



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending February 4, 2012, Week 5

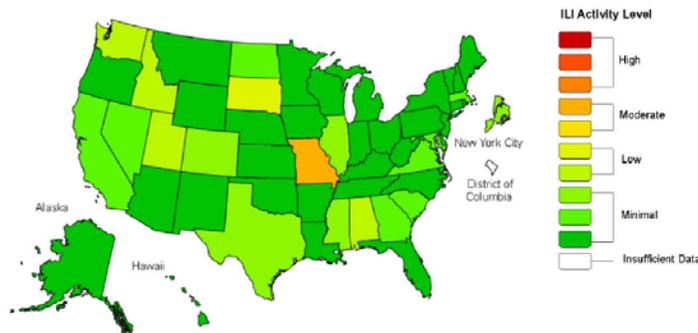
Quick Stats for this reporting week

Iowa activity level ¹	Regional
Percent of outpatient visits for ILI ²	0.4% (baseline 2.3%)
Percent of influenza rapid test positive	6.4% (29/455)
Percent of RSV rapid tests positive	25.0% (69/206)
Percent school absence due to illness	2.5%
Number of schools with ≥10% absence due to illness	4
Influenza-associated hospitalizations*	2/6386 inpatients surveyed
Influenza-associated pediatric mortality**	0

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

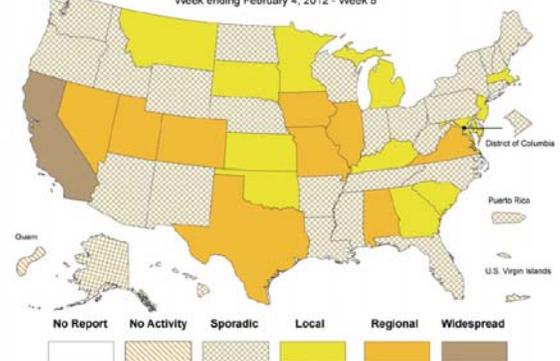
** CDC asks states to report any pediatric death (<18 years old) associated with influenza

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2011-12 Influenza Season Week 5 ending Feb 04, 2012



*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 4, 2012 - Week 5



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

Iowa statewide activity summary

Influenza activity in Iowa is increasing and has been upgraded from ‘Sporadic’ activity to ‘Regional’ activity based on recent increases in laboratory-confirmed cases and ILI rates in the Northwest and East Central regions of the state. In this reporting week, the State Hygienic laboratory confirmed 34 seasonal influenza cases including 23 A (H3), 3 A (2009 H1N1), 1 B, and subtyping is pending on 7 specimens that tested positive for influenza A. The overall proportion of outpatient visits due to influenza-like illness (ILI) remained low at 0.4 percent, which is below the regional baseline of 2.3 percent; however, activity increased in Northwest (2.1 percent) and East Central (1.0 percent). The percent of influenza rapid tests that tested positive increased from the previous week, while the percent of RSV rapid tests that tested positive decreased but remained high. There were two influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. Four schools (2 Sac County, 1 Sioux County and 1 in Appanoose County) reported 10 percent or greater absenteeism due to various illnesses, primarily respiratory. There were also seven cases of RSV, one adenovirus, and one rhinovirus detected in this reporting week. For the season, other respiratory viruses identified include rhinovirus, adenovirus, parainfluenza 1-2, RSV, and human metapneumovirus (hMPV).

National activity summary - www.cdc.gov

Synopsis: During week 5 (January 29-February 4, 2012), influenza activity in the United States increased.

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

Sporadic: Isolated 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.

- **U.S. Virologic Surveillance:** Of the 3,586 specimens tested by the U.S. World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories and reported to CDC/Influenza Division, 378 (10.5 percent) were positive for influenza.
- **Pneumonia and Influenza (P&I) Mortality Surveillance:** The proportion of deaths attributed to P&I was below the epidemic threshold.
- **Influenza-associated Pediatric Mortality:** One influenza-associated pediatric death was reported and was associated with an influenza A virus for which the subtype was not determined.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.7 percent, which is below the national baseline of 2.4 percent. Regions 7 and 10 reported ILI above region-specific baseline levels. One state experienced moderate ILI activity, five states experienced low ILI activity, New York City and 44 states experienced minimal ILI activity, and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** One state reported widespread geographic activity; nine states reported regional activity; 12 states reported local activity; the District of Columbia, Puerto Rico, and 27 states reported sporadic activity; Guam, the U.S. Virgin Islands and one state reported no influenza activity.

