



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending February 16, 2013, Week 7

Quick Stats for this reporting week

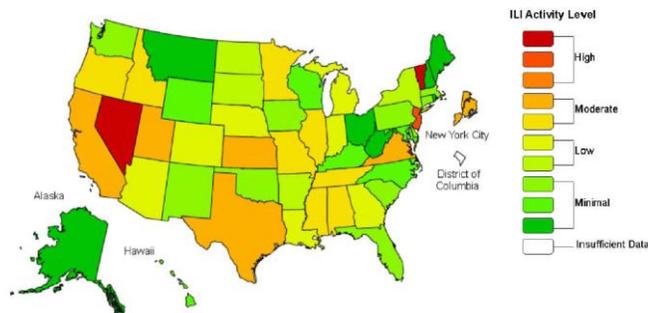
Iowa activity level ¹	Widespread
Percent of outpatient visits for ILI ²	1.9 % (baseline 2.1%)
Percent of influenza rapid test positive	16.6% (237/1,424)
Percent of RSV rapid tests positive	42.6% (179/420)
Percent school absence due to illness	2.9%
Number of schools with ≥10% absence due to illness	9
Influenza-associated hospitalizations*	20/6,712 inpatients surveyed
Influenza-associated pediatric mortality**	0

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

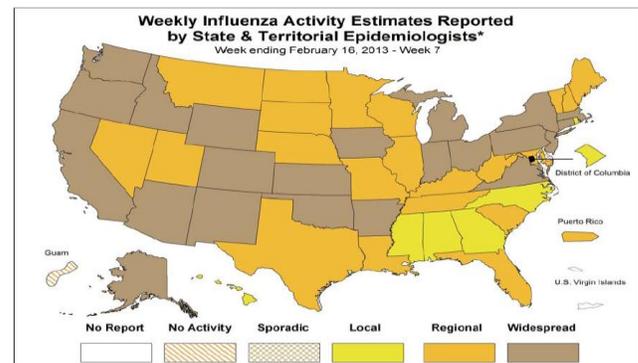
**CDC asks states to report any pediatric death (<18 years old) associated with influenza

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

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2012-13 Influenza Season Week 7 ending Feb 16, 2013



*This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state.



*This map indicates geographic spread & does not measure the severity of influenza activity.

Iowa statewide activity summary

Influenza activity in Iowa continues to decrease, but outbreaks are still being reported from half of the state. For this reporting week, the State Hygienic Laboratory (SHL) confirmed a total of 23 cases of seasonal influenza, including nine influenza A (subtyping pending) and 14 influenza B. The proportion of outpatient visits due to influenza-like illness (ILI) was 1.9 percent and was below the regional baseline of 2.1 percent. The number of influenza-associated hospitalizations reported from sentinel hospitals decreased to 20. A total of 852 hospitalizations have been reported this season. There were nine schools that reported 10 percent or greater absenteeism due to illness in this reporting week. In addition, nine cases of respiratory syncytial virus (RSV) and one case of parainfluenza 2 were detected during this reporting week. Thus far this season, the other respiratory viruses that have been identified include adenovirus, rhinovirus, parainfluenza 2-3, RSV, and human metapneumovirus (hMPV).

National activity summary - www.cdc.gov

Synopsis: During week 7 (February 10 - 16, 2013), influenza activity remained elevated in the United States, but decreased in most areas.

- **Viral Surveillance:** Of 8,144 specimens tested and reported by collaborating laboratories, 1,371 (16.8%) were positive for influenza.

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.

- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold.
- **Influenza-Associated Pediatric Deaths:** Fourteen pediatric deaths were reported.
- **Influenza-Associated Hospitalizations:** A cumulative rate for the season of 34.2 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Of reported hospitalizations, more than 50 percent were among adults 65 years and older.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 2.8 percent. This is above the national baseline of 2.2 percent. All 10 regions reported ILI at or above region-specific baseline levels. Three states experienced high ILI activity; 13 states and New York City experienced moderate activity; 11 states experienced low activity; 23 states experienced minimal activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** Twenty-two states reported widespread influenza activity; Puerto Rico and 21 states reported regional influenza activity; the District of Columbia and six states reported local influenza activity; one state reported sporadic influenza activity; Guam reported no influenza activity, and the U.S. Virgin Islands did not report.

