

# 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 2015-16 Influenza Season

All data are preliminary and may change as more reports are received

### Summary of the 2015-16 Season

- 1,541 people were hospitalized with laboratory-confirmed influenza
- 3 pediatric influenza-related deaths were confirmed
- 48 outbreaks of influenza in long-term care were reported
- 203 outbreaks of ILI in schools were reported

**Minnesota Influenza Surveillance Website:** <http://www.health.state.mn.us/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>

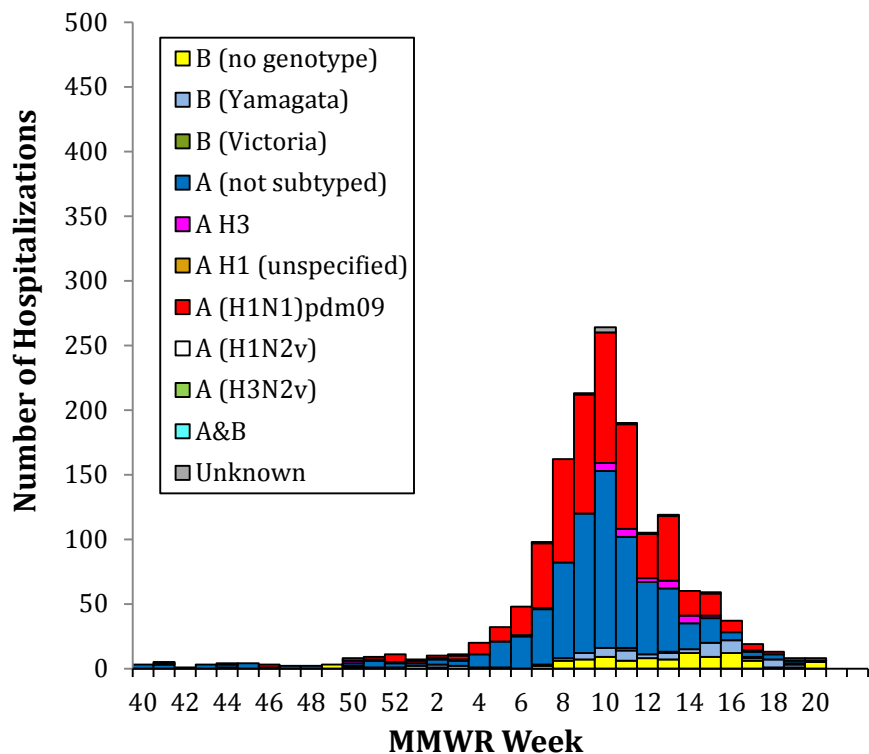
North Dakota <http://www.ndflu.com/default.aspx>

South Dakota <http://doh.sd.gov/diseases/infectious/flu/>

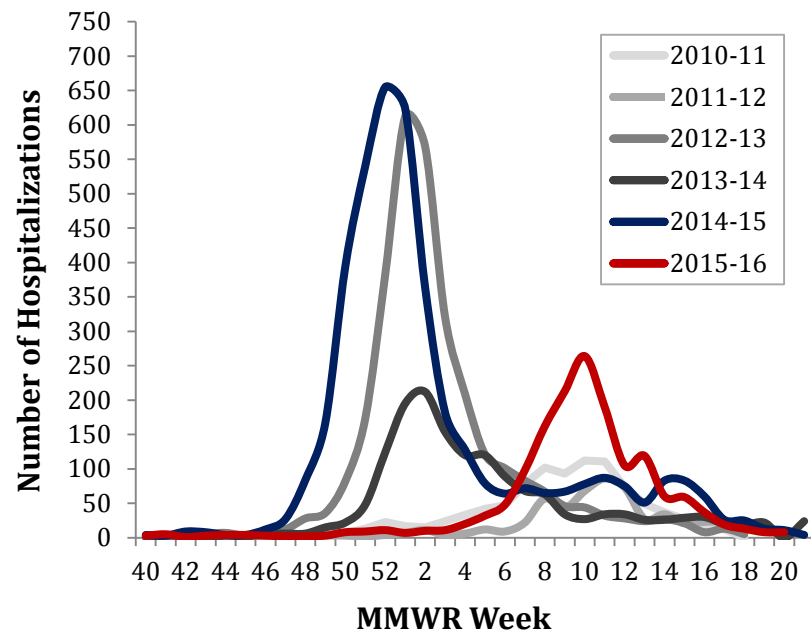
# Hospitalized Influenza Surveillance

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.

