

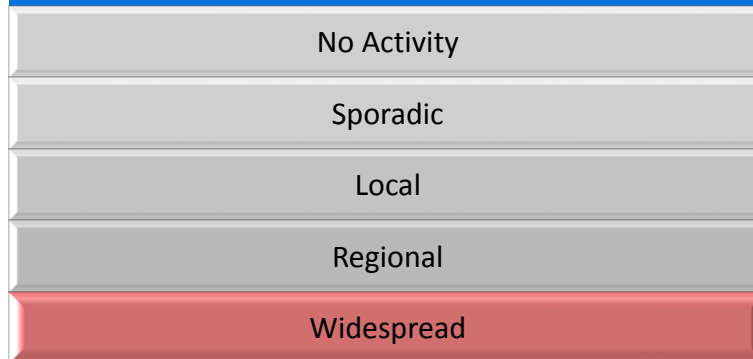
# Weekly Influenza & Respiratory Illness Activity Report

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

## Week Ending March 4, 2017 | WEEK 9

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

### Minnesota Influenza Geographic Spread



During the week ending March 4, 2017 (Week 9), surveillance indicators showed widespread geographic spread of influenza.

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

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/>



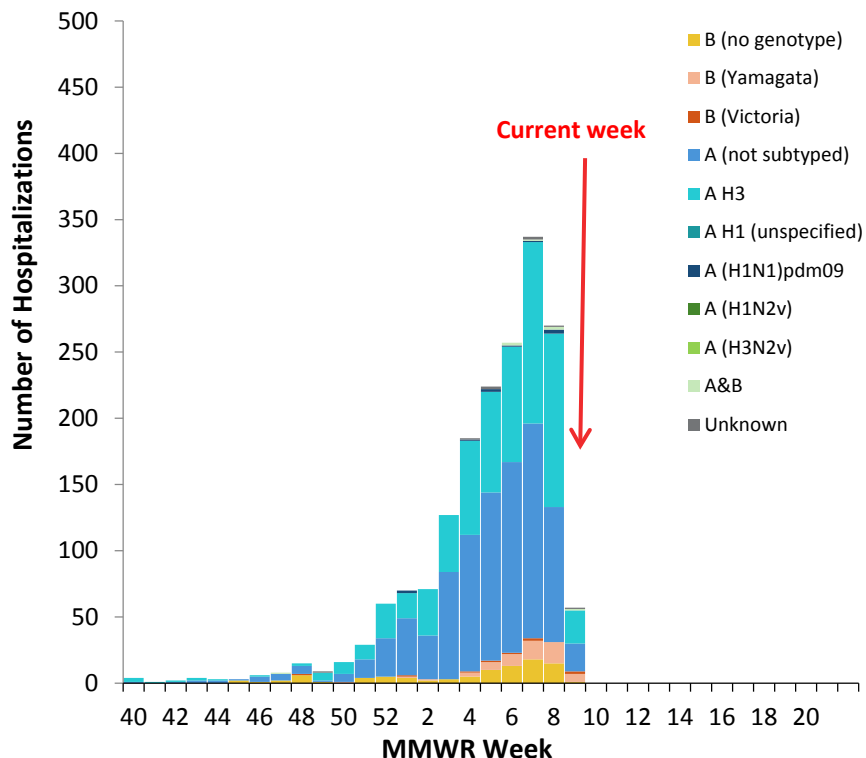
Minnesota  
Department of Health

Minnesota Department of Health  
651-201-5414 or 1-877-676-5414  
[www.health.state.mn.us](http://www.health.state.mn.us)

# Hospitalized Influenza Surveillance

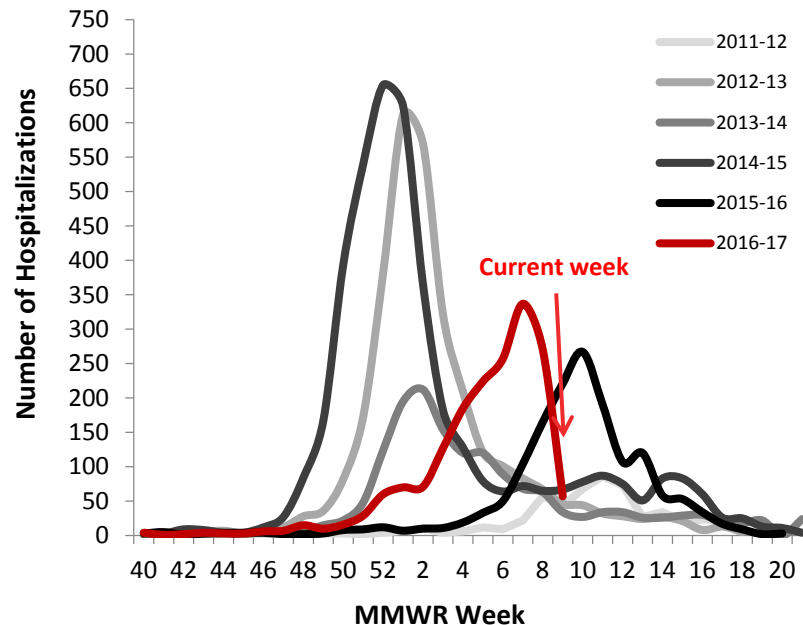
Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. **Due 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)
57	270	1,758

