



# Missouri Weekly Influenza Surveillance Report 2022-2023 Influenza Season<sup>1</sup>

## Week 16: April 16, 2023 – April 22, 2023

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

### Summary:

- Seasonal influenza activity in Missouri decreased to Sporadic<sup>2</sup> while the Influenza-like illness (ILI) activity in Missouri increased to Level 2 in the minimal category<sup>3</sup>, respectively during Week 16.
- During Week 16 a total of 88 laboratory-positive<sup>4</sup> influenza cases (26 influenza A, 62 influenza B and 0 untyped) were reported. The influenza type for reported season-to-date cases includes 94.0% influenza A, 5.7% influenza B and 0.4% untyped. The percentage of respiratory specimens testing positive for influenza in Missouri laboratories reporting to the National Respiratory and Enteric Virus Surveillance System (NREVSS) was 0.35% for Week 16.
- Influenza-like illness activity for the hospital emergency room visit chief complaint data reported through ESSENCE increased to 1.37% for Week 16 (Figure 6).<sup>5</sup>
- Two hundred thirty six influenza-associated deaths have been reported in Missouri as of Week 14 (week ending April 8, 2023).<sup>6</sup>
- Eleven influenza outbreaks and two influenza-associated school closures have been reported as of Week 16.
- Seasonal influenza activity continues to decline nationwide. 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>.

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

<sup>2</sup>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 cases of ILI.

<sup>3</sup>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>

<sup>4</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>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>Influenza deaths are collected from Missouri's death certificate data. Decedents with influenza listed as a cause or contributor to death are classified as an influenza-associated death. Death certificate data are generally available two weeks following the current CDC week.

## Surveillance Data:

### Interactive Maps

The jurisdiction-specific influenza data are provided through interactive maps available at <https://arcg.is/DKTSe0>. 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 16
- Reported Week-specific Rate per 100,000 Population, CDC Week 16
- 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 14-16 (April 16, 2023 – April 22, 2023)<sup>\*</sup>**

Influenza Type	Week 14	Week 15	Week 16	2022-2023* Season-to-Date
Influenza A	63	51	26	101,226
Influenza B	93	75	62	6,101
Influenza Unknown Or Untyped	0	0	0	476
<b>Total</b>	<b>156</b>	<b>126</b>	<b>88</b>	<b>107,803</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 with the week ending October 8, 2022 (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 16 (April 16, 2023 – April 22, 2023)<sup>\*</sup>**

Age Group	Week 16 Cases	Week 16 Rate <sup>‡</sup>	2022-23* Season-to-Date	2022-2023* Season-to-Date Rate <sup>‡</sup>
00-04	14	3.80	15,926	4,326.78
05-24	29	1.85	45,284	2,895.38
25-49	22	1.13	22,940	1,180.59
50-64	8	0.67	11,944	995.16
65+	15	1.41	11,708	1,102.41
<b>Total</b>	<b>88</b>	<b>1.43</b>	<b>107,803</b>	<b>1,756.48</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 8, 2022 (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 16 (April 16, 2023 – April 22, 2023)<sup>‡\*</sup>**

