

Influenza & Respiratory Illness Activity

Annual Summary 2022-2023

A summary of influenza surveillance indicators prepared by the Division of Infectious Disease Epidemiology Prevention & Control.
Summary of the 2022 - 2023 Influenza Season.

Minnesota Influenza Key Statistics	
Hospitalizations	3,338
Most common strain	Influenza A/H3
School outbreaks	1,021
Long-term care outbreaks	107
Pediatric influenza-associated deaths	2

Contents

Hospitalized Influenza Surveillance	2
Influenza-Associated Death Surveillance	4
Respiratory Disease Outbreak Surveillance: School Outbreaks	5
Respiratory Disease Outbreak Surveillance: LTC Outbreaks	6
Sentinel Provider Surveillance (Outpatients)	7
Laboratory Surveillance	8
Minnesota Influenza Incidence Surveillance Project (MIISP)	10
Weekly U.S. Influenza Surveillance Report	12

[Minnesota Influenza Surveillance \(www.health.state.mn.us/diseases/flu/stats/\)](http://www.health.state.mn.us/diseases/flu/stats/)
[Weekly U.S. Influenza Surveillance Report \(www.cdc.gov/flu/weekly/\)](http://www.cdc.gov/flu/weekly/)
[World Health Organization \(WHO\) Surveillance \(www.who.int/teams/global-influenza-programme/\)](http://www.who.int/teams/global-influenza-programme/)

Neighboring states' influenza information:

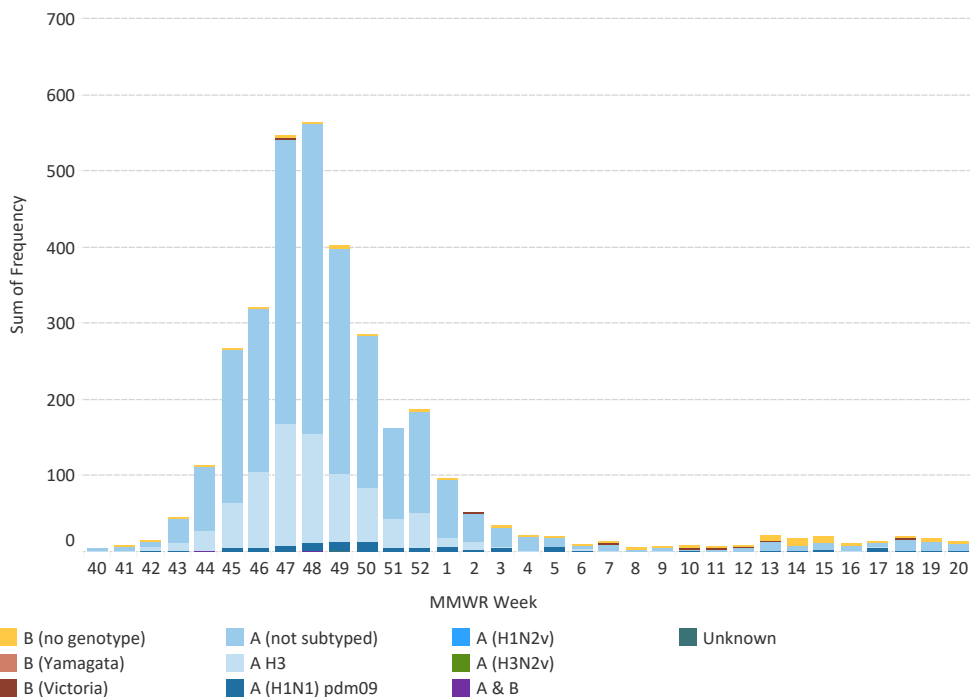
- Iowa: [Iowa Flu Reports \(idph.iowa.gov/influenza/reports\)](http://idph.iowa.gov/influenza/reports)
- Wisconsin: [Influenza \(Flu\) \(https://dhs.wisconsin.gov/influenza/index.htm\)](https://dhs.wisconsin.gov/influenza/index.htm)
- North Dakota: [Reported Seasonal Influenza Activity in North Dakota \(www.ndflu.com/default.aspx\)](http://www.ndflu.com/default.aspx)
- South Dakota: [South Dakota Influenza Information \(doh.sd.gov/diseases/infectious/flu/\)](http://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.

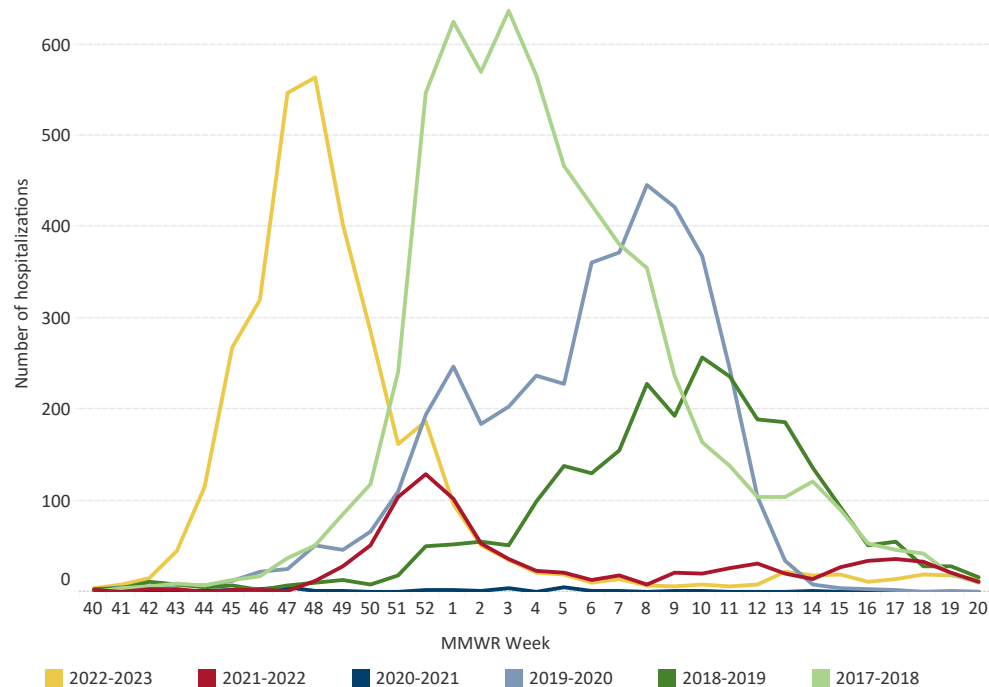
Hospitalized Influenza Surveillance

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*)



