Weekly Influenza & Respiratory Illness Activity Report

Week Ending April 29, 2023 | WEEK 17

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	2.7%
Hospitalizations	3,332
Most common strain	Influenza A/H3
School outbreaks	1018
Long-term care outbreaks	105
Pediatric influenza-associated deaths	1

Contents

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.

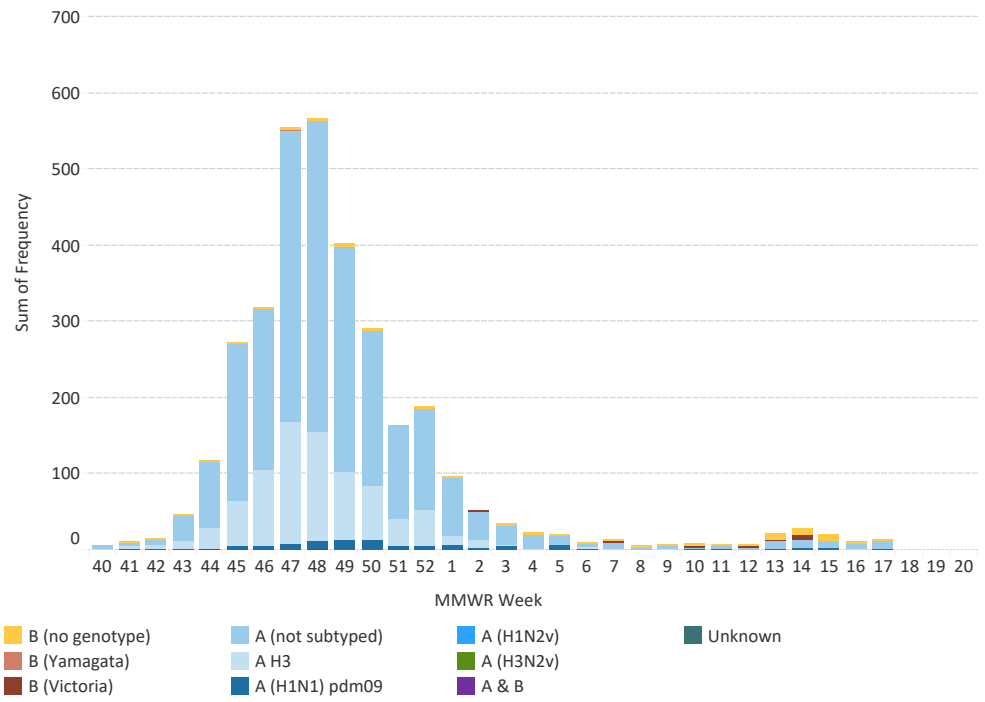
DEPARTMENT OF HEALTH

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

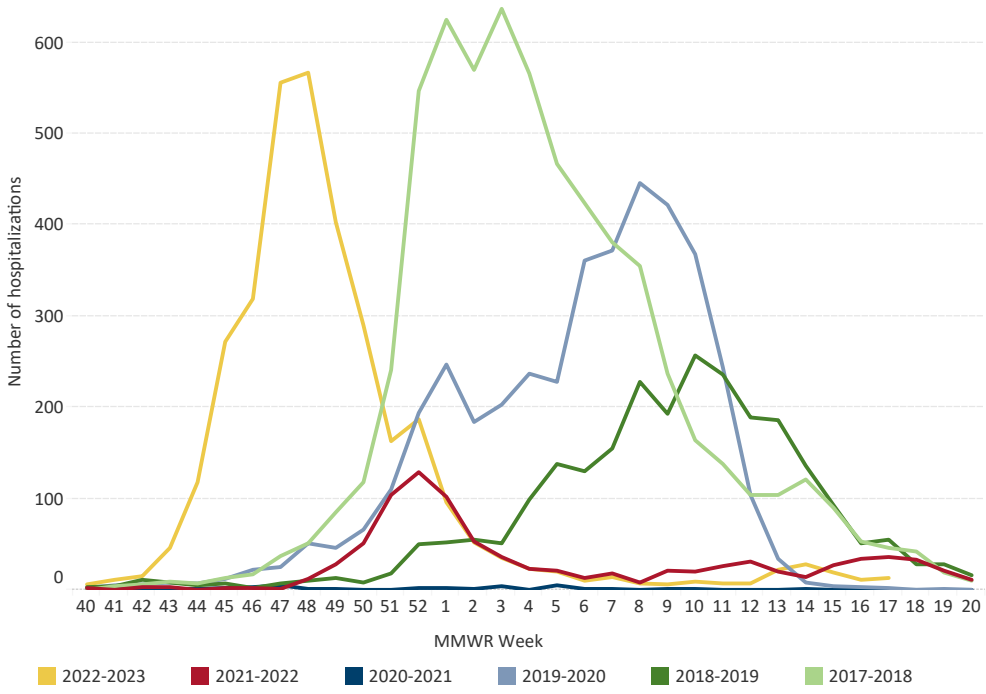
Hospitalized Influenza Surveillance

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*)



