

# Weekly Influenza & Respiratory Illness Activity Report

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

## Summary of the 2019-20 Influenza Season

### Summary of the 2019-20 Influenza Season:

- 4,022 people were hospitalized with laboratory-confirmed influenza
- 3 pediatric influenza-associated deaths were reported
- 197 influenza-associated deaths were reported
- 109 outbreaks of influenza in long-term care facilities were reported
- 921 outbreaks of influenza-like illness in K-12 schools were reported

[Weekly Influenza & Respiratory Activity: Statistics \(https://www.health.state.mn.us/diseases/flu/stats/index.html\)](https://www.health.state.mn.us/diseases/flu/stats/index.html)

[Weekly U.S. Influenza Surveillance Report \(http://www.cdc.gov/flu/weekly/\)](http://www.cdc.gov/flu/weekly/)

World Health Organization (WHO): [Influenza Updates \(http://www.who.int/influenza/surveillance\\_monitoring/updates/en/\)](http://www.who.int/influenza/surveillance_monitoring/updates/en/)

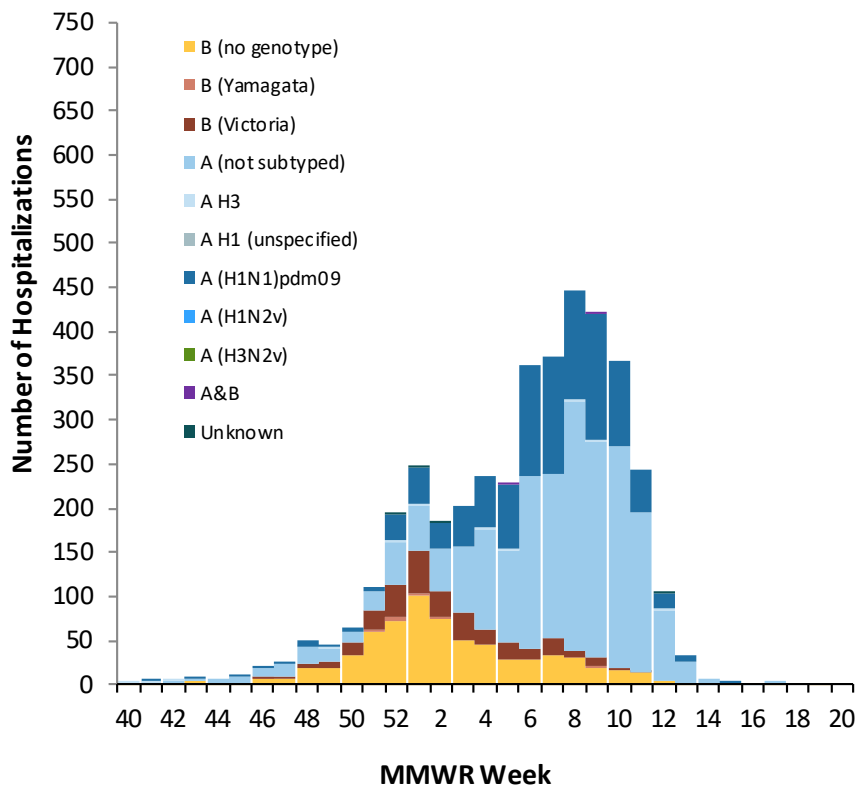
Neighboring states' influenza information:

- [Iowa Flu Reports \(https://idph.iowa.gov/influenza/reports\)](https://idph.iowa.gov/influenza/reports)
- Wisconsin: [Influenza \(Flu\) \(https://www.dhs.wisconsin.gov/influenza/index.htm\)](https://www.dhs.wisconsin.gov/influenza/index.htm)
- North Dakota: [Influenza \(https://www.health.nd.gov/flu\)](https://www.health.nd.gov/flu)
- [South Dakota Influenza Information \(http://doh.sd.gov/diseases/infectious/flu/\)](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.**

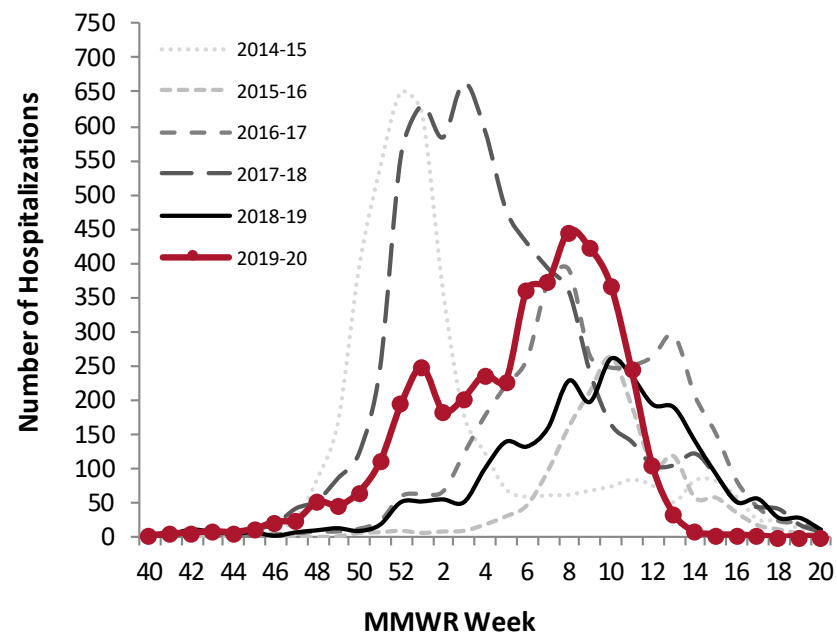
## Hospitalized Influenza Cases by Type Minnesota (FluSurv-NET\*)