International activity summary - www.who.int

Influenza activity in the temperate regions of the northern hemisphere remains low overall, though notable local increases in activity have been reported in North America, the western part of Europe, and northern China. Countries in the tropical zone reported low levels of influenza activity with the exceptions of southern China, Colombia, and Ecuador. Influenza activity in the temperate countries of the southern hemisphere is at inter-seasonal levels. The low level inter-seasonal transmission of A (H3N2) previously noted in Chile and Australia appears to be diminishing and becoming more sporadic. The most commonly detected virus type or subtype throughout the northern hemisphere temperate zone has been influenza A(H3N2) with the exception of China, which is reporting a predominance of influenza type B, and Mexico, where influenza A(H1N1)pdm09 is the predominant subtype circulating. In addition to Mexico, some southern states of the United States of America and Colombia in northern South America have also reported a predominance of A (H1N1) pdm09 in recent weeks. Nearly all influenza A viruses characterized are antigenically related to the viruses contained in the current northern hemisphere trivalent vaccine. About half of the small number of influenza type B viruses characterized are of the Yamagata lineage, which is not contained in the current vaccine. Oseltamivir resistance has been observed at very low levels and has not increased notably over levels reported in previous seasons.

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 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

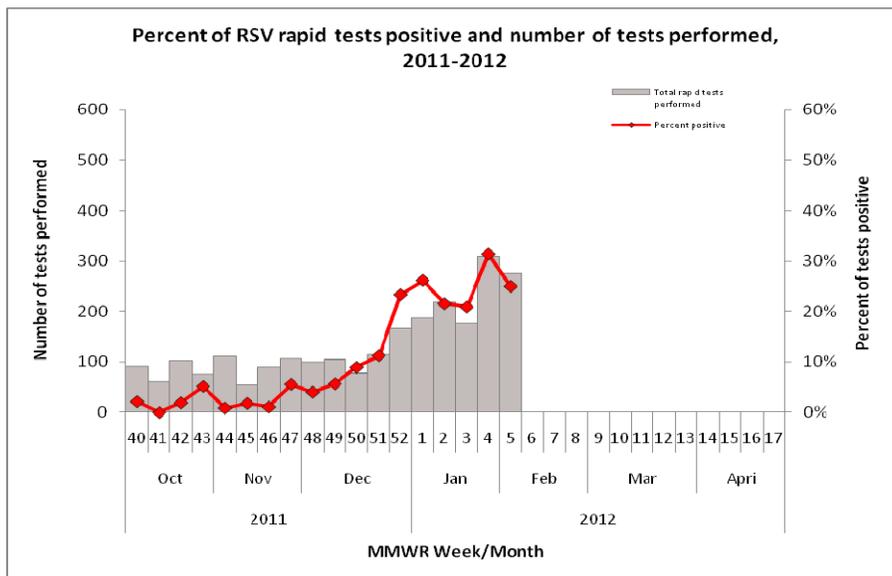
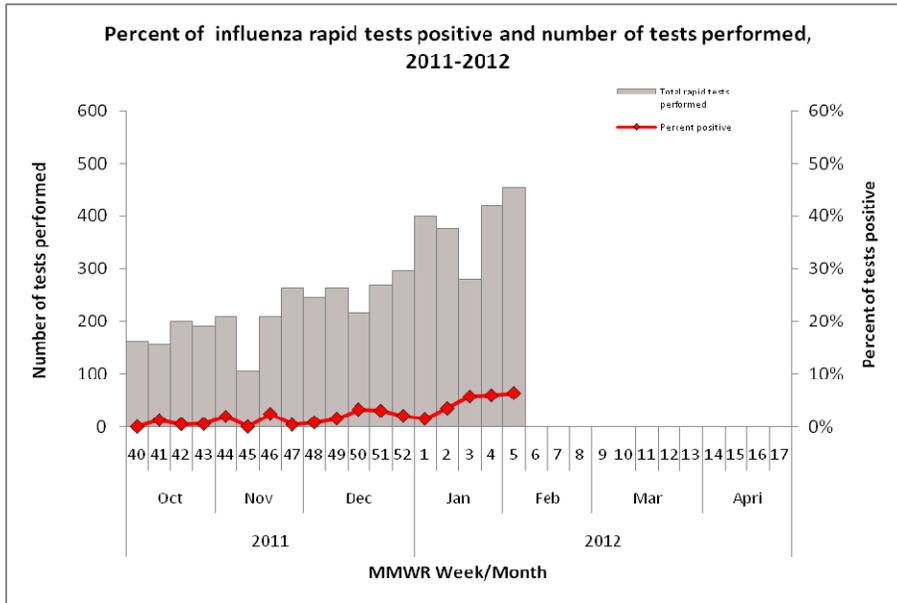
	<i>Current week</i>	<i>Cumulative</i>
Flu A	33 (50%)	98 (19%)
Flu A (2009 H1N1)	3 (6%)	5 (1%)
Flu A (H3)	23 (34%)	83 (15%)
Novel A (H3N2)	0 (0%)	3 (1%)
Subtyping not reported	7 (10%)	10 (2%)
Flu B	1 (2%)	3 (<1%)
Equivocal	0 (0%)	0 (0%)
Indeterminate	0 (0%)	6 (1%)
Negative	32 (48%)	432 (80%)
Total	66	539

