



Missouri Weekly Influenza Surveillance Report 2021-2022 Influenza Season¹

Week 15: April 10, 2022 – April 16, 2022

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

Summary:

- The estimated influenza activity in Missouri is Regional².
- During Week 15, a total of 927 laboratory-positive³ influenza cases (882 influenza A, 42 influenza B and 3 untyped) were reported. A season-to-date total of 37,950 laboratory-positive influenza cases (34,831 influenza A, 2,871 influenza B, and 248 untyped) have been reported in Missouri as of Week 15. The influenza type for reported season-to-date cases includes 91.7% influenza A, 7.6% influenza B, and 0.7% 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 4.7% during Week 15, with the most common subtype being A(H3N2) (Figure 5).
- Influenza-like illness (ILI) activity for Week 15 was at baseline for the hospital emergency room visit chief complaint data reported through ESSENCE. The reported percentage of visits for ILI through ESSENCE was 1.96% (Figure 6).⁴
- Twenty-two influenza-associated deaths have been reported in Missouri as of Week 15.⁵
- Eight influenza or ILI-associated outbreaks have been reported in Missouri as of Week 15.
- 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 2021- 2022 influenza season begins CDC Week 40 (week ending October 9, 2021) and ends CDC Week 39 (week ending October 1, 2022).

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

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 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 15
- Reported Week-specific Rate per 100,000 Population, CDC Week 15
- 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 13-15 (March 27, 2021 – April 16, 2022)*

Influenza Type	Week 13	Week 14	Week 15	2021-2022* Season-to-Date
Influenza A	1,617	1,465	882	34,831
Influenza B	66	64	42	2,871
Influenza Unknown Or Untyped	3	5	3	248
Total	1,686	1,534	927	37,950

[†]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 15 (April 10, 2022 – April 16, 2022)*[‡]

Age Group	Week 15 Cases	Week 15 Rate [‡]	2021-22* Season-to-Date	2021-2022* Season-to-Date Rate [‡]
00-04	148	40.21	5,803	1,576.56
05-24	466	29.80	19,417	1,241.49
25-49	173	8.90	6,941	357.21
50-64	74	6.17	2,930	244.12
65+	66	6.21	2,859	269.20
Total	927	15.10	37,950	618.34

[†]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 15 (April 10, 2022 – April 16, 2022)^{*‡}