**Total hospitalizations**

4,022

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

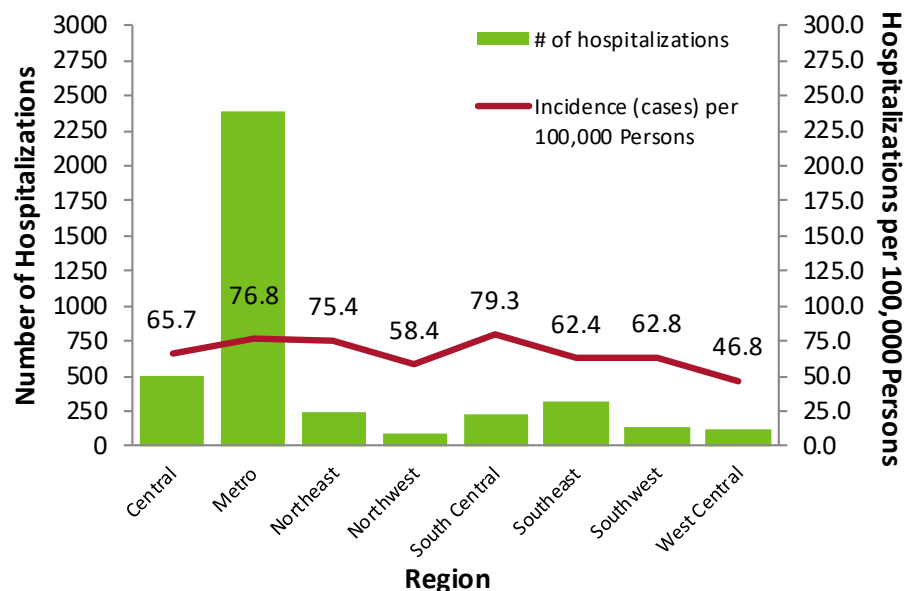


Season	Total hospitalizations (historic)
2014-2015	4,081
2015-2016	1,538
2016-2017	3,695
2017-2018	6,446
2018-2019	2,543
<b>2019-2020</b>	<b>4,022</b>

\*Influenza Surveillance Network

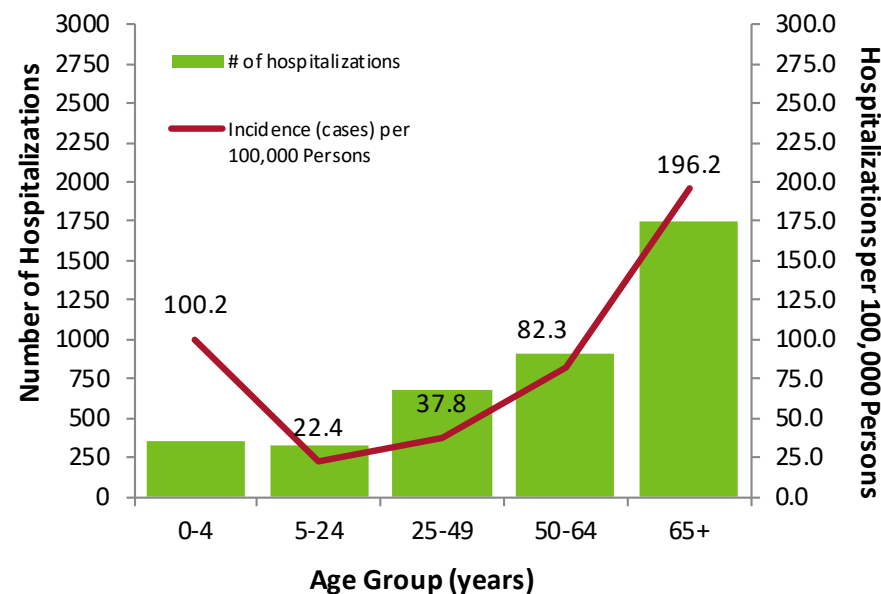
# Hospitalized Influenza Surveillance (continued)

