

Week 46: November 15th – November 21th, 2009



Illinois Influenza Surveillance Report

Week 46: November 15th – November 21st, 2009

Division of Infectious Diseases

Immunizations Section

Friday, November 27th, 2009

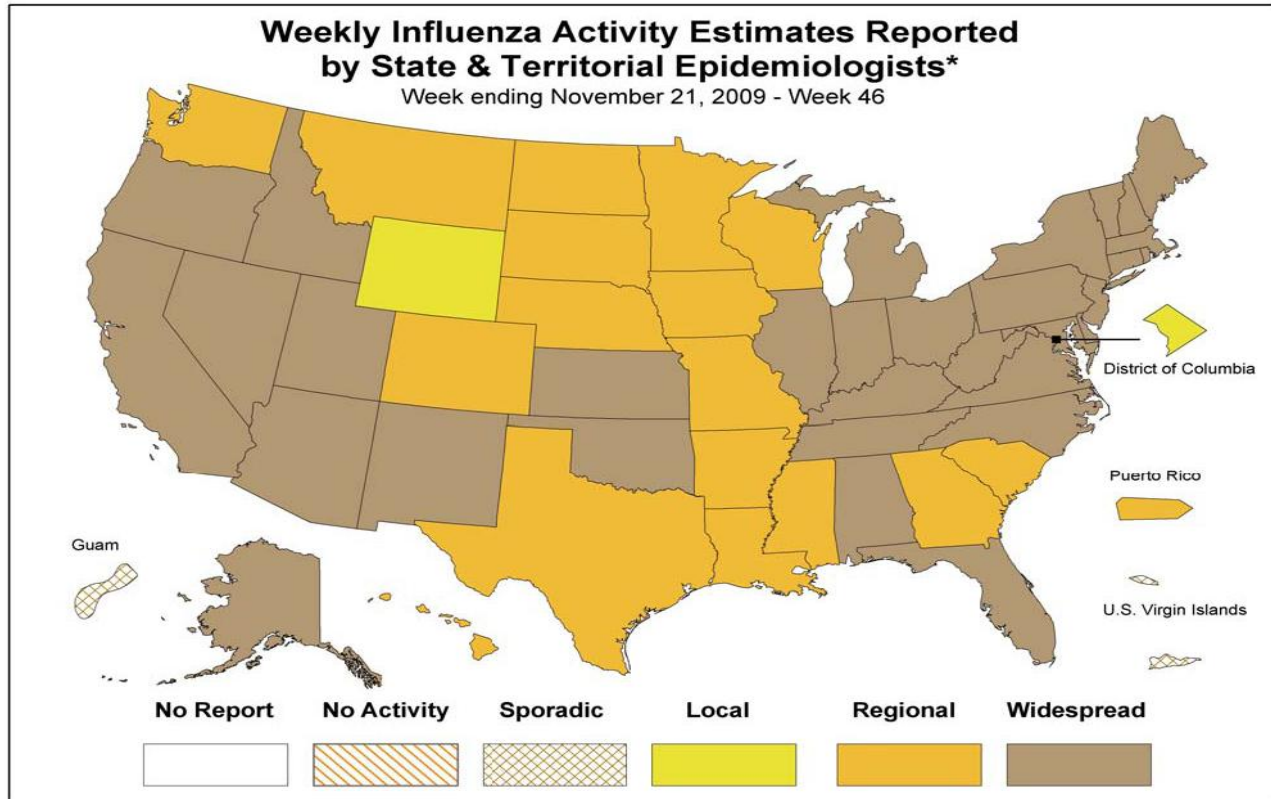
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SUMMARY

- During CDC week 46, the proportion of outpatient visits for influenza-like illness (ILI)ⁱ was 4.6%. This represents a 34% decrease compared with last week.
- Based on CDC criteria; influenza activity is currently **widespread** in Illinois, and 31 other ~~several~~ other states. For more information visit <http://www.cdc.gov/flu/weekly/fluactivity/htm>
- During week 46, 99.0 % of all influenza A viruses sub typed by IDPH and sentinel hospitals were 2009 influenza A (H1N1).
- Two thousand and one hospital admissions and 64 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



Activity Level	ILI activity*/Outbreaks		Laboratory data
No activity	Low	And	No lab confirmed cases [†]
Sporadic	Not increased	And	Isolated lab-confirmed cases
	Not increased	OR	
Local	Increased ILI in 1 region**; ILI activity in other regions is not increased	And	Lab confirmed outbreak in one institution [‡]
	2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased	OR	
Regional (doesn't apply to states with ≤4 regions)	Increased ILI in ≥2 but less than half of the regions	And	Recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI
	Institutional outbreaks (ILI or lab confirmed) in ≥2 and less than half of the regions	OR	
Widespread	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions	And	Recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions
		OR	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions

* ILI activity can be assessed using a variety of data sources including ILINet providers, school/workplace absenteeism, and other syndromic surveillance systems that monitor influenza-like illness.