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



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

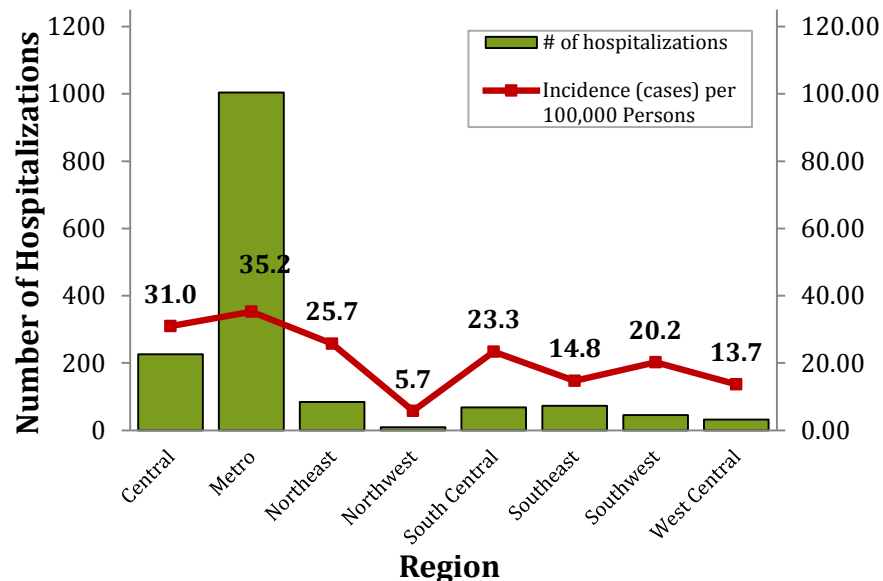


\*Influenza Surveillance Network

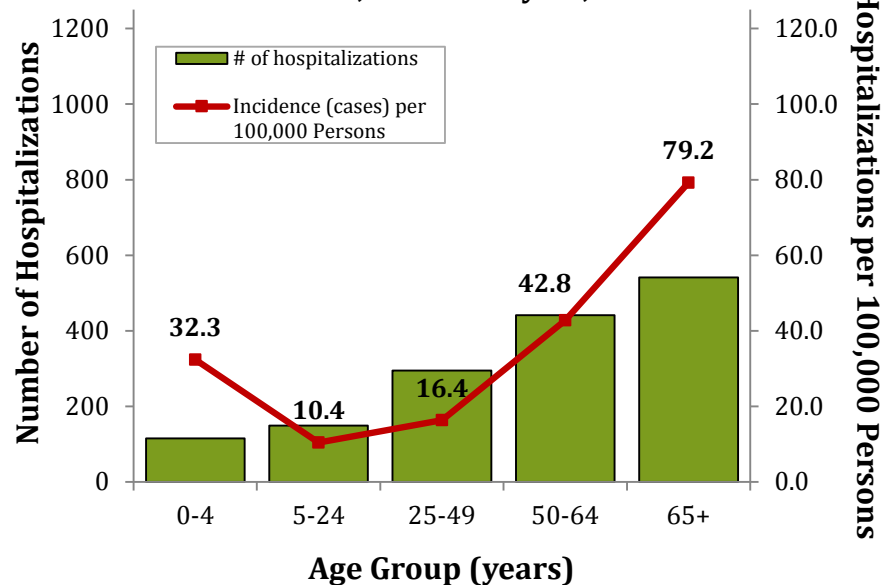
Season	Total Hospitalizations (historic)
2010-2011	965
2011-2012	556
2012-2013	3,068
2013-2014	1,540
2014-2015	4,138
<b>2015-2016</b>	<b>1,541</b>

# Hospitalized Influenza Surveillance – continued

**Number of Influenza Hospitalizations and Incidence by Region, Minnesota  
October 4, 2015 – May 21, 2016**



**Number of Influenza Hospitalizations and Incidence by Age, Minnesota  
October 4, 2015 – May 21, 2016**



Region	Total (to date)
Central	226 (15%)
Metro	1,004 (65%)
Northeast	84 (5%)
Northwest	9 (1%)
South Central	68 (4%)
Southeast	73 (5%)
Southwest	45 (3%)
West Central	32 (2%)

