Missouri Weekly Influenza Surveillance Report
2021-2022 Influenza Season[1]

Week 48: November 28, 2021 – December 4, 2021

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

Summary:

- The estimated influenza activity in Missouri is Regional[2].
- During Week 48, a total of 476 laboratory-positive[3] influenza cases (420 influenza A, 53 influenza B and 3 untyped) were reported. A season-to-date total of 1,373 laboratory-positive influenza cases (1,048 influenza A, 306 influenza B, and 19 untyped) have been reported in Missouri as of Week 48. The influenza type for reported season-to-date cases includes 76.3% influenza A, 22.3% influenza B, and 1.4% untyped. The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) remained low during Week 48 (Figure 5).
- Influenza-like illness (ILI) activity was above baseline for the hospital emergency room visit chief complaint data reported through ESSENCE. The reported percentage of visits for ILI through ESSENCE was 2.84 % (Figure 6).[4]
- One influenza-associated death has been reported in Missouri as of Week 48.[5]
- One influenza or ILI-associated outbreak has been reported in Missouri as of Week 48.
- 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.

---

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

[2]Regional is defined as: Increased ILI in two regions and elevated numbers of laboratory-confirmed influenza cases in those regions

[3]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.

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

[5]All 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/G5LWv.

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 48**
- **Reported Week-specific Rate per 100,000 Population, CDC Week 48**
- **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 46-48 (November 14, 2021 – December 4, 2021)*

Influenza Type	Week 46	Week 47	Week 48	2021-2022* Season-to-Date
Influenza A	185	246	420	1,048
Influenza B	45	36	53	306
Influenza Unknown Or Untyped	2	0	3	19
Total	232	282	476	1,373

185† 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).

Figure 2. Number of Laboratory-positive† Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 48 (November 28, 2021 – December 4, 2021)*‡

Age Group	Week 48 Cases	Week 48 Rate‡	2021-22* Season-to-Date	2021-2022* Season-to-Date Rate‡
00-04	35	9.35	128	34.19
05-24	255	15.89	694	43.25
25-49	105	5.49	304	15.89
50-64	42	3.40	126	10.19
65+	39	4.08	121	12.67
Total	476	7.82	1,373	22.57

