

Weekly Influenza & Respiratory Illness Activity Report

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

Week Ending April 25, 2020 | WEEK 17

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 April 25, 2020 (Week 17), surveillance indicators showed sporadic geographic spread of influenza *(based on CDC's Activity Estimates Definitions)*.

Since the start of the influenza season, 3 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/)

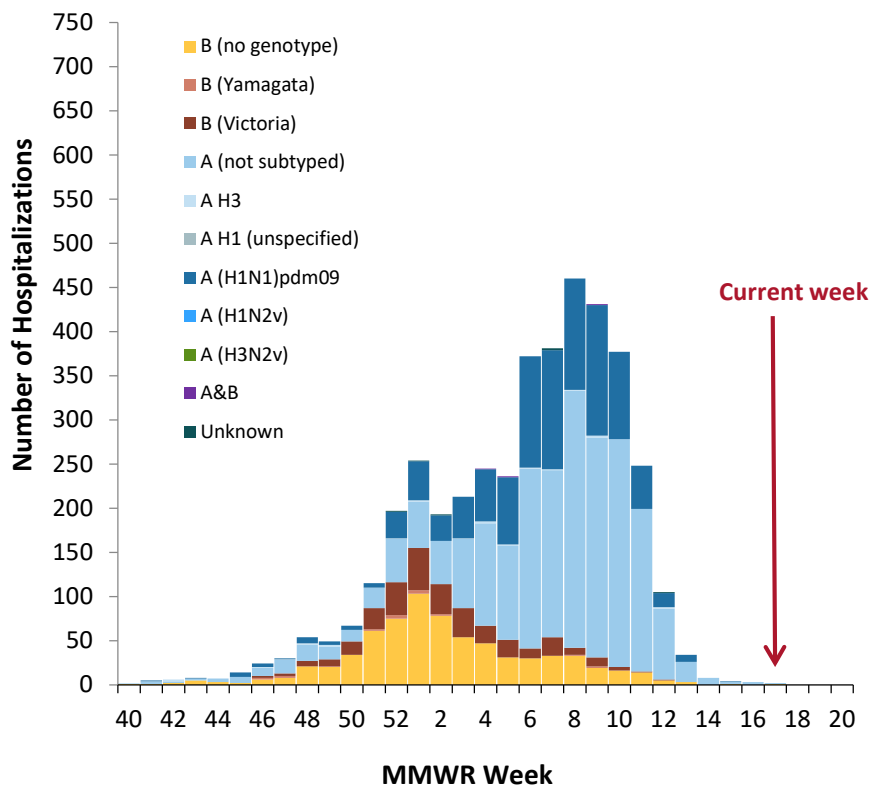
North Dakota: [Reported Seasonal Influenza Activity in North Dakota \(www.ndflu.com/default.aspx\)](http://www.ndflu.com/default.aspx)

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

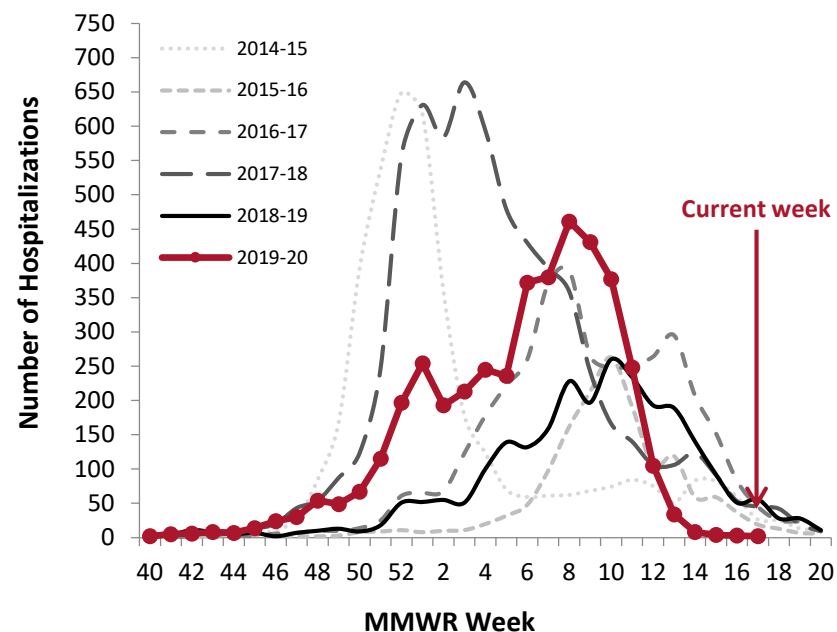
Hospitalized Influenza Surveillance

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*)



