



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

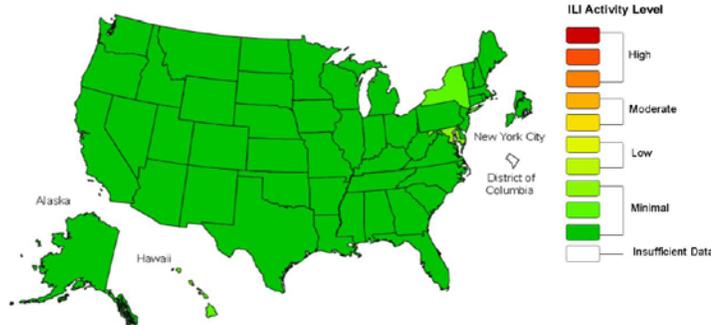
For the week ending April 23, 2011, Week 16

Quick Stats for this reporting week

Iowa activity level ¹	Sporadic
Percent of outpatient visits for ILI ²	0.5% (threshold 2.1%)
Percent of influenza rapid test positive	5.2% (18/348)
Percent of RSV rapid tests positive	30.6% (56/183)
Percent school absence due to illness	2.8%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations**	1 of 5538 inpatients surveyed

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

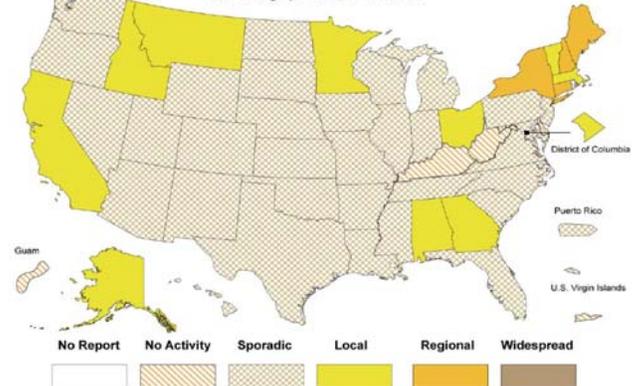
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILInet
2010-11 Influenza Season Week 16 ending Apr 23, 2011



Interactive web tool available at: <http://qis.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 23, 2011 - Week 16



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

Iowa statewide activity summary

Overall influenza activity in Iowa is low and continues to decrease. For this reporting week, the State Hygienic Laboratory (SHL) confirmed one new case of influenza B and Mercy Dunes in Sioux City reported two cases of influenza A. For the 2010-2011 influenza seasons, the 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 0.5%, which is below the baseline of 2.1 percent. There was one new influenza-associated hospitalization reported from sentinel hospitals this reporting week. The percentage of influenza rapid tests that tested positive has decreased from last week, while the percentage of RSV tests that tested positive has increased. Other respiratory viruses have also been identified in Iowa this season, including respiratory syncytial virus (RSV), parainfluenza 1, parainfluenza 2, parainfluenza 3, adenovirus, and rhinovirus.

National activity summary - www.cdc.gov

Synopsis: During week 16 (April 17-23, 2011), influenza activity in the United States continued to decrease.

- Of the 2,072 specimens tested by the U.S. World Health Organization and the National Respiratory and the Enteric Virus Surveillance System collaborating laboratories and reported to CDC/Influenza Division, 88 (4.3 percent) 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: 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.

- The proportion of deaths attributed to pneumonia and influenza has been at or above the epidemic threshold for 13 consecutive weeks.
- Two influenza-associated pediatric deaths were reported, bringing the season total to 97. Both of these deaths were associated with an influenza B virus.
- The proportion of outpatient visits for influenza-like illness (ILI) was 1.3 percent, which is below the national baseline of 2.5 percent. Region 2 reported ILI above its region-specific baseline. 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 four states was reported as regional; the District of Columbia and 10 states reported local influenza activity; Puerto Rico and 32 states reported sporadic influenza activity, and the U.S. Virgin Islands, Guam, and four states reported no influenza activity.

International activity summary - www.who.int

Worldwide influenza activity is generally low and decreasing. Influenza activity in the northern hemisphere temperate regions is back to baseline levels in most areas, indicating the season is now ending. In countries of the tropical zone, influenza activity is generally low with a few recent localized areas of activity reported and ongoing transmission of H3N2 in central Africa. In southern hemisphere temperate countries influenza seasonal 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.

