2022-2023 Influenza Surveillance Report

Week 08

Feb. 19 – Feb. 25, 2023

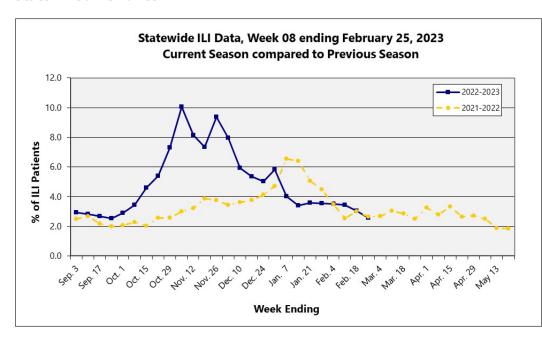
About our flu activity reporting

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.*

Content

- **❖ State ILI Surveillance**
- * Influenza Outbreaks
- * Flu Testing Reports
- **❖** National and Mississippi Pediatric Mortality Surveillance
- **❖** National ILI Surveillance
- * Appendix
 - Figure 1 (Statewide ILI Data, Current Season compared to Previous Season)
 - Figure 2 (Percentage of ILI Cases by Age Group, Mississippi)
 - Figure 3 (State ILI Rates 2018-2023 (YTD))
 - Figure 4 (Comparison of the BioSense and Statewide ILI Rates)
 - <u>Figure 5</u> (Number of Reported Influenza Outbreaks by Type and Subtype, Mississippi)
 - <u>Figure 6</u> (Comparison of Statewide ILI Rate to Positive Influenza Isolates by Type and Subtype, Mississippi)

State ILI Surveillance



During week **08** (02/19/23-02/25/23), the overall state ILI rate (**2.6%**) **decreased** from the previous week (**3.0%**) and was comparable to this time last year (**2.6%**). | Figure 1

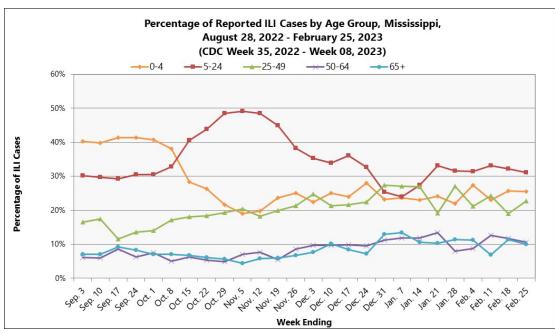
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

2022-2023 Influenza Season						
CDC Week	Week Ending	Number of reports received from Sentinel Providers	Total patients	ILI symptoms	ILI Rate (%)	
08	Feb. 25	96	12073	309	2.6	
07	Feb. 18	100	12342	375	3.0	
06	Feb. 11	101	12756	437	3.4	

During week **08**, two districts (2 and 6) had an increase in ILI activity, while three districts (3, 4, and 9) had a decrease. The remaining four districts (1, 5, 7, and 8) remained about the same. *Information is provisional only and may change depending on additional reporting from sentinel providers.* | **Table**



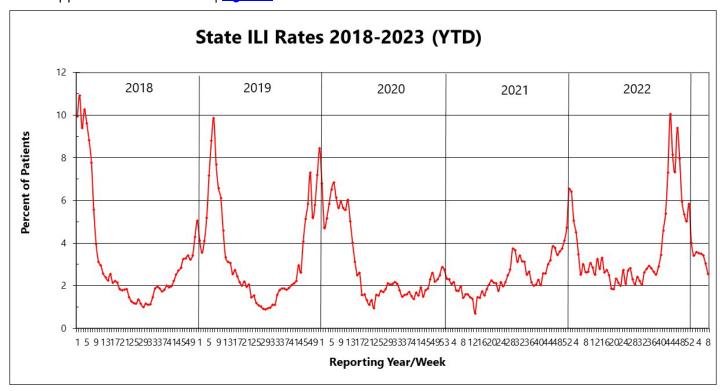
MSDH District ILI Rates (%) 2022-2023					
District	Week 07	Week 08			
State	3.0	2.6			
	0.6	0.7			
II	3.7	5.1			
III	25.0	23.3			
IV	5.7	2.9			
V	1.3	1.3			
VI	3.3	4.1			
VII	3.7	3.4			
VIII	1.6	1.5			
IX	2.0	1.3			



Overall, the percentage of reported ILI cases has been highest among those in the 5-24 years of age group. This trend continued into week 08. The