## Number of Influenza Hospitalizations and Incidence by Region, Minnesota September 29, 2019 – May 16, 2020



Region	Total
Central	503 (13%)
Metro	2,381 (59%)
Northeast	245 (6%)
Northwest	93 (2%)
South Central	232 (6%)
Southeast	318 (8%)
Southwest	136 (3%)
West Central	114 (3%)

## Number of Influenza Hospitalizations and Incidence by Age, Minnesota September 29, 2019 – May 16, 2020

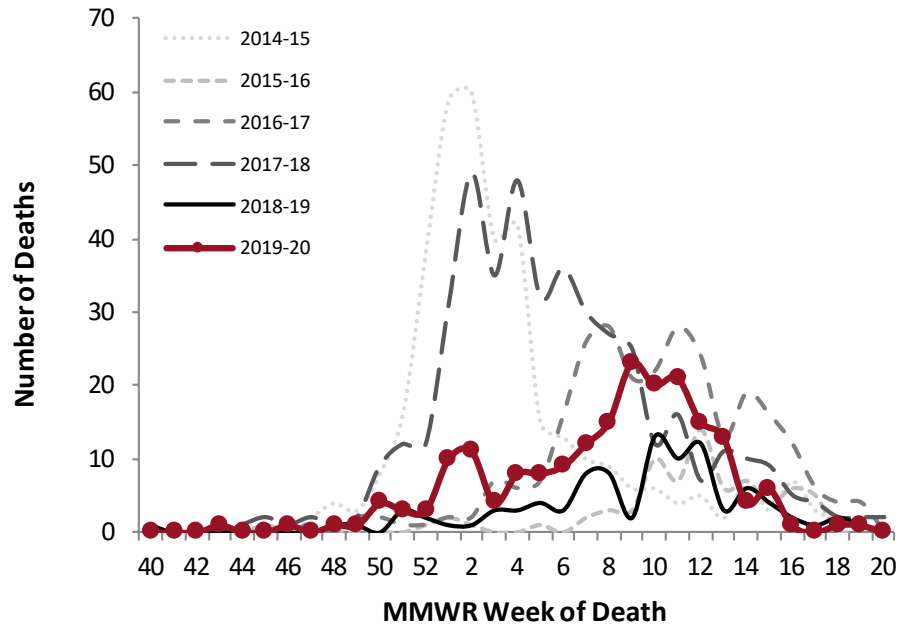


Median age (years) at time of admission
61.0

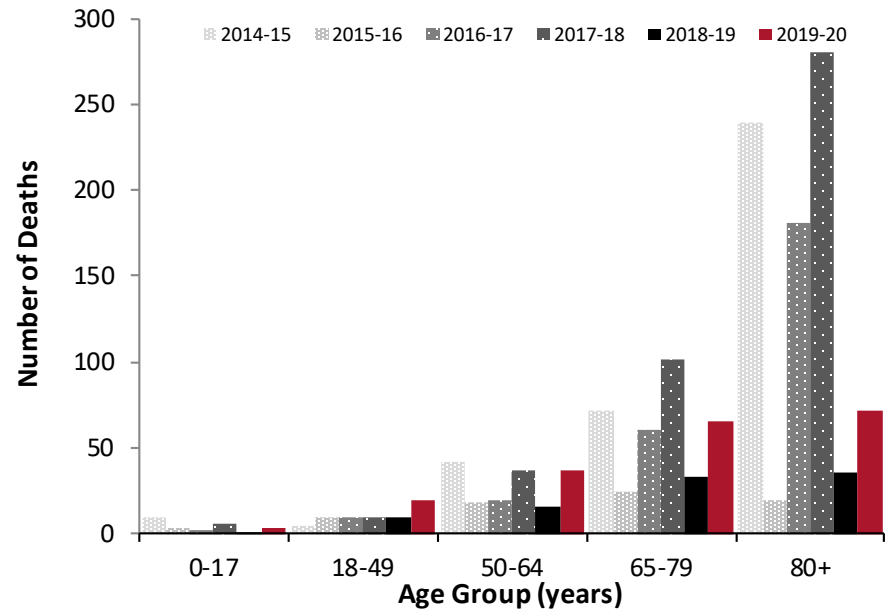
# Influenza-Associated Death Surveillance

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>197</b>	<b>3</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</b>

