Weekly Influenza & Respiratory Illness Activity Report

Week Ending Dec. 30, 2023 | WEEK 52

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	14.7%	
Hospitalizations	908	
Most common strain	Influenza A	
School outbreaks	49	
Long-term care outbreaks	13	
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/)

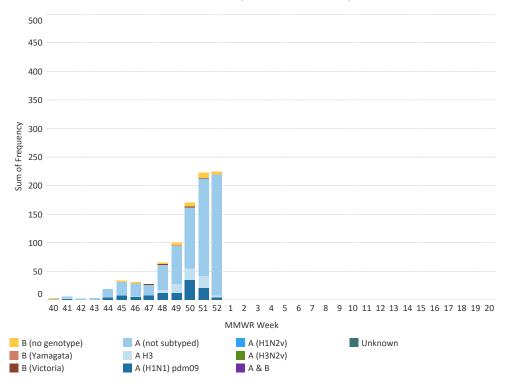
Due to the COVID-19 pandemic, CDC and MDH will not be posting the weekly geographic spread indicators (no activity, sporadic, local, regional, widespread) this season as they rely on influenza-like illness data (ILI). Because these data are based on symptoms, the cause of ILI cannot reliably be attributed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



Hospitalized Influenza Surveillance

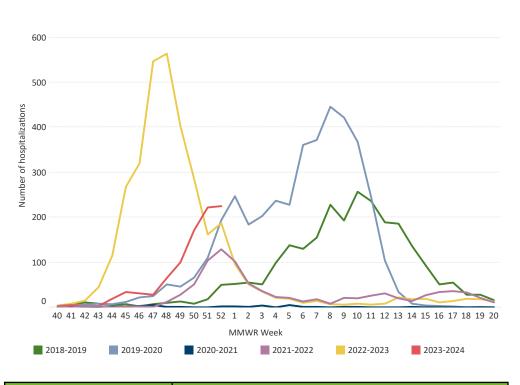
Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. Due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

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



Hospitalizations this week	Hospitalizations last week	Total hospitalizations (to date)
225	222	908

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



Season	Total hospitalizations (historic)
2018-2019	2543
2019-2020	4022
2020-2021	35
2021-2022	905
2022-2023	3,338
2023-2024 (to date)	908

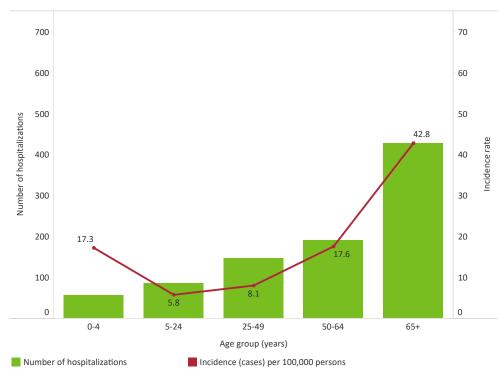
^{*}FluSurv-NET = Influenza Surveillance Network

Hospitalized Influenza Surveillance (continued)

Number of Influenza Hospitalizations and Incidence by Region, Minnesota



Number of Influenza Hospitalizations and Incidence by Age, Minnesota



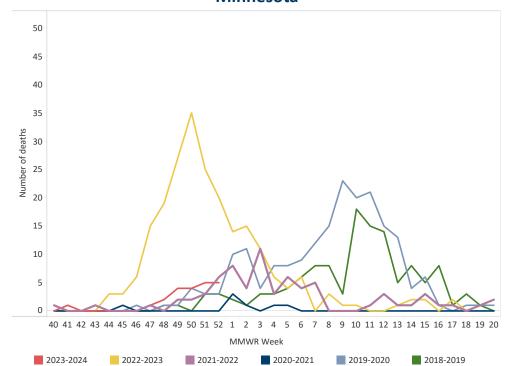
Region	Hospitalizations this week	Total (to date)	% Hospitalizations this week	% Total (to date)
Central	30	136	13%	15%
Metro	144	566	64%	62%
Northeast	11	28	5%	3%
Northwest	8	20	4%	2%
South Central	8	42	4%	5%
Southeast	12	53	5%	6%
Southwest	6	23	3%	3%
West Central	6	40	3%	4%

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.