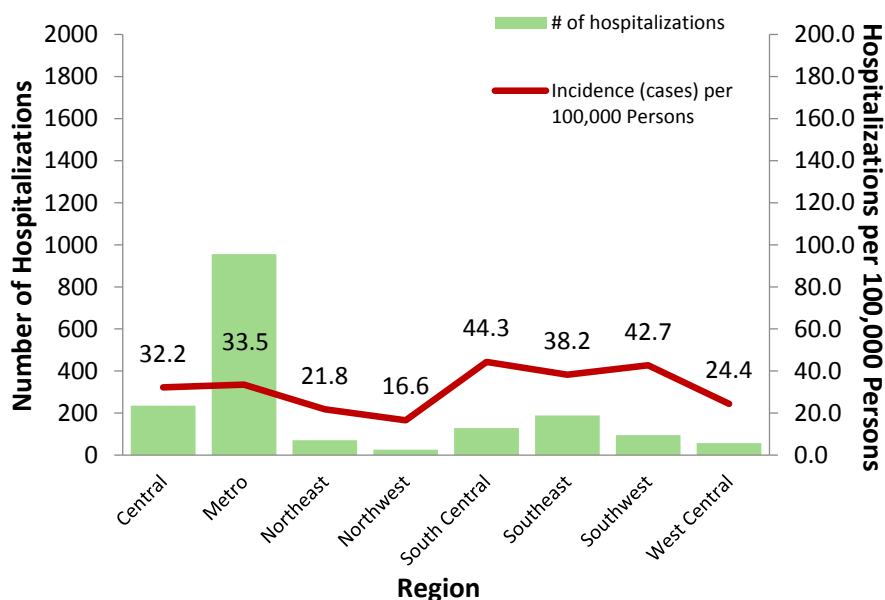
## Hospitalized Influenza Cases by Season, Minnesota (FluSurv-NET\*)



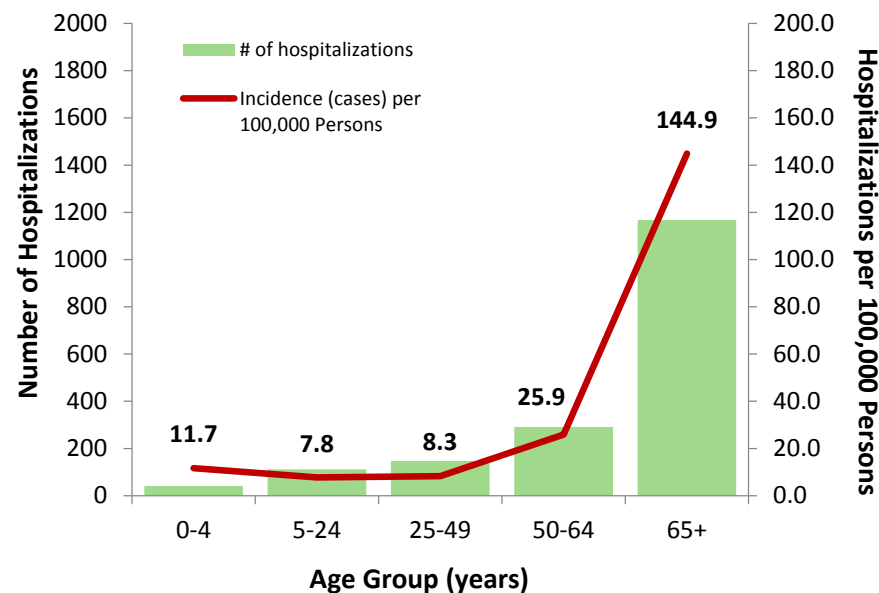
Season	Total hospitalizations (historic)
2011-2012	556
2012-2013	3,068
2013-2014	1,540
2014-2015	4,138
2015-2016	1,541
<b>2016-2017</b>	<b>1,758 (to date)</b>

\*Influenza Surveillance Network

## Number of Influenza Hospitalizations and Incidence by Region, Minnesota October 2, 2016 – March 4, 2017



## Number of Influenza Hospitalizations and Incidence by Age, Minnesota October 2, 2016 – March 4, 2017



Region	Hospitalizations this week	Total (to date)
Central	15 (26%)	235 (13%)
Metro	24 (42%)	956 (54%)
Northeast	2 (4%)	71 (4%)
Northwest	1 (2%)	26 (1%)
South Central	4 (7%)	129 (7%)
Southeast	7 (12%)	189 (11%)
Southwest	3 (5%)	95 (5%)
West Central	1 (2%)	57 (3%)

