2023-2024 Influenza Surveillance Report

Week 52

Dec. 24 – Dec. 30, 2023

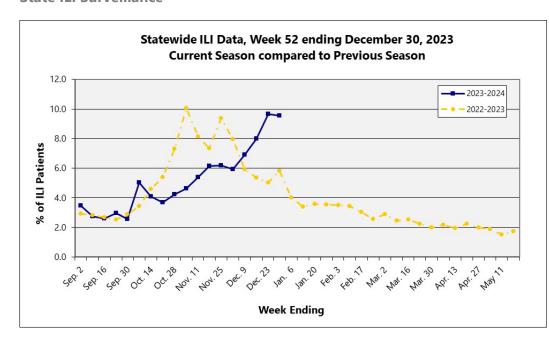
About our flu activity reporting

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 52 (12/24/23-12/30/23), the overall state ILI rate (9.5%) decreased from the previous week (9.7%) and was higher than this time last year (5.8%). | Figure 1

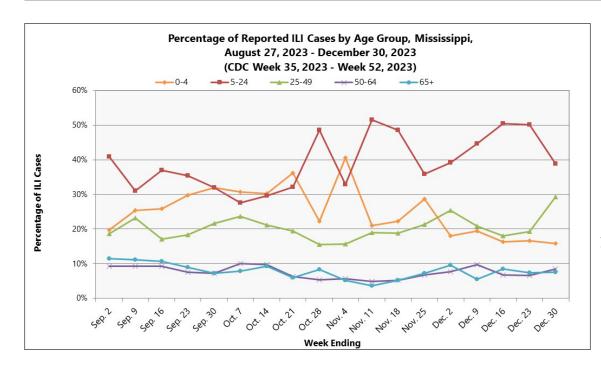
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2023-2024 Influenza Season						
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)	
52	Dec. 30	99	17795	1699	9.5	
51	Dec. 23	97	17098	1652	9.7	
50	Dec. 16	102	16879	1350	8.0	

During week **52**, two districts (3 and 4) had an increase in ILI activity, while five districts (1, 2, 5, 6, and 8) had a decrease. Two districts (7 and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**



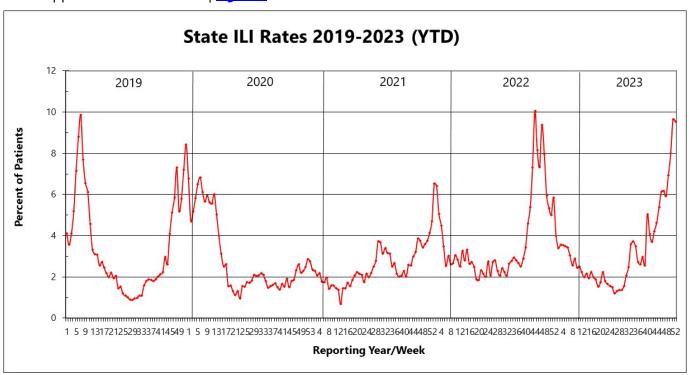
MSDH District ILI Rates (%) 2023-2024					
District	Week 51	Week 52			
State	9.7	9.5			
I	9.5	8.1			
П	19.9	15.1			
III	36.1	42.2			
IV	8.9	12.9			
V	9.5	8.6			
VI	10.3	8.6			
VII	11.7	11.4			
VIII	6.8	5.6			
IX	6.0	5.9			



Overall, the percentage of reported ILI cases has been highest among those in the **5-24 years** of age group.
During week **52**, the percentage

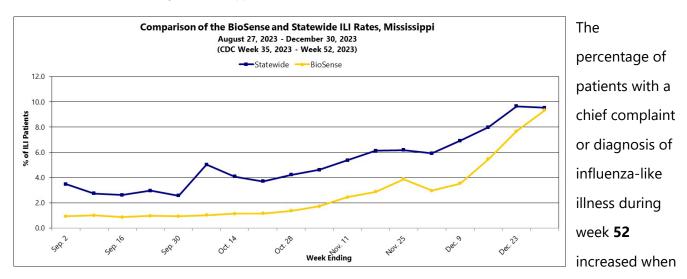
of ILI cases in the 25-49 and 50-64 years of age groups increased. However, the percentage of ILI cases decreased in the 0-4 and 5-24 age groups when compared to the previous week. The percentage of ILI cases in the 65+ years of age group remained about the same. | Figure 2

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.