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



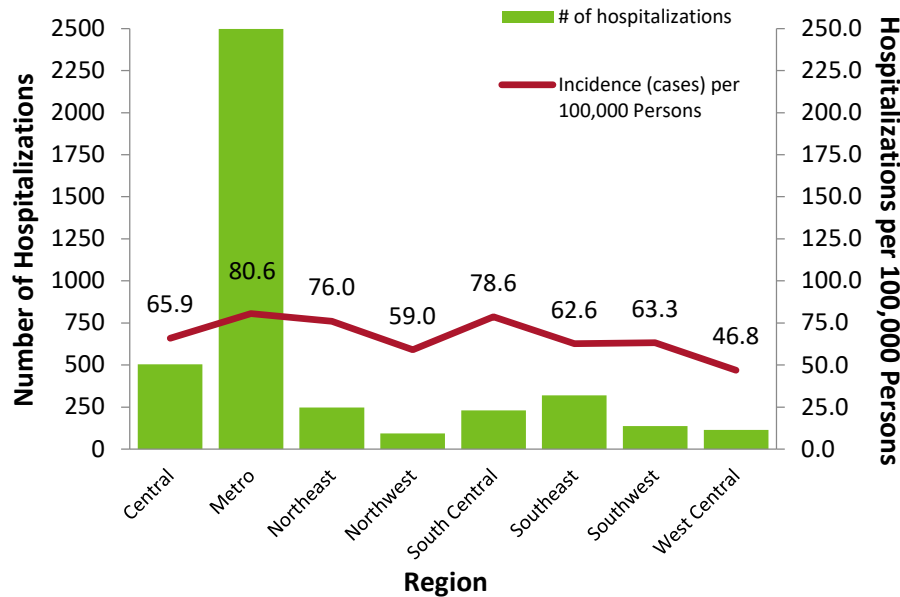
| Hospitalizations this week | Hospitalizations last week | Total hospitalizations (to date) |
|----------------------------|----------------------------|----------------------------------|
| 2 | 3 | 4,144 |

| Season | Total hospitalizations (historic) |
|------------------|-----------------------------------|
| 2014-2015 | 4,081 |
| 2015-2016 | 1,538 |
| 2016-2017 | 3,695 |
| 2017-2018 | 6,446 |
| 2018-2019 | 2,543 |
| 2019-2020 | 4,144 (to date) |

*Influenza Surveillance Network

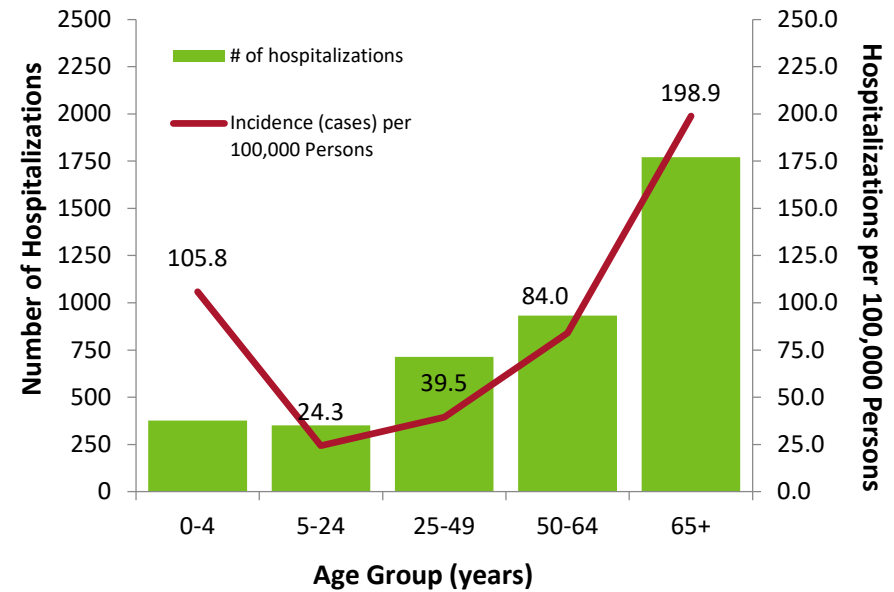
Hospitalized Influenza Surveillance (continued)

Number of Influenza Hospitalizations and Incidence by Region, Minnesota September 29, 2019 – April 25, 2020



| Region | Hospitalizations this week | Total (to date) |
|---------------|----------------------------|-----------------|
| Central | 1 (50%) | 505 (12%) |
| Metro | 1 (50%) | 2,498 (60%) |
| Northeast | 0 (0%) | 247 (6%) |
| Northwest | 0 (0%) | 94 (2%) |
| South Central | 0 (0%) | 230 (6%) |
| Southeast | 0 (0%) | 319 (8%) |
| Southwest | 0 (0%) | 137 (3%) |
| West Central | 0 (0%) | 114 (3%) |

Number of Influenza Hospitalizations and Incidence by Age, Minnesota September 29, 2019 – April 25, 2020