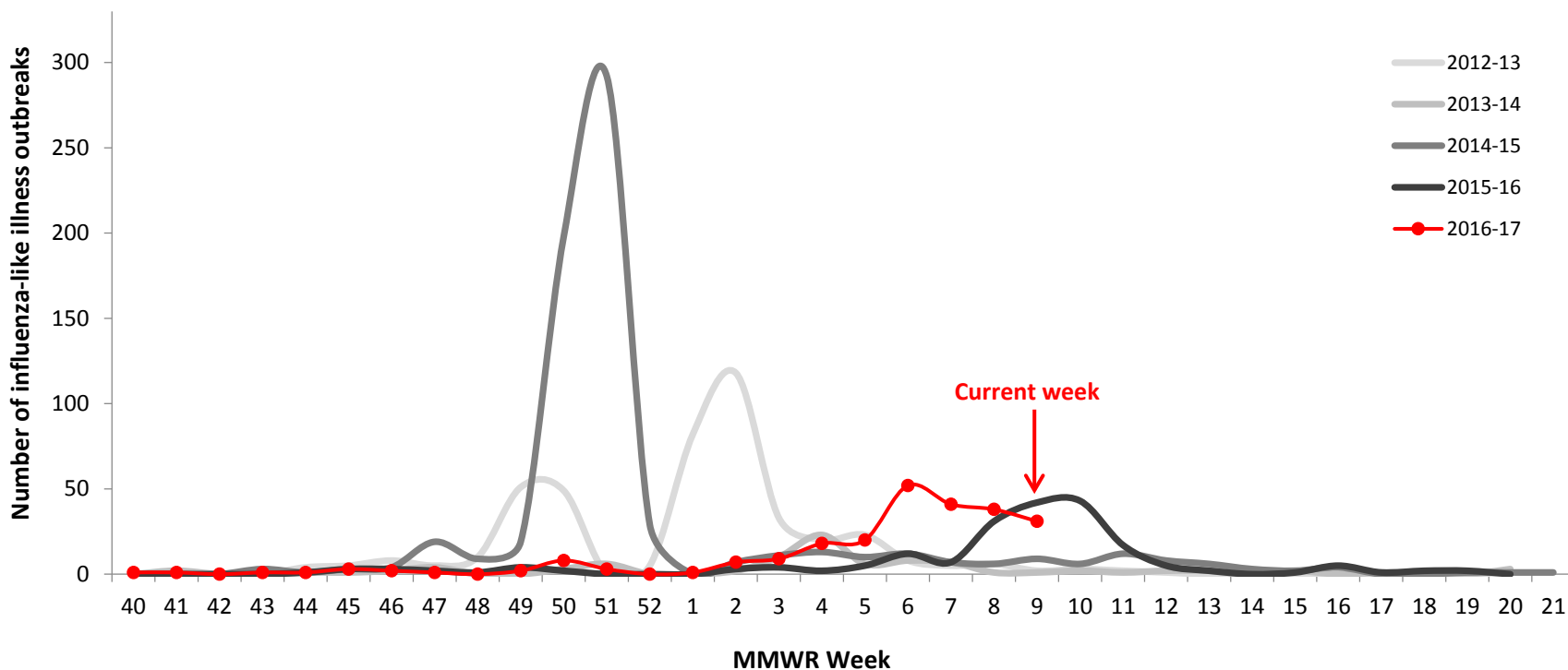
Median age (years) at time of admission
74.0