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



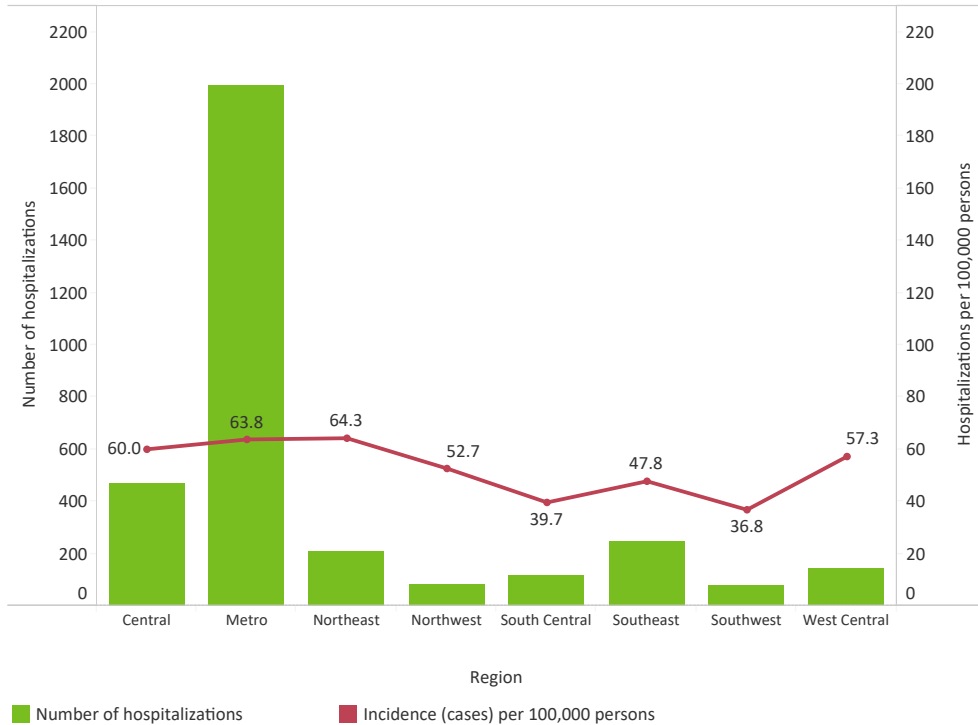
Total hospitalizations
3,338

Season	Total hospitalizations (historic)
2016-2017	6,446
2017-2018	2,543
2018-2019	4,022
2019-2020	35
2020-2021	905
2021-2022	3,338

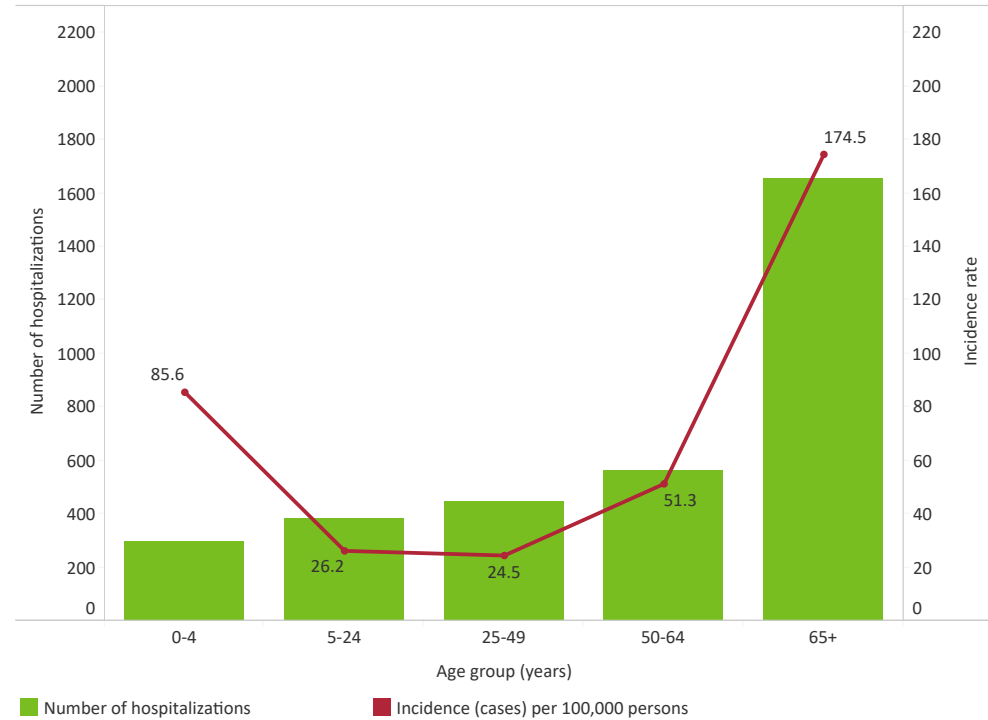
*FluSurv-NET = Influenza Surveillance Network

