

# Weekly Influenza & Respiratory Illness Activity Report

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

Current: Week Ending January 10, 2015 | WEEK 1



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

## Summary

During the week ending January 10, 2015 (Week 1), surveillance indicators showed WIDESPREAD geographic spread of influenza. Since the start of the influenza season, 4 pediatric (less than 18 years of age) influenza-related deaths have been identified.

## Minnesota Influenza Geographic Spread\*

No Activity

Sporadic

Local

Regional

**Widespread**

\*Based on CDC's Activity Estimates Definitions:  
[www.cdc.gov/flu/weekly/overview.htm](http://www.cdc.gov/flu/weekly/overview.htm)

**Minnesota Influenza Surveillance Website:** [www.health.state.mn.us/divs/idepc/diseases/flu/stats/](http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/)

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

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

**Google Flu Trends:** [www.google.org/flutrends/us/](http://www.google.org/flutrends/us/)

## Neighboring states' influenza information:

Iowa [www.idph.state.ia.us/IdphArchive/Archive.aspx?channel=FluReports](http://www.idph.state.ia.us/IdphArchive/Archive.aspx?channel=FluReports)

Wisconsin [www.dhs.wisconsin.gov/communicable/influenza/Reports/Surveillance.htm](http://www.dhs.wisconsin.gov/communicable/influenza/Reports/Surveillance.htm)

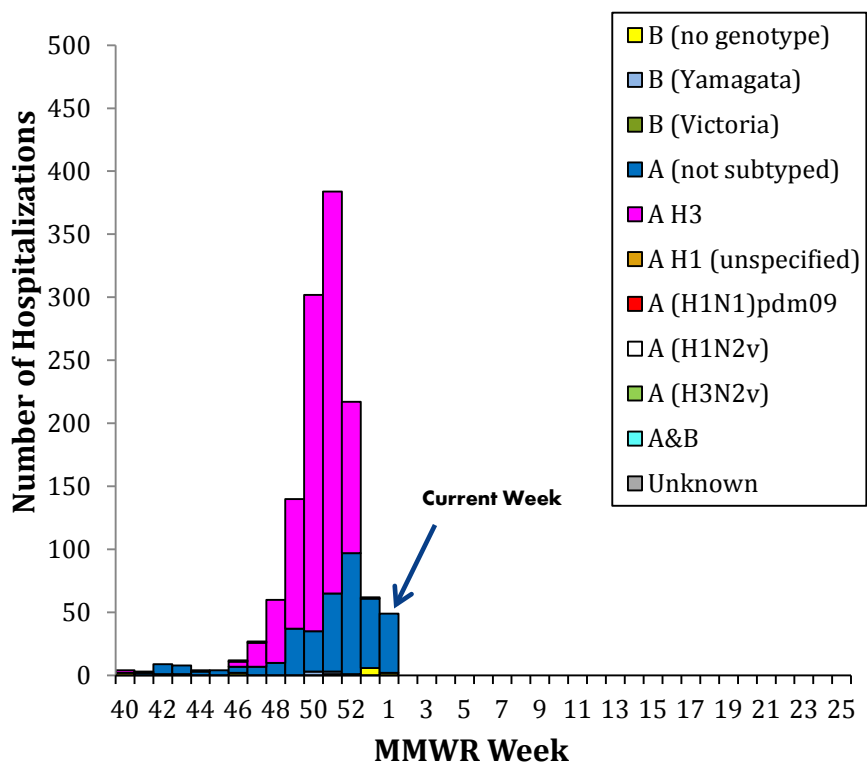
North Dakota [www.ndflu.com/default.aspx](http://www.ndflu.com/default.aspx)

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

# Hospitalized Influenza Surveillance

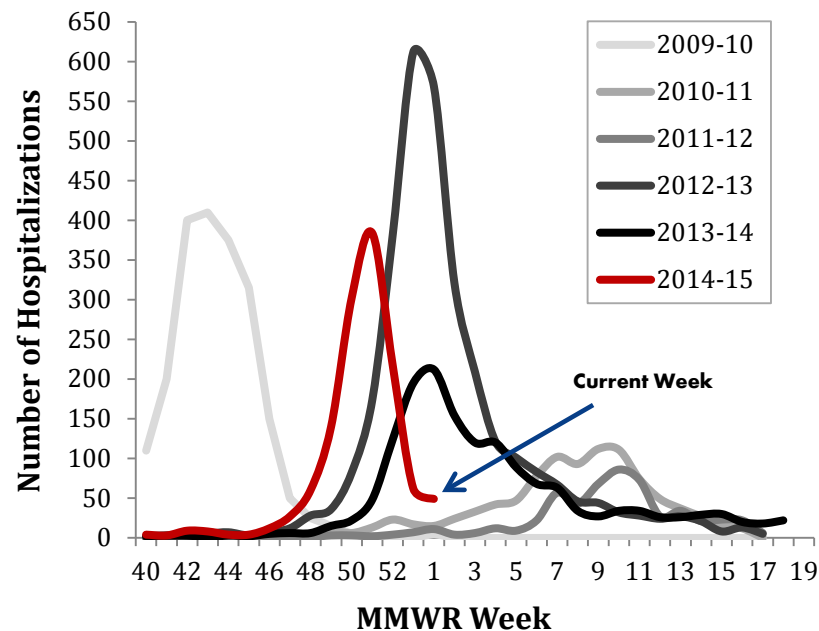
Hospitalized influenza cases are based on disease reports of laboratory-positive influenza (via DFA, IFA, viral culture, EIA, rapid test, paired serological tests or RT-PCR) and specimens from hospitalized patients with acute respiratory illness submitted to MDH-PHL by hospitals and laboratories. **Due 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 (to date)
49	62	1,285