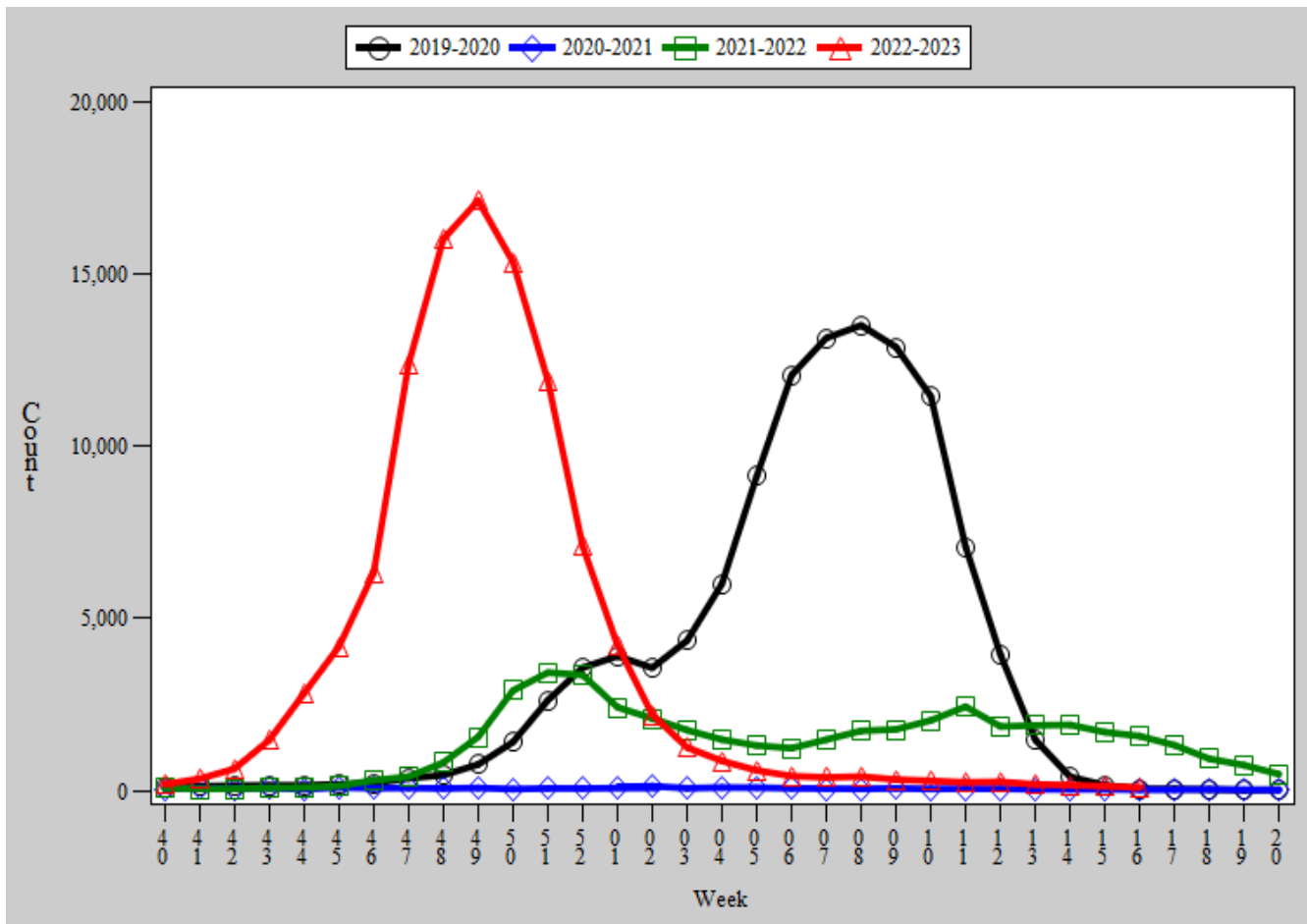
Region	Week 16 Cases	Week 16 Rate <sup>‡</sup>	2022-23* Season-to-Date	2022-23* Season-to-Date Rate <sup>‡</sup>
Central	29	4.30	11,257	1,668.15
Eastern	24	1.06	30,012	1,323.40
Northwest	14	0.86	30,889	1,887.23
Southeast	11	2.54	12,467	2,882.96
Southwest	10	0.95	23,178	2,206.10
<b>Total</b>	<b>88</b>	<b>1.43</b>	<b>107,803</b>	<b>1,756.48</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 8, 2022 (CDC Week 40) Data Source: Missouri Health Information Surveillance System (WebSurv)