[†] Lab confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR.

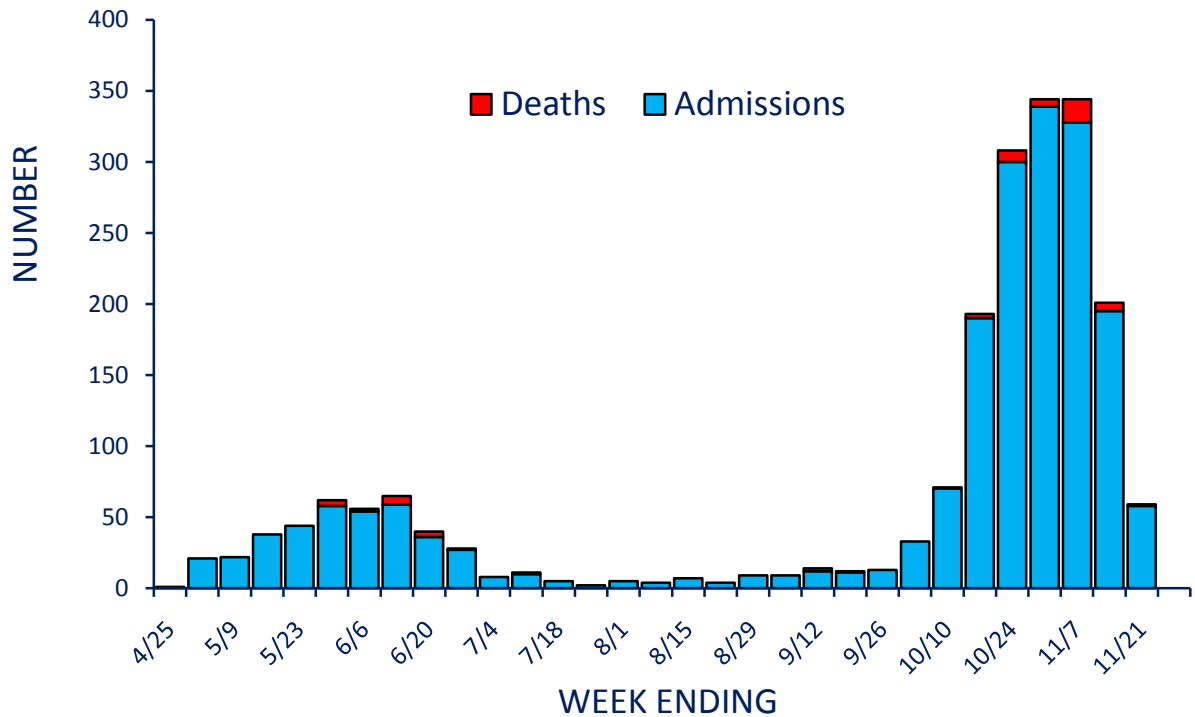
[‡] Institution includes nursing home, hospital, prison, school, etc.