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



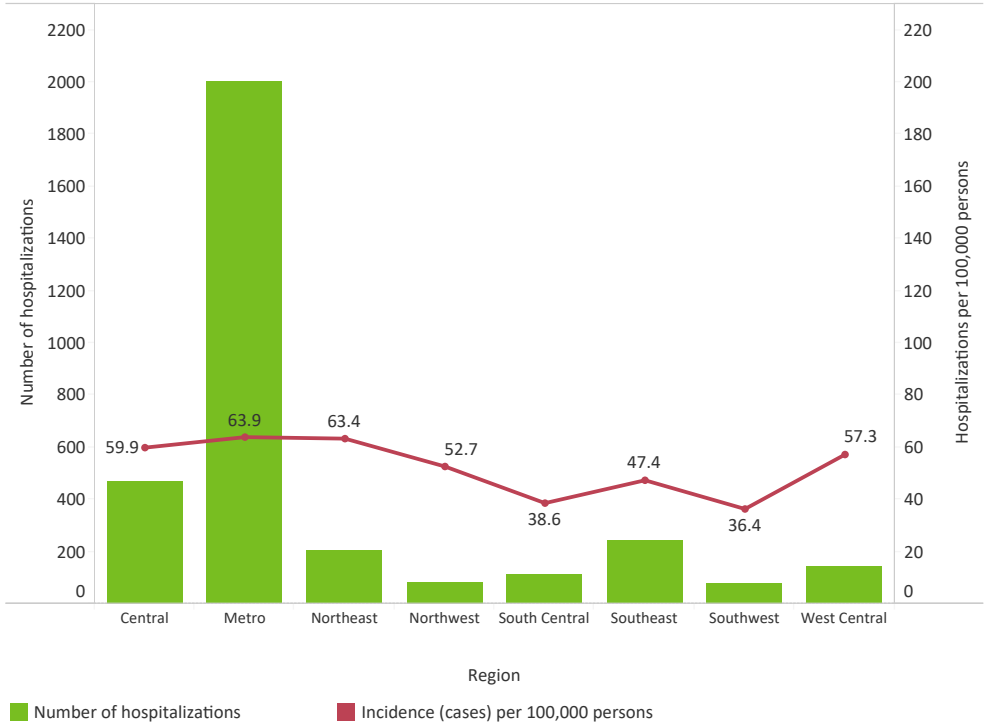
Hospitalizations this week	Hospitalizations last week	Total hospitalizations (to date)
13	11	3,332

Season	Total hospitalizations (historic)
2017-2018	6,446
2018-2019	2,543
2019-2020	4,022
2020-2021	35
2021-2022	905
2022-2023 (to date)	**3,332 (to date)**

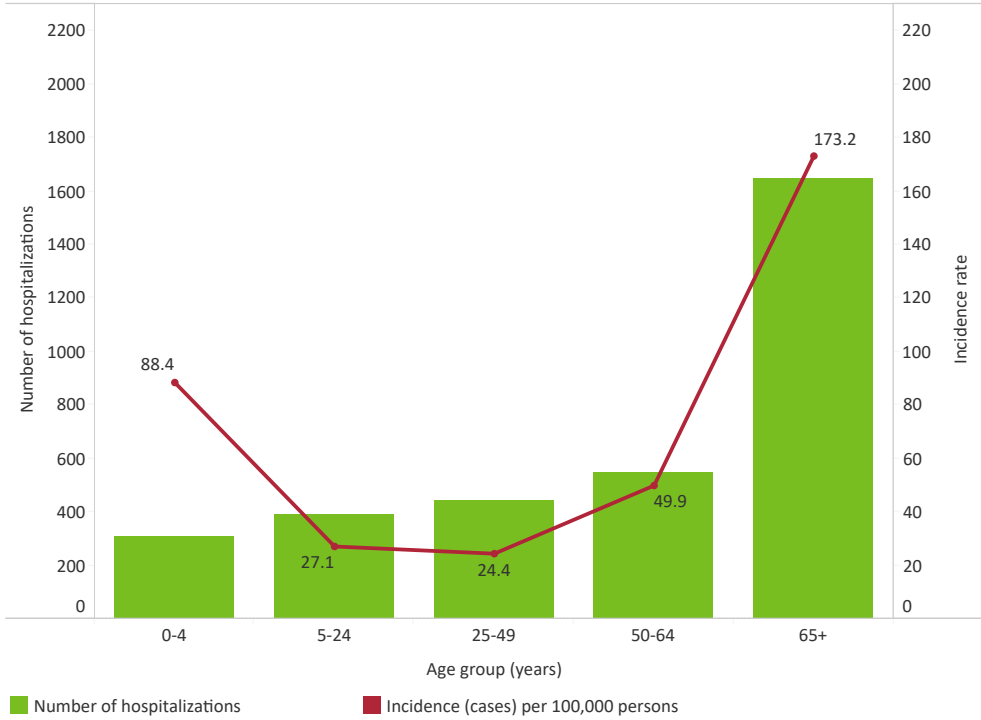
*FluSurv-NET = Influenza Surveillance Network

Hospitalized Influenza Surveillance (continued)