International activity summary - www.who.int

Influenza activity in North America, though high with A (H3N2) virus predominant, started decreasing. In the United States of America, the number of pneumonia and influenza-related hospitalizations among adults aged 65+ years continued to increase. In Europe influenza activity continued to increase in the majority of countries, with A (H1N1) pdm09 virus predominant. Most countries reported medium-intensity transmission, wide geographic spread and increasing trends. Influenza activity throughout the temperate region of Asia is ongoing. In the Caribbean, Central America and tropical South America, influenza activity remained at low levels. Most countries in Africa experienced decreasing influenza activity. Influenza in the southern hemisphere remained at inter-seasonal levels.

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 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.

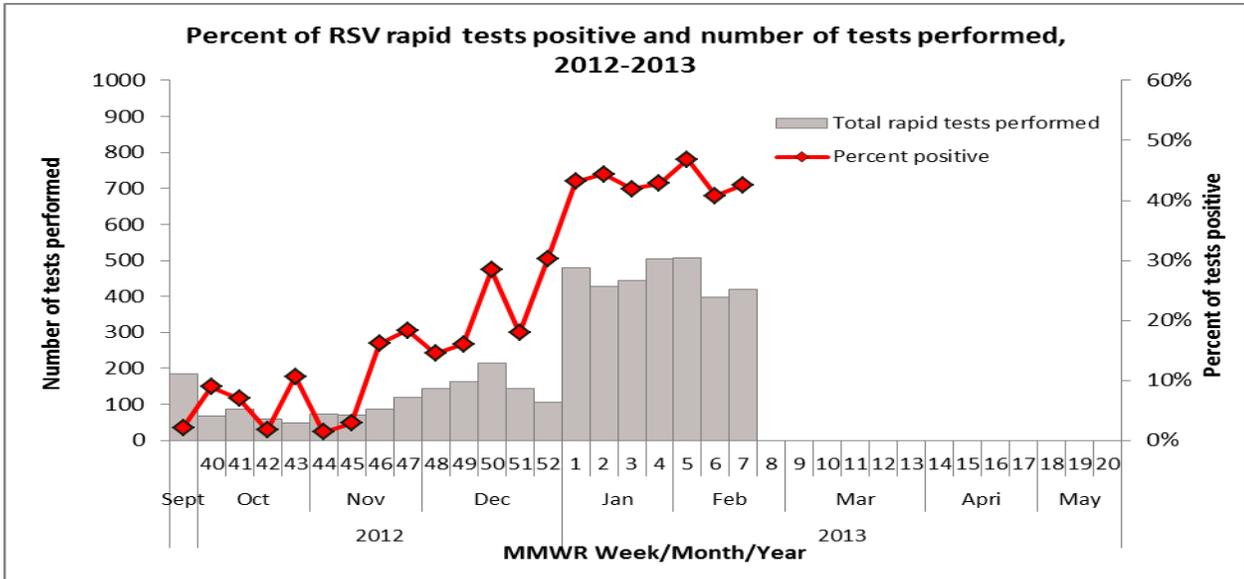
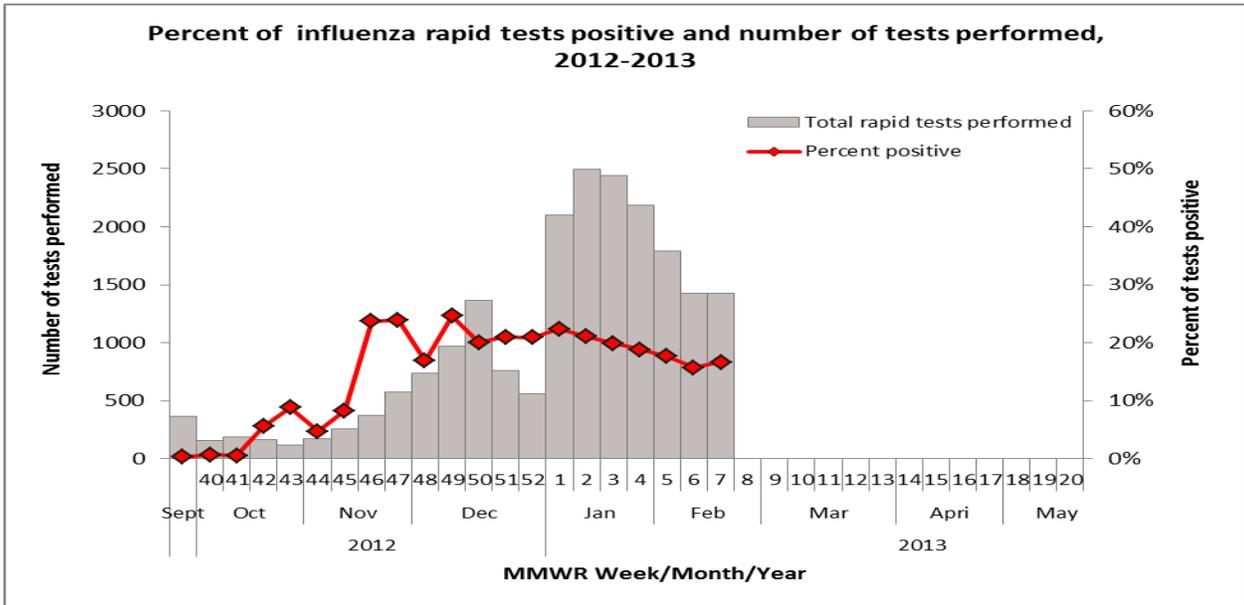
Specimens tested by the State Hygienic Laboratory