# 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

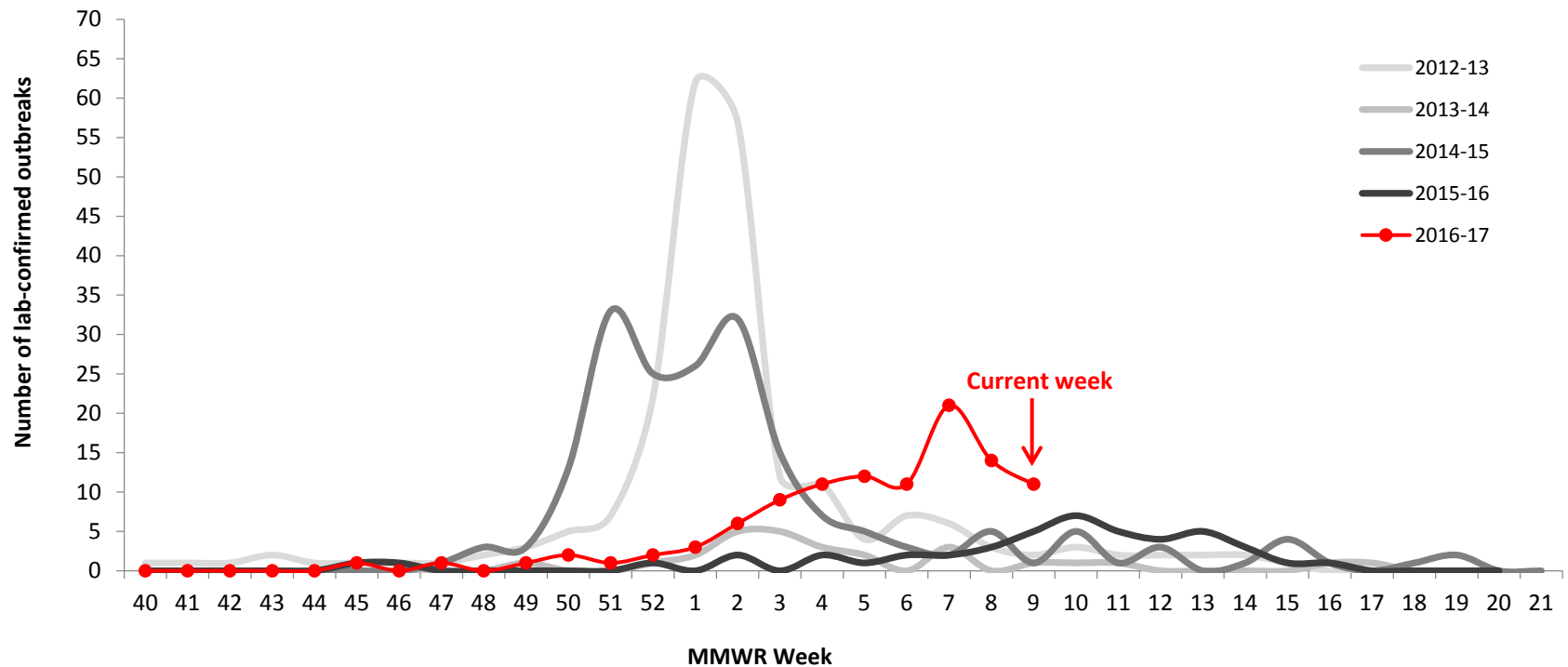


New school outbreaks this week	New school outbreaks last week	Total this season (to date)
31	38	243