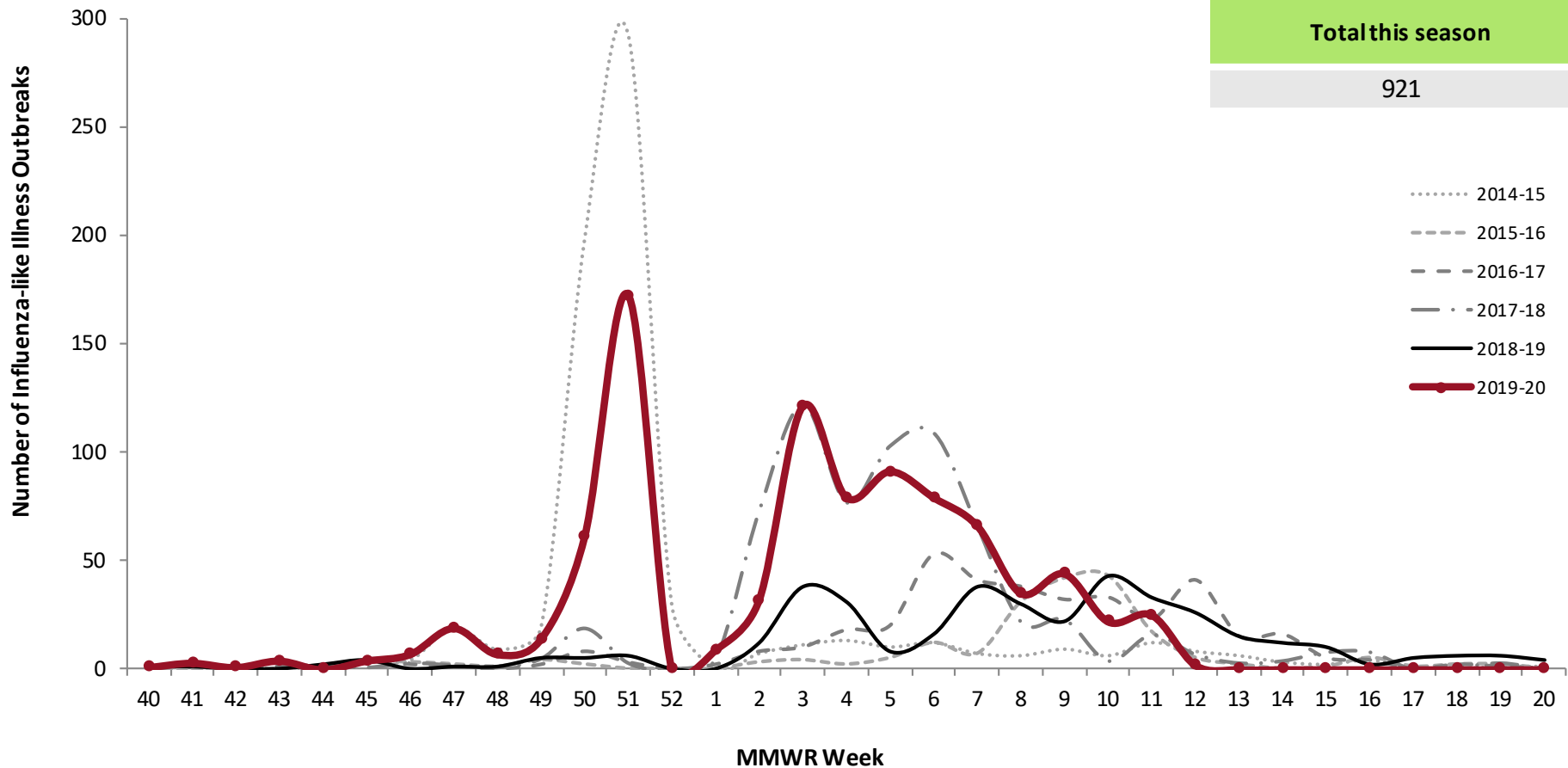
\*Influenza Surveillance Network

# 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.

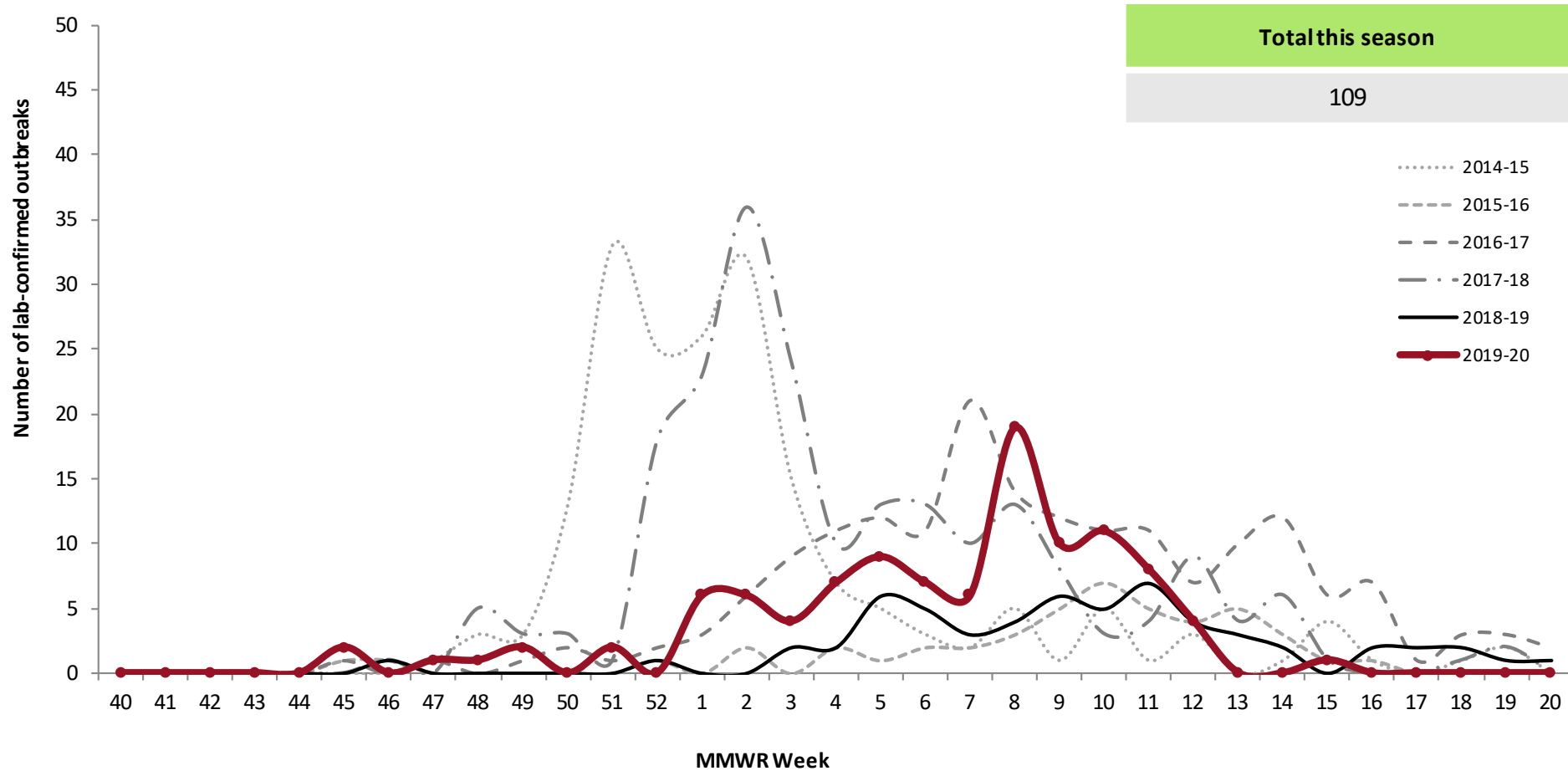
