



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending October 5, 2013, Week 40

Quick Stats for this reporting week

Iowa activity level ¹	Sporadic
Percent of outpatient visits for ILI ²	0.1 % (baseline 1.8%)
Percent of influenza rapid test positive	0.0% (0/149)
Percent of RSV rapid tests positive	2.0% (1/49)
Percent school absence due to illness	1.8%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations*	0/6,783 inpatients surveyed
Influenza-associated pediatric mortality**	0

* Hospitalizations due to influenza are voluntarily reported through a weekly survey of Iowa sentinel hospitals

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

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

Maps for ILI activity and geographic spread are not available due to federal government shutdown

Iowa statewide activity summary

Influenza activity in Iowa is sporadic. For this reporting week, there were two cases of influenza A confirmed by the State Hygienic Laboratory. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.14 percent which is well below the regional baseline. There were no influenza-associated hospitalizations reported from sentinel hospitals. No school reported 10 percent or greater absenteeism due to illness. In addition, one case of adenovirus, two cases of parainfluenza virus type 1, three cases of parainfluenza virus type 4, and seven cases of rhinovirus were reported to IDPH.

National activity summary - www.cdc.gov

No national influenza activity summary due to federal government shutdown. National influenza activity will be reported weekly by CDC on Fridays when the federal government returns.

International activity summary - www.who.int

The influenza season is gradually coming to an end with inter seasonal levels seen in much of North America, Europe, and northern Asia though low level persistent transmission was still observed in a few countries. The persistence of transmission at low levels in the northern hemisphere temperate regions has been associated with increasing numbers of influenza type B virus appearing late in the season across North America and parts of Europe. Prior to this, influenza A (H3N2) was the most commonly detected virus in North America, A (H1N1) pdm09 in Europe, and both in varying proportions in different countries of northern Asia. Low levels of influenza activity continued to be reported across the tropical regions of the world and activity in countries of the southern hemisphere remained at inter-seasonal levels. The majority of influenza A viruses characterized so far this season have been antigenically related to those contained in the current trivalent vaccine. Among the B viruses characterized, those that were of the Yamagata lineage were antigenically related to the viruses recommended for the trivalent vaccine, although 10-30 percent of reported B viruses were of the Victoria lineage. Only very low numbers of oseltamivir and zanamivir resistant viruses have been detected so far this season. In China, a total of 131 cases of H7N9 have been reported with 36 deaths to date. A summary review of the Northern Hemisphere influenza season is expected to be published in the World Epidemiological Report on 31 May 2013.

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 several times every week. In

¹ **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.

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

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

	<i>Current week</i>	<i>Cumulative since 9/1/13</i>
Flu A	2 (16%)	3 (8%)
A (2009 H1N1)	1 (8%)	2 (5%)
A (H3)	0 (0%)	0 (0%)
A (H3N2) variant	0 (0%)	0 (0%)
Subtype pending	1 (8%)	1 (3%)
Flu B	0 (0%)	0 (0%)
Equivocal	0 (0%)	0 (0%)
Indeterminate	0 (0%)	0 (0%)
Negative	10 (84%)	36 (92%)
Total	12	39

<i>Age group</i>	<i>Flu A (2009 H1N1)</i>	<i>Flu A (H3)</i>	<i>Flu A (H3N2) Variant</i>	<i>Flu A (subtype pending)</i>	<i>Flu B</i>
0-4	1 (50%)	0 (0%)	0 (0%)	1 (100%)	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	1 (50%)	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	2	0	0	1	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