Number of Influenza Hospitalizations and Incidence by Region, Minnesota



Number of Influenza Hospitalizations and Incidence by Age, Minnesota



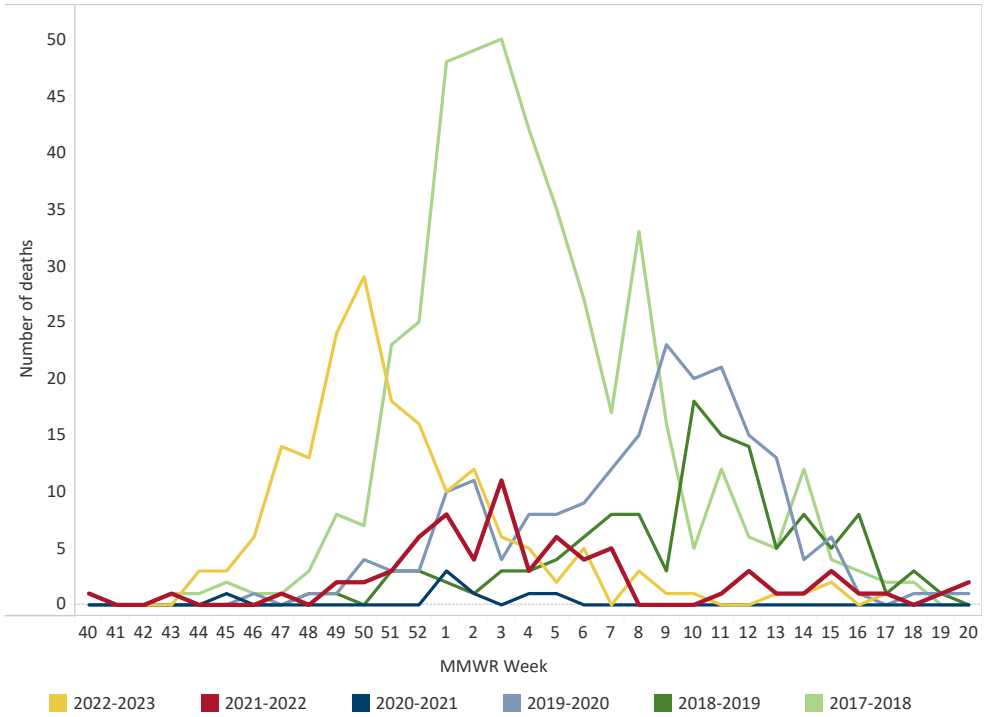
Region	Hospitalizations this week	Total (to date)	% Hospitalizations this week	% Total (to date)
Central	2	467	15%	14%
Metro	9	2002	69%	60%
Northeast	0	205	0%	6%
Northwest	1	84	8%	3%
South Central	1	113	8%	3%
Southeast	0	243	0%	7%
Southwest	0	78	0%	2%
West Central	0	140	0%	4%

Median age (years) at time of admission
64

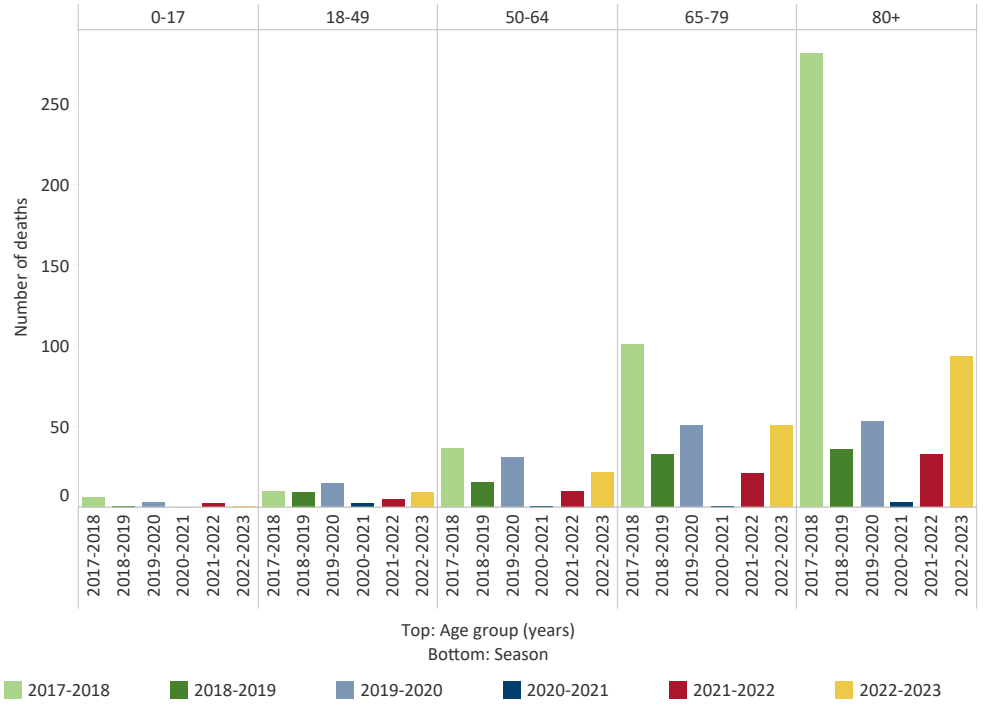
Influenza-Associated Death Surveillance

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



Deaths Associated with Influenza by Age Group and Season, Minnesota



Season	Total deaths (historic)	Total pediatric (<18 years) deaths (historic)
2017-2018	440	6
2018-2019	126	1
2019-2020	197	3
2020-2021	7	0
2021-2022	71	2
2022-2023 (to date)	**177**	**1**

