



# Missouri Weekly Influenza Surveillance Report 2021-2022 Influenza Season<sup>1</sup>

**Week 51: December 19, 2021 – December 25, 2021**

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

## Summary:

- The estimated influenza activity in Missouri is Widespread<sup>2</sup>.
- During Week 51, a total of 1,907 laboratory-positive<sup>3</sup> influenza cases (1,813 influenza A, 83 influenza B and 11 untyped) were reported. A season-to-date total of 6,788 laboratory-positive influenza cases (6,033 influenza A, 685 influenza B, and 70 untyped) have been reported in Missouri as of Week 51. The influenza type for reported season-to-date cases includes 88.9% influenza A, 10.1% influenza B, and 1.0% untyped. The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) increased to 6.36 % during Week 51 (Figure 5).
- Influenza-like illness (ILI) activity for Week 51 was above baseline for the hospital emergency room visit chief complaint data reported through ESSENCE. The reported percentage of visits for ILI through ESSENCE<sup>4</sup> was 4.24 % (Figure 6).<sup>5</sup>
- One influenza-associated death has been reported in Missouri as of Week 51.<sup>6</sup>
- One influenza or ILI-associated outbreak has been reported in Missouri as of Week 51.
- 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>.

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

<sup>2</sup>Widespread is defined as: Increased influenza-like illness from sentinel providers (ILI) in three or more regions and large numbers of laboratory-confirmed influenza cases in those regions.

<sup>3</sup>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.

<sup>4</sup>Reports from a small number of ESSENCE participating hospitals were not available for 12/19/2021 and 12/20/2021, therefore, all ESSENCE data for week 51 should be considered preliminary.

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

<sup>6</sup>All influenza-associated deaths became reportable in Missouri in 2016.

## Surveillance Data:

### Interactive Maps

The jurisdiction-specific influenza data are provided through 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 51
- Reported Week-specific Rate per 100,000 Population, CDC Week 51
- 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<sup>†</sup> Influenza Cases by Influenza Type, Missouri, CDC Weeks 49-51 (December 5, 2021 – December 25, 2021)\***

Influenza Type	Week 49	Week 50	Week 51	2021-2022* Season-to-Date
Influenza A	1,120	1,840	1,813	6,033
Influenza B	83	156	83	685
Influenza Unknown Or Untyped	23	11	11	70
<b>Total</b>	<b>1,226</b>	<b>2,007</b>	<b>1,907</b>	<b>6,788</b>

<sup>185†</sup>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<sup>†</sup> Influenza Cases and Case Rates by Age Group, Missouri, CDC Week 51 (December 19, 2021 – December 25, 2021)\*\***

Age Group	Week 51 Cases	Week 51 Rate <sup>‡</sup>	2021-22* Season-to-Date	2021-2022* Season-to-Date Rate <sup>‡</sup>
00-04	217	57.97	697	186.18
05-24	1,140	71.05	3,972	247.55
25-49	314	16.41	1,206	63.03
50-64	121	9.79	487	39.39
65+	115	12.04	426	44.61
<b>Total</b>	<b>1,907</b>	<b>31.35</b>	<b>6,788</b>	<b>111.58</b>

<sup>†</sup>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)

<sup>‡</sup>Incidence Rate per 100,000 population

**Figure 3. Number of Laboratory-positive<sup>†</sup> Influenza Cases and Case Rates by Region, Missouri, CDC Week 51 (December 19, 2021 – December 25, 2021)<sup>\*\*</sup>**

