



# Iowa Influenza Surveillance Network (IISN)

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

### Weekly Activity Report

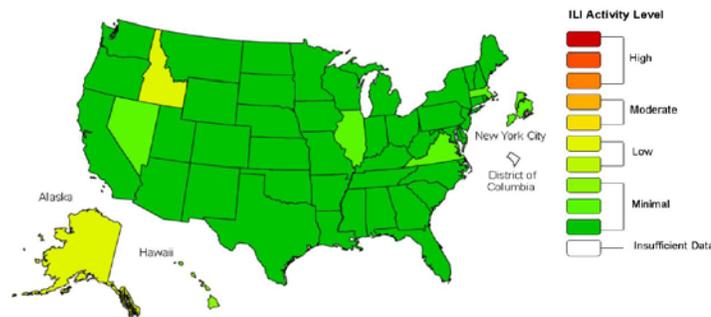
For the week ending April 9, 2011, Week 14

#### Quick Stats for this reporting week

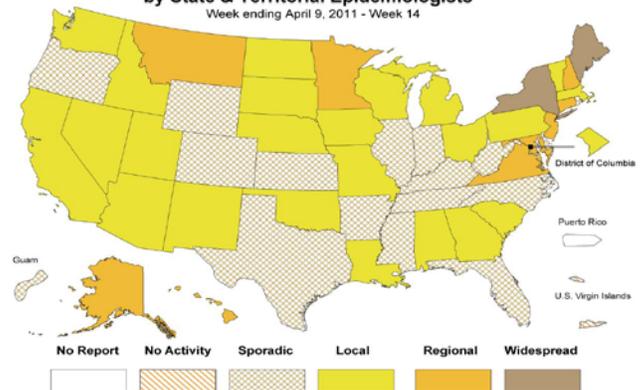
<b>Iowa activity level<sup>1</sup></b>	<b>Local</b>
Percent of outpatient visits for ILI <sup>2</sup>	1.0% (threshold 2.1%)
Percent of influenza rapid test positive	9.1% (53/583)
Percent of RSV rapid tests positive	29.2% (80/274)
Percent school absence due to illness	2.1%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations <sup>**</sup>	6 of 6146 inpatients surveyed

*\*\* Hospitalizations due to influenza are voluntarily reported through a weekly survey of 21 Iowa hospitals.*

**Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILinet**  
2010-11 Influenza Season Week 14 ending Apr 09, 2011



**Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists\***  
Week ending April 9, 2011 - Week 14



Interactive web tool available at: <http://gis.cdc.gov/grasp/fluview/main.html>

\*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

Overall influenza activity in Iowa is declining. For this reporting week, State Hygienic Laboratory (SHL) confirmed 5 new cases of influenza and Mercy Dunes in Sioux City reported 2 cases. For the 2010-2011 influenza seasons, State Hygienic Laboratory has isolated three different strains of influenza in Iowans - influenza A (H3N2), 2009 H1N1, and influenza B. All three strains are well matched with this year's influenza vaccine.

The proportion of visits due to influenza-like illness (ILI) was 1.0%, which is below the baseline of 2.1%. There were 6 new influenza-associated hospitalizations reported from sentinel hospitals this reporting week. Most of these hospitalizations are occurring in people older than 64 years of age. The percentage of influenza rapid tests and RSV tests that tested positive has also decreased from last week. Other respiratory viruses have also been identified in Iowa, including respiratory syncytial virus (RSV), parainfluenza 1, parainfluenza 2, parainfluenza 3, adenovirus, and rhinovirus. Beginning this reporting week, regional activity will not be reported since influenza activity is low. If activity increases, we will expand the report.

#### National activity summary - [www.cdc.gov](http://www.cdc.gov)

**Synopsis:** During week 14 (April 3-9, 2011), influenza activity in the United States continued to decrease.

- Of the 4,234 specimens tested by the U.S. World Health Organization and National Respiratory and the Enteric Virus Surveillance System collaborating laboratories and reported to CDC/Influenza Division, 387 (9.1%) 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:** Small numbers of 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.