## 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

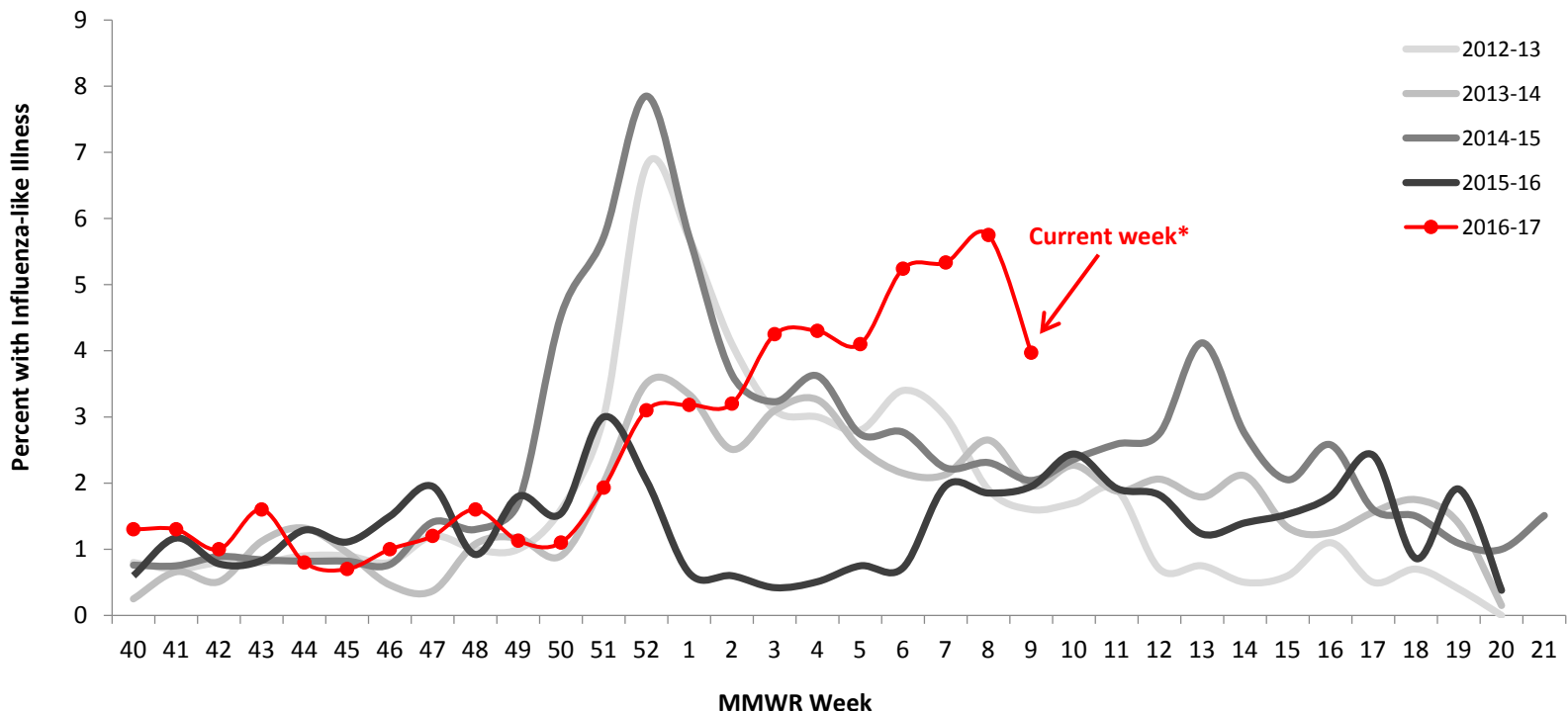


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
11	14	106

# 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)



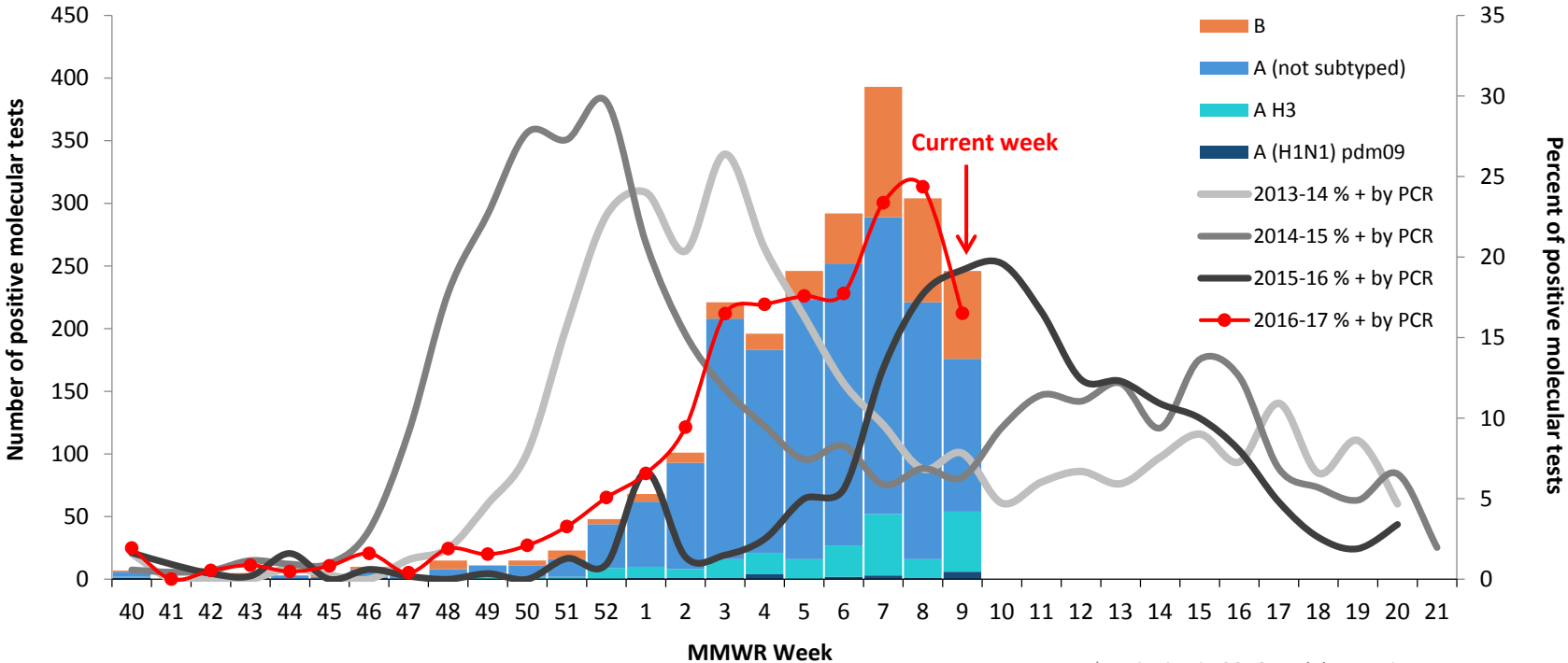
% of outpatients with ILI this week	% of outpatients with ILI last week
3.97%	5.75%