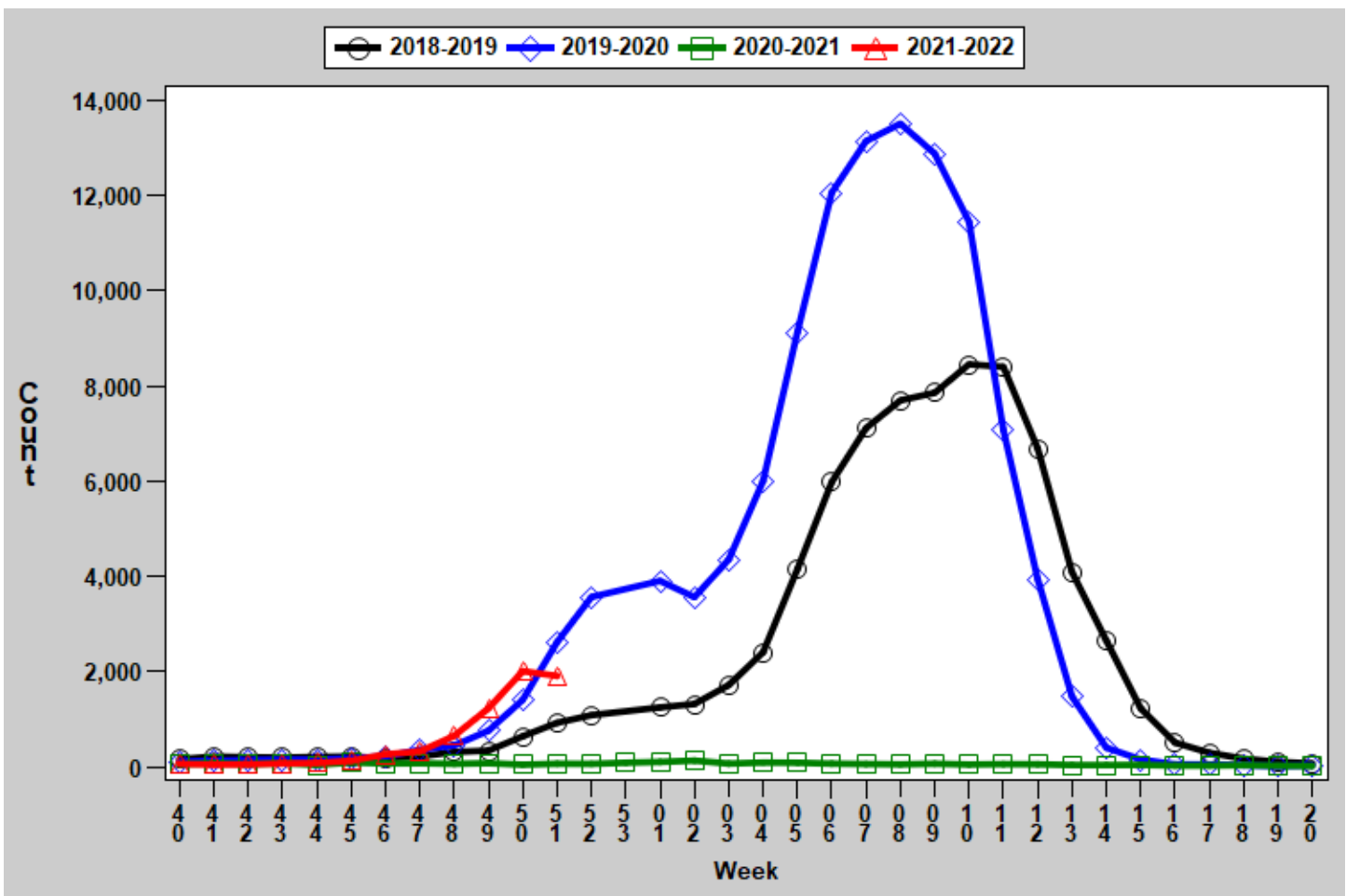
Region	Week 51 Cases	Week 51 Rate <sup>‡</sup>	2021-22* Season-to-Date	2021-22* Season-to-Date Rate <sup>‡</sup>
Central	291	42.98	1,167	172.38
Eastern	899	36.67	2,535	111.86
Northwest	254	15.90	1,228	76.87
Southeast	328	69.54	970	205.64
Southwest	135	12.60	888	82.89
<b>Total</b>	<b>1,907</b>	<b>31.35</b>	<b>6,788</b>	<b>111.58</b>

<sup>†</sup>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.

