



Champion positive health outcomes and behaviors through innovative programs and community engagement

Respiratory Disease Surveillance Report Jefferson County, Missouri

Week 41: October 5, 2025- October 11, 2025

OVERVIEW: The Jefferson County Health Department (JCHD) monitors influenza and other respiratory pathogens, including COVID-19, throughout Jefferson County, Missouri. The Jefferson County Health Department conducts influenza surveillance using passive surveillance and syndromic surveillance. Although influenza illness can occur year-round, the seasonal influenza reporting begins on the Morbidity and Mortality Weekly Report (MMWR¹) Week 40 of a given year and continues through MMWR Week 20 of the following calendar year. COVID-19 surveillance began in March 2020 and case reporting continues year-round. COVID-19 data reflects cases that are entered into Missouri's communicable disease database. *All data and information are conditional and may change as more reports are received.*

¹ Data is reported in epidemiologic weeks established by the CDC's Morbidity and Mortality Weekly Report (MMWR). The MMWR week starts on a Sunday and ends on Saturday. Values for MMWR week range from 1 to 53, although most years consist of 52 weeks.

INFLUENZA SURVEILLANCE

Passive Surveillance

Table 1. Number of Laboratory-Positive² Influenza Cases by Week, Jefferson County, Missouri

CDC Reporting Week	Week Start Date	Type A	Type B	Unknown	
				Type	Week Total
40	9/28/2025	2	2	0	4
41	10/5/2025	1	0	0	1

Table 2. Number of Laboratory-Positive Influenza Cases by Age Group, Jefferson County, Missouri
For Cases Reported 9/28/2025- 10/11/2025

Age Group	Type A	Type B	Unknown		Total	% TOTAL
			Type			
00 to <02	0	0	0	0	0	0.0%
02 to 04	0	0	0	0	0	0.0%
05 to 14	0	0	0	0	0	0.0%
15 to 24	0	0	0	0	0	0.0%
25 to 49	1	0	0	0	1	20.0%
50 to 64	1	1	0	0	2	40.0%
65+	1	1	0	0	2	40.0%
TOTAL	3	2	0	0	5	100.0%

² 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.