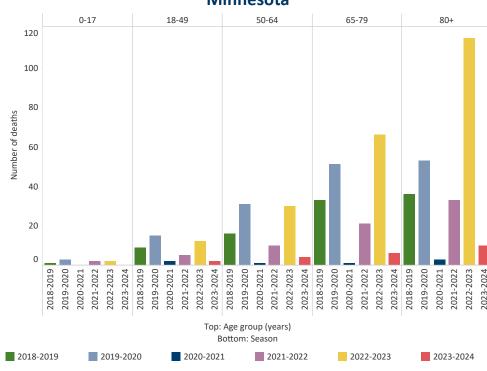
Deaths Associated with Influenza by Season, Minnesota



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)	22	0

*FluSurv-NET = Influenza Surveillance Network

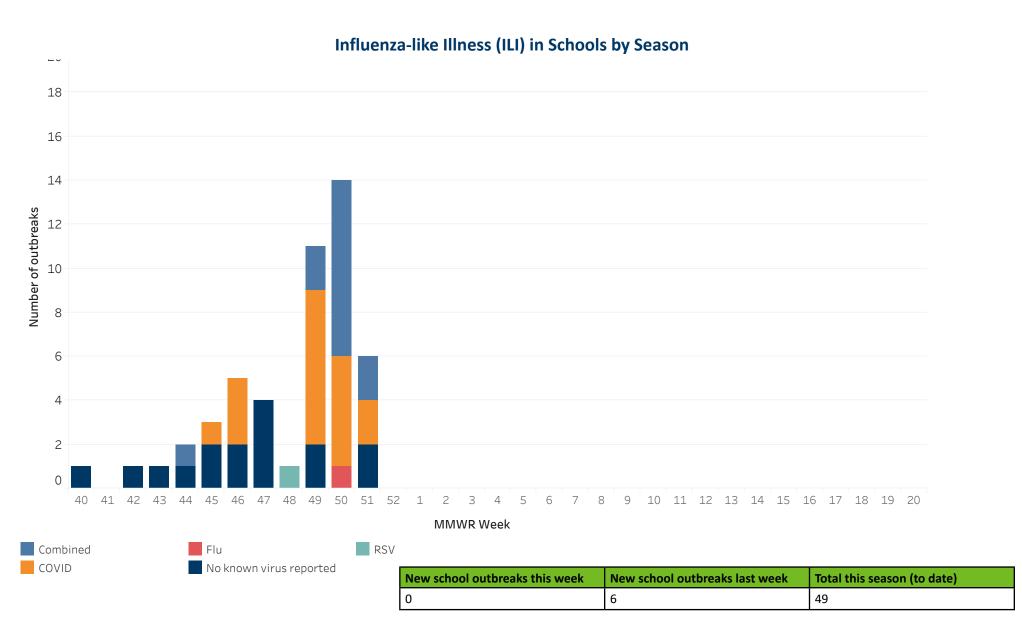
Deaths Associated with Influenza by Age Group and Season, Minnesota



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)	73.5

Respiratory Disease Outbreak Surveillance: School Outbreaks

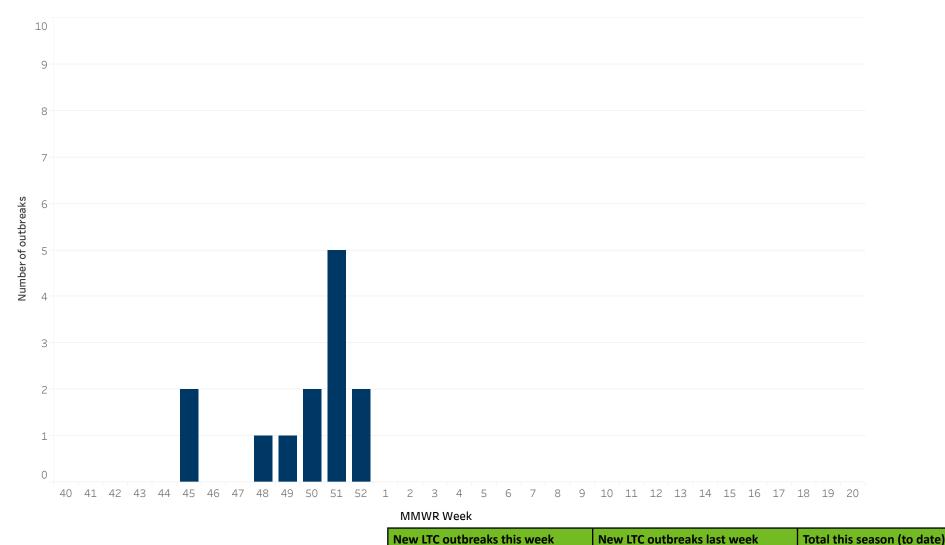
K-12 schools report an outbreak of acute respiratory illness (ARI; e.g. COVID-19, influenza, RSV) when the number of students absent with ARI reaches 10% of the facility's total enrollment.



