



# Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses
Weekly Activity Report

For the week ending October 6, 2012, Week 40

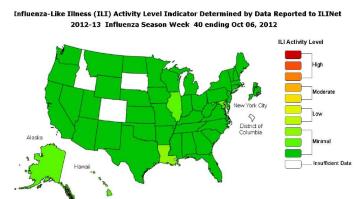


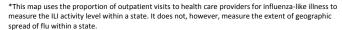
# **Quick Stats for this reporting week**

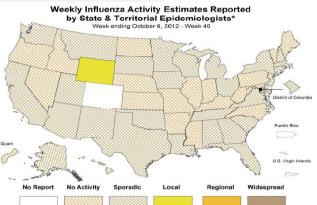
lowa activity level <sup>1</sup>	Sporadic
Percent of outpatient visits for ILI <sup>2</sup>	0.5 % (baseline 2.1%)
Percent of influenza rapid test positive	0.6% (1/156)
Percent of RSV rapid tests positive	9.0% (6/67)
Percent school absence due to illness	2.2%
Number of schools with ≥10% absence due to illness	1
Influenza-associated hospitalizations*	0/5416 inpatients surveyed
Influenza-associated pediatric mortality**	0

<sup>\*</sup> Hospitalizations due to influenza are voluntarily reported through a weekly survey of lowa sentinel hospitals.

Note: All data in this report are provisional and may change as additional reports are received







 $\hbox{$^*$ This map indicates geographic spread \& does not measure the severity of influenza activity.}$ 

#### Iowa statewide activity summary

Current influenza activity in Iowa is sporadic. In this reporting week, the State Hygienic Laboratory (SHL) confirmed three cases of seasonal influenza A (H3N2). Since September 2012, SHL has identified three strains of influenza - influenza A (H3N2), 2009 H1N1, and influenza B. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.5 percent, which increased slightly from previous weeks but is below the regional baseline. The percent of respiratory syncytial virus (RSV) rapid tests that tested positive increased from the previous month. There were no influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. One school reported 10 percent or greater absenteeism due to illness. One parainfluenza virus type 3 and one RSV were also detected during this reporting week. Thus far this season, the other respiratory viruses that have been identified include rhinovirus, parainfluenza 2-3, RSV, and human metapneumovirus (hMPV).

#### National activity summary - www.cdc.gov

Synopsis: During week 40 (September 30-October 6, 2012), influenza activity was low in the United States.

• Viral Surveillance: Of 2,870 specimens tested and reported by the U.S. World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories during week 40, 75 (2.6 percent) were positive for influenza.

<sup>\*\*</sup>CDC asks states to report any pediatric death (<18 years old) associated with influenza

<sup>&</sup>lt;sup>1</sup> No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of influenza-like illness (ILI²).

Sporadic: Isolated laboratory-confirmed influenza cases or a single influenza outbreak has been reported, but there is no increase in cases of ILI².

Local: Outbreaks of influenza or increases in ILI cases 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 of the state.

<sup>&</sup>lt;sup>2</sup> ILI: Influenza-like Illness is defined as a fever of ≥100° F as well as cough and/or sore throat.

- **Pneumonia and Influenza Mortality**: The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold.
- Influenza-associated Pediatric Deaths: No influenza-associated pediatric deaths were reported.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.2 percent, which is below the national baseline of 2.2 percent. All 10 regions reported ILI below region-specific baseline levels. Forty-seven states and New York City experienced minimal ILI activity and the District of Columbia and three states had insufficient data.
- **Geographic Spread of Influenza**: The geographic spread of influenza in one state (Wyoming) was reported as local; the District of Columbia and 29 states reported sporadic activity; Guam and 18 states reported no influenza activity, and Puerto Rico, the U.S. Virgin Islands, and two states did not report.

### International activity summary - www.who.int

Seasonal influenza transmission has not been picked up yet in the northern temperate zone. In the tropical areas most countries are reporting low or decreasing trends of influenza virus detections. The exceptions are Costa Rica in the Americas, and India, Nepal, Lao PDR and Thailand in Asia. In Sub-Saharan Africa, Cameroon has reported an increase in influenza virus detections. The influenza season has seemed to come to an end in the temperate countries of the southern hemisphere.

