

Missouri Weekly Influenza Surveillance Report 2022-2023 Influenza Season¹

Week 40: October 2, 2022 – October 8, 2022

All data are preliminary and may change as more reports are received.

Summary:

- The estimated influenza activity in Missouri is Sporadic². Cases of influenza were reported in all five regions of the State. However, the overall ILI activity for week 40 remains minimal (Level 3).³
- During Week 40, a total of 80 laboratory-positive⁴ influenza cases (51 influenza A, 29 influenza B and 0 untyped) were reported. The influenza type for reported season-to-date cases includes 63.8 % influenza A, 36.2 % influenza B. The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) was 0.4% during Week 40.
- Influenza-like illness (ILI) activity for Week 40 was below baseline for the hospital emergency room visit chief complaint data reported through ESSENCE. The reported percentage of visits for ILI through ESSENCE was just below baseline at 1.86% (Figure 6).⁵
- Mortality data lags case data by several weeks. Therefore, the number of influenza-associated deaths reported for week 40 will be included in future reports.⁶
- No influenza or ILI-associated outbreaks have been reported in Missouri as of Week 40.
- National influenza surveillance information is prepared by CDC and is included in the weekly FluView report, which is available online at http://www.cdc.gov/flu/weekly/fluactivitysurv.htm.

¹The 2022-2023 influenza season begins CDC Week 40 (week ending October 8, 2022) and ends CDC Week 39 (week ending September 30, 2023).

² Sporadic is defined as: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in ILI.

³ ILI Activity indicates levels of activity on a scale of 1-13 ranging from minimal to very high. For more information see https://gis.cdc.gov/grasp/fluview/main.html

⁴Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

⁵ILI is defined by ESSENCE as Emergency Department chief complaints for Influenza or (FeverPlus and (Cough or SoreThroat) and not NonILIFevers).

⁶All influenza-associated deaths became reportable in Missouri in 2016.

Surveillance Data:

Interactive Maps

The jurisdiction-specific influenza data are provided though interactive maps available at https://arcg.is/1W99rC. Click on the jurisdiction to view the influenza data specific to that jurisdiction.

- Reported Laboratory-positive Influenza Cases by Influenza Type by Jurisdiction, CDC Week 40
- Reported Week-specific Rate per 100,000 Population, CDC Week 40
- Reported Laboratory-positive Influenza Cases by Influenza Type by Jurisdiction, Season-to-Date
- Reported Rate per 100,000 Population, Season-to-Date

Data Figures

Figure 1. Number of Laboratory-positive[†] Influenza Cases by Influenza Type, Missouri, CDC Week 40 (October 2, 2022 – October 8, 2022)*

Influenza Type	Week 40	2022-23* Season-to-Date
Influenza A	51	51
Influenza B	29	29
Influenza Unknown Or Untyped	0	0
Total	80	80

[†]Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

*Influenza season begins with the week ending October 8, 2022 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv).

Figure 2. Number of Laboratory-positive[†] Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 40 (October 2, 2022 – October 8, 2022)*[‡]

Age Group	Week 40 Cases	Week 40 Rate [‡]	2022-23* Season-to-Date	2022-2023* Season-to-Date Rate [‡]
00-04	17	4.62	17	4.62
05-24	25	1.60	25	1.60
25-49	15	0.77	15	0.77
50-64	14	1.17	14	1.17
65+	9	0.85	9	0.85
Total	80	1.30	80	1.30

[†]Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

*Influenza season begins week ending October 8, 2022 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