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

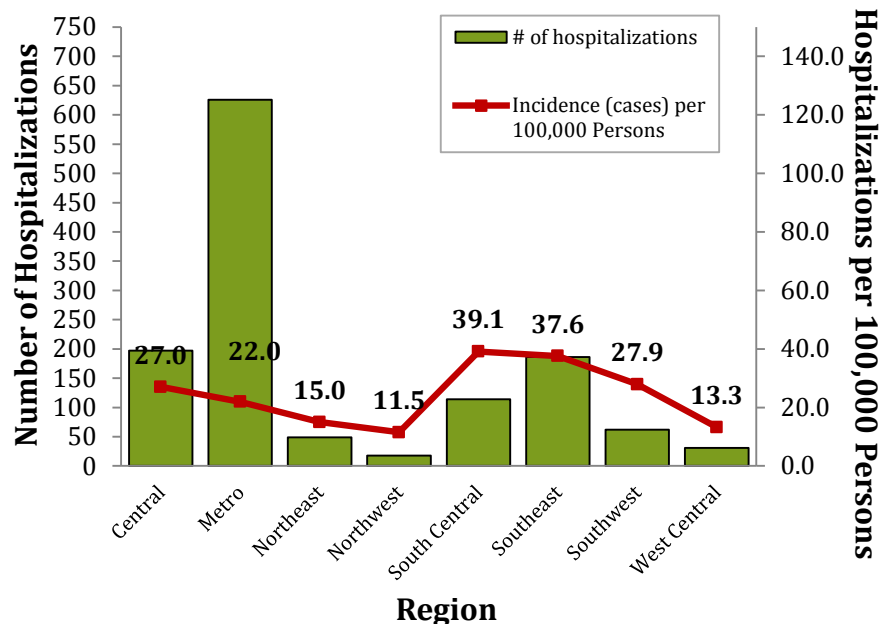


Season	Hospitalizations current week (historic)	Total
2009-2010	5	2,060
2010-2011	15	965
2011-2012	11	556
2012-2013	569	3,068
2013-2014	212	1,540
2014-2015	49	1,285 (to date)

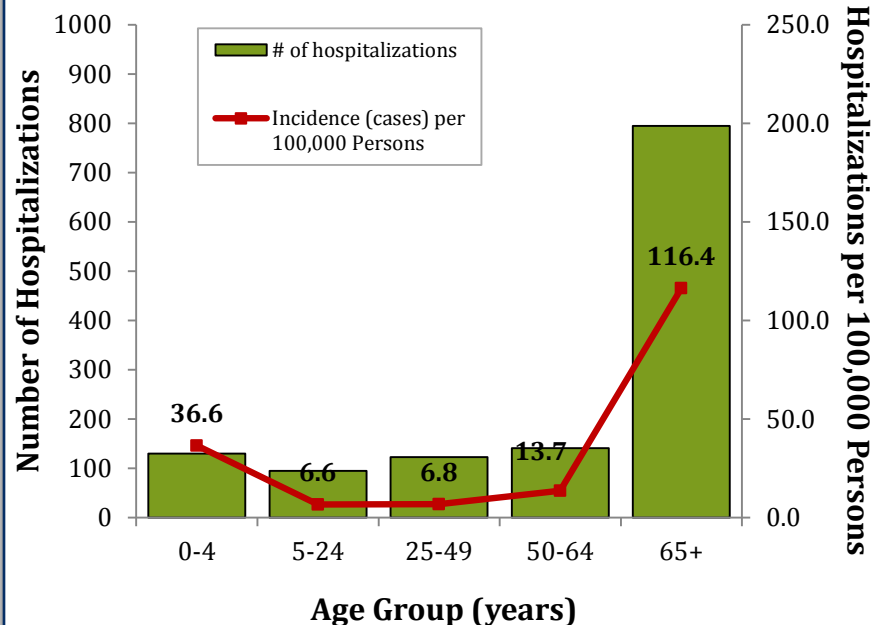
\*Influenza Surveillance Network

# Hospitalized Influenza Surveillance – continued

**Number of Influenza Hospitalizations and Incidence by Region, Minnesota  
Sept 28, 2014 – January 10, 2015**



**Number of Influenza Hospitalizations and Incidence by Age, Minnesota  
Sept 28, 2014 – January 10, 2015**



Region	Hospitalizations this week	Total (to date)
Central	14 (29%)	197 (15%)
Metro	127(55%)	626 (49%)
Northeast	0 (0%)	49 (4%)
Northwest	1 (2%)	18 (1%)
South Central	3 (6%)	114 (9%)
Southeast	0 (0%)	186 (15%)
Southwest	4 (8%)	62 (5%)
West Central	0 (0%)	31 (2%)

