

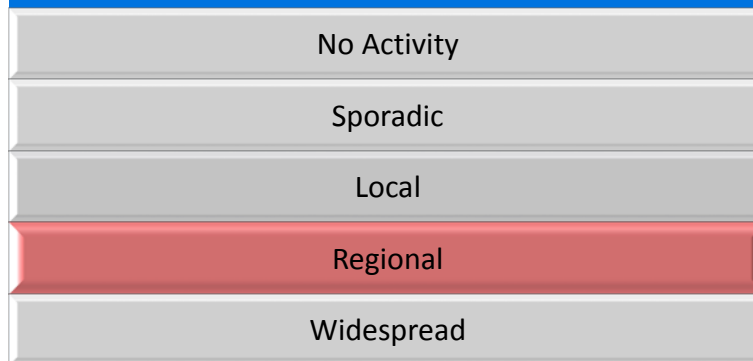
Weekly Influenza & Respiratory Illness Activity Report

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

Week Ending January 14, 2017 | WEEK 2

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

Minnesota Influenza Geographic Spread



During the week ending January 14, 2017 (Week 2), surveillance indicators showed regional geographic spread of influenza.

Since the start of the influenza season, 0 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/
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/>



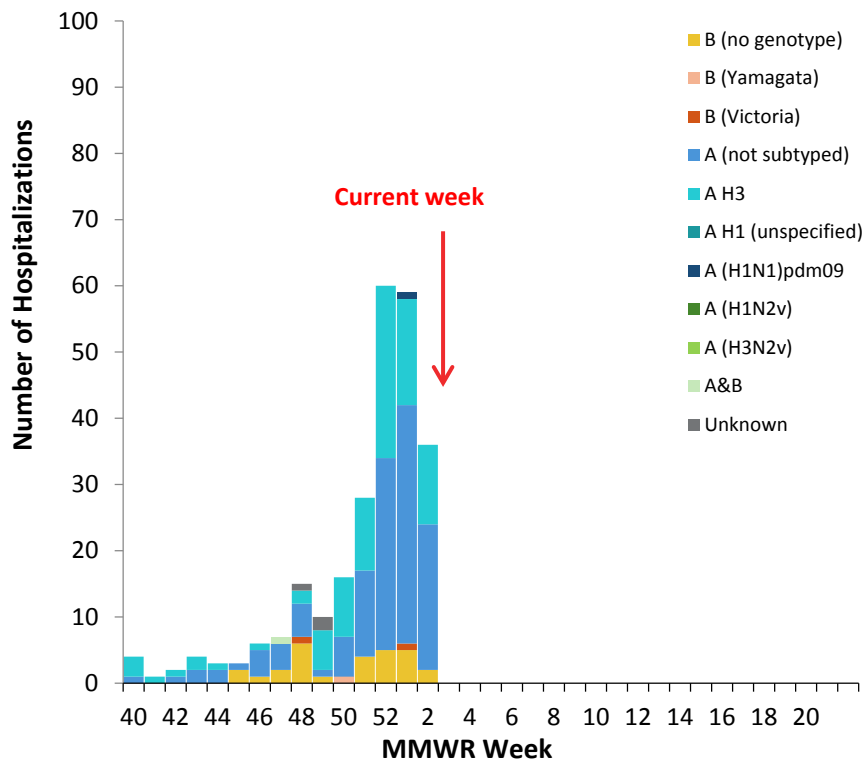
Minnesota
Department of Health

Minnesota Department of Health
651-201-5414 or 1-877-676-5414
www.health.state.mn.us

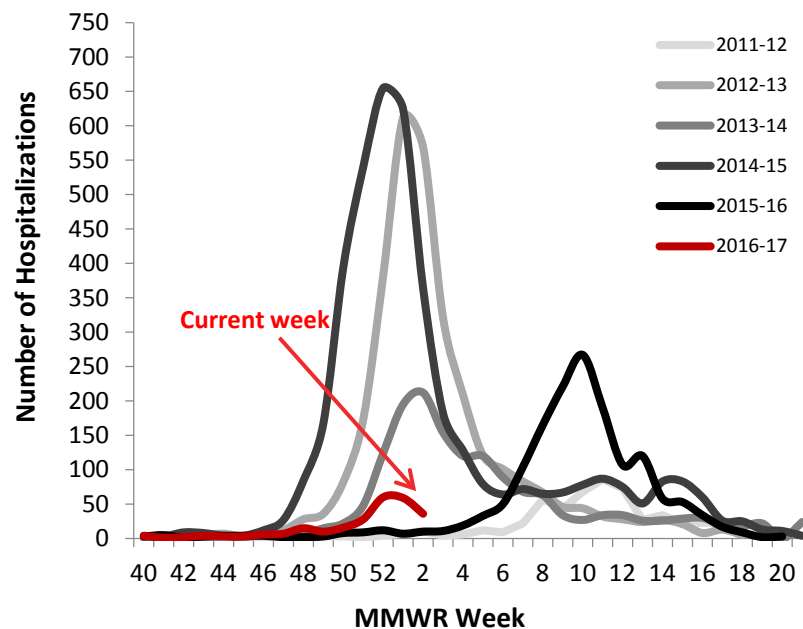
Hospitalized Influenza Surveillance

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*)