\*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

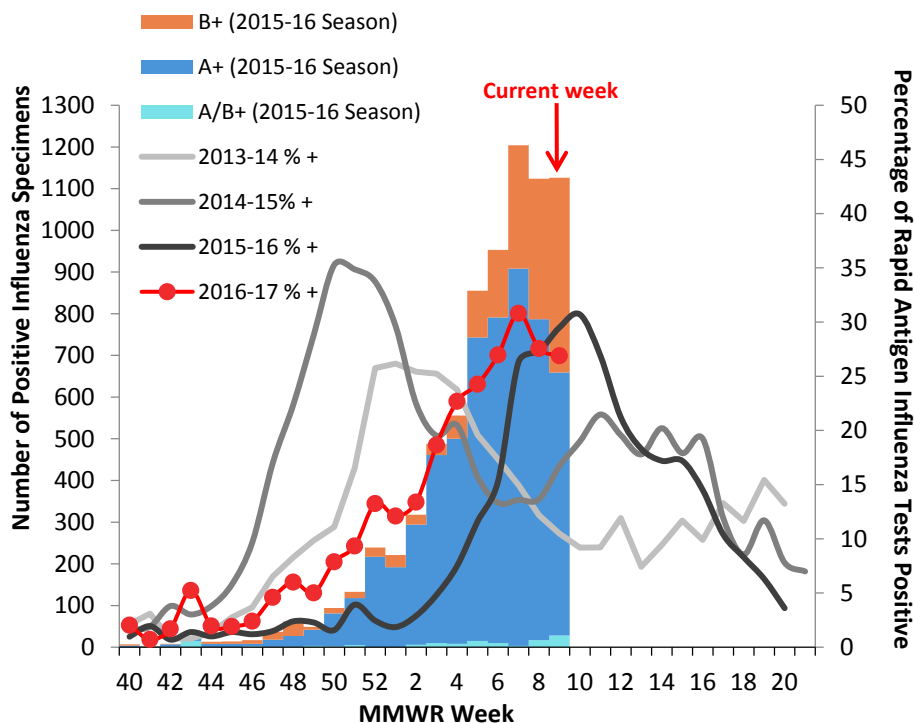


% molecular tests positive this week	% molecular tests positive last week
16.5%	24.4%

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

## MLS Laboratories – Influenza Testing

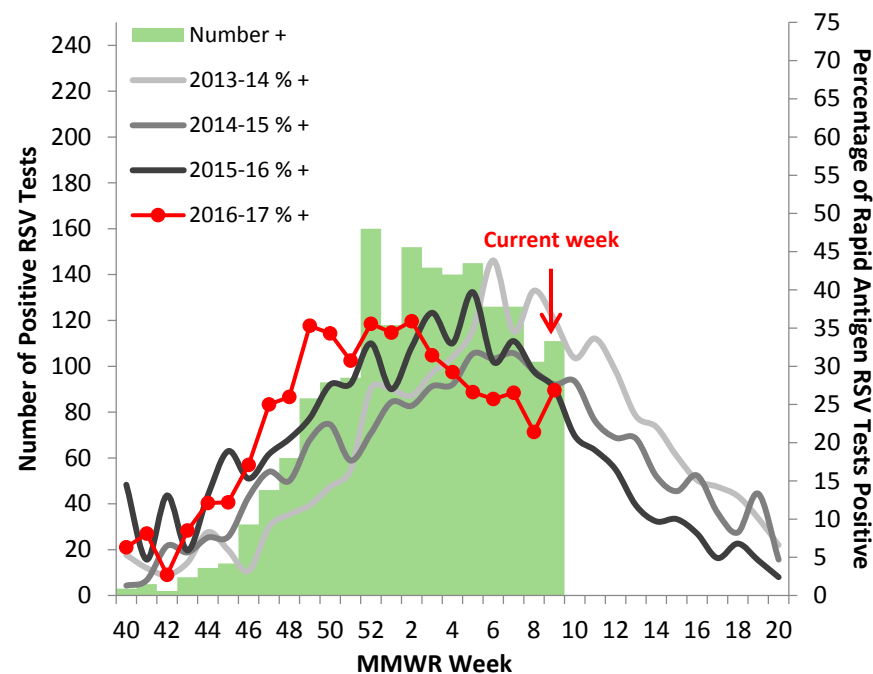
### Specimens Positive by Influenza Rapid Antigen Test, by Week



Region	% rapid antigen influenza tests + (current week)
Northeast	25%
South Central	30%
Southwest	25%
Southeast	21%
Metro	30%
Central	22%
West Central	21%
Northwest	21%
State (overall)	27%