**Figure 1. Percentage of Influenza Cases by Type,
Jefferson County, Missouri**
For Cases Reported 9/28/2025- 10/11/2025

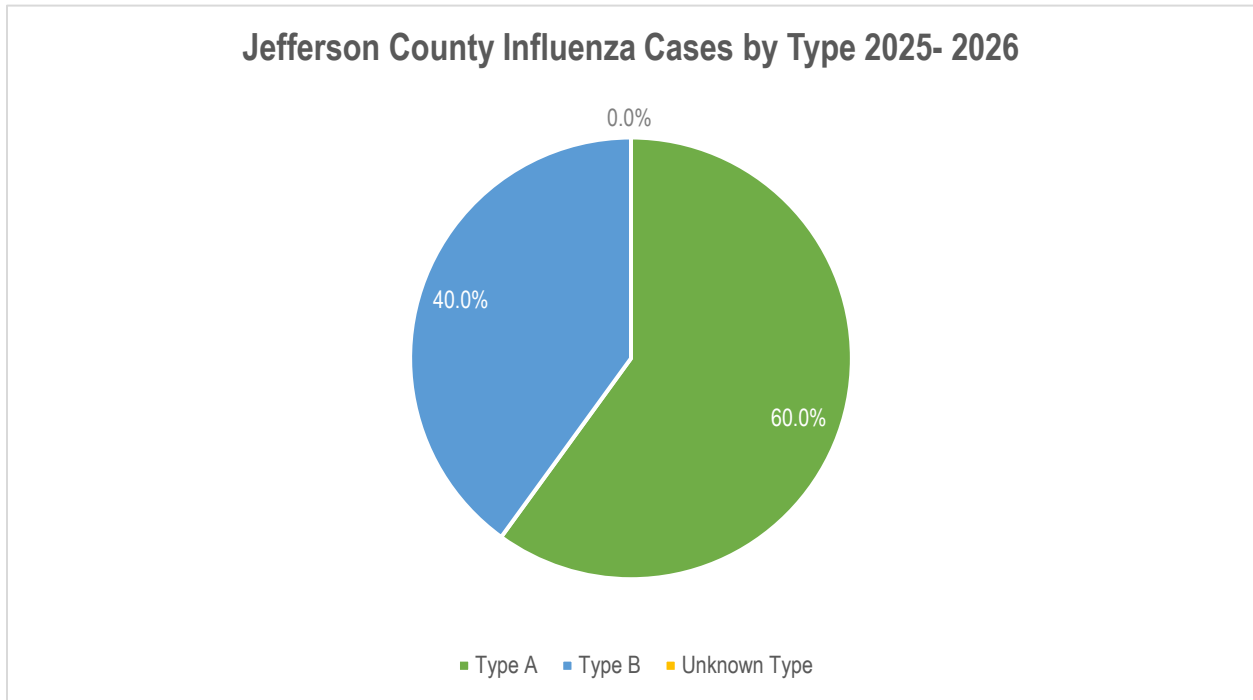
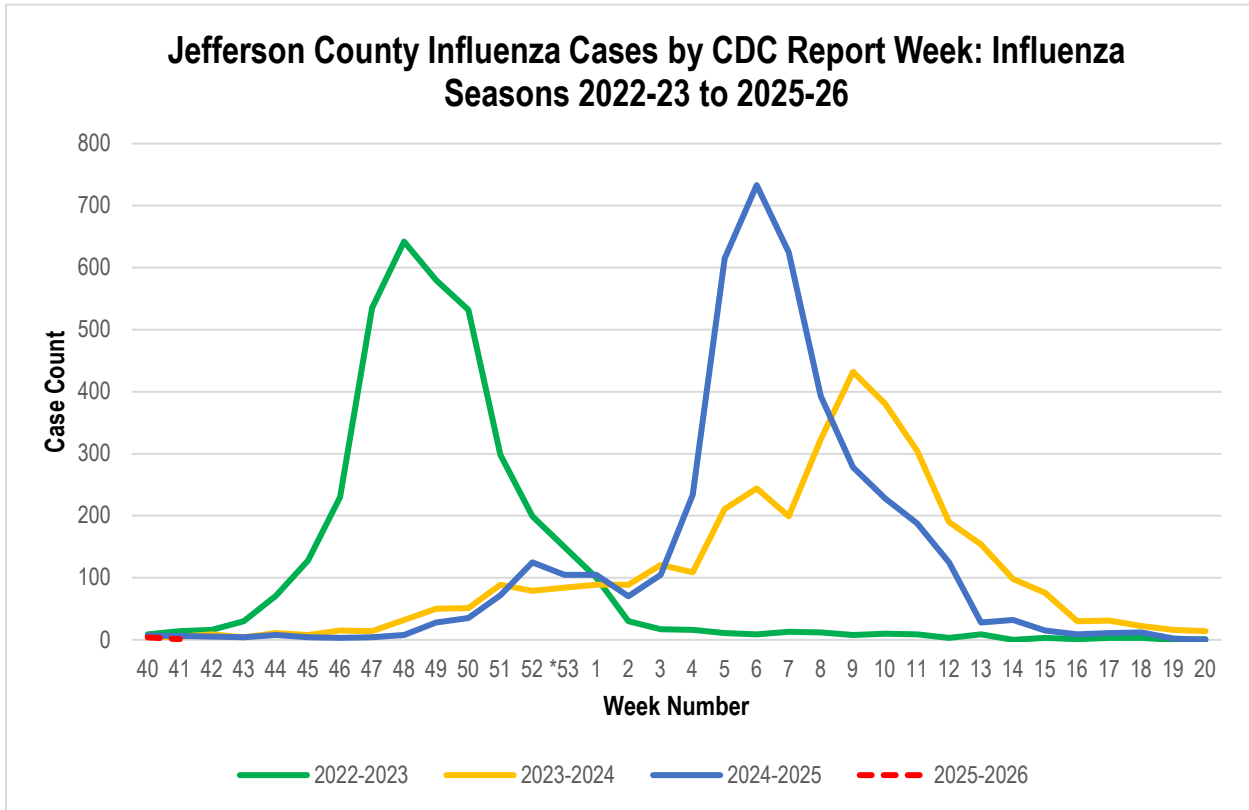