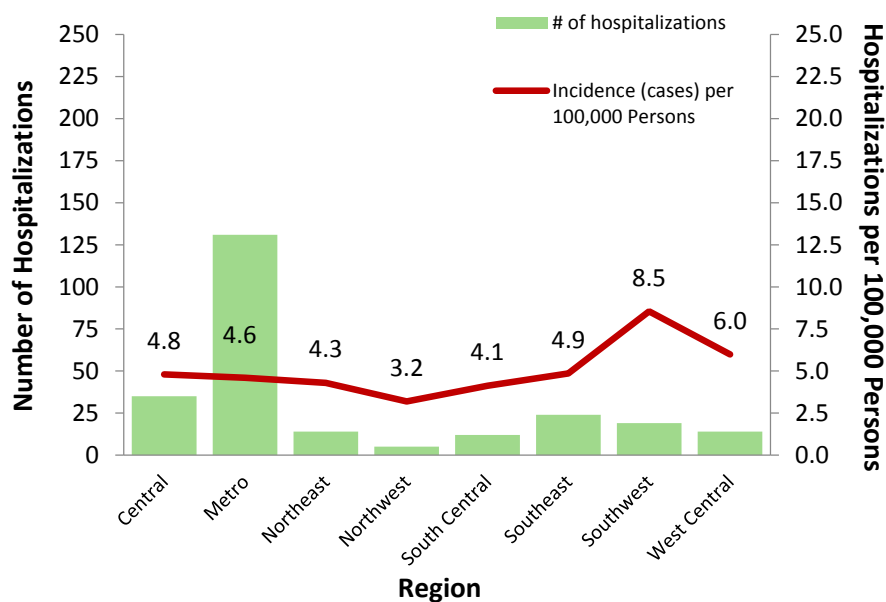


Hospitalizations this week	Hospitalizations last week	Total hospitalizations (to date)
39	59	254

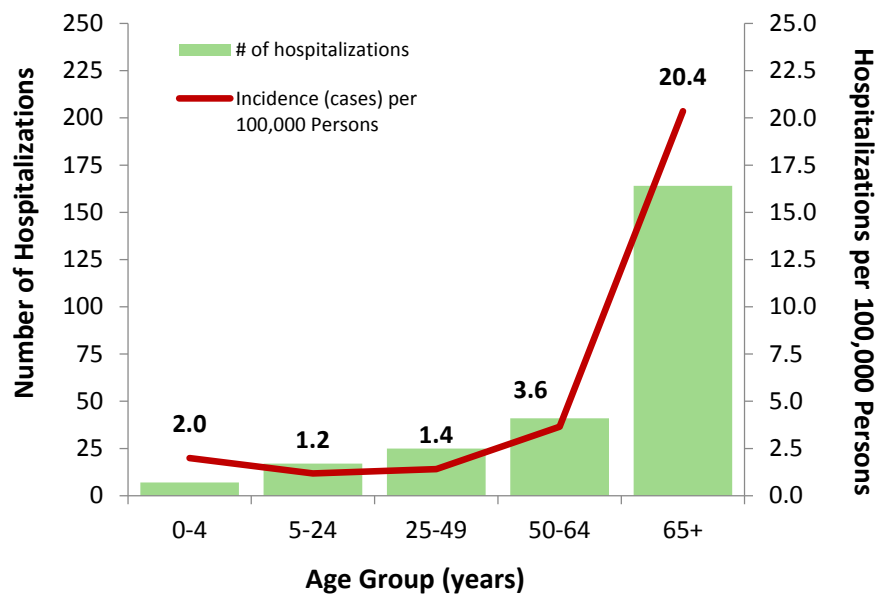
Season	Total hospitalizations (historic)
2011-2012	556
2012-2013	3,068
2013-2014	1,540
2014-2015	4,138
2015-2016	1,541
2016-2017	254 (to date)

*Influenza Surveillance Network

Number of Influenza Hospitalizations and Incidence by Region, Minnesota October 2, 2016 – January 14, 2017



Number of Influenza Hospitalizations and Incidence by Age, Minnesota October 2, 2016 – January 14, 2017



Region	Hospitalizations this week	Total (to date)
Central	6 (17%)	35 (14%)
Metro	20 (56%)	131 (52%)
Northeast	0 (0%)	14 (6%)
Northwest	0 (0%)	5 (2%)
South Central	2 (6%)	12 (5%)
Southeast	3 (8%)	24 (9%)
Southwest	5 (14%)	19 (7%)
West Central	0 (0%)	14 (6%)