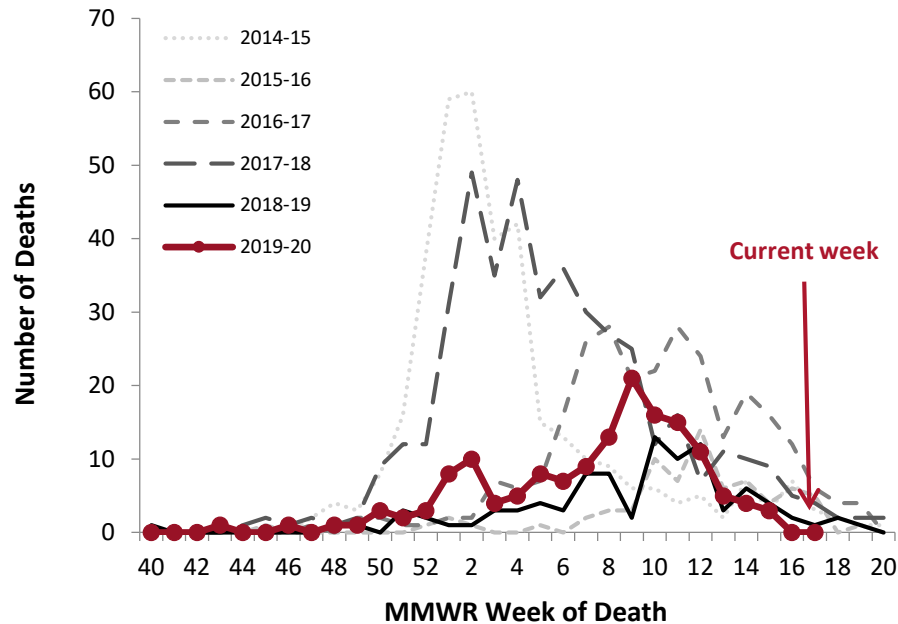


| Median age (years) at time of admission |
|---|
| 60.0 |

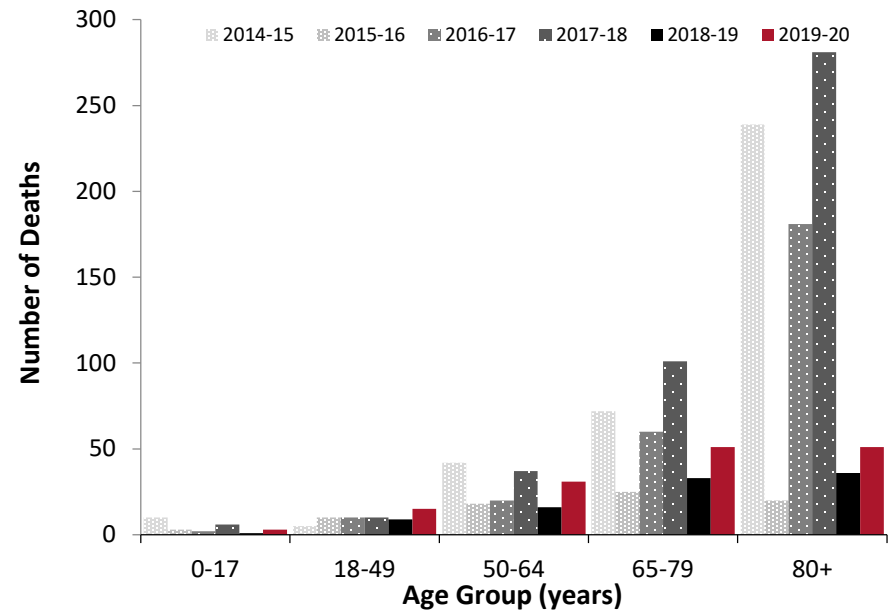
Influenza-Associated Death Surveillance

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 |
| 2019-2020 | 151 (to date) | 3 (to date) |

| Season | Median age (years) at time of death |
|------------------|-------------------------------------|
| 2014-2015 | 85 |
| 2015-2016 | 68 |
| 2016-2017 | 86 |
| 2017-2018 | 85 |
| 2018-2019 | 75 |
| 2019-2020 | 72 (to date) |

