2023-2024 Influenza Surveillance Report

Week 16

Apr. 14, 2024 - Apr. 20, 2024

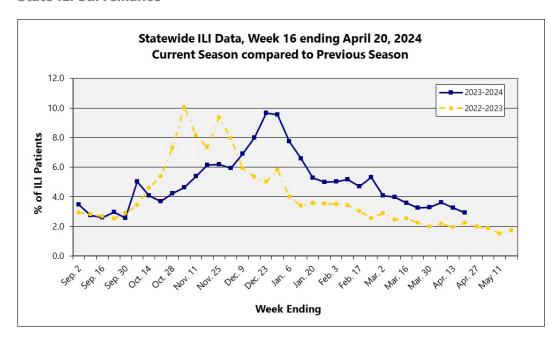
About our flu activity reporting

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 16 (4/14/24-4/20/24), the overall state ILI rate (2.9%) was comparable to the previous week (3.3%) and was higher than this time last year (2.2%). | Figure 1

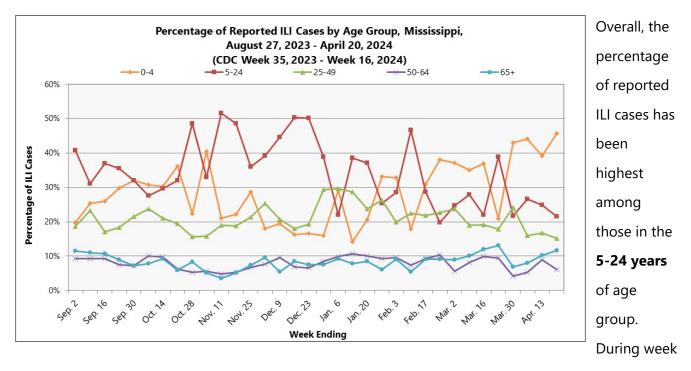
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2023-2024 Influenza Season						
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)	
16	Apr. 20	93	14630	429	2.9	
15	Apr. 13	109	13732	447	3.3	
14	Apr. 6	107	13555	488	3.6	

During week **16**, two districts (5 and 6) had an increase in ILI activity, while five districts (1, 3, 4, 7, and 8) had a decrease. Two districts (2 and 9) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table 2**

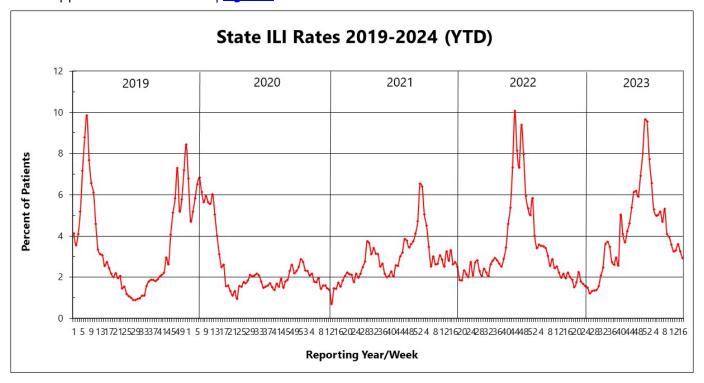


MSDH District ILI Rates (%) 2023-2024					
District	Week 15	Week 16			
State	3.3	2.9			
I	3.9	1.3			
П	4.1	4.2			
III	13.7	11.1			
IV	3.4	2.3			
V	4.2	4.8			
VI	9.7	11.8			
VII	3.7	3.1			
VIII	2.1	1.5			
IX	1.5	1.4			



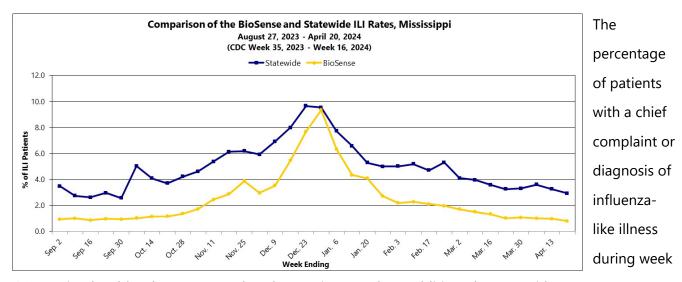
16, the percentage of ILI cases in the 0-4 and 65+ years of age groups increased. However, the percentage of ILI cases decreased in the 5-24, 25-49, and 50-64 years of age groups, when compared to the previous week. | Figure 2

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.