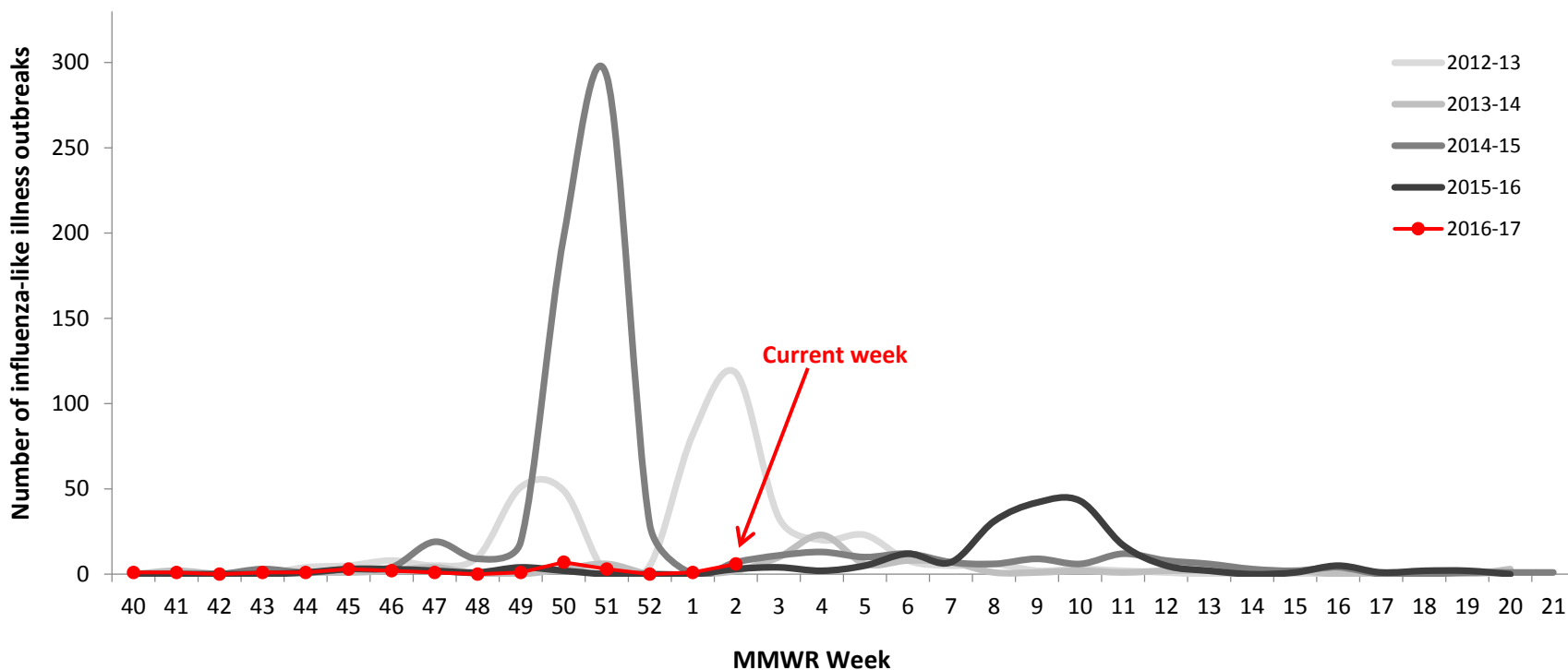
Median age (years) at time of admission
73.0

