Week 43: October 25th – October 31st, 2009



Illinois Influenza Surveillance Report

Week 43: October 25th -October 31st, 2009

Division of Infectious Diseases

Immunizations Section

Thursday, October 29, 2009

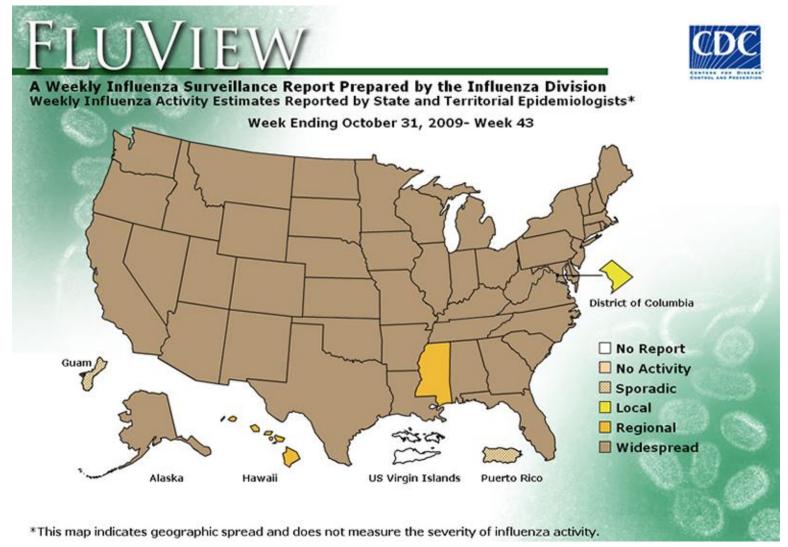
IN THIS ISSUE

Summary Page 2
CDC FLU View Page 3
2009 H1N1 Hospital Admissions and Deaths Page 4
ILI Net Page 5
Laboratory surveillance summary Page 6
National antiviral resistance data and resources Page 7

SUMMARY

- During CDC week 43, the proportion of outpatient visits for influenza-like illness (ILI)ⁱ was 10.67%. This is four times higher than the proportion of ILI outpatients typically seen this time of the year.
- Based on CDC criteria; influenza activity is currently **widespread** in Illinois, and several other states. For more information visit http://www.cdc.gov/flu/weekly/fluactivity/htm
- During week 43, 91.0 % of all influenza A viruses sub typed by IDPH and sentinel hospitals were 2009 influenza A (H1N1).
- One thousand and three hospital admissions and 36 deaths have occurred among individuals with confirmed 2009 influenza A (H1N1) since April 2009.
- 2009 influenza (A) H1N1 infection continues to impact younger age groups in Illinois.
 More than 80% of individuals hospitalized since April 1^{9th}, 2009 were less than 65 years old.

CDC FLU VIEW



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.

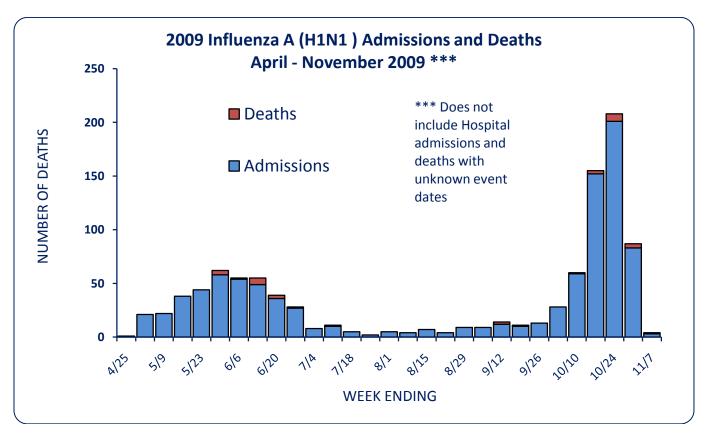
Regional: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state.