### Influenza-like Illness (ILI) in Schools by Season



## 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.

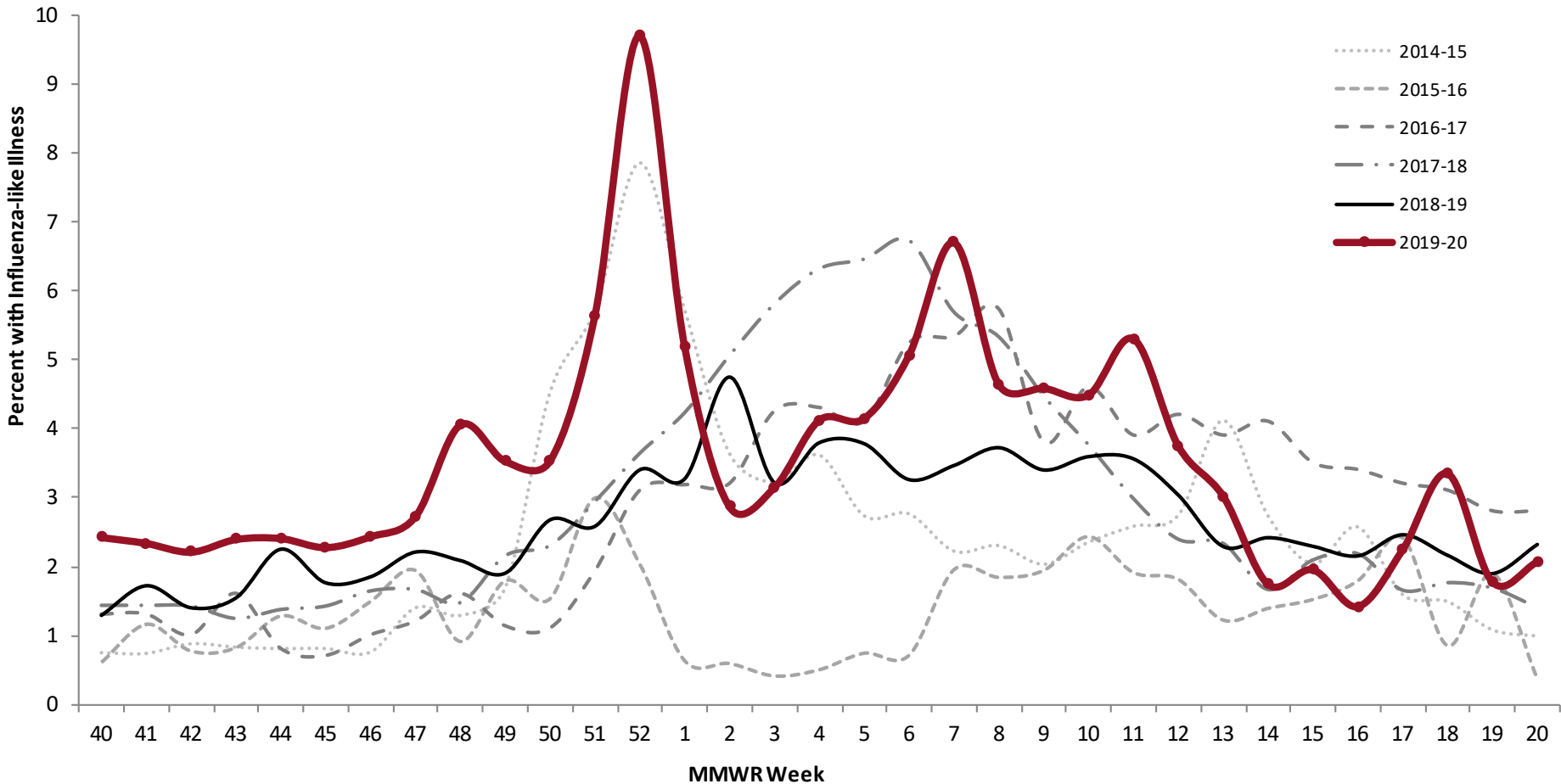
### Confirmed Influenza Outbreaks in LTC by Season



