

Week 40: September 28, 2014 – October 4, 2014

ILLINOIS DEPARTMENT OF PUBLIC HEALTH



# Illinois Influenza Surveillance Report

Week 40: Week Ending Saturday, October 4, 2014

**Division of Infectious Diseases Communicable Disease Section**

**10/10/2014**

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## Summary

- For this reporting week, the proportion of outpatient visits for influenza-like illness (ILI)<sup>1</sup> was **0.90%**, which is **Below** the regional baseline of **1.70%**.
- Based on CDC criteria, Illinois influenza activity is classified as **No Activity** (see CDC FluView Section) for this reporting week.
- For this reporting week there were **134** influenza specimens tested by WHO/NREVSS collaborating Illinois laboratories (which includes all Illinois Department of Public Health Laboratories). **One** specimen tested positive for Influenza.
- **One** influenza-associated Intensive Care Unit (ICU) admission<sup>3</sup> was reported for this reporting week.
- **No** influenza-associated pediatric deaths were reported for this reporting week.
- For this reporting week, **No** influenza outbreaks were reported.

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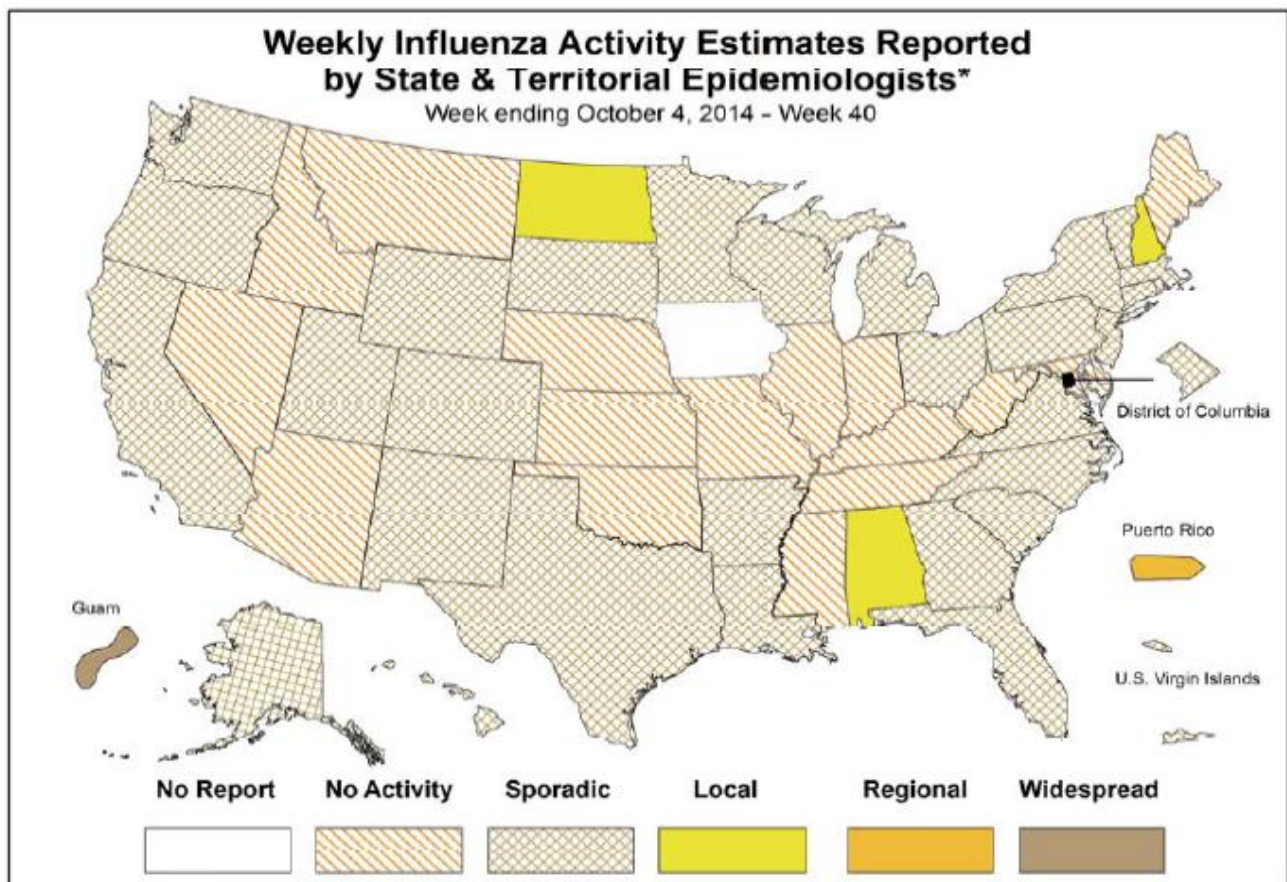
<sup>1</sup> ILI "Influenza like Illness" is defined as fever  $\geq 100^{\circ}\text{F}$  and cough and/or sore throat.

