



# Iowa Influenza Surveillance Network (IISN)

## Influenza-like Illness (ILI) and Other Respiratory Viruses

### Weekly Activity Report

For the week ending February 2, 2013, Week 5

### Quick Stats for this reporting week

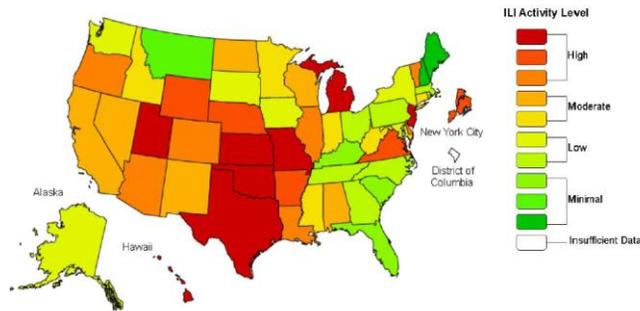
Iowa activity level <sup>1</sup>	<b>Widespread</b>
Percent of outpatient visits for ILI <sup>2</sup>	2.7 % (baseline 2.1%)
Percent of influenza rapid test positive	17.6% (316/1792)
Percent of RSV rapid tests positive	46.8% (237/506)
Percent school absence due to illness	3.3%
Number of schools with ≥10% absence due to illness	16
Influenza-associated hospitalizations*	48/6919 inpatients surveyed
Influenza-associated pediatric mortality**	0

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

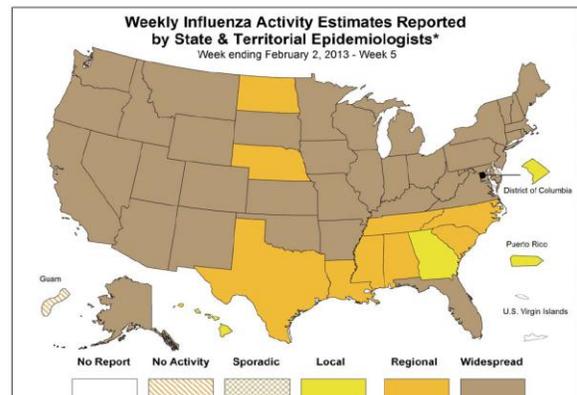
\*\*CDC asks states to report any pediatric death (<18 years old) associated with influenza

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 5 ending Feb 02, 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 remains widespread, but is decreasing. For this reporting week, the State Hygienic Laboratory (SHL) confirmed a total of 55 cases of seasonal influenza, including 25 influenza A (H3), one influenza A (2009 H1N1), nine influenza A (subtyping pending), and 20 influenza B. The proportion of outpatient visits due to influenza-like illness (ILI) decreased to 2.7 percent and is above the regional baseline of 2.1 percent. The number of influenza-associated hospitalizations reported from sentinel hospitals decreased to 48. A total of 797 hospitalizations have been reported this season. There were 16 schools that reported 10 percent or greater absenteeism due to illness in this reporting week. In addition, 37 cases of respiratory syncytial virus (RSV) and one case of adenovirus 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](http://www.cdc.gov)

**Synopsis:** During week 5 (January 27 - February 2, 2013), influenza activity remained elevated in the United States, but decreased in most areas.

- **Viral Surveillance:** Of 10,132 specimens tested and reported by collaborating laboratories, 2,362 (23.3 percent) were positive for influenza.

<sup>1</sup> **No Activity:** No laboratory-confirmed cases of influenza and no reported increase in the number of cases of influenza-like illness (ILI<sup>2</sup>).

**Sporadic:** Isolated laboratory-confirmed influenza cases or a single influenza outbreak has been reported, but there is no increase in cases of ILI<sup>2</sup>.