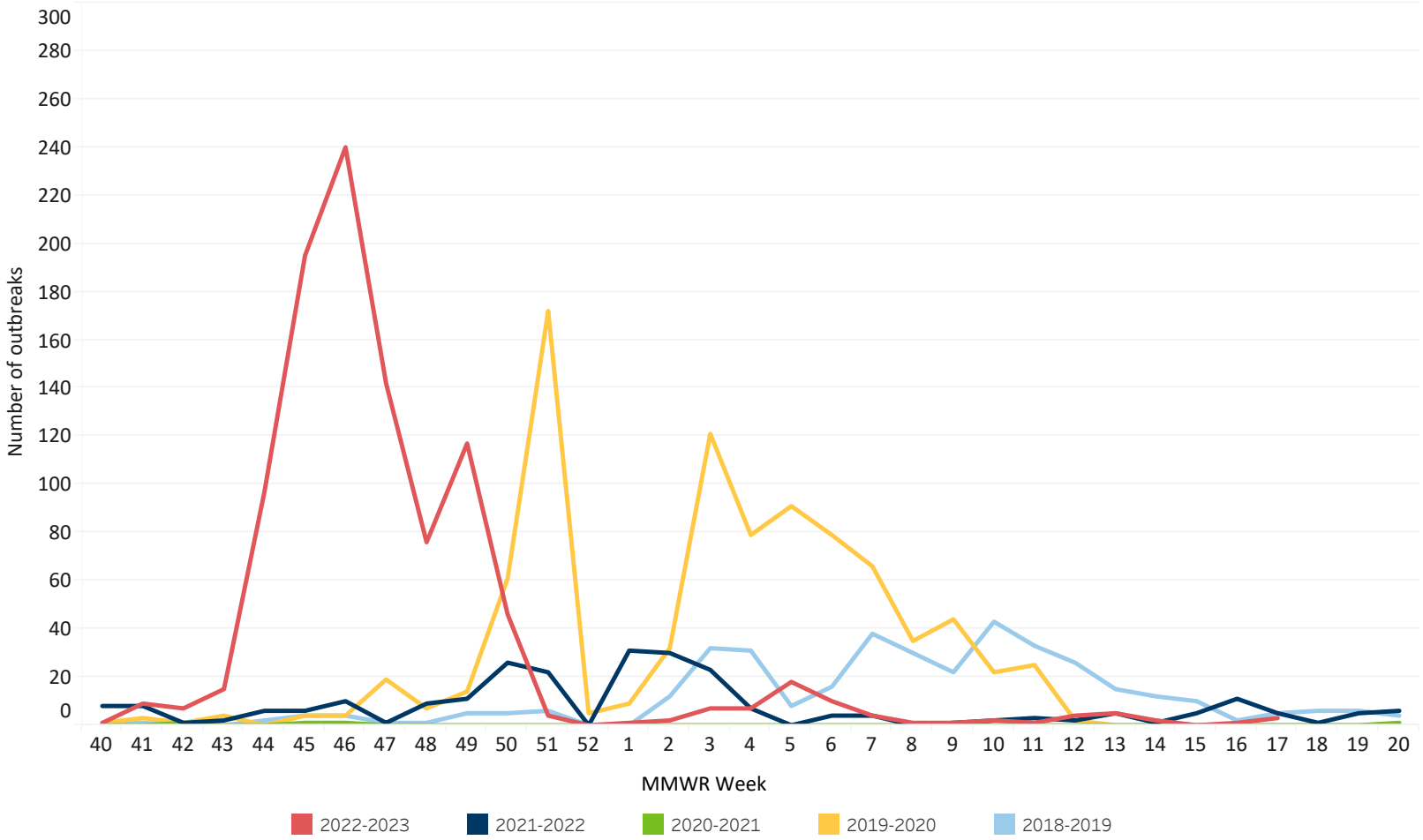
*FluSurv-NET = Influenza Surveillance Network

Season	Median age (years) at time of death
2017-2018	85
2018-2019	75
2019-2020	73
2020-2021	76
2021-2022	77
2022-2023 (to date)	**80**

Respiratory Disease Outbreak Surveillance: School Outbreaks

K-12 schools report an outbreak of influenza-like illness (ILI) when the number of students absent with ILI reaches 5% of total enrollment or three or more students with ILI are absent from the same elementary classroom.