<sup>2</sup> FRI surveillance is ongoing at 8 U.S. military basic training centers, representing all service branches. FRI Rate Status is classified into one of 3 categories:

1. At or below expected value
2. Moderately elevated
3. Substantially elevated

<sup>3</sup> For the purpose of diagnosis, influenza can be diagnosed by using the following test: reverse transcription polymerase chain reaction RT-PCR], viral culture, Immunofluorescence [Direct Fluorescent Antibody (DFA) or Indirect Fluorescent Antibody (IFA) Staining], Enzyme Immuno Assay (EIA) or any rapid diagnostic test. Sensitivities of rapid diagnostic tests are approximately 50-70% when compared with viral culture or reverse transcription polymerase chain reaction (RT-PCR), and specificities of rapid diagnostic tests for influenza are approximately 90-95%. False-positive (and true-negative) results are more likely to occur when disease prevalence in the community is low, which is generally at the beginning and end of the influenza seasons. False-negative (and true-positive) results are more likely to occur when disease prevalence is high in the community, which is typically at the height of the influenza season.

## CDC FluView



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

**No activity:** No laboratory confirmed cases of influenza and no reported increase in cases of influenza like illness (ILI).

**Sporadic:** Small numbers of laboratory confirmed influenza cases or a single laboratory confirmed influenza in a single region of the state.

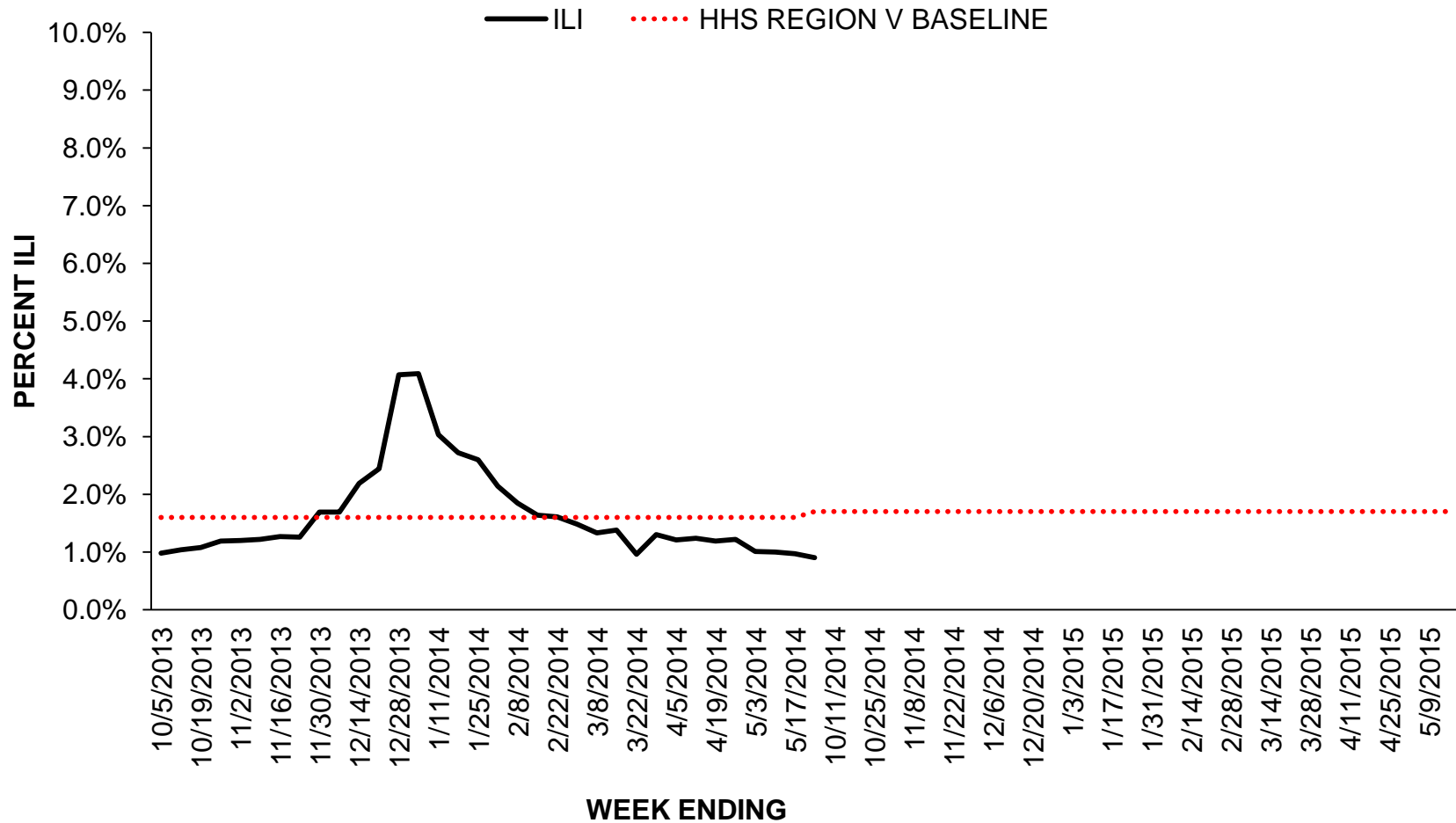
**Local:** Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in a single region of the state.