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

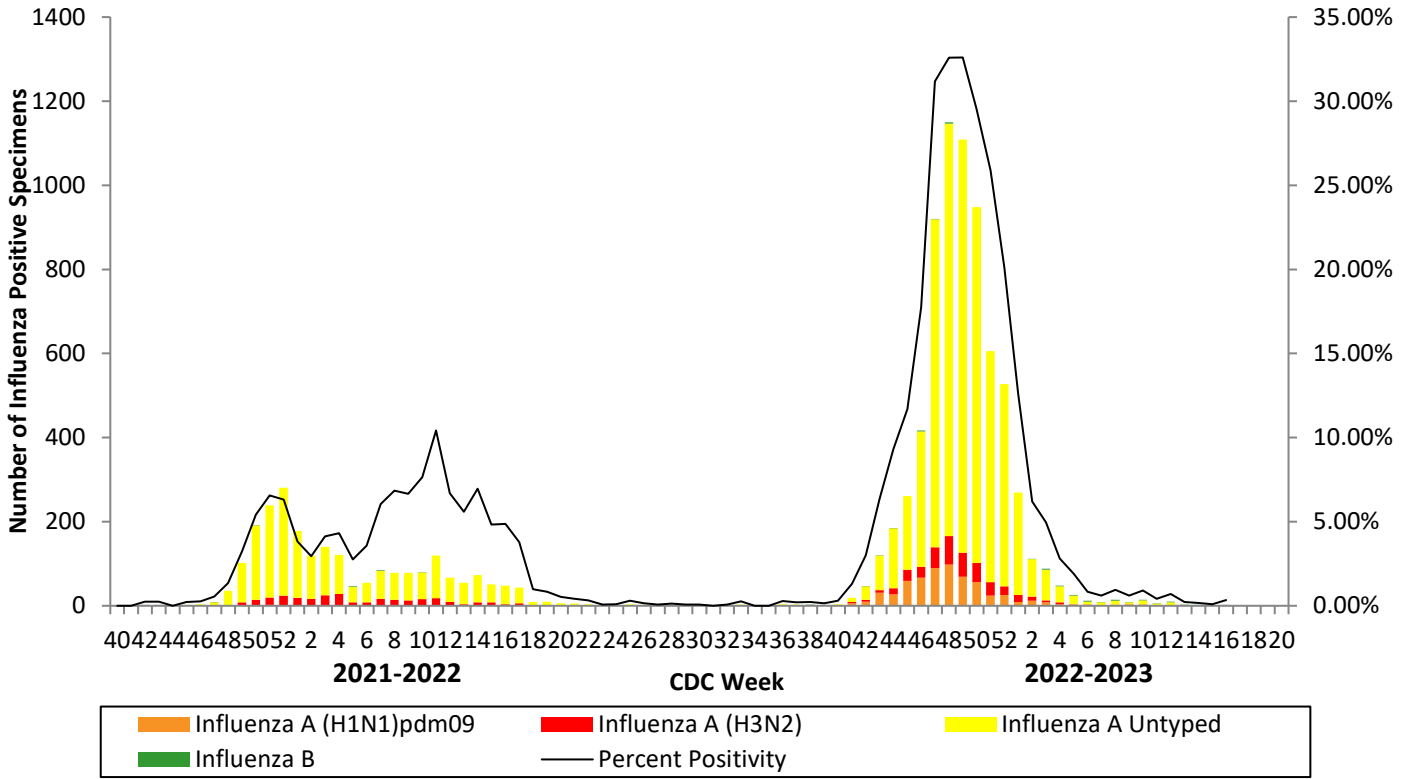
**Figure 4. Number of Laboratory-positive<sup>†</sup> Influenza Cases by CDC Week, Missouri, 2019-2023<sup>\*</sup>.**



<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.

