Division of Acute Disease Prevention and Emergency Response
Center for Acute Disease Epidemiology

Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses
Summer Monthly Report
August 6 (Week 31) – September 3 (Week 35), 2011

Iowa statewide activity summary

Influenza activity in Iowa remains low. There was one laboratory confirmed case of influenza A (H3) in this reporting period. The percent of influenza rapid tests that tested positive increased when compared to previous months. Other respiratory viruses with culture tests positive for the reporting period include adenovirus and enterovirus. The IISN weekly report will resume in the week ending October 8 (MMWK 40).

National activity summary - www.cdc.gov

During May 22--September 3, 2011, the United States experienced low levels of influenza activity; 2009 influenza A (H1N1), influenza A (H3N2), and influenza B viruses were detected worldwide and identified sporadically in the United States. Typical seasonal patterns of influenza activity occurred in the Southern Hemisphere.

International activity summary - www.who.int

Countries in the temperate regions of the northern hemisphere reported low or undetectable influenza activity. The United States of America (USA) has recently reported four human cases of swine influenza A(H3N2) containing a novel reassortment with an M gene derived from influenza A(H1N1)2009. Influenza activity in the tropical zone was mostly low with the exception of a few countries of the Americas (Cuba and Honduras), Western Africa (Cameroon and Senegal), and Southern Asia (Bangladesh and Thailand) that reported continued transmission. In South America the influenza season has been mild and has peaked with variation in the predominant type and subtype of virus circulating in different countries in the area. Influenza activity may have peaked nationally in Australia, though regional increases are still being reported. New South Wales, Australia has recently reported a cluster of 25 cases with oseltamivir-resistant influenza A(H1N1)2009 virus infection. The cases occurred in a limited geographic area but occurred over a three month period of time. Of note, none of the cases interviewed had previously been exposed to oseltamivir or had other risk factors previously associated with the development of oseltamivir resistance. This represents the largest cluster of oseltamivir resistant viruses to date and the most persistent period of community transmission. Investigations are ongoing to determine the full extent of spread of the virus.

Laboratory surveillance program - *Influenza and Other Respiratory Viruses*

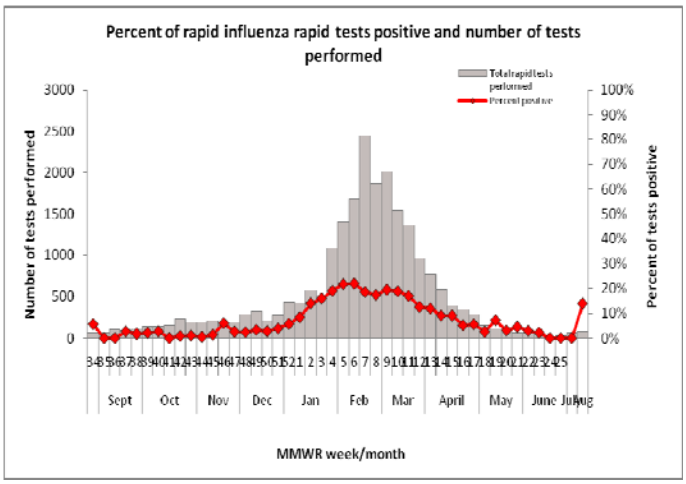
The State Hygienic Laboratory (SHL) is the primary lab testing and reporting influenza tests in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs for the number of rapid-antigen tests performed and number positive weekly. This report also includes the positive non-influenza virus culture tests reported from the Dunes Medical Laboratories at Mercy Medical Center-Sioux City.

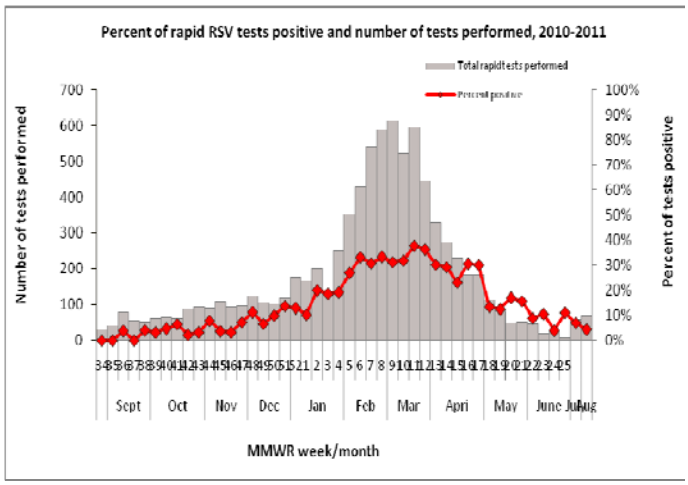
Specimens tested by the State Hygienic Laboratory