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

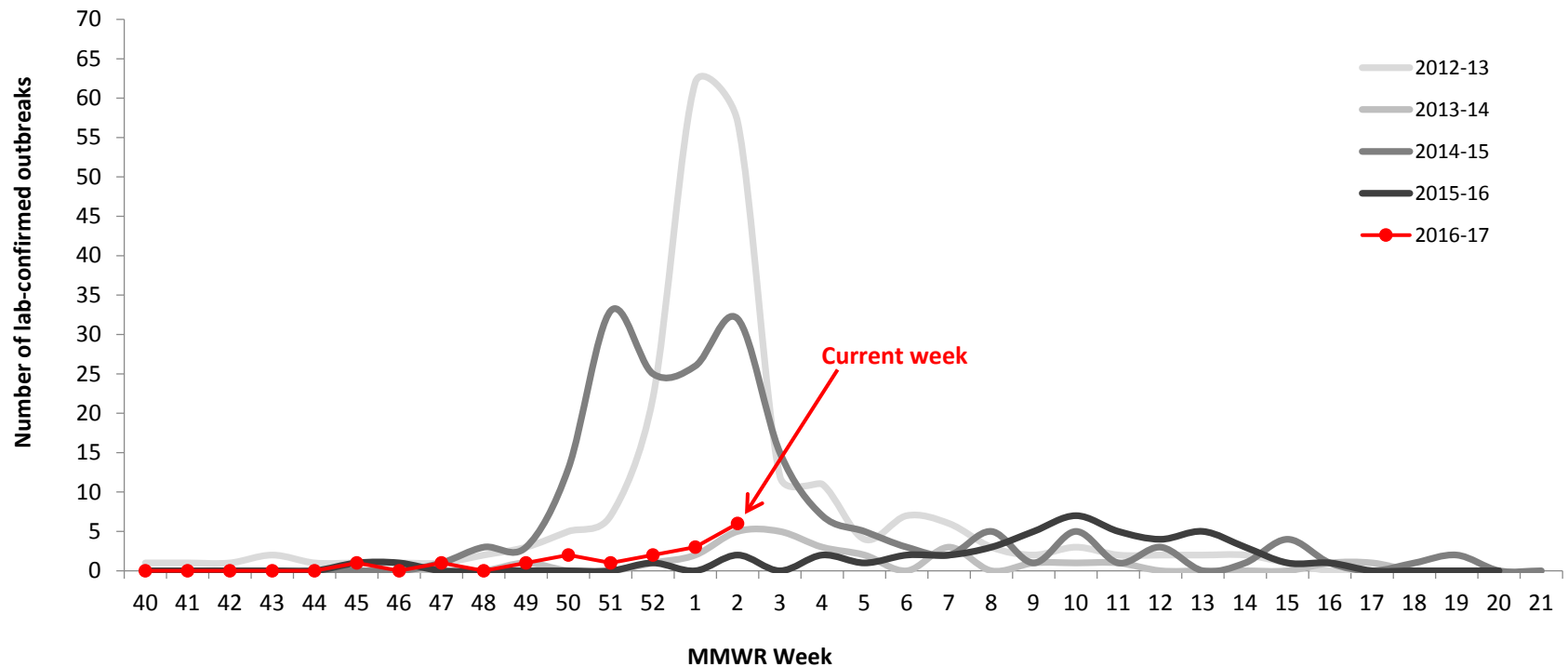


New school outbreaks this week	New school outbreaks last week	Total this season (to date)
6	1	28