	<i>Current week</i>	<i>Cumulative since 9/2/12</i>
Flu A	9 (8%)	1,563 (42%)
A (2009 H1N1)	0 (0%)	13 (<1%)
A (H3)	0 (0%)	1,443 (39%)
A (H3N2) variant	0 (0%)	1 (<1%)
Subtyping not reported	9 (8%)	106 (3%)
Flu B	14 (13%)	244 (7%)
Equivocal	0 (0%)	0 (0%)
Indeterminate	0 (0%)	22 (<1%)
Negative	84 (79%)	1,911 (51%)
Total	107	3,740

<i>Age group</i>	<i>Flu A (2009 H1N1)</i>	<i>Flu A (H3)</i>	<i>Flu A (H3N2) Variant</i>	<i>Flu A (no typing)</i>	<i>Flu B</i>
0-4	4 (31%)	181 (13%)	* (*%)	7 (7%)	46 (19%)
5-17	3 (23%)	275 (19%)	* (*%)	7 (7%)	95 (39%)
18-24	0 (0%)	108 (8%)	0 (0%)	10 (9%)	17 (7%)
25-49	4 (31%)	260 (18%)	0 (0%)	10 (9%)	39 (16%)
50-64	1 (8%)	161 (11%)	0 (0%)	18 (17%)	20 (8%)
>64	1 (8%)	456 (32%)	0 (0%)	54 (51%)	27 (11%)
Total	13	1,443	1	106	244