- The proportion of deaths attributed to pneumonia and influenza has been at or above the epidemic threshold for 11 consecutive weeks.
- One influenza-associated pediatric death was reported, bringing the season total to 91. This death was associated with an influenza B virus.
- The proportion of outpatient visits for influenza-like illness (ILI) was 1.4%, which is below the national baseline of 2.5%. All 10 regions reported ILI below region-specific baseline levels. Two states experienced low ILI activity; 48 states and New York City experienced minimal ILI activity, and the District of Columbia had insufficient data to calculate an ILI activity level.
- The geographic spread of influenza in two states was reported as widespread; nine states reported regional influenza activity; the District of Columbia and 23 states reported local influenza activity; Guam and 16 states reported sporadic influenza activity; the U.S. Virgin Islands reported no influenza activity, and Puerto Rico did not report.

**International activity summary - [www.who.int](http://www.who.int)**

Worldwide influenza activity is generally low. Influenza activity in the northern hemisphere temperate regions is continuing to decline or back to baseline levels indicating the season is ending. In countries in the tropical zone, influenza activity is low in most areas. In southern hemisphere countries influenza activity has not yet started. Viruses which have been characterized antigenically continue to be largely related to the lineages found in the current trivalent seasonal vaccine, except for a small number of influenza B viruses of the Yamagata lineage.

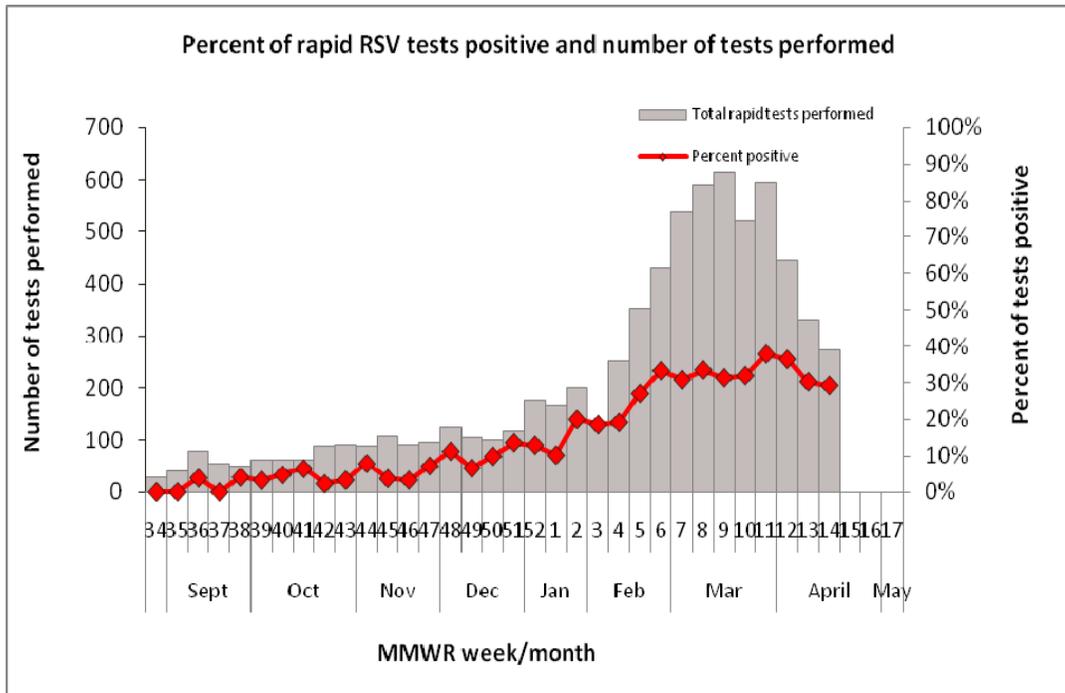
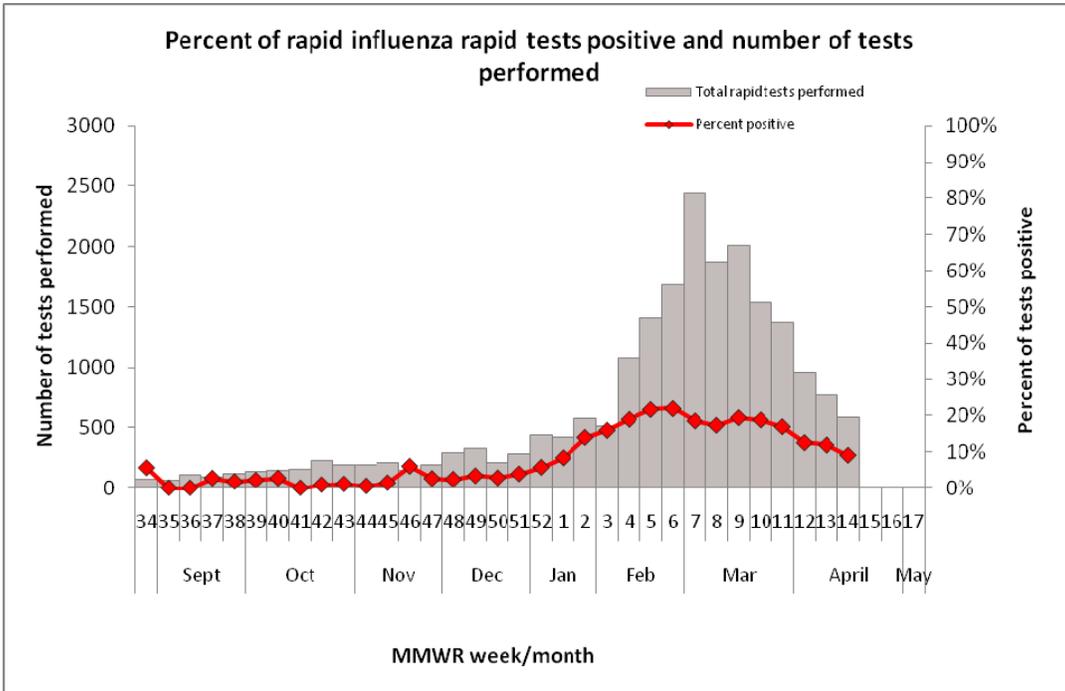
**Laboratory surveillance program - Influenza and Other Respiratory Viruses**

