

# 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 10, 2018 | WEEK 6

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

### Minnesota Influenza Geographic Spread

No Activity	<p>During the week ending February 10, 2018 (Week 6), surveillance indicators showed widespread geographic spread of influenza.</p> <p>Since the start of the influenza season, four pediatric influenza-related deaths have been reported.</p>
Sporadic	
Local	
Regional	
<b>Widespread</b>	

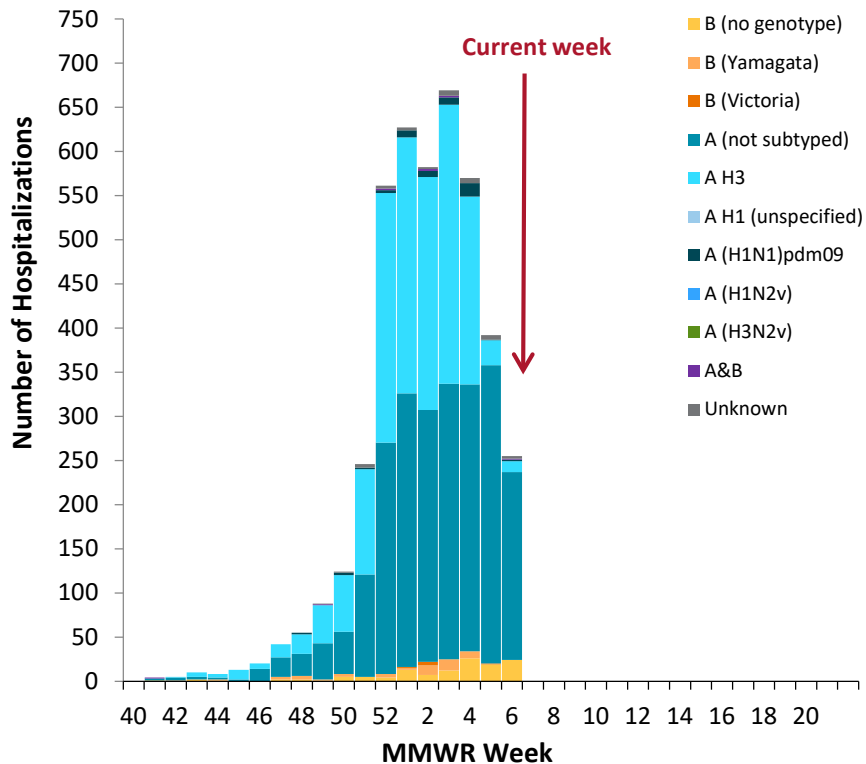
Based on CDC's Activity Estimates Definitions: <http://www.cdc.gov/flu/weekly/overview.htm>

Minnesota Influenza Surveillance: <http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/>  
Weekly U.S. Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>  
World Health Organization (WHO) Surveillance: [http://www.who.int/influenza/surveillance\\_monitoring/updates/en/](http://www.who.int/influenza/surveillance_monitoring/updates/en/)  
Neighboring states' influenza information:  
Iowa <http://www.idph.state.ia.us/IdphArchive/Archive.aspx?channel=FluReports>  
Wisconsin <http://www.dhs.wisconsin.gov/communicable/influenza/surveillance.htm>  
North Dakota <http://www.ndflu.com/default.aspx>  
South Dakota <http://doh.sd.gov/diseases/infectious/flu/>

# Hospitalized Influenza Surveillance

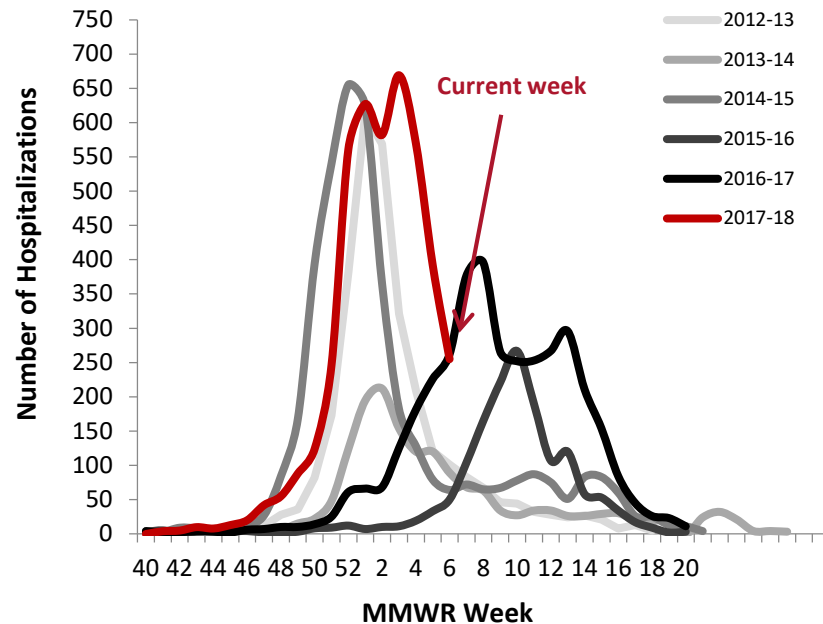
Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. **Due 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)
255	392	4,271