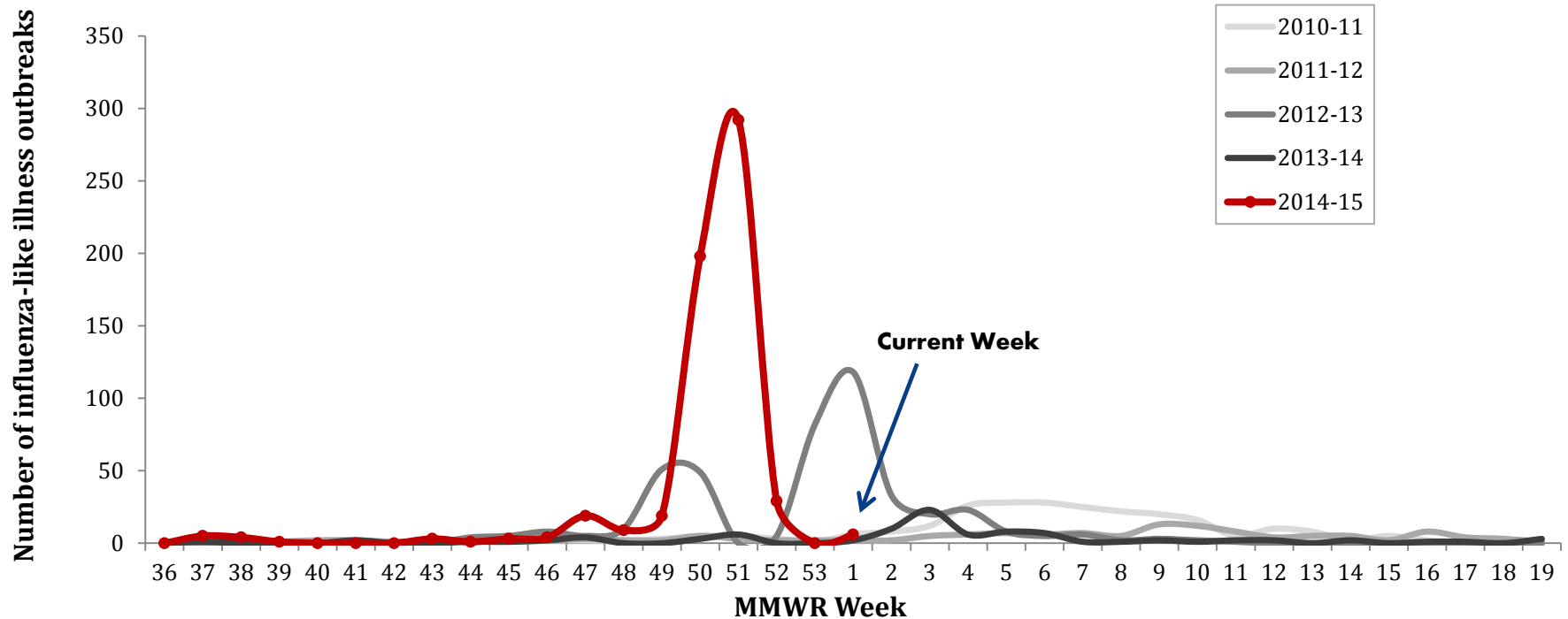
Median age (years) at time of admission
73.9