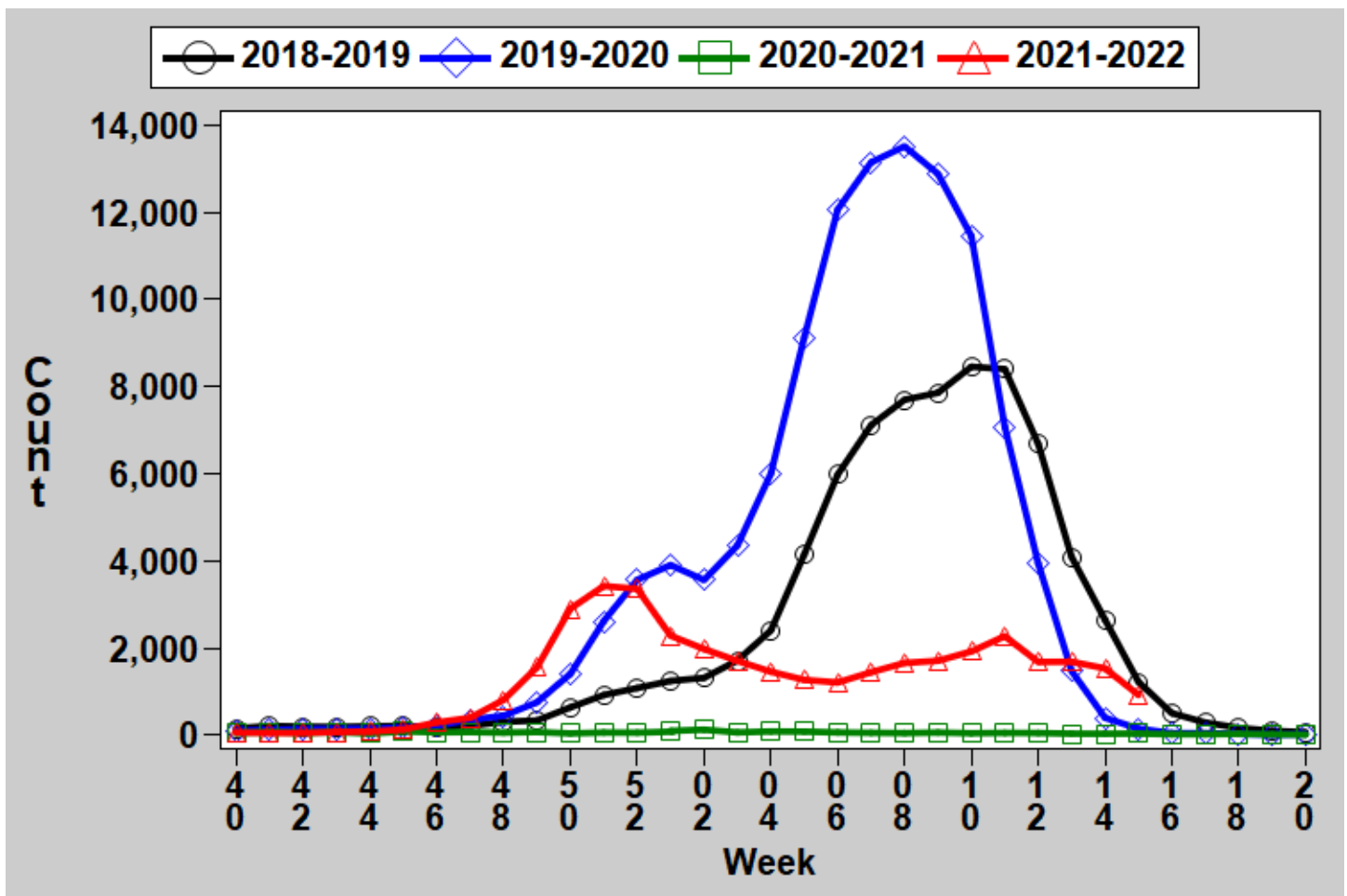
Region	Week 15 Cases	Week 15 Rate [‡]	2021-22* Season-to-Date	2021-22* Season-to-Date Rate [‡]
Central	76	11.26	4,180	619.43
Eastern	368	16.23	11,185	493.21
Northwest	201	12.28	9,176	560.63
Southeast	133	30.76	4,482	1,036.45
Southwest	149	14.18	8,927	849.68
Total	927	15.10	37,950	618.34

[†]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

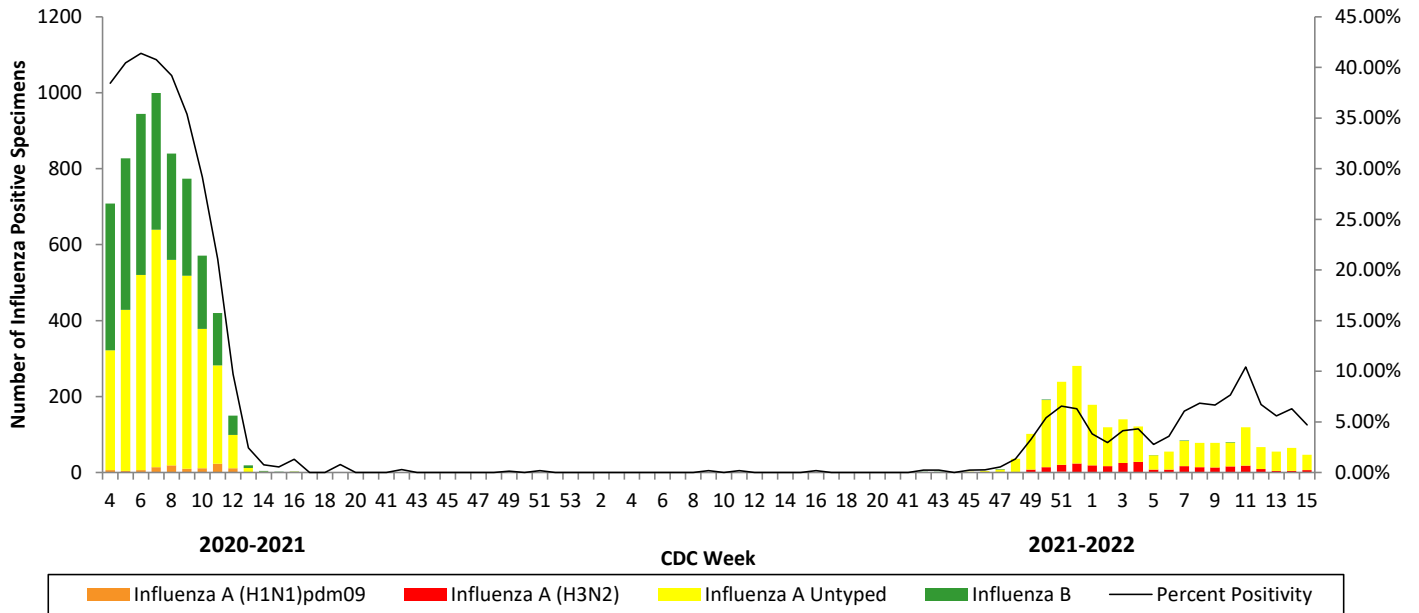
Figure 4. Number of Laboratory-positive[†] Influenza Cases by CDC Week, Missouri, 2018-2022^{*}