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 virus cultures tests reported from the Dunes Medical Laboratories at Mercy Medical Center-Sioux City. The Mercy Medical Center-Sioux City reports the number of virus cultures performed, the number of virus cultures positive and negative, as well as the number of viral types every week.

**Specimens tested by the State Hygienic Laboratory and Mercy Dunes in Sioux City**

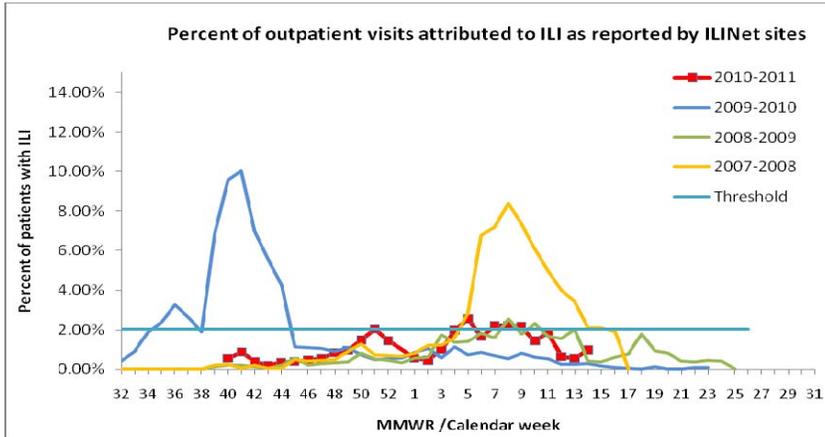
Influenza viruses isolated 9/1/10 to present week			Influenza viruses by age group 9/1/10 to present week				
	<i>Current week</i>	<i>Cumulative</i>	<i>Age group</i>	<i>Flu A (2009 H1N1)</i>	<i>Flu A (H3)</i>	<i>Flu A (no subtyping)</i>	<i>Flu B</i>
<b>Flu A</b>	1 (2%)	706 (22%)	<b>0-4</b>	41 (14%)	58 (16%)	7 (13%)	66 (18%)
Flu A (2009 H1N1)	0 (0%)	291 (9%)	<b>5-17</b>	55 (19%)	59 (16%)	8 (15%)	165 (44%)
Flu A (H3)	0 (0%)	362 (11%)	<b>18-24</b>	90 (31%)	23 (6%)	5 (9%)	60 (16%)
Subtyping not reported	1 (2%)	53 (2%)	<b>25-49</b>	71 (25%)	67 (19%)	12 (23%)	46 (12%)
<b>Flu B</b>	4 (7%)	372 (12%)	<b>50-64</b>	29 (10%)	33 (9%)	6 (11%)	13 (4%)
<b>Indeterminate/Equivocal</b>	1 (2%)	81 (2%)	<b>&gt;64</b>	5 (2%)	122 (34%)	15 (28%)	22 (6%)
<b>Negative</b>	48 (89%)	2066 (64%)	<b>Total</b>	291	362	53	372
<b>Total</b>	54	3225					