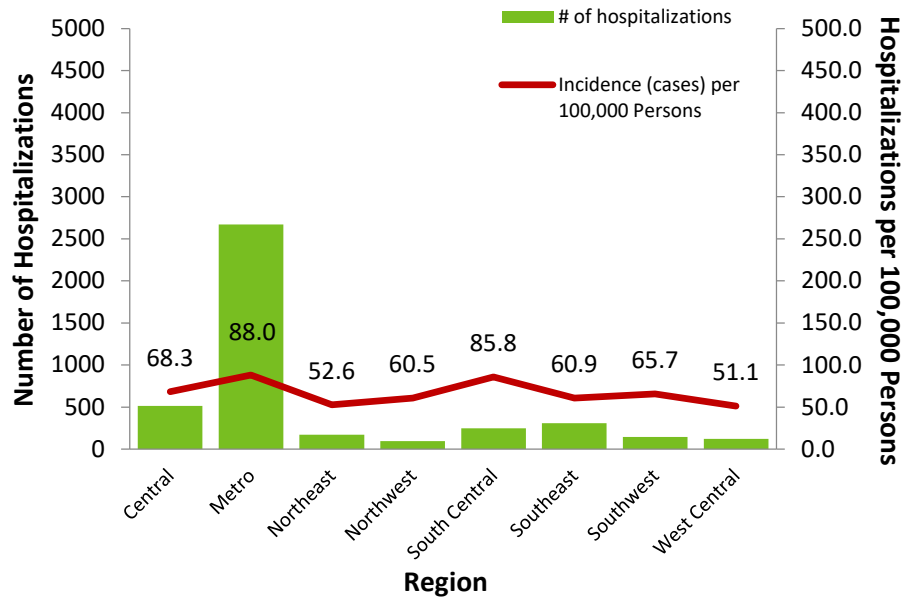
### Hospitalized Influenza Cases by Season, Minnesota (FluSurv-NET\*)



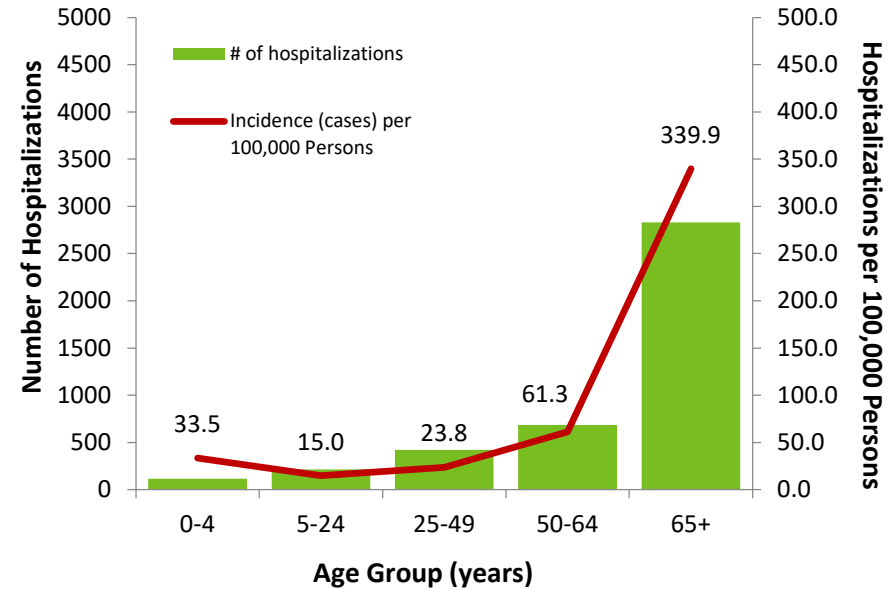
Season	Total hospitalizations (historic)
2012-2013	3,068
2013-2014	1,540
2014-2015	4,138
2015-2016	1,541
2016-2017	3,738
<b>2017-2018</b>	<b>4,271 (to date)</b>