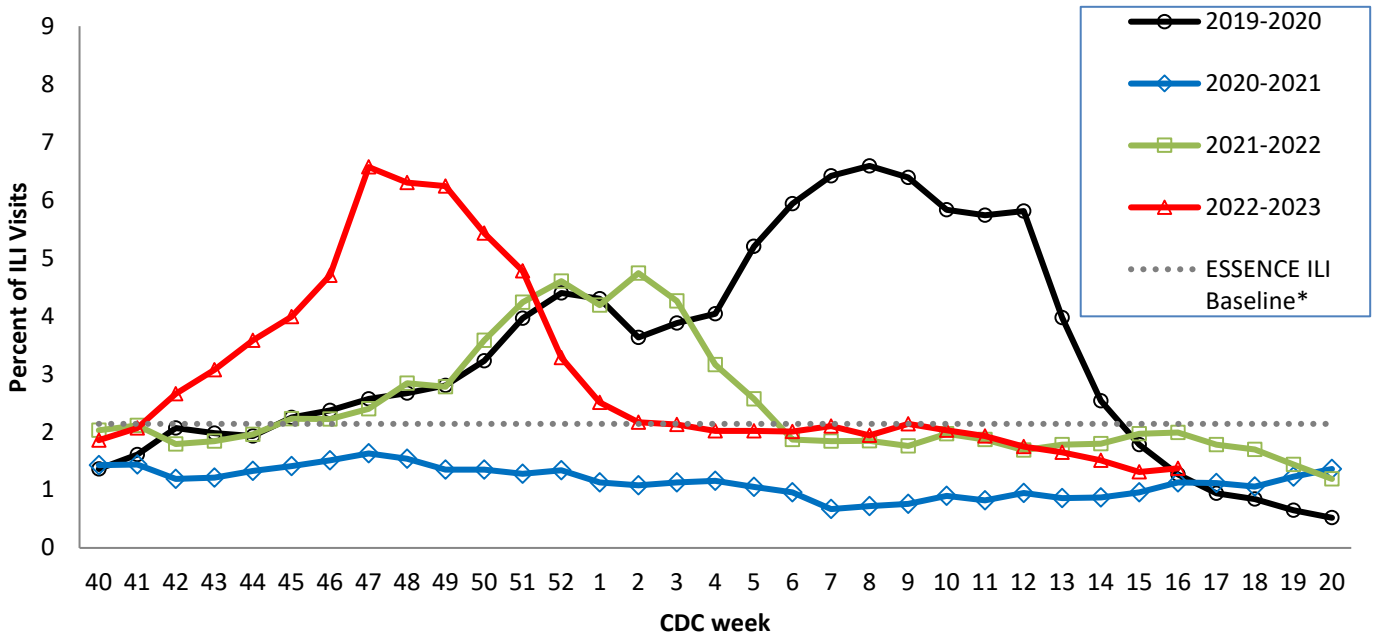
<sup>\*</sup>2022-2023 season-to-date through the week ending April 22, 2023 (Week 16). Data Source: Missouri Health Information Surveillance System (WebSurv)

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



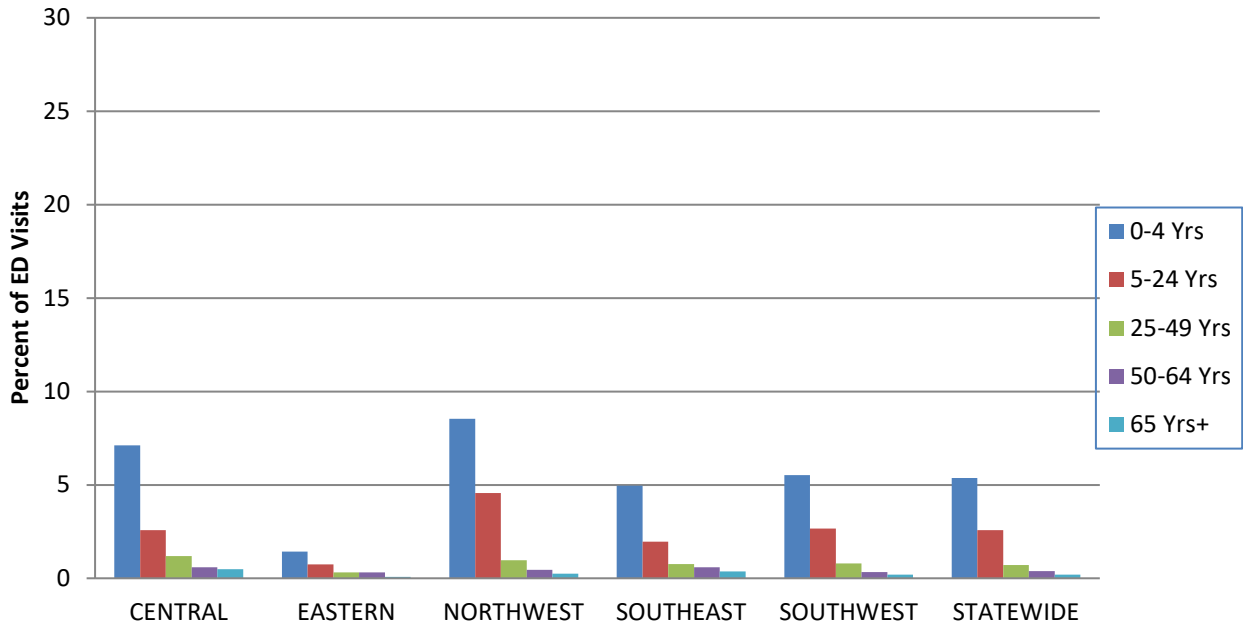
Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2022-2023 season-to-date through the week ending April 22, 2023 (Week 16).