<sup>\*\*</sup>Influenza season begins week ending October 3, 2020 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

<sup>‡</sup>Incidence Rate per 100,000 population

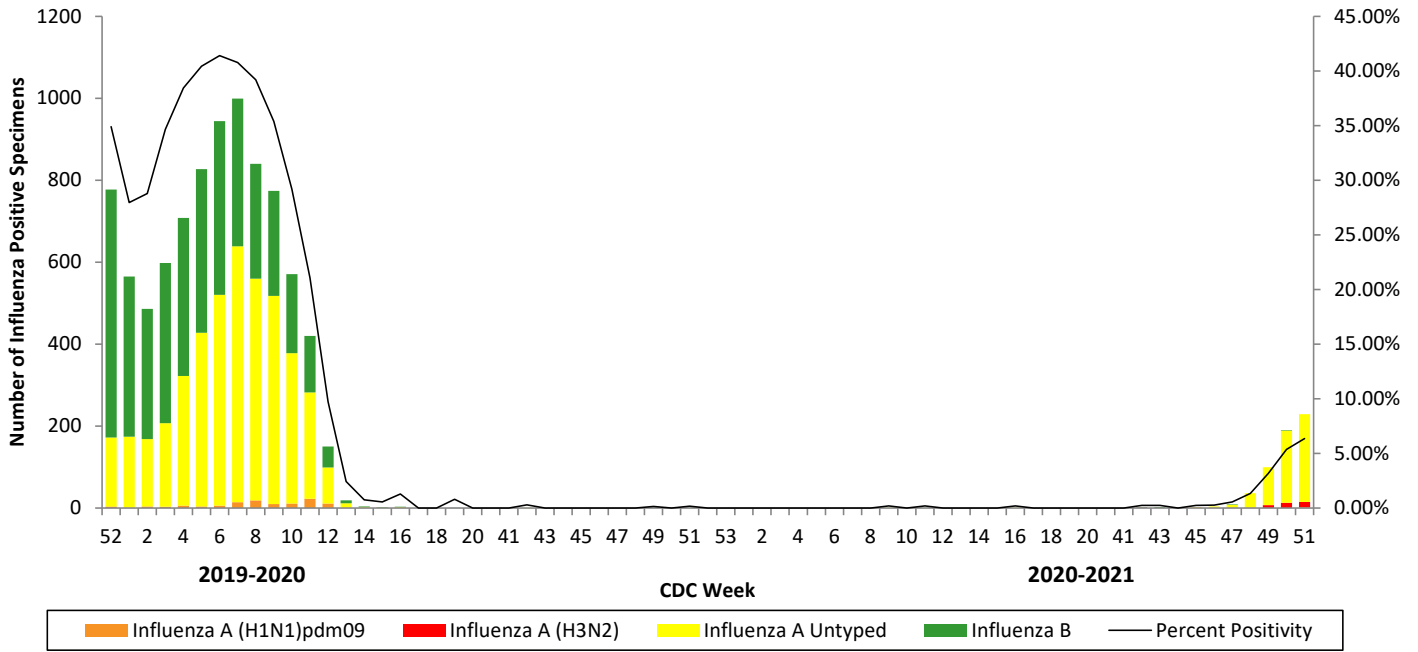
**Figure 4. Number of Laboratory-positive<sup>†</sup> Influenza Cases by CDC Week, Missouri, 2018-2022<sup>\*</sup>**



<sup>†</sup>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.