16 remained stable when compared to the previous week. In addition, the statewide ILI rate was comparable to the previous week. Since week 43, the BioSense ILI rate appears to be following a similar trend as the statewide ILI rate. | Figure 4

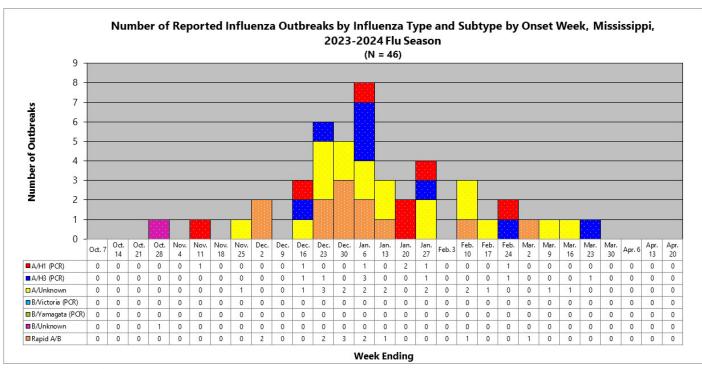
Influenza Outbreaks

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 16 (week ending Apr. 20, 2024), 48 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 48 reported outbreaks, complete information was available for 46 of them. One was attributed to an influenza B virus, unknown subtype, seven were attributed to an influenza A/H1, eight were attributed to an influenza A/H3, 12 were attributed to an influenza Rapid A/B, and 18 were attributed to an influenza A virus, unknown subtype.

Through week 16, within the reported outbreaks, the overall vaccination rate among facility residents was 82%, and among staff members, 46%. In addition, the percentage of residents that were ill due to influenza was 14%, and among staff members, 4%. The percentage of residents that were hospitalized due to influenza was 2%, and among staff members, 0%.

The influenza outbreaks have occurred in the following counties: Alcorn (2), Attala (3), Calhoun (1), Greene (1), Harrison (2), Humphreys (2), Jackson (1), Jefferson (1), Lafayette (3), Lamar (1), Lauderdale (1), Leake (1), Lincoln (1), Lowndes (1), Madison (2), Marion (2), Marshall (1), Monroe (1), Newton (1), Pontotoc (3), Prentiss (2), Rankin (2), Simpson (1), Stone (3), Tallahatchie (1), Union (1), Webster (3), Wilkinson (1), Yalobusha (1), and Yazoo (1). Figure 5

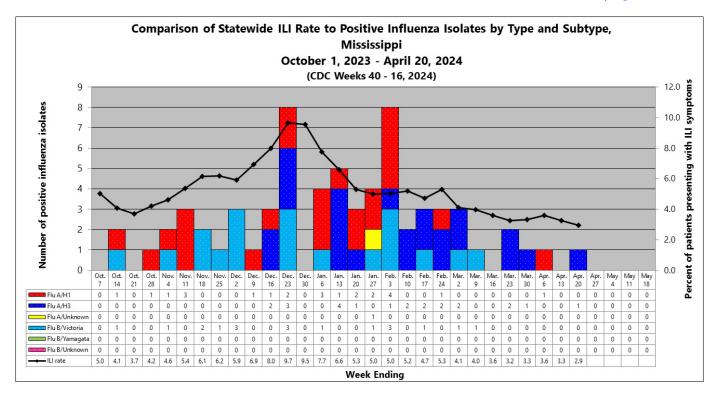


For additional information on infection control measures in health care facilities and managing influenza outbreaks in long-term care facilities, please refer to the CDC's webpages: https://www.cdc.gov/flu/professionals/infectioncontrol/index.htm and https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-quidance.htm,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