<i>Age group</i>	<i>Flu A (2009 H1N1)</i>	<i>Flu A (H3)</i>	<i>Novel A (H3N2)</i>	<i>Flu A (no typing)</i>	<i>Flu B</i>
0-4	0 (0%)	15 (18%)	* (*%)	1 (14%)	0 (0%)
5-17	2 (40%)	26 (32%)	* (*%)	5 (72%)	0 (0%)
18-24	1 (20%)	6 (7%)	0 (0%)	1 (14%)	0 (0%)
25-49	2 (40%)	19 (23%)	0 (0%)	0 (0%)	1 (33%)
50-64	0 (0%)	12 (15%)	0 (0%)	0 (0%)	2 (67%)
>64	0 (0%)	4 (5%)	0 (0%)	0 (0%)	0 (0%)
Total	5	83	3	7	3

* Counts of three or less of reportable diseases are suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information

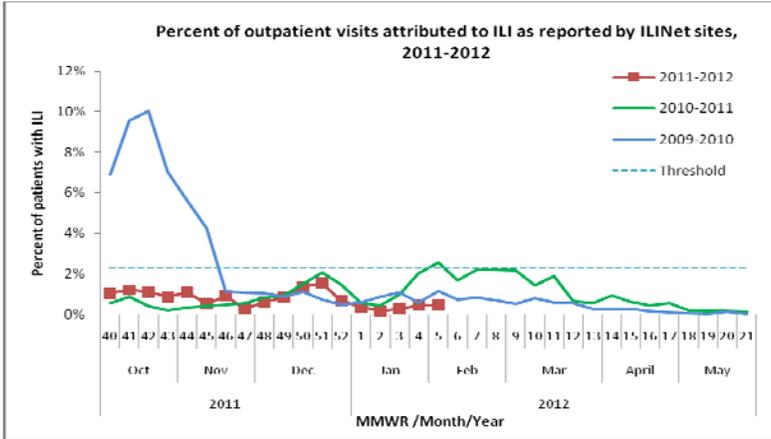
Table 3. Number of positive results for non-influenza respiratory virus isolated since 10/2/11 by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

	<i>Current week</i>	<i>Cumulative</i>
<i>Adenovirus</i>	1	20
<i>Parainfluenza Virus Type 1</i>	0	28
<i>Parainfluenza Virus Type 2</i>	0	8
<i>Parainfluenza Virus Type 3</i>	0	0
<i>Rhinovirus</i>	1	35
<i>Respiratory syncytial virus (RSV)</i>	7	26
<i>human metapneumovirus (hMPV)</i>	0	4



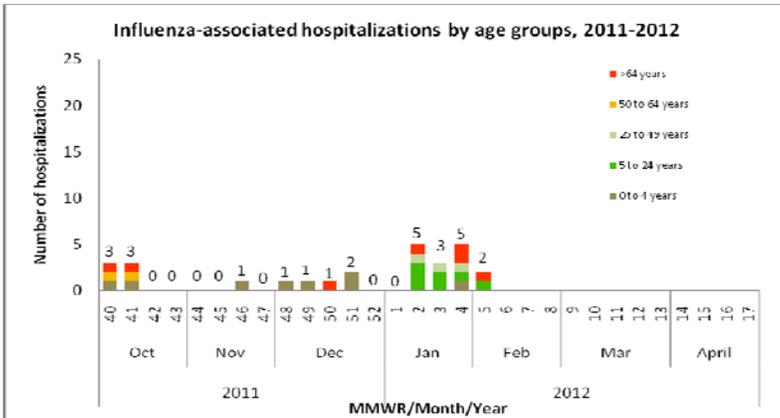
Outpatient health care provider surveillance program (ILINet)

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.



Influenza-associated hospitalizations

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

Schools participating in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week.