**Regional:** Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state.

**Widespread:** Outbreaks of influenza or increases in ILI cases and recent laboratory confirmed influenza in at least half the regions in the state.

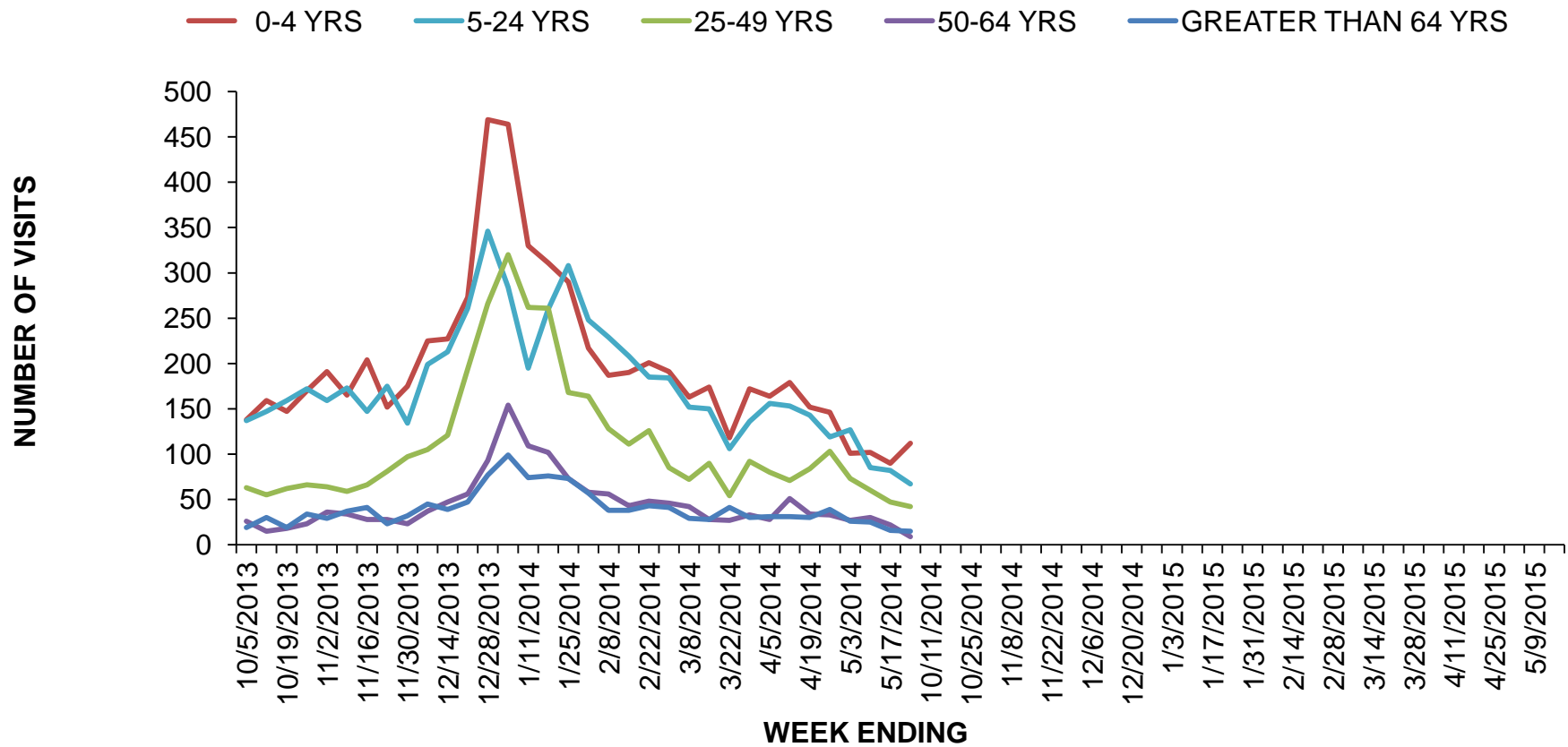
**ILINet Provider Surveillance**

Influenza Like Illness Outpatient Surveillance 2013-2015