Flu Testing Reports

Since week 41 (week ending October 14, 2023), 66 laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. 24 (36%) were identified as influenza A/H1, 23 (34%) were identified as influenza A/H3, and 19 (28%) were identified as influenza B/Victoria. One (1%) was identified as an influenza A virus, unknown subtype. 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: Attala (15), Calhoun (2), Harrison (1), Hinds (24), Leake (1), Lincoln (2), Lowndes (6), Marshall (2), Monroe (2), Pontotoc (2), Pearl River (1), Prentiss (2), Rankin (1), Stone (1), Tallahatchie (1), Union (1), Webster (1), and Wilkinson (1). | Figure 6



National and Mississippi Pediatric Mortality Surveillance

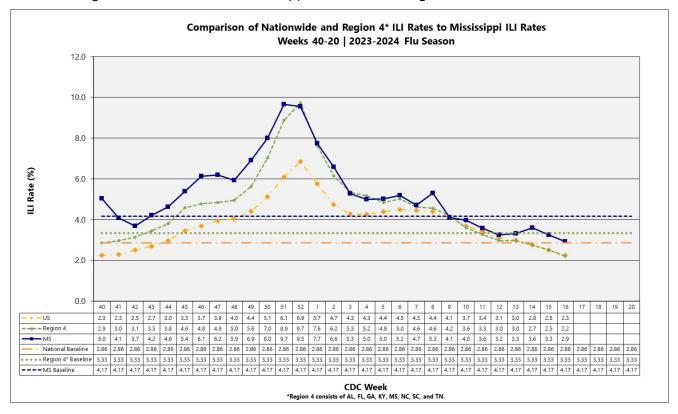
Nationally, **148** influenza-associated pediatric deaths have been reported to CDC for the 2023-2024 season. 35 deaths were associated with an influenza A virus (not subtyped), 35 deaths were associated with influenza A(H1N1) viruses, seven deaths were associated with an influenza A(H3) virus, one death was associated with an influenza A(H3N2) virus, nine deaths were associated with an influenza B/Victoria virus, 57 deaths were associated with an influenza B virus (not subtyped), one death was associated with a co-infection of an influenza A(H1N1) and an influenza B/Victoria virus, and one death was associated with a co-infection of an influenza A(H1N1) and an influenza B virus.

Mississippi has had **two** influenza-associated pediatric deaths 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 **16**, influenza activity **decreased** in the United States. 2.3% of patients reported through ILINet presented with ILI symptoms. This was a decrease when compared to week 15 and was below the national baseline (2.9%).

Region 4's (Southeast) ILI rate (2.2%) **decreased**, when compared to the previous week. It was also below the regional baseline (3.3%). Mississippi is included in Region 4.