# Hospitalized Influenza Surveillance (continued)

## Number of Influenza Hospitalizations and Incidence by Region, Minnesota October 1, 2017 – February 10, 2018



## Number of Influenza Hospitalizations and Incidence by Age, Minnesota October 1, 2017 – February 10, 2018



Region	Hospitalizations this week	Total (to date)
Central	33 (13%)	512 (12%)
Metro	146 (57%)	2,670 (63%)
Northeast	11 (4%)	171 (4%)
Northwest	12 (5%)	96 (2%)
South Central	20 (8%)	249 (6%)
Southeast	15 (6%)	307 (7%)
Southwest	9 (4%)	143 (3%)
West Central	9 (4%)	123 (3%)

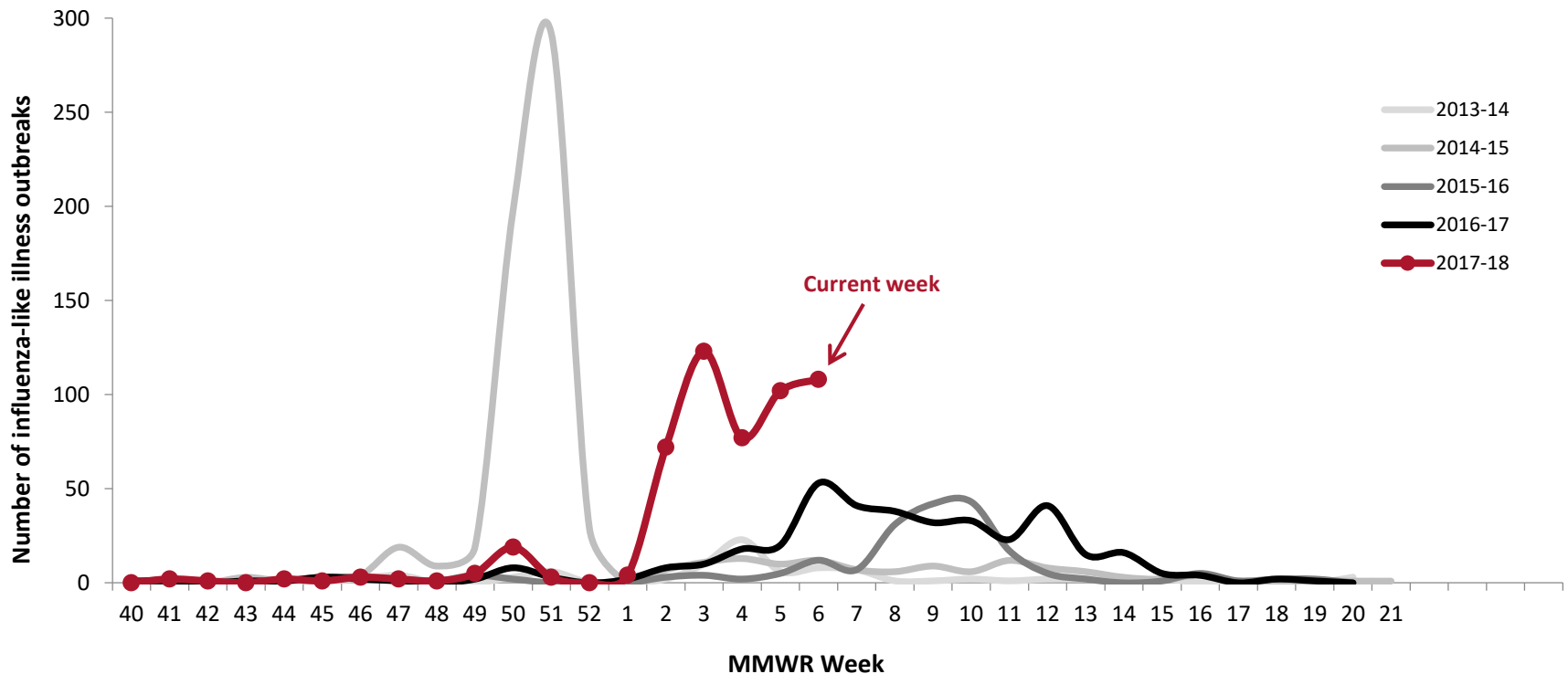
Median age (years) at time of admission
74.0