# 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



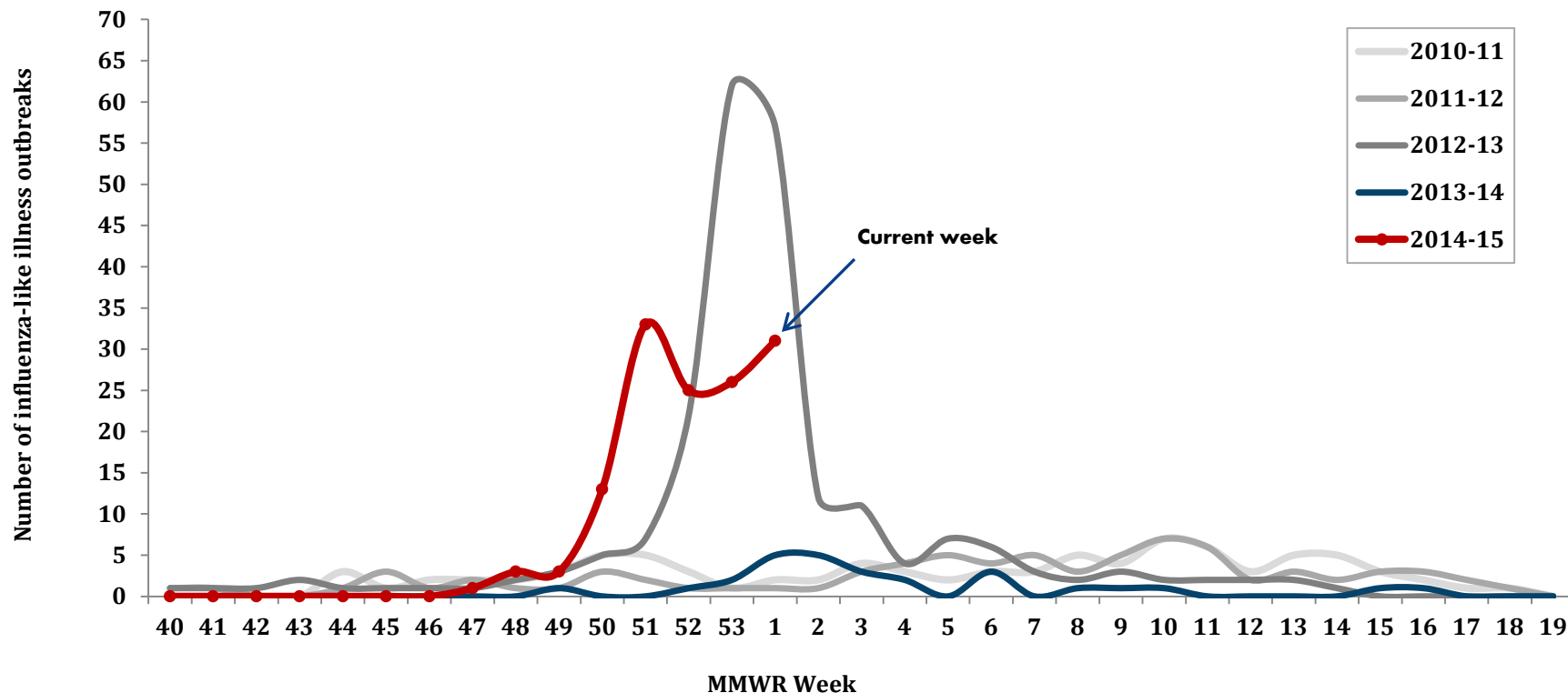
New school outbreaks this week	New school outbreaks last week	Total this season (to date)
6	0	593

# 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

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

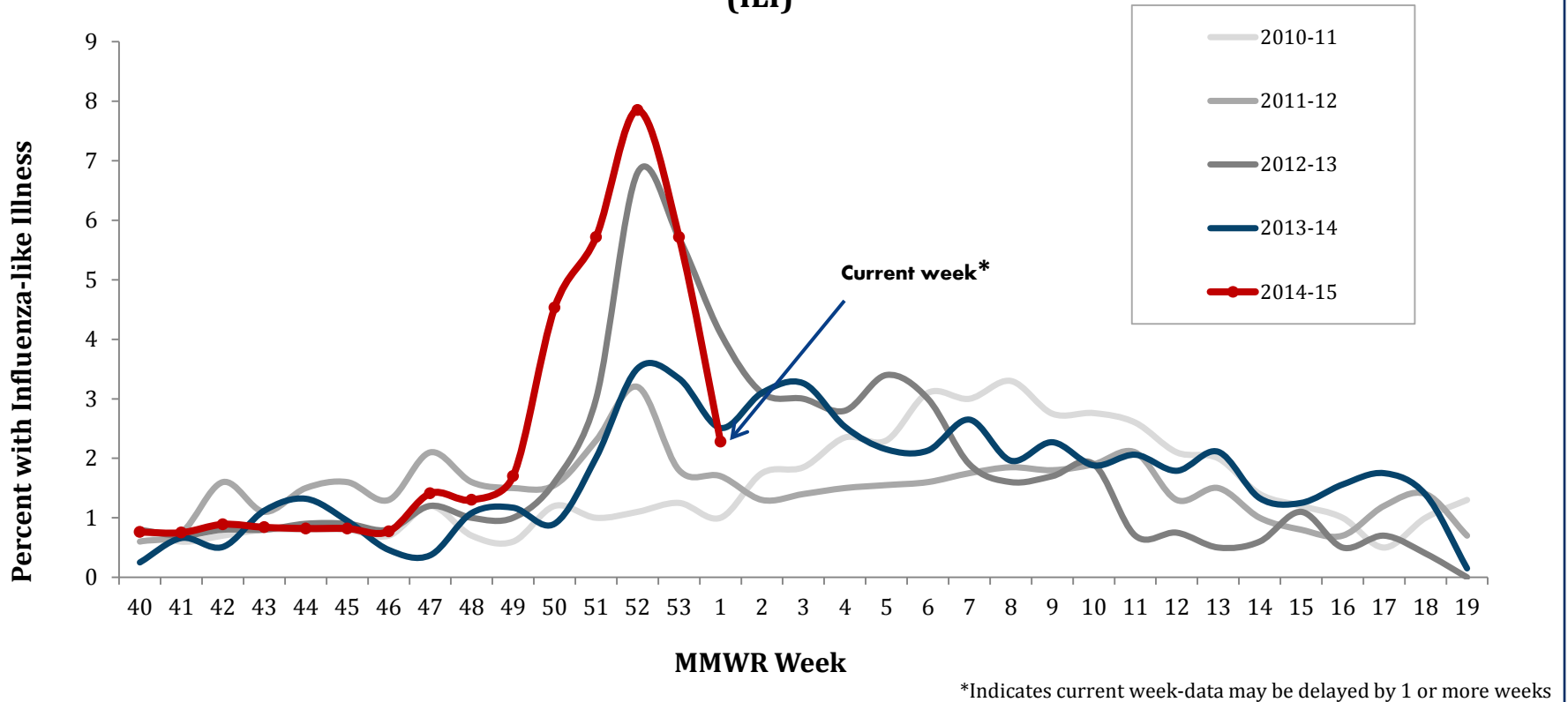


New LTC outbreaks this week	New LTC outbreaks last week	Total this season (to date)
31	26	135

