2022-2023 Influenza Surveillance Report

Week 52

Dec. 25 – Dec. 31, 2022

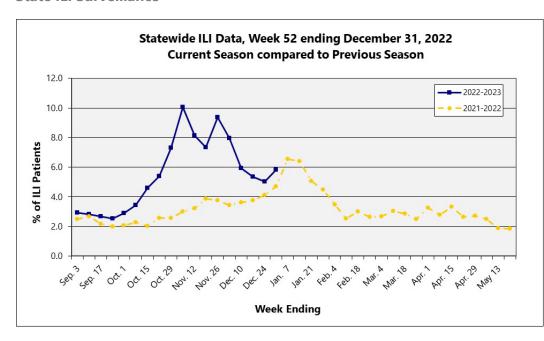
About our flu activity reporting

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** (12/25/22-12/31/22), the overall state ILI rate (**5.8%**) **increased** from the previous week (**5.0%**) and was higher than this time last year (**4.7%**). | Figure 1

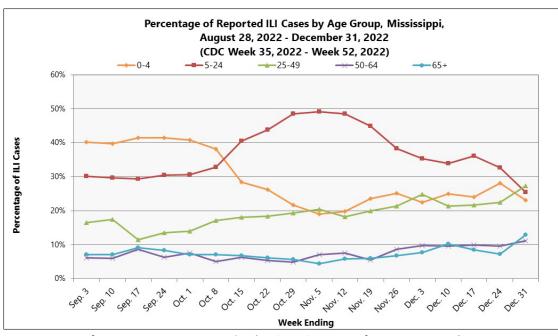
Total number of patients treated by sentinel providers in the last three weeks. | Table 1

| 2022-2023 Influenza Season | | | | | | | |
|----------------------------|----------------|--|----------------|--------------|--------------|--|--|
| CDC Week | Week Ending | Number of reports received from Sentinel Providers | Total patients | ILI symptoms | ILI Rate (%) | | |
| 52 | Dec. 31 | 97 | 12716 | 743 | 5.8 | | |
| 51 | Dec. 24 | 94 | 11006 | 552 | 5.0 | | |
| 50 | Dec. 17 | 103 | 12909 | 689 | 5.3 | | |

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



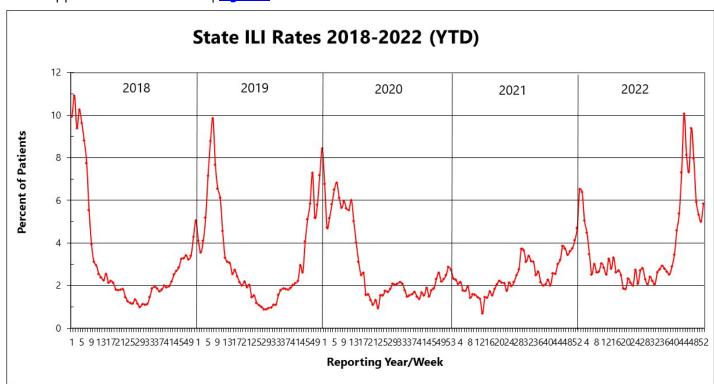
| MSDH District ILI Rates (%) 2022-2023 | | | | | | |
|--|---------|---------|--|--|--|--|
| District | Week 51 | Week 52 | | | | |
| State | 5.0 | 5.8 | | | | |
| [| 2.1 | 2.0 | | | | |
| П | 8.6 | 5.9 | | | | |
| III | 37.6 | 41.8 | | | | |
| IV | 10.1 | 10.1 | | | | |
| V | 5.7 | 4.9 | | | | |
| VI | 0.0 | 4.6 | | | | |
| VII | 4.9 | 7.1 | | | | |
| VIII | 2.0 | 3.3 | | | | |
| IX | 3.3 | 4.0 | | | | |