# 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.

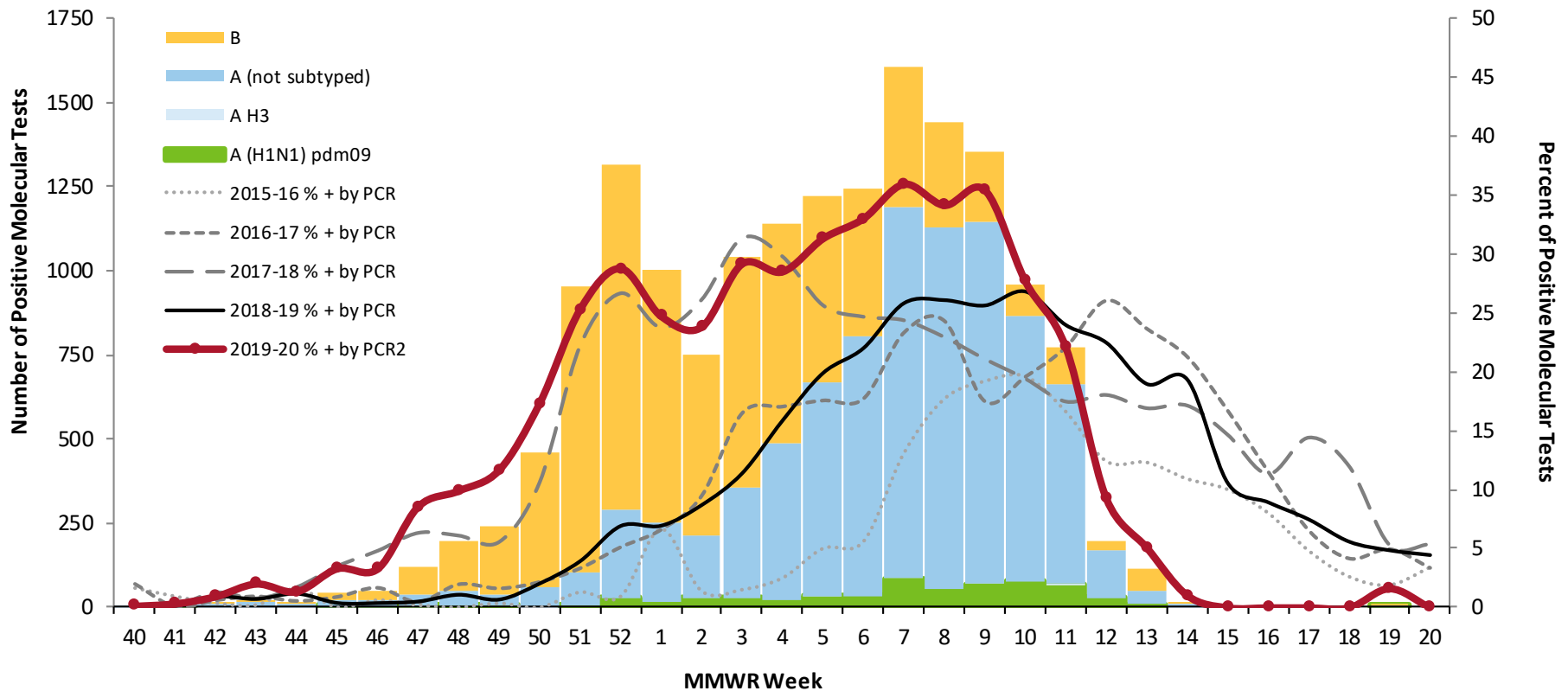
## Percentage of Persons Presenting to Outpatient Clinics with Influenza-Like Illness (ILI)