Hospitalized Influenza Surveillance (continued)

Number of Influenza Hospitalizations and Incidence by Region, Minnesota



Number of Influenza Hospitalizations and Incidence by Age, Minnesota



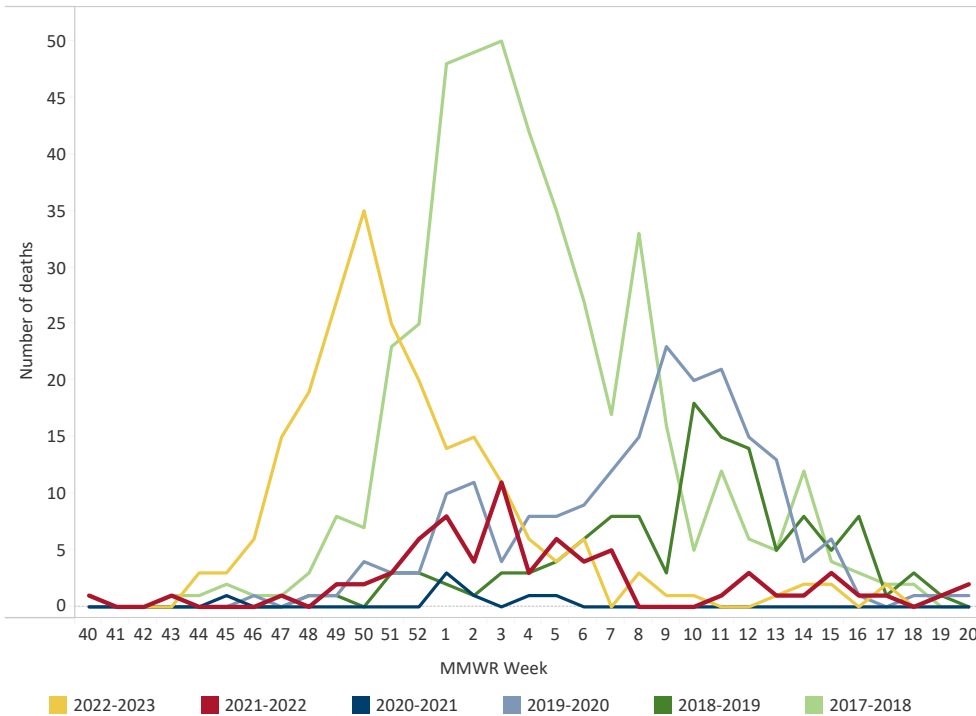
Region	Total	% Hospitaliations Total
Central	468	14%
Metro	1,998	60%
Northeast	208	6%
Northwest	84	3%
South Central	116	3%
Southeast	245	7%
Southwest	79	2%
West Central	140	4%