**ILI Visits by Age Group**

2013-2015 INFLUENZA SEASON PROPORTION OF ILI OFFICE VISITS BY AGE GROUP



### **Influenza Intensive Care Unit (ICU) Admissions and Deaths**

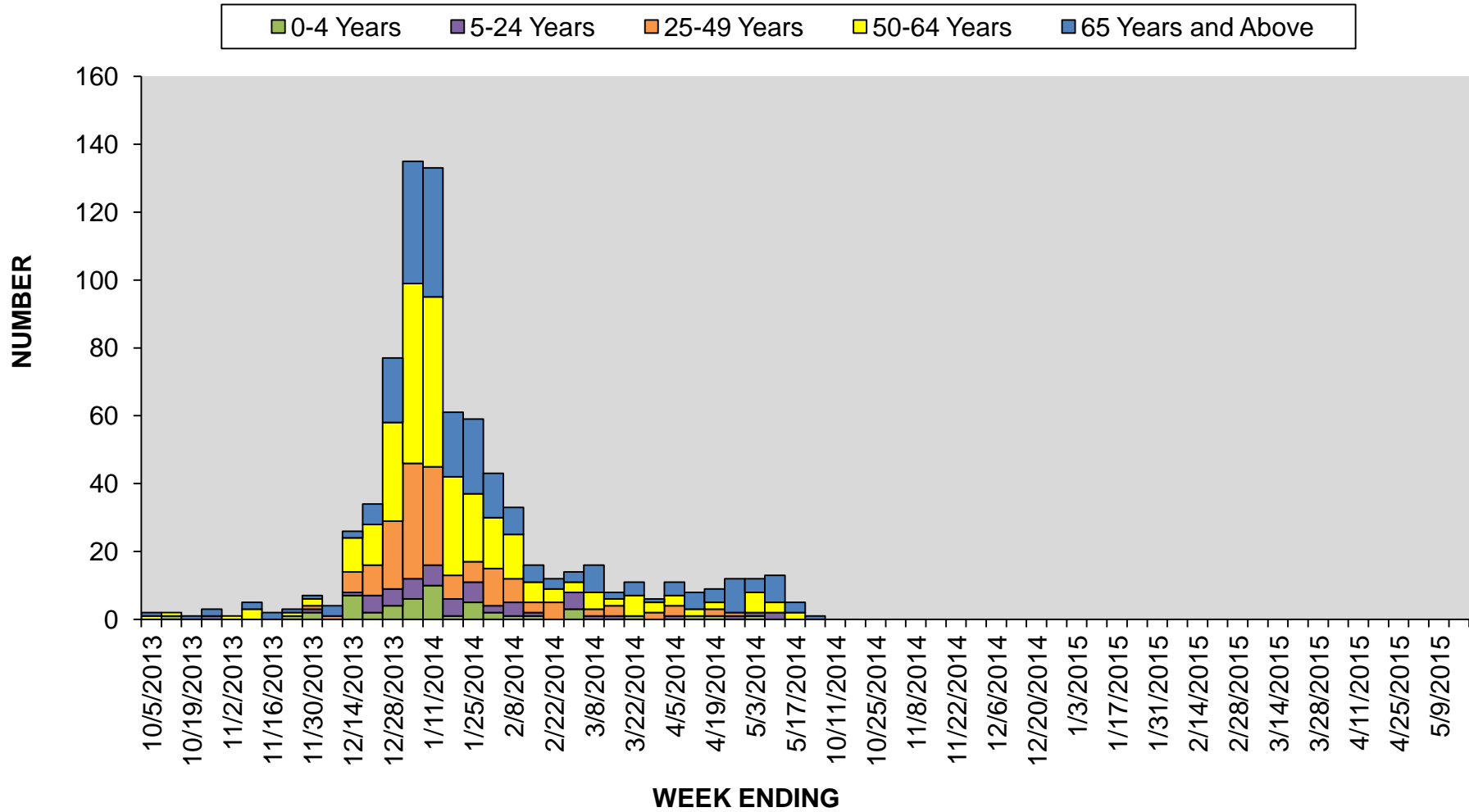
There was **1** influenza related ICU admission and **1** death for this reporting week.