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

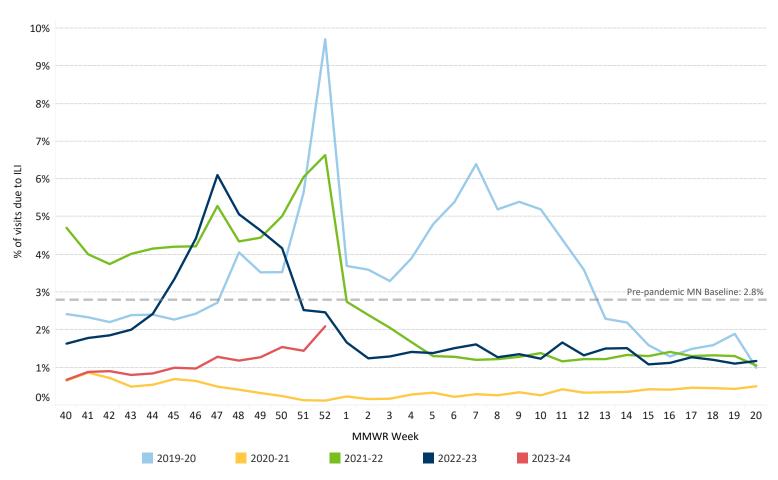


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Sentinel Provider Surveillance (Outpatients)

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

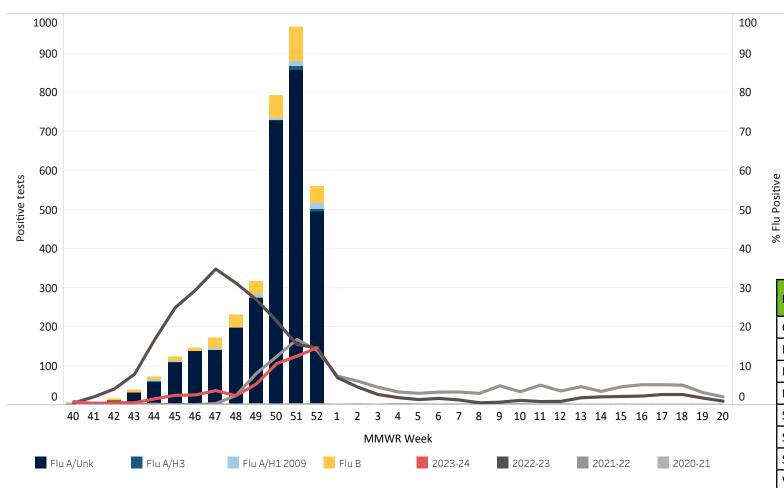
MN Baseline valid for 2020-21 season only, do not compare it with previous seasons. The baseline is calculated by averaging the ILI percent for non-influenza weeks over the previous four seasons and adding two standard deviations. Non-influenza weeks account for less than 2% of the season's total flu-positive 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
2.1%	1.7%

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.