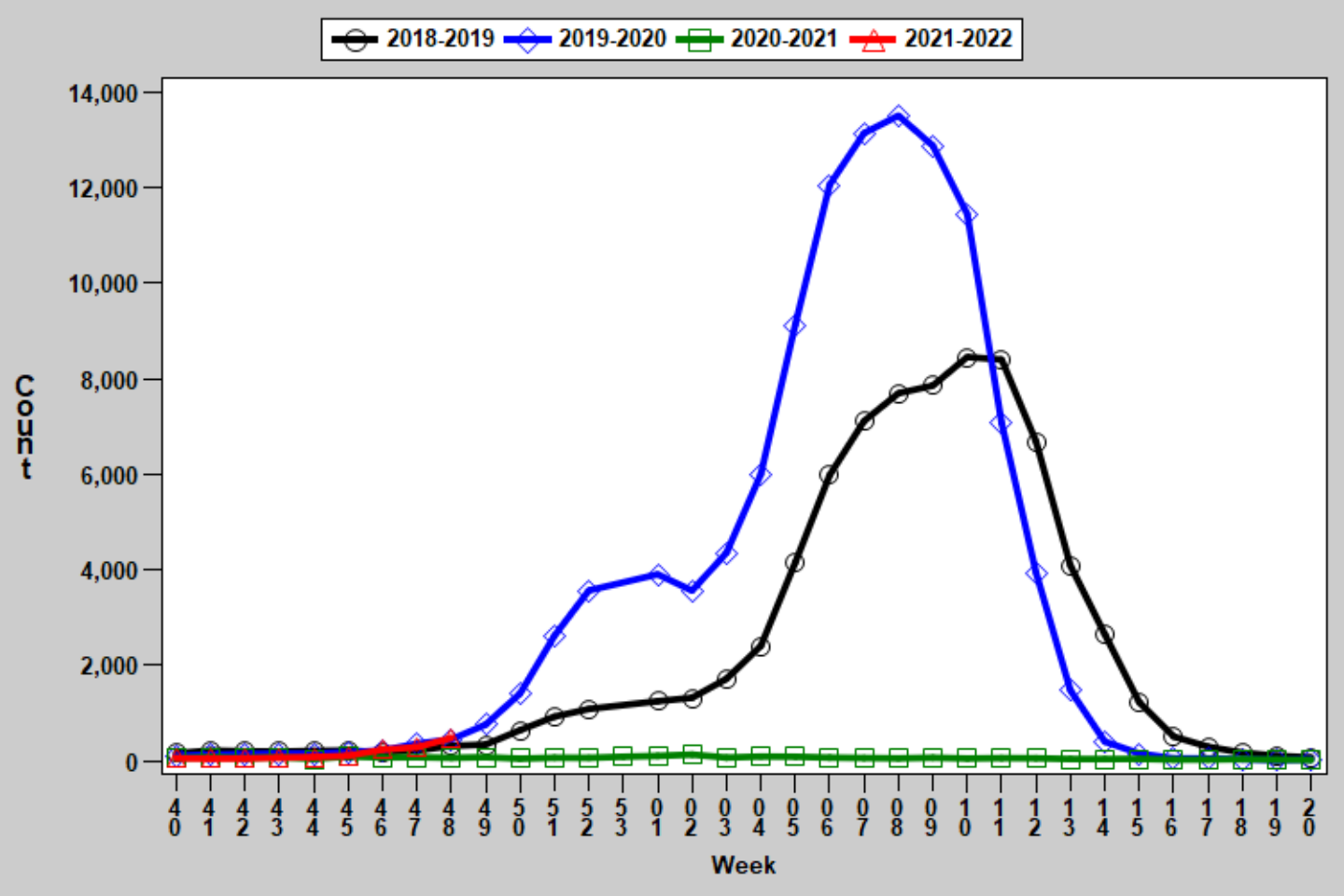
†Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.
*Influenza season begins week ending October 3, 2020 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)
‡Incidence Rate per 100,000 population

Figure 3. Number of Laboratory-positive† Influenza Cases and Case Rates by Region, Missouri, CDC Week 48 (November 28, 2021 – December 4, 2021)*‡

Region	Week 48 Cases	Week 48 Rate‡	2021-22* Season-to-Date	2021-22* Season-to-Date Rate‡
Central	107	15.81	390	57.61
Eastern	185	8.16	399	17.61
Northwest	94	5.88	232	14.52
Southeast	67	14.20	157	33.28
Southwest	23	2.15	195	18.20
Total	476	7.82	1,373	22.57