**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>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 above the epidemic threshold.
- **Influenza-Associated Pediatric Deaths:** Fourteen pediatric deaths were reported.
- **Influenza-Associated Hospitalizations:** A cumulative rate for the season of 29.8 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Of all 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 3.6 percent. This is above the national baseline of 2.2 percent. All 10 regions reported ILI above region-specific baseline levels. Nineteen states and New York City experienced high ILI activity; 12 states experienced moderate activity; 13 states experienced low activity; six states experienced minimal activity; and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** Thirty-eight states reported widespread influenza activity; nine states reported regional influenza activity; the District of Columbia, Puerto Rico and two 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](http://www.who.int)**

Influenza activity in North America remained high regionally, though nationally most indicators of transmission began to decrease. Influenza A (H3N2) was the most commonly detected virus subtype. The United States of America reported a sharp increase in the number of pneumonia and influenza-related deaths among adults aged 65+ years. Europe in general reported increasing influenza virus detections over the past weeks, though activity started to decrease in some countries in the northwest. The most commonly detected virus across the continent was A (H1N1) pdm09, while influenza B virus predominated in several countries of Western Europe. In the temperate countries of Asia influenza virus detections increased in the last weeks, while it remained low in most of tropical Asia. Influenza activity in North Africa and the Middle East declined overall in the last several weeks, though a few countries reported increases. Influenza A (H1N1) pdm09 was the most commonly detected virus in the region. Low level activity was noted in most tropical countries, with slight increases observed in the Plurinational State of Bolivia and Paraguay. Influenza in countries of the southern hemisphere was currently 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**

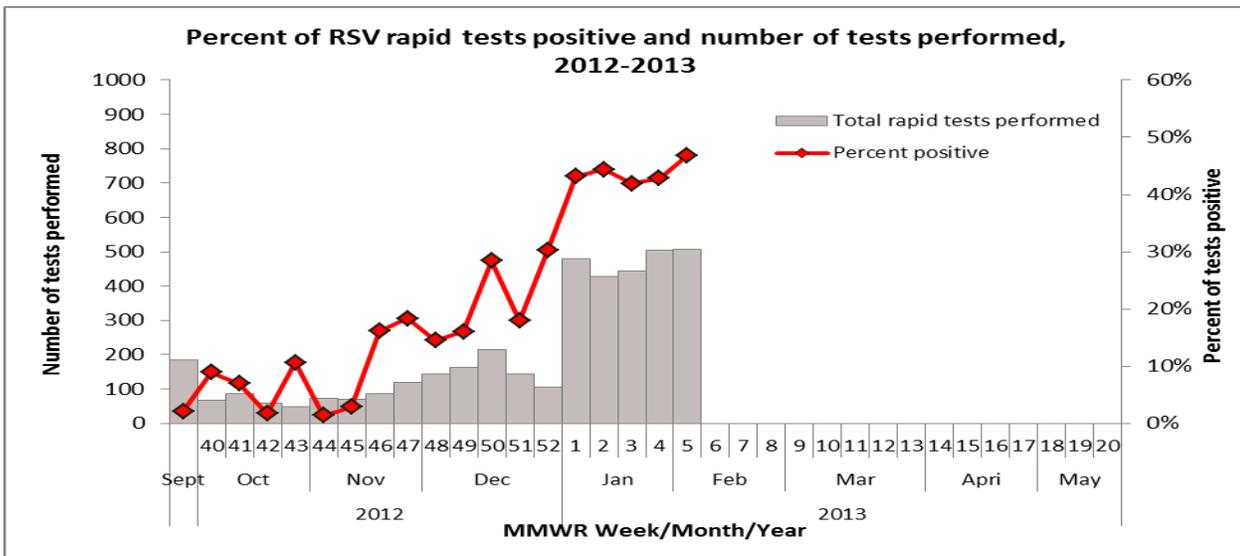
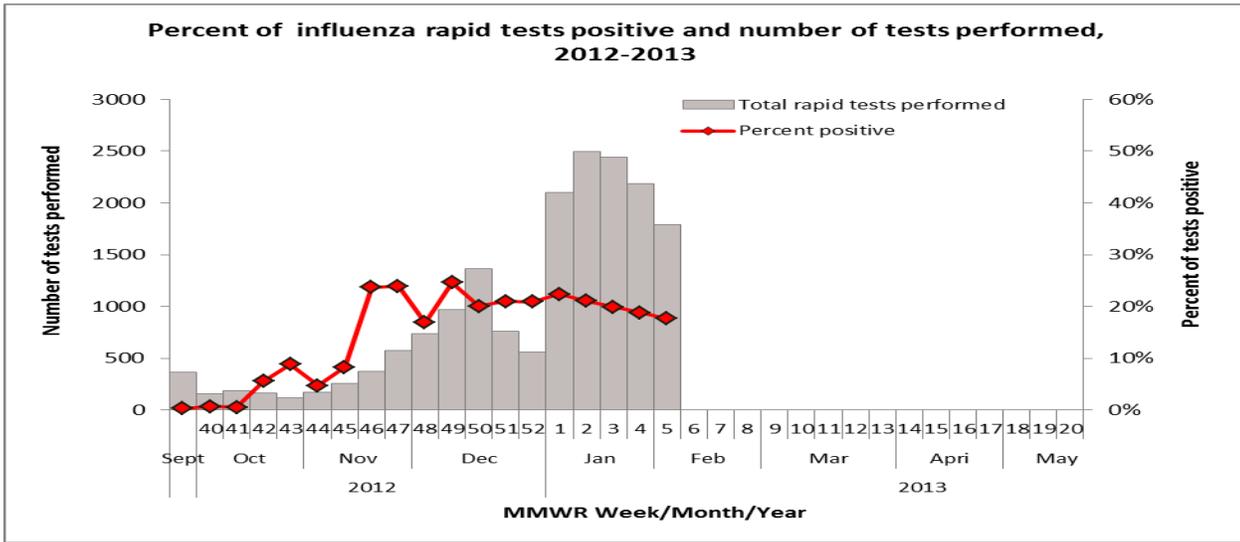
	<i>Current week</i>	<i>Cumulative since 9/2/12</i>
<b>Flu A</b>	35 (20%)	1517 (49%)
A (2009 H1N1)	1 (<1%)	11 (<1%)
A (H3)	25 (14%)	1414 (41%)
A (H3N2) variant	0 (0%)	1 (<1%)
Subtyping not reported	9 (5%)	91 (3%)
<b>Flu B</b>	20 (11%)	209 (6%)
<b>Equivocal</b>	0 (0%)	0 (0%)
<b>Indeterminate</b>	1 (<1%)	18 (<1%)
<b>Negative</b>	120 (68%)	1674 (49%)
<b>Total</b>	176	3418