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

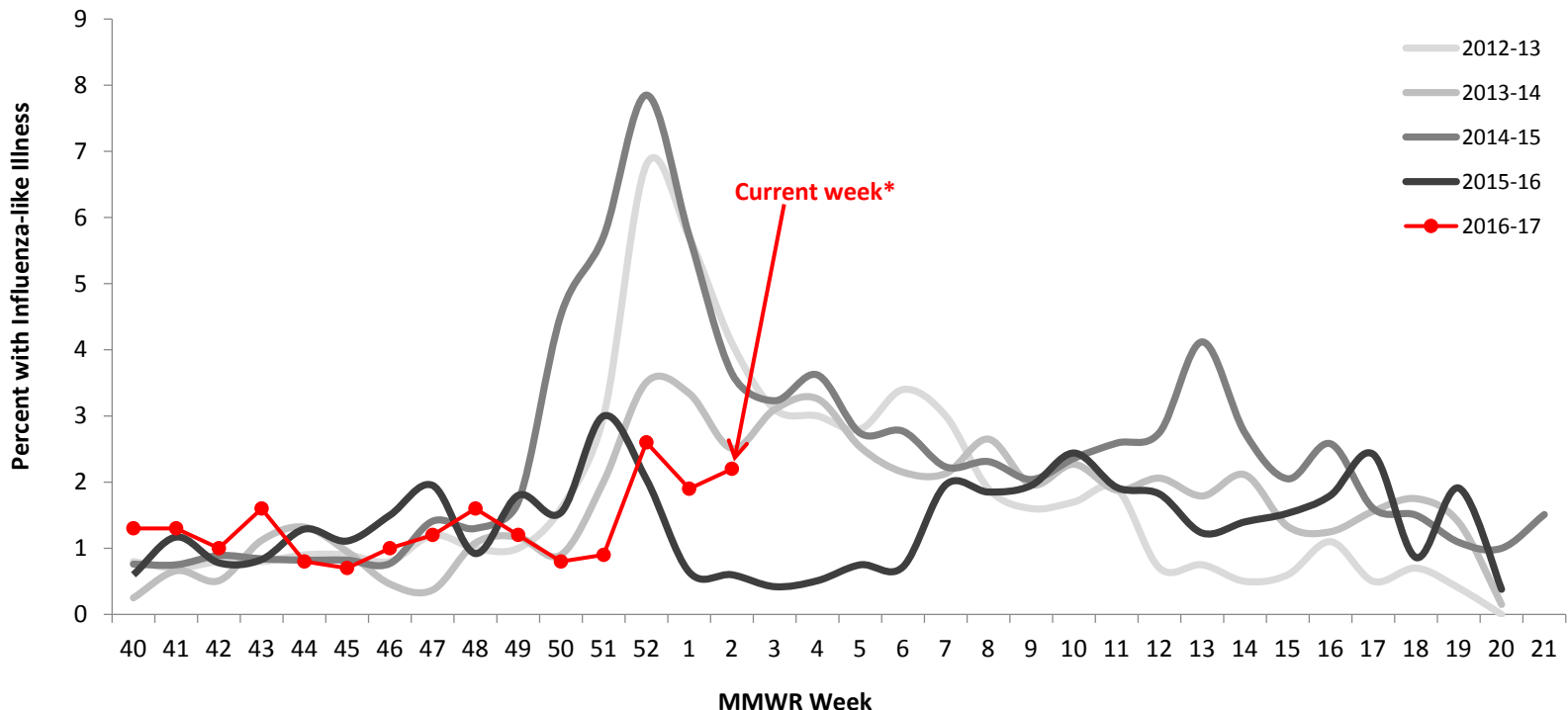


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
6	3	17

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)



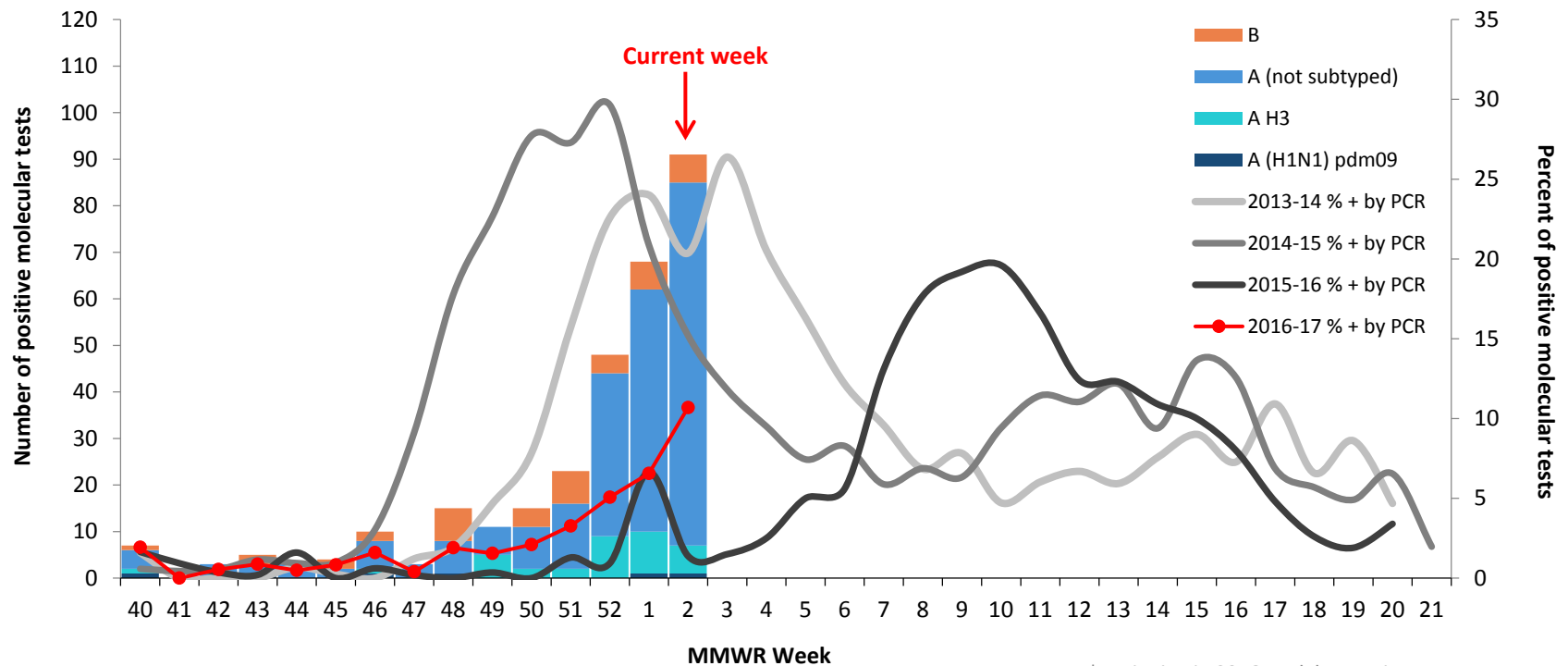
% of outpatients with ILI this week	% of outpatients with ILI last week
2.2%	1.9%

