



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

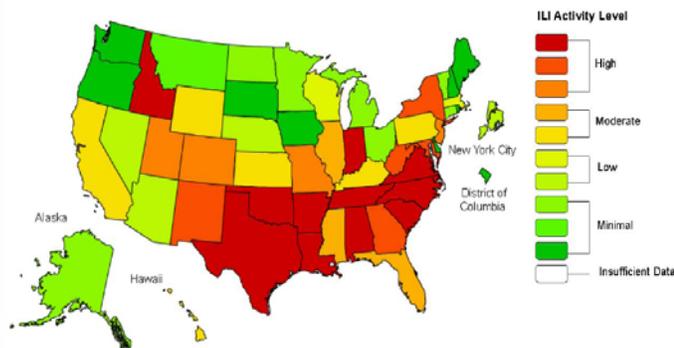
For the week ending February 12, 2011, Week 6

Quick Stats for this reporting week

Iowa activity level¹	Widespread
Percent of outpatient visits for ILI ²	1.6% (threshold 2.1%)
Percent of influenza rapid test positive	22.0% (369/1681)
Percent of RSV rapid tests positive	33.2% (143/431)
Percent school absence due to illness	3.9%
Number of schools with ≥10% absence due to illness	25
Influenza-associated hospitalizations ^{**}	31 of 6612 inpatients surveyed

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

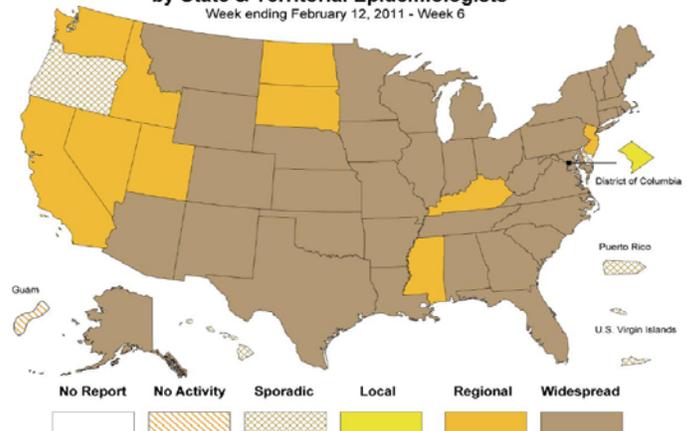
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILInet
2010-11 Influenza Season Week 6 ending Feb 12, 2011



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 February 12, 2011 - Week 6



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

Iowa statewide activity summary

Iowa is experiencing widespread influenza activity. In this reporting week, the State Hygienic Laboratory (SHL) again 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. Recently, there has been an increase in proportion of 2009 H1N1 virus identified among subtyped influenza A viruses. By week 6, more 2009 H1N1 cases than influenza A (H3) cases were reported.

There were 31 new influenza-associated hospitalizations reported from sentinel hospitals this reporting week. The number has increased from previous weeks and most of the new hospitalizations are occurring in people younger than 25 years of age and older than 64 years of age. The number of influenza and RSV rapid tests continues to increase as well as the percent of the tests that tested positive. Other respiratory viruses recently identified in Iowa include respiratory syncytial virus (RSV), parainfluenza 1, parainfluenza 2, parainfluenza 3, adenovirus, and rhinovirus. The number of schools reporting >10% absence due to illness has also increased to twenty-five.

National activity summary - www.cdc.gov

Synopsis: During week 6 (February 6-12, 2011), influenza activity in the United States remained elevated.

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 9,448 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, 3,306 (35.0%) were positive for influenza.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.
- Five influenza-associated pediatric deaths were reported. Three of these deaths were associated with 2009 influenza A (H1N1) virus, one was associated with an influenza A virus for which the subtype was not determined, and one was associated with an influenza B virus.
- The proportion of outpatient visits for influenza-like illness (ILI) was 4.5%, which is above the national baseline of 2.5%. All 10 regions reported ILI at or above region-specific baseline levels. Twenty states experienced high ILI activity; nine states experienced moderate ILI activity; New York City and five states experienced low ILI activity, and the District of Columbia and 16 states experienced minimal ILI activity.
- The geographic spread of influenza in 37 states was reported as widespread; 10 states reported regional influenza activity; the District of Columbia reported local activity; Puerto Rico, the U.S. Virgin Islands, and three states reported sporadic influenza activity, and Guam reported no influenza activity.

