Weekly Influenza & Respiratory Illness Activity Report

Week Ending Nov. 18, 2023 | WEEK 46

A summary of influenza surveillance indicators prepared by the Division of Infectious Disease Epidemiology Prevention & Control. All data are preliminary and may change as more information is received.

Minnesota Influenza Key Statistics		
Percent of molecular laboratory tests positive	2.6%	
Hospitalizations	95	
Most common strain	Influenza A	
School outbreaks	9	
Long-term care outbreaks	2	
Pediatric influenza-associated deaths	0	

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Minnesota Influenza Surveillance (www.health.state.mn.us/diseases/flu/stats/) Weekly U.S. Influenza Surveillance Report (www.cdc.gov/flu/weekly/) World Health Organization (WHO) Surveillance (www.who.int/teams/global-influenza-programme/ surveillance-and-monitoring/influenza-surveillance-outputs) Neighboring states' influenza information: Iowa: Iowa Flu Reports (idph.iowa.gov/influenza/reports)

Wisconsin: Influenza (Flu) (https://dhs.wisconsin.gov/influenza/index.htm) North Dakota: Reported Seasonal Influenza Activity in North Dakota (www.ndflu.com/default.aspx) South Dakota: South Dakota Influenza Information (doh.sd.gov/diseases/infectious/flu/)

Due to the COVID-19 pandemic, CDC and MDH will not be posting the weekly geographic spread indicators (no activity, sporadic, local, regional, widespread) this season as they rely on influenza-like illness data (ILI). Because these data are based on symptoms, the cause of ILI cannot reliably be attributed to influenza while COVID-19 is widely circulating.



Minnesota Department of Health 651-201-5414 or 1-877-676-5414 www.health.state.mn.us

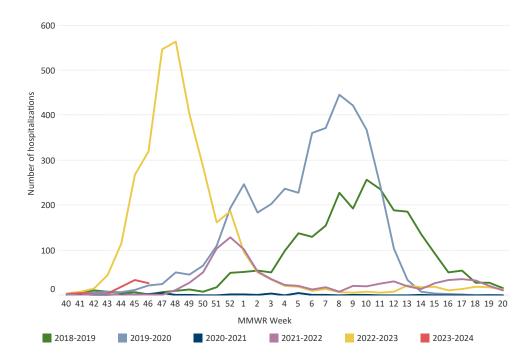
Hospitalized Influenza Surveillance

Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. Due to the need to confirm reports and reporting delays, consider current week data preliminary.

Hospitalized Influenza Cases by Type, Minnesota (FluSurv-NET*)

100 90 80 70 Sum of Frequency 60 50 40 30 20 10 0 9 10 11 12 13 14 15 16 17 18 19 20 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 8 7 MMWR Week Unknown B (no genotype) A (not subtyped) A (H1N2v) B (Yamagata) A H3 A (H3N2v) B (Victoria) A (H1N1) pdm09 A & B

Hospitalized Influenza Cases by Season, Minnesota (FluSurv-NET*)



ospitalizations this week	Hospitalizations last week	Total hospitalizations (to date)	9
7	34	95	2

Season	Total hospitalizations (historic)
2018-2019	2543
2019-2020	4022
2020-2021	35
2021-2022	905
2022-2023	3,338
2023-2024 (to date)	95

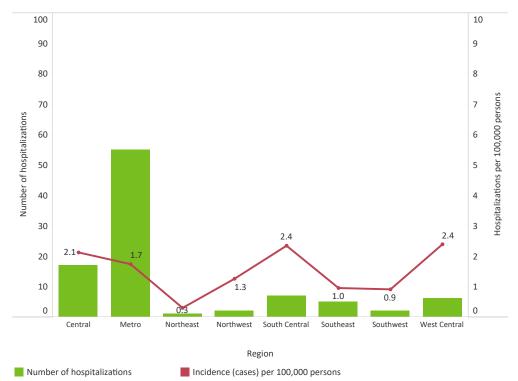
*FluSurv-NET = Influenza Surveillance Network