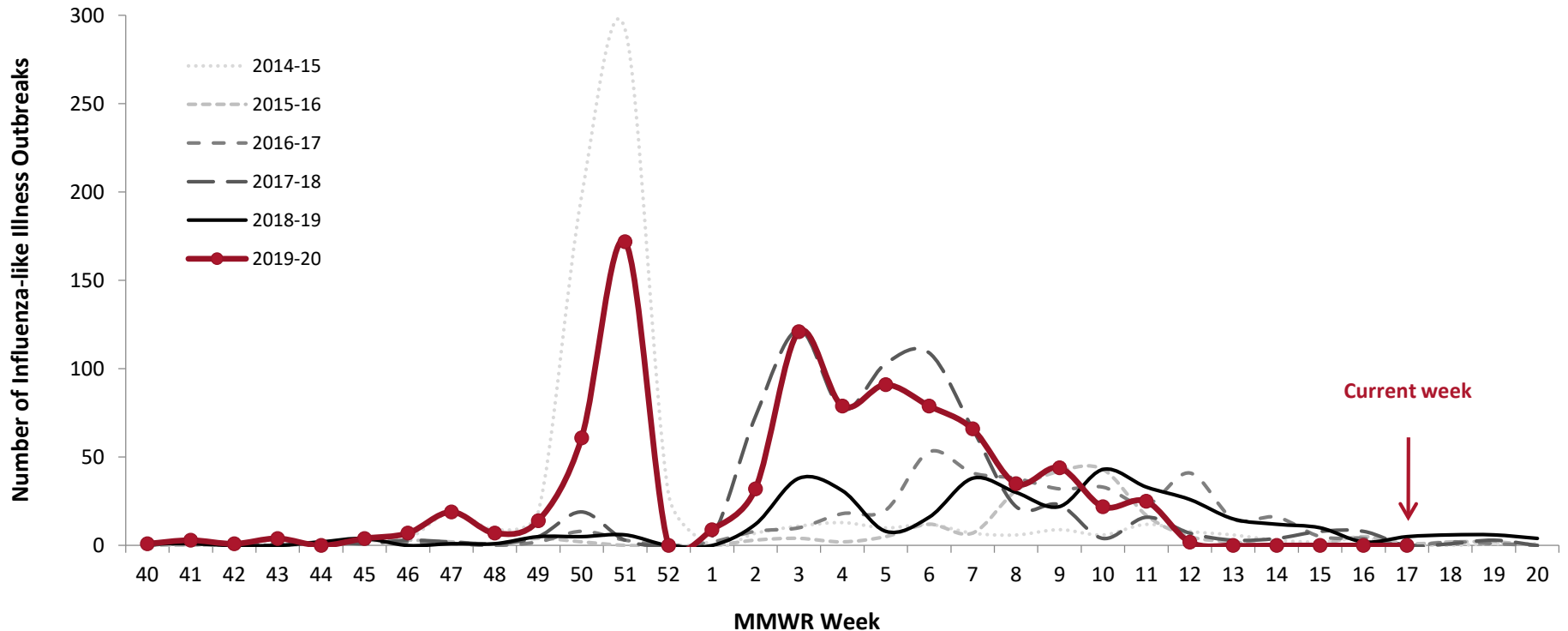
*Influenza Surveillance Network

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

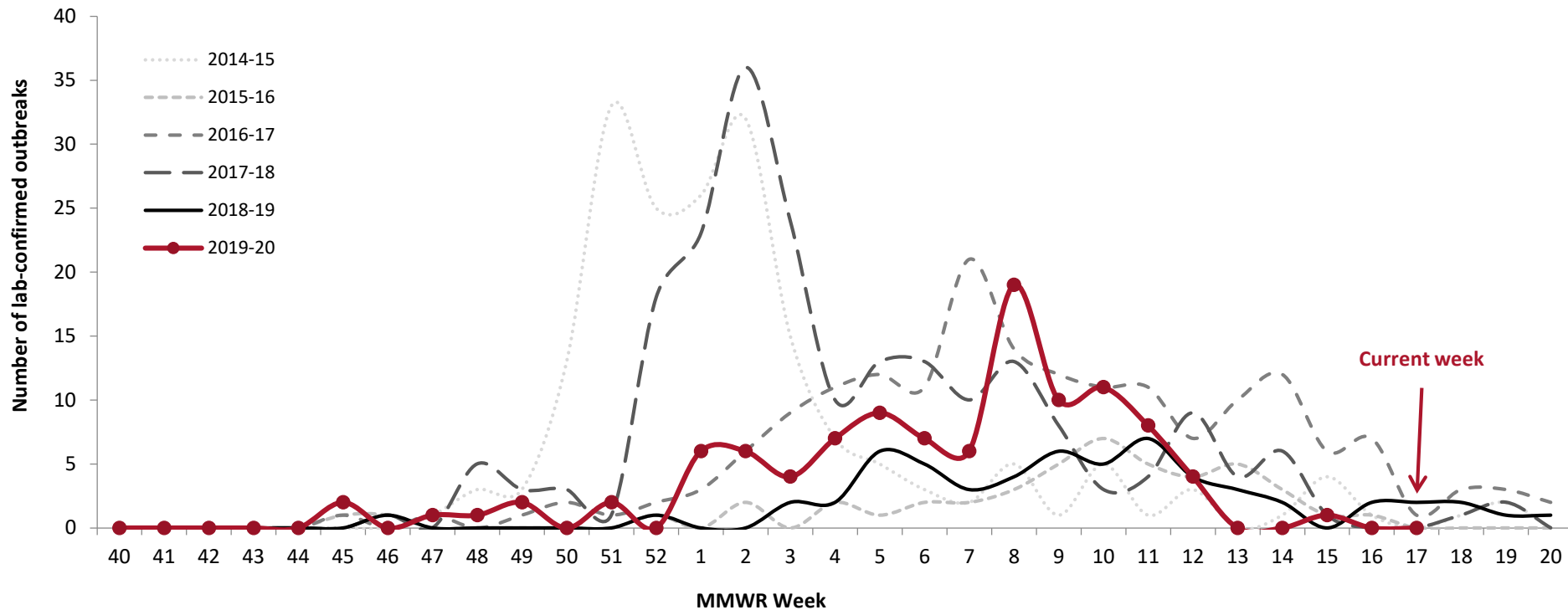


| New school outbreaks this week | New school outbreaks last week | Total this season (to date) |
|--------------------------------|--------------------------------|-----------------------------|
| 0 | 0 | 921 |