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

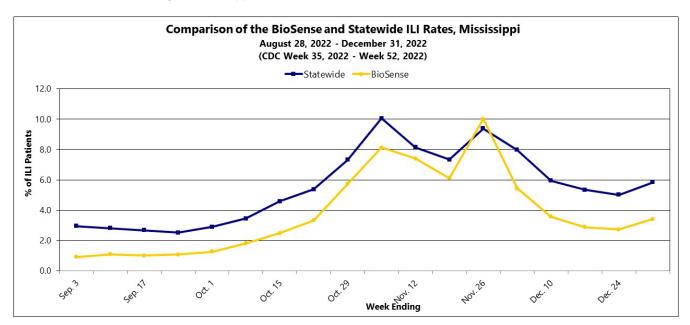
percentage of ILI cases was greater in the 25-49 years of age group. The percentage of ILI cases in the 0-4 and 5-24 years of age groups decreased while the percentage in the 25-49, 50-64, and 65+ years of age groups increased when compared to the previous week. | Figure 2

Mississippi ILI Rates 2018-2022 | 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.

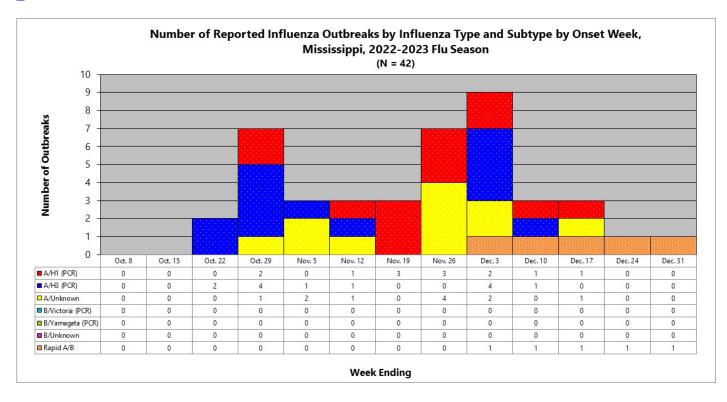


The percentage of patients with a chief complaint or diagnosis of influenza-like illness during week **52** increased from the previous week, as did the statewide ILI rate. Overall, the BioSense ILI rate appears to be following the same trend as the statewide ILI rate. | Figure 4

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 52 (week ending December 31, 2022), 45 outbreaks were reported to MSDH. MSDH investigates all reported outbreaks, and of the 45 reported outbreaks, complete information was available for 42 of them. Thirteen (31%) of the outbreaks were attributed to influenza A/H1, 13 (31%) were attributed to influenza A/H3, 11 (26%) were attributed to an influenza A virus, unknown subtype, and five (12%) were due to an unknown influenza type. | Figure 5



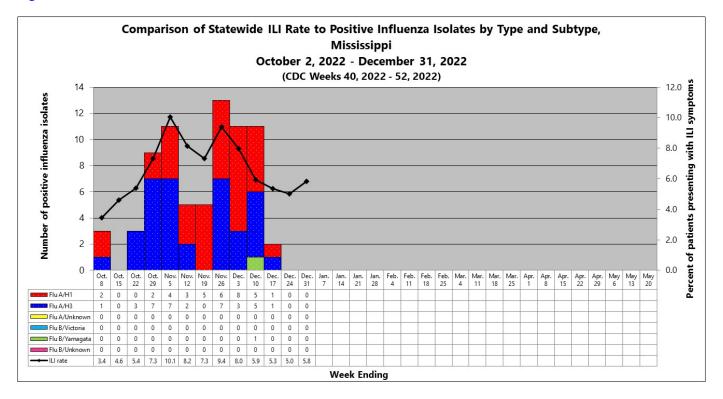
The influenza outbreaks have occurred in the following counties: Alcorn (1), Attala (1), Clarke (1), Covington (1), Forrest (3), Franklin (1), George (1), Hancock (1), Harrison (1), Hinds (2), Holmes (1), Humphreys (1), Jackson (1), Jefferson (1), Jones (2), Kemper (1), Lafayette (3), Lauderdale (2), Leake (1), Lee (1), Lincoln (1), Lowndes (1), Marion (1), Monroe (1), Neshoba (1), Pearl River (1), Pontotoc (2), Rankin (3), 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), **73** laboratory confirmed influenza samples have been identified by the MSDH Public Health Laboratory. Thirty-six (49%) were identified as influenza A/H1,

2022 – 2023 Influenza Season | Week 52 Influenza Surveillance Report| Dec. 25 – Dec. 31, 2022 36 (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 (10), Holmes (3), Jefferson (2), Jones (2), Lafayette (5), Lauderdale (2), Lincoln (3), Lowndes (2), Marion (1), Marshall (5), Monroe (1), Pearl River (3), Pontotoc (5), Rankin (4), Simpson (2), Walthall (1), and Washington (2).