Specimens Positive for Influenza by Molecular Testing*, by Week

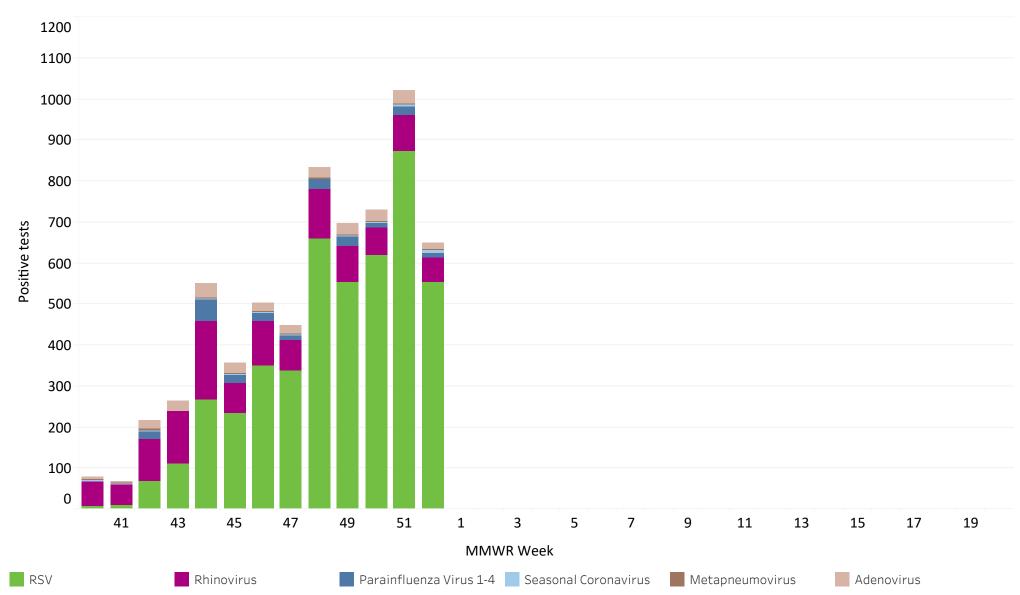


Region	% molecular influenza tests + this week
Central	8.7%
Metro	14.5%
Northeast	11.5%
Northwest	28.6%
South Central	16.9%
Southeast	20.9%
Southwest	37.7%
West Central	
Statewide (overall)	14.7%

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



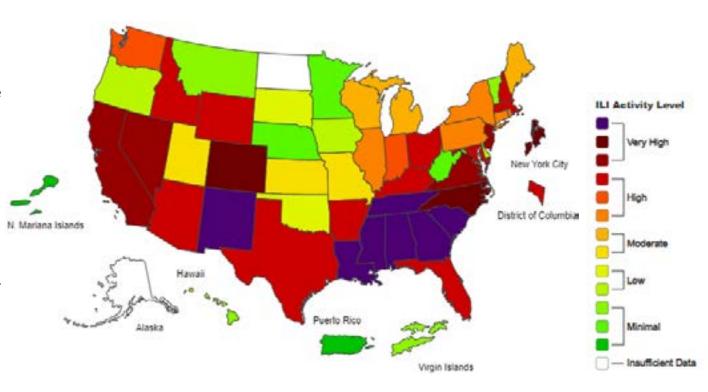
Weekly U.S. Influenza Surveillance Report

Week 51, ending December 23, 2023

Seasonal influenza activity is elevated and continues to increase in most parts of the country.

- Outpatient respiratory illness is above baseline nationally for the eighth consecutive week and is above baseline in all 10 HHS Regions.
- The number of weekly flu hospital admissions continues to increase.
- During Week 51, of the 875 viruses reported by public health laboratories, 748 (85.5%) were influenza A and 127 (14.5%) were influenza B. Of the 391 influenza A viruses subtyped during Week 51, 309 (79.0%) were influenza A(H1N1) and 82 (21.0%) were A(H3N2).
- Six influenza-associated pediatric deaths occurring during the 2023-2024 influenza season were reported during Week 51, bringing the 2023-2024 season total to 20 pediatric deaths.
- CDC estimates that there have been at least 7.1 million illnesses, 73,000 hospitalizations, and 4,500 deaths from flu so far this season.
- CDC recommends that everyone 6 months and older get an annual flu vaccine as long as influenza viruses are spreading. Vaccination now can still provide benefit this season.
- There also are prescription flu antiviral drugs that can treat flu illness; those should be started as early as possible and are especially important for higher risk patients.
- Flu viruses are among several viruses contributing to respiratory disease activity. CDC is providing updated, integrated information about COVID-19, flu, and RSV activity on a weekly basis.





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