



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

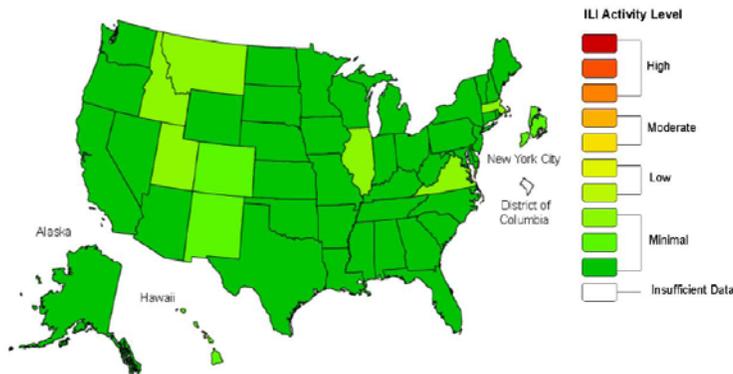
For the week ending April 2, 2011, Week 13

Quick Stats for this reporting week

Iowa activity level ¹	Regional
Percent of outpatient visits for ILI ²	0.6% (threshold 2.1%)
Percent of influenza rapid test positive	11.9% (91/764)
Percent of RSV rapid tests positive	30.2% (100/331)
Percent school absence due to illness	3.2%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations **	5 of 6369 inpatients surveyed

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

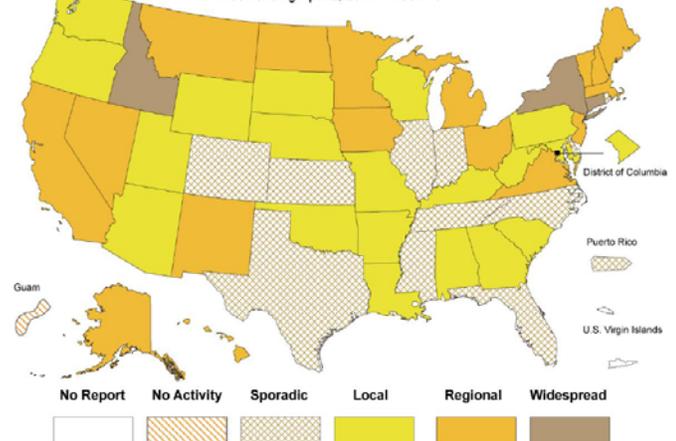
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILInet
2010-11 Influenza Season Week 13 ending Apr 02, 2011



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.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending April 2, 2011 - Week 13



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

Iowa statewide activity summary

Influenza activity in Iowa continues to decrease. The State Hygienic Laboratory again isolated three different strains of influenza in Iowans this reporting week - 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 0.6%, which is well below the baseline of 2.1%. There were 5 new influenza-associated hospitalizations reported from sentinel hospitals this reporting week. These new hospitalizations are occurring in all age groups. 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.

National activity summary - www.cdc.gov

Synopsis: During week 13 (March 27-April 2, 2011), influenza activity in the United States continued to decrease.

¹ *No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of influenza-like illness (ILI²).

Sporadic: Small numbers of 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.

- Of the 3,616 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, 399 (11.0%) were positive for influenza.
- The proportion of deaths attributed to pneumonia and influenza has been at or above the epidemic threshold for 10 consecutive weeks.
- Two influenza-associated pediatric deaths were reported, bringing the season total to 91. One of these deaths was associated with 2009 influenza A (H1N1) virus, and one was associated with an influenza A virus for which the subtype was not determined.
- The proportion of outpatient visits for influenza-like illness (ILI) was 1.6%, which is below the national baseline of 2.5%. All 10 regions reported ILI below region-specific baseline levels. All 50 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 three states was reported as widespread; 17 states reported regional influenza activity; the District of Columbia and 19 states reported local influenza activity; Puerto Rico and 11 states reported sporadic influenza activity; Guam reported no influenza activity, and the U.S. Virgin Islands did not report.

International activity summary - 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