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

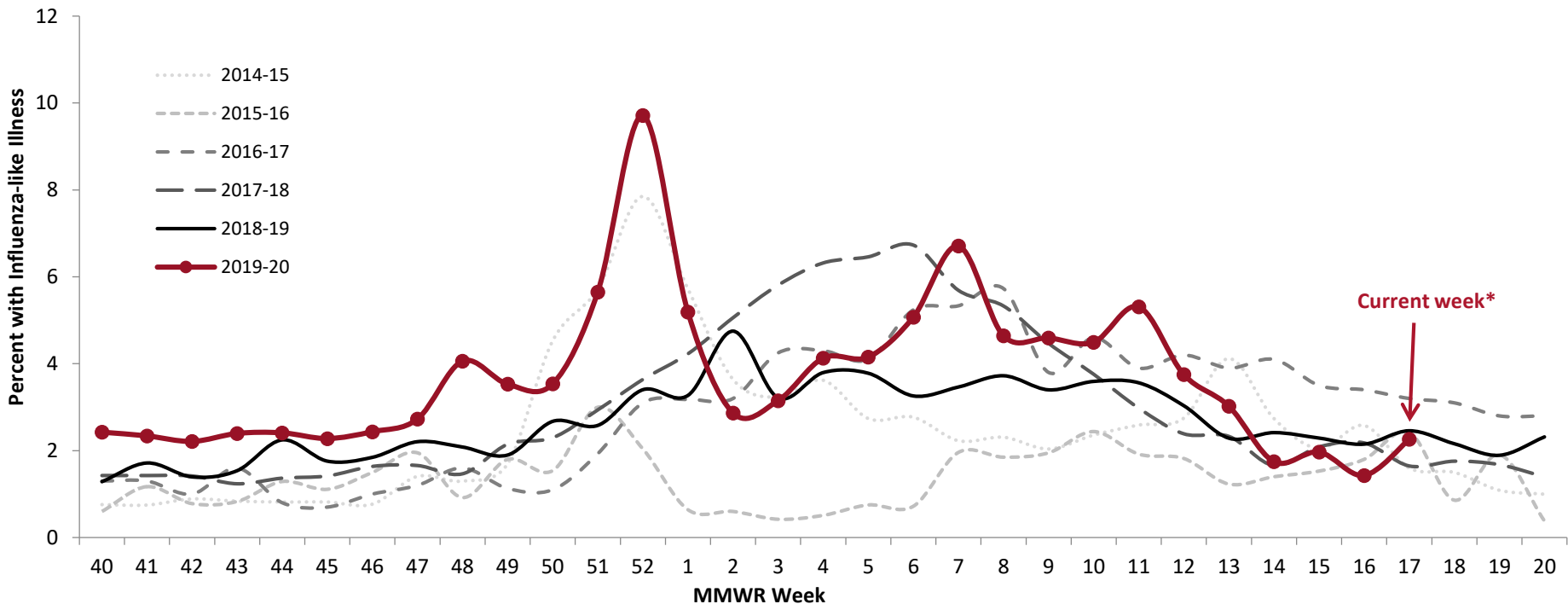


| New LTC outbreaks this week | New LTC outbreaks last week | Total this season (to date) |
|-----------------------------|-----------------------------|-----------------------------|
| 0 | 0 | 109 |

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)



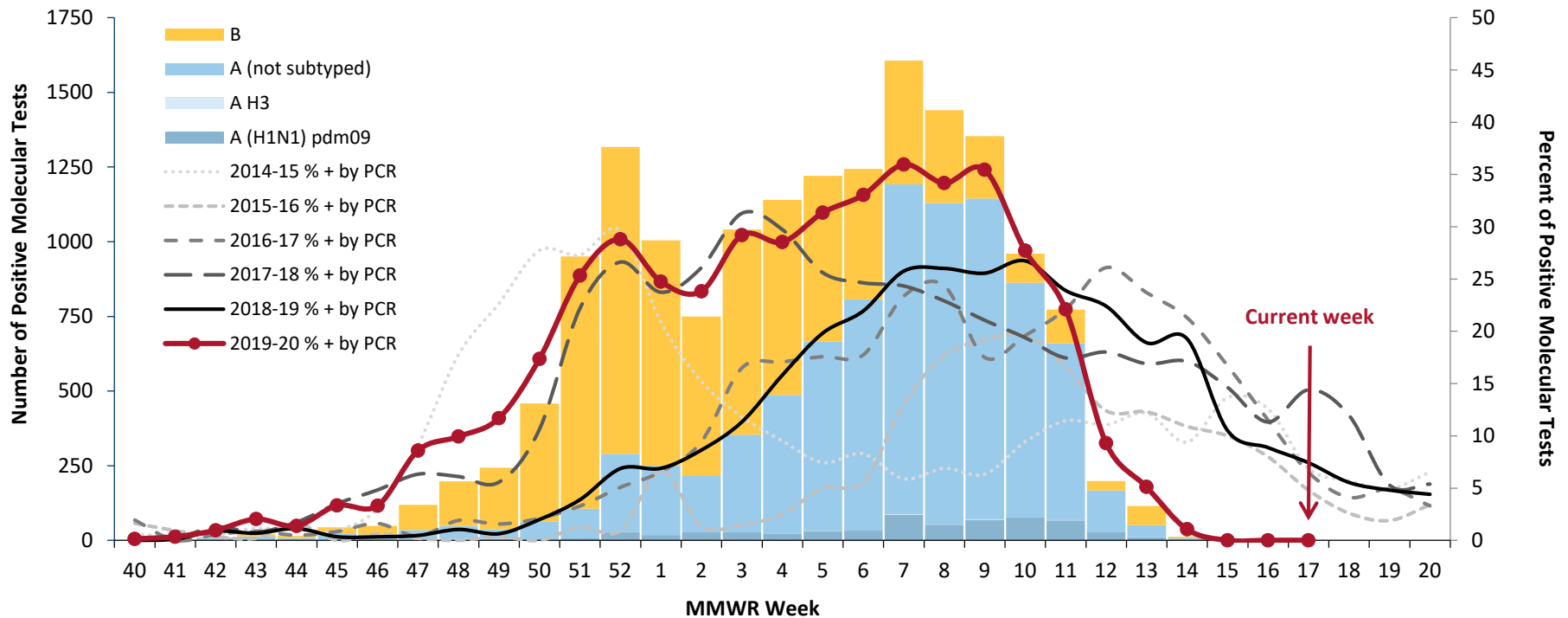
| % of outpatients with ILI this week | % of outpatients with ILI last week |
|-------------------------------------|-------------------------------------|
| 2.3% | 1.4% |