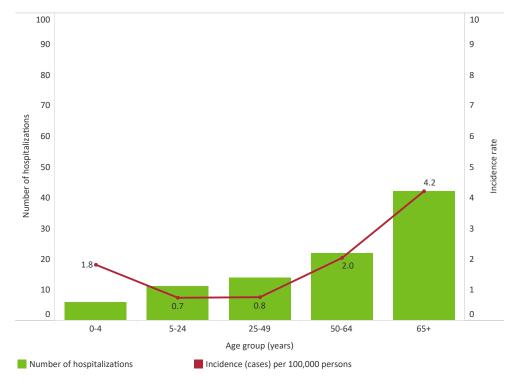
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Hospitalized Influenza Surveillance (continued)

Number of Influenza Hospitalizations and Incidence by Region, Minnesota

Number of Influenza Hospitalizations and Incidence by Age, Minnesota



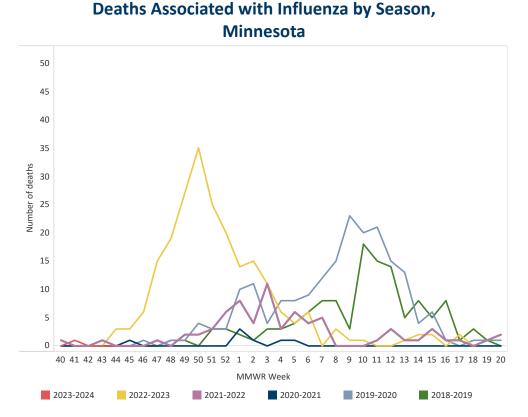


Region	Hospitalizations this week	Total (to date)	% Hospitalizations this week	% Total (to date)
Central	6	17	22%	18%
Metro	14	55	52%	58%
Northeast	0	1	0%	1%
Northwest	0	2	0%	2%
South Central	3	7	11%	7%
Southeast	0	5	0%	5%
Southwest	2	2	7%	2%
West Central	2	6	7%	6%

Median age (years) at time of admission	
63	

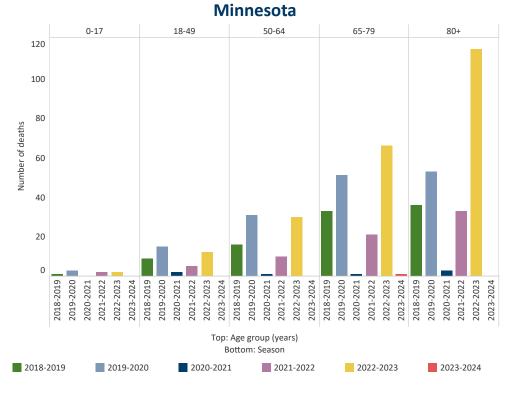
Influenza-Associated Death Surveillance

Influenza deaths are collected via reports from Minnesota's death certificate database, hospitals, and long-term care facilities. Decedents with influenza listed as a cause of or contributor to death, have recent laboratory confirmation of influenza, or are part of an ongoing influenza outbreak at a long-term care facility are reported to influenza surveillance. Due to the need to confirm reports and reporting delays, consider current week data preliminary.



Season	Total deaths	Total pediatric (<18 years) deaths
2018-2019	126	1
2019-2020	197	3
2020-2021	7	0
2021-2022	71	2
2022-2023	224	2
2023-2024 (to date)	1	0