# 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



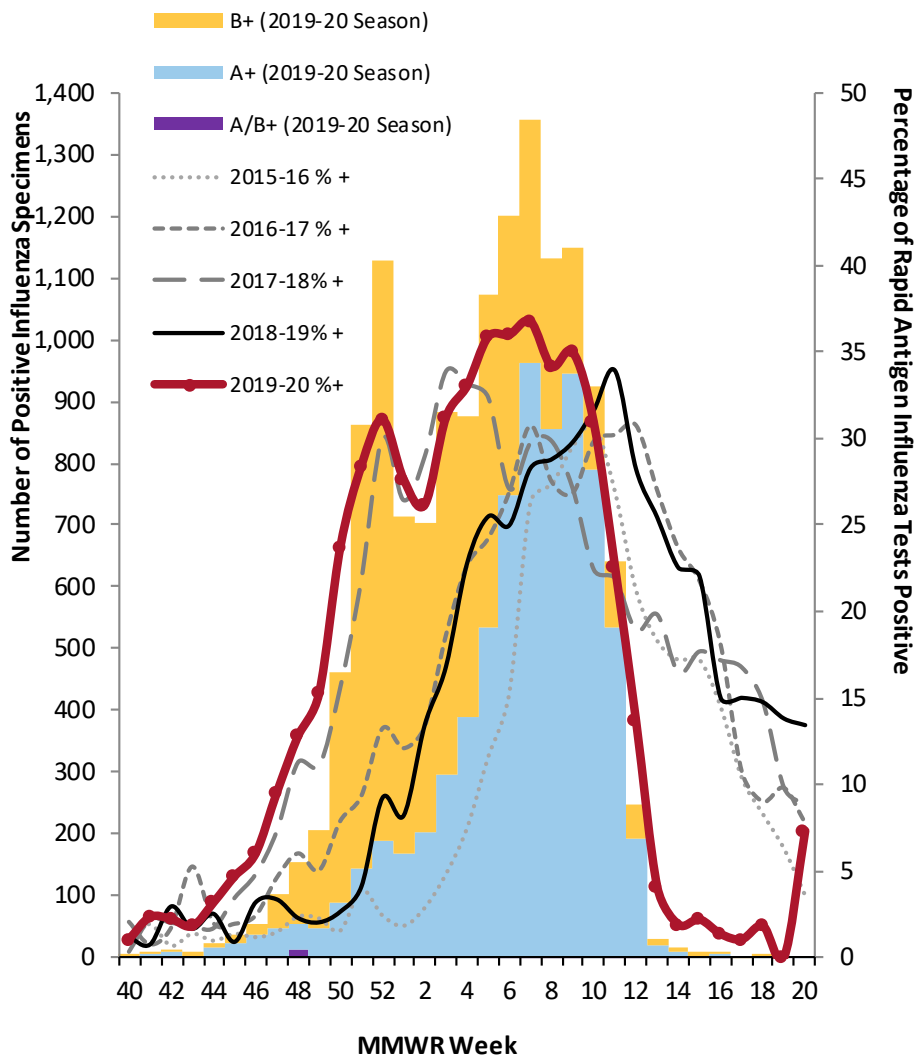
\* Beginning in 2016-17, laboratories report results for rapid molecular influenza tests in addition to RT-PCR results