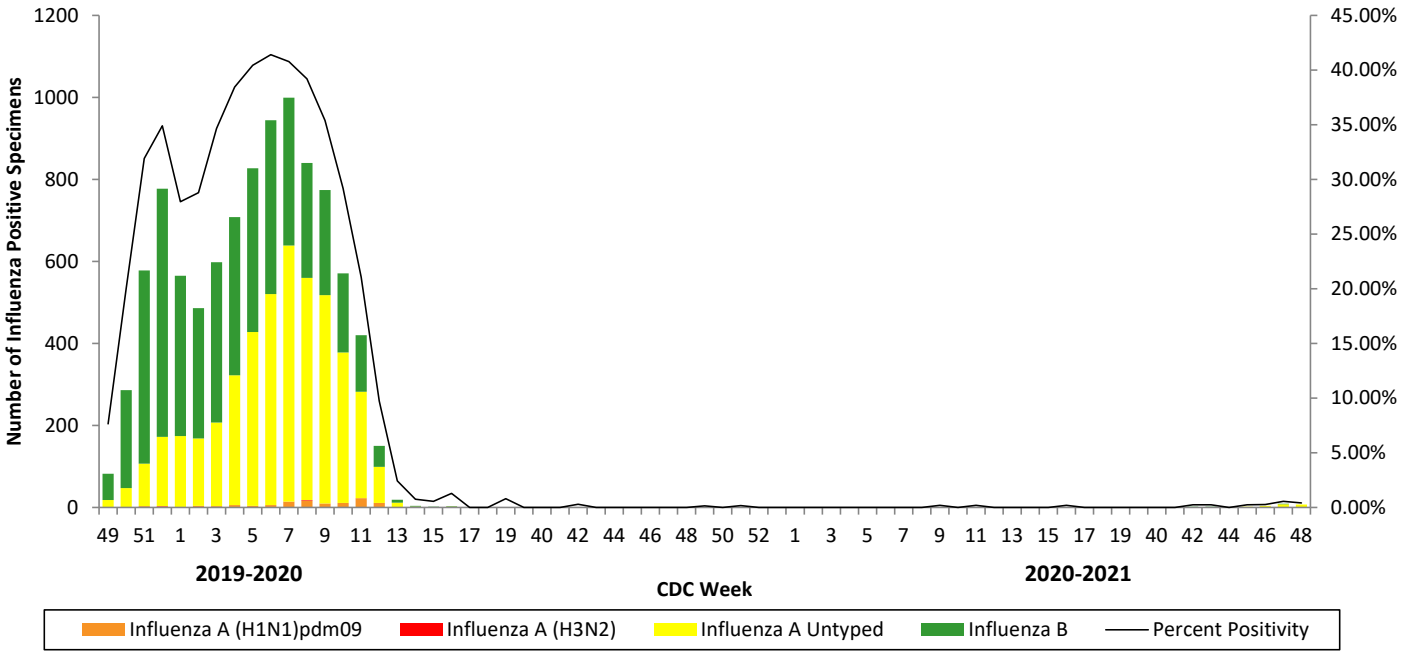
†Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.
*Influenza season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



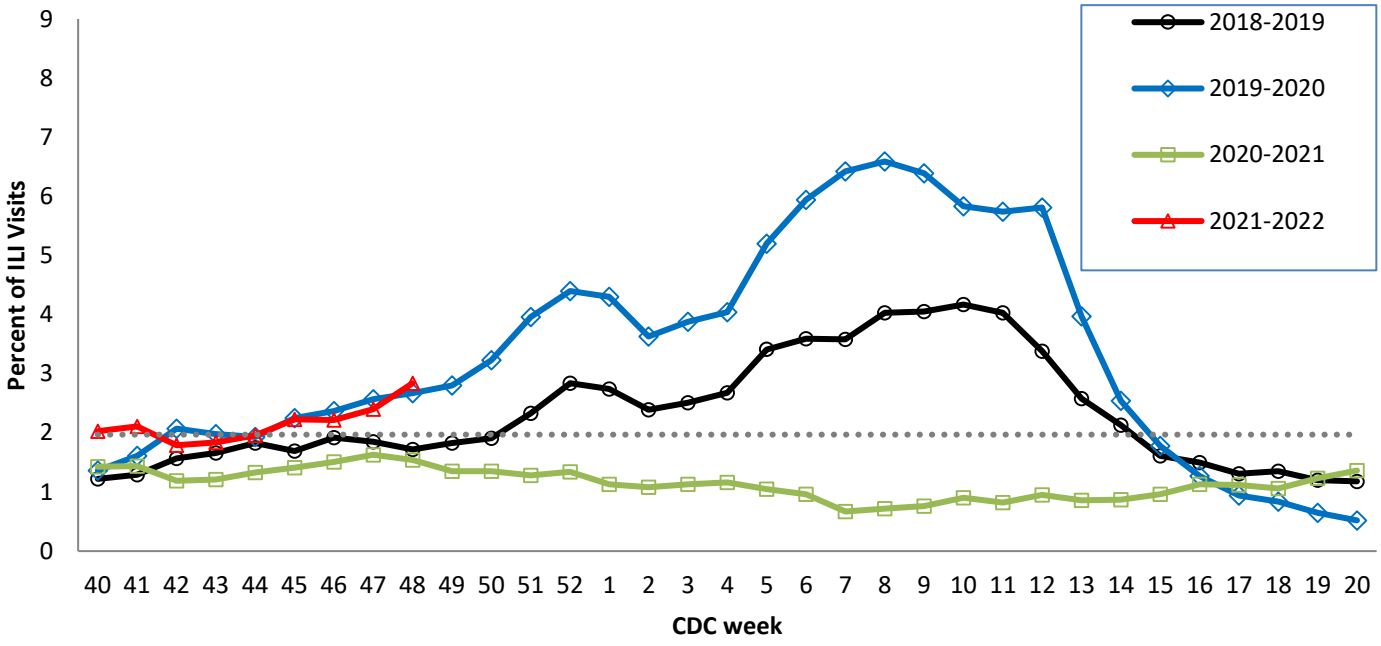
†Laboratory-positive influenza includes the following test methods: rapid influenza diagnostic tests (antigen), reverse transcriptase polymerase chain reaction (RT-PCR) and other molecular assays, immunofluorescence antibody staining (Direct (DFA) or Indirect (IFA)), or viral culture.
*2021-2022 season-to-date 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