International activity summary - www.who.int

Influenza activity is increasing on the European continent, particularly in the central, south and eastern part. In the tropics, several countries of southern Asia have seen a recent increase in influenza virus transmission mainly due to influenza A (H1N1) 2009 virus. Other tropical areas of the world and the temperate countries of the southern hemisphere are currently reporting very little influenza circulation. Influenza transmission in North America, notably in the United States of America (USA) has increased this week with a slight increase of (H1N1) 2009 compared to earlier weeks. Transmission in most of northern Africa and the Middle East has peaked recently and is declining. Some countries in northern Asia are seeing an increase in (H1N1) 2009 transmissions and some are seeing an increase in influenza-like illness activity. The majority of the viruses characterized from North America and Europe are closely related to the vaccine viruses for the current seasonal vaccines.

Laboratory surveillance program - Influenza and Other Respiratory Viruses

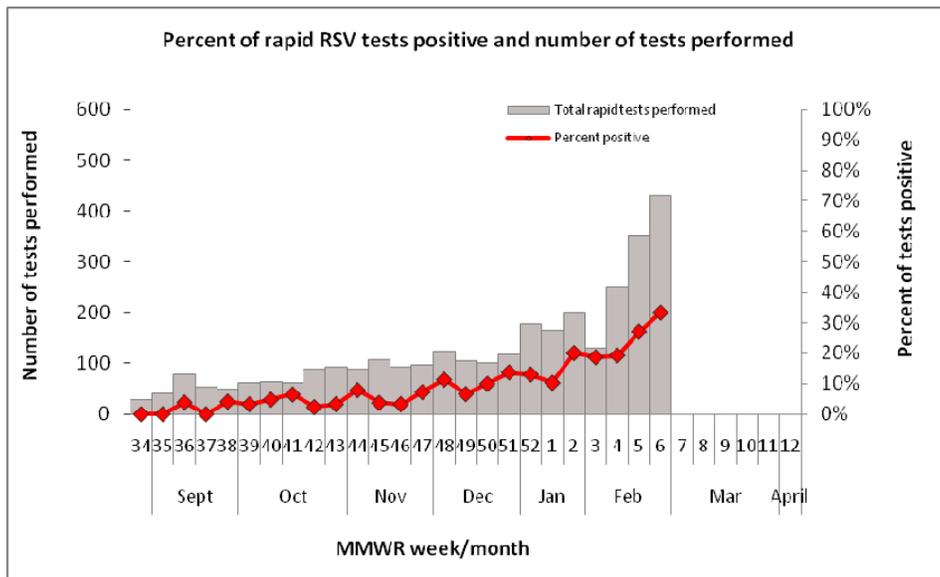
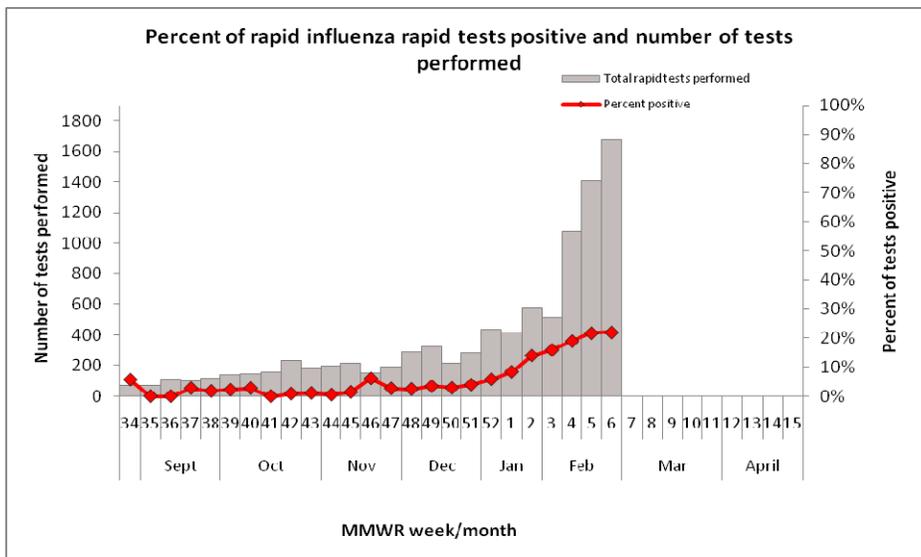
The State Hygienic Laboratory (SHL) is the primary lab testing and reporting influenza tests in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs 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	73 (53%)	471 (21%)	0-4	29 (13%)	43 (20%)	6 (15%)	43 (19%)
Flu A (2009 H1N1)	35 (17%)	220 (10%)	5-17	45 (21%)	43 (20%)	8 (20%)	112 (49%)
Flu A (H3)	35 (17%)	211 (9%)	18-24	78 (36%)	16 (8%)	4 (10%)	26 (12%)
Subtyping not reported	3 (1%)	40 (2%)	25-49	49 (22%)	44 (21%)	11 (28%)	27 (12%)
Flu B	36 (18%)	227 (10%)	50-64	16 (7%)	16 (8%)	5 (12%)	7 (3%)
Indeterminate/Equivocal	2 (1%)	42 (2%)	>64	3 (1%)	49 (23%)	6 (15%)	12 (5%)
Negative	94 (46%)	1491 (67%)	Total	220	211	40	227
Total	205	2232					