# 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

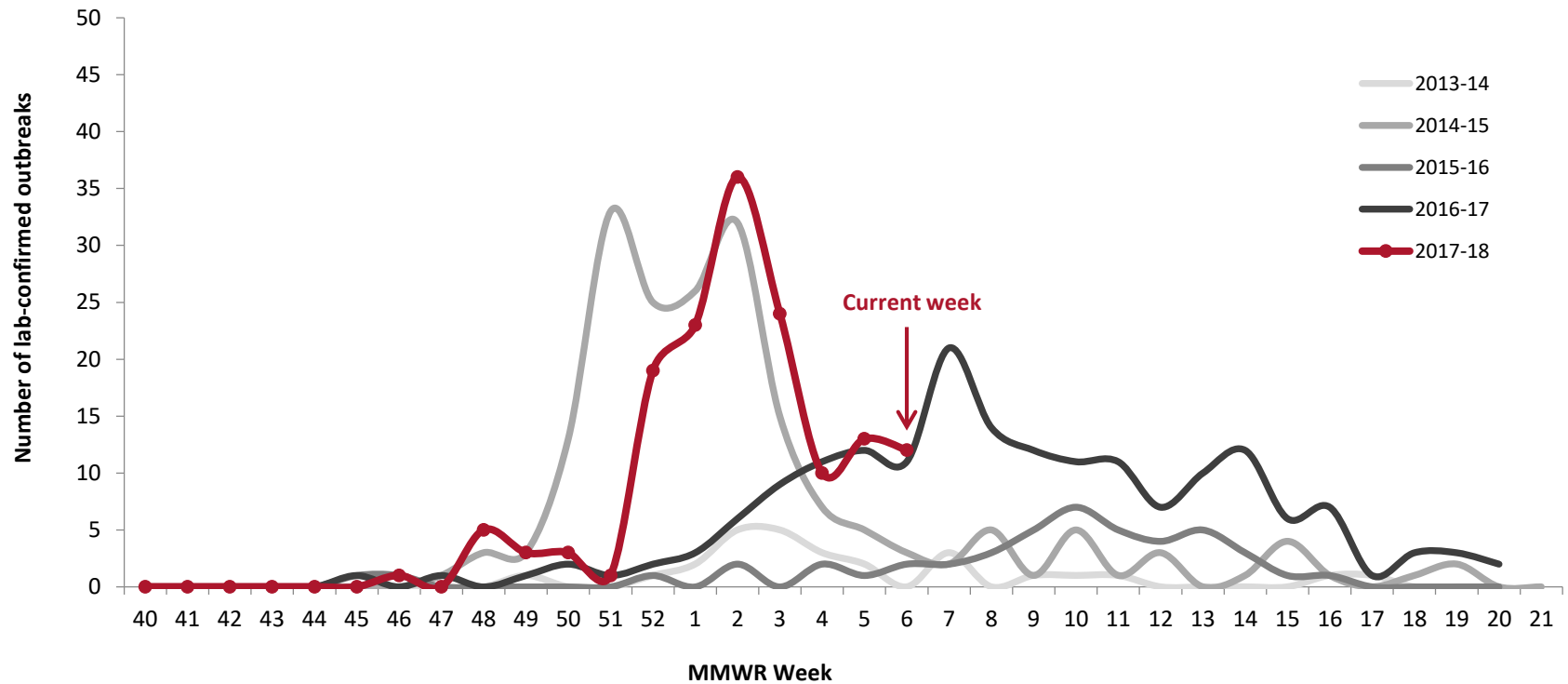


New school outbreaks this week	New school outbreaks last week	Total this season (to date)
108	102	525