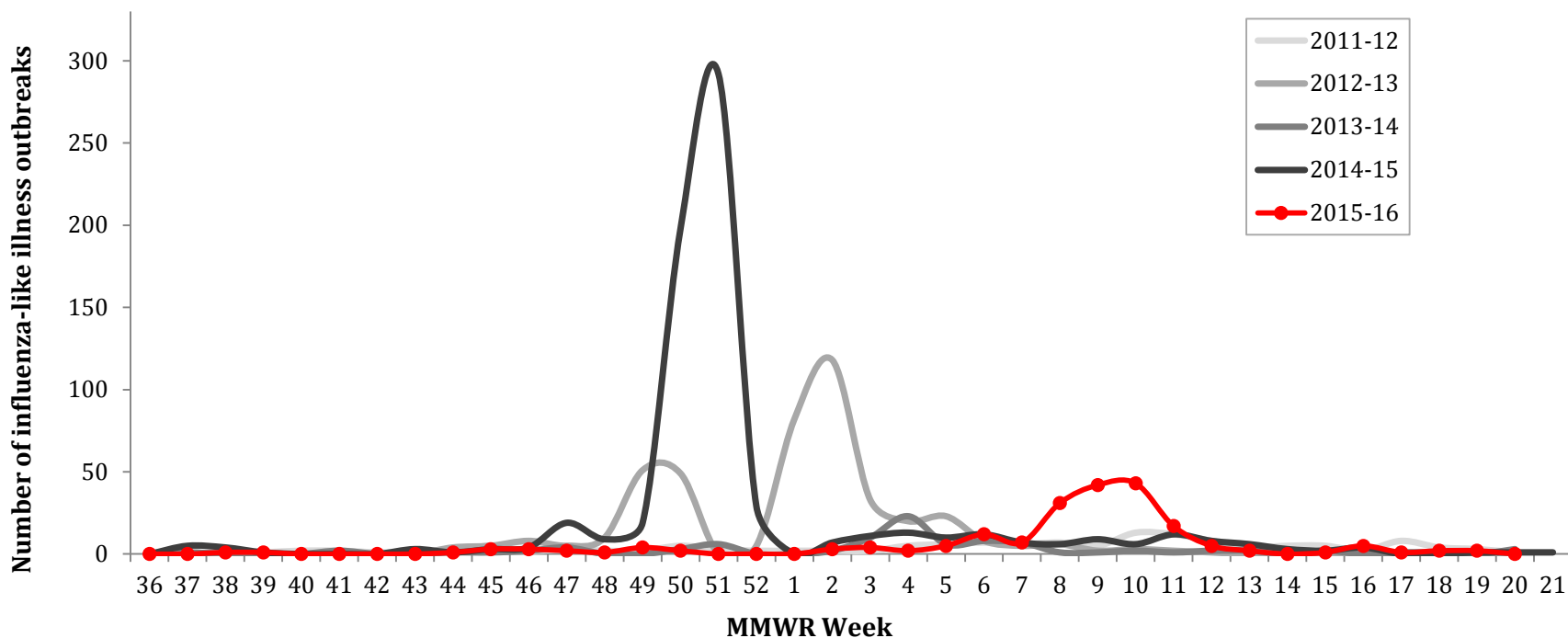
Median age (years) at time of admission
57.0