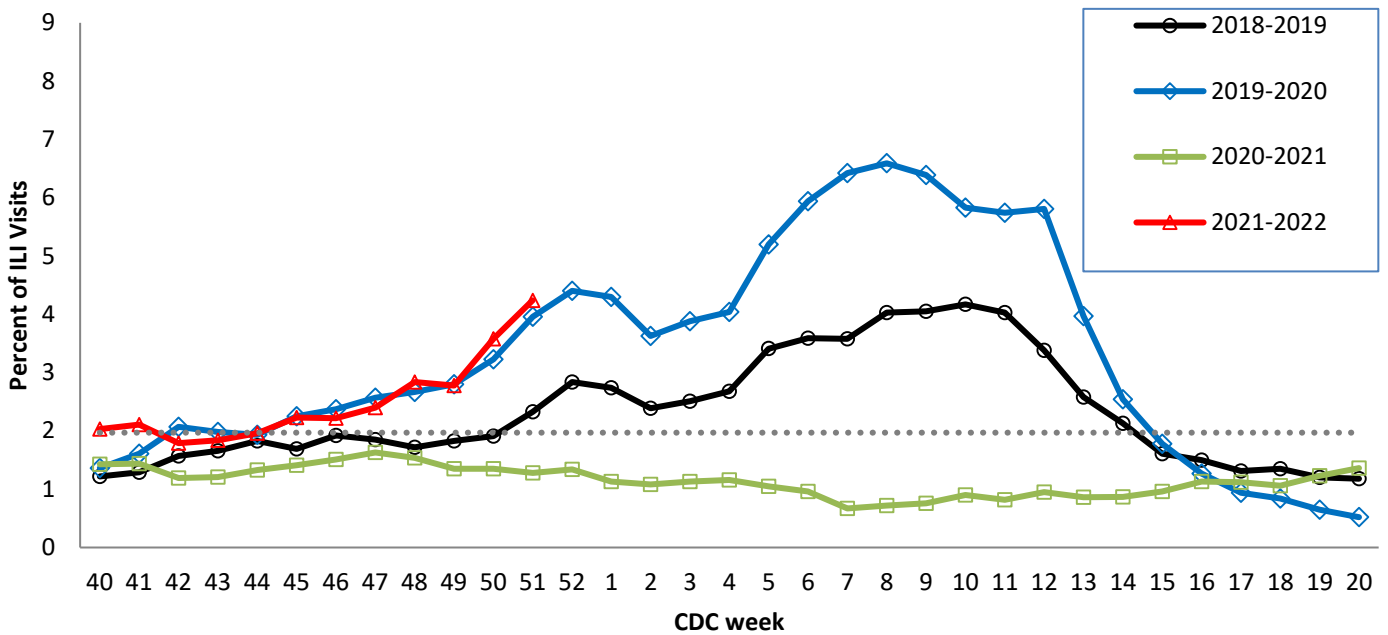
<sup>\*</sup>2021-2022 season-to-date through the week ending May 21, 2022 (Week 20).Data Source: Missouri Health Information Surveillance System (WebSurv)

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



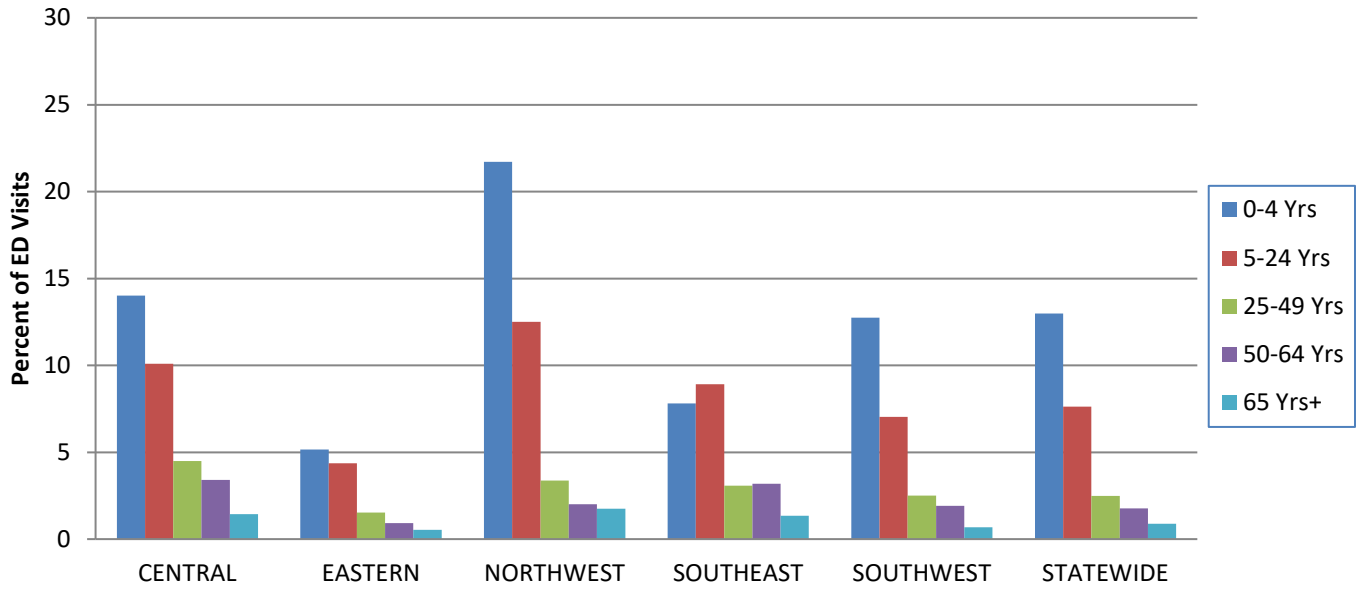
Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2021-2022 season-to-date through the week ending December 25, 2021 (Week 51).