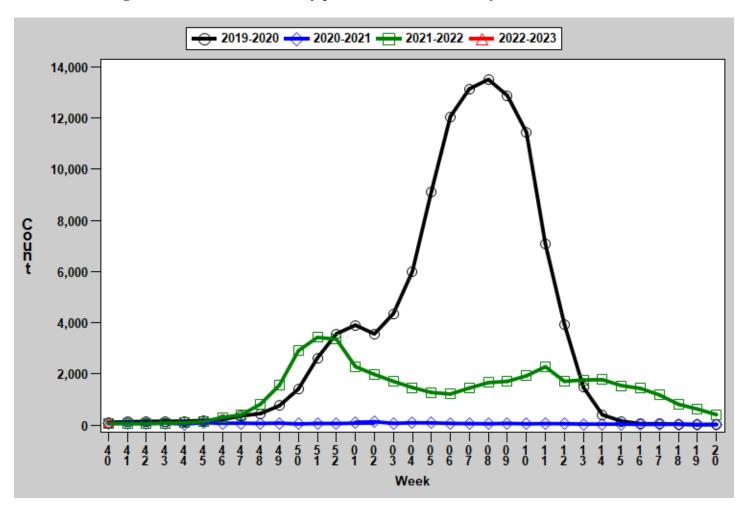
^{*}Incidence Rate per 100,000 population

Figure 3. Number of Laboratory-positive[†] Influenza Cases and Case Rates by Region, Missouri, CDC Week 40 (October 2, 2022 – October 8, 2022)*[‡]

Region	Week 40 Cases	Week 40 Rate [‡]	2022-23* Season-to-Date	2022-23* Season-to-Date Rate [‡]
Central	13	1.93	13	1.93
Eastern	33	1.46	33	1.46
Northwest	16	0.98	16	0.98
Southeast	3	0.69	3	0.69
Southwest	15	1.43	15	1.43
Total	80	1.30	80	1.30

[†]Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

Figure 4. Number of Laboratory-positive[†] Influenza Cases by CDC Week, Missouri, 2019-2023^{*}



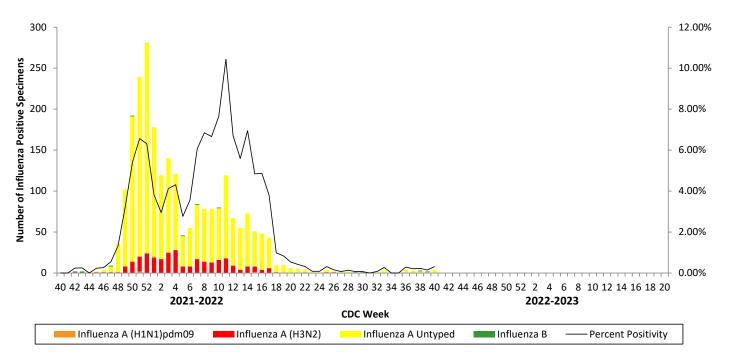
Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.

*2022-20223season-to-date through the week ending October 8, 2022 (Week 40).Data Source: Missouri Health Information Surveillance System (WebSurv)

^{*}Influenza season begins week ending October 8, 2022 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

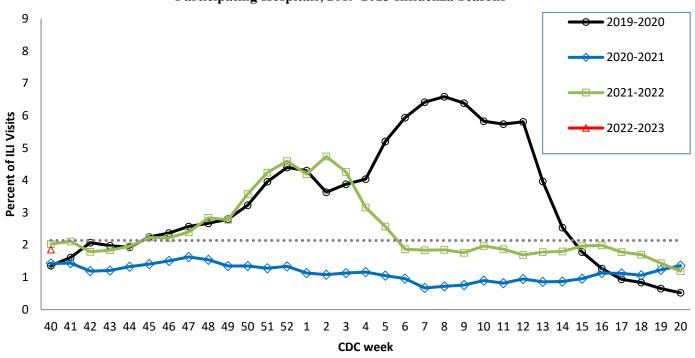
^{*}Incidence Rate per 100,000 population

Figure 5. Season-to-Date PCR (+) Tests for Influenza in Missouri



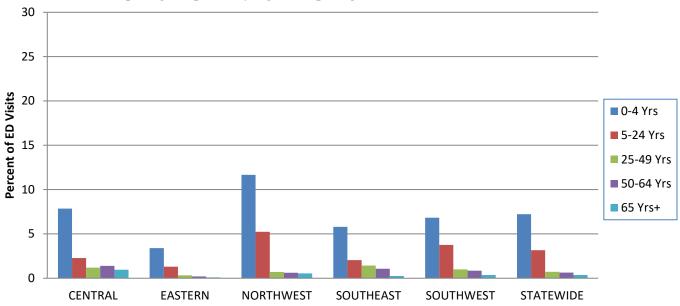
Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2022-2023 season-to-date through the week ending October 8, 2022 (Week 40).