# 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



Total

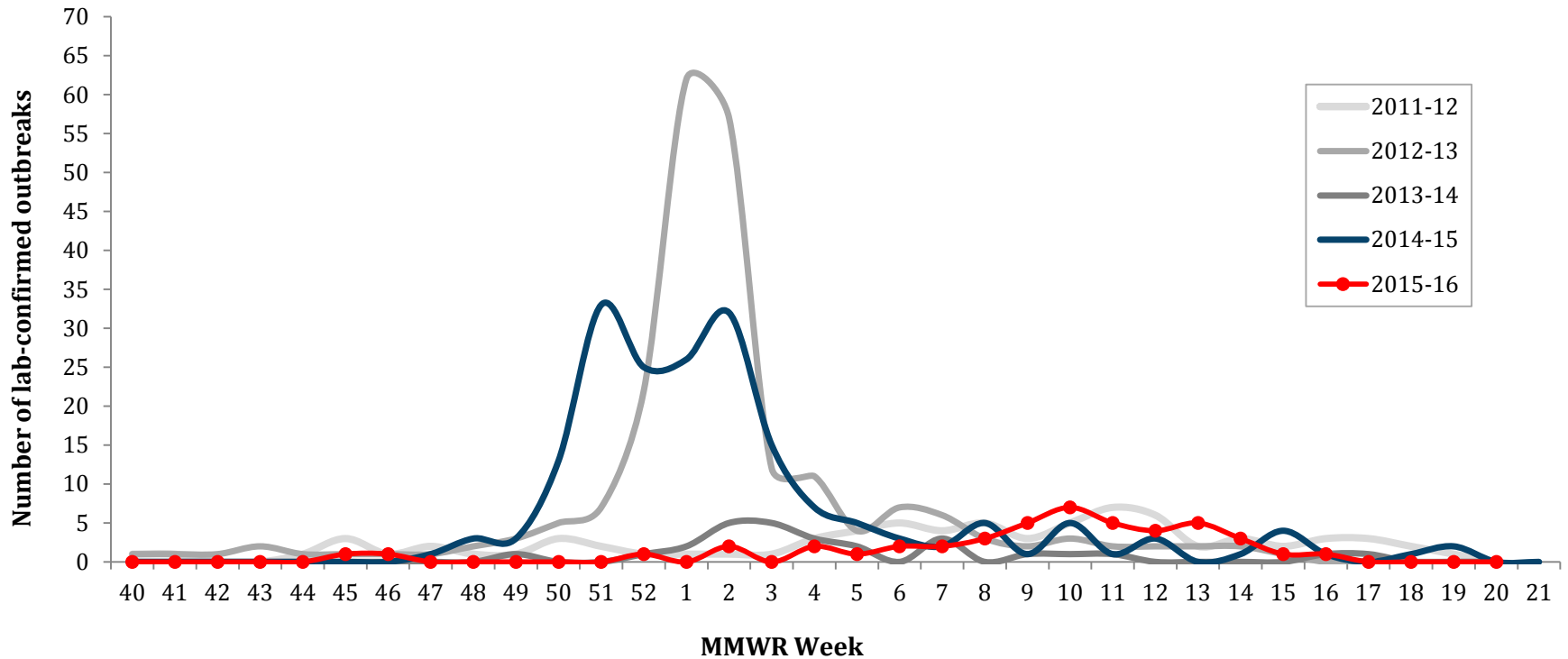
203

# Respiratory Disease Outbreak Surveillance

## 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

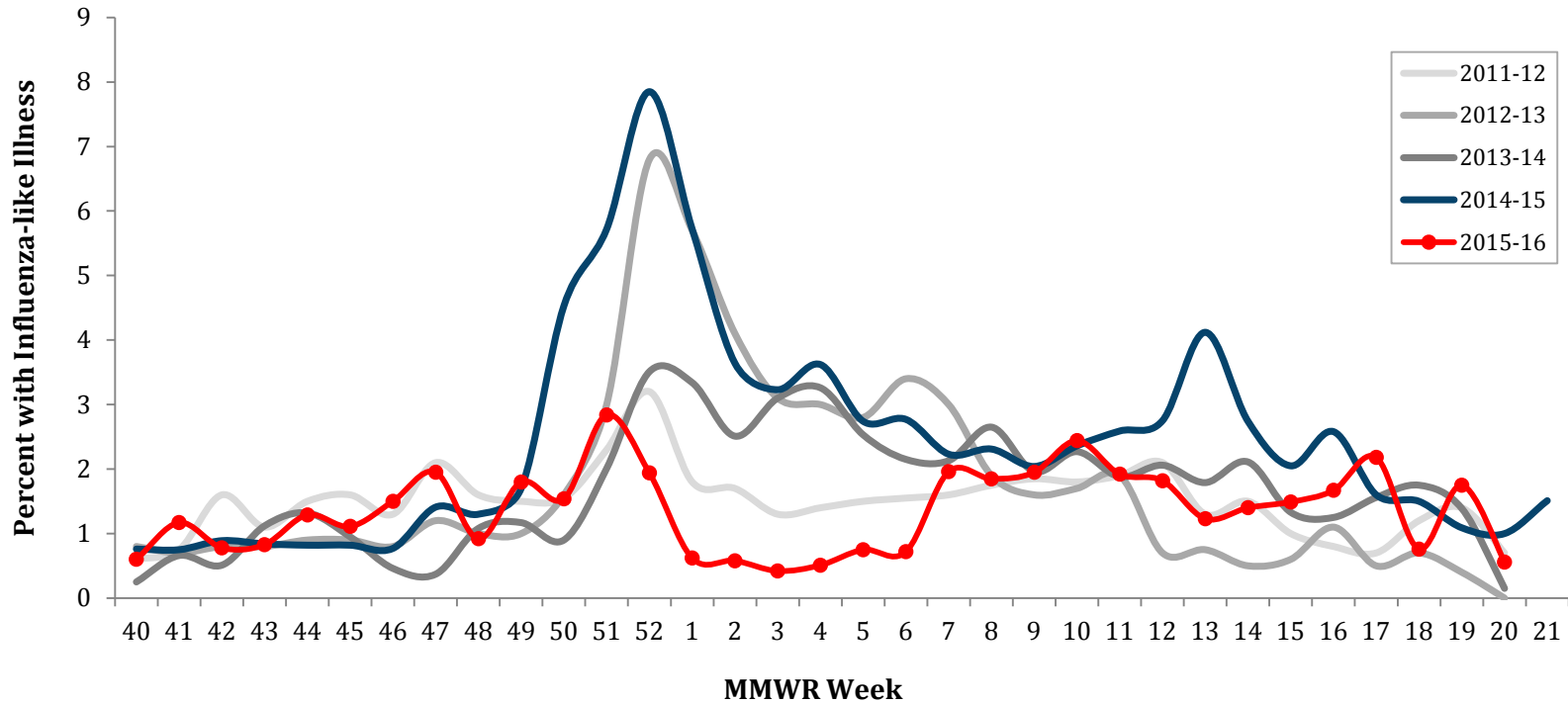


Total
48