Deaths Associated with Influenza by Age Group and Season,

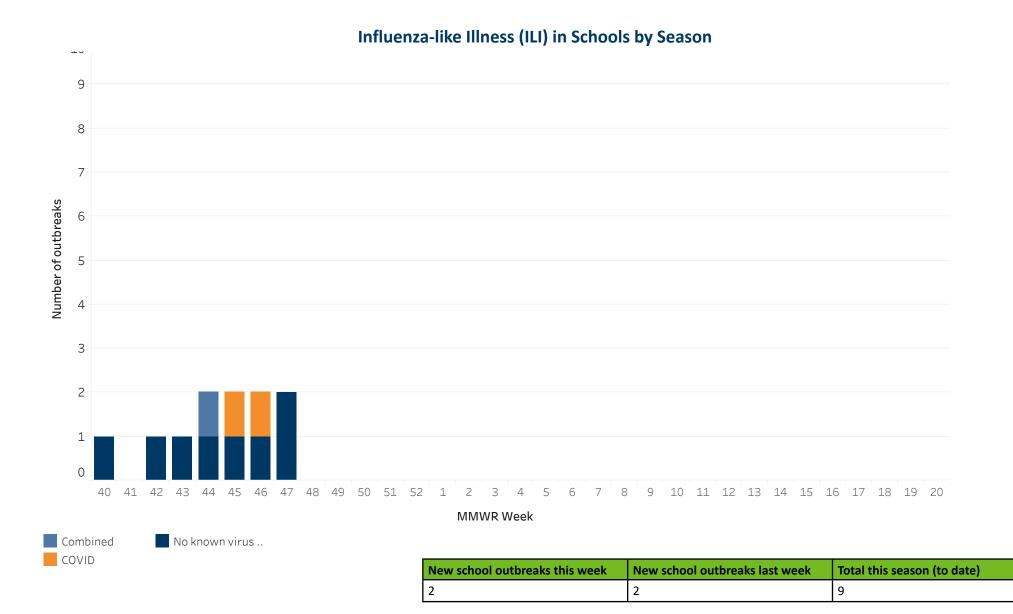


Season	Median age (years) at time of death
2018-2019	75
2019-2020	73
2020-2021	76
2021-2022	77
2022-2023	80
2024-2024 (to date)	

*FluSurv-NET = Influenza Surveillance Network

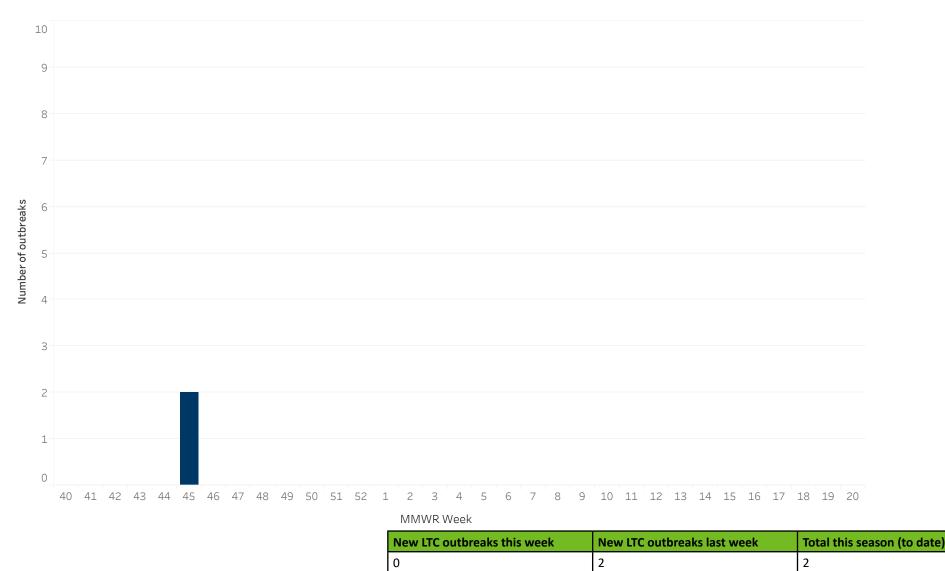
Respiratory Disease Outbreak Surveillance: School Outbreaks

K-12 schools report an outbreak of acute respiratory illness (ARI; e.g. COVID-19, influenza, RSV) when the number of students absent with ARI reaches 10% of the facility's total enrollment.