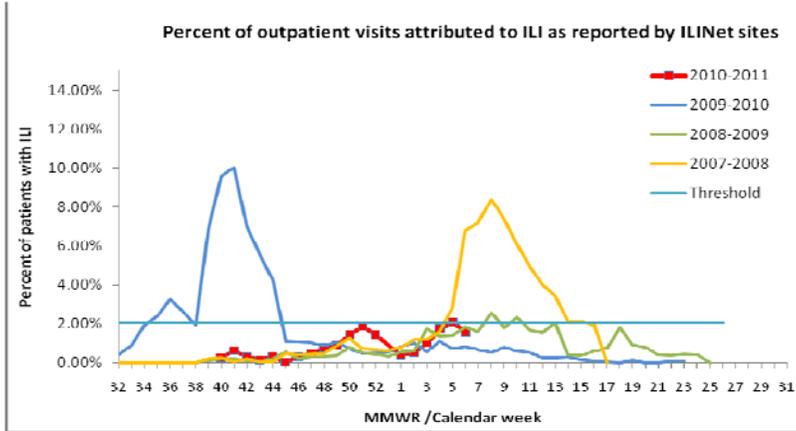
Number of positive results for non-influenza respiratory virus isolated since 9/1/10

	<i>Current week</i>	<i>Cumulative</i>
Adenovirus Isolated	0	31
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	2
Parainfluenza Virus Type 2 Isolated	0	16
Parainfluenza Virus Type 3 Isolated	1	11
Rhinovirus Isolated	0	13
Respiratory syncytial virus (RSV)	2	6



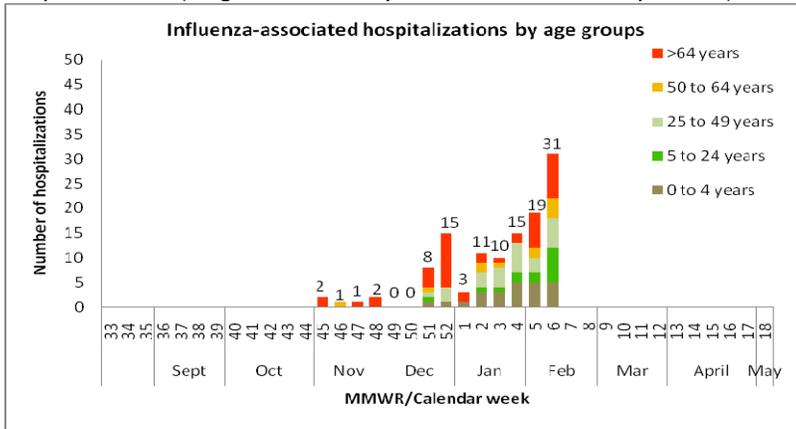
Outpatient health care provider surveillance program (ILINet)

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.