[†]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.

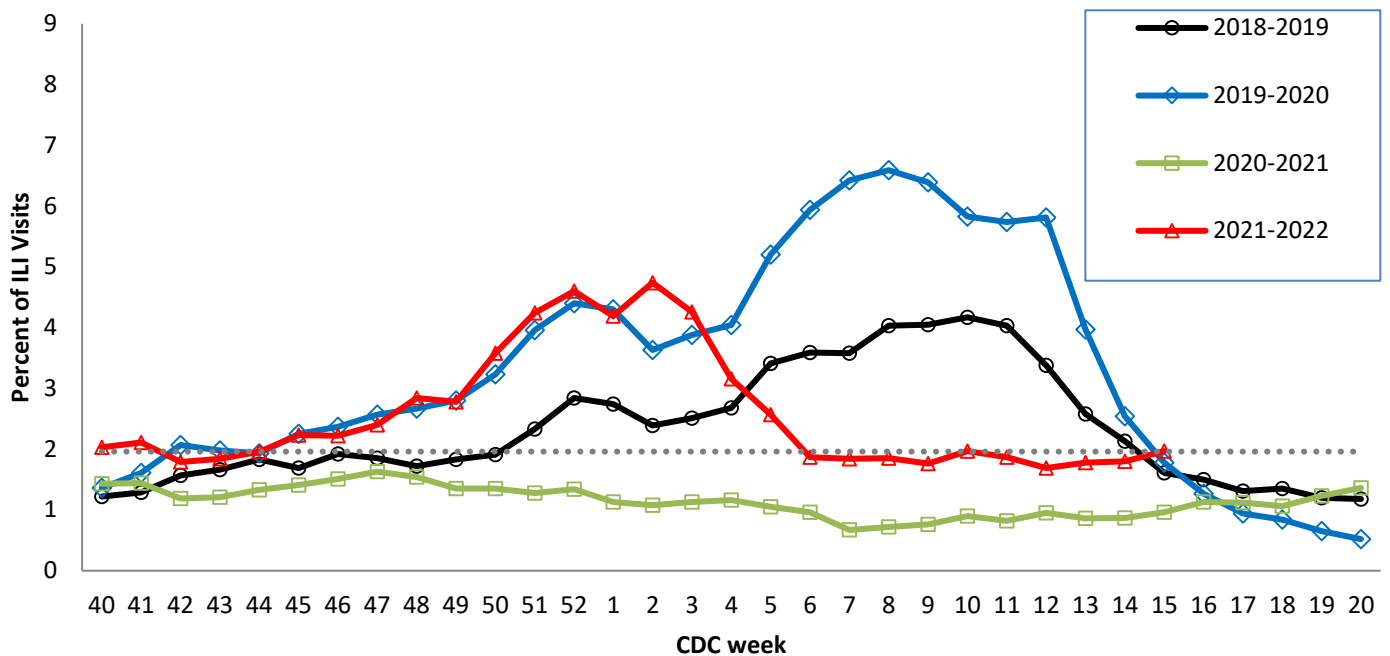
^{*}2021-2022 season-to-date through the week ending May 21, 2022 (Week 20). Data Source: Missouri Health Information Surveillance System (WebSurv)

