped), 11 deaths were associated with influenza A(H1N1) viruses, one death was associated with an influenza A(H3) virus, one death was associated with an influenza A(H3N2) virus, three deaths were associated with an influenza B/Victoria virus, and 15 deaths were associated with an influenza B virus (not subtyped).

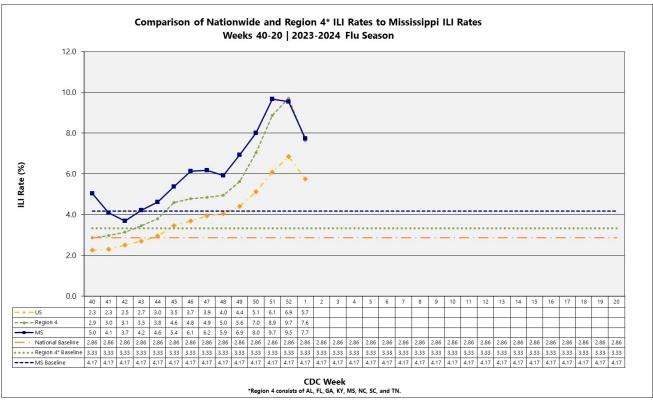
Mississippi has had **two** influenza-associated pediatric deaths reported during this influenza season. The second death was reported to MSDH during week 01 and will be reflected in CDC's week 02 FluView pediatric mortality data.

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

#### **National ILI Surveillance**

During week **01**, influenza activity **decreased** in the United States. 5.7% of patients reported through ILINet presented with ILI symptoms. This was a decrease when compared to week 52 and above the national baseline (2.9%).

Region 4's (Southeast) ILI rate (7.6%) **decreased**, 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: <a href="http://www.cdc.gov/flu/weekly/fluactivitysurv.htm">http://www.cdc.gov/flu/weekly/fluactivitysurv.htm</a>.