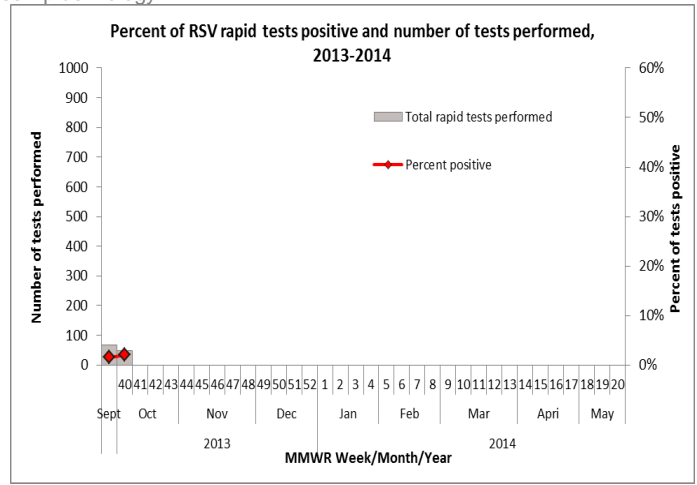
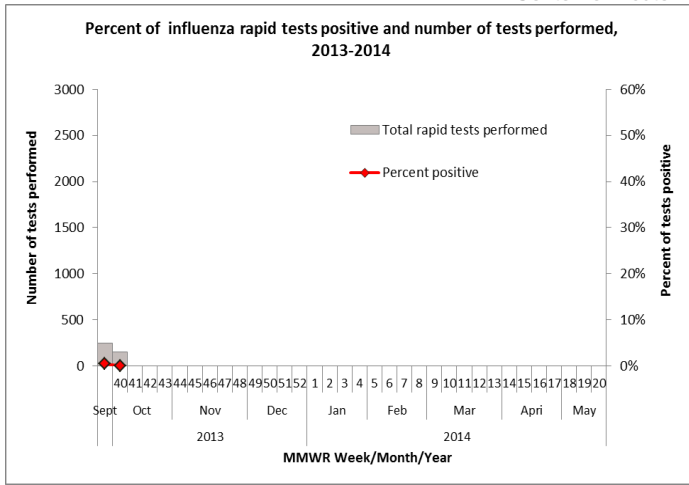
Table 3. Number of positive results for non-influenza respiratory virus isolated by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

	<i>Current week</i>	<i>Cumulative since 9/1/13</i>
Adenovirus	1	3
Parainfluenza Virus Type 1	2	8
Parainfluenza Virus Type 2	0	0
Parainfluenza Virus Type 3	0	1
Parainfluenza Virus Type 4	3	5
Rhinovirus/Enterovirus	7	50
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 for the present week

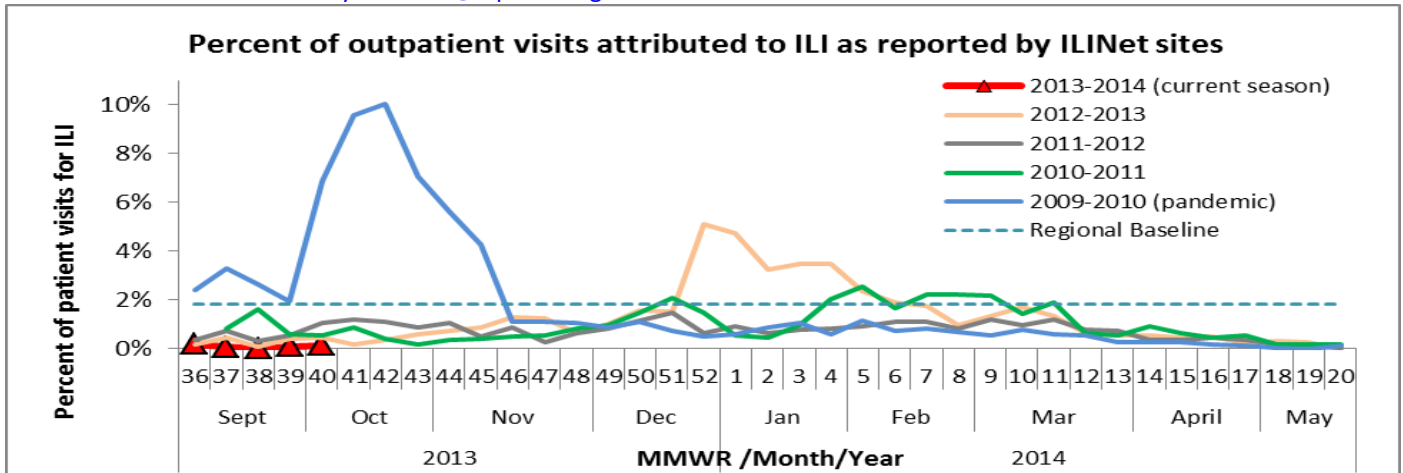
Region *	Influenza					RSV		
	<i>Tested</i>	<i>Flu A</i>	<i>Flu B</i>	<i>Both</i>	<i>% Positive</i>	<i>Tested</i>	<i>Positive</i>	<i>% Positive</i>
Region 1	23	0	0	0	0.0%	9	0	0.0%
Region 2	1	0	0	0	0.0%	0	0	NA
Region 3	14	0	0	0	0.0%	8	0	0.0%
Region 4	2	0	0	0	0.0%	1	1	100.0%
Region 5	19	0	0	0	0.0%	7	0	0.0%
Region 6	90	0	0	0	0.0%	24	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.