Year	Week No	Admissions	Deaths <sup>4</sup>
2014	40	1	1
<b>Total (Provisional) for 2014-15 Season</b>		<b>1</b>	<b>1</b>

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<sup>4</sup> Deaths are reported for a) adults admitted to an intensive care unit who have a positive test for influenza and b) hospitalized and non-hospitalized children (less than 18 years of age) with a positive influenza test. The degree to which influenza infection is an immediate or underlying cause of death is not ascertained. CDC Influenza-Associated Pediatric Mortality data: <http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>

**Influenza Related ICU Admissions by Age Group, 2013-2015**





**Laboratory Surveillance**

- For this reporting week there were **134** influenza specimens tested by WHO/NREVSS collaborating Illinois laboratories (which includes all Illinois Department of Public Health Laboratories). **Two** specimens tested positive for Influenza.

For more information about circulating viruses visit:

- St Louis Children’s Hospital Weekly Virus/Microbiology Update:  
<http://slchlabtestguide.bjc.org/Default.aspx?url=63e0653d-fe31-466f-9228-d4de90fa7424>

Year	Week	A (H1)	2009(A) H1N1	A (H3)	A (Unable to subtype)	A (Sub typing not performed)	B	Total # Tested	Total # Positive	% Positive
2014	40	0	0	0	0	1	0	134	1	0.7%
<b>Season Totals</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>134</b>	<b>0</b>	<b>0.7%</b>

**Influenza Outbreaks Reported in Long-Term Facilities (LTC) and Correctional Facilities**

There were **No** outbreaks reported for this reporting week.

Region	2014-2015 Influenza Season - Number of outbreaks (%)
Rockford (1)	0
Peoria (2),	0
Edwardsville (4),	0
Marion (5),	0
Champaign (6),	0
West Chicago (7)	0
Chicago/Cook (8)	0
<b>Total</b>	<b>0</b>

## **Viral Resistance:**

**Antiviral Resistance:** No antiviral resistance data is available for specimens collected after October 1, 2014. During May 18 – September 27, 2014, 229 specimens (six 2009 H1N1, 113 influenza A (H3N2), and 110 influenza B viruses) collected in the United States were tested for susceptibility to the neuraminidase inhibitors (oseltamivir and zanamivir), none of the tested viruses were found to be resistant to either oseltamivir or zanamivir.

The majority of currently circulating influenza viruses are susceptible to the neuraminidase inhibitor antiviral medications, oseltamivir and zanamivir; however, rare sporadic instances of oseltamivir-resistant 2009 H1N1 and A (H3N2) viruses have been detected worldwide. Antiviral treatment with oseltamivir or zanamivir is recommended as early as possible for patients with confirmed or suspected influenza who have severe, complicated, or progressive illness; who require hospitalization; or who are at high risk for serious influenza-related complications. Additional information on recommendations for treatment and chemoprophylaxis of influenza virus infection with antiviral agents is available at <http://www.cdc.gov/flu/antivirals/index.htm>.

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## **Weekly Viral Subtype**

Influenza Isolates from Illinois Reported by WHO/NREVSS Collaborating Laboratories, 2014-2015 Influenza Season

This chart will be updated as the season progresses.

## IDPH Infectious Diseases Regional Map



- 1 – Rockford Region
- 2 – Peoria Region
- 4 – Edwardsville Region
- 5 – Marion Region
- 6 – Champaign Region
- 7 – West Chicago Region
- 8 – Chicago/Cook Co Region

## **Resources**

- Centers for Disease Control and Prevention Influenza Website:
  - <http://www.cdc.gov/flu/>
- Immunization Action Coalition Website: <http://immunize.org/>
- IDPH Seasonal Influenza Website: <http://www.idph.state.il.us/flu/surveillance.htm>
- National Respiratory and Enteric Virus Surveillance System (NREVSS), CDC website: <https://www.cdc.gov/nrevss/account/export.aspx>
- St Louis Children's Hospital Weekly Virus/Microbiology Update: <http://slchlabtestguide.bjc.org/Default.aspx?url=63e0653d-fe31-466f-9228-d4de90fa7424>