# 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)

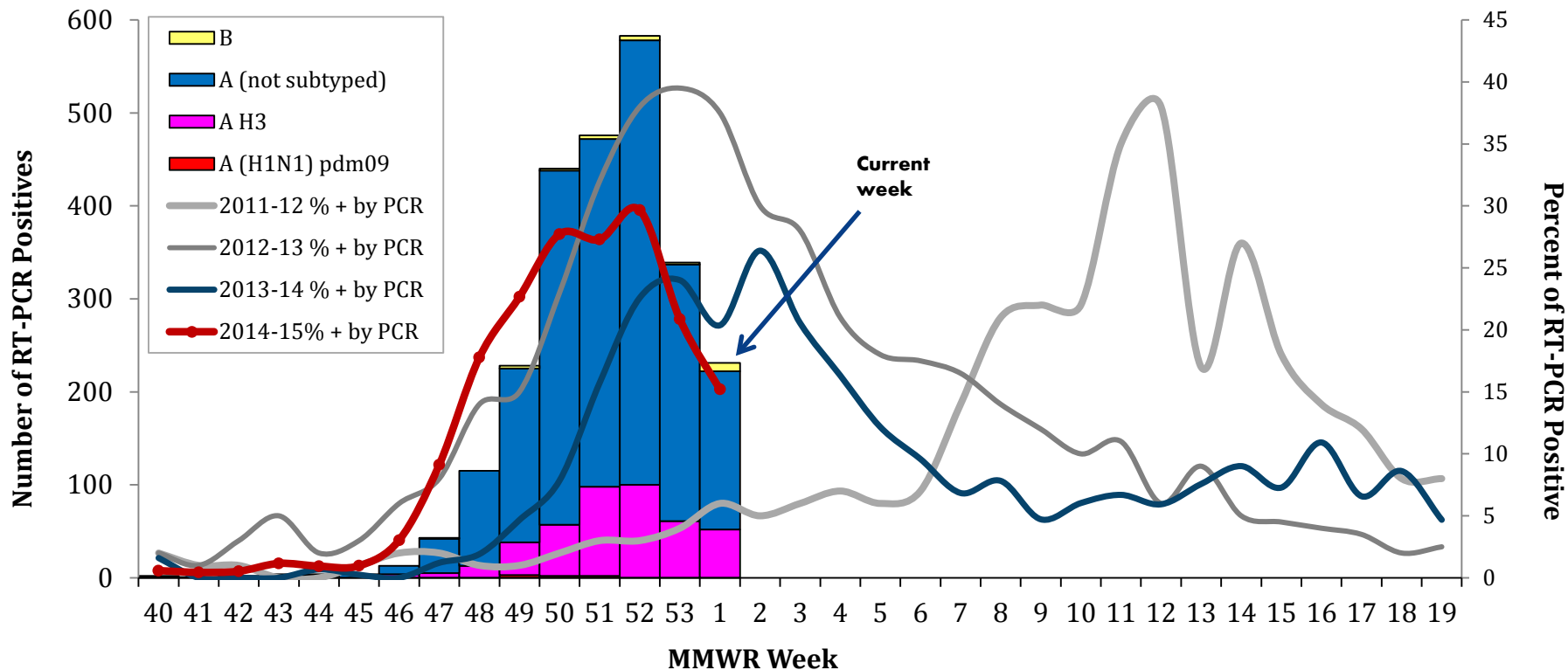


% of outpatients with ILI this week	% of outpatients with ILI last week
2.28%	5.72%

