

Missouri Weekly Influenza Surveillance Report 2021-2022 Influenza Season¹

Week 20: May 15, 2022 – May 21, 2022

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

Summary:

- The estimated influenza activity in Missouri is Local².
- During Week 20, a total of 334 laboratory-positive³ influenza cases (303 influenza A, 31 influenza B and 0 untyped) were reported. A season-to-date total of 43,163 laboratory-positive influenza cases (39,773 influenza A, 3,131 influenza B, and 259 untyped) have been reported in Missouri as of Week 20. The influenza type for reported season-to-date cases includes 92.1% influenza A, 7.3% influenza B, and 0.6% untyped. The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) decreased to 0.6% during Week 20.
- Influenza-like illness (ILI) activity for Week 20 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 1.19% (Figure 6).⁴
- Twenty-nine influenza-associated deaths have been reported in Missouri as of Week 20.⁵
- Eight influenza or ILI-associated outbreaks have been reported in Missouri as of Week 20.
- National influenza surveillance information is prepared by CDC and is included in the weekly FluView report, which is available online at <u>http://www.cdc.gov/flu/weekly/fluactivitysurv.htm</u>.

¹The 2021- 2022 influenza season begins CDC Week 40 (week ending October 9, 2021) and ends CDC Week 39 (week ending October 1, 2022).

² Local: Increased ILI in one region and elevated numbers of laboratory-confirmed influenza cases in that region.

³Laboratory-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.

⁴ILI is defined by ESSENCE as Emergency Department chief complaints for Influenza or (FeverPlus and (Cough or SoreThroat) and not NonILIFevers).

⁵All 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 <u>https://arcg.is/G5LWv</u>.

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 20
- Reported Week-specific Rate per 100,000 Population, CDC Week 20
- 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 Weeks 18-20 (May 1, 2021 – May 21, 2022)^{*}

Influenza Type	Week 18	Week 19	Week 20	2021-2022* Season-to-Date
Influenza A	744	547	303	39,773
Influenza B	38	48	31	3,131
Influenza Unknown Or Untyped	2	0	0	259
Total	784	595	334	43,163

[†]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 9, 2021 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv).

Age Group	Week 20 Cases	Week 20 Rate [‡]	2021-22* Season-to-Date	2021-2022* Season-to-Date Rate [‡]
00-04	87	23.64	6,869	1,866.17
05-24	136	8.70	21,876	1,398.71
25-49	70	3.60	7,856	404.30
50-64	25	2.08	3,273	272.70
65+	16	1.51	3,289	309.69
Total	334	5.44	43,163	703.28

Figure 2. Number of Laboratory-positive[†] Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 20 (May 15, 2022 – May 21, 2022)^{*‡}

¹Laboratory-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 3, 2020 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

^{*}Incidence Rate per 100,000 population

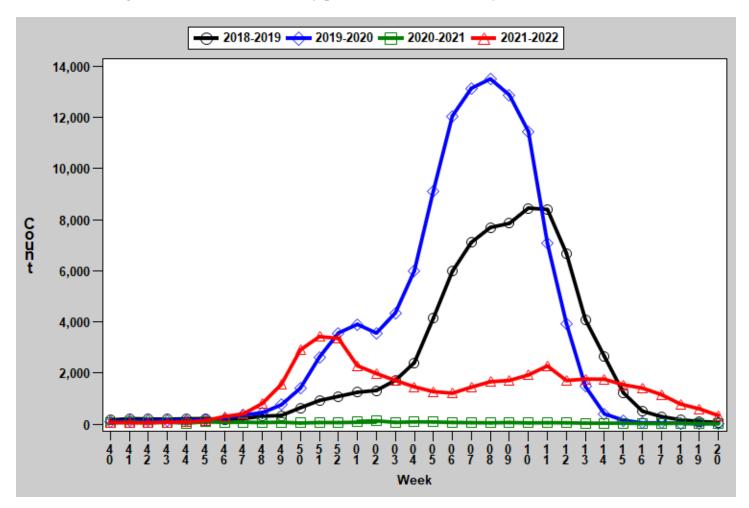
Figure 3. Number of Laboratory-positive [†] I	Influenza Cases and Case Rates by Region,
Missouri, CDC Week 20 (N	/lay 15 – May 21, 2022) ^{*‡}

Region	Week 20 Cases	Week 20 Rate [‡]	2021-22* Season-to-Date	2021-22* Season-to-Date Rate [‡]
Central	17	2.52	4,487	664.92
Eastern	249	10.98	13,106	577.92
Northwest	32	1.96	11,231	686.18
Southeast	23	5.32	4,925	1,138.89
Southwest	13	1.24	9,414	896.03
Total	334	5.44	43,163	703.28

[†]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 3, 2020 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

^{*}Incidence Rate per 100,000 population

Figure 4. Number of Laboratory-positive[†] Influenza Cases by CDC Week, Missouri, 2018-2022^{*}



[†]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. *2021-2022 season-to-date through the week ending May 21, 2022 (Week 20).Data Source: Missouri Health Information Surveillance System (WebSurv)