Number of positive results for non-influenza respiratory virus isolated since 9/1/10		
	<i>Current week</i>	<i>Cumulative</i>
<b>Adenovirus Isolated</b>	3	78
<b>Enteroviruses (presumptive)</b>	0	4
<i>Coxsackievirus A9 Isolated</i>	0	2
<i>Coxsackievirus B4 Isolated</i>	0	1
<i>Echovirus 9 Isolated</i>	0	2
<b>Parainfluenza Virus Type 1 Isolated</b>	0	5
<b>Parainfluenza Virus Type 2 Isolated</b>	0	19
<b>Parainfluenza Virus Type 3 Isolated</b>	2	33
<b>Rhinovirus Isolated</b>	1	14
<b>Respiratory syncytial virus (RSV)</b>	2	27



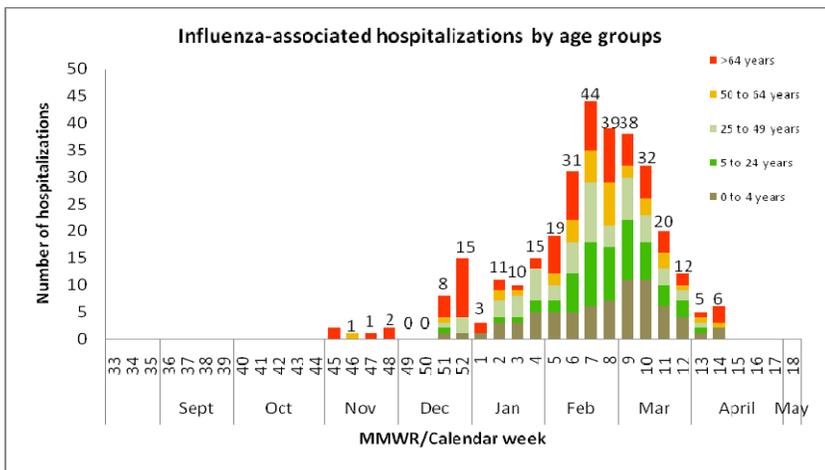
### Outpatient health care provider surveillance program (ILINet)

There are approximately 10 outpatient health care provider surveillance sites surveying patient populations for ILI each week. These sites report the number of patients seen with influenza-like illness and the total number of patient visits each week.



### Influenza-associated hospitalizations

Twenty-one Iowa hospitals participate in the IISN. These hospitals track and report the number of influenza-associated hospitalizations (diagnosed clinically or based on laboratory results) and the total number of inpatients.



### School surveillance program

Forty-two Iowa schools participate in the IISN system for tracking and reporting absence due to all illness (including non-influenza illnesses). They also track total enrollment, and log the number of days school was in session each week.