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



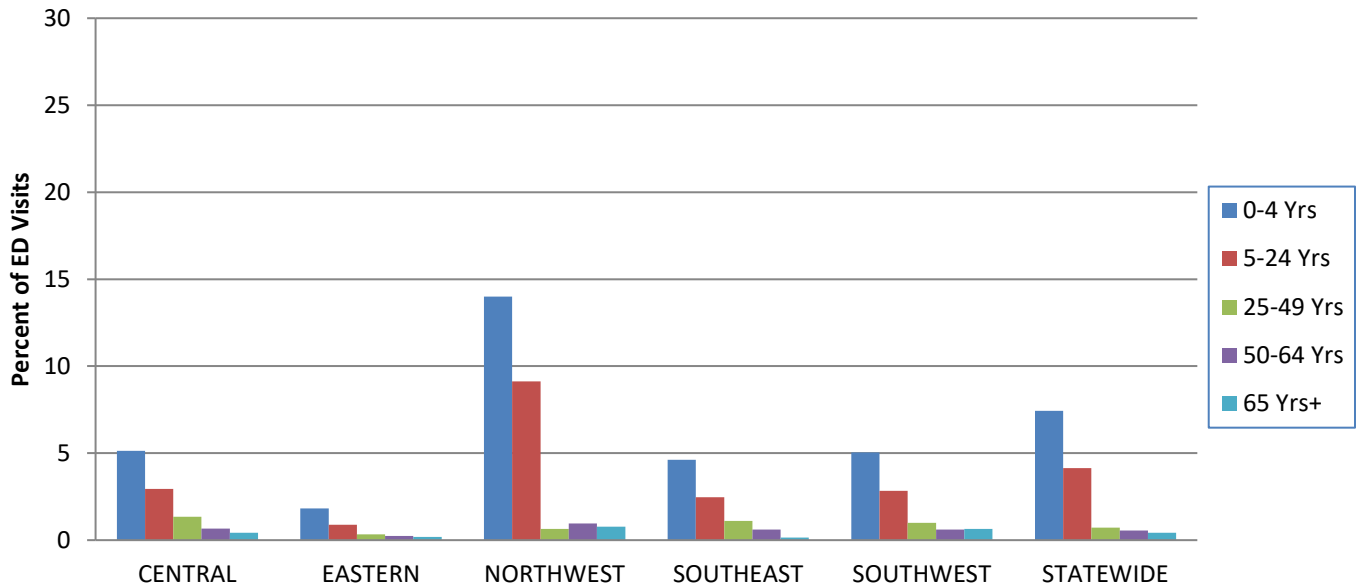
Data Source: National Respiratory and Enteric Virus Surveillance System (NREVSS), Centers for Disease Control and Prevention (CDC). 2021-2022 season-to-date through the week ending April 16, 2022 (Week 15).

Figure 6. Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) in ESSENCE Participating Hospitals, 2018-2022 Influenza Seasons**