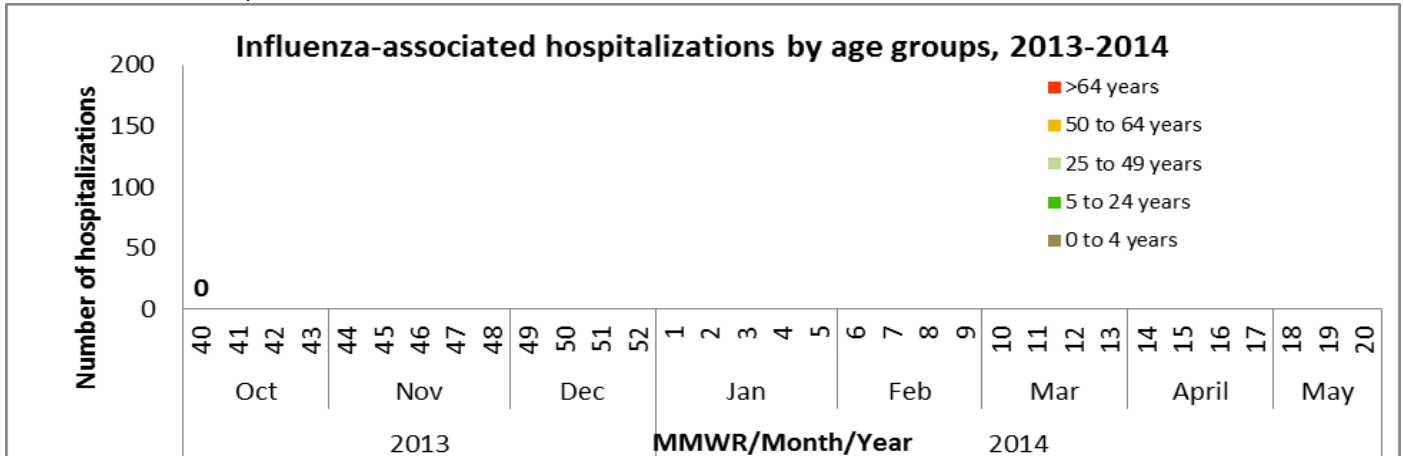
Outpatient health care provider surveillance program (ILINet)

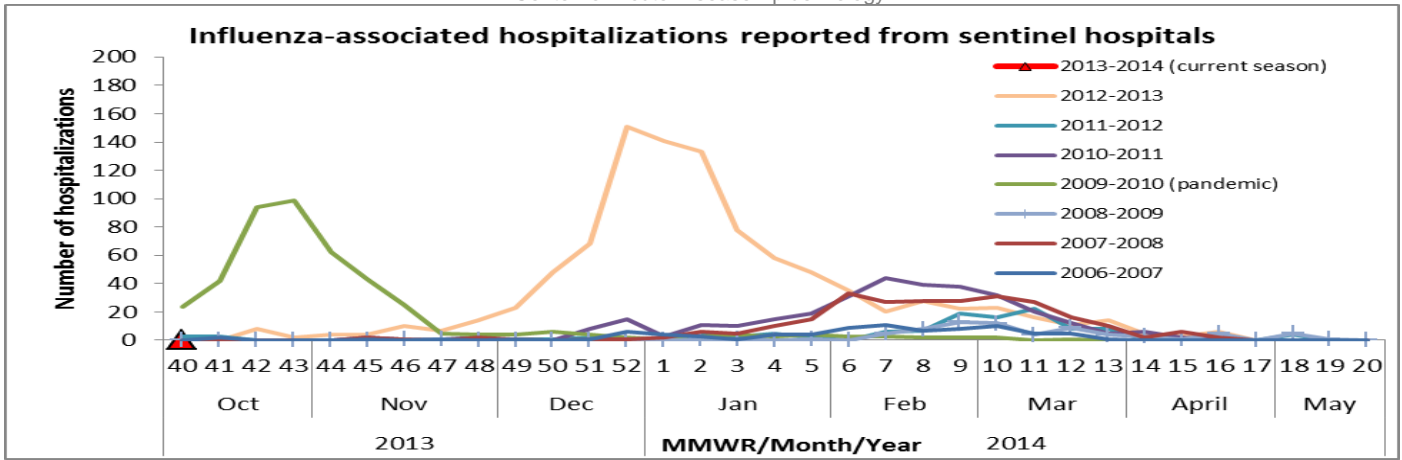
Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa's influenza surveillance. Iowa health care providers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