Respiratory Disease Outbreak Surveillance: LTC Outbreaks

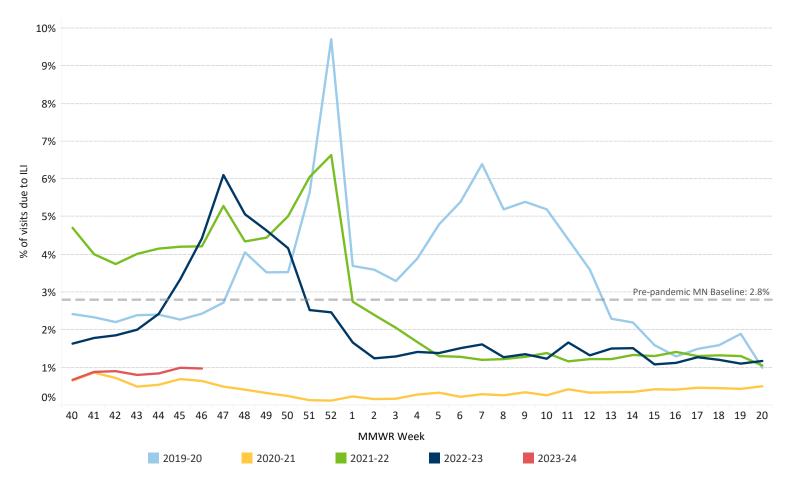
Long-Term Care (LTC) facilities report to MDH when they have a lab-confirmed influenza or RSV outbreak in their facility. The definition of an outbreak is at least 2 cases of laboratory-confirmed influenza (or RSV) identified within 72 hours of each other in residents on the same unit.



Confirmed Influenza Outbreaks in LTC by Season

Sentinel Provider Surveillance (Outpatients)

MDH collaborates with healthcare providers who report the total number of patients seen and the total number of those patients presenting to outpatient clinics with influenza-like illness.



Percentage of Persons Presenting to Outpatient Clinics with Influenza-Like Illness (ILI)

* Indicates current week-data may be delayed by 1 or more weeks

MN Baseline valid for 2020-21 season only, do not compare it with previous seasons. The baseline is calculated by averaging the ILI percent for non-influenza weeks over the previous four seasons and adding two standard deviations. Non-influenza weeks account for less than 2% of the season's total flu-positive specimens tested at Public Health Labs in HHS Region 5. Weeks where ILI % is above baseline reflect weeks with excess health care visits due to ILI.

% of outpatients with ILI this week	% of outpatients with ILI last week
1.0%	1.0%

Laboratory Surveillance

The MN Lab System (MLS) Laboratory Influenza Surveillance Program is made up of more than 310 clinic- and hospital-based laboratories, voluntarily submitting testing data weekly. These laboratories perform antigen and molecular testing for influenza and Respiratory Syncytial Virus (RSV). A subset of labs also performs PCR testing for other respiratory viruses. MDH-PHL provides further characterization of submitted influenza isolates to determine the hemagglutinin serotype to indicate vaccine coverage. Tracking the laboratory results assists healthcare providers with patient diagnosis of influenza-like illness and provides an indicator of the progression of the influenza season as well as prevalence of disease in the community.

100 180 90 170 160 80 150 140 70 130 120 60 Flu Positive 110 Positive tests 100 50 90 % 80 40 70 60 30 % molecular influenza Region 50 tests + this week 40 20 Central 7.4% 30 1.8% Metro 20 10 Northeast 1.1% 10 Northwest 4.3% 0 South Central 6.7% 40 41 42 43 44 45 46 47 48 49 50 51 52 1 9 10 11 12 13 14 15 16 17 18 19 20 2 3 4 5 6 7 8 Southeast 1.6% MMWR Week 2.7% Southwest Flu A/Unk Flu A/H3 Flu A/H1 2009 Flu B 2023-24 2022-23 2021-22 2020-21 West Central 4.5%