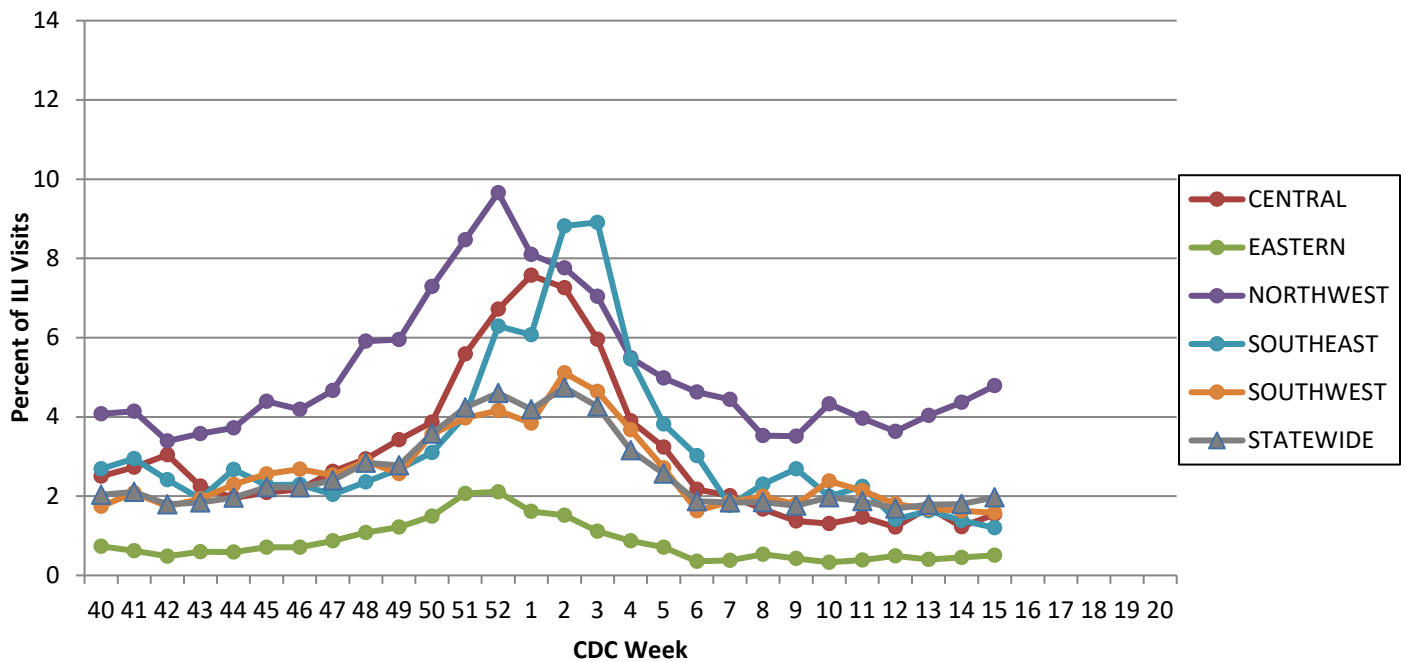
**The ESSENCE ILI Baseline is the mean percent of ILI visits for each week during the previous three flu seasons when percentage of ILI visits were less than 2% of total visits, plus two standard deviations. Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease 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 15, 2021*



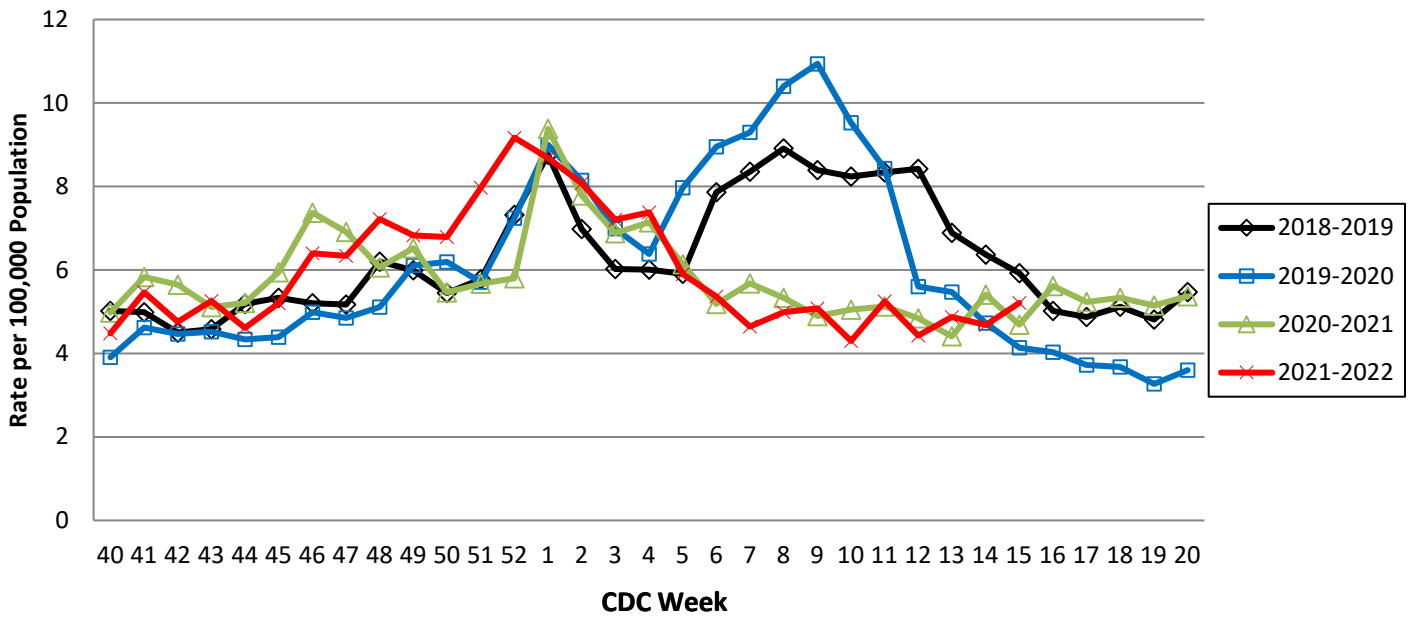
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
 *The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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