*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



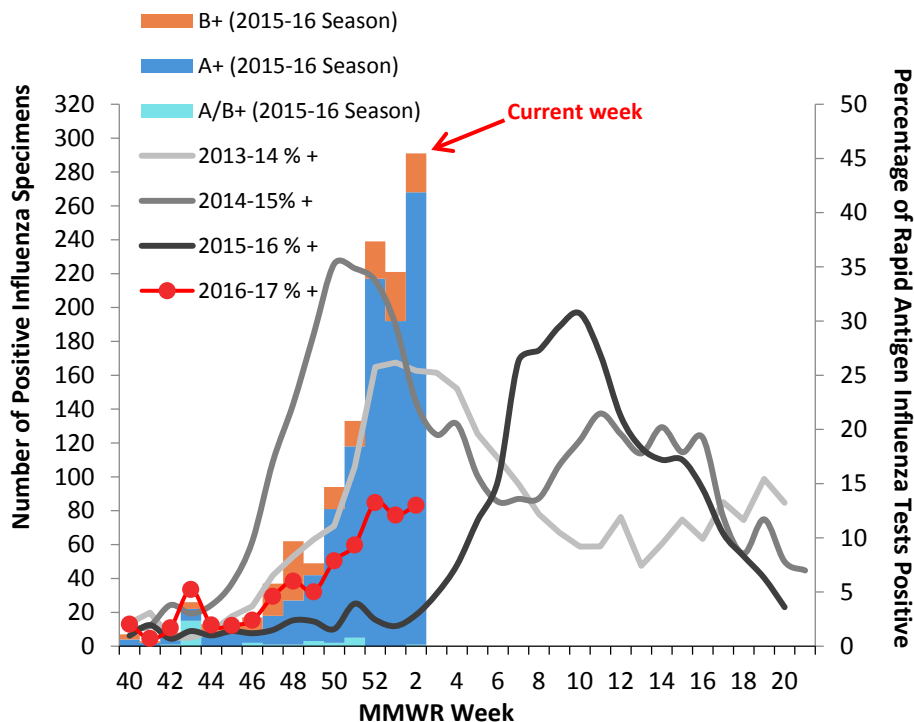
% molecular tests positive this week	% molecular tests positive last week
10.7%	6.6%

*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

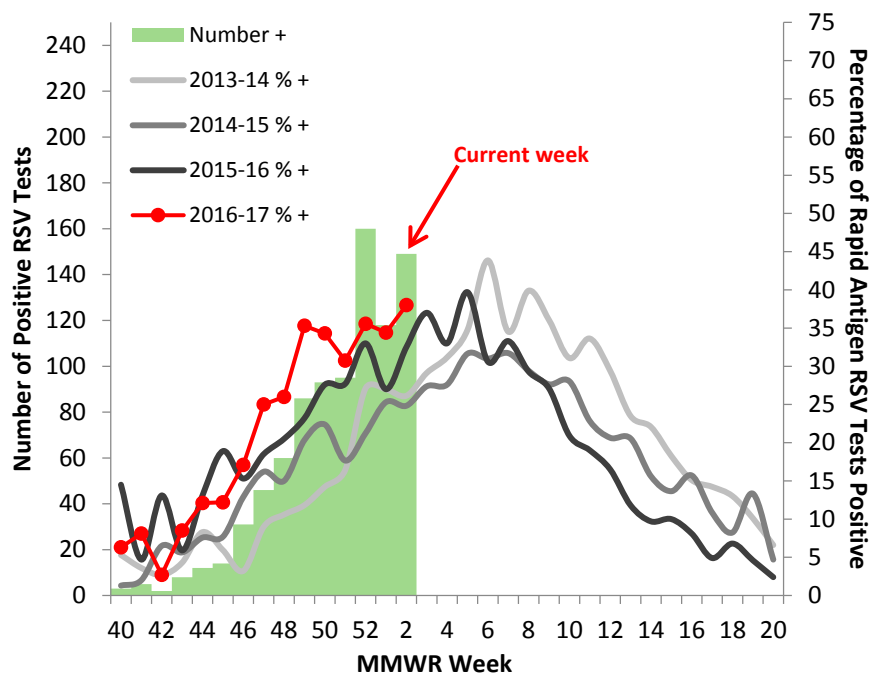
Specimens Positive by Influenza Rapid Antigen Test, by Week



Region	% rapid antigen influenza tests + (current week)
Northeast	6%
South Central	16%
Southwest	16%
Southeast	13%
Metro	15%
Central	11%
West Central	11%
Northwest	8%
State (overall)	13%