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

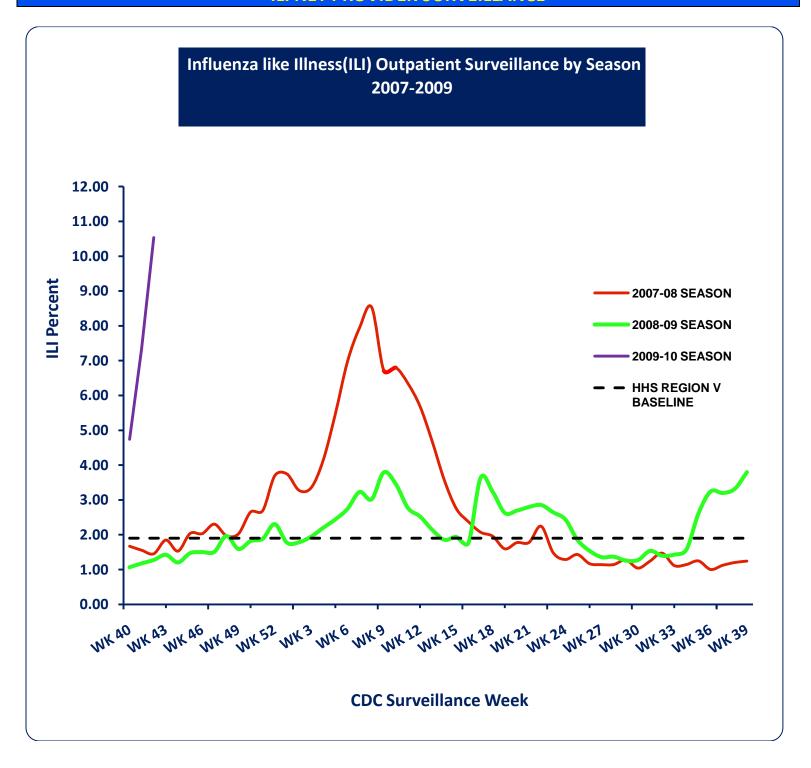
Weekly Influenza Report Page-3

2009 (A) H1N1 HOSPITILZATIONS AND DEATHS

H1N1 2009 Cumulative Hospitalizations and Deaths by Age Group* through October 27th, 2009						
Age range	Hospital Admissions No. (%)	Deaths No. (%)				
0-4	213 21.24	1 2.78				
5-18	284 28.32	5 13.89				
19-24	77 7.68	2 5.56				
25-49	223 22.23	17 47.22				
50-64	151 15.05	7 19.44				
65 +	54 5.38	4 11.11				
Unknown	1 0.10	0 0.00				
TOTAL	1003	36				



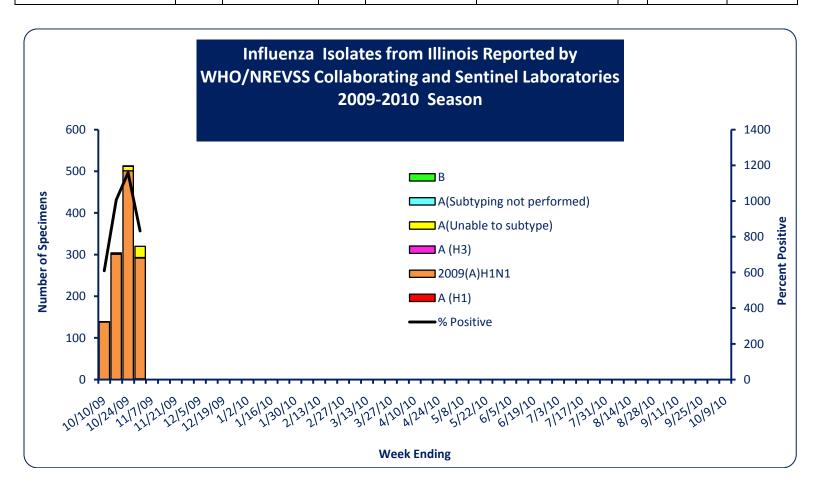
ILI NET PROVIDER SURVEILLANCE



LABORATORY SURVEILLANCE

During week 43, 320(38%) specimens tested by Illinois WHO/NREVSSⁱⁱ collaborating laboratories and sentinel sitesⁱⁱⁱ tested positive for influenza. 290 (91.0%) of all sub typed influenza A viruses were 2009 influenza A (H1N1) viruses.

Week	No of Labs Reporting	A (H1)	2009(A)H1N1	A (H3)	A(Unable to subtype)	A(Sub typing not performed)	В	Total # Tested	% Positive
40	8	0	138	0	1	0	0	609	0.23
41	8	0	301	0	1	0	2	1006	0.30
42	4	0	501	0	11	0	1	1159	0.44
43	2	2	290	1	27	0	0	832	0.38
200	9 Year to Date	214	4928	73	120	74	68	14103	0.39



NATIONAL ANTIVIRAL RESISTANCE DATA

	Viruses tested (n)	Resistant Viruses, No. (%)	Viruses tested (n)	Resistant Viruses, No. (%)	Viruses tested (n)	Resistant Viruses, No. (%)
	Oseltamivir		Zanamivir		Adamantanes	
Seasonal Influenza A (H1N1)	0	0 (0)	0	0 (0)	0	0 (0)
Influenza A (H3N2)	0	0 (0)	0	0 (0)	1	1 (100)
Influenza B	0	0 (0)	0	0 (0)	NA	NA
2009 Influenza A (H1N1)	884	2 ^{ivv} (0.2)	256	0 (0)	152	152 (100)

The majority of 2009 influenza A (H1N1) viruses are susceptible to the neuraminidase inhibitor antiviral medication oseltamivir; however, rare sporadic cases of oseltamivir resistant 2009 influenza A (H1N1) viruses have been detected worldwide. Since September 1, 2009, four cases have been identified in the United States, and a total of 14 cases of oseltamivir resistant 2009 influenza A (H1N1) viruses have been identified in the United States since April 2009.

RESOURCES

Centers for Disease Control and Prevention Influenza Website:

http://www.cdc.gov/flu/weekly/fluactivity.htm

Immunization Action Coalition Website: http://immunize.org/
IDPH Website http://www.idph.state.il.us/flu/surveillance.htm

ⁱ ILI "Influenza like Illness" is defined as fever ≥ 100°F and cough and/or sore throat.

[&]quot;WHO/NREVSS Collaborating Laboratories WHO/NREVSS Collaborating Laboratories: For viral surveillance - About 80 U.S. World Health Organization (WHO) Collaborating Laboratories and 70 National Respiratory and Enteric Virus Surveillance System (NREVSS), located throughout the United States report daily or weekly the results of their testing.

Super Sentinel Surveillance Sites: Sites recruited by IDPH to conduct virologic surveillance during summer 2009

Two screening tools were used to determine oseltamivir resistance: sequence analysis of viral genes or a neuraminidase inhibition assay

Additional laboratories perform antiviral resistance testing and report their results to CDC. Two additional oseltamivir resistant 2009 influenza A (H1N1) viruses have been identified by these laboratories, bringing the total number to 11.