Laboratory surveillance program - *Influenza and Other Respiratory Viruses*

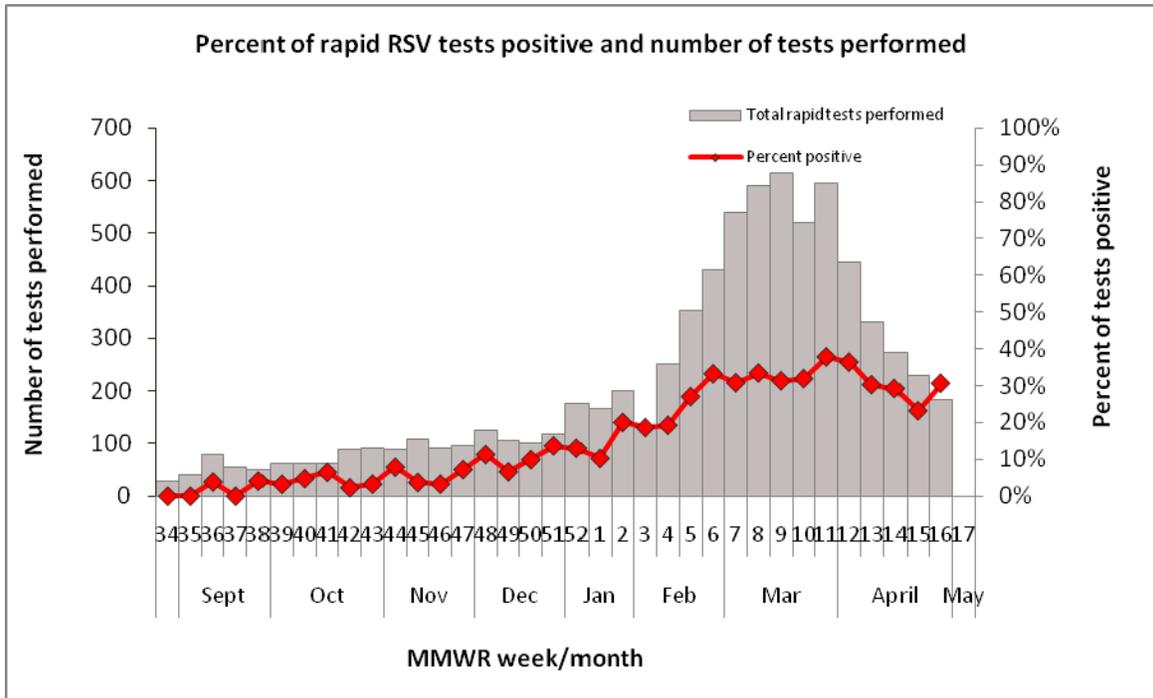
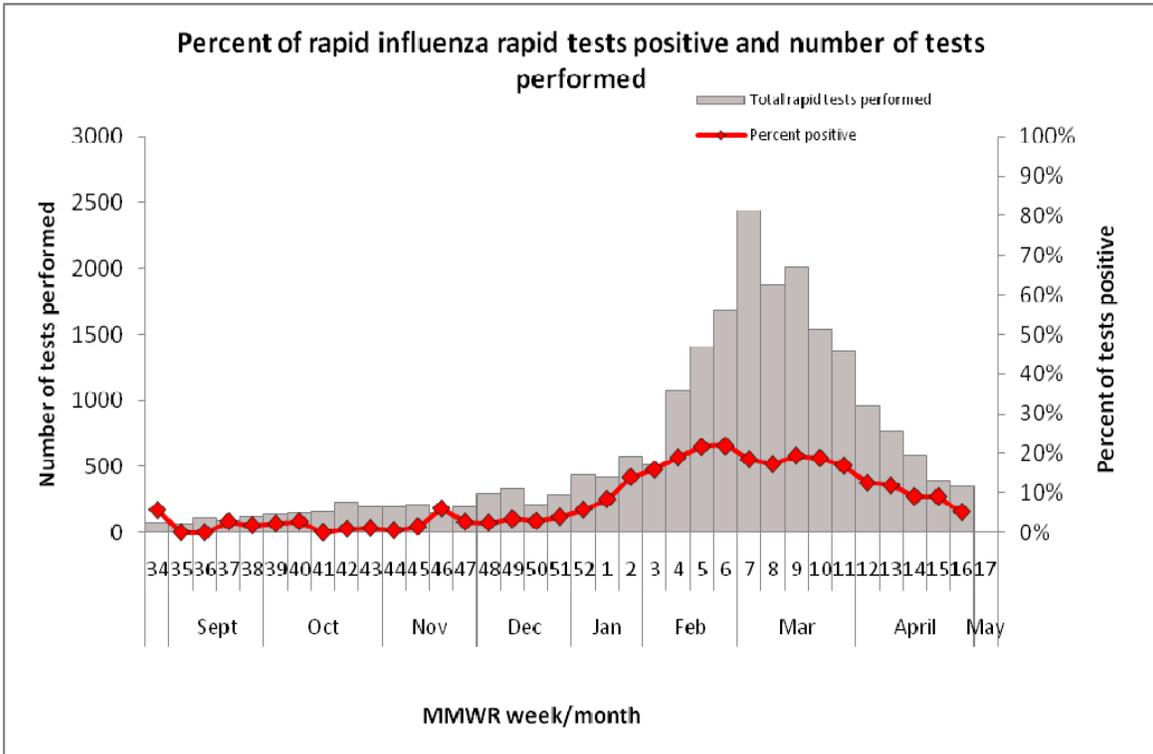
The State Hygienic Laboratory (SHL) is the primary lab testing and reporting influenza tests in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs for the number of rapid-antigen tests performed and number positive weekly. This report also includes the positive non-influenza virus culture tests reported from the Dunes Medical Laboratories at Mercy Medical Center-Sioux City.