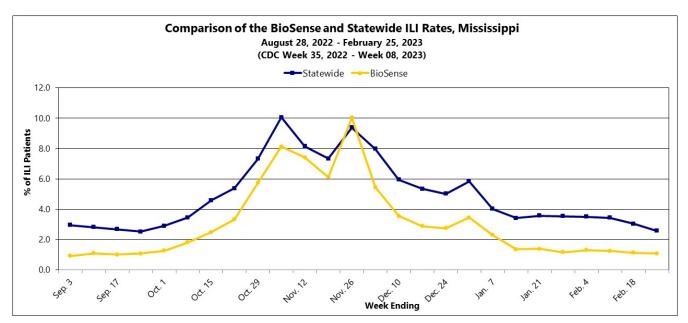
percentage of ILI cases in the 25-49 years of age group increased, decreased in the 5-24, 50-64 and 65+ years of age groups, and remained constant in the 0-4 years of age group when compared to the previous week. | Figure 2

Mississippi ILI Rates 2018-2023 | 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.

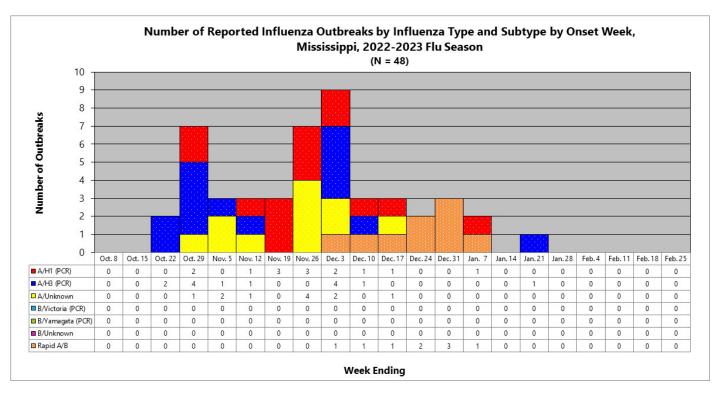


The percentage of patients with a chief complaint or diagnosis of influenza-like illness during week **08** was comparable to the previous week. Overall, the BioSense ILI rate appears to be following the same trend as the statewide ILI rate. | Figure 4

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 8, 2022) and week 08 (week ending February 25, 2023), 50 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 50 reported outbreaks, complete information was available for 48 of them. Fourteen (29%) of the outbreaks were attributed to influenza A/H1, 14 (29%) were attributed to influenza A/H3, 11 (23%) were attributed to an influenza A virus, unknown subtype, and nine (19%) were due to an unknown influenza type. The last reported influenza outbreak was reported to MSDH on January 19, 2023. | Figure 5



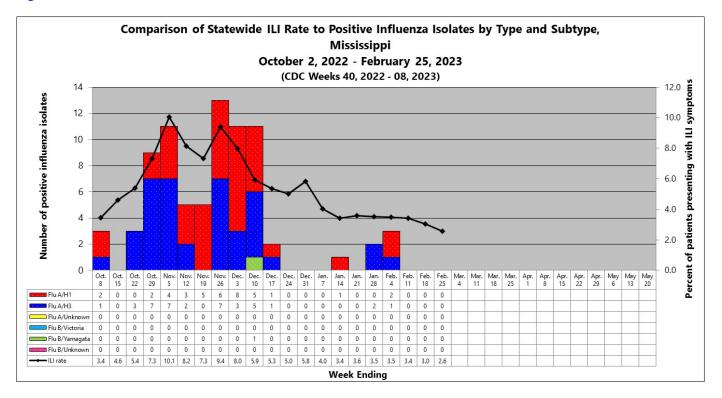
The influenza outbreaks have occurred in the following counties: Alcorn (1), Attala (1), Clarke (1), Covington (1), Forrest (3), Franklin (1), George (1), Hancock (1), Harrison (1), Hinds (3), Holmes (1), Humphreys (1), Jackson (1), Jefferson (1), Jones (3), Kemper (1), Lafayette (3), Lauderdale (2), Leake (1), Lee (1), Lincoln (1), Lowndes (1), Marion (1), Monroe (1), Neshoba (1), Pearl River (2), Perry (1), Pontotoc (2), Rankin (3), Scott (1), Simpson (2), Walthall (1), Warren (1), Washington (2), and Yazoo (1).