# 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

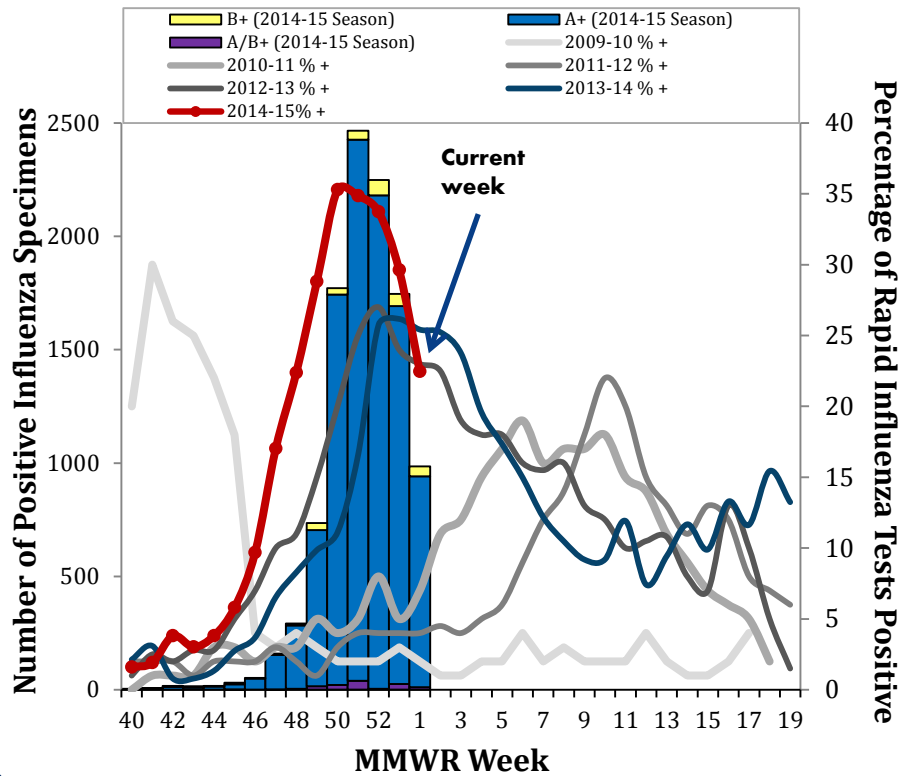


% RT-PCR positive this week	% RT-PCR positive last week
15.20%	20.86%

# Laboratory Surveillance – Rapid Test

## MLS Laboratories – Influenza Testing

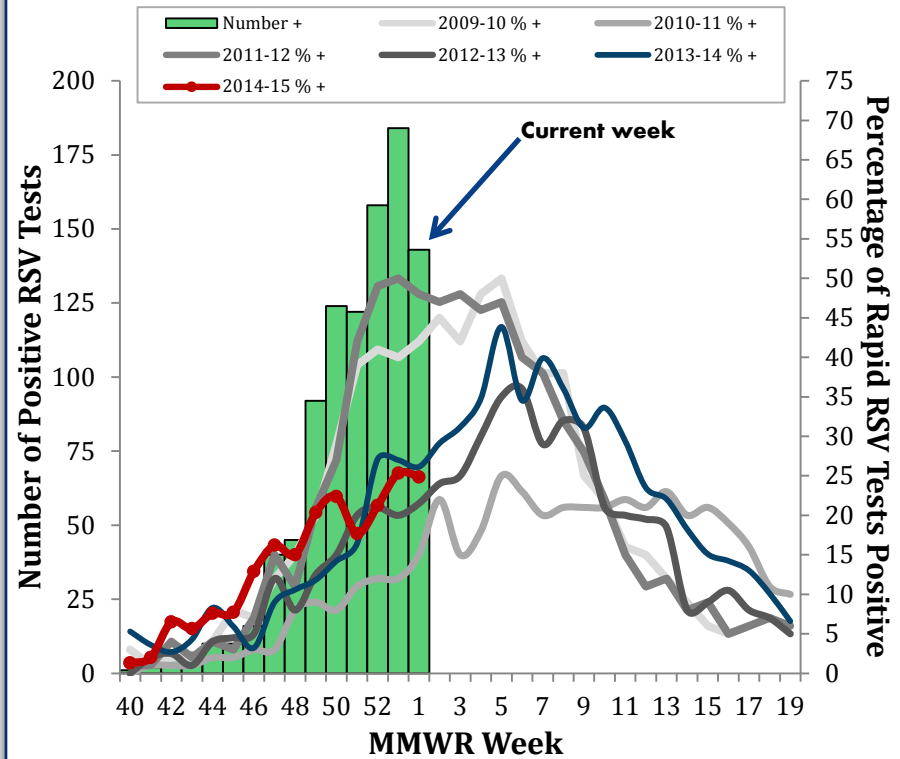
### Specimens Positive by Influenza Rapid Test, by Week



Region	% rapid influenza tests + (current week)
Northeast	26%
South Central	29%
Southwest	20%
Southeast	20%
Metro	20%
Central	23%
West Central	25%
Northwest	26%
State (overall)	22%