Figure 6. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, 2019-2023 Influenza Seasons*[‡]



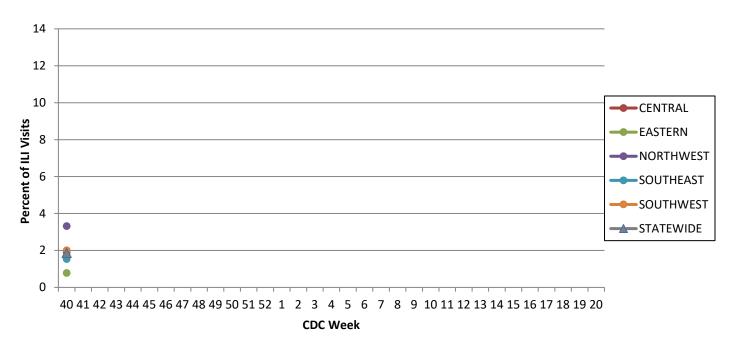
^{*}The ESSENCE ILI Baseline is the mean percent of ILI visits for each week during the previous three flu seasons when percentage of ILI visits were less than 2% of total visits, plus two standard deviations. Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.

Figure 7. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, by Age Group, Region and Statewide, Week 40, 2022*



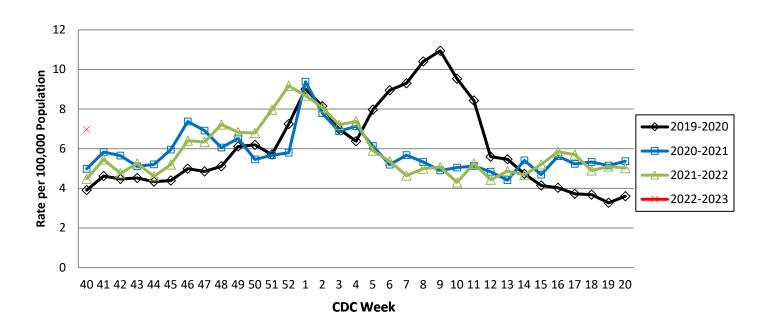
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest Region should be interpreted with caution.

Figure 8. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, by Region and Statewide, 2022-2023 Influenza Season*



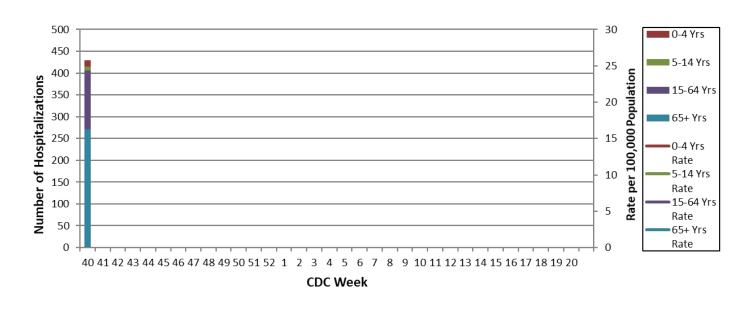
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest Region should be interpreted with caution.

Figure 9. Weekly Rate of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Missouri Hospitals, 2019-2023 Influenza Seasons



Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, HL7 Messaging Portal. Population data from Missouri Census Data Center 2017 (https://census.missouri.edu).

Figure 10. Number of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Participating Missouri Hospitals by Age Group, Week 40, 2022-2023 Influenza Season



Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, HL7 Messaging Portal

Additional Influenza Data Sources:

Centers for Disease Control and Prevention: National Influenza Surveillance (FluView): http://www.cdc.gov/flu/weekly/fluactivitysurv.htm

The National Respiratory and Enteric Virus Surveillance System (NREVSS): https://www.cdc.gov/surveillance/nrevss/

World Health Organization: International Influenza Surveillance: http://www.who.int/influenza/surveillance monitoring/en/