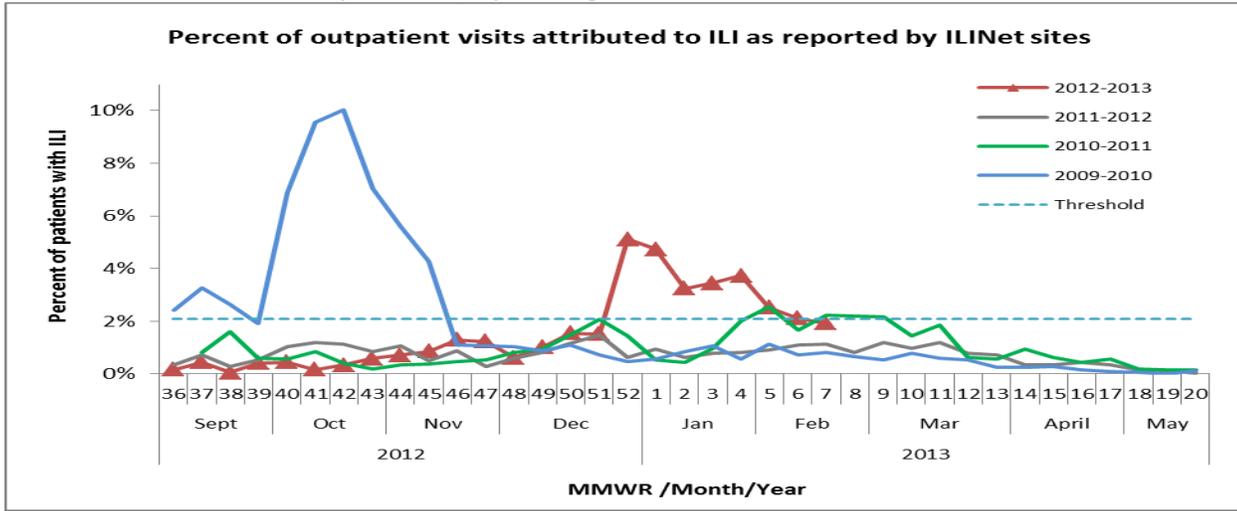
* Counts of three or less are sometimes suppressed to protect confidentiality.
Note that counts may not add up to the total due to missing age information

	<i>Current week</i>	<i>Cumulative since 9/2/12</i>
<i>Adenovirus</i>	0	17
<i>Parainfluenza Virus Type 1</i>	0	1