## 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

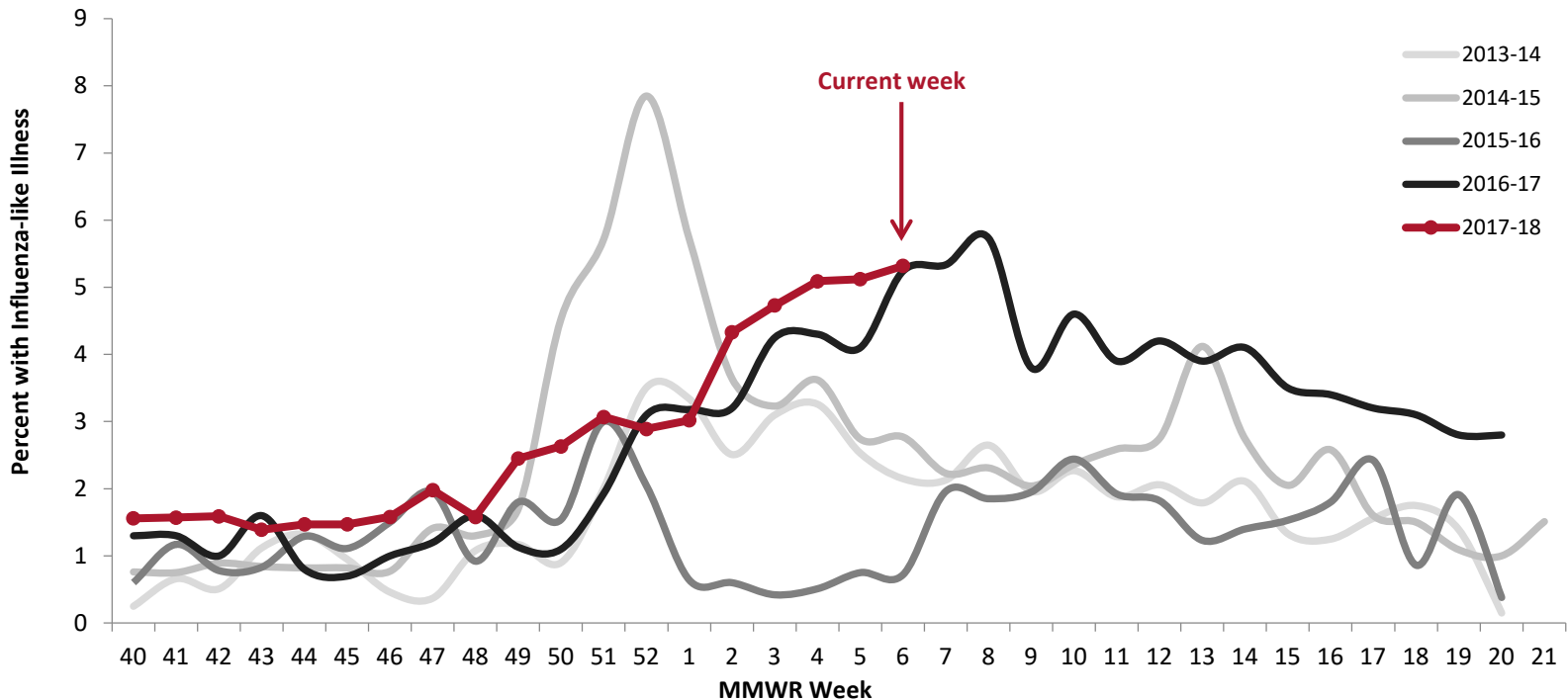


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
12	10	150

# 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)



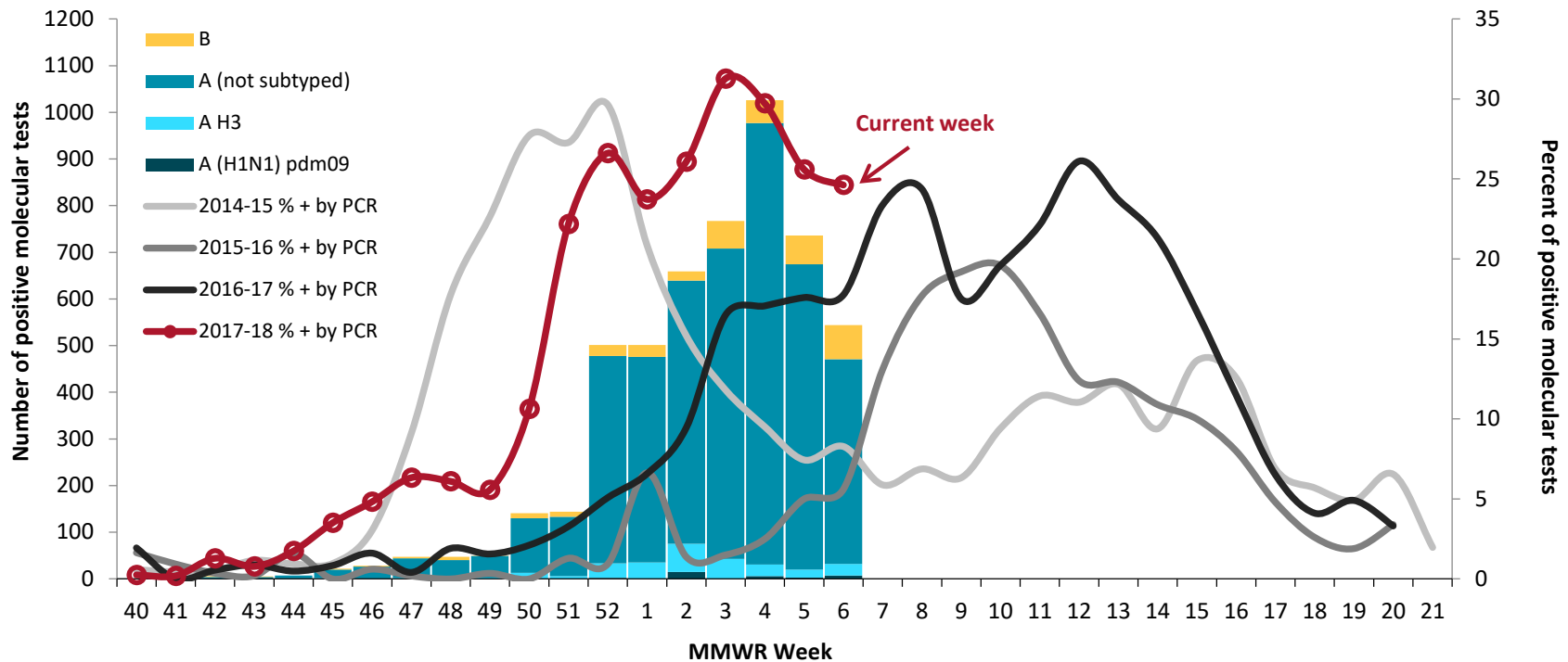
% of outpatients with ILI this week	% of outpatients with ILI last week
5.3%	5.1%