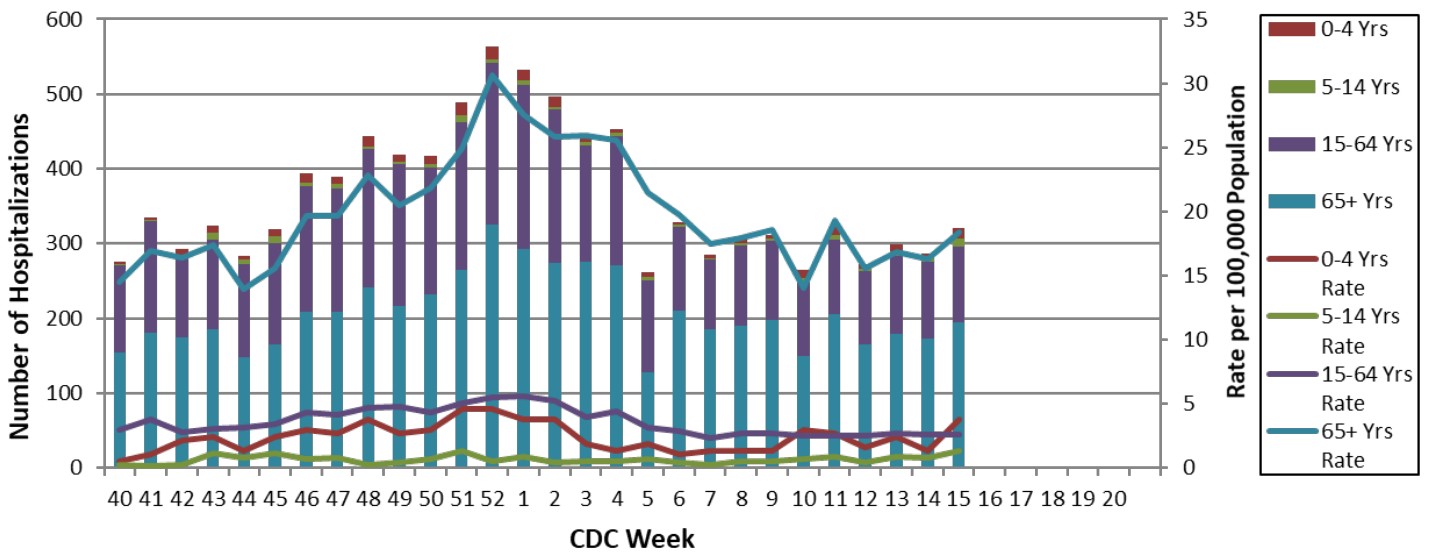
Data Source: Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, ESSENCE version 1.20.
 *The ILI data from a small number of sites located in the Northwest Region of the state is temporarily unavailable in ESSENCE. Therefore, the ILI data for the Northwest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

Figure 10. Number of Patients Hospitalized with Influenza and/or Pneumonia Syndromes in Participating Missouri Hospitals by Age Group, Week 15, 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/