National and Mississippi Pediatric Mortality Surveillance

Nationally, **74** influenza-associated pediatric deaths have been reported to CDC for the 2022-2023 season. Thirty-two deaths have been associated with an influenza A/H3 virus, five 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 34 deaths were associated with an influenza A virus (not subtyped). Two 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 **52**, 5.4% of patients reported through ILINet presented with ILI symptoms. This was above the national baseline (2.5%).

2022 – 2023 Influenza Season | Week 52 Influenza Surveillance Report| Dec. 25 – Dec. 31, 2022 All 10 HHS regions were above their respective baselines. The percentage of patients presenting with ILI symptoms **remained stable** in Region 4 (Southeast) during week 52. 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

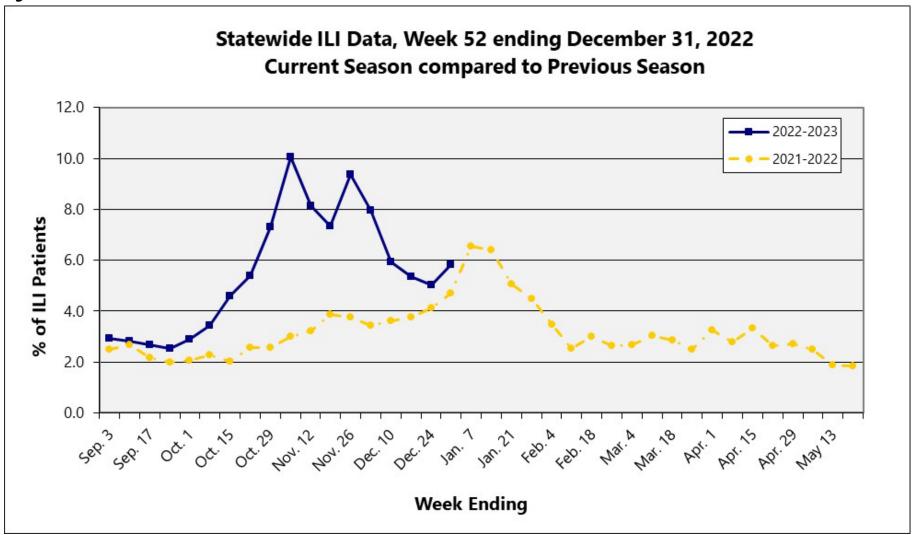


Figure 2

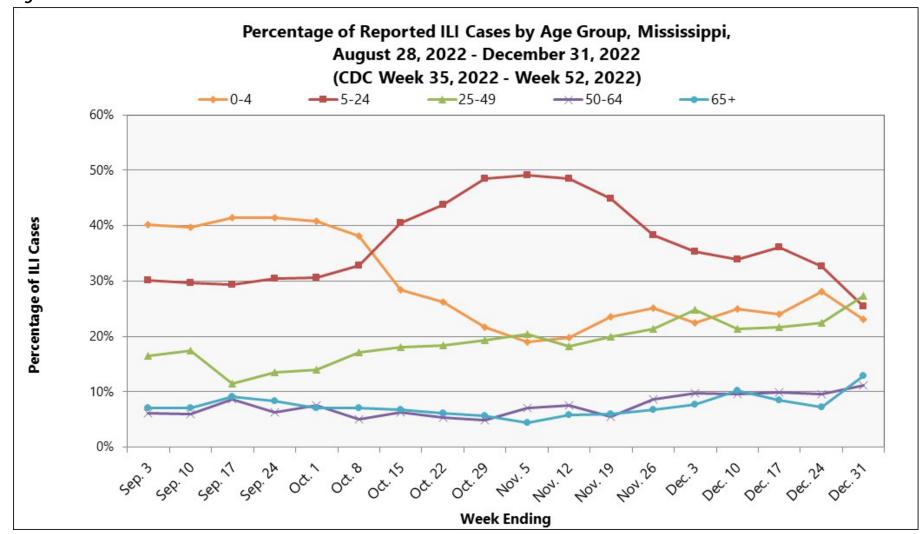


Figure 3

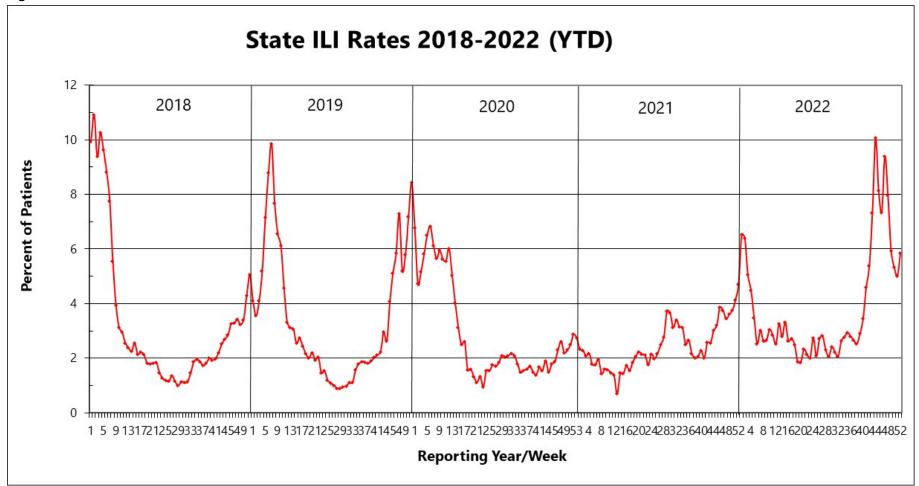


Figure 4

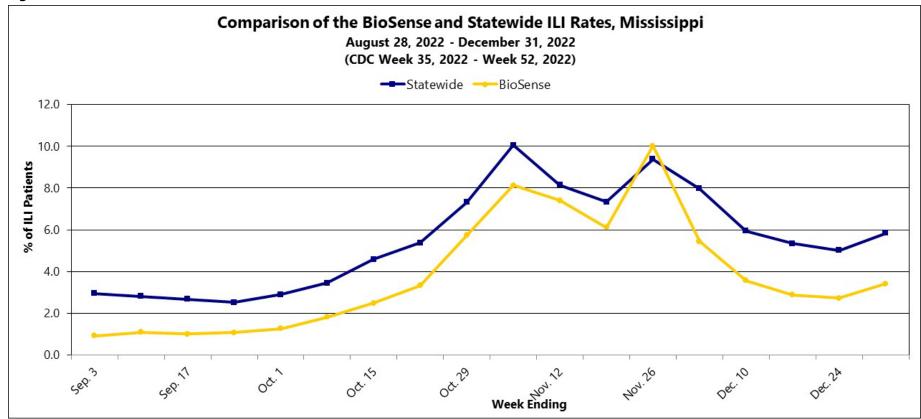


Figure 5

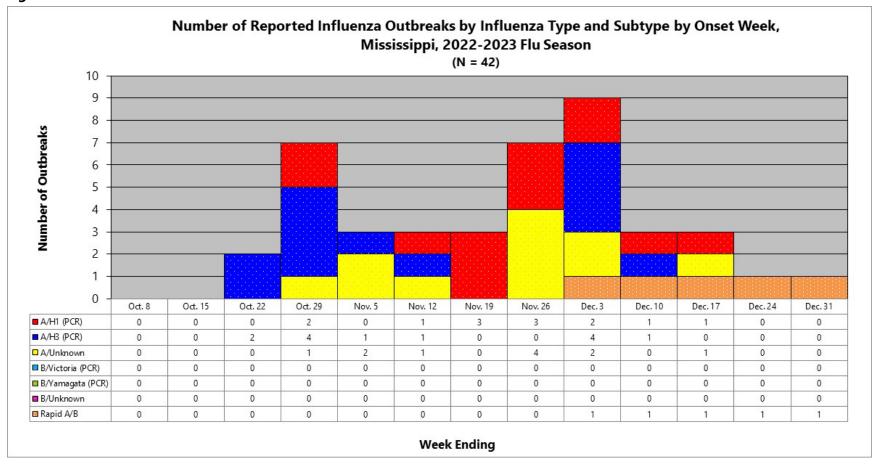


Figure 6