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

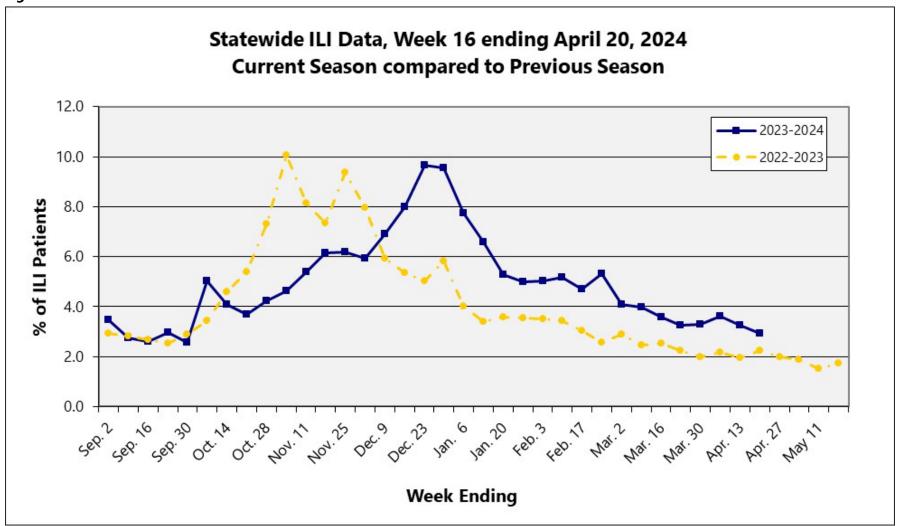


Figure 2

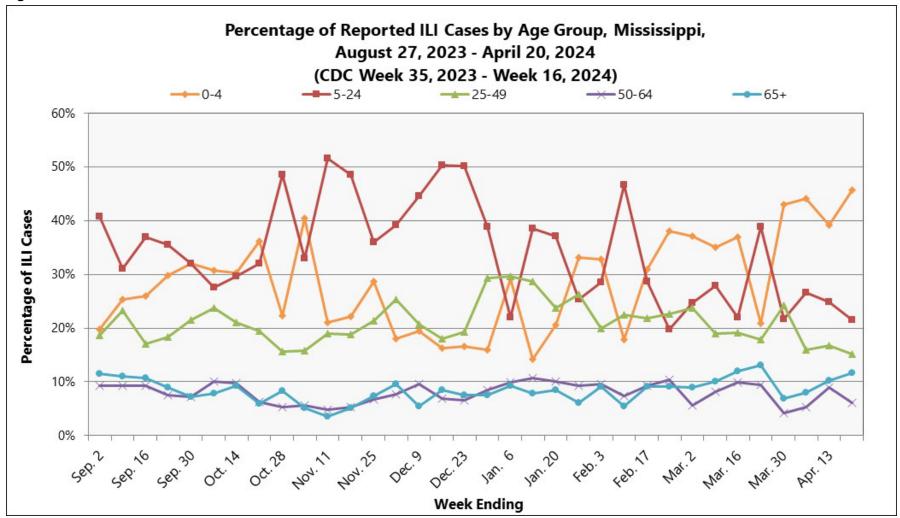


Figure 3

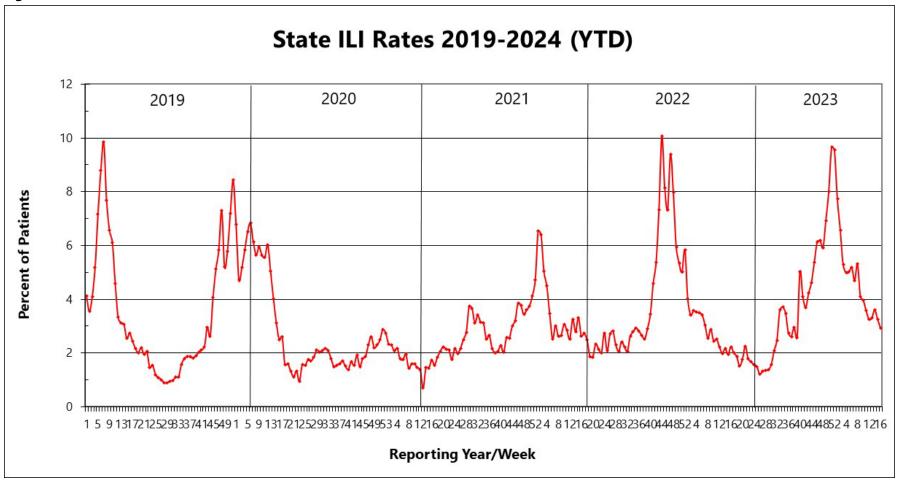