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



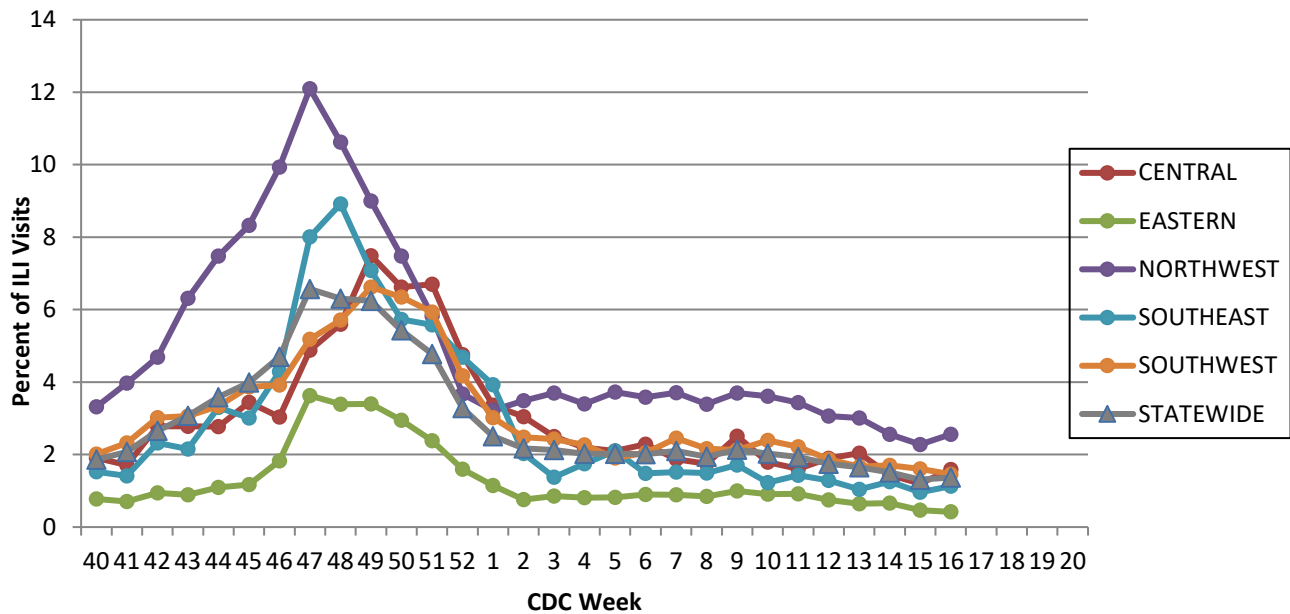
\*\*The ESSENCE ILI Baseline is the mean percent of ILI visits for each week during the previous three flu seasons when percentage of ILI visits were less than 2% of total visits, plus two standard deviations. Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable 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 16, 2023\***