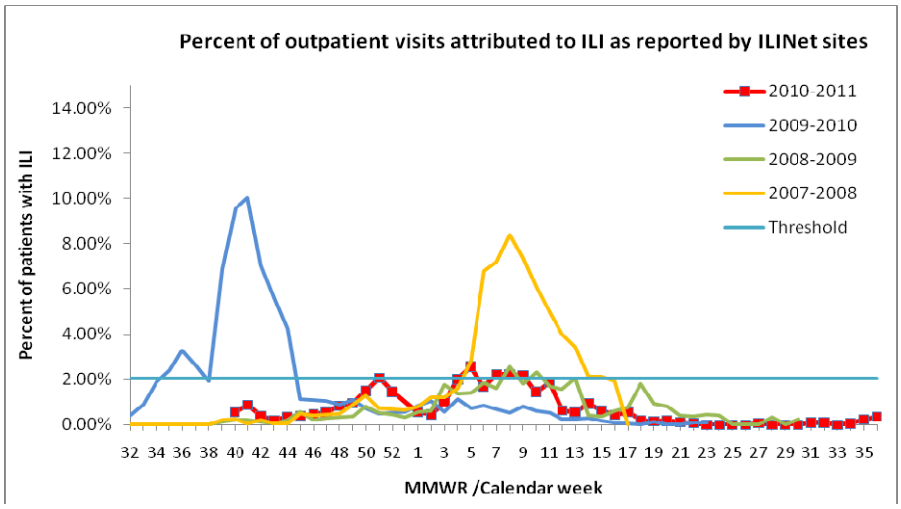
Influenza viruses isolated 9/1/10 to present week		
	Week 31-34	*Cumulative*
Flu A	*0*	713 (22%)
Flu A (2009 H1N1)	*0*	291 (9%)
Flu A (H3)	*1*	370 (11%)
Subtyping not reported	*0*	52 (2%)
Flu B	*0*	375 (11%)
Indeterminate/Equivocal	*0*	85 (2%)
Negative	*21*	2268 (66%)
Total	*22*	3441

Influenza viruses by age group 9/1/10 to present week				
Age group	*Flu A (2009 H1N1)*	*Flu A (H3)*	*Flu A (no subtyping)*	*Flu B*
0-4	41 (14%)	58 (16%)	7 (13%)	67 (18%)
5-17	55 (19%)	60 (16%)	8 (15%)	165 (44%)
18-24	90 (31%)	23 (6%)	5 (10%)	60 (16%)
25-49	71 (25%)	68 (18%)	12 (23%)	47 (12%)
50-64	29 (10%)	34 (9%)	6 (12%)	13 (4%)
>64	5 (2%)	127 (34%)	14 (27%)	23 (6%)
Total	291	370	52	375

Number of positive culture results for non-influenza respiratory virus isolated since 9/1/10 by the State Hygienic Laboratory and Mercy Dunes in Sioux City		
	Week 26-30	***Cumulative***
Adenovirus Isolated	3	88
Enteroviruses (presumptive)	1	6
Coxsackievirus A9 Isolated	2	4
Coxsackievirus B4 Isolated	0	1
Echovirus 9 Isolated	0	2
Parainfluenza Virus Type 1 Isolated	0	5
Parainfluenza Virus Type 2 Isolated	0	20
Parainfluenza Virus Type 3 Isolated	0	45
Rhinovirus Isolated	0	19
Respiratory syncytial virus (RSV)	0	31





Outpatient health care provider surveillance program (ILINet)

There are approximately 10 outpatient health care provider surveillance sites surveying patient populations for ILI each week. These sites report the number of patients seen with influenza-like illness and the total number of patient visits each week. *As part of national influenza surveillance, CDC and IDPH highly encourage new outpatient providers to join the sentinel surveillance program today! Contact Yumei Sun at 515-281-7134 or yumei.sun@idph.iowa.gov for more information.*