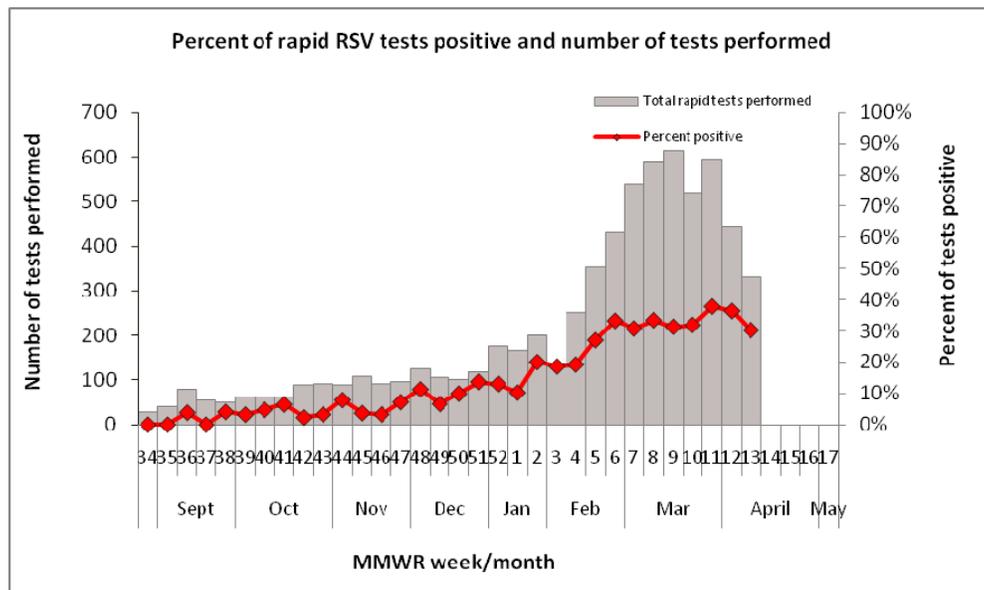
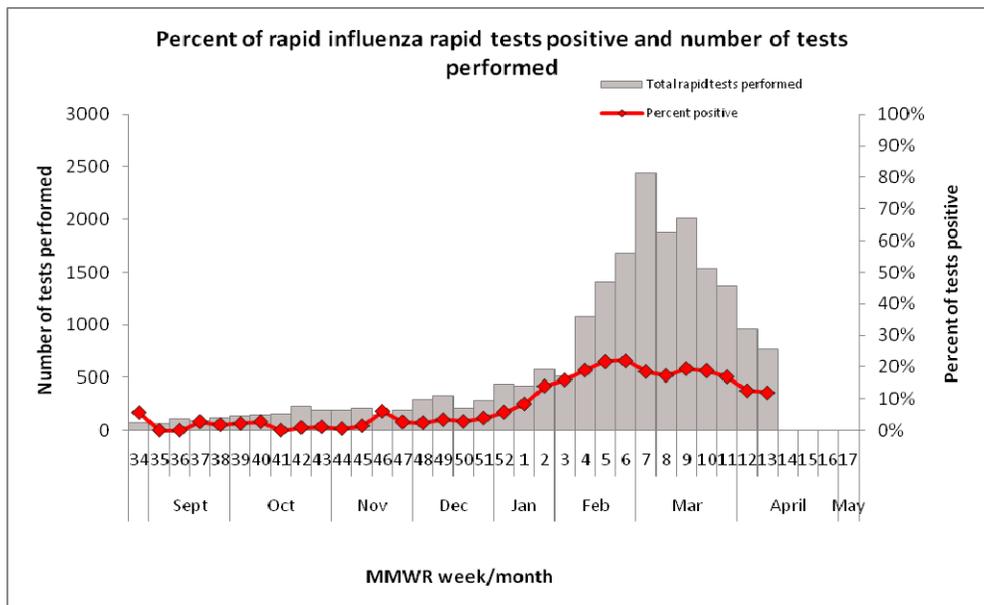
The State Hygienic Laboratory (SHL) is the primary lab testing and reporting influenza tests in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs 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>
Flu A	11 (17%)	692 (22%)	0-4	41 (14%)	58 (16%)	7 (14%)	65 (18%)
Flu A (2009 H1N1)	1 (2%)	291 (9%)	5-17	55 (19%)	59 (16%)	8 (15%)	165 (45%)
Flu A (H3)	10 (15%)	362 (11%)	18-24	90 (31%)	23 (6%)	5 (10%)	58 (16%)
Subtyping not reported	0 (0%)	52 (2%)	25-49	71 (25%)	67 (19%)	12 (23%)	45 (12%)
Flu B	3 (5%)	367 (12%)	50-64	29 (10%)	33 (9%)	6 (12%)	12 (3%)
Indeterminate/Equivocal	3 (5%)	79 (2%)	>64	5 (2%)	122 (34%)	14 (27%)	22 (6%)
Negative	49 (74%)	2009 (64%)	Total	291	362	52	367
Total	66	3160					

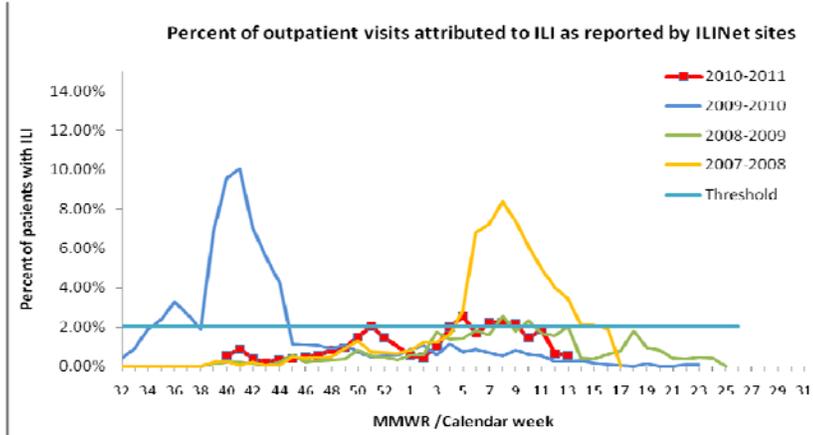
Number of positive results for non-influenza respiratory virus isolated since 9/1/10