* 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



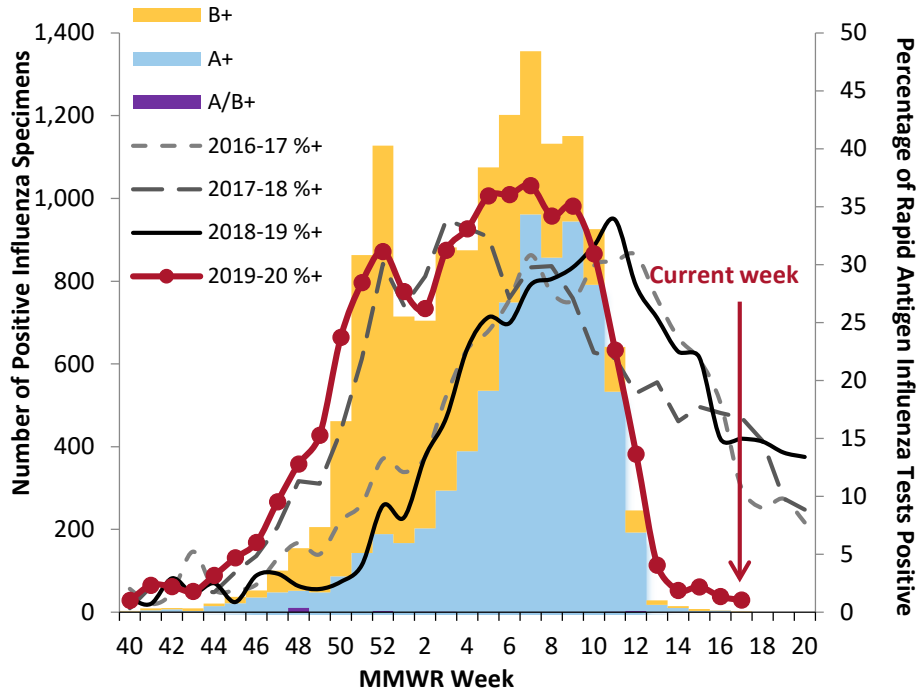
| % molecular tests positive this week | % molecular tests positive last week |
|--------------------------------------|--------------------------------------|
| 0.0% | 0.0% |

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

Laboratory Surveillance (continued)