## MLS Laboratories – RSV Testing

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

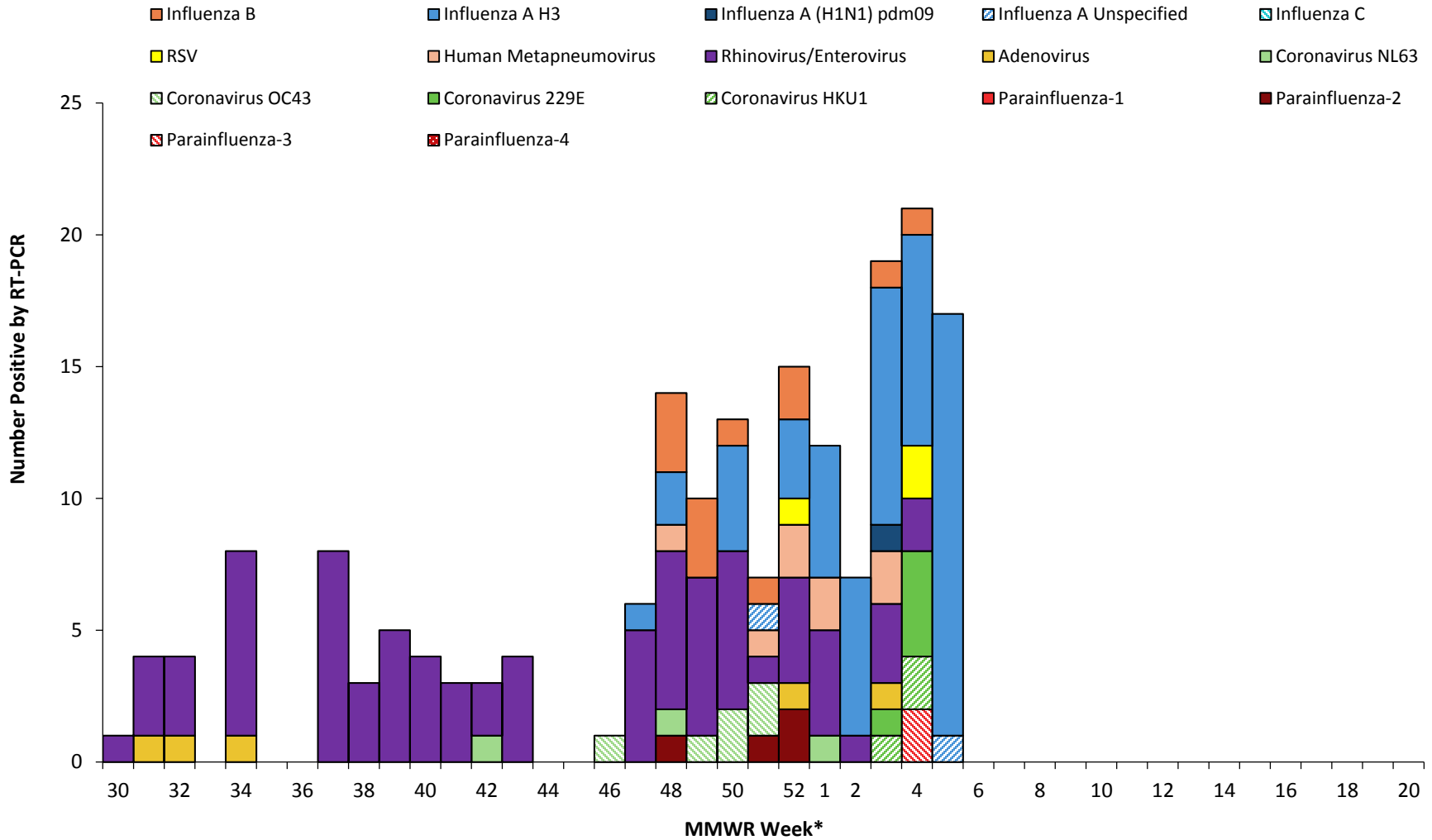


Region	% rapid antigen RSV tests + (current week)
Northeast	33%
South Central	20%
Southwest	30%
Southeast	20%
Metro	17%
Central	36%
West Central	24%
Northwest	40%
State (overall)	27%