Specimens tested by the State Hygienic Laboratory

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	0 (0%)	708 (22%)	0-4	41 (14%)	58 (16%)	7 (13%)	66 (18%)
Flu A (2009 H1N1)	0 (0%)	291 (9%)	5-17	55 (19%)	60 (16%)	9 (17%)	165 (44%)
Flu A (H3)	0 (0%)	365 (11%)	18-24	90 (31%)	23 (6%)	5 (9%)	60 (16%)
Subtyping not reported	0 (%)	52 (2%)	25-49	71 (25%)	67 (18%)	12 (22%)	46 (12%)
Flu B	1 (4%)	373 (11%)	50-64	29 (10%)	33 (9%)	6 (11%)	13 (4%)
Indeterminate/Equivocal	1 (4%)	84 (3%)	>64	5 (2%)	124 (34%)	15 (28%)	23 (6%)
Negative	21 (92%)	2130 (65%)	Total	291	365	52	373
Total	23	3295					

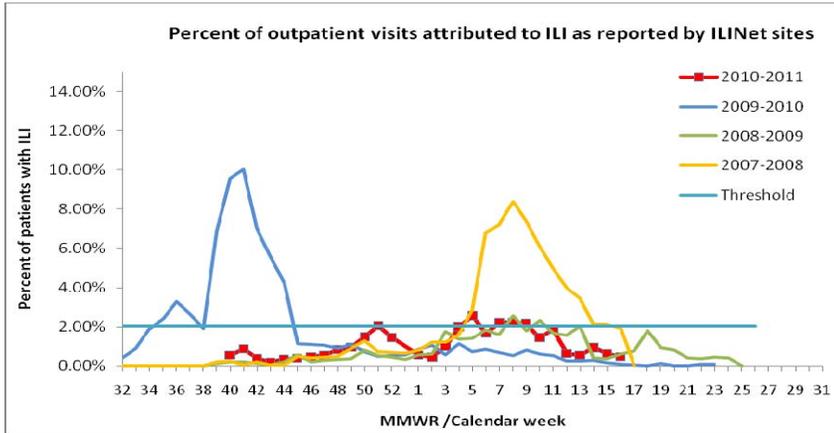
Number of positive results for non-influenza respiratory virus isolated since 9/1/10 by the State Hygienic Laboratory and Mercy Dunes in Sioux City

	<i>Current week</i>	<i>Cumulative</i>
Adenovirus Isolated	0	78
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	0	5
Parainfluenza Virus Type 2 Isolated	0	19
Parainfluenza Virus Type 3 Isolated	2	41
Rhinovirus Isolated	0	16
Respiratory syncytial virus (RSV)	1	29



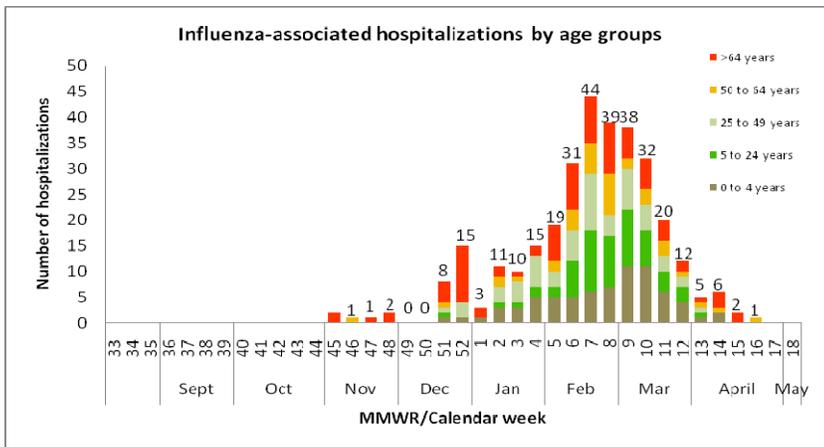
Outpatient health care provider surveillance program (ILINet)

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.