Median age (years) at time of admission
64

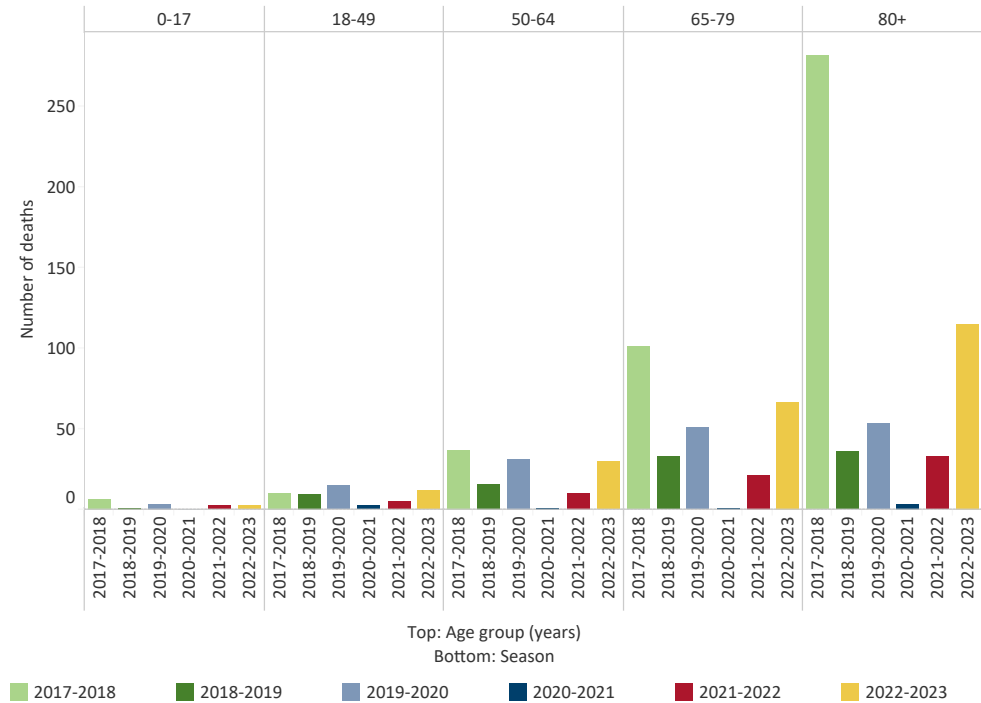
Influenza-Associated Death Surveillance

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	225	2

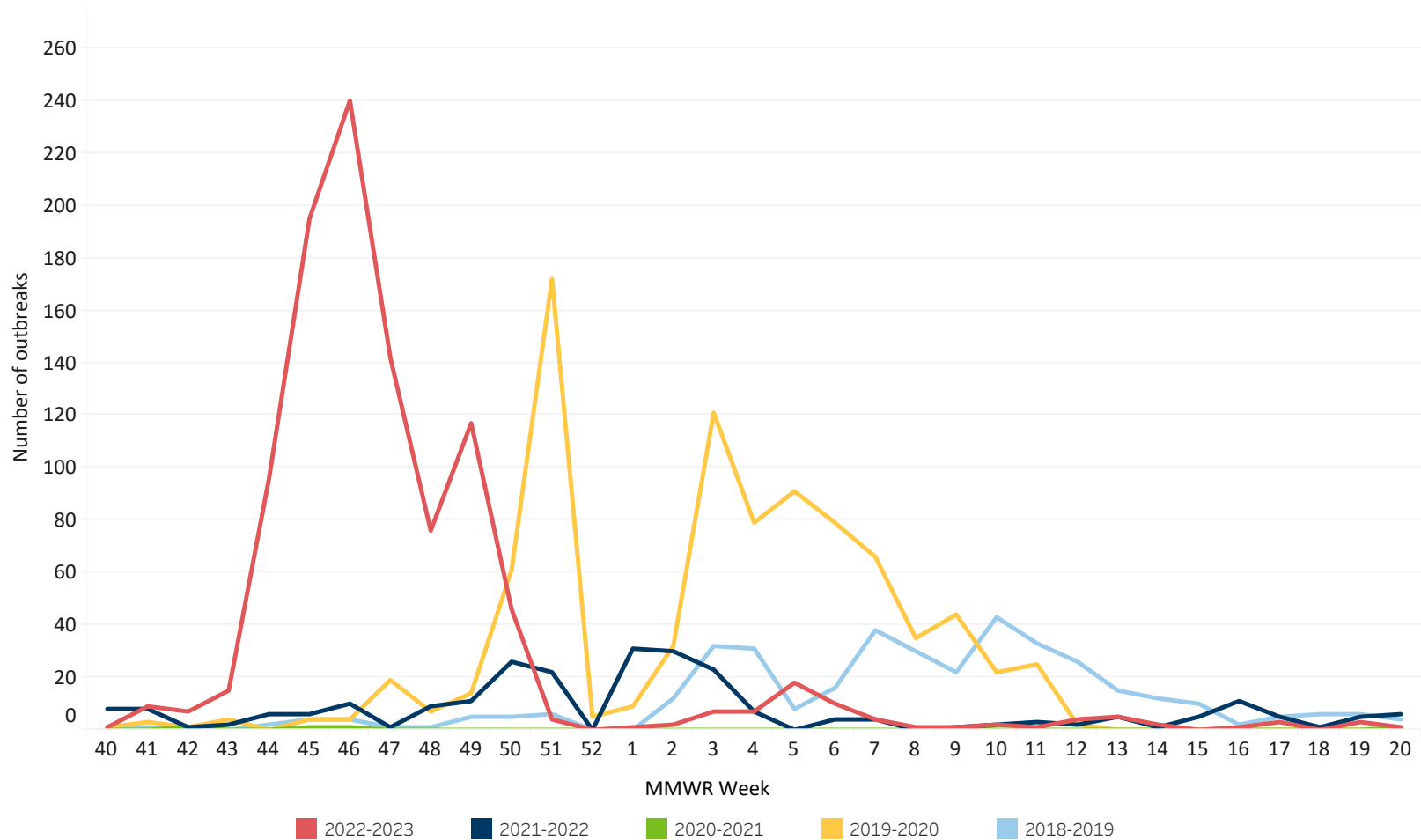
Season	Median age (years) at time of death
2017-2018	85.0
2018-2019	75.0
2019-2020	73.0
2020-2021	76.0
2021-2022	77.0
2022-2023	80.0