**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.

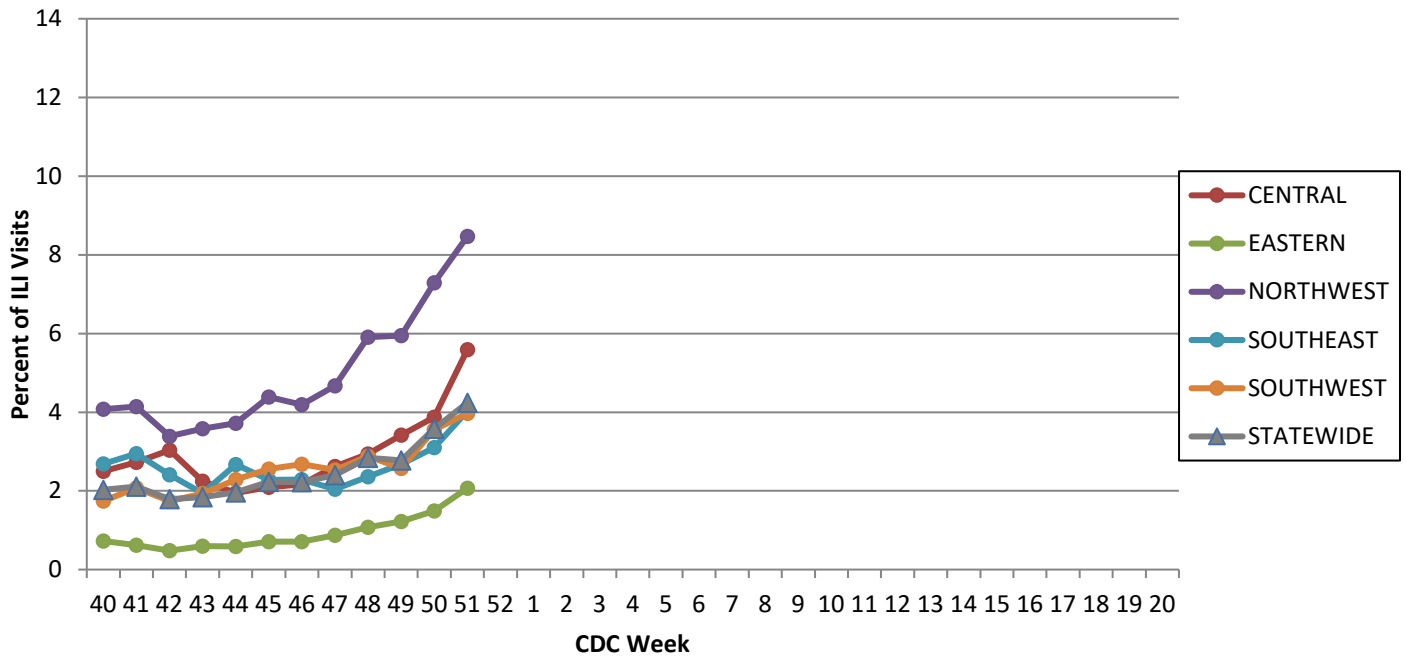
**Figure 7. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, by Age Group, Region and Statewide, Week 51, 2021\***



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.