MLS Laboratories – RSV Testing

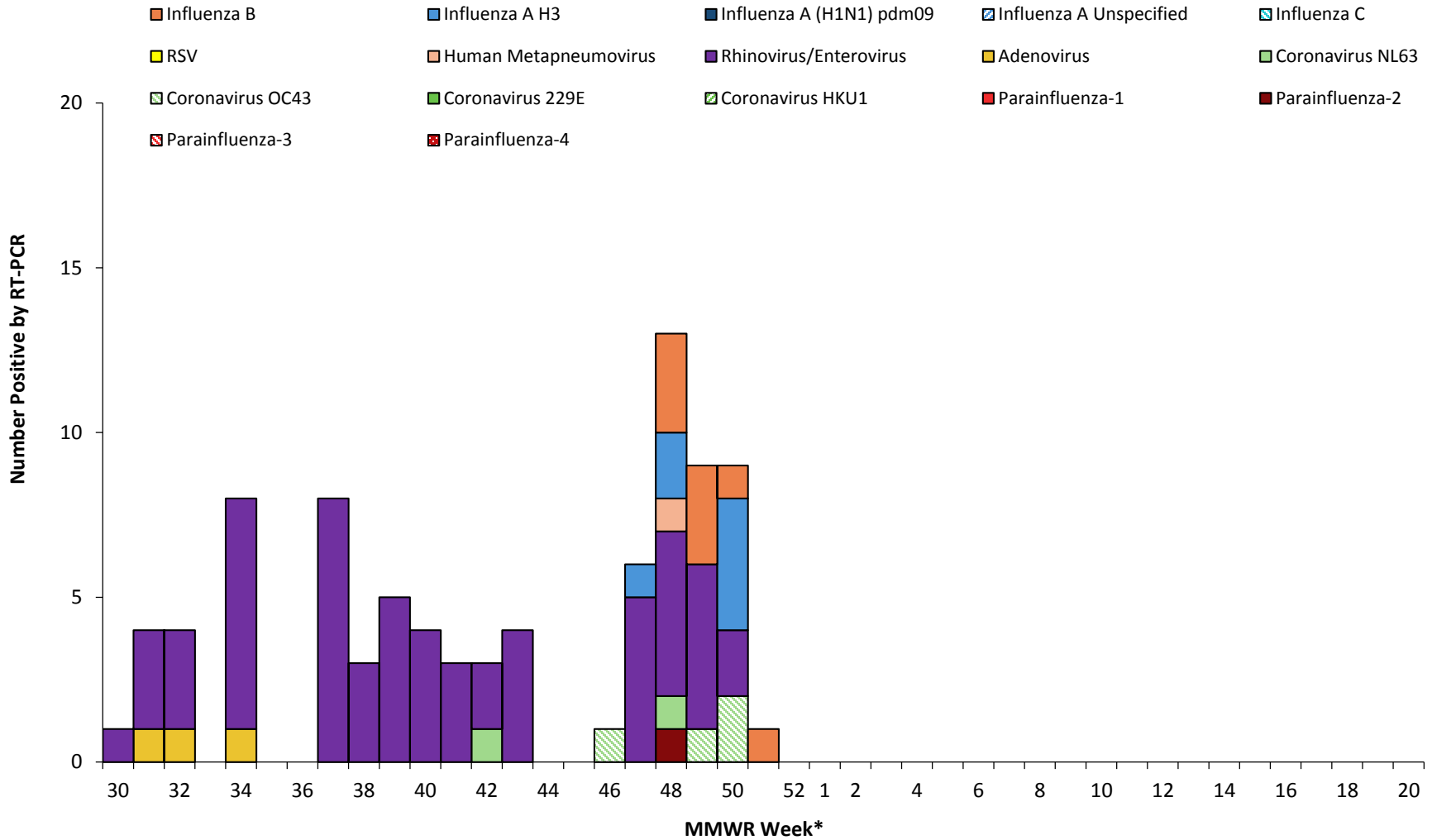
Specimens Positive by RSV Rapid Antigen Test, by Week



Region	% rapid antigen RSV tests + (current week)
Northeast	13%
South Central	54%
Southwest	45%
Southeast	33%
Metro	37%
Central	44%
West Central	50%
Northwest	0%
State (overall)	38%

Minnesota Influenza Incidence Surveillance Project (MIISP)