*FluSurv-NET = Influenza Surveillance Network

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

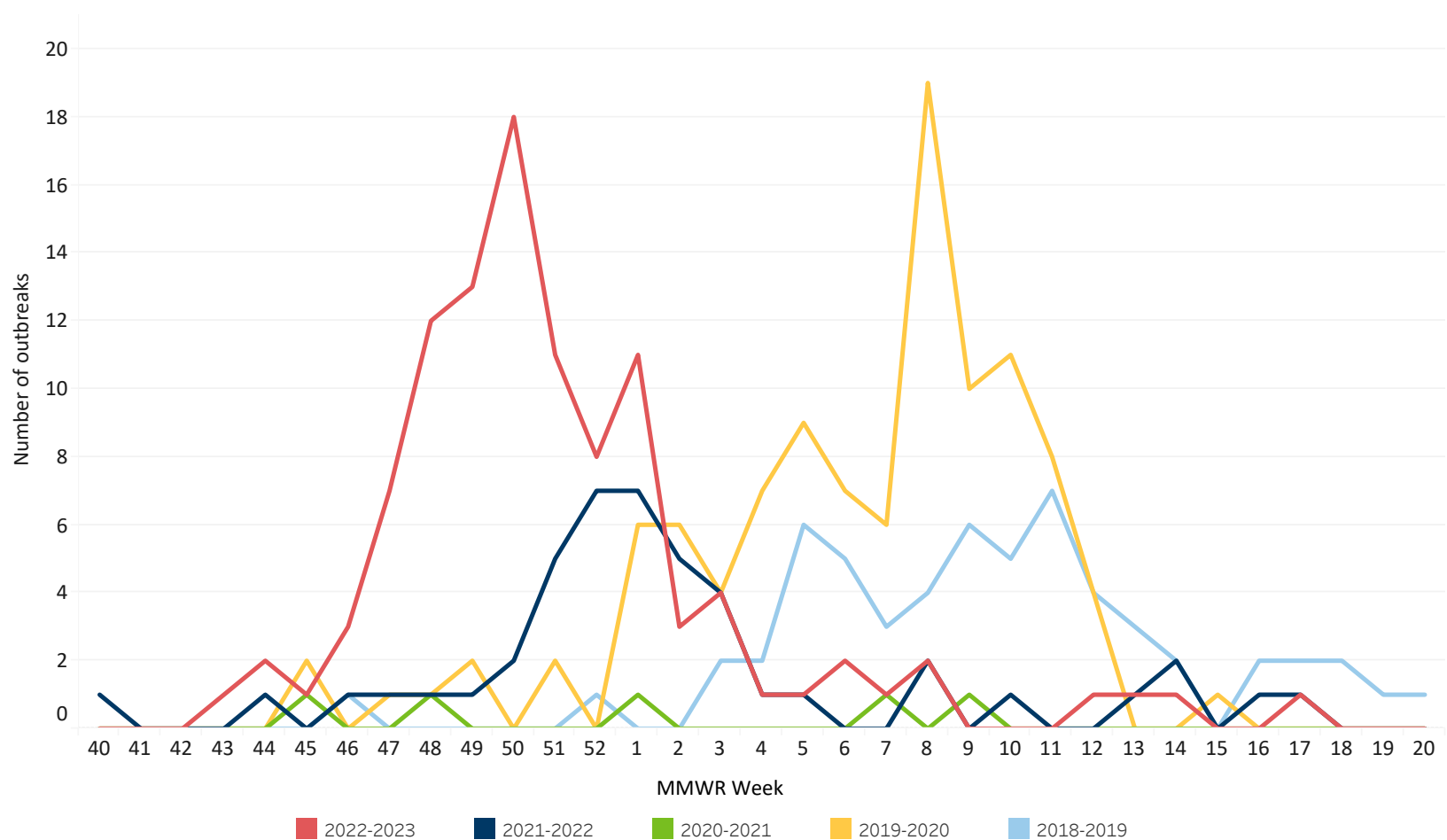


School outbreaks this season	School outbreaks last season
1,021	256

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

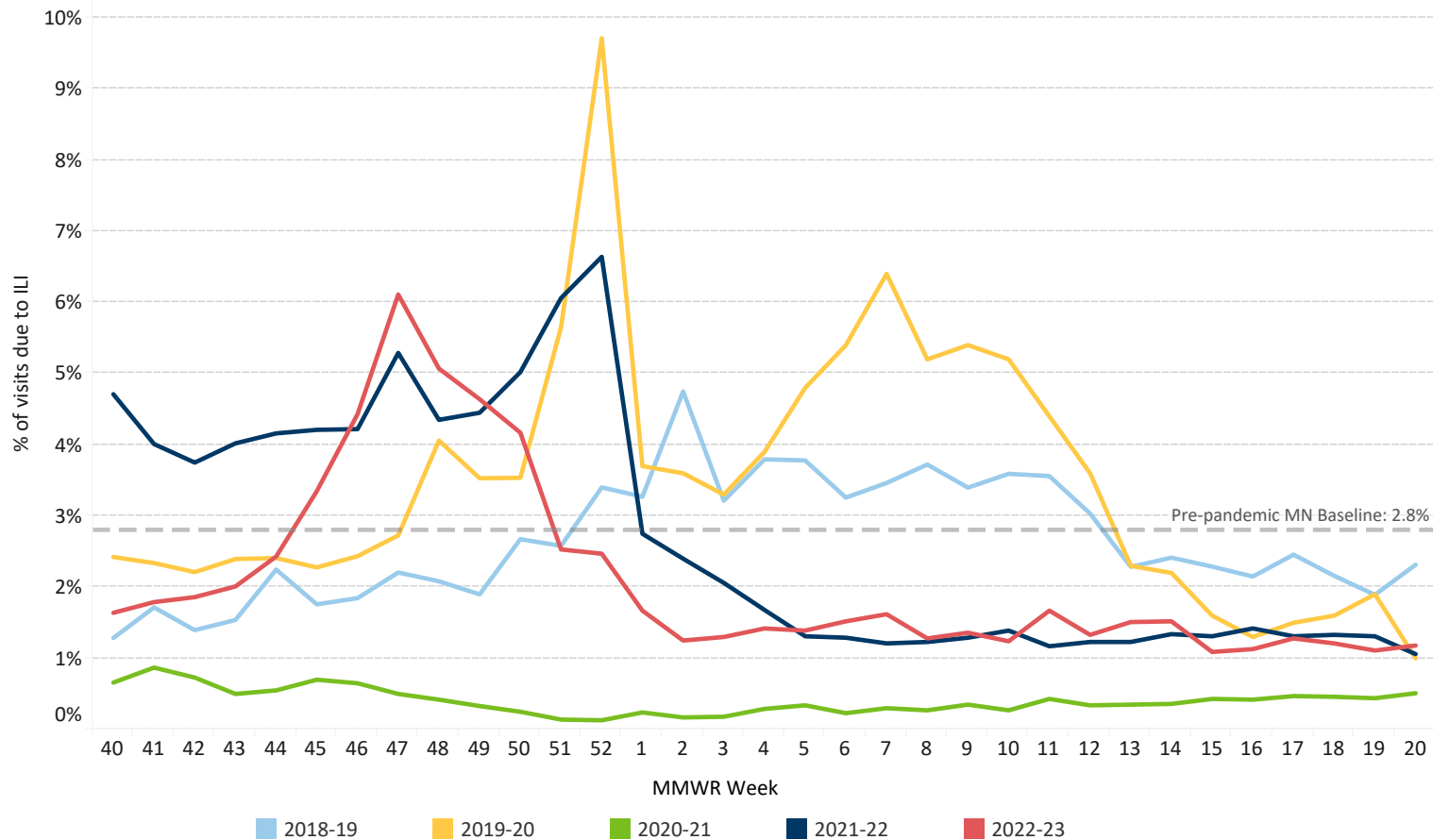


LTC outbreaks this season	LTC outbreaks last season
107	46

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

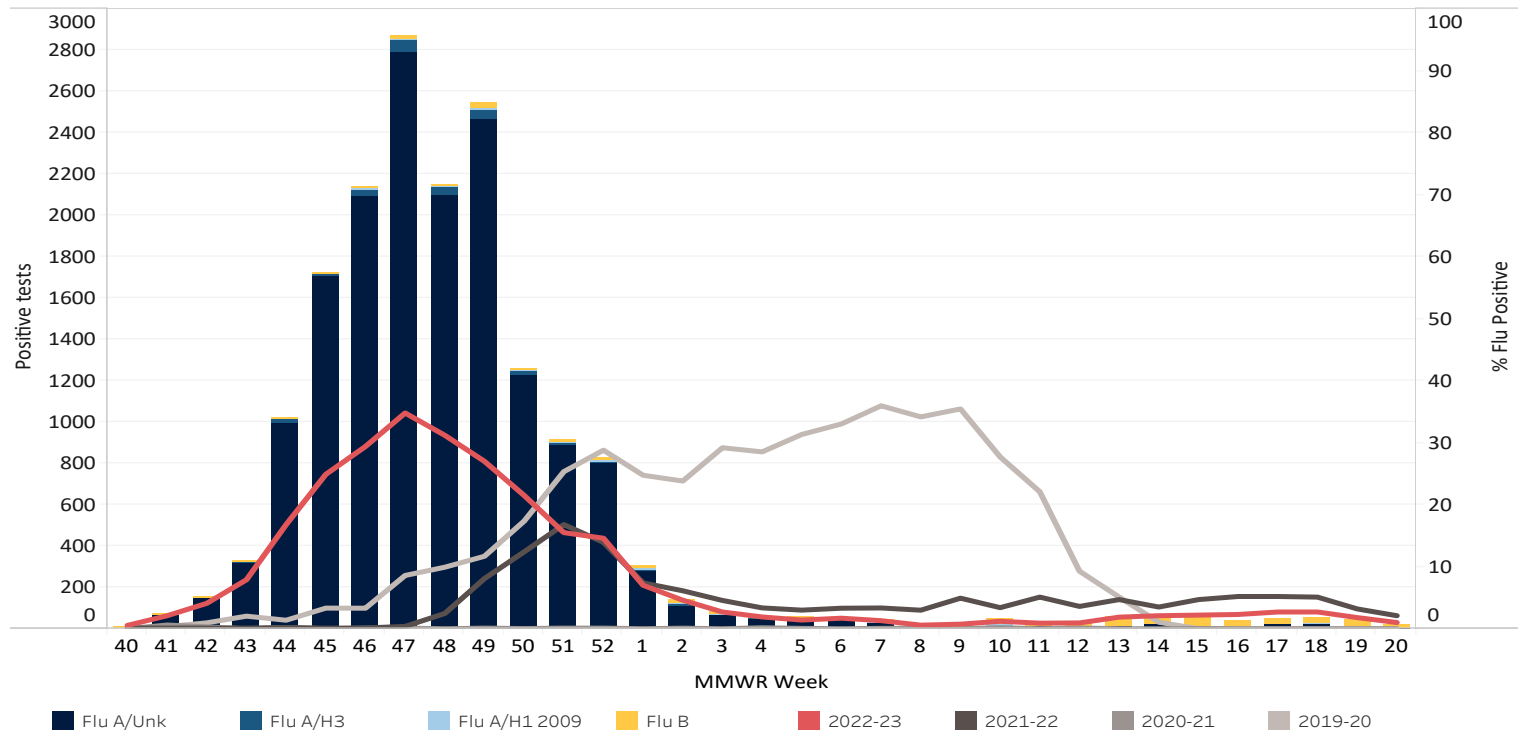
‡ MN Baseline valid for 2020-21 season only, do not compare it with previous seasons. The baseline is calculated by averaging the ILI percent for non-influenza weeks over the previous four seasons and adding two standard deviations. Non-influenza weeks account for less than 2% of the season's total flu-positive 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 in week 20	% of outpatients with ILI in week 19
1.18%	1.11%

Laboratory Surveillance

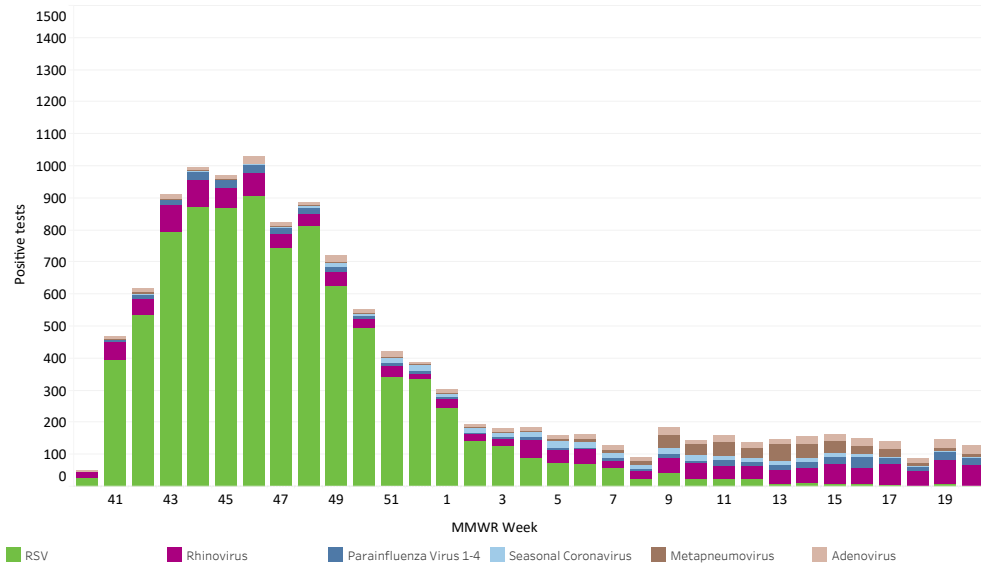
The MN Lab System (MLS) Laboratory Influenza Surveillance Program is made up of more than 310 clinic- and hospital-based laboratories, voluntarily submitting testing data weekly. These laboratories perform rapid testing for influenza and Respiratory Syncytial Virus (RSV). Significantly fewer labs perform 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

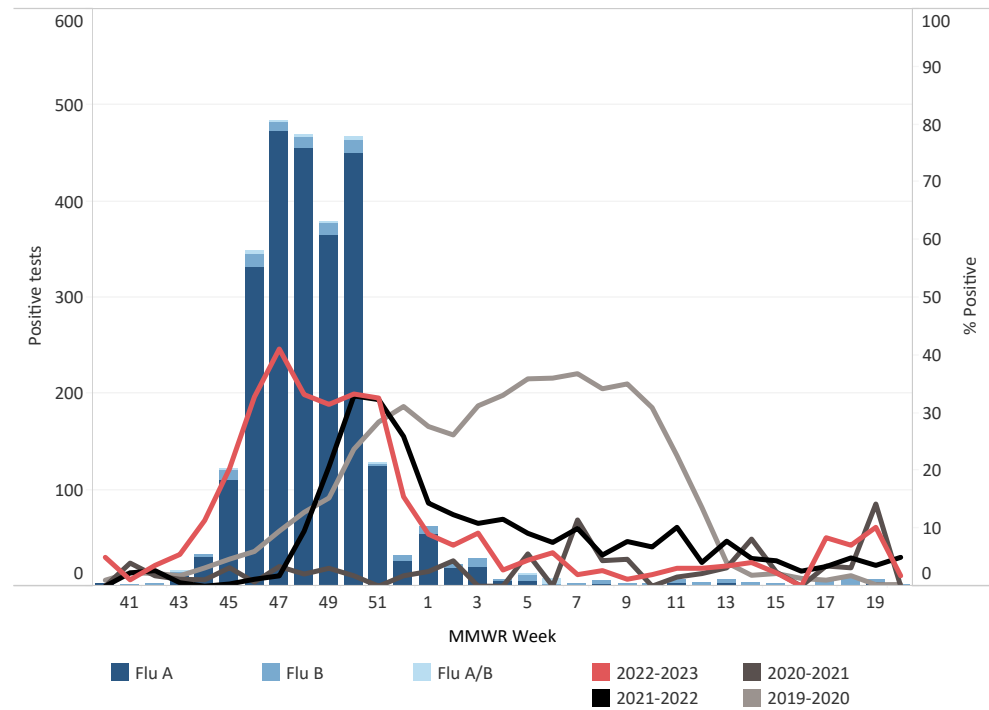


Laboratory Surveillance

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



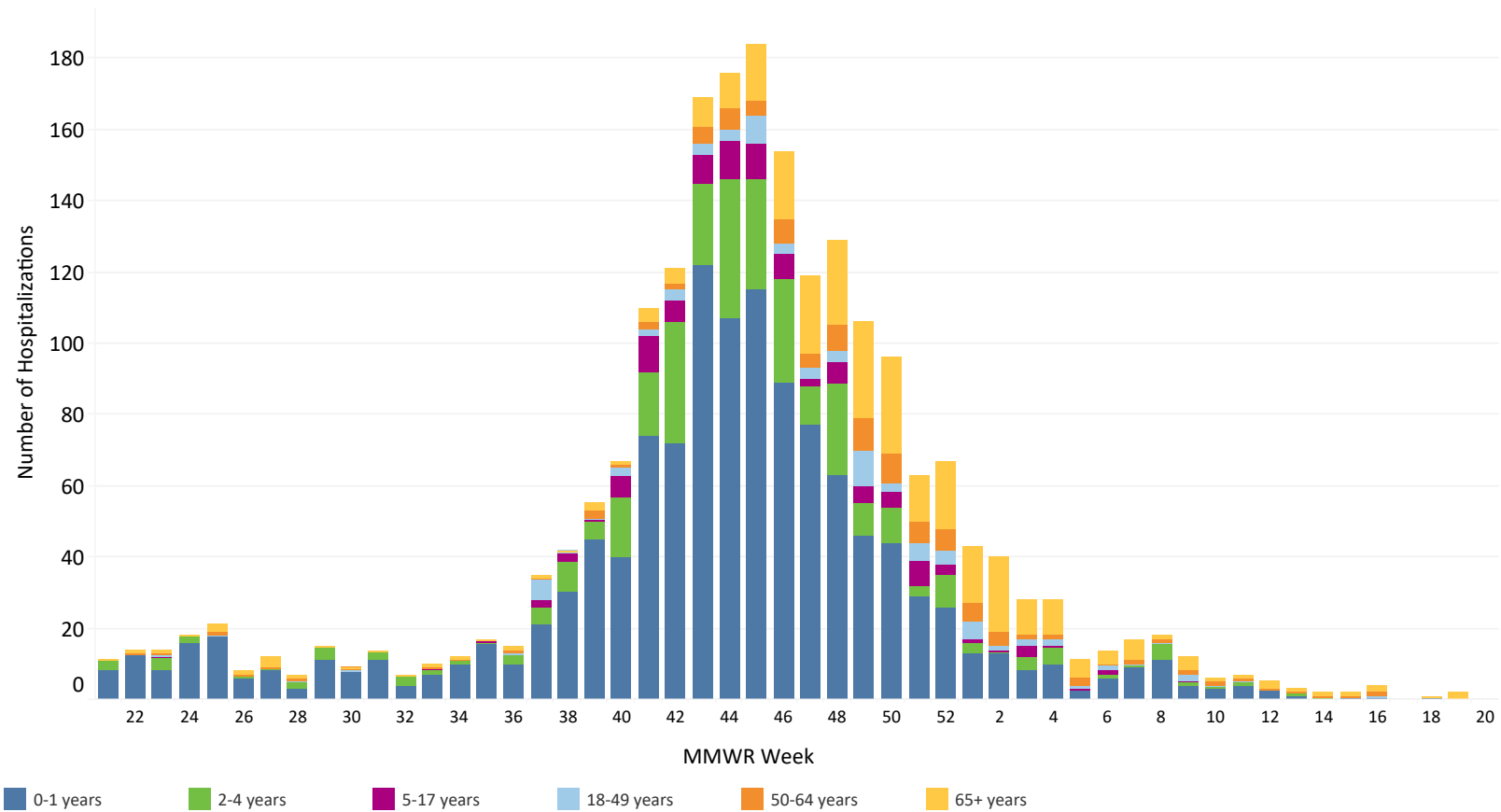
MLS Laboratories – RSV Testing Specimens Positive by RSV Rapid Antigen Test, by Week



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.

Number of RSV Hospitalizations and Incidence by Age, Minnesota



Total hospitalizations
637

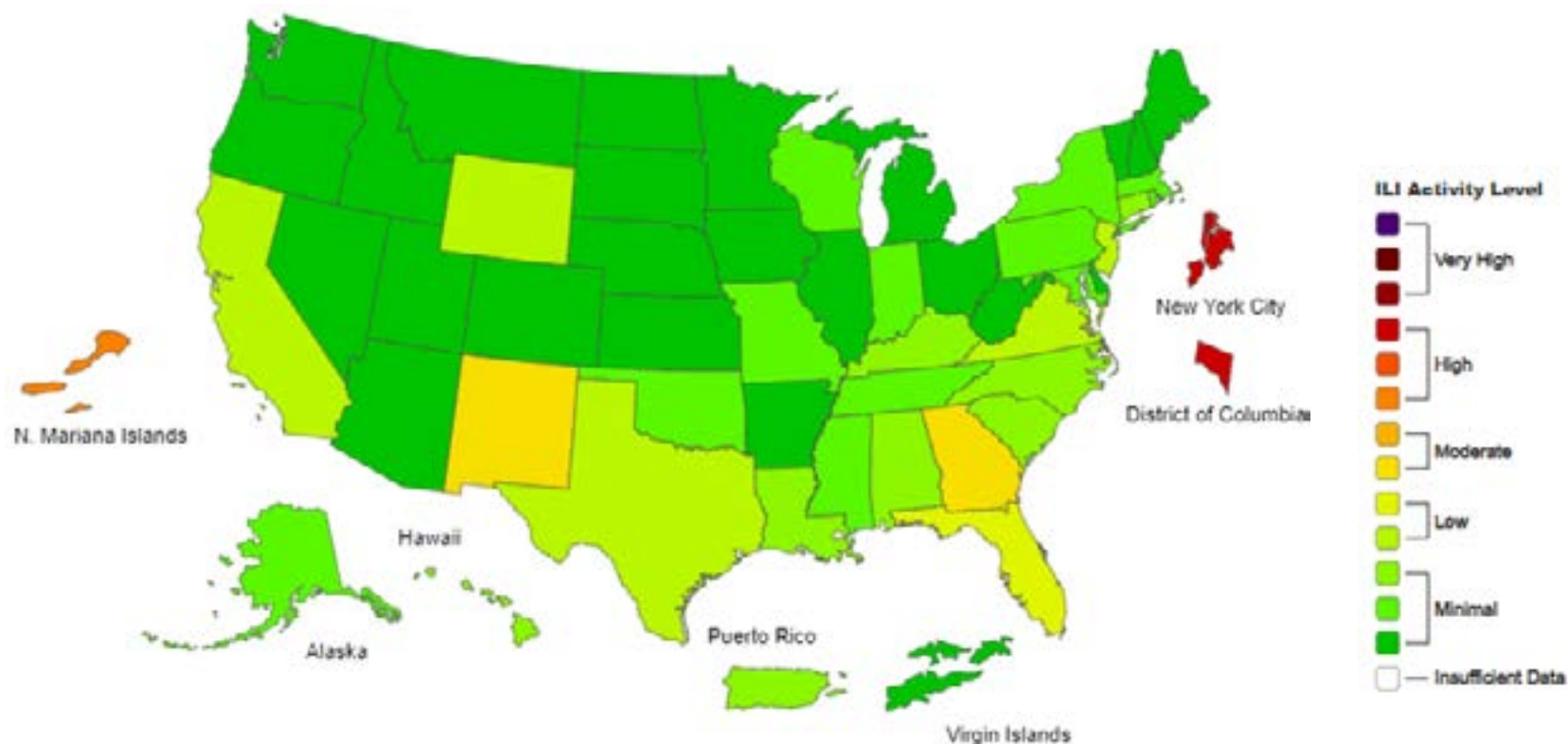
Median age (years) at time of admission
0.86

Weekly U.S. Influenza Surveillance Report

2022-23 Influenza Season Week 39 ending September 30, 2023

- Flu activity is unusually low at this time.
- An annual flu vaccine is the best way to protect against flu and its potentially serious complications.
- There are also flu antiviral drugs that can be used to treat flu illness.

Outpatient Illness: ILINet Activity Map



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