** Region: population under surveillance in a defined geographical subdivision of a state.

2009 (A) H1N1 HOSPITALIZATIONS AND DEATHS

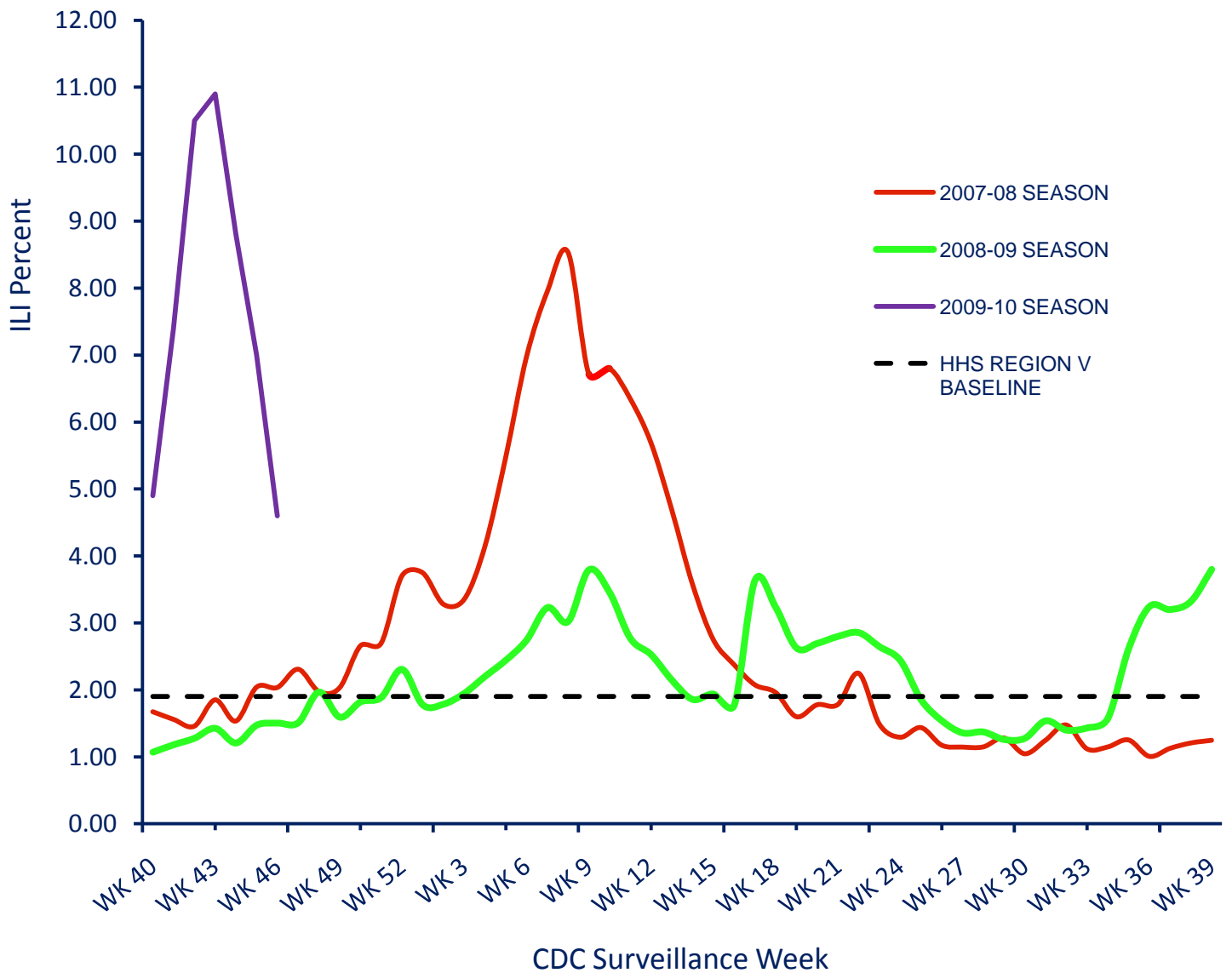
H1N1 2009 Cumulative Hospitalizations and Deaths by Age Group* through November 24th , 2009		
Age range	Hospital Admissions No. (%)	Deaths No. (%)
0-4	403 (20)	2 (3)
5-18	495 (25)	10 (16)
19-24	151 (8)	3 (5)
25-49	497 (25)	23 (36)
50-64	327 (16)	15 (23)
65 +	126 (6)	11 (17)
Unknown	2 (0)	0 (0)
TOTAL	2001	64