Influenza-like Illness (ILI) in Schools by Season

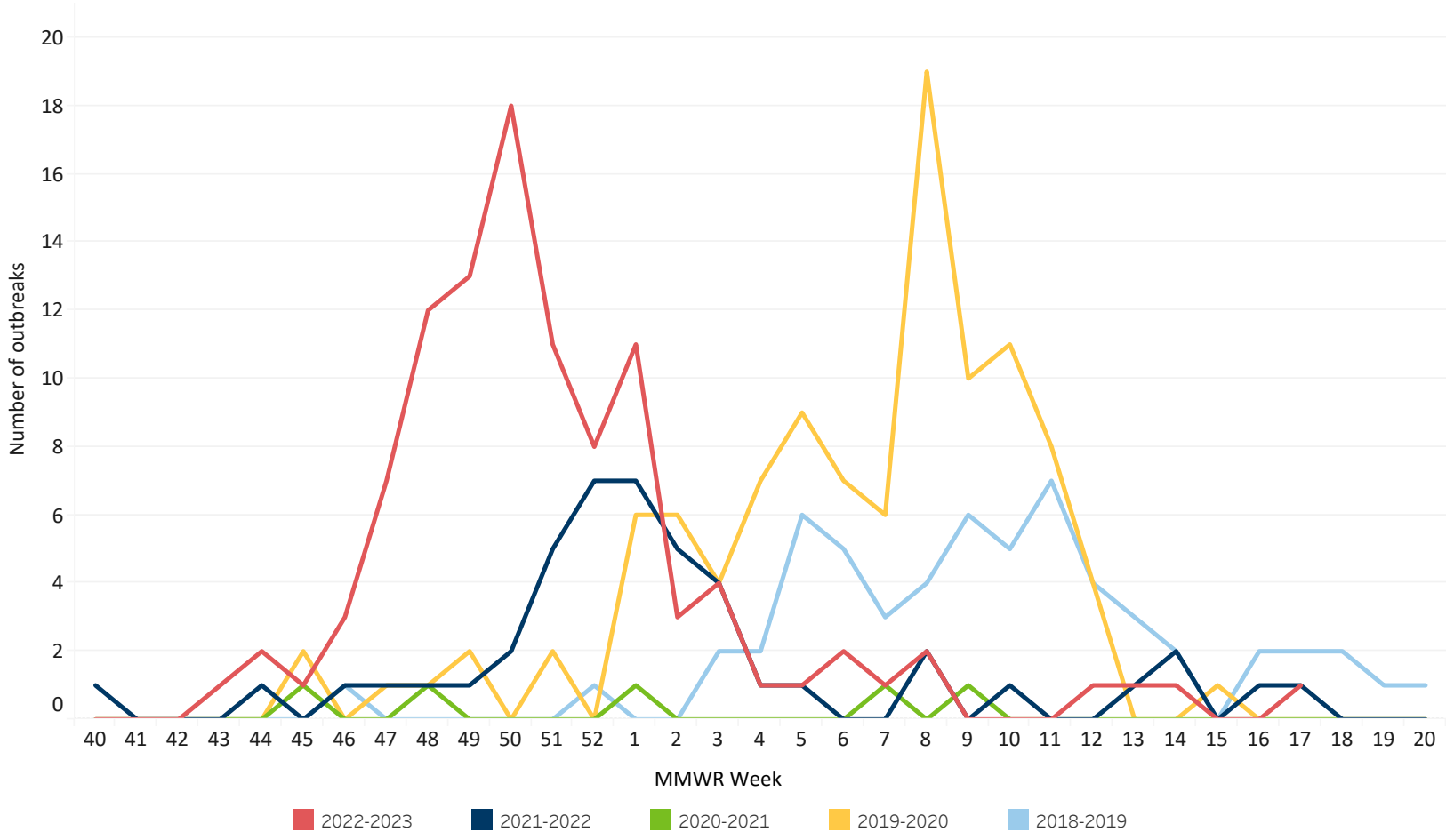


New school outbreaks this week	New school outbreaks last week	Total this season (to date)
3	1	1018

Respiratory Disease Outbreak Surveillance: LTC Outbreaks

Long-Term Care (LTC) facilities report to MDH when they suspect an outbreak of influenza in their facility. Laboratory-confirmed outbreaks are reported here.