<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>
<b>0-4</b>	3 (27%)	176 (12%)	* (*%)	5 (5%)	43 (21%)
<b>5-17</b>	2 (18%)	273 (19%)	* (*%)	5 (5%)	82 (39%)
<b>18-24</b>	0 (0%)	106 (8%)	0 (0%)	8 (9%)	11 (5%)
<b>25-49</b>	4 (36%)	257 (18%)	0 (0%)	9 (10%)	33 (16%)
<b>50-64</b>	1 (9%)	158 (11%)	0 (0%)	16 (18%)	17 (8%)
<b>&gt;64</b>	1 (9%)	442 (31%)	0 (0%)	48 (53%)	23 (11%)
<b>Total</b>	11	1414	1	91	209

\* 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

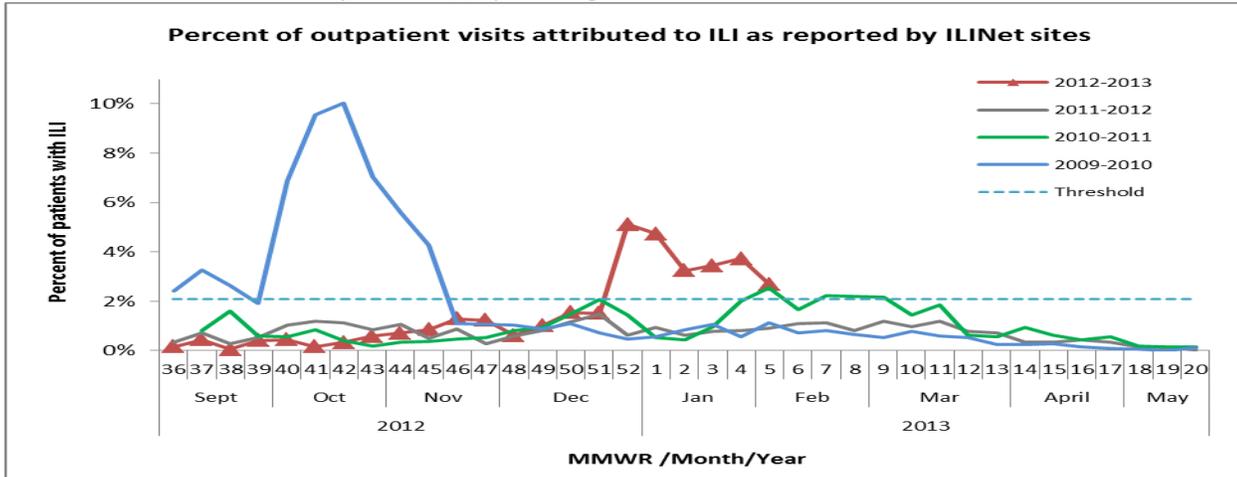
