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
September 1 (Week 36) – September 28 (Week 39), 2013

Iowa statewide activity summary

Influenza activity in Iowa is very low. There was one case of seasonal influenza A (H1N1) confirmed by the State Hygienic Laboratory (SHL) for this reporting period. Other respiratory viruses reported in this period include 43 cases of rhinovirus/enterovirus, two cases of adenovirus, six cases of parainfluenza 1, one case of parainfluenza 3, and two cases of parainfluenza 4. This report will change from monthly to weekly next week.

National activity summary - www.cdc.gov

Condensed reports over the summer months are available at www.cdc.gov/flu/weekly/

International activity summary - www.who.int

Influenza activity in the northern hemisphere temperate zones remained at inter-seasonal levels. In most regions of tropical Asia influenza activity decreased, with the exception of Hong Kong Special Administrative Region, China, where influenza activity associated with A (H3N2) viruses increased. In the Caribbean region of Central America and tropical South America the influenza season appeared to have come to an end. Acute respiratory infections continued to decline. Respiratory Syncytial Virus predominated, and influenza A (H1N1) pdm09 and influenza A (H3N2) were the main respiratory viruses reported since May of this year. Influenza activity peaked in the temperate countries of South America and in South Africa in late June. Influenza activity in these areas was primarily associated with influenza A (H1N1) pdm09 throughout the season, but since July greater numbers of influenza A (H3N2) and influenza type B viruses were observed. Australia and New Zealand had a late start of a season in August. Influenza activity seemed to decrease in mid-September in Australia. Co-circulation of influenza A (H3N2), influenza A (H1N1) pdm09 and type B was reported in both countries.

Laboratory surveillance program – *influenza and other respiratory viruses*

The State Hygienic Laboratory (SHL) is the primary lab for influenza testing and reporting in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network on a daily basis. 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 tests reported from SHL, the Dunes Medical Laboratories at Mercy Medical Center in Sioux City, and Iowa Methodist Medical Center in Des Moines.

Specimens tested by the State Hygienic Laboratory

Table 1. Influenza viruses isolated by SHL

	Week 36-39	*Cumulative since 9/1/13*
Flu A	1 (4%)	1 (4%)
A (2009 H1N1)	1 (4%)	1 (4%)
A (H3)	0 (0%)	0 (0%)
A (H3N2) variant	0 (0%)	0 (0%)
Subtyping not reported	0 (0%)	0 (0%)
Flu B	0 (0%)	0 (0%)
Equivocal	0 (0%)	0 (0%)
Indeterminate	0 (0%)	0 (0%)
Negative	27 (96%)	27 (96%)
Total	28	28

Table 2. Influenza viruses by age group 9/1/13 to present week

Age group	*Flu A (2009 H1N1)*	*Flu A (H3)*	*Flu A (H3N2) Variant*	*Flu A (no typing)*	*Flu B*
0-4	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
5-17	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
18-24	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
25-49	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
50-64	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
>64	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	1	0	0	0	0

* Counts of three or less are sometimes suppressed to protect confidentiality.
Note that counts may not add up to the total due to missing age information

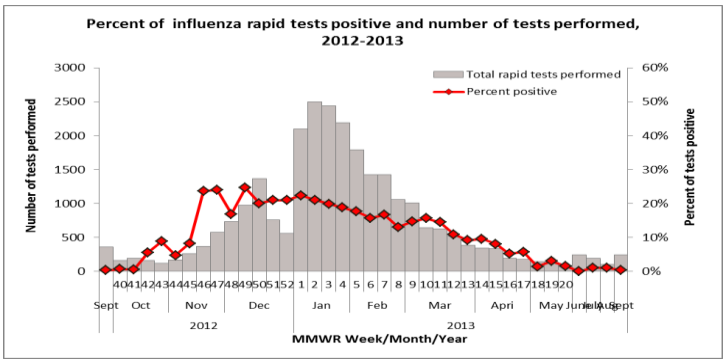
Table 3. Number of positive results for non-influenza respiratory virus isolated by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