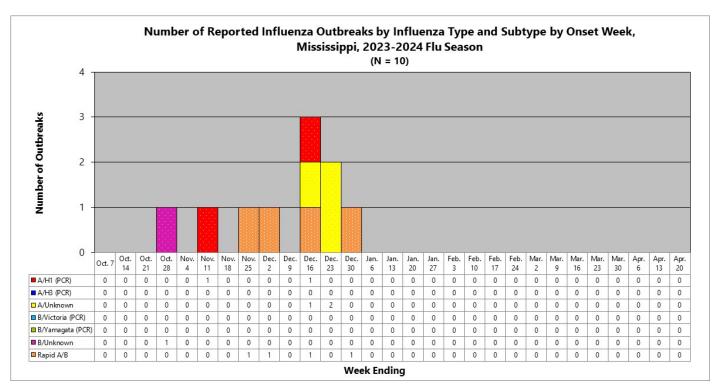
compared to the previous week; however, the statewide ILI rate decreased from the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate and is nearly equal to the statewide ILI rate for week 52. | Figure 4

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 52 (week ending Dec. 30, 2023), 19 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 19 reported outbreaks, complete information was available for 10 of them. One was attributed to an influenza B virus, unknown subtype, two were attributed to an influenza A/H1, four were attributed to an influenza Rapid A/B, and three 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), Lafayette (1), Lamar (1), Lauderdale (1), Marion (2), Newton (1), Pontotoc (1), Prentiss (1), Simpson (1), Webster (1), Wilkinson (1), and Yazoo (1). | Figure 5

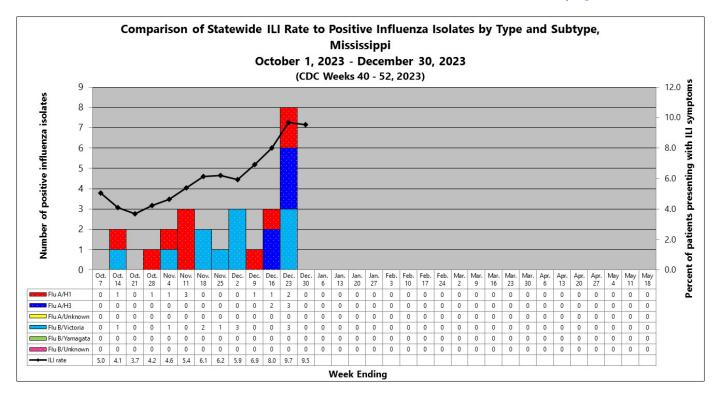


For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm and https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm,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

Flu Testing Reports

Since week 41 (week ending October 14, 2023), 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

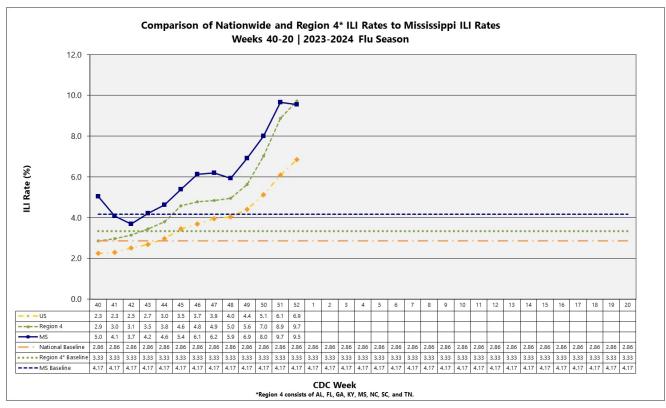
Nationally, **27** influenza-associated pediatric deaths have been reported to CDC for the 2023-2024 season. Five deaths were associated with an influenza A virus (not subtyped), 10 deaths were associated with influenza A(H1N1) viruses, one death was associated with an influenza A(H3) virus, and 11 deaths 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 <u>CDC's FluView</u>.

National ILI Surveillance

During week **52**, influenza activity **increased** in the United States. 6.9% of patients reported through ILINet presented with ILI symptoms. This was an increase when compared to week 51 and above the national baseline (2.9%).