**Table 3. Number of positive results for non-influenza respiratory virus isolated by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center**

	<i>Current week</i>	<i>Cumulative since 9/2/12</i>
<i>Adenovirus</i>	1	16
<i>Parainfluenza Virus Type 1</i>	0	1
<i>Parainfluenza Virus Type 2</i>	0	22
<i>Parainfluenza Virus Type 3</i>	0	36
<i>Rhinovirus</i>	0	45
<i>Respiratory syncytial virus (RSV)</i>	37	433
<i>human metapneumovirus (hMPV)</i>	0	1



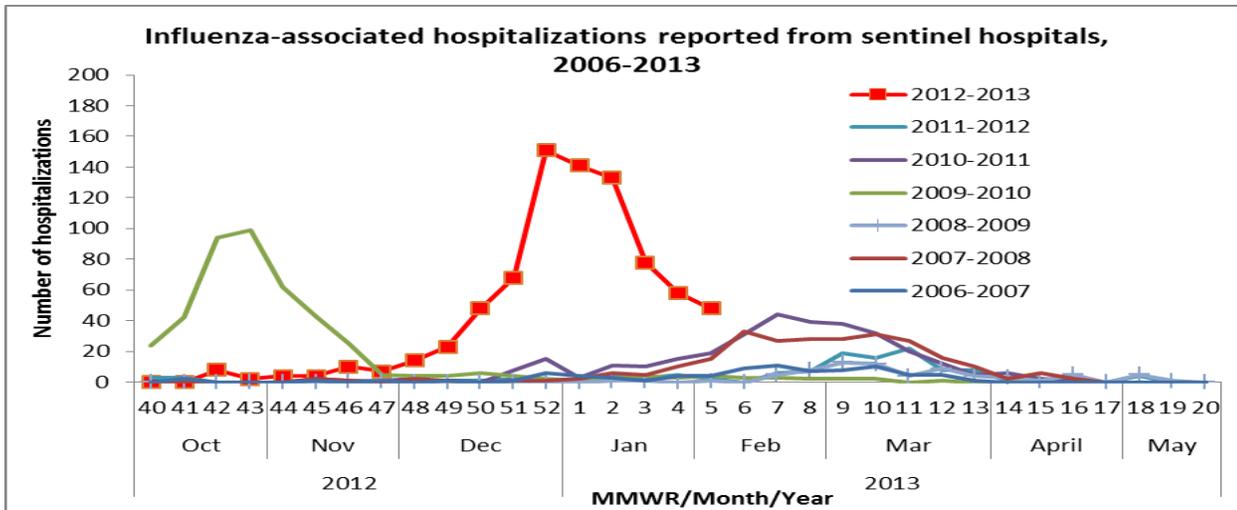
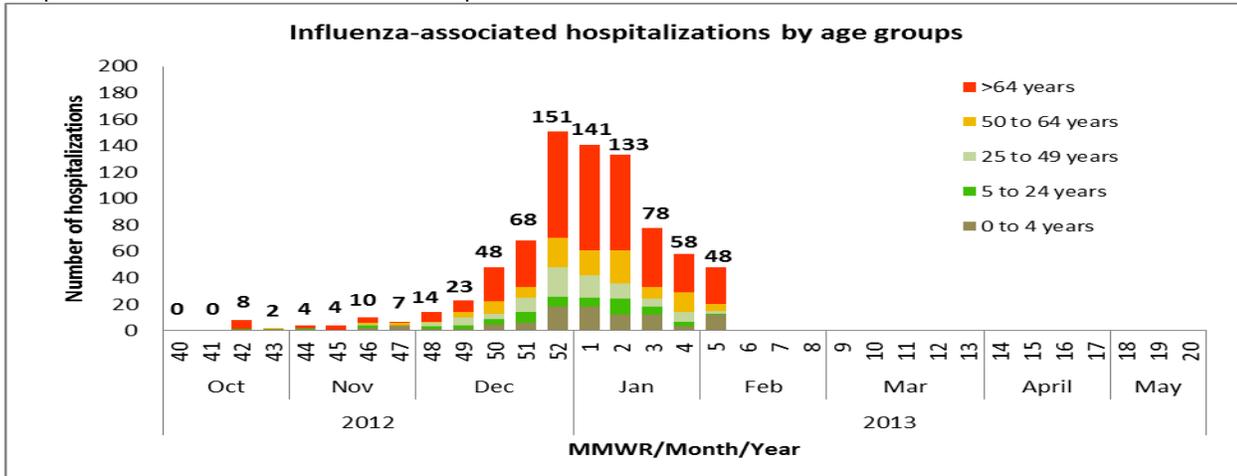
### Outpatient health care provider surveillance program (ILINet)