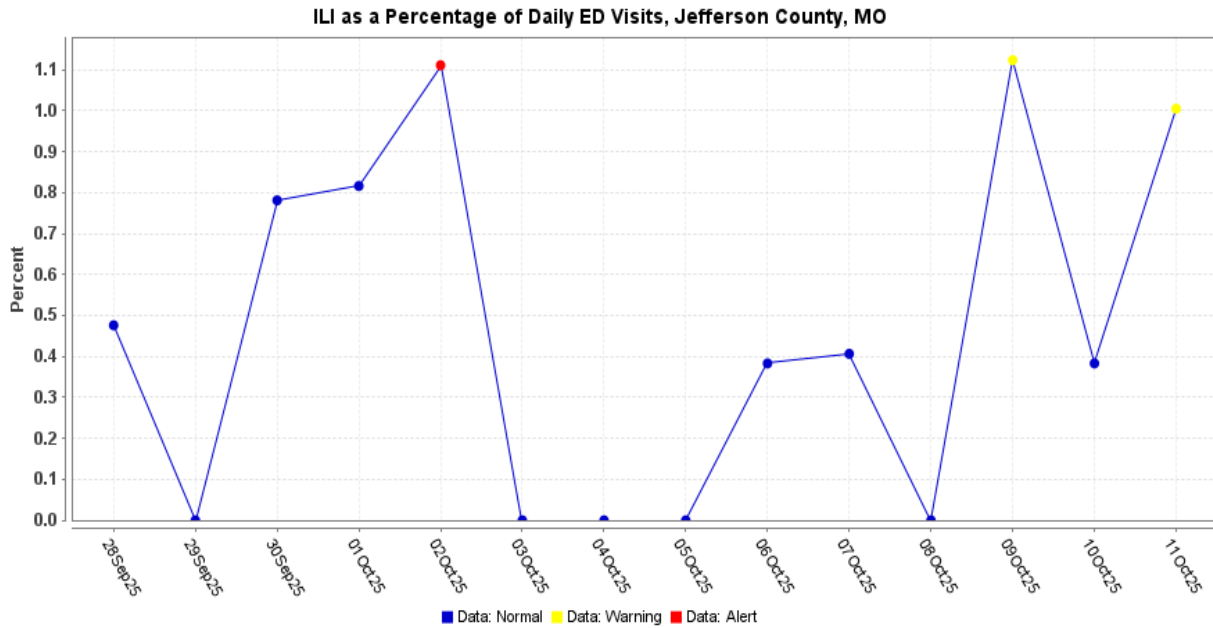
Figure 2. Number of Laboratory-Positive Influenza Cases by Week, Influenza Seasons 2022-23 to 2025-26, Jefferson County, Missouri



Syndromic Surveillance

As determined by ESSENCE, Influenza-Like-Illness (ILI³) accounted for 0.00% to 1.12% of daily visits to hospital emergency departments (EDs) for Jefferson County residents during Week 41. The number of visits to local hospital EDs for ILI ranged from zero to three per day during Week 41.

**Figure 3. Syndromic Surveillance for Influenza-Like-Illness (ILI)
Jefferson County, Missouri**



Jefferson County Influenza Outbreaks

No influenza outbreaks have been reported in Jefferson County as of Week 41.

Jefferson County Influenza Deaths⁴

No influenza-associated deaths have been reported in Jefferson County as of Week 41.

³ ILI is defined by ESSENCE as Emergency Department chief complaints for Influenza or (FeverPlus and (Cough or SoreThroat) and not NonILIFevers).