# 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)

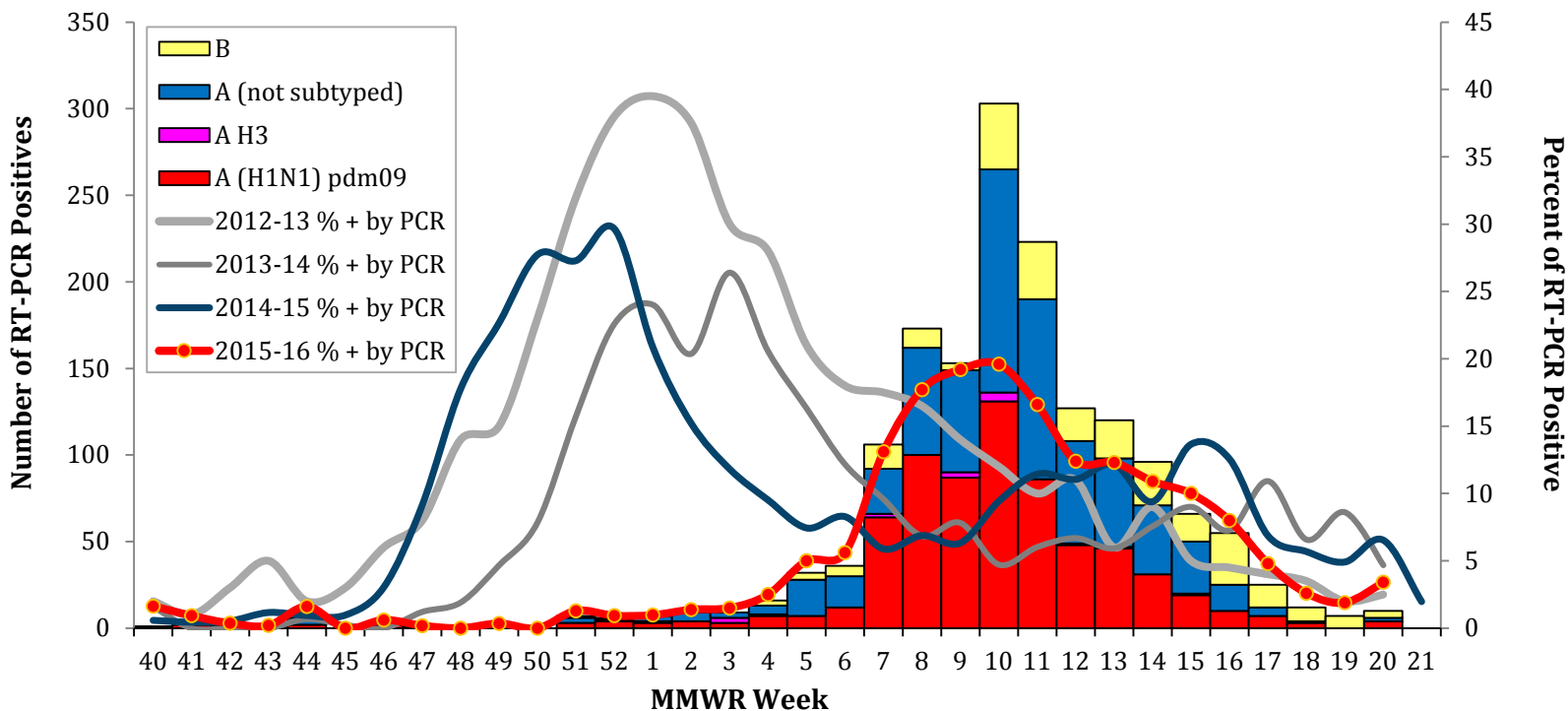


**Peak % of  
outpatients  
with ILI**  
2.84%

# 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 RT-PCR, by Week

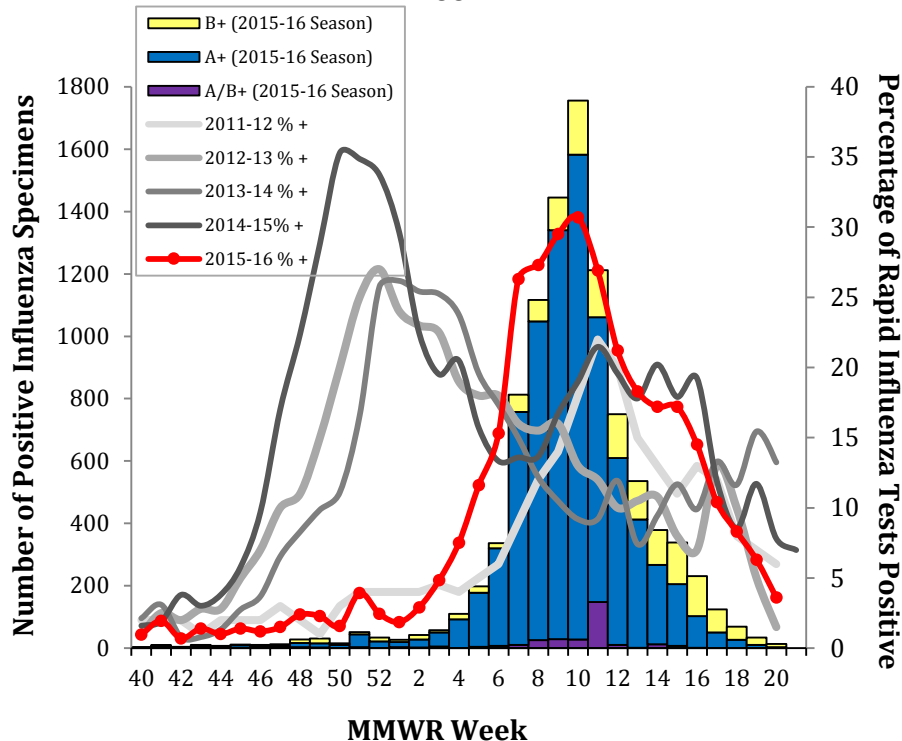


**Peak % RT-PCR positive**  
19.6%