2009 Influenza A (H1N1) Admissions and Deaths



ILI NET PROVIDER SURVEILLANCE

Influenza like Illness(ILI) Outpatient Surveillance by Season
2007-2009

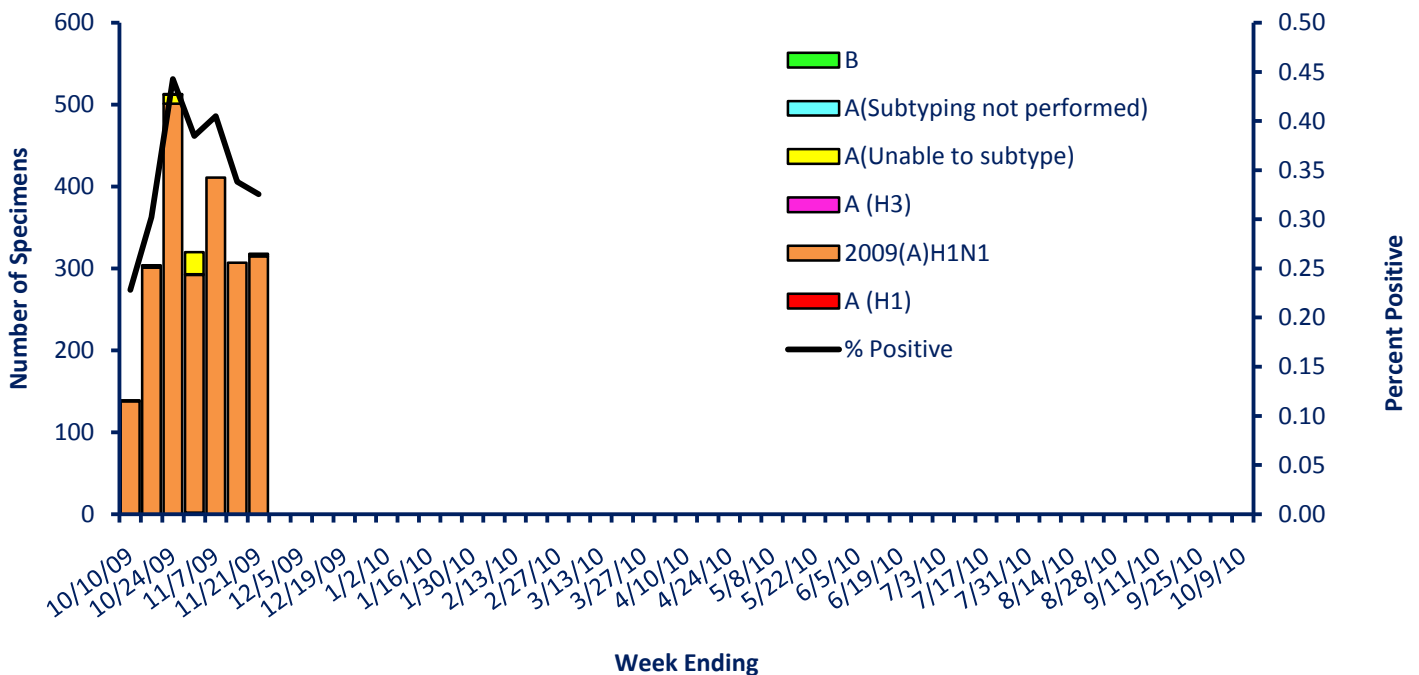


LABORATORY SURVEILLANCE

During week 46, 318 (32%) specimens tested by Illinois WHO/NREVSSⁱⁱ collaborating laboratories and sentinel sitesⁱⁱⁱ tested positive for influenza. Three hundred and fifteen (99.0%) 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)	B	Total # Tested	% Positive
43	2	2	290	1	27	0	0	832	0.38
44	2	0	411	0	0	0	0	1015	0.40
45	2	0	307	0	0	0	0	908	0.33
46	2	0	315	0	2	0	1	977	0.32
2009 Year to Date		214	5961	73	122	74	69	17003	0.38

Influenza Isolates from Illinois Reported by WHO/NREVSS Collaborating and Sentinel Laboratories 2009-2010 Season



NATIONAL ANTIVIRAL RESISTANCE DATA

The dates for this testing need to be specified--Antiviral Resistance Testing Results on Samples Collected Since September 1, 2009.

	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 (0)
Influenza A (H3N2)	5	0 (0)	0	0 (0)	2 (0)	2 (100)
Influenza B	1	0 (0)	0	0 (0)	NA	NA
2009 Influenza A (H1N1)	1409	12 ^{iv} (0.9)	402	0 (0)	207	206 (99.5)

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. A total of 23 cases of oseltamivir resistant 2009 influenza A (H1N1) viruses have been identified in the United States since April 2009. Thirteen of these 23 cases, have been identified in the United States since September 1, 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 $\geq 100^{\circ}\text{F}$ and cough and/or sore throat.

ⁱⁱ 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.

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

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

^v ~~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.~~ ~~Additional laboratories perform antiviral resistance testing and report their results to CDC. One additional oseltamivir resistant 2009 influenza A (H1N1) virus has been identified by these laboratories since September 1, 2009, bringing the total number to 13.~~