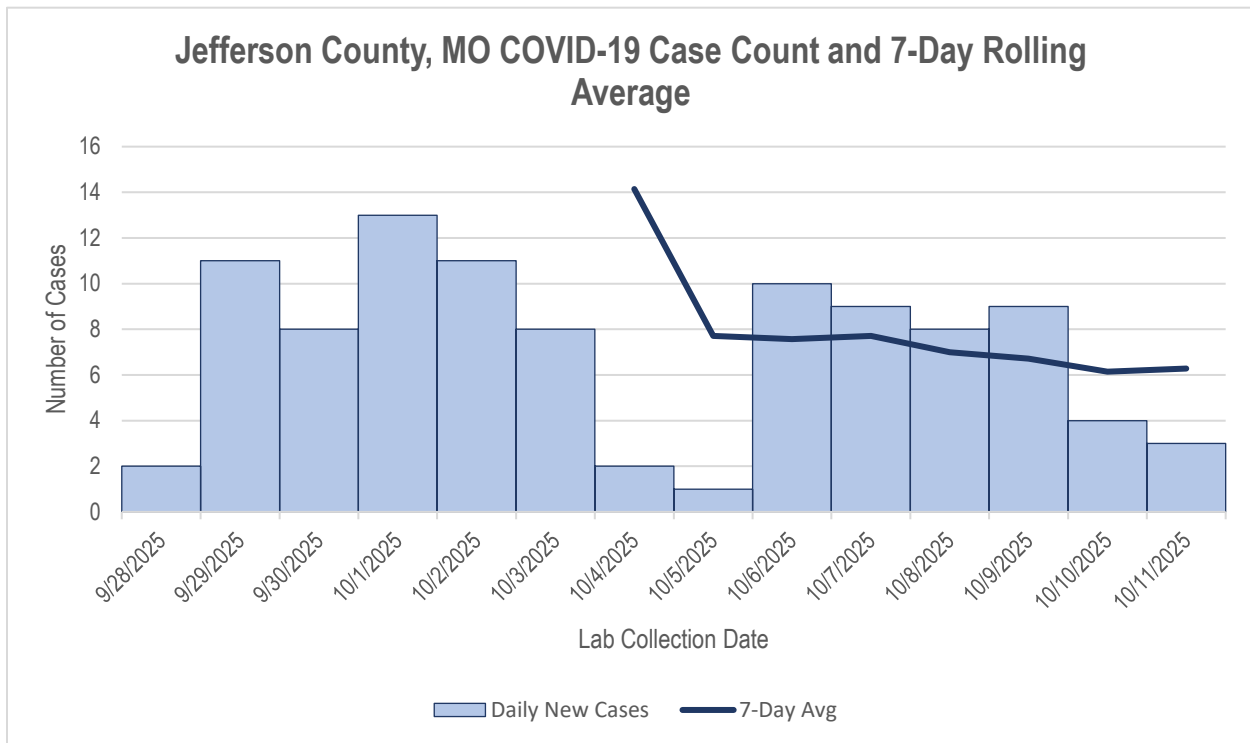
⁴ All influenza-associated deaths became reportable in Missouri in 2016.

COVID-19 SURVEILLANCE

Table 3. Number of Confirmed and Probable COVID-19 Cases by Week, Jefferson County, Missouri

CDC Reporting Week	Week Start Date	Covid-19 Cases	Cumulative Total
40	9/28/2025	55	55
41	10/5/2025	44	99