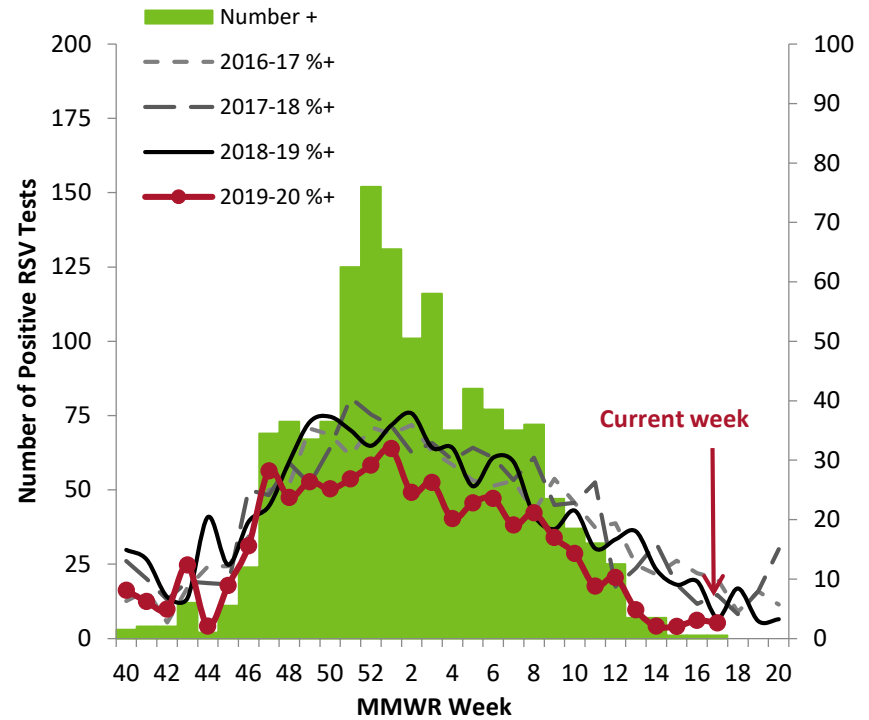
MLS Laboratories – Influenza Testing

Specimens Positive by Influenza Rapid Antigen Test, by Week



MLS Laboratories – RSV Testing

Specimens Positive by RSV Rapid Antigen Test, by Week



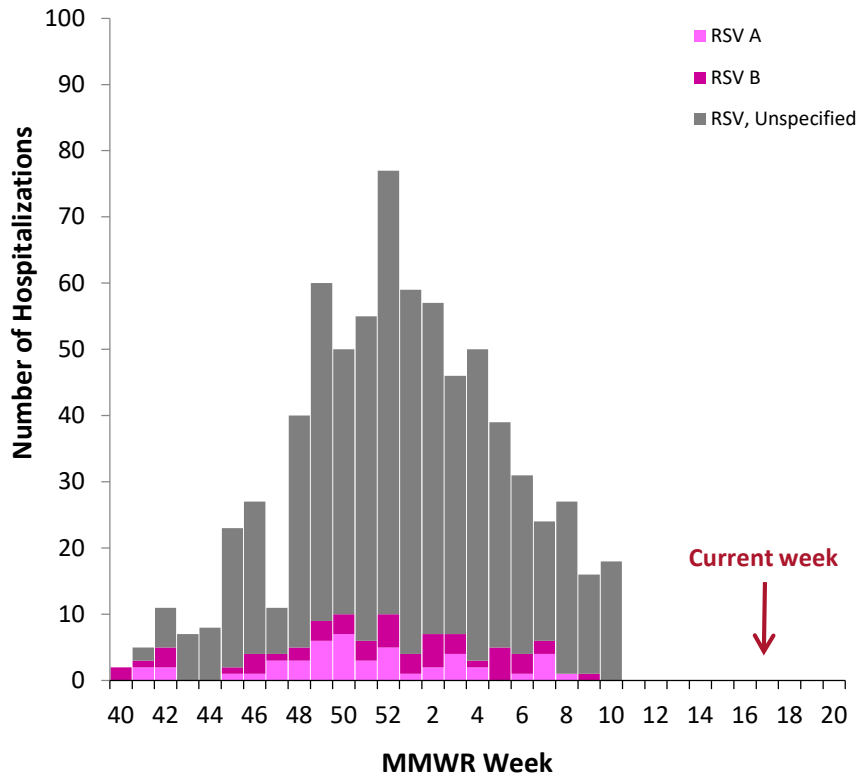
| Region | % rapid antigen influenza tests + (current week) |
|-----------------|--|
| Central | 0% |
| Metro | 0% |
| Northeast | 0% |
| Northwest | --- |
| South Central | 0% |
| Southeast | 8% |
| Southwest | 0% |
| West Central | 0% |
| State (overall) | 1% |

| Region | % rapid antigen RSV tests + (current week) |
|-----------------|--|
| Central | 0% |
| Metro | 0% |
| Northeast | 6% |
| Northwest | --- |
| South Central | 0% |
| Southeast | 0% |
| Southwest | 0% |
| West Central | 0% |
| State (overall) | 3% |