\* 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



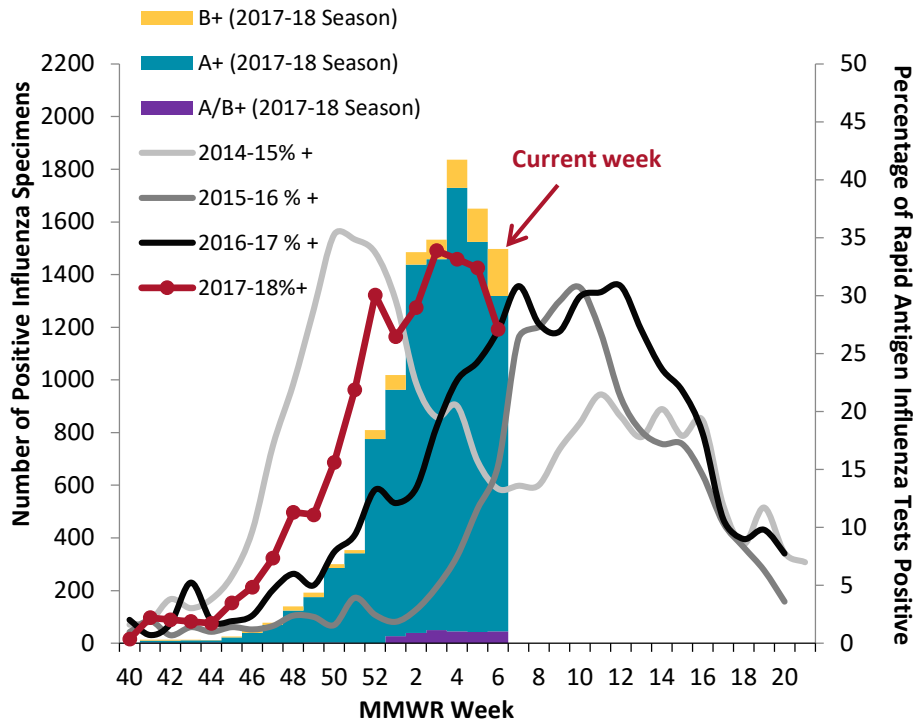
% molecular tests positive this week	% molecular tests positive last week
24.6%	25.6%

\* 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

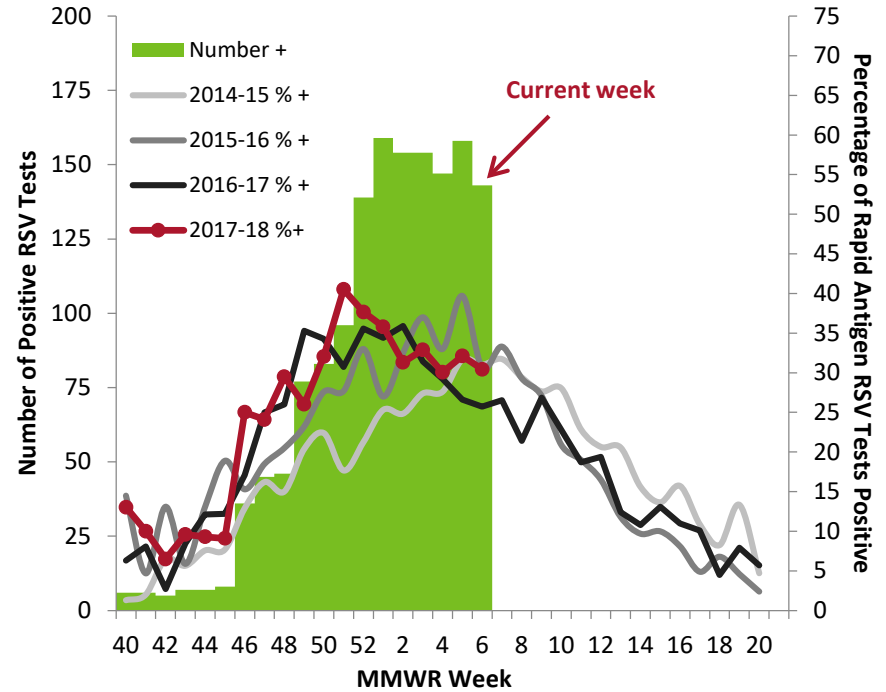
### Specimens Positive by Influenza Rapid Antigen Test, by Week