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](mailto:yumei.sun@idph.iowa.gov) for more information.



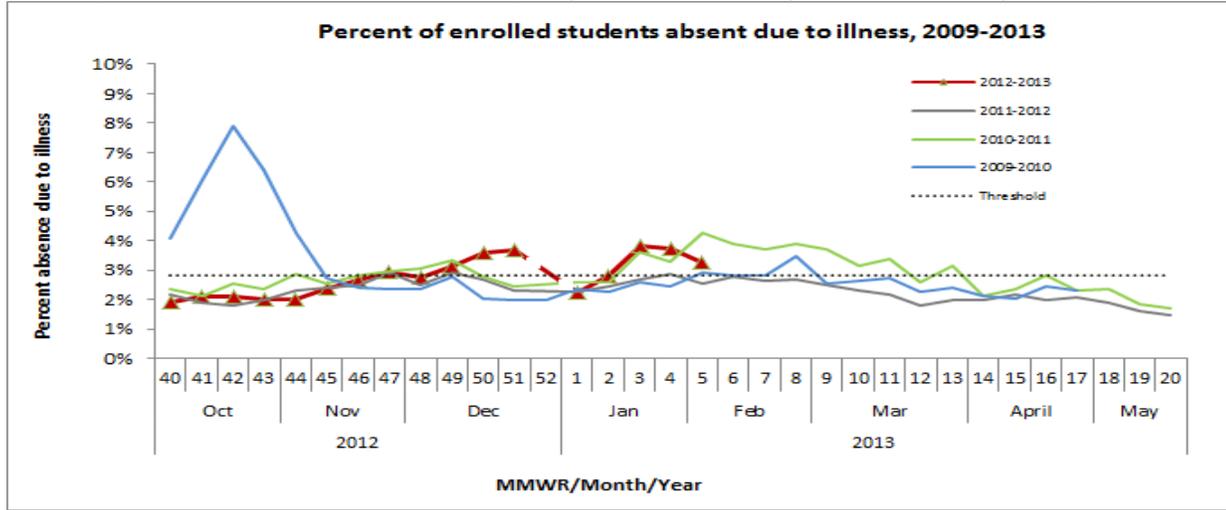
### Influenza-associated hospitalizations

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.