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 40 (week ending October 8th), **79** laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. Thirty-nine (49%) were identified as influenza A/H1,

2022 – 2023 Influenza Season | Week 08 Influenza Surveillance Report| Feb. 19 – Feb. 25, 2023 39 (49%) were identified as influenza A/H3, and one (1%) was identified as influenza B/Yamagata. | Figure 6



The influenza cases were identified from the following counties: Alcorn (1), Attala (3), Forrest (8), Franklin (2), Hancock (3), Harrison (3), Hinds (13), Holmes (3), Jefferson (2), Jones (2), Lafayette (5), Lauderdale (2), Lincoln (3), Lowndes (2), Marion (1), Marshall (5), Monroe (1), Pearl River (5), Perry (1), Pontotoc (5), Rankin (4), Simpson (2), Walthall (1), and Washington (2).

National and Mississippi Pediatric Mortality Surveillance

Nationally, **117** influenza-associated pediatric deaths have been reported to CDC for the 2022-2023 season. Forty-nine deaths have been associated with an influenza A/H3 virus, 10 were associated with an influenza A/H1 virus, one was associated with a coinfection of an influenza A/H1 virus and an influenza A/H3 virus, and 54 deaths were associated with an influenza A virus (not subtyped). Three deaths were associated with an influenza B virus (not subtyped).

Mississippi has had **no** influenza-associated pediatric deaths 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 **08**, 2.6% of patients reported through ILINet presented with ILI symptoms. This was above the national baseline (2.5%).

Six of the 10 HHS regions were below their respective baselines, including Region 4 (Southeast). The percentage of patients presenting with ILI symptoms **remained stable** in Region 4 during week 08. 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