Region	% rapid antigen influenza tests + (current week)
Northeast	10%
South Central	23%
Southwest	26%
Southeast	33%
Metro	34%
Central	27%
West Central	34%
Northwest	19%
State (overall)	27%

## MLS Laboratories – RSV Testing

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



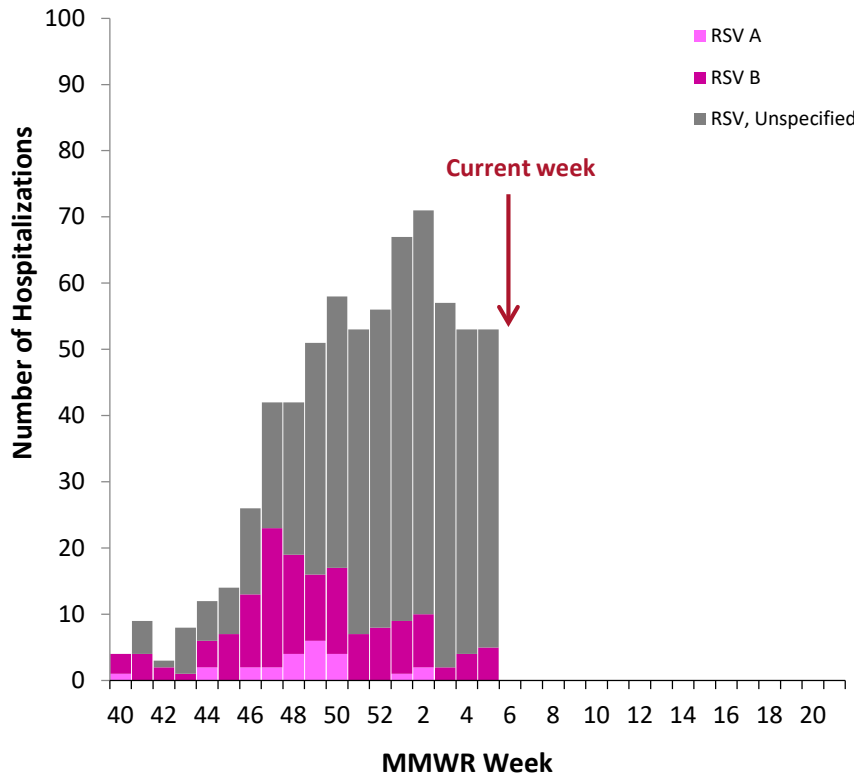
Region	% rapid antigen RSV tests + (current week)
Northeast	42%
South Central	21%
Southwest	36%
Southeast	33%
Metro	17%
Central	35%
West Central	30%
Northwest	44%
State (overall)	30%