Confirmed Influenza Outbreaks in LTC by Season

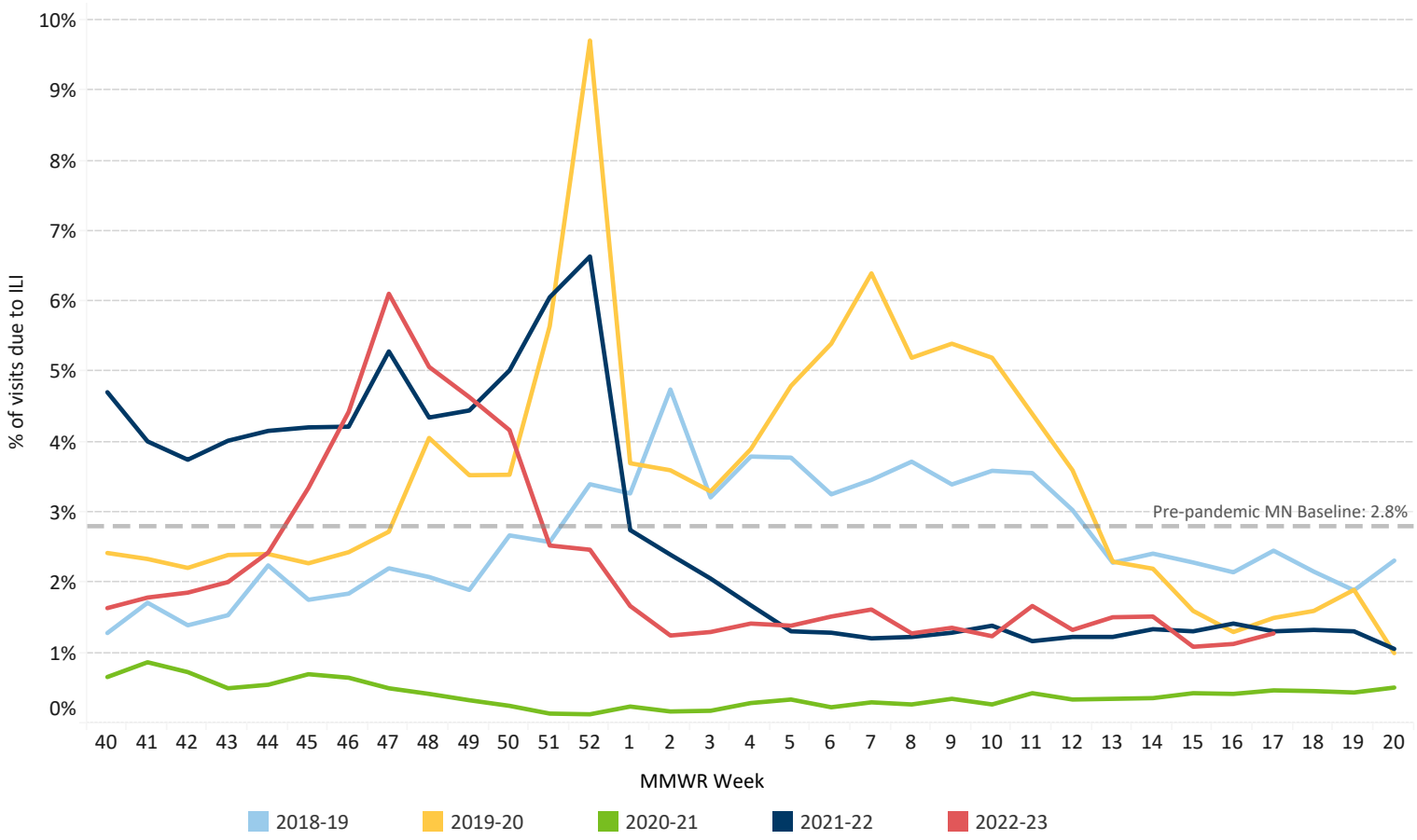


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
1	0	105

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

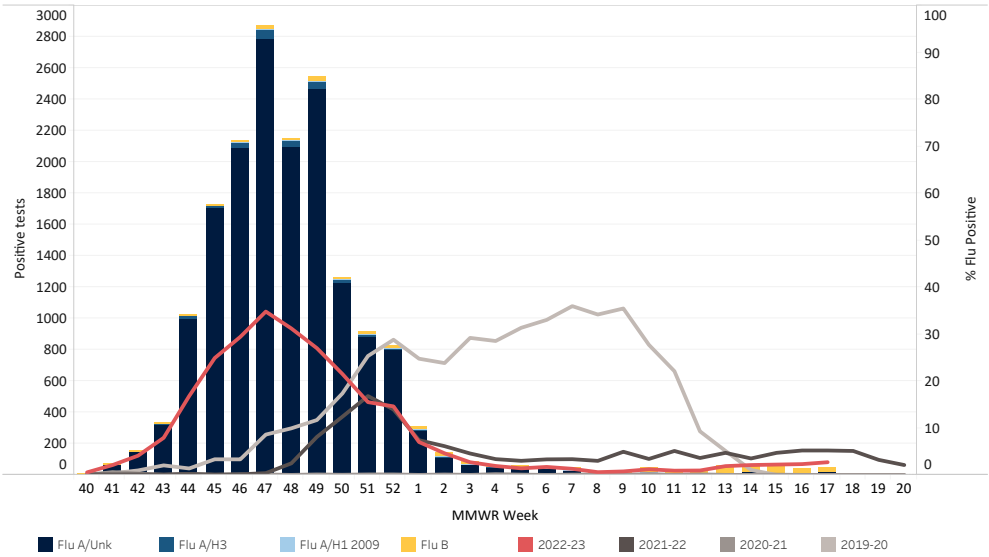
‡ MN Baseline valid for 2020-21 season only, do not compare it with previous seasons. The baseline is calculated by averaging the ILI percent for non-influenza weeks over the previous four seasons and adding two standard deviations. Non-influenza weeks account for less than 2% of the season's total flu-positive 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
1.28%	1.13%

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 rapid testing for influenza and Respiratory Syncytial Virus (RSV). Significantly fewer labs perform PCR testing for influenza and three also perform 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.

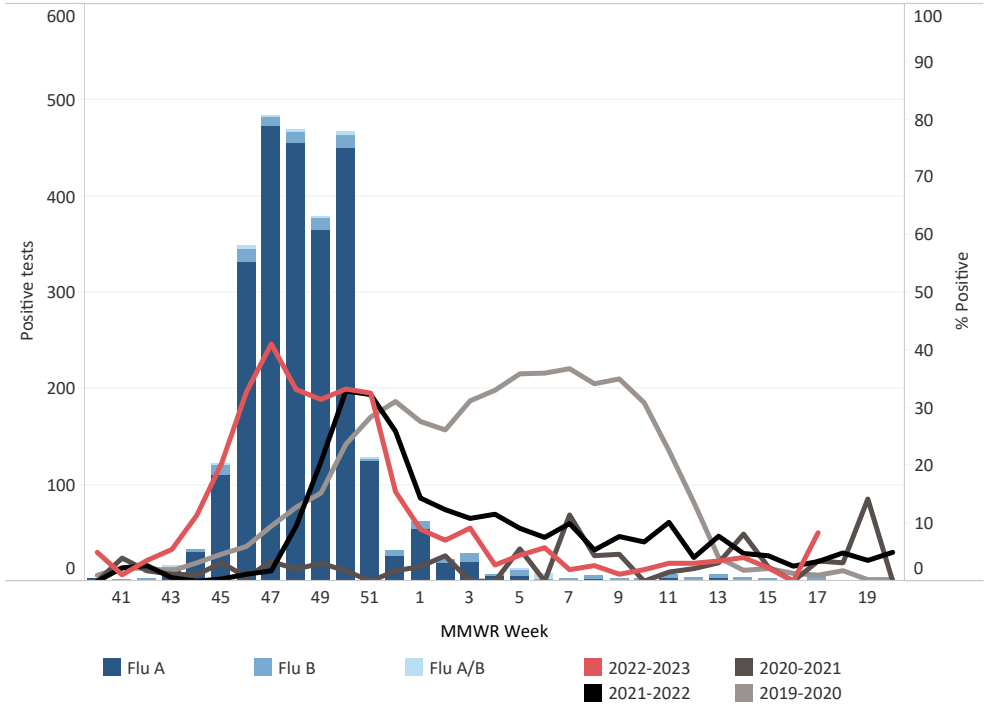
Specimens Positive for Influenza by Molecular Testing*, by Week



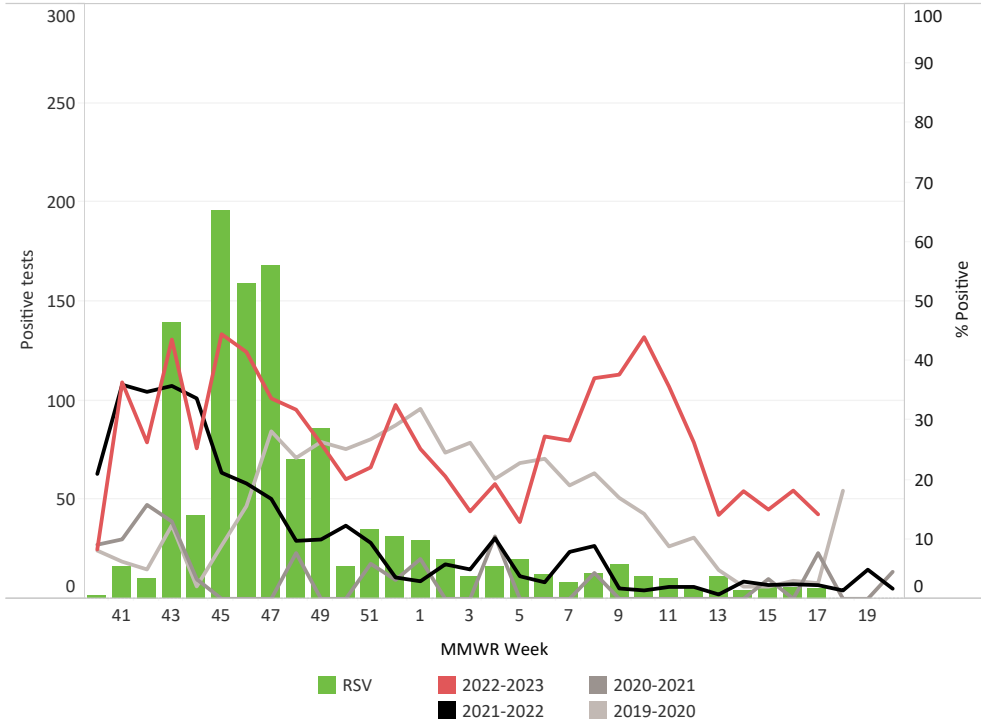
Region	% molecular influenza tests + this week
Central	0.9%
Metro	3.6%
Northeast	0.0%
Northwest	1.3%
South Central	3.4%
Southeast	0.0%
Southwest	0.0%
West Central	1.5%
Statewide (overall)	**2.7%**