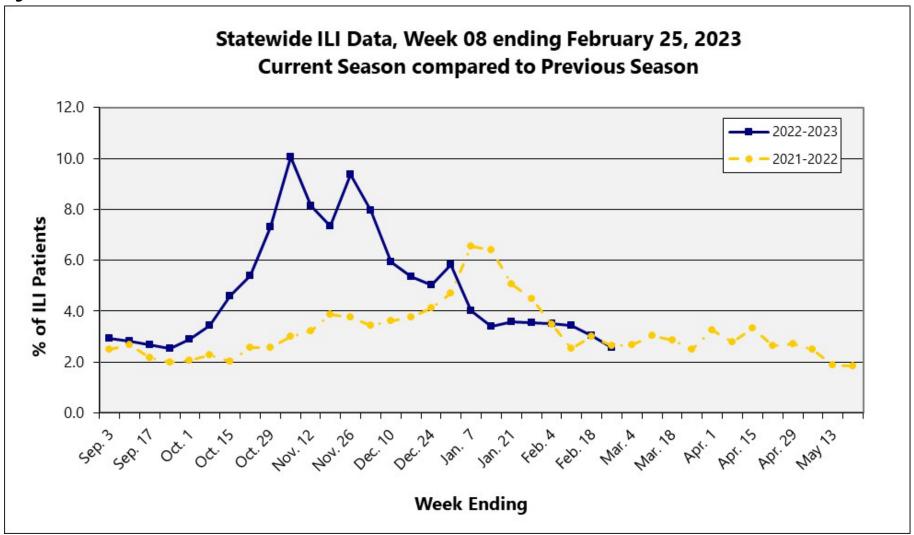


Figure 2

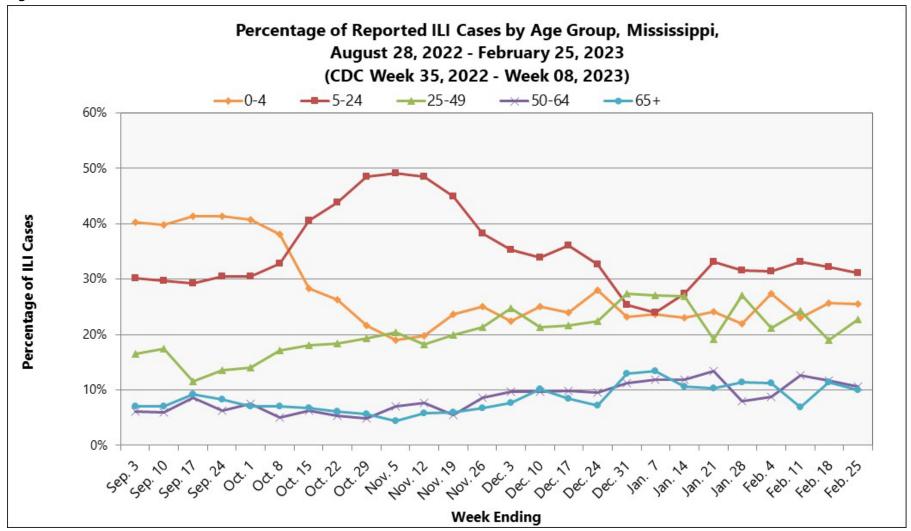


Figure 3

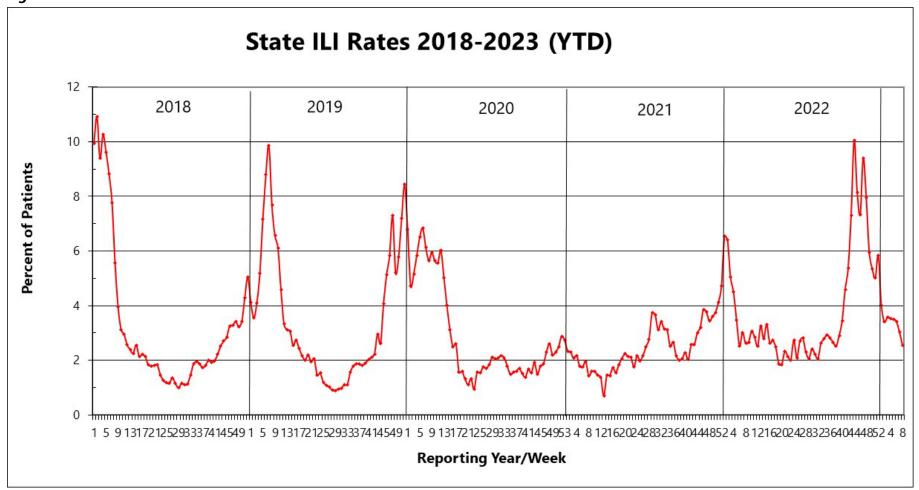


Figure 4

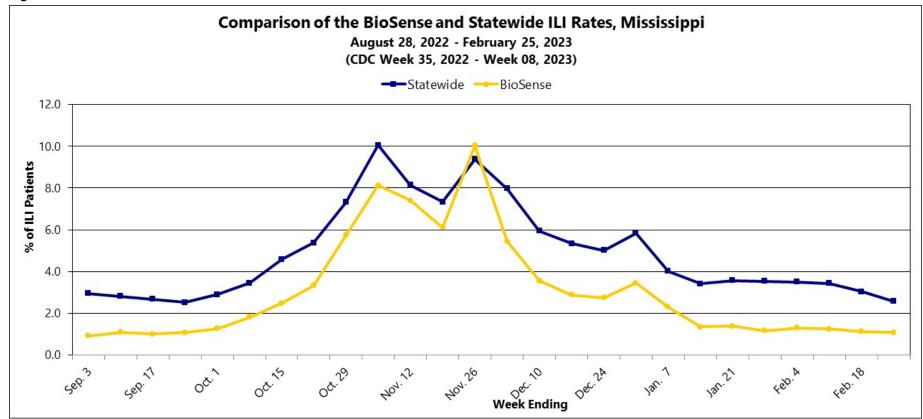


Figure 5

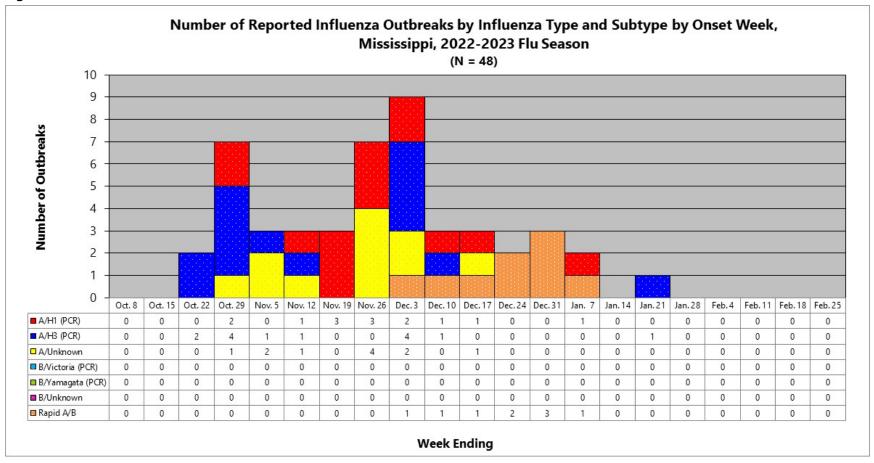


Figure 6