Influenza-associated hospitalizations

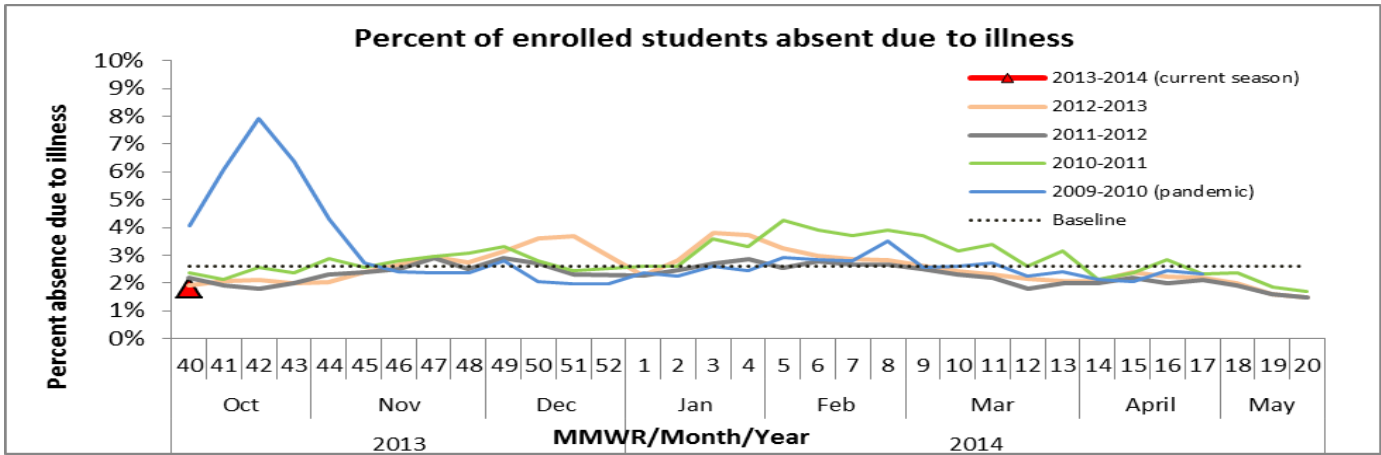
Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week.





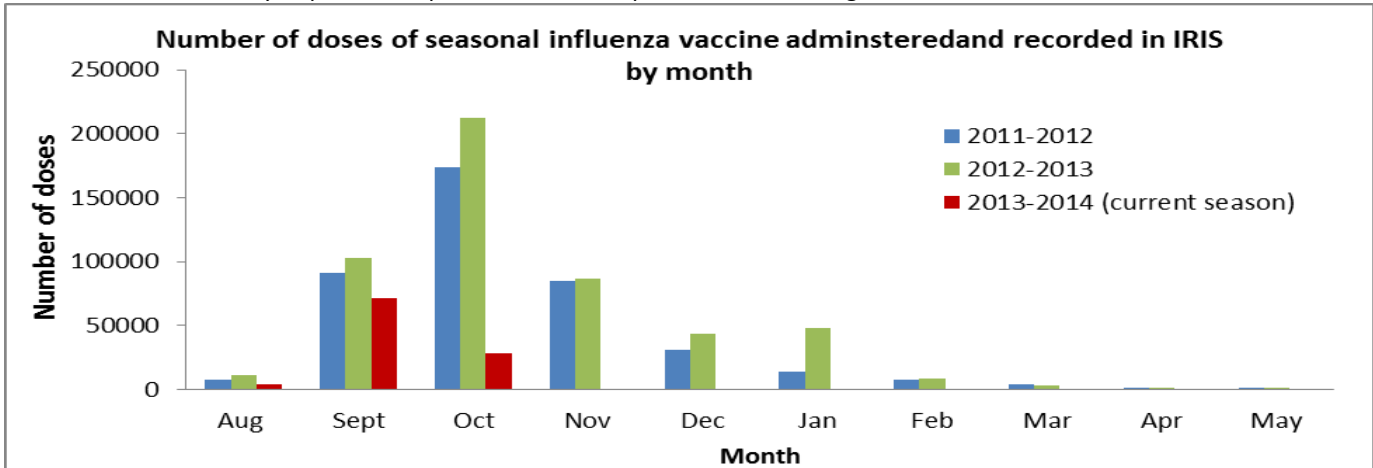
School surveillance program

Sentinel schools that participate 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 Iowa is based on doses reported to the Iowa Immunization Registry Information System³ (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 2013-2014 season is only up to the current week 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.

³ For information on the immunization data, contact Kim Tichy, IRIS coordinator, at 515-281-4288 or Kimberly.Tichy@idph.iowa.gov