Laboratory Surveillance (continued)

MLS Laboratories – Influenza Testing
Specimens Positive by Influenza Rapid Antigen Test, by Week



MLS Laboratories – RSV Testing
Specimens Positive by RSV Rapid Antigen Test, by Week



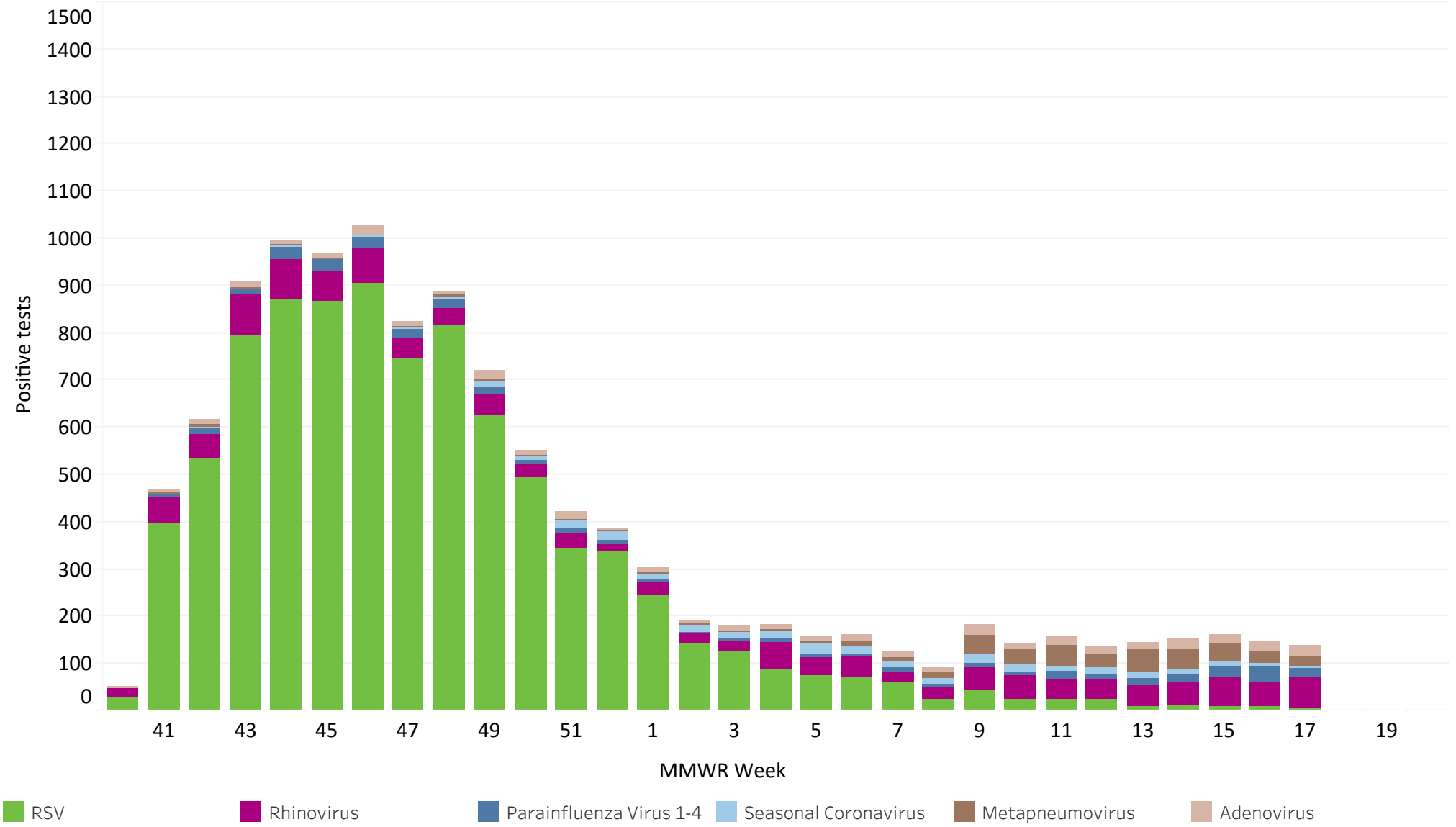
Region	% rapid antigen influenza tests + this week
Central	8.7%
Metro	0.0%
Northeast	
Northwest	
South Central	17.6%
Southeast	6.0%
Southwest	
West Central	
Statewide (overall)	**8.4%**

Region	% rapid antigen RSV tests + this week
Central	55.6%
Metro	0.0%
Northeast	0.0%
Northwest	
South Central	0.0%
Southeast	0.0%
Southwest	0.0%
West Central	
Statewide (overall)	**14.2%**

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.