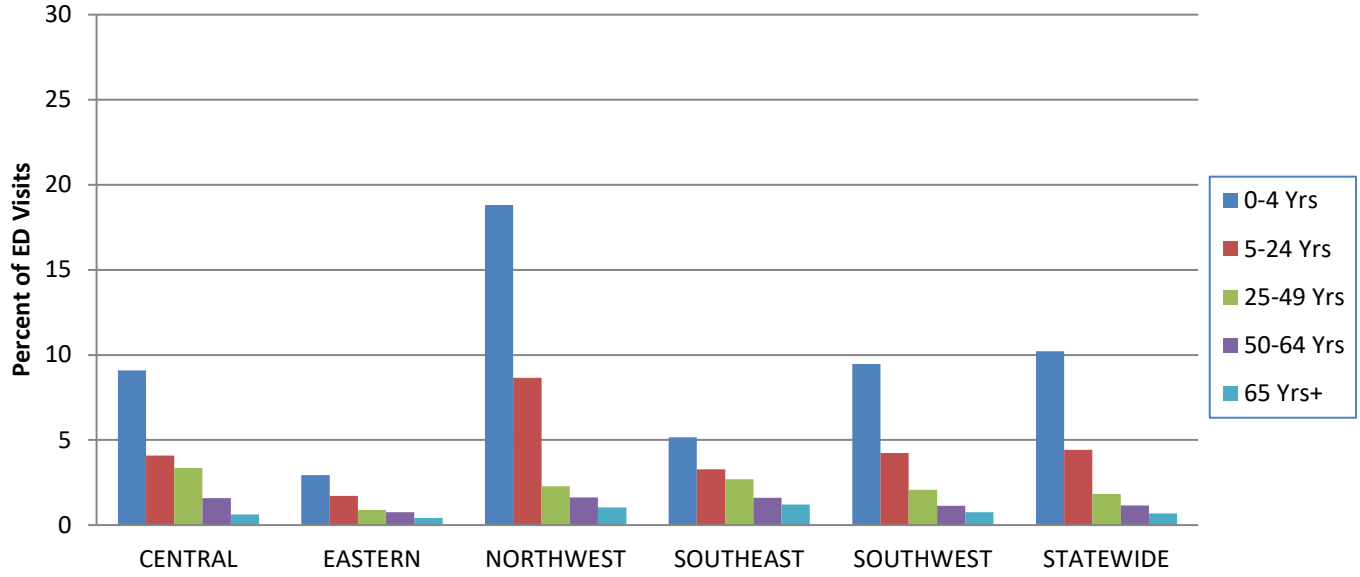
Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2021-2022 season-to-date through the week ending December 4, 2021 (Week 48).

Figure 6. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, 2018-2021 Influenza Seasons*‡