Figure 4

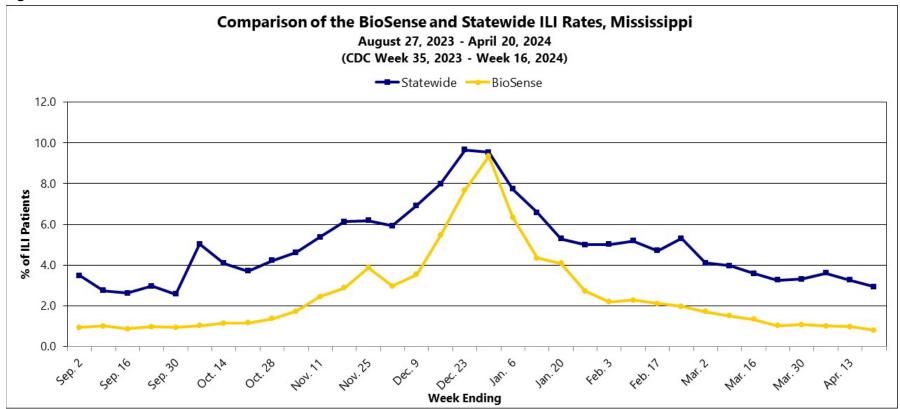


Figure 5

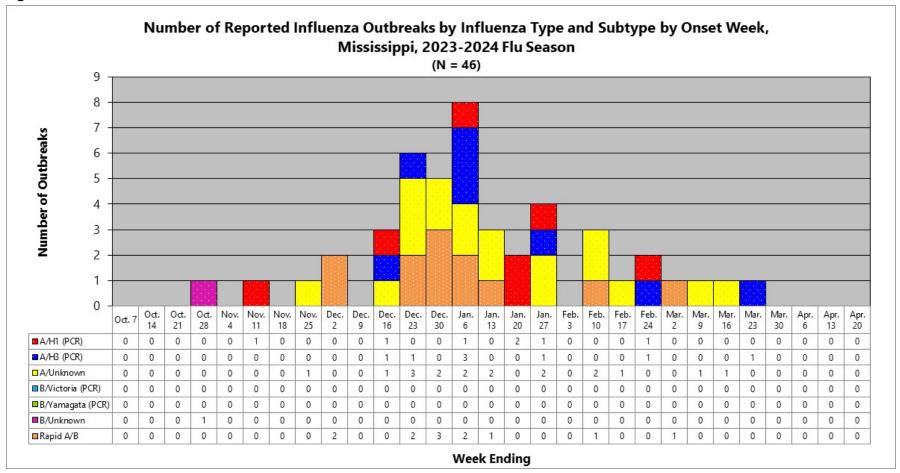


Figure 6

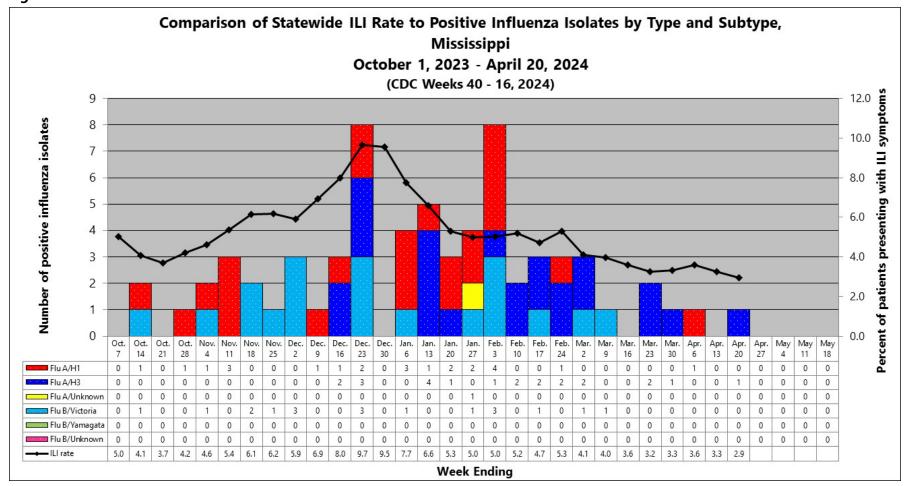


Figure 7