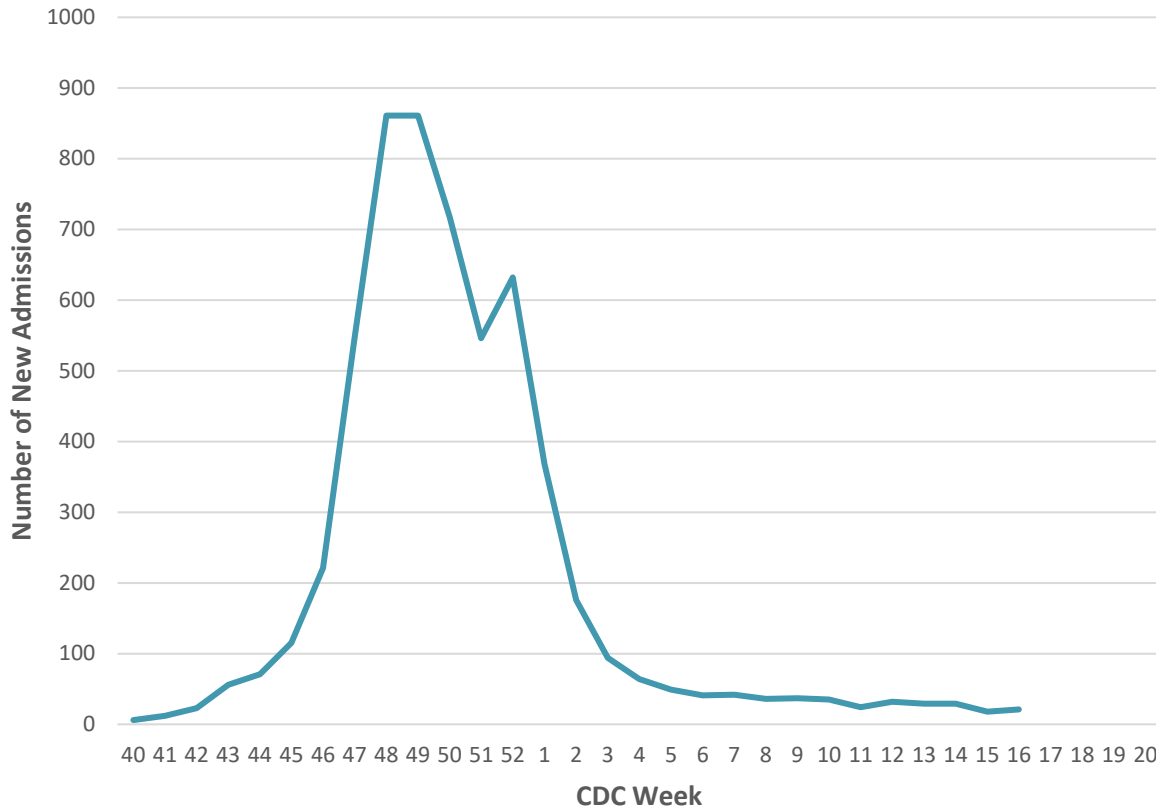
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.  
 \*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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



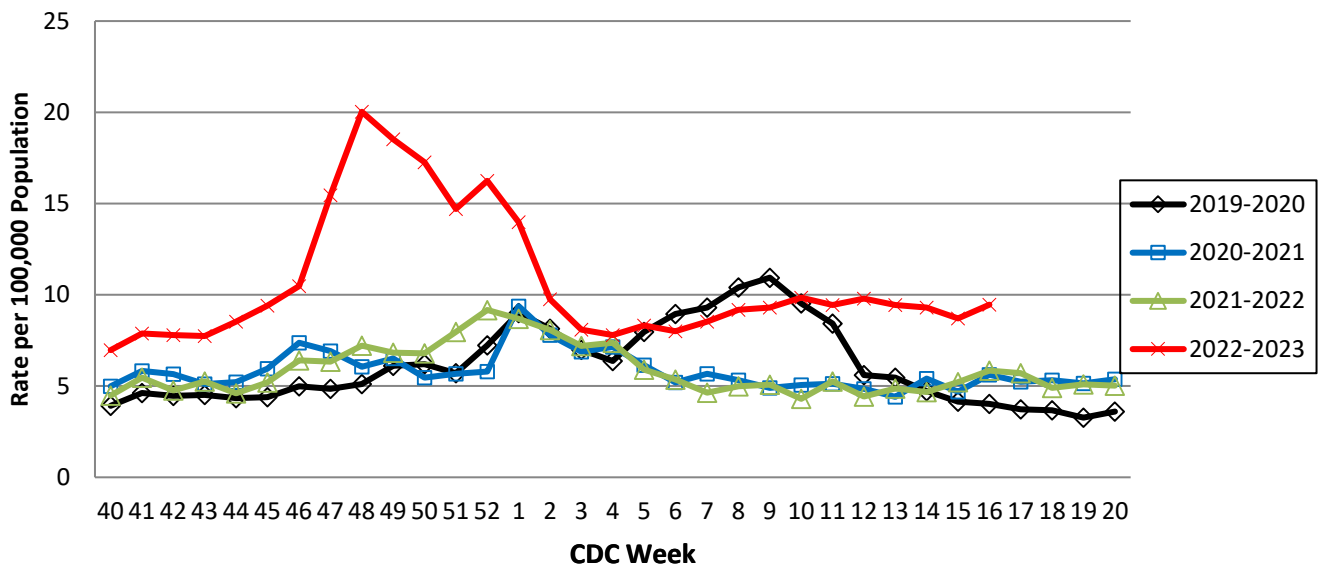
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.  
 \*The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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