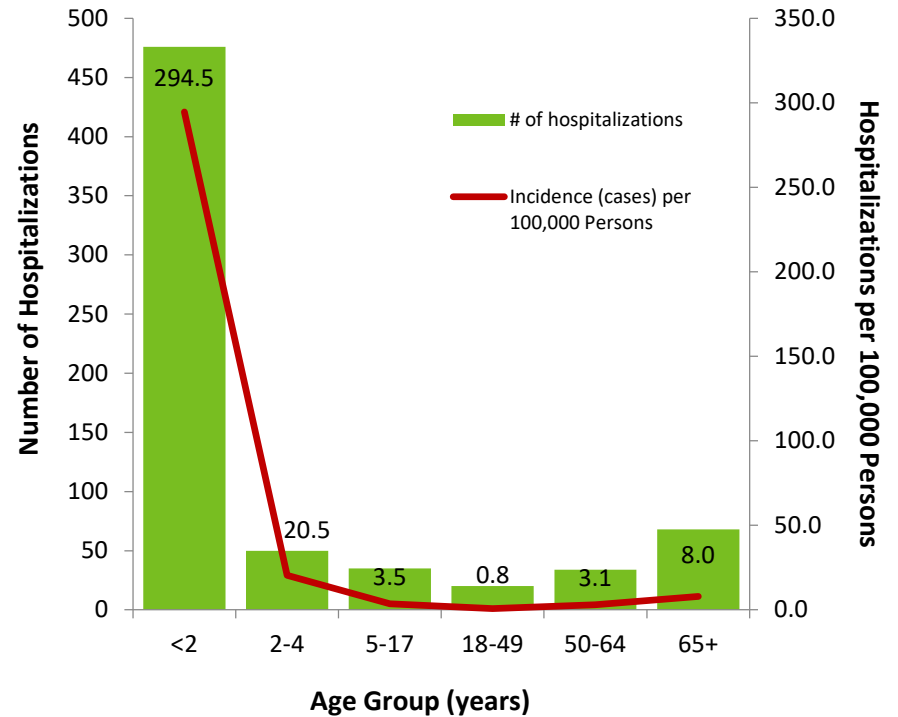
# Hospitalized RSV Surveillance

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 (to date)
53	53	683

Median age at time of admission
8.6 months

# Weekly U.S. Influenza Surveillance Report

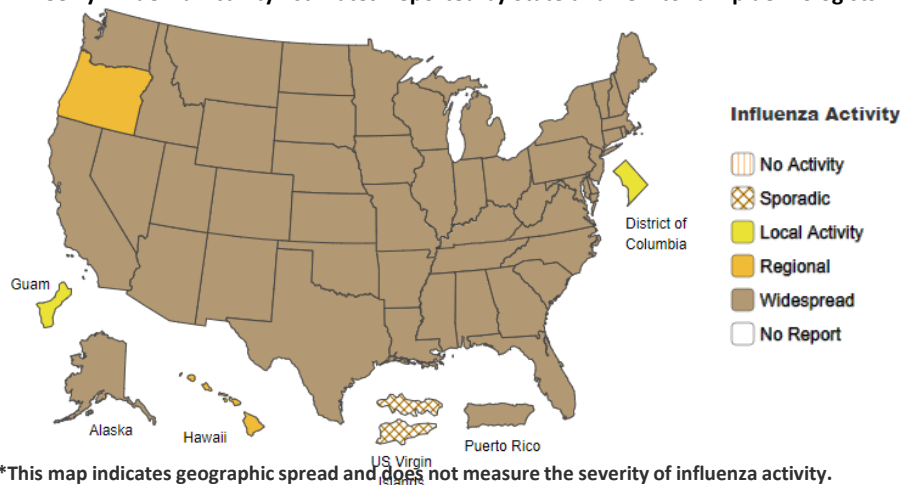
2017-2018 Influenza Season Week 5 ending February 3, 2018

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

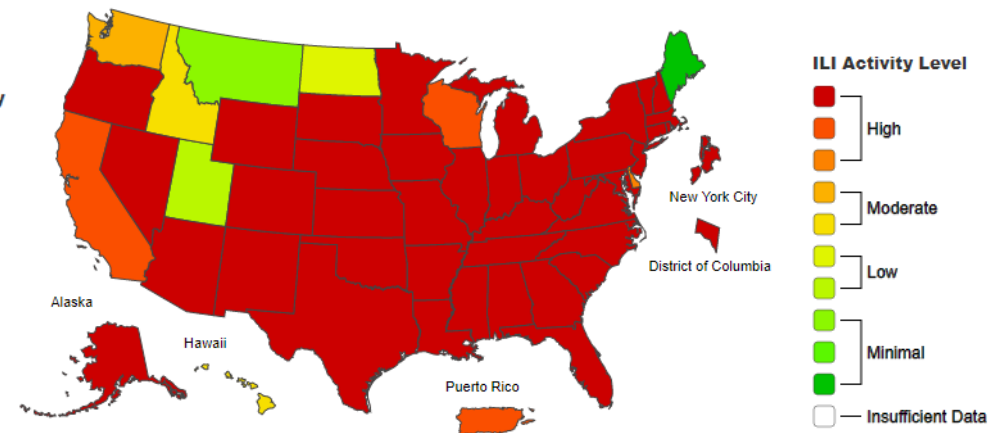
During week 5 (January 28-February 3, 2018), influenza activity increased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 5 was influenza A(H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories remained elevated.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Ten influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 59.9 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 7.7%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above region-specific baseline levels. New York City, the District of Columbia, Puerto Rico and 43 states experienced high ILI activity; three states experienced moderate ILI activity; two states experienced low ILI activity; and two states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 48 states was reported as widespread; two states reported regional activity; the District of Columbia and Guam reported local activity; and the U.S. Virgin Islands reported sporadic activity.

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



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



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