	<i>Current week</i>	<i>Cumulative</i>
Adenovirus Isolated	2	75
Enteroviruses (presumptive)	0	4
<i>Coxsackievirus A9 Isolated</i>	0	2
<i>Coxsackievirus B4 Isolated</i>	0	1
<i>Echovirus 9 Isolated</i>	0	2
Parainfluenza Virus Type 1 Isolated	1	5
Parainfluenza Virus Type 2 Isolated	0	19
Parainfluenza Virus Type 3 Isolated	2	31
Rhinovirus Isolated	0	13
Respiratory syncytial virus (RSV)	2	25



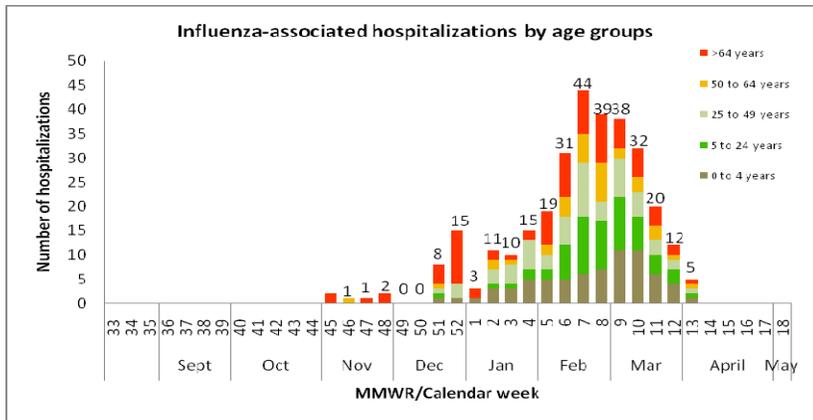
Outpatient health care provider surveillance program (ILINet)

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.



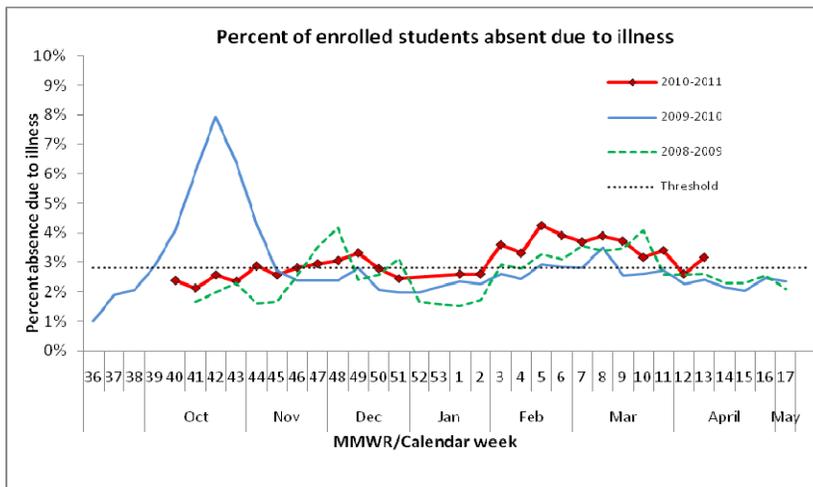
Influenza-associated hospitalizations

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.



Regional activity

Region 1 (Central)	
Percent of influenza rapid test positive	13.9% (14/101)
Percent of RSV rapid tests positive	30.2% (N/S)
Schools with ≥10% absence due to illness	0

Region 2 (North Central)	
Percent of influenza rapid test positive	20.0 (11/55)
Percent of RSV rapid tests positive	13.3% (2/15)
Schools with ≥10% absence due to illness	0

Region 3 (Northwest)	
Percent of influenza rapid test positive	10.3% (14/136)
Percent of RSV rapid tests positive	23.3% (14/60)
Schools with ≥10% absence due to illness	0

Region 4 (Southwest)	
Percent of influenza rapid test positive	7.8% (4/51)
Percent of RSV rapid tests positive	23.5% (4/17)
Schools with ≥10% absence due to illness	0

Region 5 (Southeast)	
Percent of influenza rapid test positive	10.5 (2/19)
Percent of RSV rapid tests positive	30.2 (N/S)
Schools with ≥10% absence due to illness	0

Region 6 (East Central)	
Percent of influenza rapid test positive	11.4% (46/402)
Percent of RSV rapid tests positive	26.7% (46/172)
Schools with ≥10% absence due to illness	0

N/S: too few labs reported RSV results, therefore the percentage for the state is assumed for this region.

Iowa map with regions and number of schools that have ≥10% absence due to illness