<i>Parainfluenza Virus Type 2</i>	1	23
<i>Parainfluenza Virus Type 3</i>	0	40
<i>Rhinovirus</i>	0	45
<i>Respiratory syncytial virus (RSV)</i>	9	453
<i>human metapneumovirus (hMPV)</i>	0	1



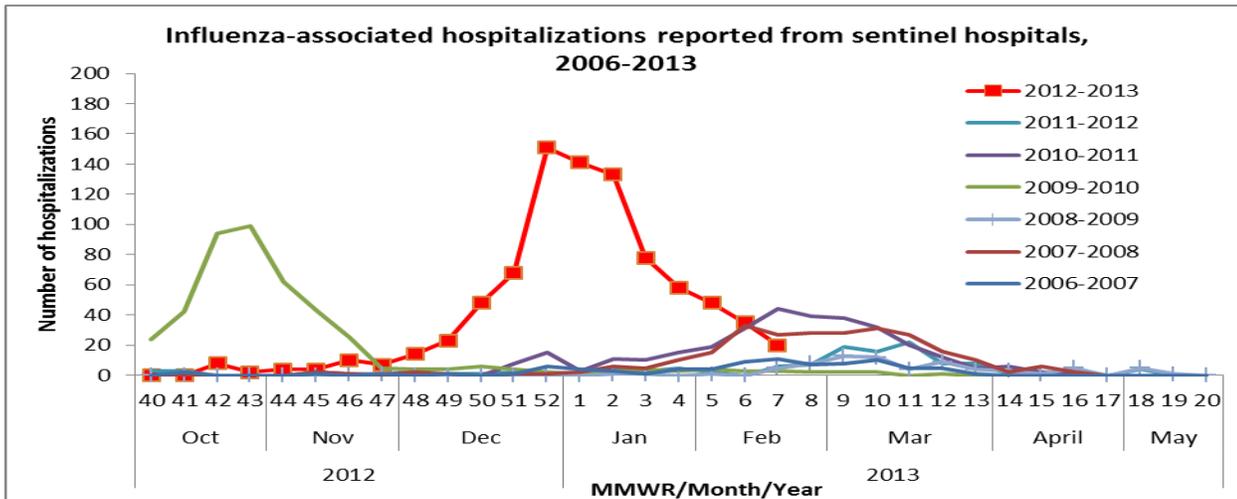
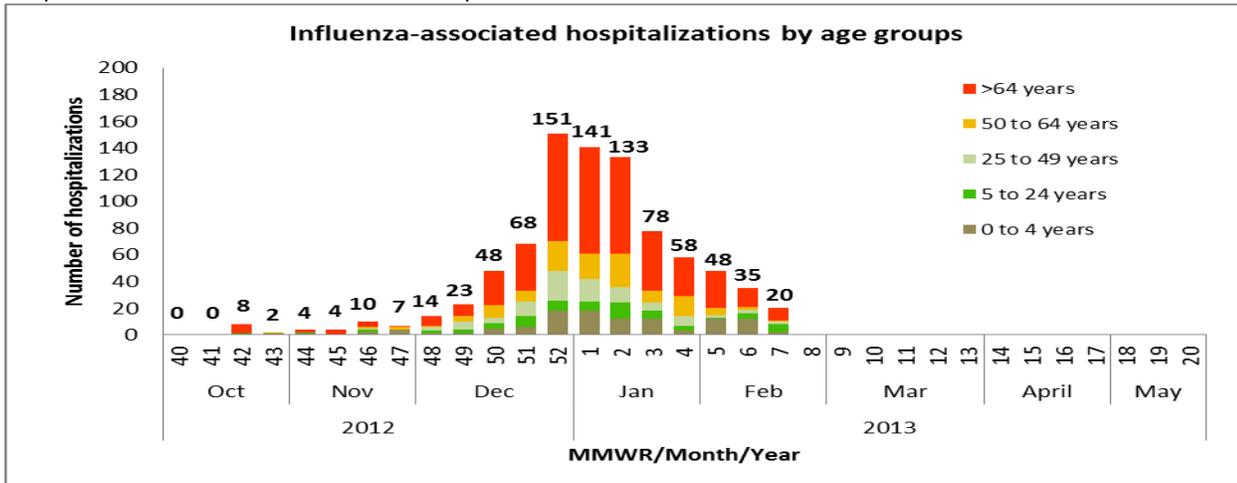
Outpatient health care provider surveillance program (ILINet)