Region 4's (Southeast) ILI rate (9.7%) **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

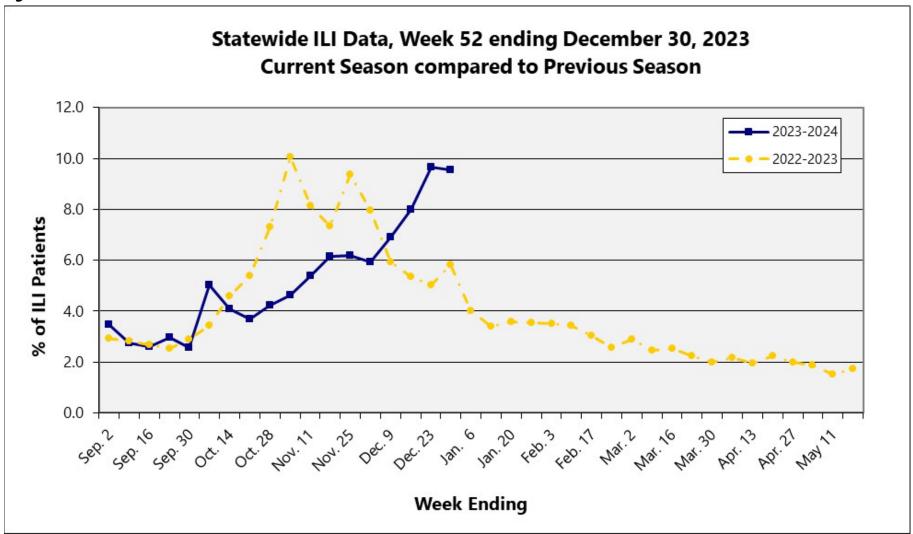


Figure 2

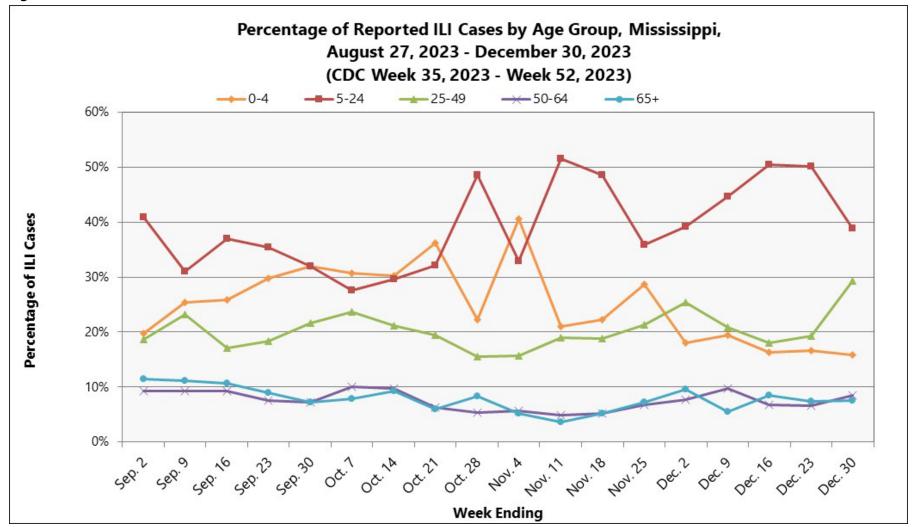


Figure 3