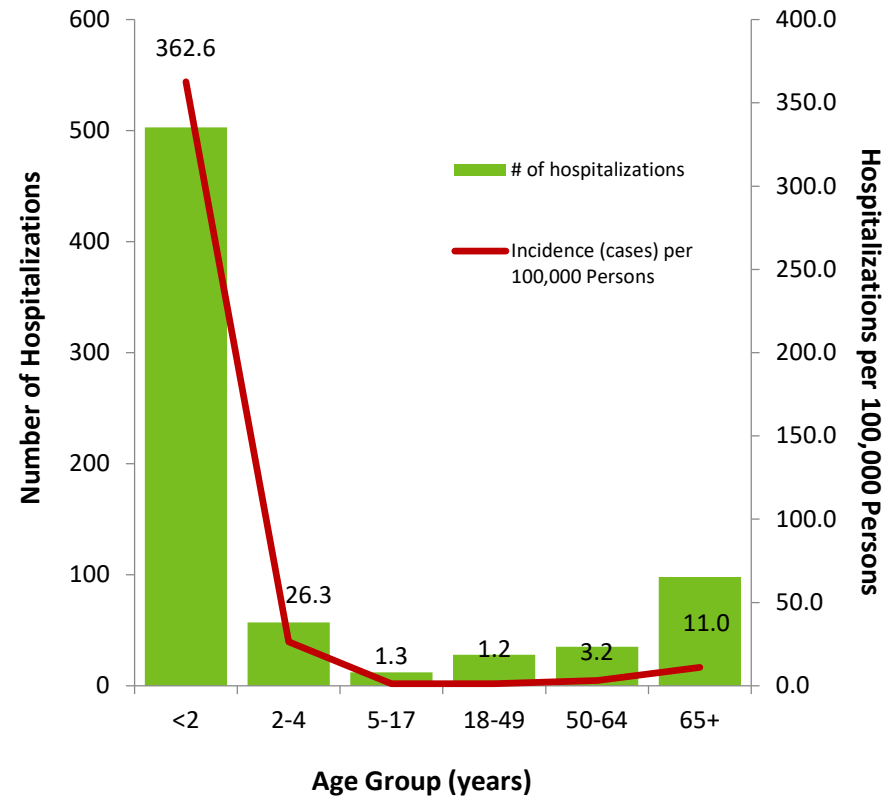
Hospitalized RSV Surveillance

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

n/a

Hospitalizations last week

n/a

Total hospitalizations

733

Median age at time of admission

9 months

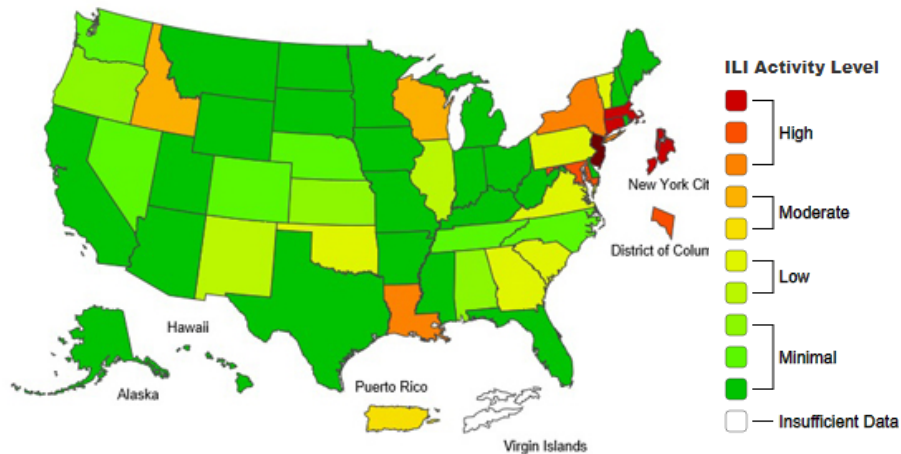
Weekly U.S. Influenza Surveillance Report

2019-2020 Influenza Season Week 16, ending April 18, 2020

Note: The COVID-19 pandemic is affecting healthcare seeking behavior. The number of persons and their reasons for seeking care in the outpatient and ED settings is changing. These changes impact data from ILINet in ways that are difficult to differentiate from changes in illness levels, therefore ILINet data should be interpreted with caution.

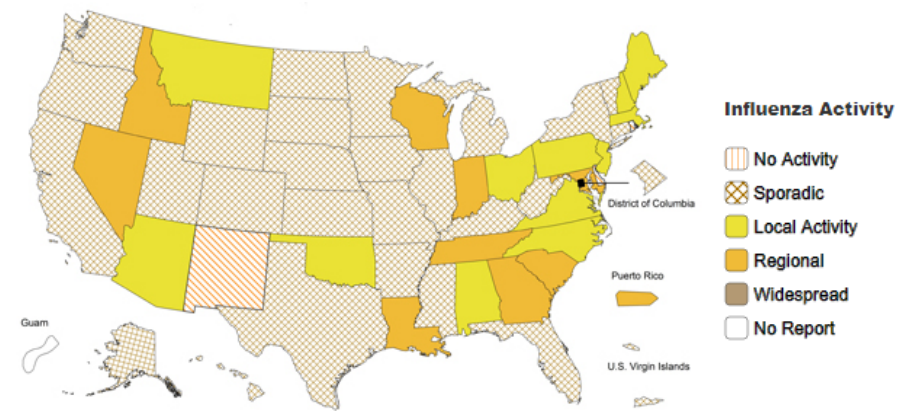
Laboratory confirmed flu activity as reported by clinical laboratories is now low. Influenza-like illness activity continues to decrease and is below the national baseline. The percent of deaths due to pneumonia or influenza (P&I) is high but the increase is due primarily to COVID-19, not influenza. Reported pediatric flu deaths for the season are high at 169.

Influenza-Like Illness (ILI) Activity: Outpatient Illness



The number of jurisdictions experiencing high or very high ILI activity decreased from 12 last week to 8 this week.

Geographic Spread of Influenza



The number of jurisdictions reporting regional or widespread influenza activity decreased from 17 last week to 10 this week.

Key Messages from CDC

- Nationally, influenza activity is now low.
- With ongoing declines in influenza activity and the continued effects of the COVID-19 pandemic, FluView will be abbreviated for the remainder of the 2019-2020 season.