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.



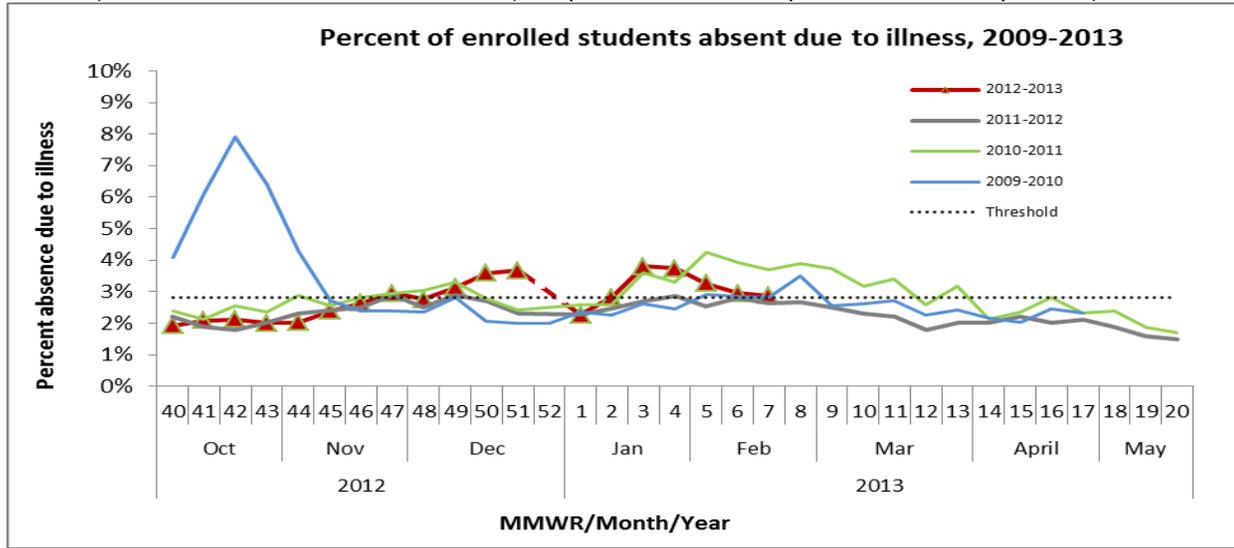
Influenza-associated hospitalizations

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



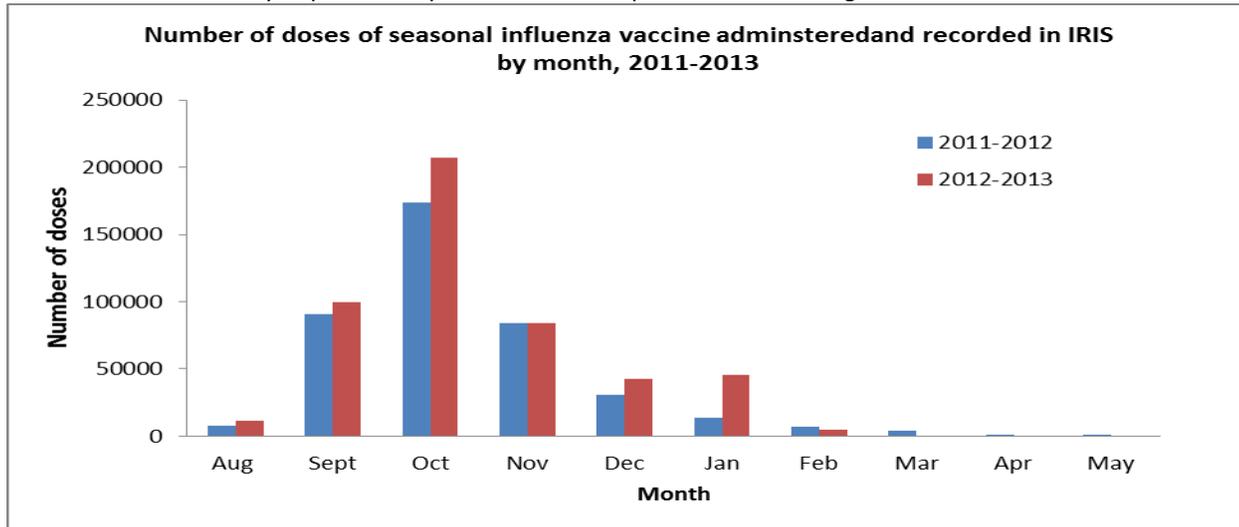
School surveillance program

Approximately 80 schools participating in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week. (Many schools were not open over the holiday weeks.)



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 2012-2013 season is only up to 2/21/2013 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

Regional activity (Data from sentinel surveillance system surveillance sites, except all schools with $\geq 10\%$ absence due to illness must report.)

Region 1 (Central)	
Influenza-associated hospitalizations	5/3,960
Percent of influenza rapid test positive	17.8% (34/191)
Percent of RSV rapid tests positive	38.9% (28/72)
Schools with $\geq 10\%$ absence due to illness	1

Region 2 (North Central)	
Influenza-associated hospitalizations	2/440
Percent of influenza rapid test positive	17.5% (10/57)
Percent of RSV rapid tests positive	37.0% (10/27)
Schools with $\geq 10\%$ absence due to illness	1

Region 3 (Northwest)	
Influenza-associated hospitalizations	0/169
Percent of influenza rapid test positive	19.2% (56/291)
Percent of RSV rapid tests positive	37.2% (29/78)
Schools with $\geq 10\%$ absence due to illness	2

Region 4 (Southwest)	
Influenza-associated hospitalizations	2/14
Percent of influenza rapid test positive	17.9% (38/212)
Percent of RSV rapid tests positive	43.3% (29/67)
Schools with $\geq 10\%$ absence due to illness	1

Region 5 (Southeast)	
Influenza-associated hospitalizations	N/A
Percent of influenza rapid test positive	20.7% (17/82)
Percent of RSV rapid tests positive	57.6% (19/33)
Schools with $\geq 10\%$ absence due to illness	1

Region 6 (East Central)	
Influenza-associated hospitalizations	11/2,129
Percent of influenza rapid test positive	13.9% (82/591)
Percent of RSV rapid tests positive	44.8% (64/143)
Schools with $\geq 10\%$ absence due to illness	5

N/A: not available

Iowa map with regions and in red the number of schools that have $\geq 10\%$ absence due to illness.