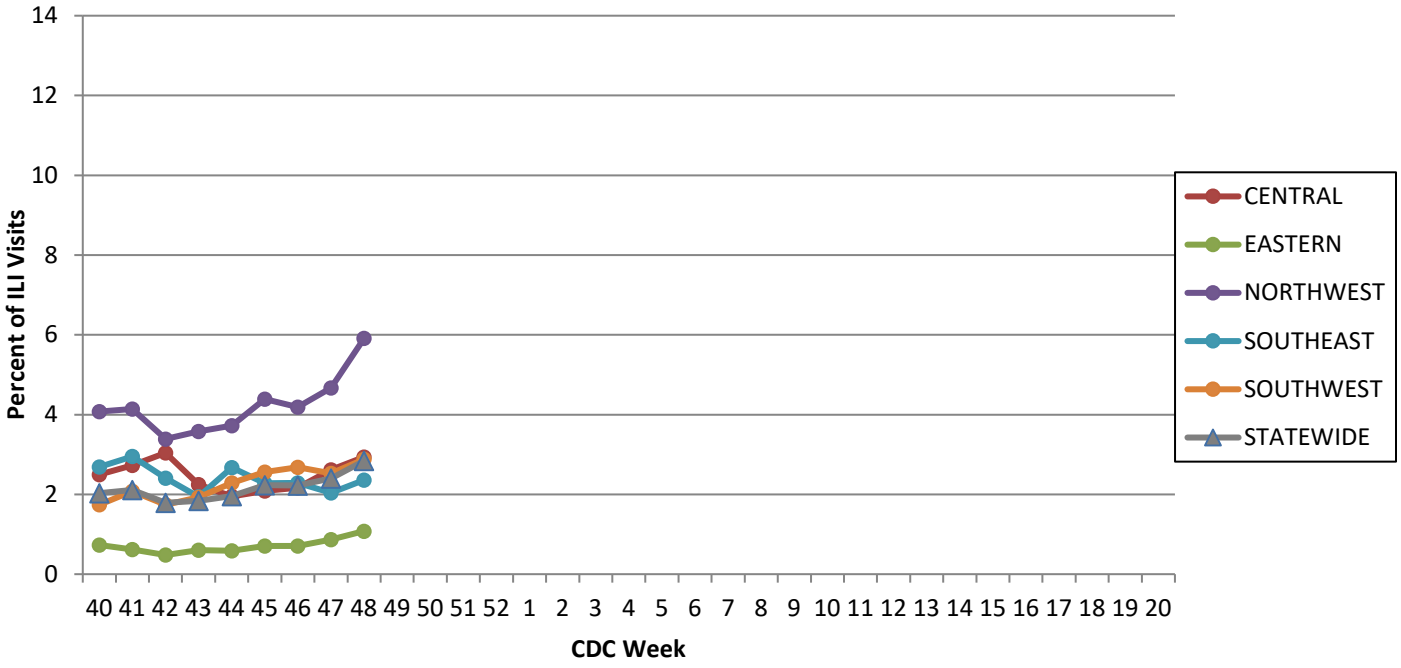
*The ESSENCE ILI Baseline is the mean percent of ILI visits for each week during the previous three flu seasons when percentage of ILI visits were less than 2% of total visits, plus two standard deviations. Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease 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 48, 2021*