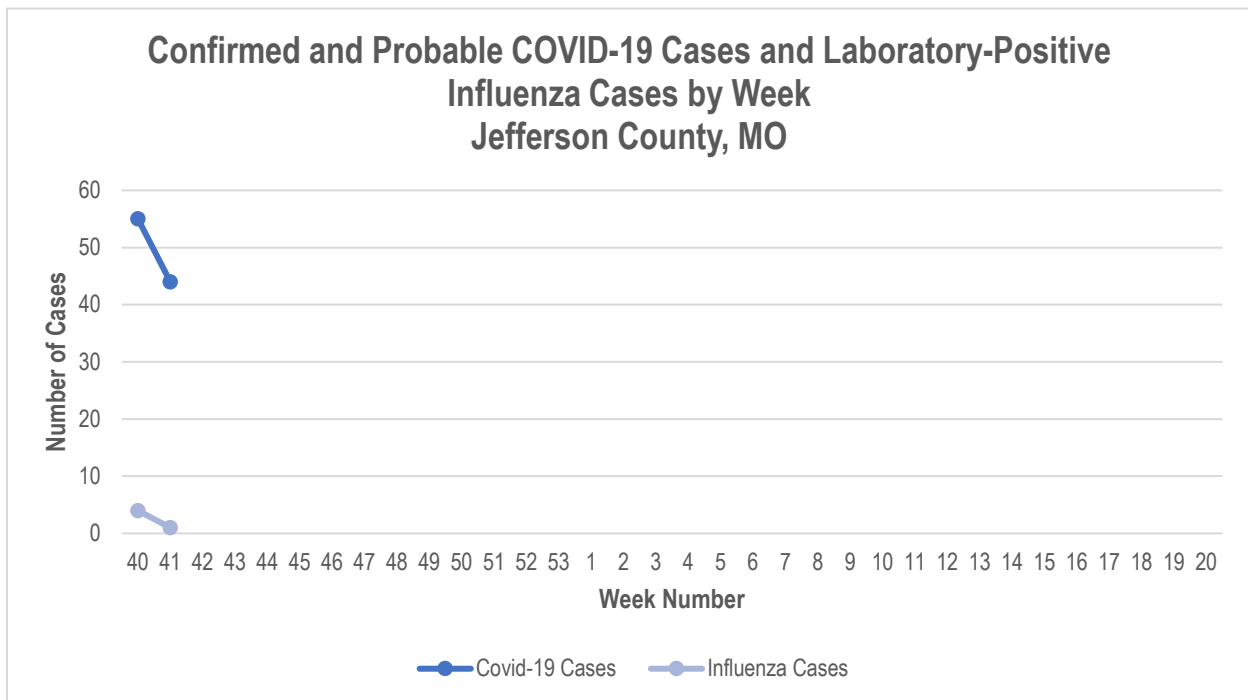
Figure 4. Confirmed and Probable COVID-19 Cases by Day and 7-Day Average, Jefferson County, Missouri
For Cases Reported 9/28/2025- 10/11/2025



Jefferson County COVID-19 Deaths

No COVID-19 associated deaths have been reported in Jefferson County as of Week 41.

Figure 5. Simultaneous Circulation of COVID-19 and Influenza by Week, Jefferson County, Missouri



ADDITIONAL DATA SOURCES AND INFORMATION

Missouri Department of Health and Senior Services, Interactive Statewide Influenza Dashboard: <https://health.mo.gov/living/healthcondiseases/communicable/influenza/dashboard.php>

Missouri Department of Health and Senior Services, Statewide Influenza Data and Statistical Reports: <https://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>

Centers for Disease Control and Prevention, National Influenza Surveillance: <https://www.cdc.gov/fluview/index.html>

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-surveillance-outputs>

Passive Surveillance

Influenza is a reportable condition in the state of Missouri. JCHD conducts passive influenza surveillance by collecting and aggregating data on all laboratory-positive influenza tests in Jefferson County residents. Passive surveillance provides information on the true burden of influenza illness in Jefferson County but is limited by variations in testing and reporting practices. If diagnostic tests are not conducted on patients presenting to health care providers with influenza-like-illness, or if test results (e.g., of rapid influenza tests) are not reported to JCHD, those persons will not be included in the passive surveillance data. Thus, passive surveillance is likely an underestimate of the true burden of influenza illness in Jefferson County. Passive surveillance helps the health department to keep track of the incidence of influenza cases in the community and facilitates early detection of potential outbreaks.

Syndromic Surveillance

JCHD uses the ESSENCE system to conduct syndromic surveillance for Influenza-Like-Illness (ILI) at Missouri hospital emergency departments (EDs). ESSENCE captures data on all ED visits in persons with chief complaints (rather than final diagnoses or positive laboratory tests) of ILI. ILI chief complaints are those which include the word “influenza” or those that the ESSENCE system parses to [fever and (cough or sore throat)]. The syndromic surveillance data presented above include all ED visits for ILI from those with a Jefferson County residential address. Data from private physicians, clinics, or urgent care centers are not included in ESSENCE. Syndromic surveillance contributes to our understanding of the burden of influenza experienced by the healthcare system, as well as demonstrating the relative impact over time of influenza with respect to other illnesses.