# Laboratory Surveillance (continued)

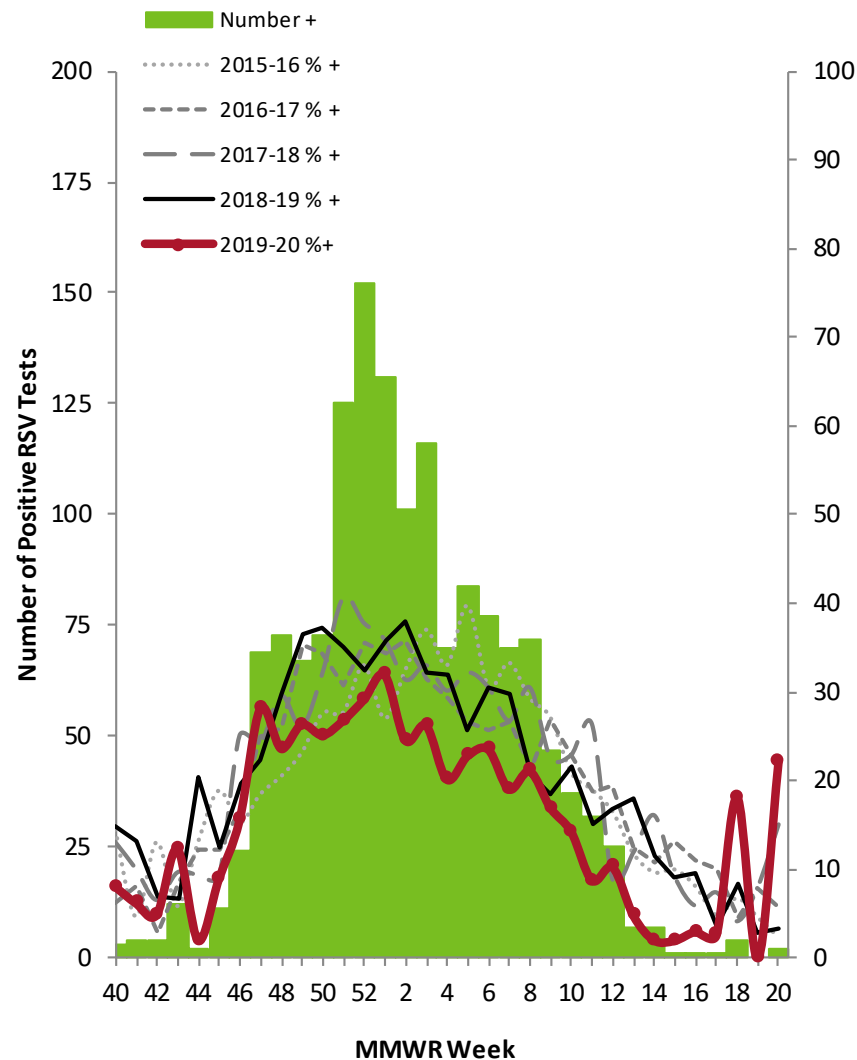
## MLS Laboratories – Influenza Testing

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



## MLS Laboratories – RSV Testing

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



# Weekly U.S. Influenza Surveillance Report

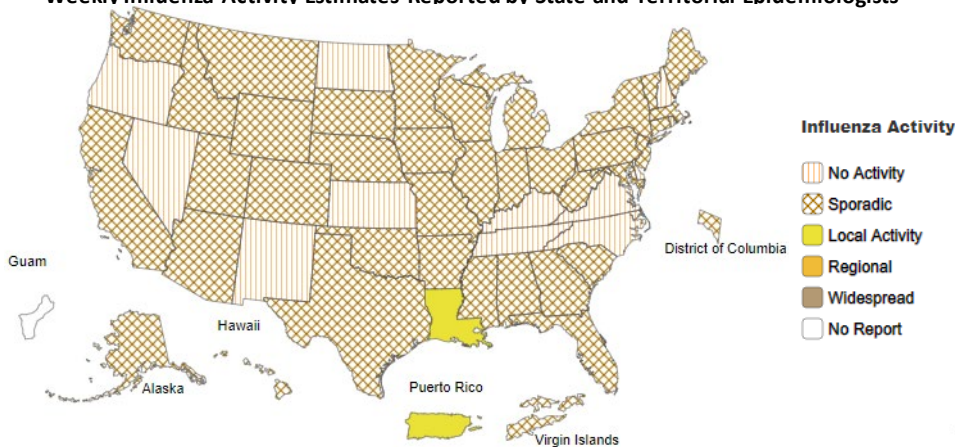
2019-2020 Influenza Season Week 41 ending October 10, 2020

CDC: [Weekly U.S. Influenza Surveillance Report \(http://www.cdc.gov/flu/weekly/\)](http://www.cdc.gov/flu/weekly/)

Influenza activity continues to decrease in the United States.

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased. During the most recent three weeks, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses nationally.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) decreased to 1.5%, which is below the national baseline of 2.2%. All regions reported ILI below their region-specific baseline level.
  - **ILI State Activity Indicator Map:** Puerto Rico and one state experienced low ILI activity; and New York City and 49 states experienced minimal ILI activity; and the District of Columbia and the U.S. Virgin Islands had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and four states was reported as regional; 16 states reported local activity; the District of Columbia, the U.S. Virgin Islands and 28 states reported sporadic activity; two states reported no activity; and Guam did not report.
- **Influenza-associated Hospitalizations:** A cumulative rate of 65.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (221.8 hospitalizations per 100,000 population).
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Three influenza-associated pediatric deaths were reported to CDC during week 19.

A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*



\*This map indicates geographic spread and does not measure the severity of influenza activity.

A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