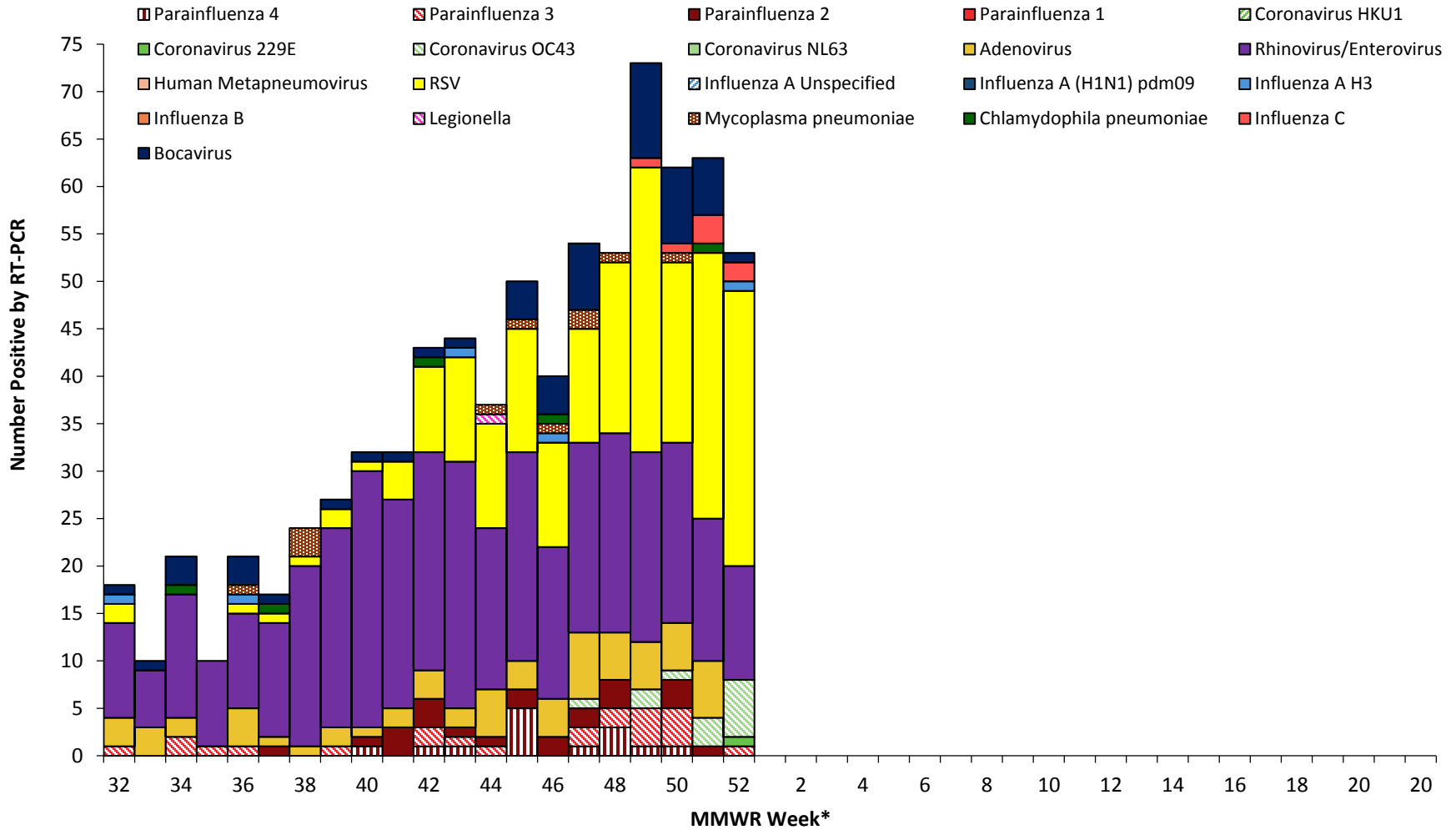
Positive Respiratory Pathogens by PCR, by MMWR Week



*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

2016-2017 Influenza Season Week 1 ending January 7, 2017

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

Viral Surveillance: The most frequently identified influenza virus subtype reported by public health laboratories during week 1 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.

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.

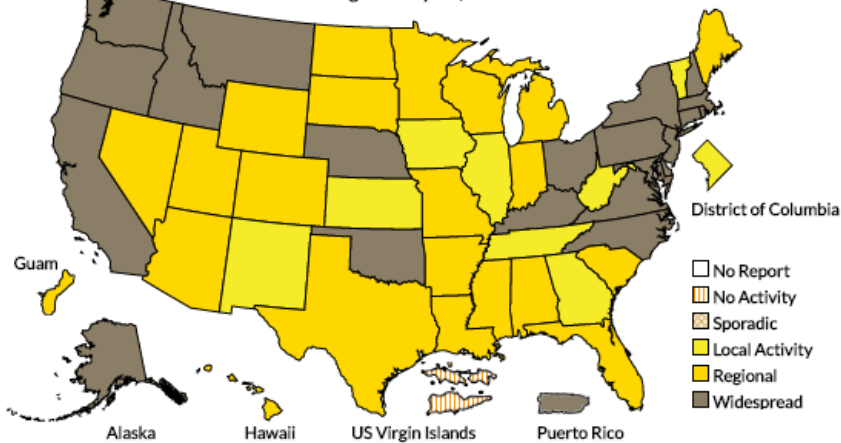
Influenza-associated Hospitalizations: A cumulative rate for the season of 7.1 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 3.2%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. New York City, Puerto Rico, and eight states experienced high ILI activity; six states experienced moderate ILI activity; seven states experienced low ILI activity; 28 states experienced minimal ILI activity, and the District of Columbia and one state had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in Puerto Rico and 21 states was reported as widespread; Guam and 21 states reported regional activity; the District of Columbia and eight states reported local activity; and the U.S. Virgin Islands reported no activity.

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

Week Ending January 07, 2017- Week 1



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 1 Ending January 7, 2017