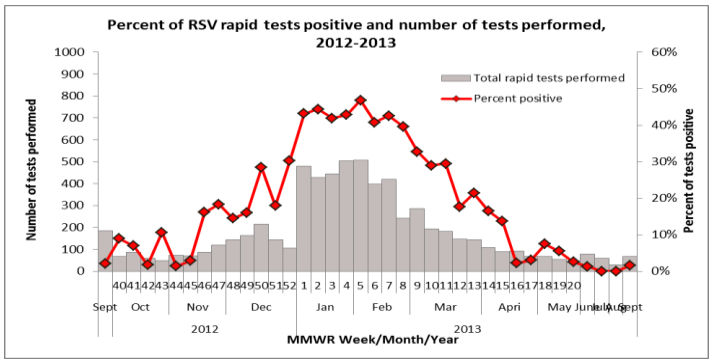
	Week 36-39	*Cumulative since 9/1/13*
Adenovirus	2	2
Parainfluenza Virus Type 1	6	6
Parainfluenza Virus Type 2	0	0
Parainfluenza Virus Type 3	1	1
Parainfluenza Virus Type 4	2	2
Rhinovirus/Enterovirus	43	43
Respiratory syncytial virus (RSV)	0	0
human metapneumovirus (hMPV)	0	0

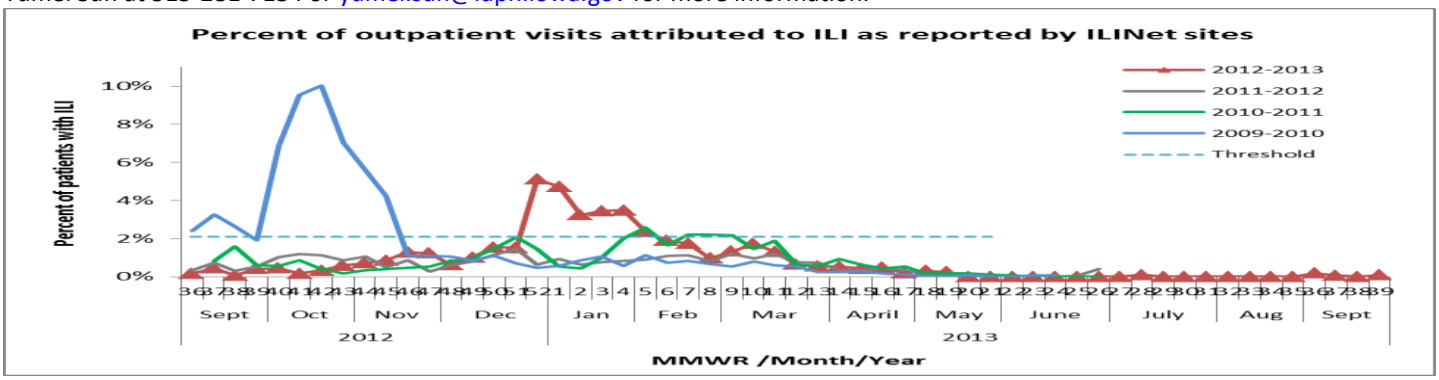
Table 4. Percent of influenza rapid tests positive and number of tests performed by region, September, 2013

Region*	Influenza					RSV		
	Tested	*Flu A*	*Flu B*	*Both*	*% Positive*	*Tested*	*Positive*	*% Positive*
Region 1	31	0	0	0	0.0%	18	1	5.6%
Region 2	8	0	0	0	0.0%	2	0	0.0%
Region 3	0	0	0	0	NA	0	0	NA
Region 4	7	0	0	0	0.0%	3	0	0.0%
Region 5	1	0	0	0	0.0%	0	0	NA
Region 6	196	0	1	0	0.5%	43	0	0.0%

*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; **Region 2**- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; **Region 3**- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; **Region 4**- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; **Region 5**- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; **Region 6**- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.





Outpatient health care provider surveillance program (ILINet)

Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa's influenza surveillance. Iowa health care providers interested in joining this important surveillance program should contact Yumei Sun at 515-281-7134 or yumei.sun@idph.iowa.gov for more information.