## MLS Laboratories – RSV Testing

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



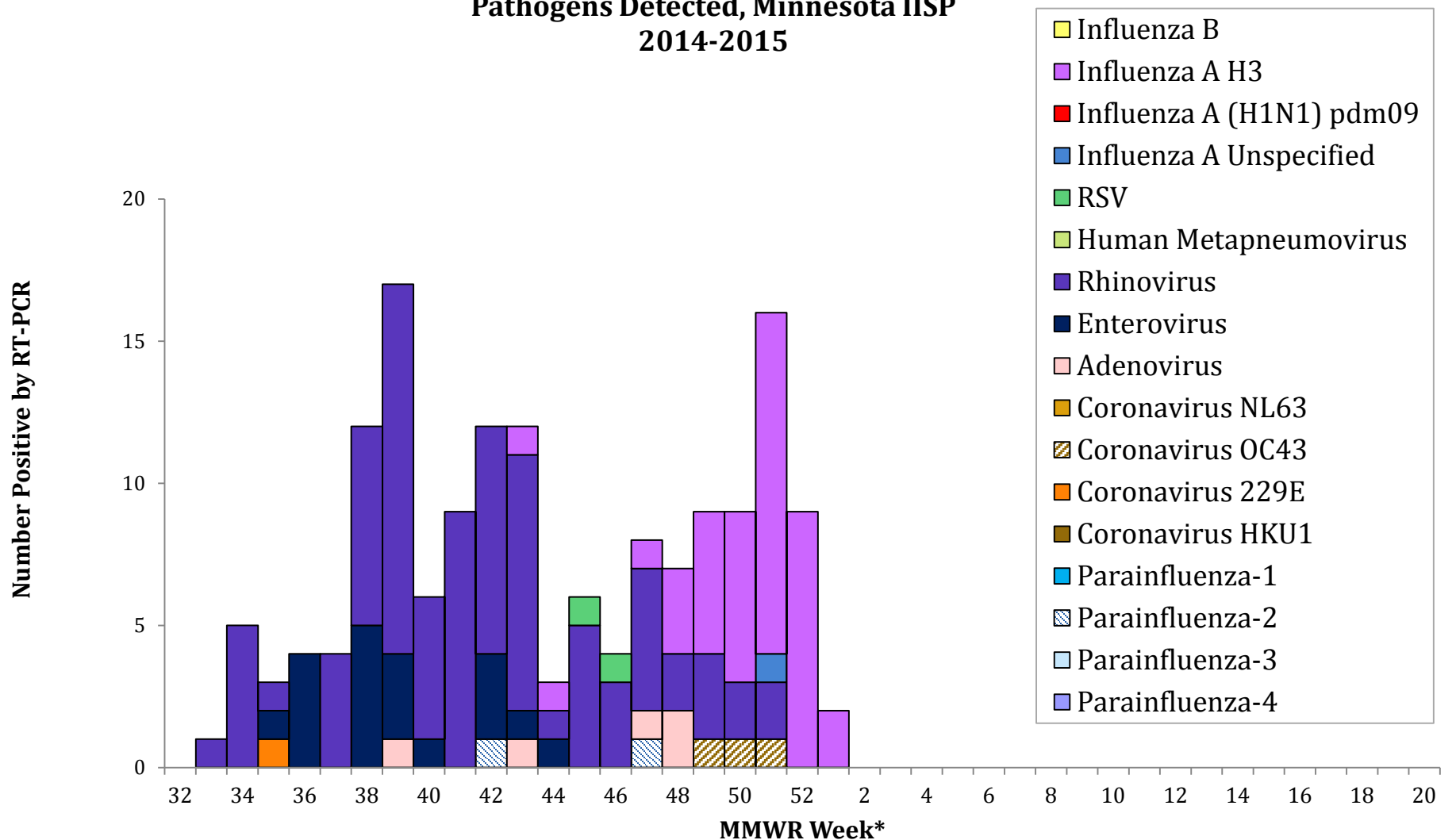
Region	% rapid RSV tests + (current week)
Northeast	10%
South Central	16%
Southwest	13%
Southeast	19%
Metro	29%
Central	33%
West Central	10%
Northwest	0%
State (overall)	25%