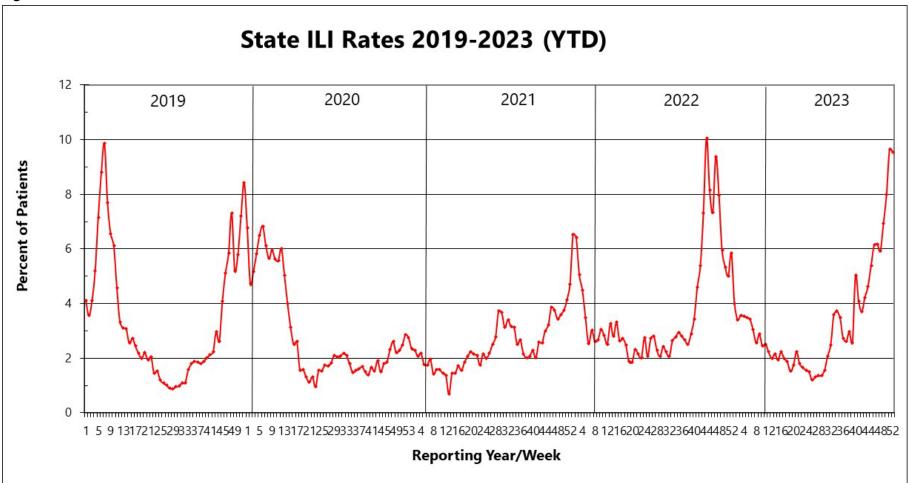


Figure 4

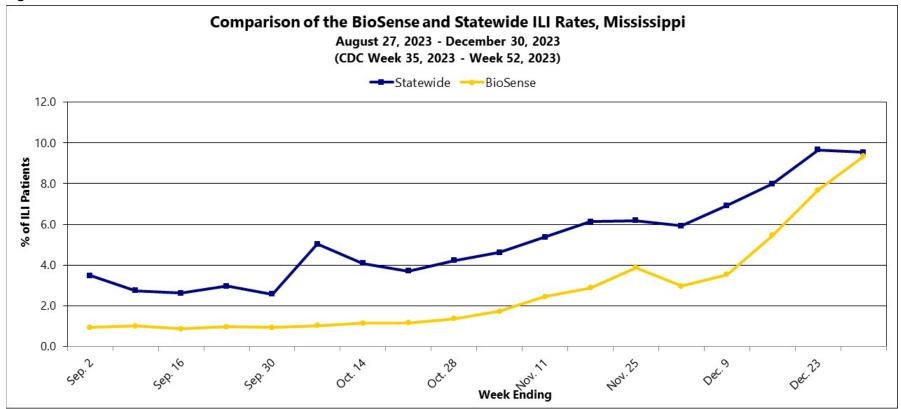


Figure 5

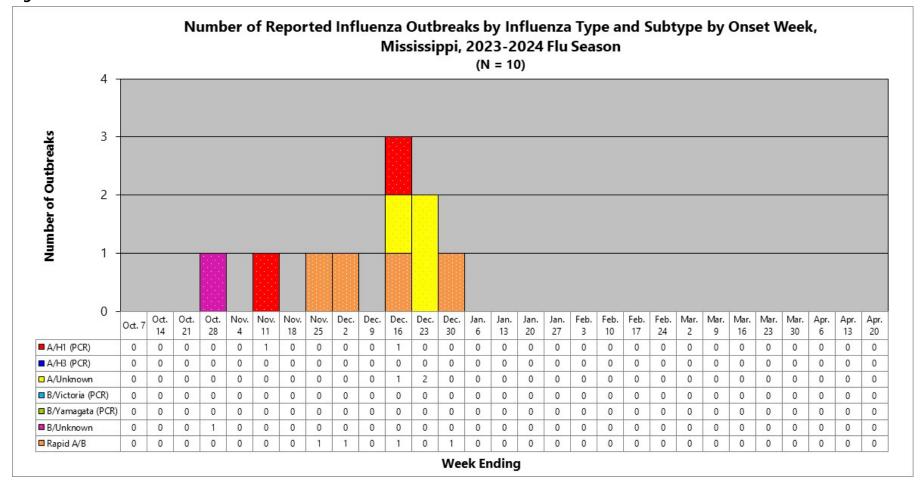


Figure 6

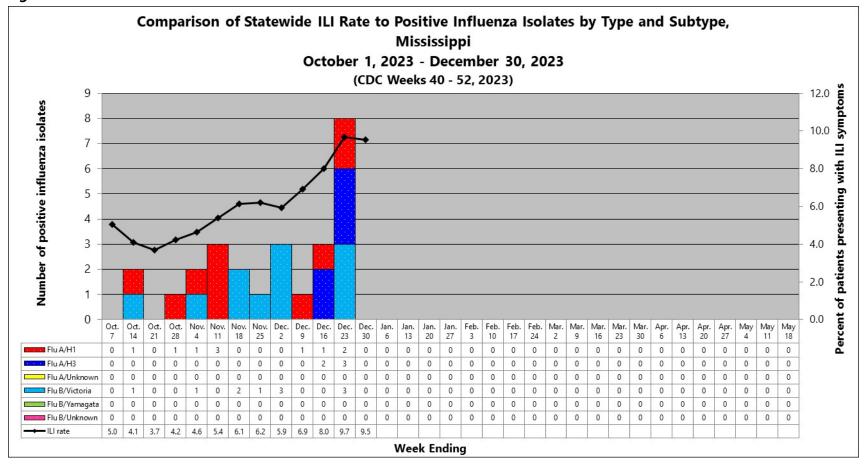


Figure 7