## Minnesota Influenza Incidence Surveillance Project (MIISP)

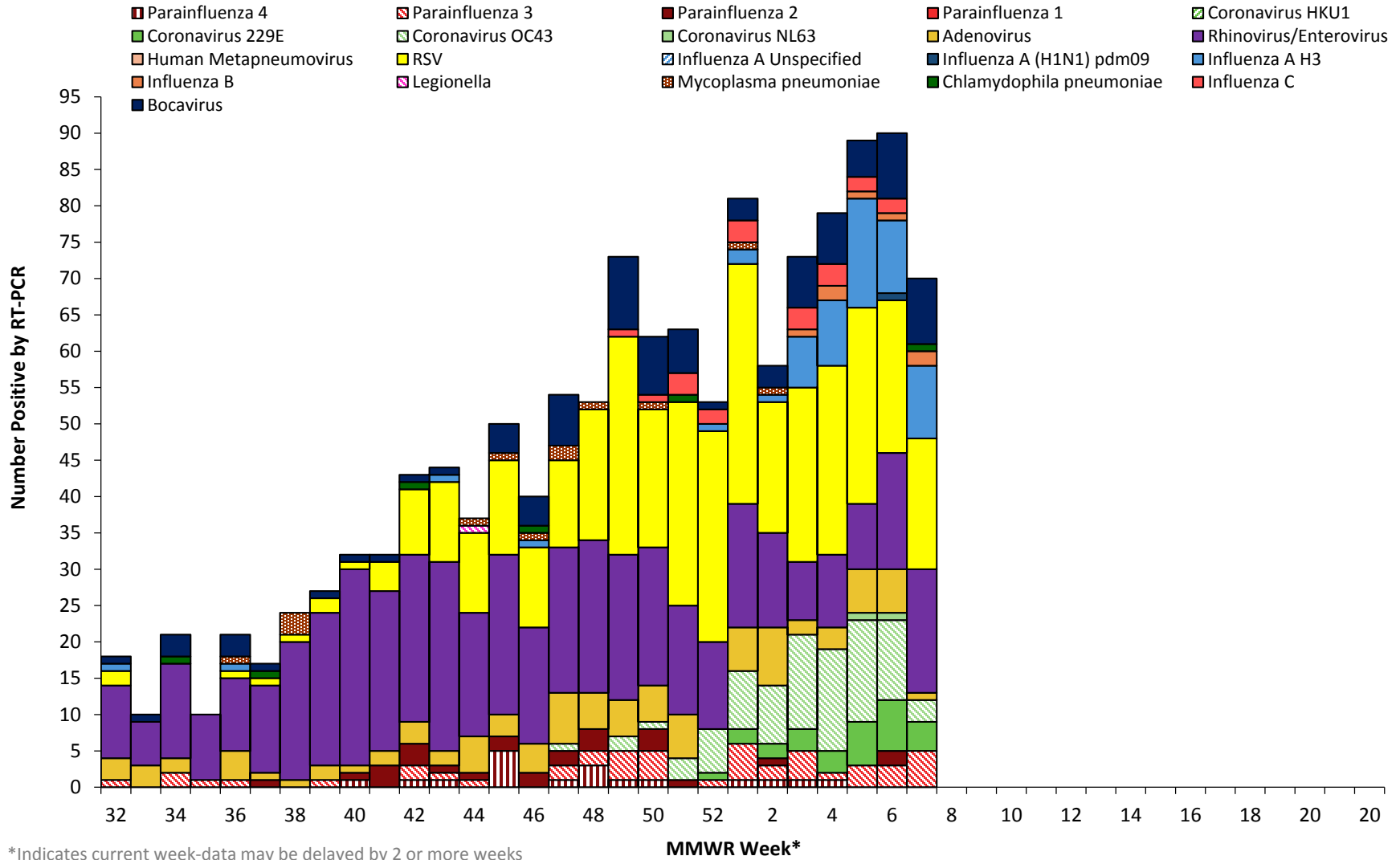
### Positive Respiratory Pathogens by PCR, by MMWR Week



\*Indicates current week-data may be delayed by 2 or more weeks

## Severe Acute Respiratory Surveillance (SARI) - Inpatients

### Positive Respiratory Pathogens by PCR, by MMWR Week



\*Indicates current week-data may be delayed by 2 or more weeks

# Weekly U.S. Influenza Surveillance Report

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

During week 8 (February 19-25, 2017), influenza activity remained elevated in the United States.

**Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 8 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories remained elevated.

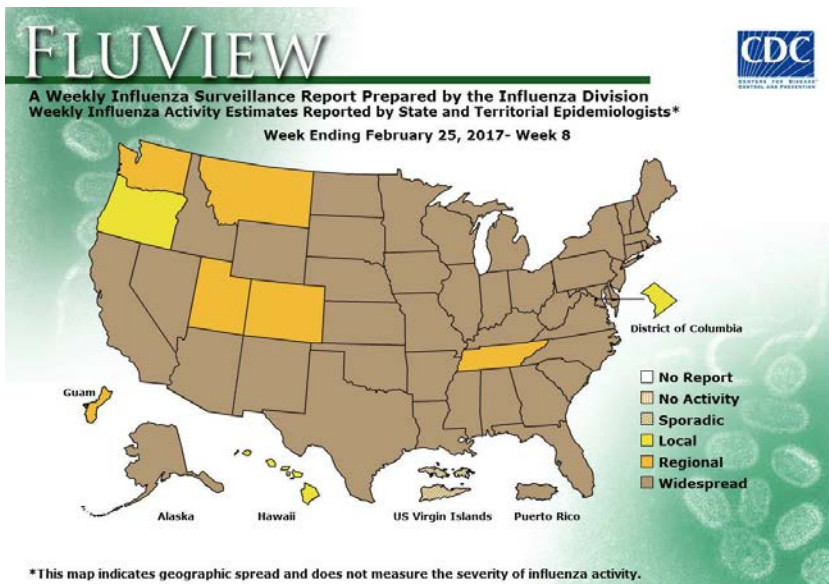
**Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.

**Influenza-associated Pediatric Deaths:** Six influenza-associated pediatric deaths were reported.

**Influenza-associated Hospitalizations:** A cumulative rate for the season of 39.4 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 4.8%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. 27 states experienced high ILI activity; four states experienced moderate ILI activity; New York City, Puerto Rico and six states experienced low ILI activity; 13 states experienced minimal ILI activity; and the District of Columbia had insufficient data.

**Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 43 states was reported as widespread; Guam and five states reported regional activity; the District of Columbia and two states reported local activity; and the U.S. Virgin Islands reported sporadic activity.



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet  
2016-2017 Influenza Season Week 8 ending February 25, 2017