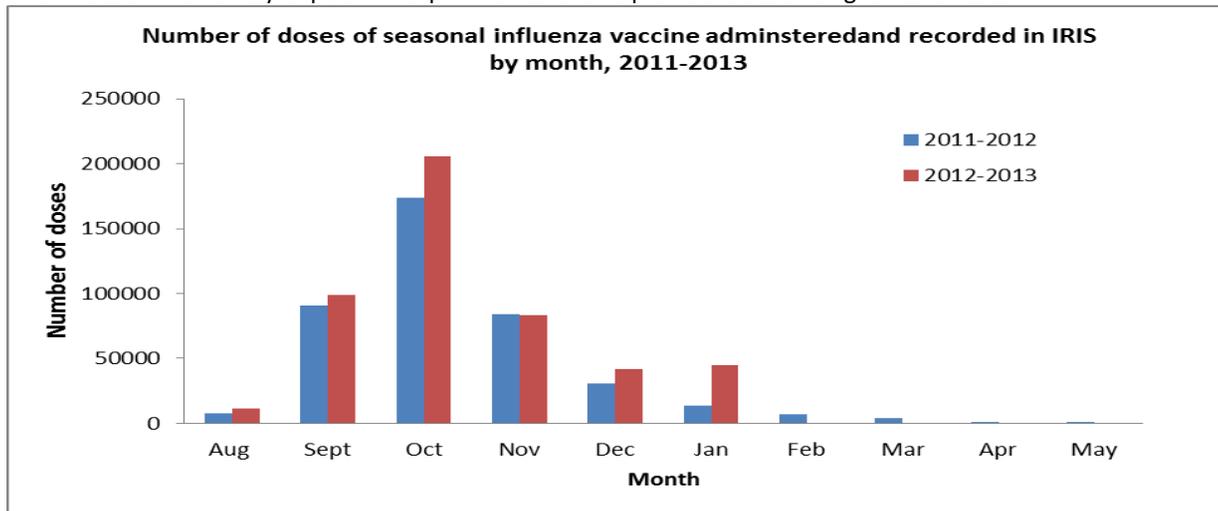
### School surveillance program

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 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 2/7/2013 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.

<sup>3</sup> For information on the immunization data, contact Kim Tichy, IRIS coordinator, at 515-281-4288 or [Kimberly.Tichy@idph.iowa.gov](mailto: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	26/4265
Percent of influenza rapid test positive	23.9% (93/389)
Percent of RSV rapid tests positive	50.5% (53/105)
Schools with $\geq 10\%$ absence due to illness	0

Region 2 (North Central)	
Influenza-associated hospitalizations	7/461
Percent of influenza rapid test positive	25.0% (34/136)
Percent of RSV rapid tests positive	48.5% (16/33)
Schools with $\geq 10\%$ absence due to illness	1

Region 3 (Northwest)	
Influenza-associated hospitalizations	2/132
Percent of influenza rapid test positive	27.4% (168/614)
Percent of RSV rapid tests positive	26.2% (16/61)
Schools with $\geq 10\%$ absence due to illness	3

Region 4 (Southwest)	
Influenza-associated hospitalizations	1/24
Percent of influenza rapid test positive	16.7% (43/257)
Percent of RSV rapid tests positive	47.8% (22/46)
Schools with $\geq 10\%$ absence due to illness	4

Region 5 (Southeast)	
Influenza-associated hospitalizations	0/41
Percent of influenza rapid test positive	11.8% (4/34)
Percent of RSV rapid tests positive	46.2% (6/13)
Schools with $\geq 10\%$ absence due to illness	4

Region 6 (East Central)	
Influenza-associated hospitalizations	12/1996
Percent of influenza rapid test positive	14.1% (142/1008)
Percent of RSV rapid tests positive	39.2% (73/186)
Schools with $\geq 10\%$ absence due to illness	4

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