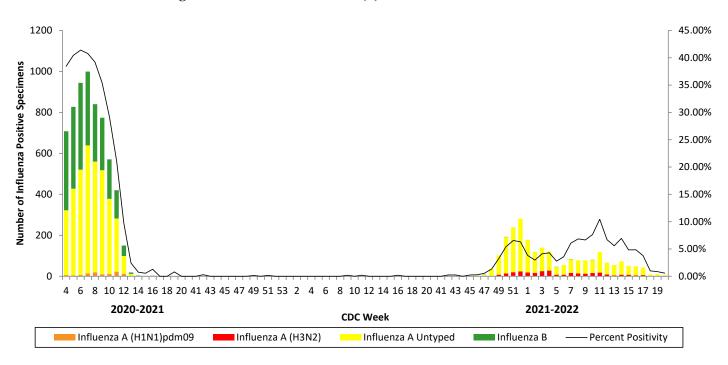
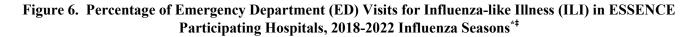
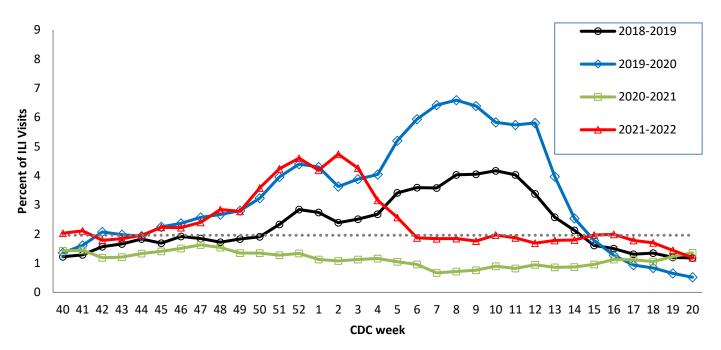


Figure 5. Season-to-Date PCR (+) Tests for Influenza in Missouri

Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2021-2022 season-to-date through the week ending May 21, 2022 (Week 20).





*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.

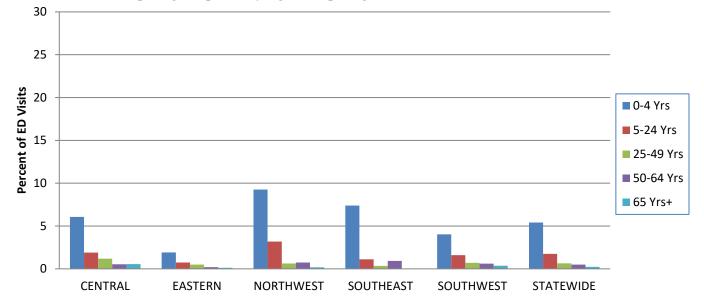
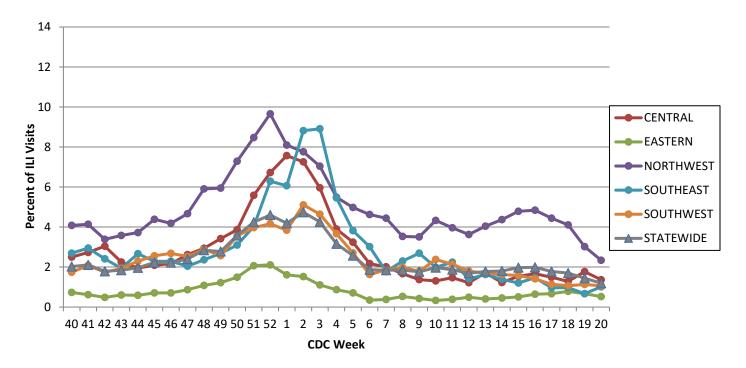


Figure 7. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, by Age Group, Region and Statewide, Week 20, 2021*

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, 2021-2022 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.

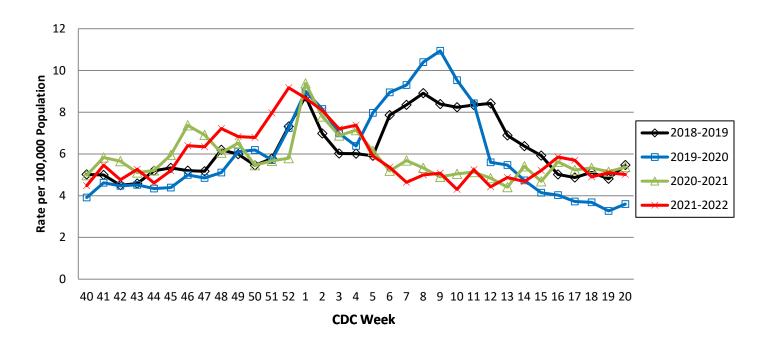
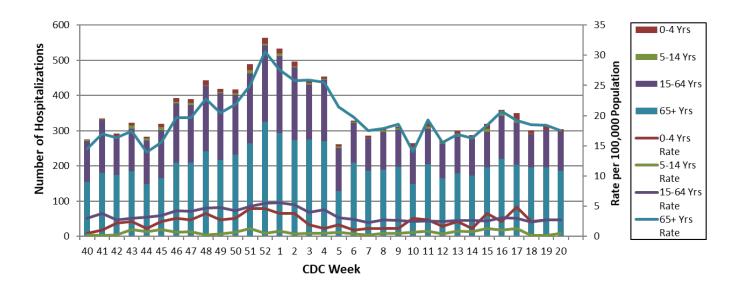


Figure 9. Weekly Rate of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Missouri Hospitals, 2018-2022 Influenza Seasons

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 (<u>https://census.missouri.edu</u>).

Figure 10. Number of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Participating Missouri Hospitals by Age Group, Week 20, 2021-2022 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/