## 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 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					
	Current week	Cumulative since 9/2/12			
Flu A	3 (13%)	6 (6%)			
A (2009 H1N1)	0 (0%)	1 (1%)			
A (H3)	3 (13%)	5 (5%)			
A (H3N2) variant	0 (0%)	0 (0%)			
Subtyping not reported	0 (0%)	0 (0%)			
Flu B	0 (0%)	1 (1%)			
Equivocal	0 (0%)	0 (0%)			
Indeterminate	0 (0%)	0 (0%)			
Negative	20 (87%)	88 (93%)			
Total	23	95			

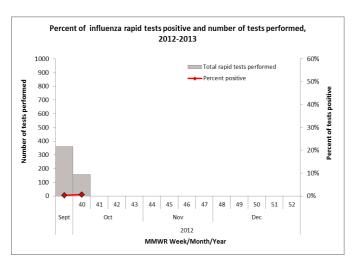
Table 2. Influenza viruses by age group 9/2/12 to present week							
Age group	Flu A (2009 H1N1)	Flu A (H3)	Flu A (H3N2) Variant	Flu A (no typing)	Flu B		
0-4	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		
<i>5-17</i>	1 (100%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)		
18-24	0 (0%)	2 (40%)	0 (0%)	0 (0%)	0 (0%)		
25-49	0 (0%)	1 (20%)	0 (0%)	0 (0%)	0 (0%)		
50-64	0 (0%)	2 (40%)	0 (0%)	0 (0%)	0 (0%)		
>64	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		
Total	1	5	0	0	1		
* Note that counts may not add up to the total due to missing age information							

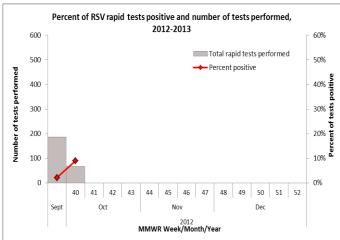
Table 3. Number of positive results for non-influenza respiratory virus isolated by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center					
	Current week Cumulative since 9/2/				
Adenovirus	0	0			
Parainfluenza Virus Type 1	0	0			
Parainfluenza Virus Type 2	0	4			
Parainfluenza Virus Type 3	1	7			
Rhinovirus	0	8			
Respiratory syncytial virus (RSV)	1	3			
human metapneumovirus (hMPV)	0	1			

Table 4. Percent of influenza rapid tests positive and number of tests performed by region for the present week

	Influenza				RSV			
Region*	Tested	Flu A	Flu B	Both	% Positive	Tested	Positive	% Positive
Region 1	24	0	0	0	0.0%	5	1	20.0%
Region 2	6	0	0	1	16.7%	10	5	50.0%
Region 3	10	0	0	0	0.0%	8	0	0.0%
Region 4	9	0	0	0	0.0%	6	0	0.0%
Region 5	26	0	0	0	0.0%	7	0	0.0%
Region 6	81	0	0	0	0.0%	31	0	0.0%

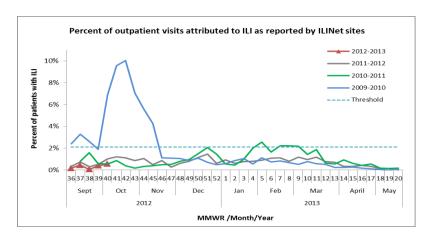
Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceda, Palo Alto, Plymouth, Pocahontas, Sac, Sloux, Woodbury; Region 4- Addir, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, De Monies, Henry, Lefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayer, Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Climbon





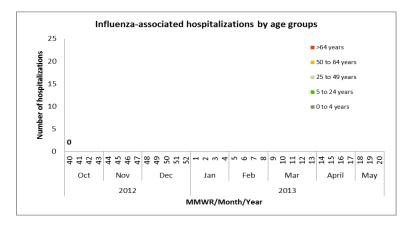
### Outpatient health care provider surveillance program (ILINet)

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 lowa's influenza surveillance. Any lowa health care providers who are interested in joining this important surveillance program, please contact Yumei Sun at 515-281-7134 or yumei.sun@idph.iowa.gov for more information.



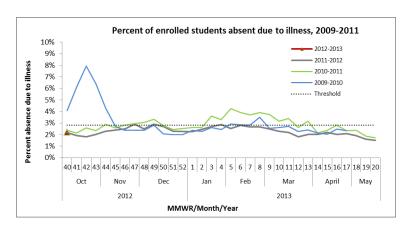
# Influenza-associated hospitalizations

Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week.



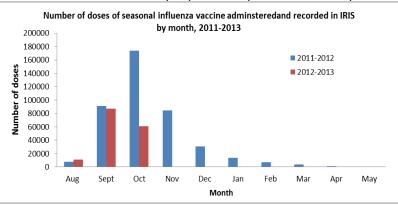
# School surveillance program

Schools participating in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week.



### Seasonal influenza vaccination

Seasonal influenza vaccination in lowa was based on doses reported to the lowa Immunization Registry Information System<sup>3</sup> (IRIS). IRIS is a confidential, computerized, population-based system that tracks immunizations for children, adolescents and adults who are seen in a variety of public and private healthcare provider sites throughout the state.



Note: The data for the 2012-2013 season is only up to 10/10/12 and there is a lag between the vaccine administration date and the date reported to the IRIS. Therefore, the current season's data will be adjusted as additional data is received.

<sup>&</sup>lt;sup>3</sup> For information on the immunization data, contact Kim Tichy, IRIS coordinator, at 515-281-4288 or Kimberly.Tichy@idph.iowa.gov