# **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

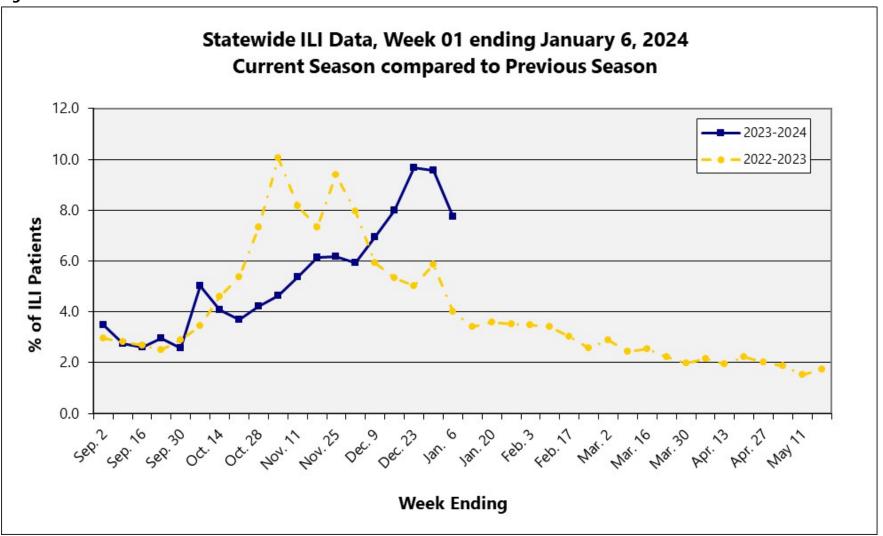


Figure 2

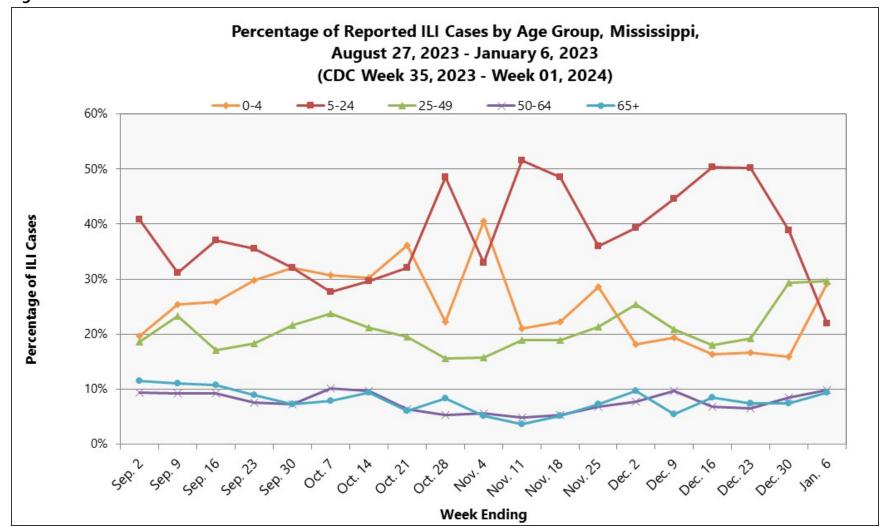


Figure 3

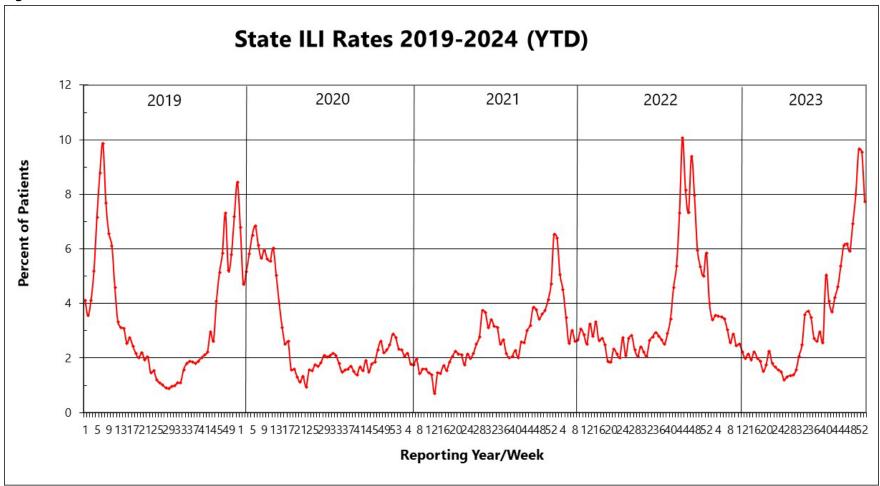


Figure 4

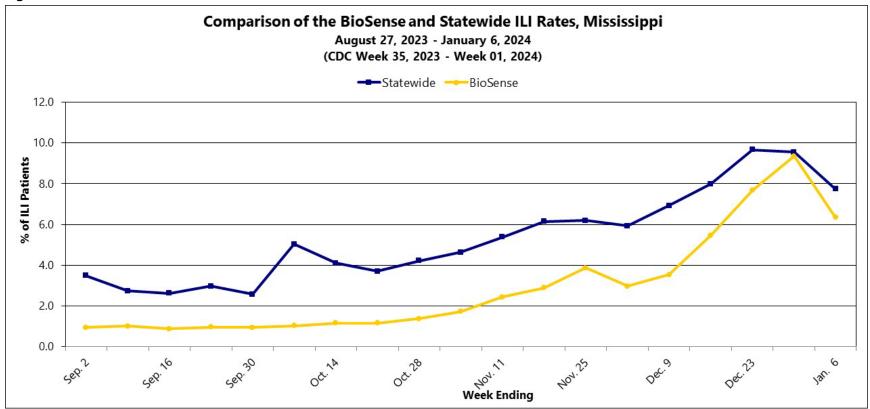


Figure 5

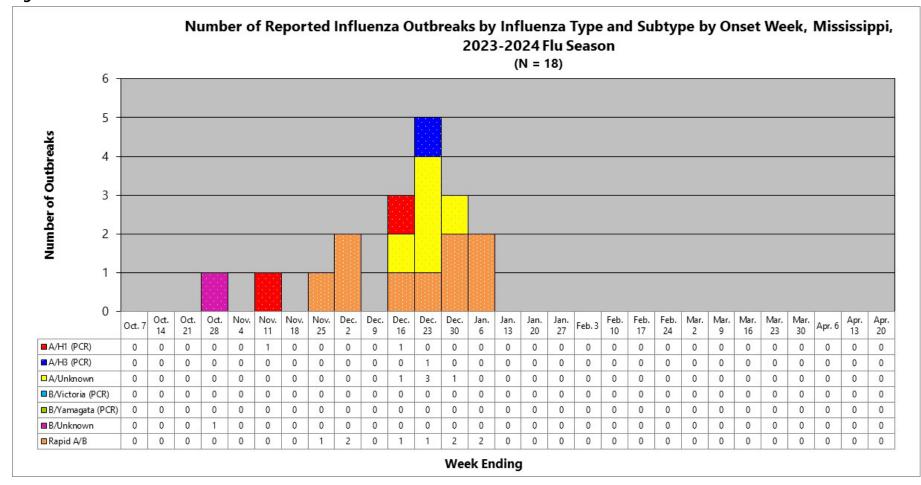


Figure 6

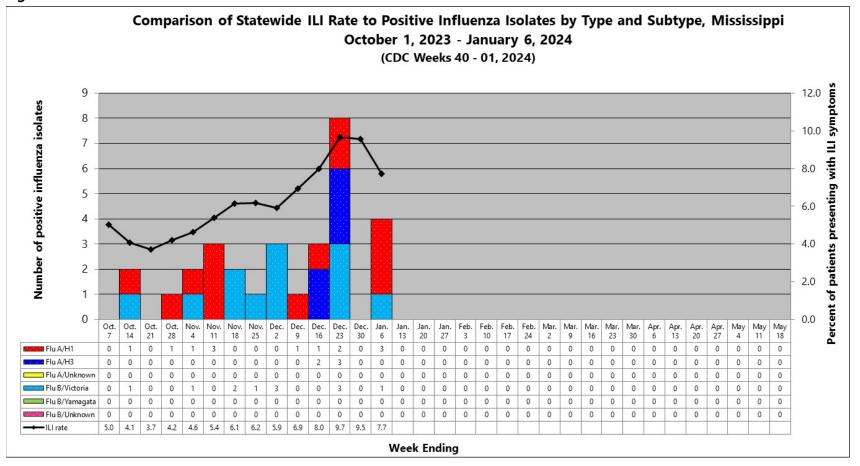


Figure 7