# Laboratory Surveillance – Rapid Test

## MLS Laboratories – Influenza Testing

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

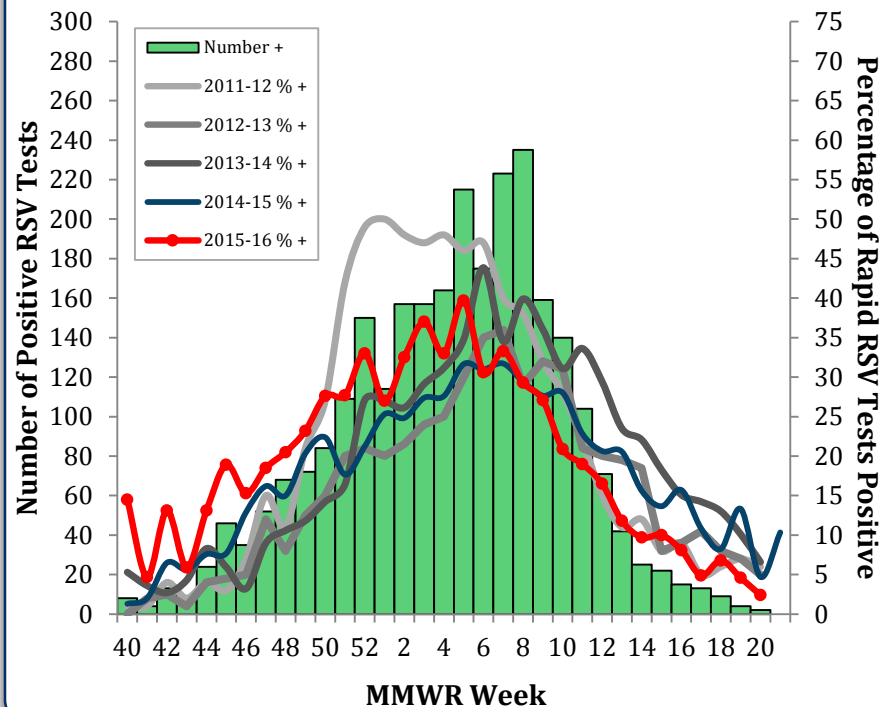


Peak % rapid positive

30.7%

## MLS Laboratories – RSV Testing

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