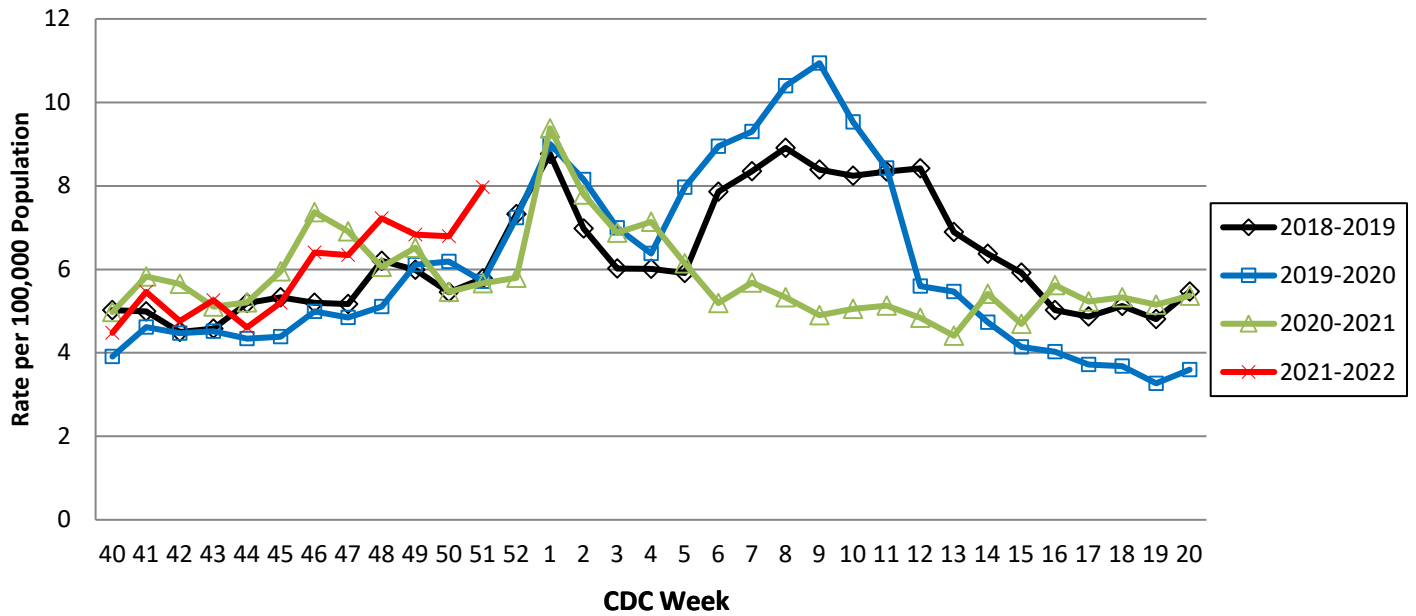
**Figure 8. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, by Region and Statewide, 2021-2022 Influenza Season\***



Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.

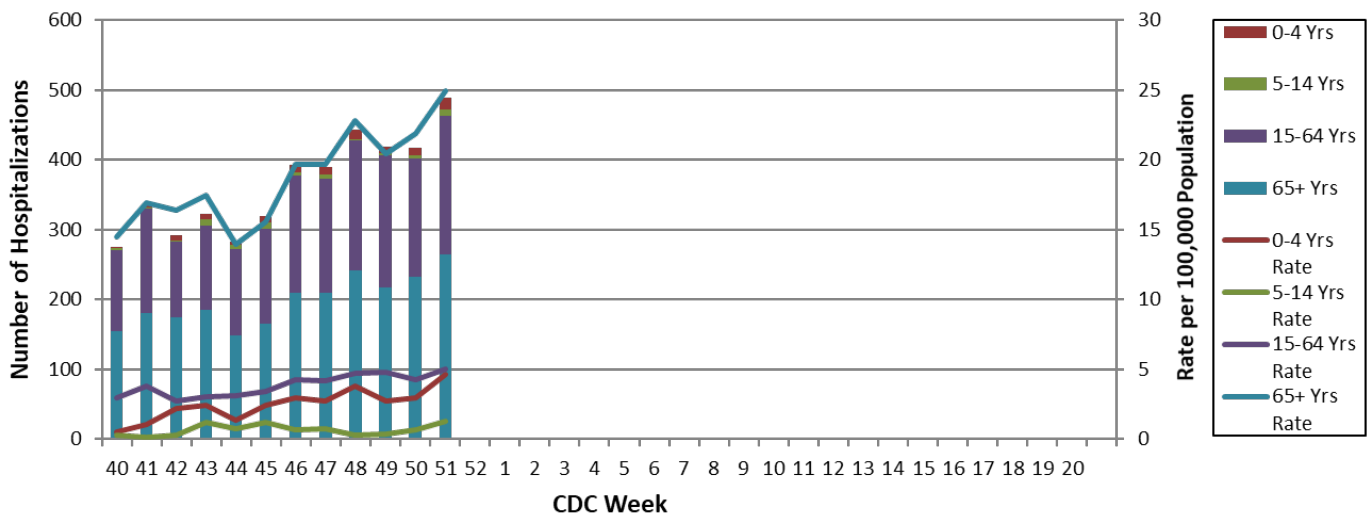
\*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest Region should be interpreted with caution.

**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 51, 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/](http://www.who.int/influenza/surveillance_monitoring/en/)