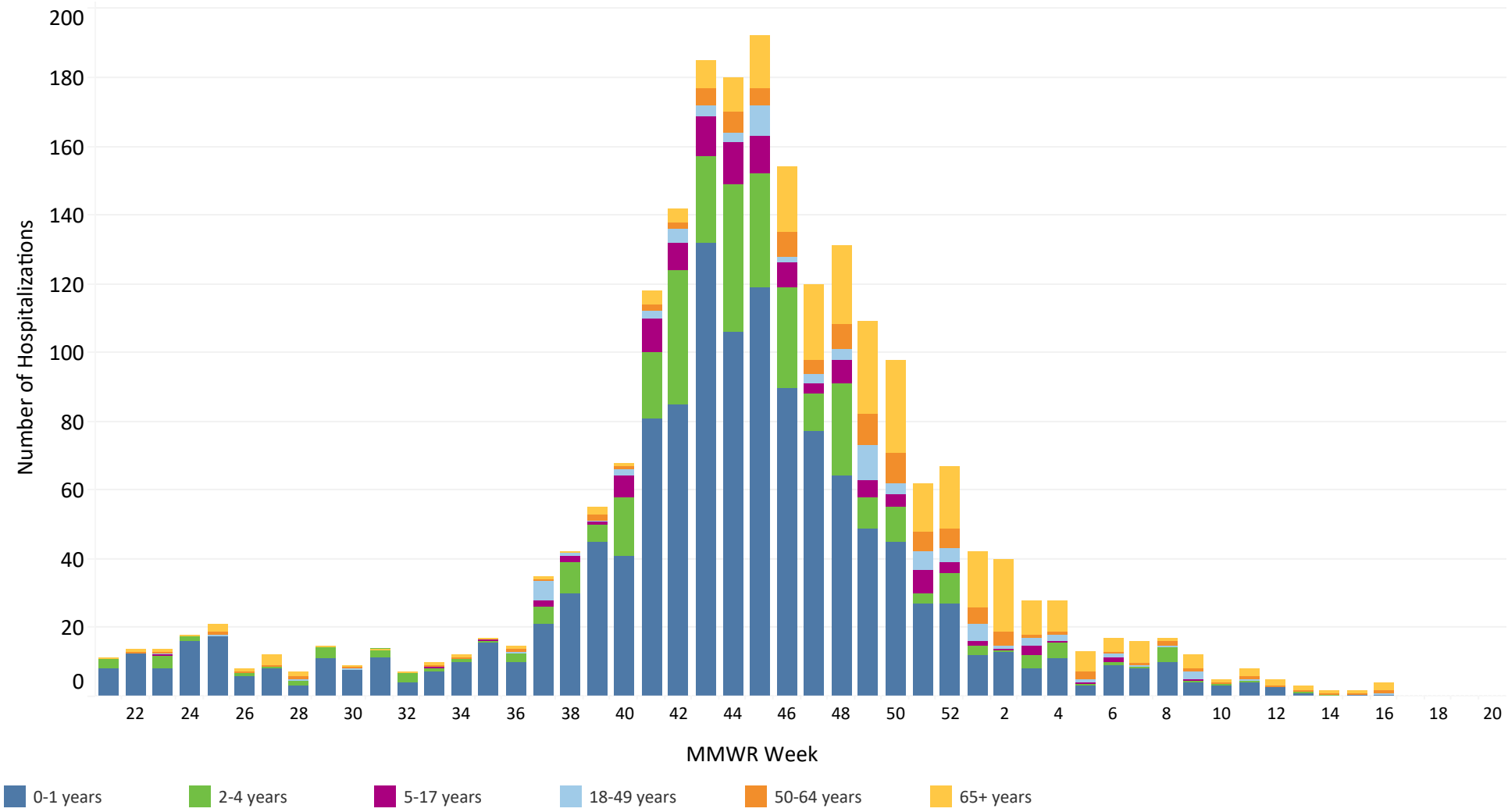
Other Molecular Testing Results by Virus from MLS Survey



Hospitalized RSV Surveillance

Surveillance for respiratory syncytial virus (RSV) began in September 2016. Hospitalized inpatients of all ages who reside in the 7-county Twin Cities metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington) with laboratory-confirmed RSV are reportable. Due to the need to confirm reports and reporting delays, consider current week data preliminary.

Hospitalized RSV Cases by Age, Minnesota



Weekly U.S. Influenza Surveillance Report

Week 16, ending April 22, 2023

Seasonal influenza activity remains low nationally.

- Nationally, outpatient respiratory illness is below baseline, and nine of 10 HHS regions are below their respective baselines.
- The number and weekly rate of flu hospital admissions remain low.
- During week 16, 60.5% of viruses reported by public health laboratories were influenza A and 39.5% were influenza B. Of the 17 influenza A viruses detected and subtyped during week 16, 4 were influenza A(H3N2) and 13 were influenza A(H1N1).
- Two influenza-associated pediatric deaths that occurred during the 2022-2023 season were reported this week, for a total of 145 pediatric flu deaths reported so far this season.
- CDC estimates that, so far this season, there have been at least 26 million illnesses, 290,000 hospitalizations, and 19,000 deaths from flu.
- The majority of influenza viruses tested are in the same genetic subclade as and antigenically similar to the influenza viruses included in this season's influenza vaccine.
- All viruses collected and evaluated this season have been susceptible to the influenza antivirals peramivir, zanamivir, and baloxavir, and all viruses except for one (> 99.9%) have been susceptible to the influenza antiviral oseltamivir.
- CDC continues to recommend that everyone ages 6 months and older get an annual flu vaccine as long as flu activity continues.
- There are also prescription flu antiviral drugs that can be used to treat flu illness; those need to be started as early as possible.

Outpatient Illness: ILINet Activity Map

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