Peak % rapid positive

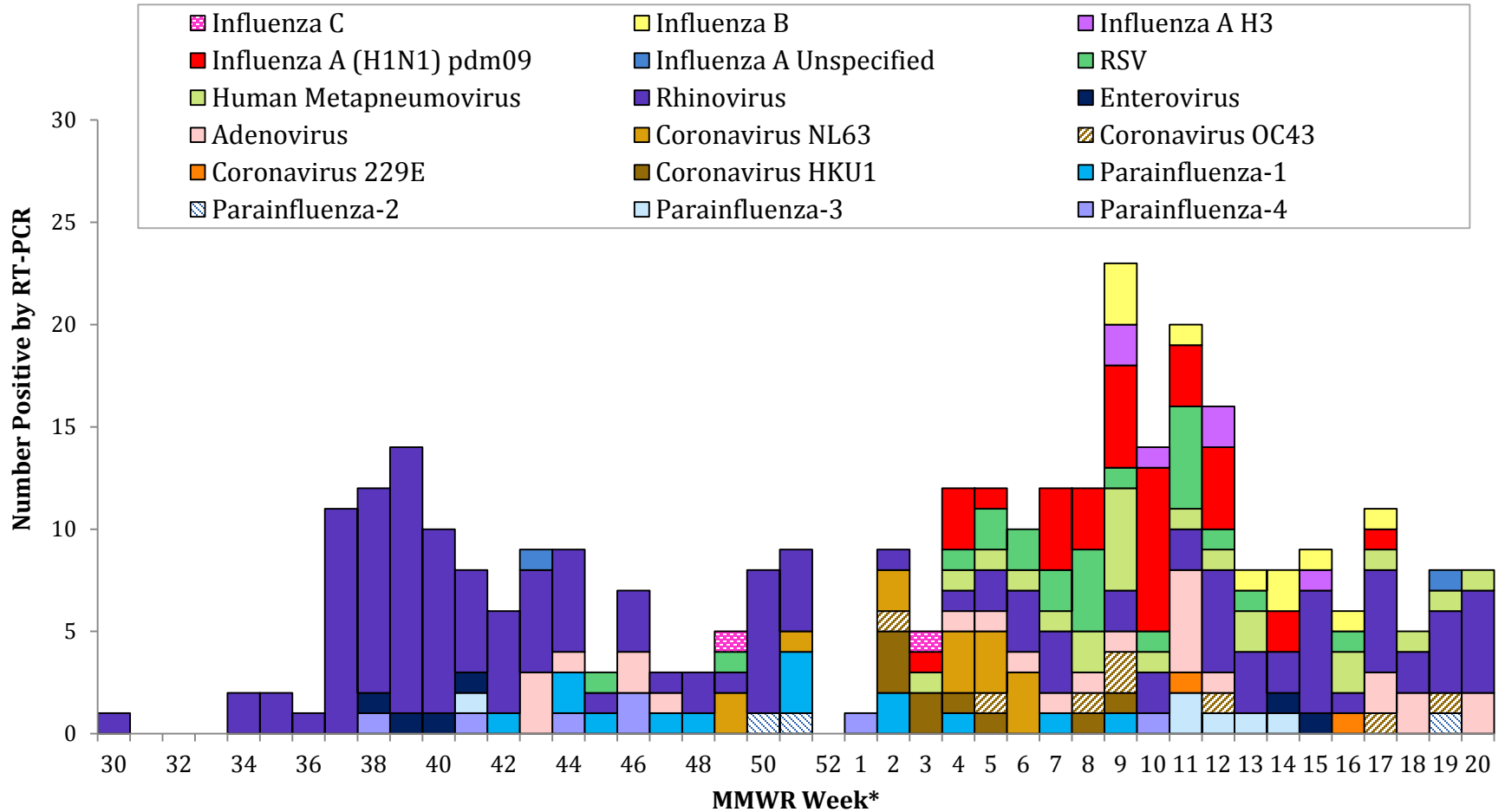
39.7%



# Laboratory Surveillance – PCR

## MN Influenza Incidence Project (IISP) - Outpatients

### Pathogens Detected, Minnesota IISP 2015-2016

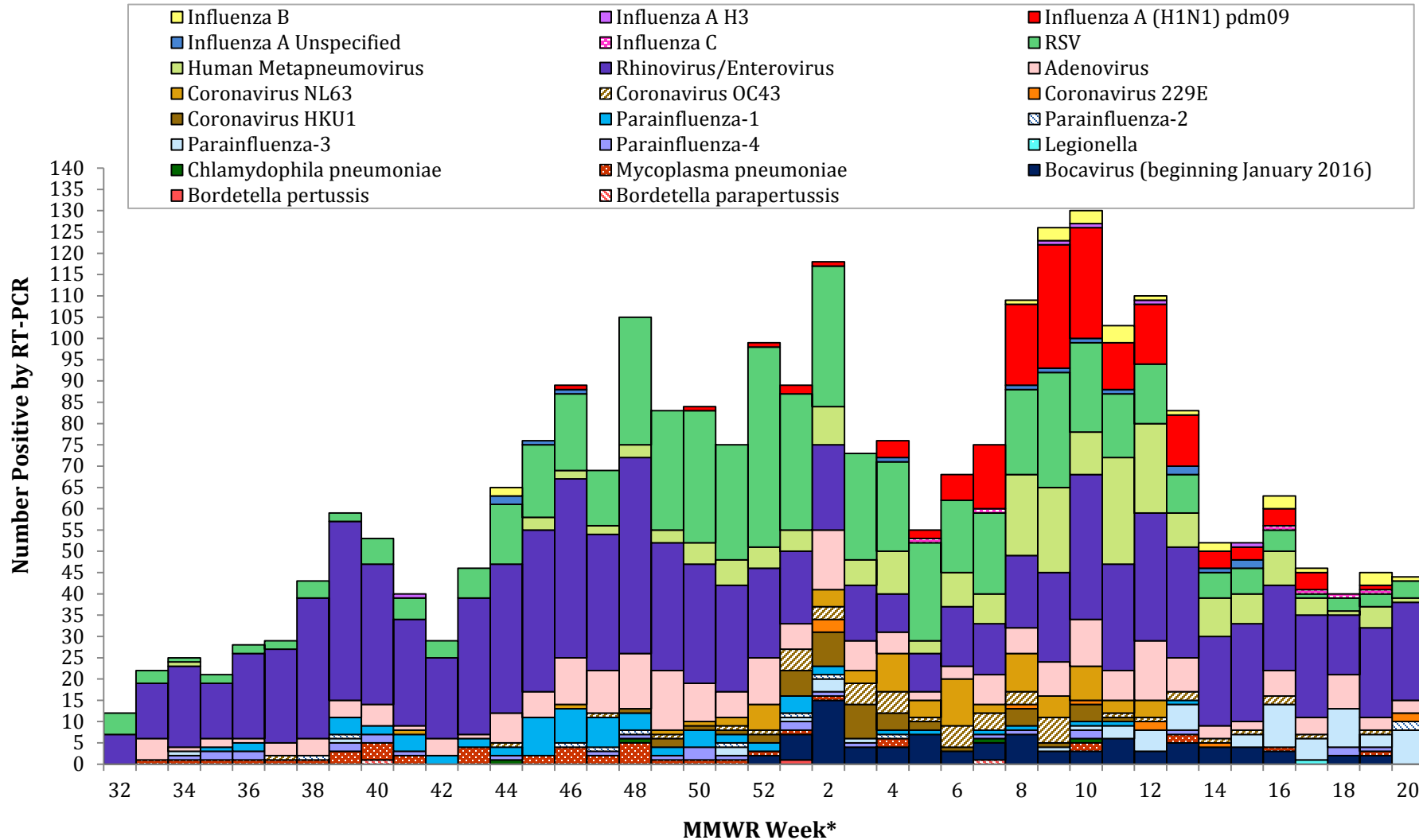


\*Indicates current week-data may be delayed by 2 or more weeks

# Laboratory Surveillance – PCR

## Severe Acute Respiratory Illness Surveillance (SARI) - Inpatients

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



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