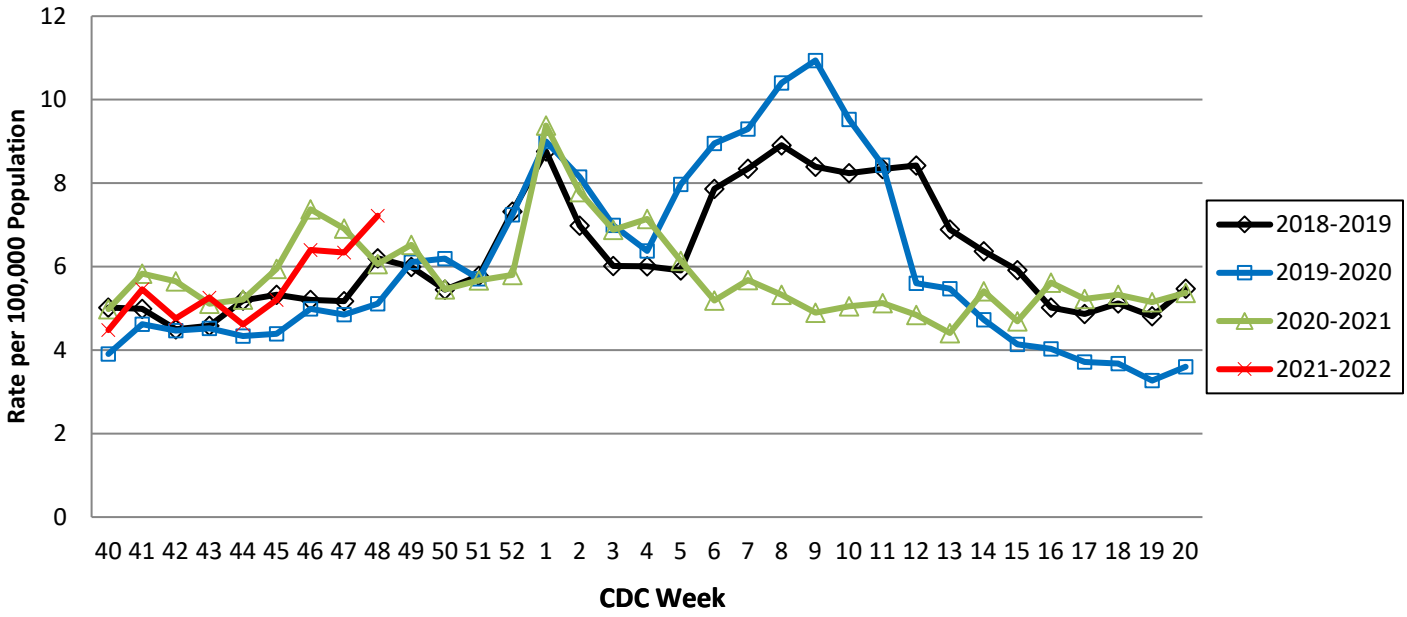
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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



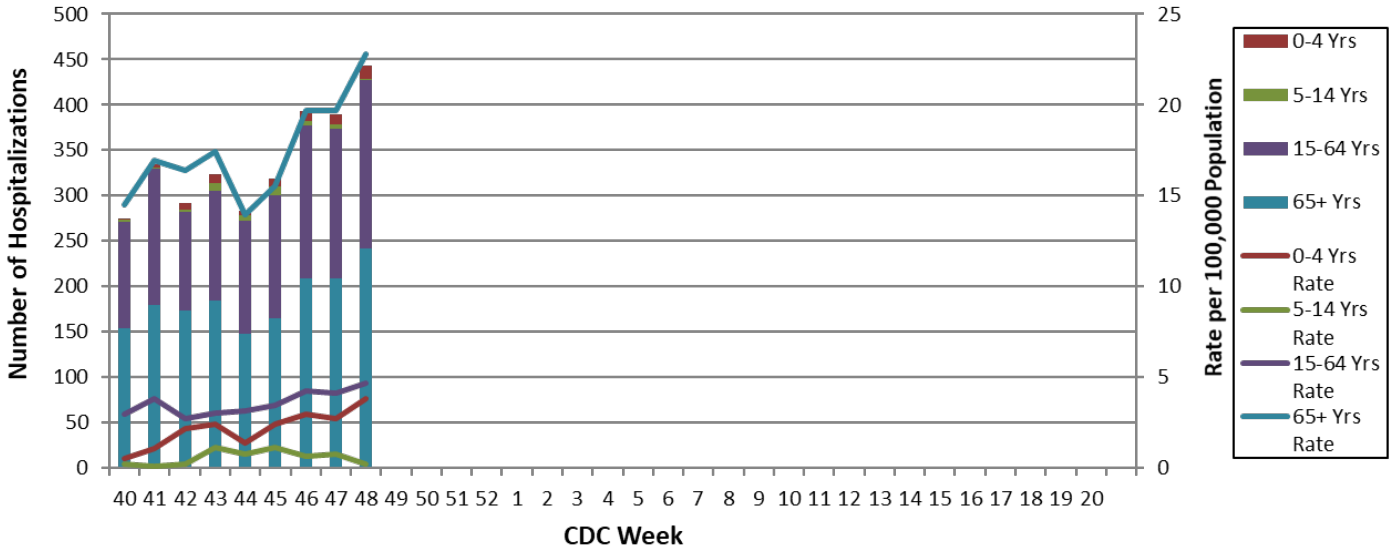
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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

Figure 9. Weekly Rate of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Missouri Hospitals, 2018-2021 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 48, 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/