**Figure 9. New Influenza Hospital Admissions Reported to HHS Protect, Missouri Hospitals, 2022-2023 Season**



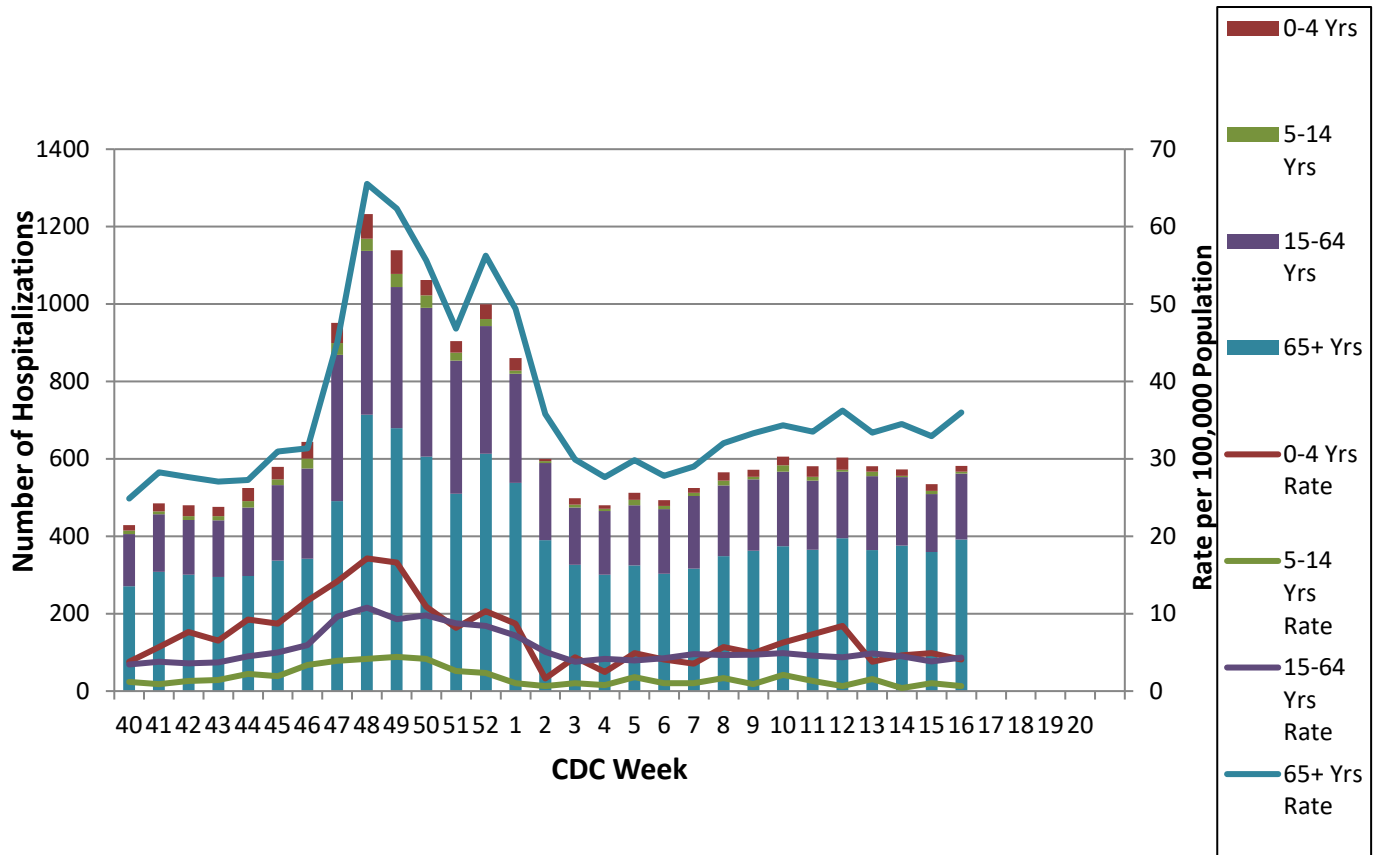
Data Source: <https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capacity-by-State-Timeseries> | HealthData.gov. 2022-2023 season-to-date through the week ending April 22, 2023 (Week 16).

**Figure 10. 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 11. Number of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Participating Missouri Hospitals by Age Group, Week 16, 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:**  
<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates>