

# Weekly Influenza & Respiratory Illness Activity Report

A summary of influenza surveillance indicators prepared by the Division of Infectious Disease Epidemiology Prevention & Control

**Week Ending February 22, 2020 | WEEK 8**

All data are preliminary and may change as more information is received

## Minnesota Influenza Geographic Spread

No Activity

Sporadic

Local

Regional

Widespread

During the week ending February 22, 2020 (Week 8), surveillance indicators showed widespread geographic spread of influenza  
*(based on CDC's Activity Estimates Definitions).*

Since the start of the influenza season, 2 pediatric influenza-related deaths have been reported.

[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 \(www.who.int/influenza/surveillance\\_monitoring/updates/en/\)](http://www.who.int/influenza/surveillance_monitoring/updates/en/)

Neighboring states' influenza information:

Iowa: [Iowa Flu Reports \(idph.iowa.gov/influenza/reports\)](http://idph.iowa.gov/influenza/reports)

Wisconsin: [Influenza \(Flu\) \(www.dhs.wisconsin.gov/communicable/influenza/\)](http://www.dhs.wisconsin.gov/communicable/influenza/)

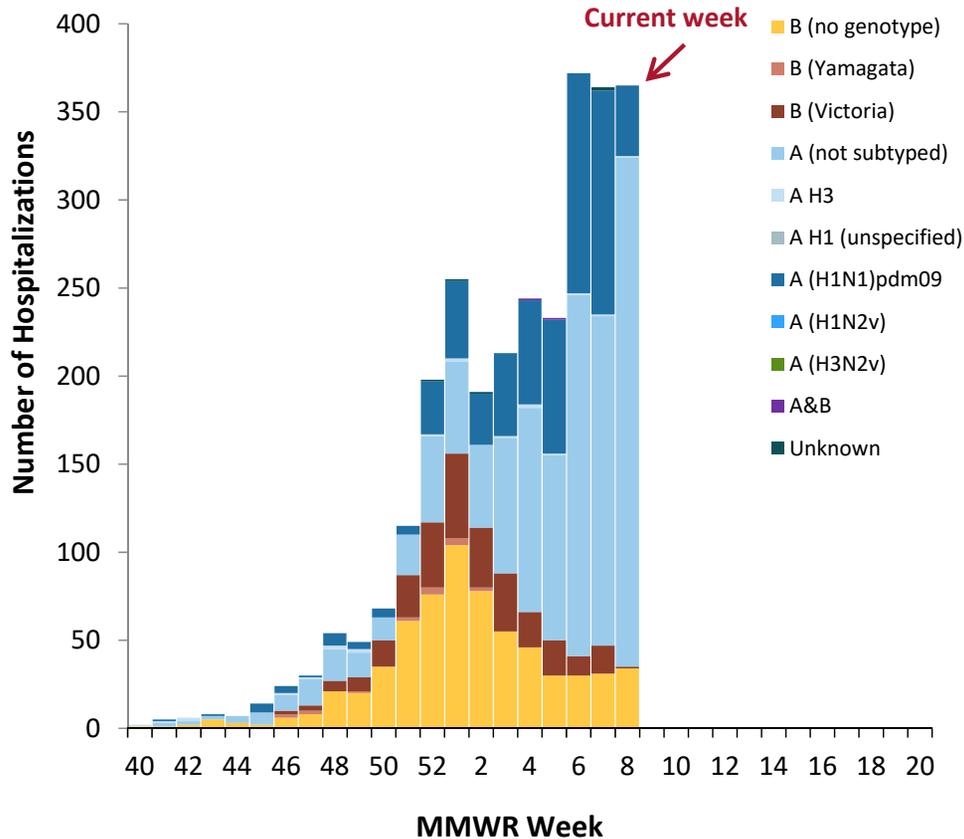
North Dakota: [Reported Seasonal Influenza Activity in North Dakota \(www.ndflu.com/default.aspx\)](http://www.ndflu.com/default.aspx)

South Dakota: [South Dakota Influenza Information \(doh.sd.gov/diseases/infectious/flu/\)](http://doh.sd.gov/diseases/infectious/flu/)

# Hospitalized Influenza Surveillance

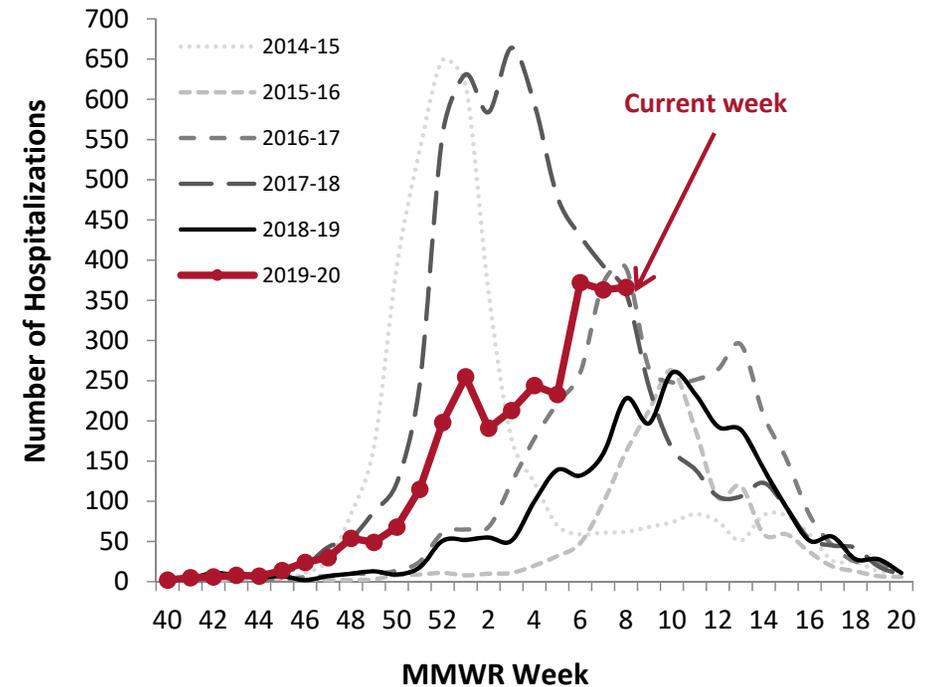
Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. **Due 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)
366	363	2,817

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

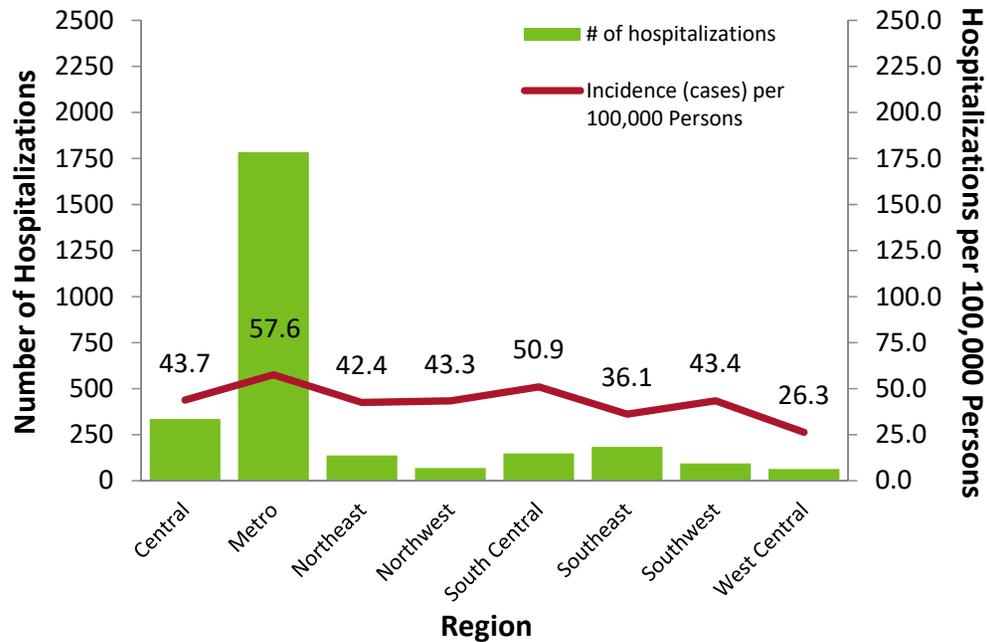


Season	Total hospitalizations (historic)
2014-2015	4,081
2015-2016	1,538
2016-2017	3,695
2017-2018	6,446
2018-2019	2,543
<b>2019-2020</b>	<b>2,817 (to date)</b>

\*Influenza Surveillance Network

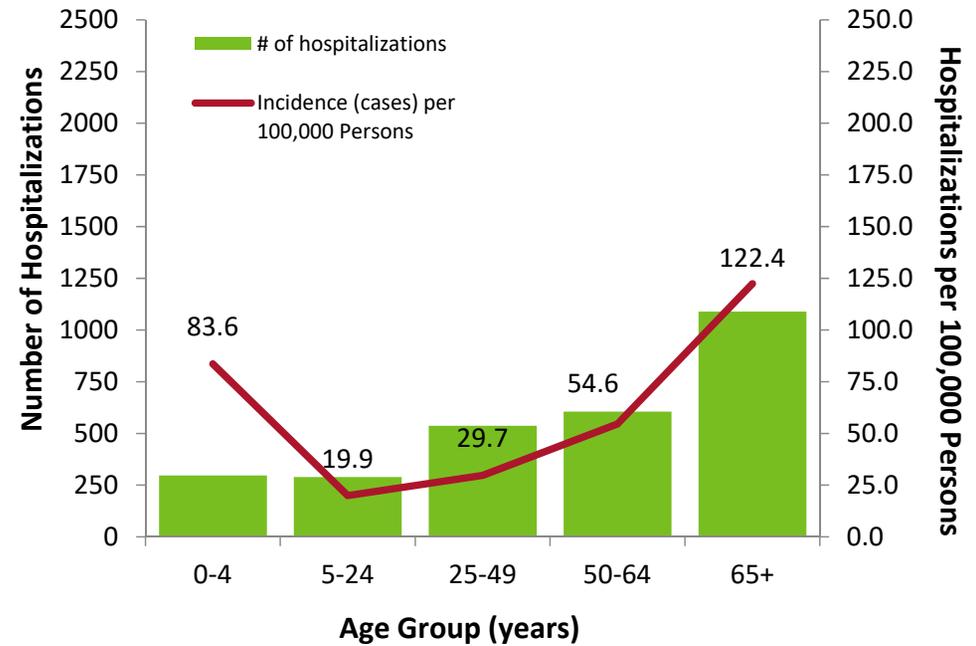
# Hospitalized Influenza Surveillance (continued)

**Number of Influenza Hospitalizations and Incidence by Region, Minnesota**  
September 29, 2019 – February 22, 2020



Region	Hospitalizations this week	Total (to date)
Central	51 (14%)	335 (12%)
Metro	209 (57%)	1,784 (63%)
Northeast	16 (4%)	138 (5%)
Northwest	6 (2%)	69 (2%)
South Central	25 (7%)	149 (5%)
Southeast	29 (8%)	184 (7%)
Southwest	10 (3%)	94 (3%)
West Central	20 (5%)	64 (2%)

**Number of Influenza Hospitalizations and Incidence by Age, Minnesota**  
September 29, 2019 – February 22, 2020

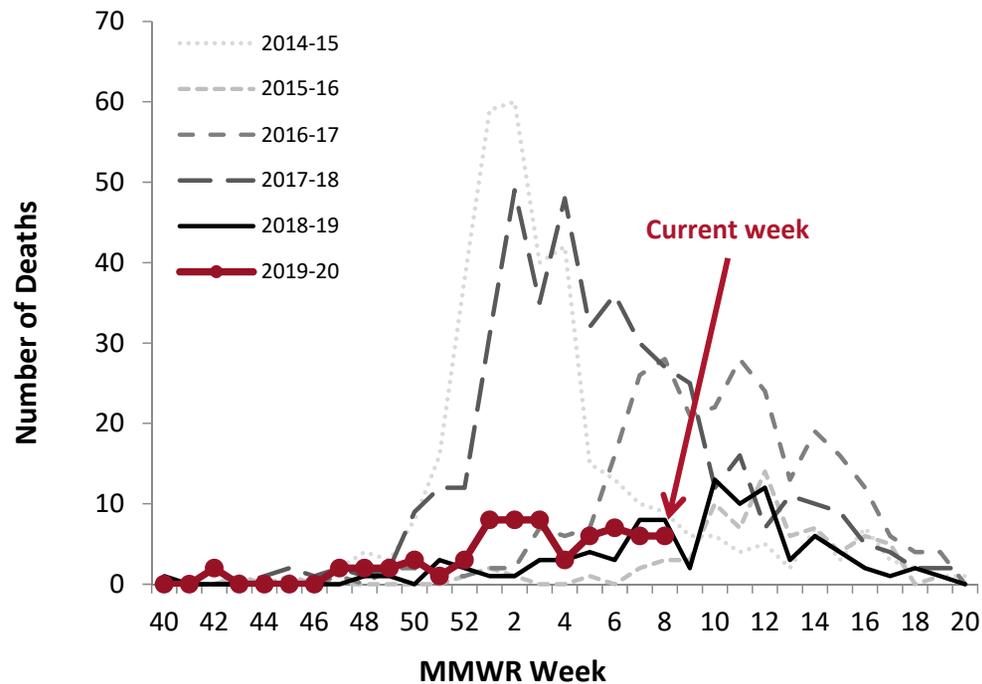


Median age (years) at time of admission
58.0

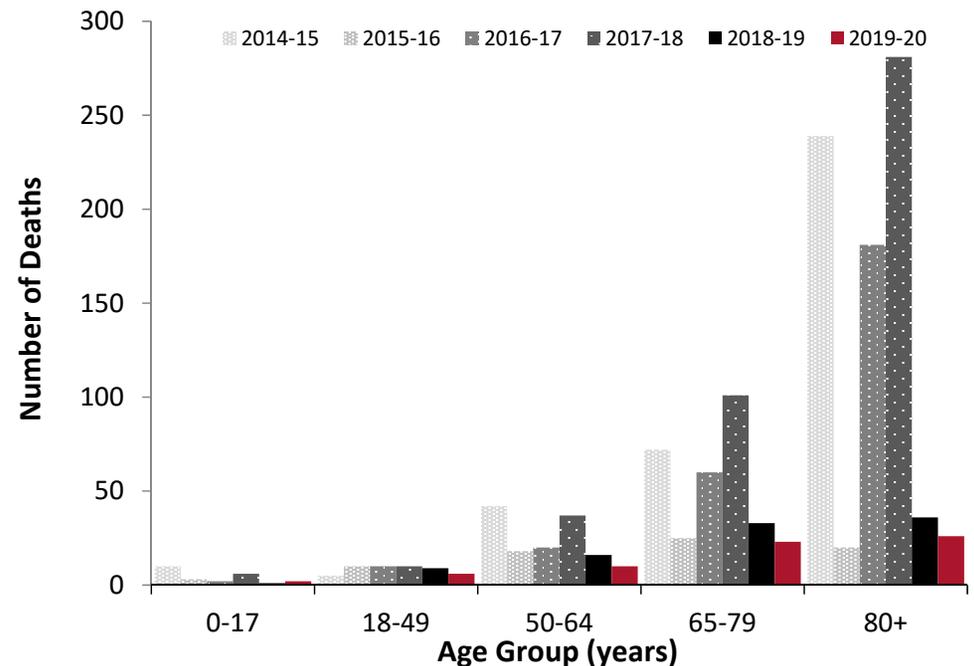
# Influenza-Associated Death Surveillance

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)
2014-2015	368	10
2015-2016	76	3
2016-2017	273	2
2017-2018	440	6
2018-2019	95	1
<b>2019-2020</b>	<b>67 (to date)</b>	<b>2 (to date)</b>

Season	Median age (years) at time of death
2014-2015	85
2015-2016	68
2016-2017	86
2017-2018	85
2018-2019	75
<b>2019-2020</b>	<b>74.0 (to date)</b>

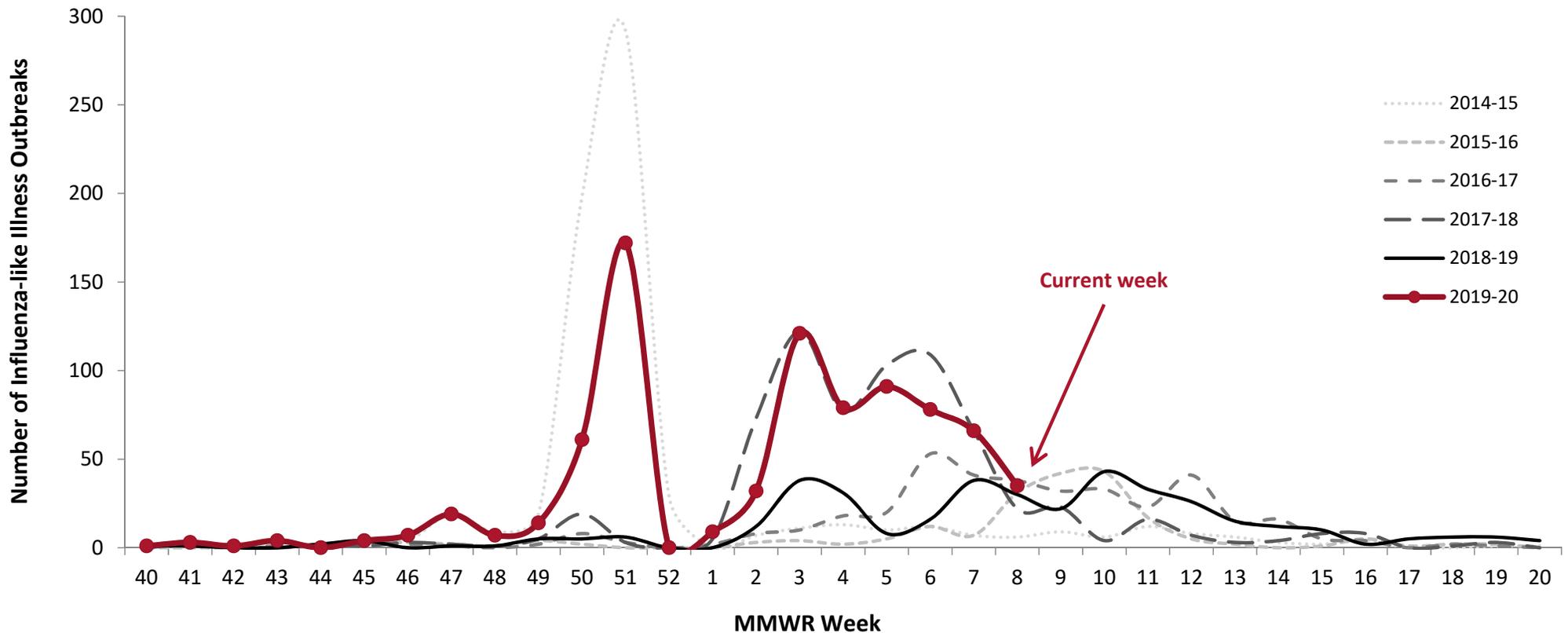
\*Influenza Surveillance Network

# 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

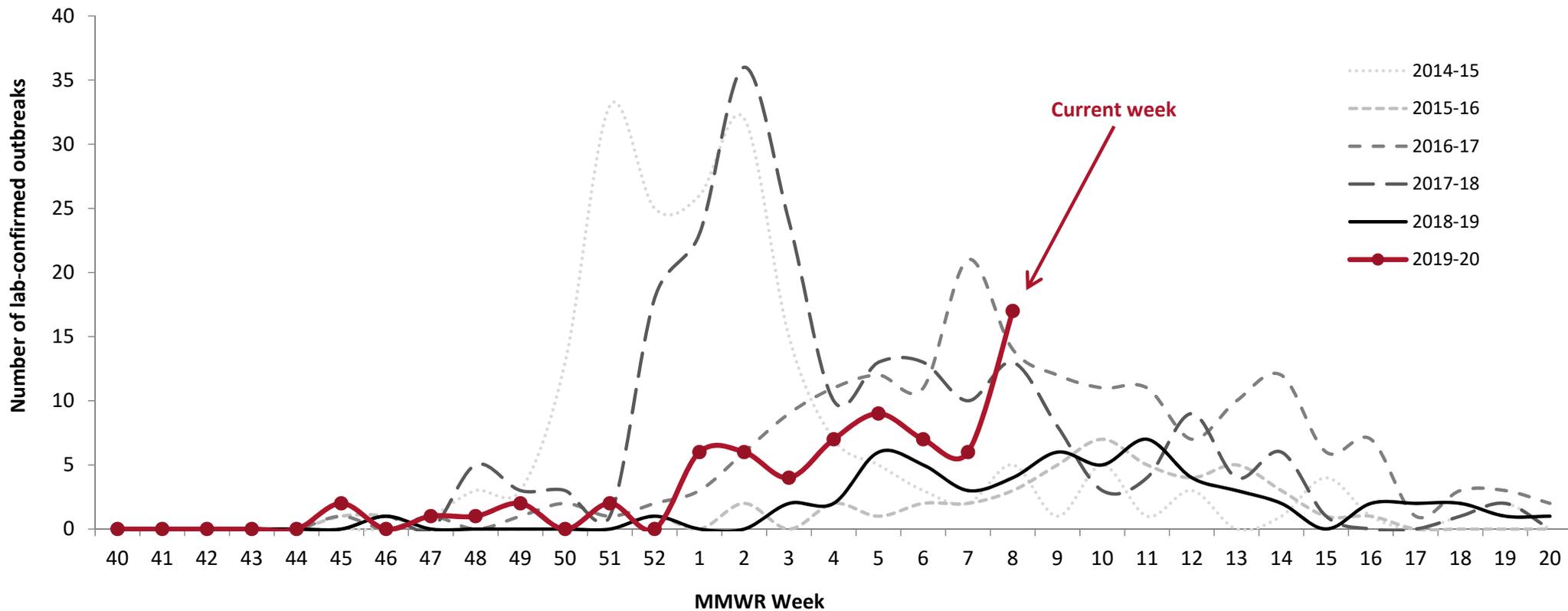


New school outbreaks this week	New school outbreaks last week	Total this season (to date)
35	66	804

## Long-Term Care (LTC) Outbreaks

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

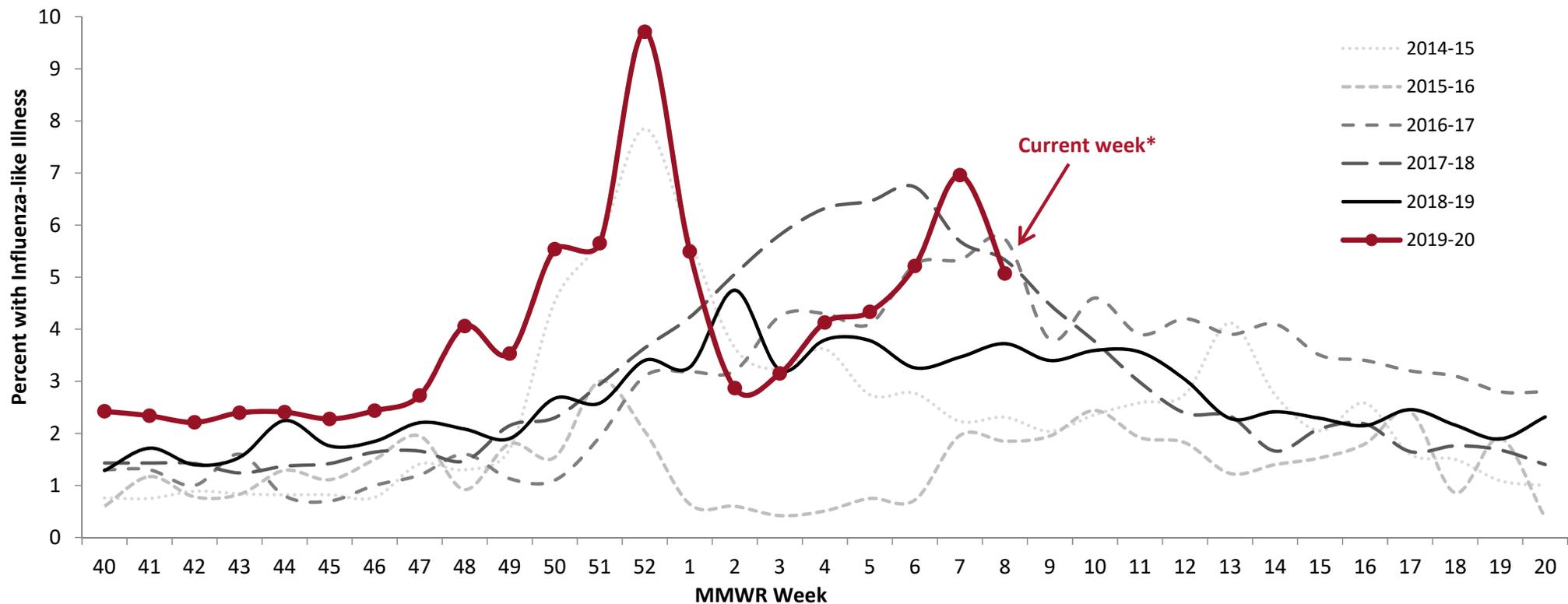


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
17	6	70

# 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)



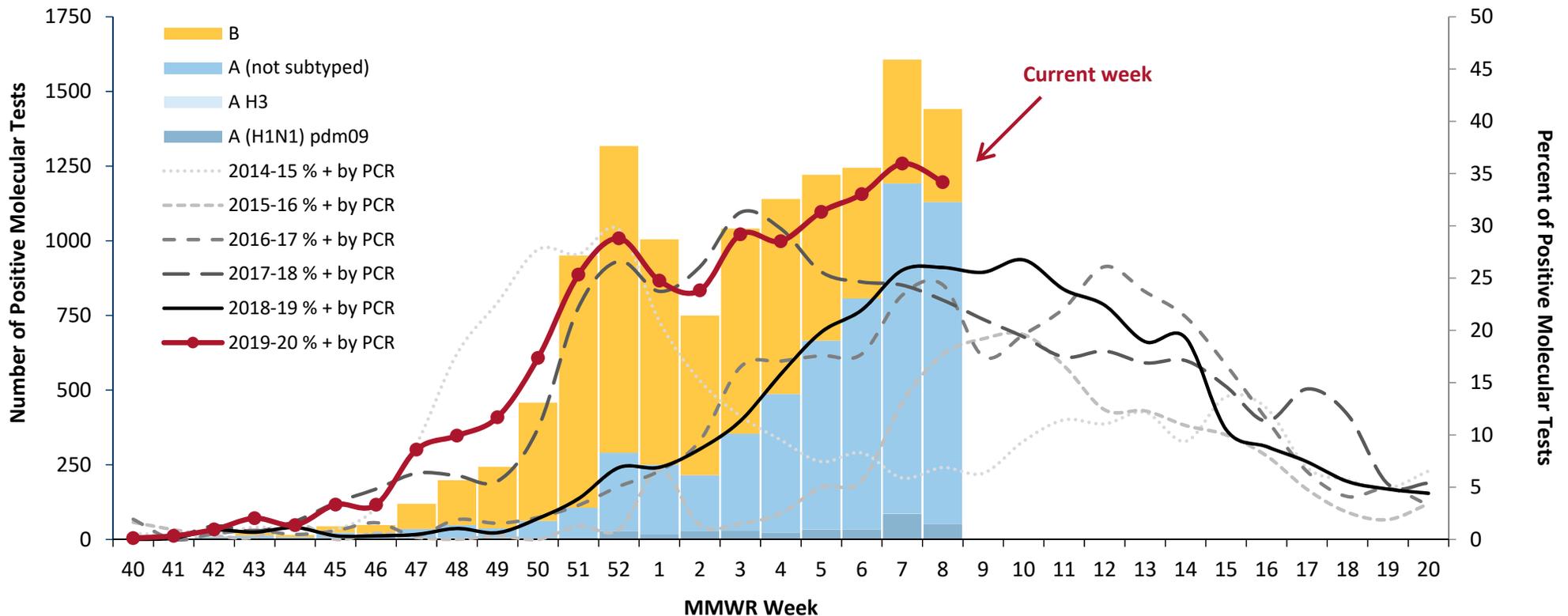
% of outpatients with ILI this week	% of outpatients with ILI last week
5.1%	7.0%

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

# 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



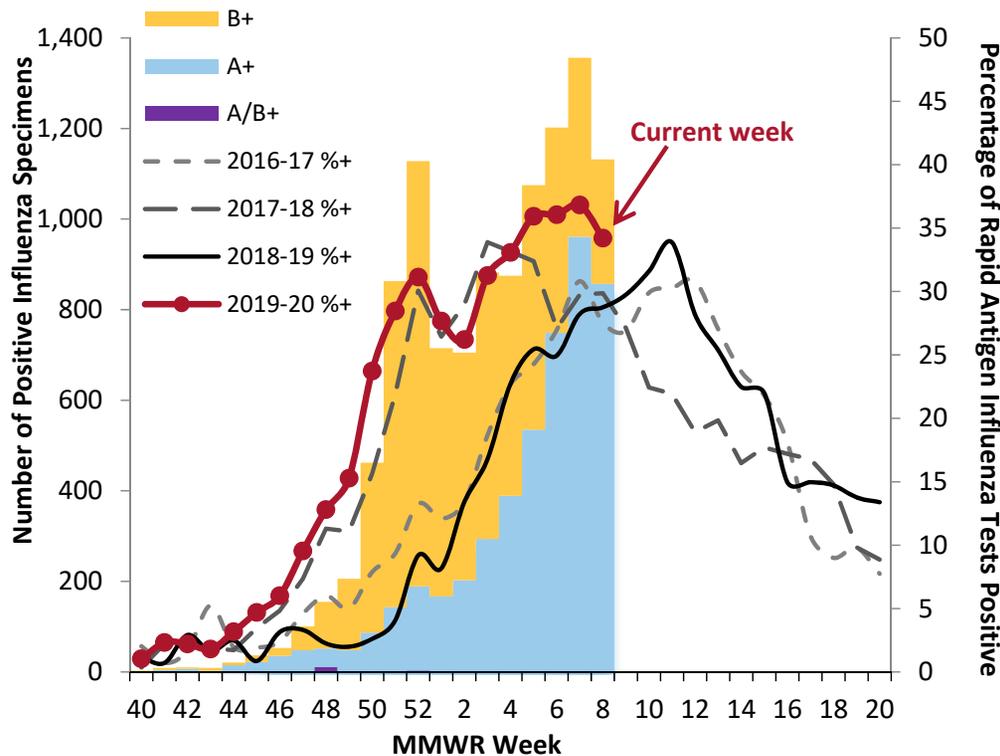
% molecular tests positive this week	% molecular tests positive last week
34.2%	36.0%

\* Beginning in 2016-17, laboratories report results for rapid molecular influenza tests in addition to RT-PCR results

# Laboratory Surveillance (continued)

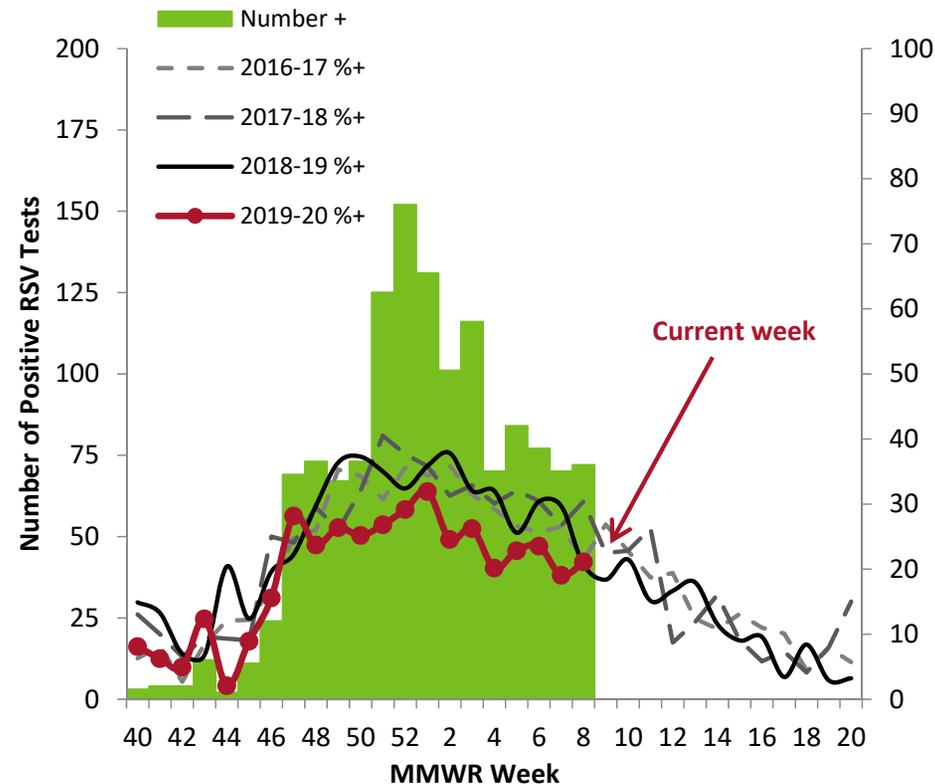
## MLS Laboratories – Influenza Testing

### Specimens Positive by Influenza Rapid Antigen Test, by Week



## MLS Laboratories – RSV Testing

### Specimens Positive by RSV Rapid Antigen Test, by Week



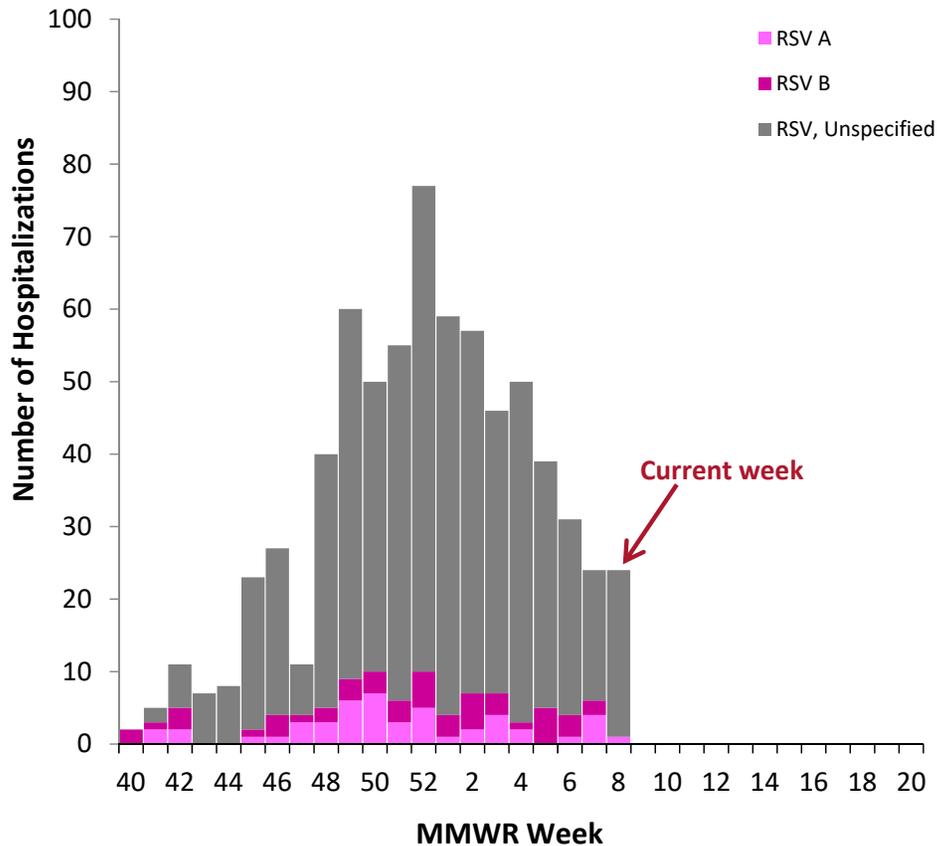
Region	% rapid antigen influenza tests + (current week)
Central	29%
Metro	37%
Northeast	38%
Northwest	24%
South Central	30%
Southeast	38%
Southwest	27%
West Central	25%
State (overall)	34%

Region	% rapid antigen RSV tests + (current week)
Central	23%
Metro	10%
Northeast	20%
Northwest	0%
South Central	35%
Southeast	30%
Southwest	38%
West Central	45%
State (overall)	21%

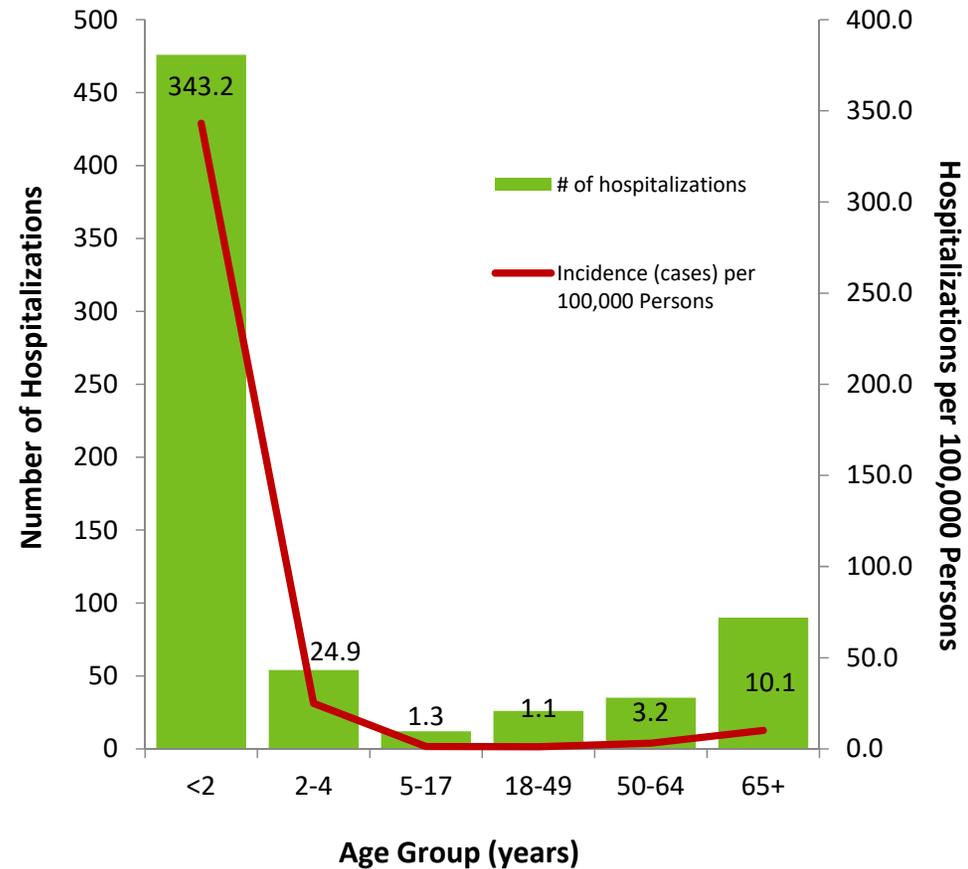
# Hospitalized RSV Surveillance

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 Subtype, Minnesota



## Number of RSV Hospitalizations and Incidence by Age, Minnesota



Hospitalizations this week	Hospitalizations last week	Total hospitalizations
24	24	693

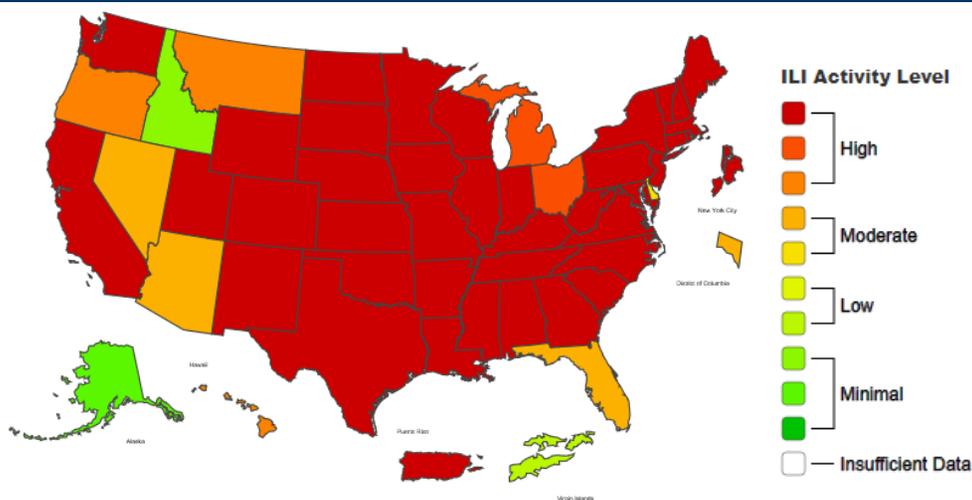
Median age at time of admission
9 months

# Weekly U.S. Influenza Surveillance Report

2019-2020 Influenza Season Week 7, ending February 15, 2020

Key indicators that track flu activity remain high but decreased slightly this week. Indicators that track overall severity (hospitalizations and deaths) are not high at this point in the season.

## Influenza-Like Illness (ILI) Activity: Outpatient Illness



The number of jurisdictions experiencing high ILI activity remained at 46 this week.

## Geographic Spread of Influenza



The number of jurisdictions reporting regional or widespread influenza activity remained at 51 this week.

## Key Messages from CDC

- Outpatient ILI and clinical laboratory data remain elevated but decreased slightly this week. The overall decrease in the percentage of specimens testing positive for influenza was due to a decrease in the percentage of specimens testing positive for influenza B. The percentage of specimens testing positive for influenza A continued to increase.
- Overall, hospitalization rates remain similar to this time during recent seasons, but rates among children and young adults are higher at this time than in recent seasons.
- Pneumonia and influenza mortality has been low, but 105 influenza-associated deaths in children have been reported so far this season.
- CDC estimates that so far this season there have been at least 29 million flu illnesses, 280,000 hospitalizations and 16,000 deaths from flu.
- Interim estimates of 2019-2020 flu vaccine effectiveness were released this week. So far this season, flu vaccines are reducing doctor's visits for flu illness by 45% overall and 55% in children.
- Antiviral medications are an important adjunct to flu vaccine in the control of influenza. Almost all (>99%) of the influenza viruses tested this season are susceptible to the four FDA-approved influenza antiviral medications recommended for use in the U.S. this season.