# Laboratory Surveillance – PCR

MN Influenza Incidence Project (IISP) - Outpatients

## Pathogens Detected, Minnesota IISP 2014-2015

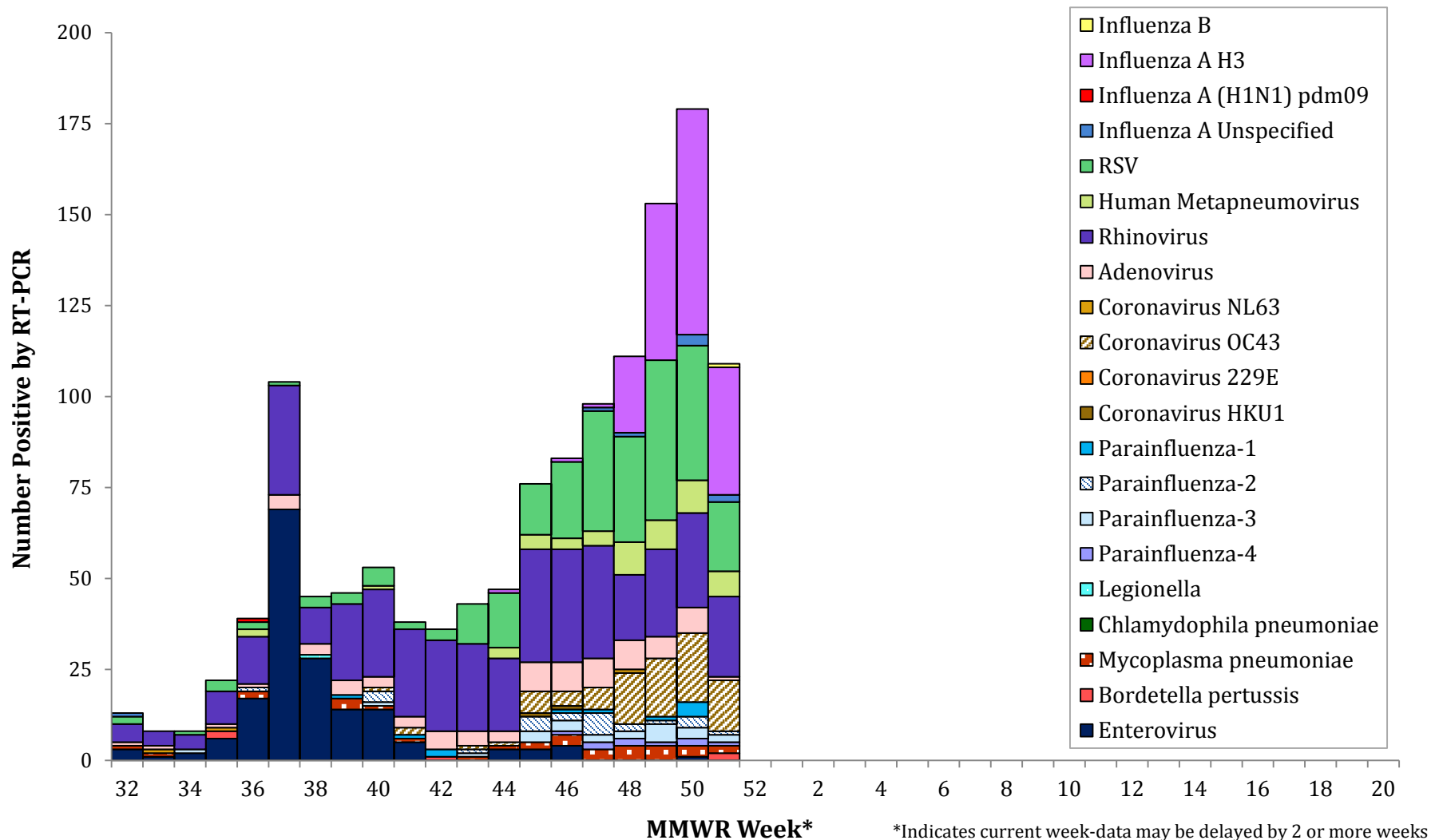


\*Indicates current week-data may be delayed by 2 or more weeks

# Laboratory Surveillance – PCR

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

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



# Weekly U.S. Influenza Surveillance Report

Current: Week Ending January 3, 2015 | WEEK 53

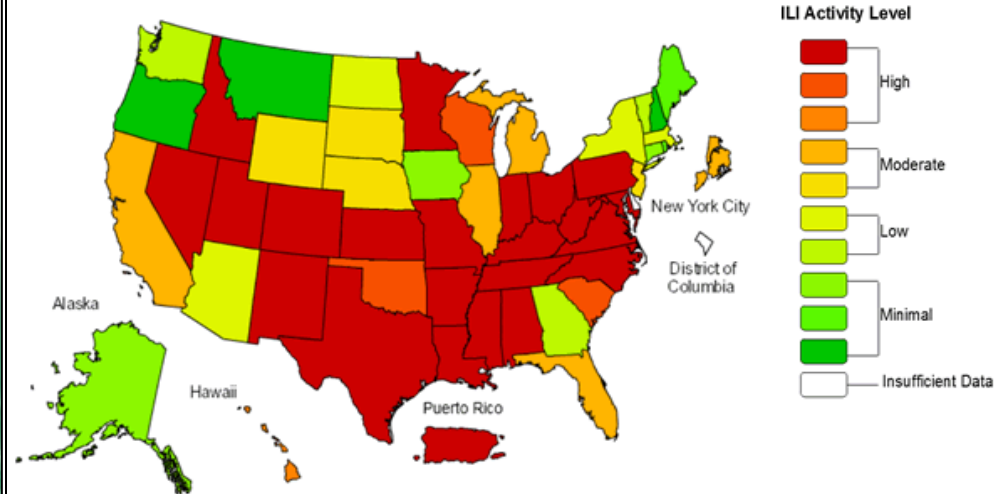
## FLUVIEW

A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*  
Week Ending January 03, 2015- Week 53



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

## Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2014-15 Influenza Season Week 53 ending Jan 03, 2015



## National Influenza Surveillance (CDC)

During week 53 (December 28, 2014-January 3, 2015), influenza activity continued at elevated levels in the United States.

**Viral Surveillance:** Of 30,469 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 53, 7,515 (24.7%) were positive for influenza.

**Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.

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

**Influenza-associated Hospitalizations:** A cumulative rate for the season of 20.1 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 5.6%, above the national baseline of 2.0%. All 10 regions reported ILI at or above region-specific baseline levels. Puerto Rico and 26 states experienced high ILI activity; New York City and eight states experienced moderate ILI activity; seven states experienced low ILI activity; eight 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 Guam and 46 states was reported as widespread; Puerto Rico, the U.S. Virgin Islands and three states reported regional activity; and the District of Columbia and one state reported local activity.