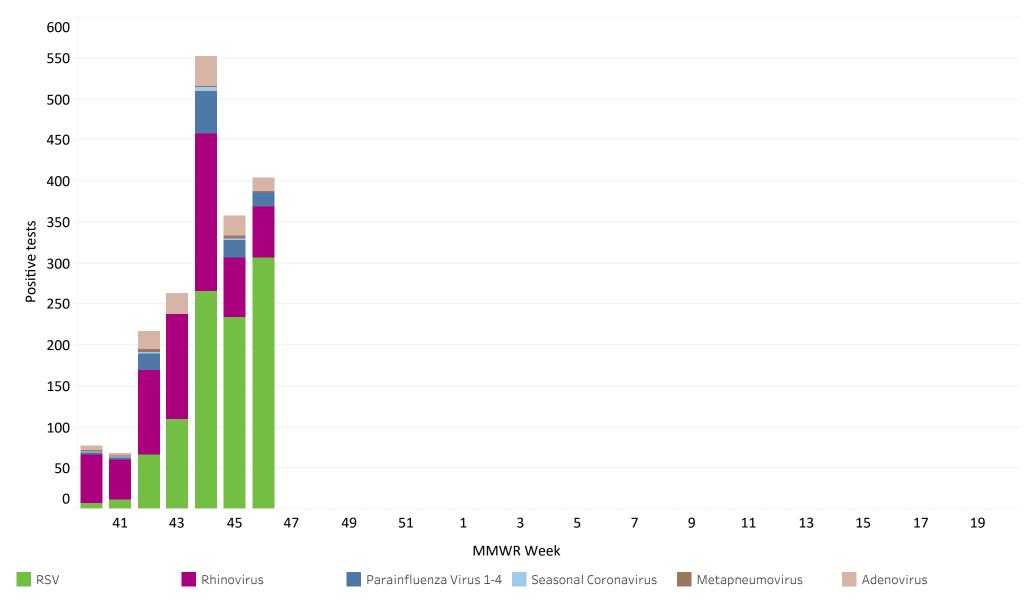
Specimens Positive for Influenza by Molecular Testing*, by Week

Statewide (overall)

2.6%

Laboratory Surveillance (continued)

Some participants in the MN Lab System (MLS) Laboratory Influenza Surveillance Program also report testing data from respiratory virus panel PCR testing. Tracking these laboratory results assists monitoring for non-influenza/non-COVID viruses that may be circulating and causing influenza-like illness.



Other Molecular Testing Results by Virus from MLS Survey

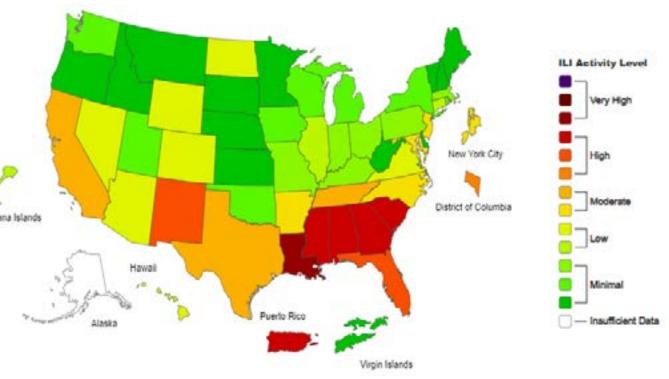
Weekly U.S. Influenza Surveillance Report

Week 45, ending November 11, 2023

Seasonal influenza activity continues to increase in most parts of the country, most notably in the South Central, Southeast, and West Coast regions.

- Outpatient respiratory illness is above baseline nationally for the second week and is at or above baseline in five of 10 HHS Regions. Region 3 (Mid-Atlantic) is at its region-specific outpatient respiratory illness baseline and Regions 2, 4, 6, and 9 (New York/New Jersey/Puerto Rico/Virgin Islands, Southeast, South Central, and West Coast) are above their region-specific baselines.
- The number of weekly flu hospital admissions continues to increase.
- During week 45, of the 310 viruses reported by public health laboratories, 235 (75.8%) were influenza A and 75 (24.2%) were influenza B. Of the 133 influenza A viruses subtyped during week 45, 116 (87.2%) were influenza A(H1N1) and 17 (12.8%) were A(H3N2).
- CDC estimates that there have been at least 780,000 illnesses, 8,000 hospitalizations, and 490 deaths from flu so far this season.
- CDC recommends that everyone 6 months and older get an annual flu vaccine.
- There also are prescription flu antiviral drugs that can be used to treat flu illness; those should be started as early as possible and are especially important for higher risk patients.
- Influenza viruses are among several viruses that contribute to respiratory disease activity. CDC is providing updated, integrated information about COVID-19, influenza, and RSV activity on a weekly basis.

Outpatient Illness: ILINet Activity Map



CDC National Influenza Surveillance (http://www.cdc.gov/flu/weekly/)