



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending April 14, 2012, Week 15

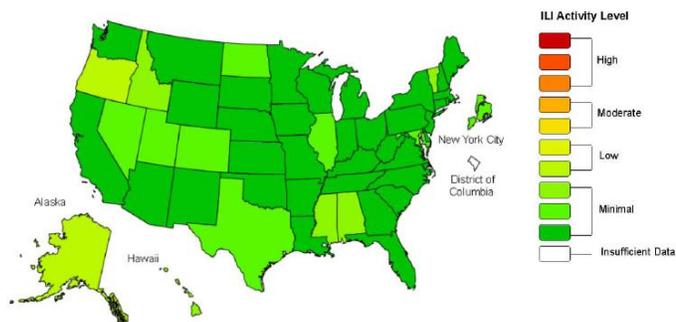
Quick Stats for this reporting week

Iowa activity level ¹	Local
Percent of outpatient visits for ILI ²	0.3 % (baseline 2.3%)
Percent of influenza rapid test positive	7.3% (22/303)
Percent of RSV rapid tests positive	16.8% (27/161)
Percent school absence due to illness	2.2%
Number of schools with ≥10% absence due to illness	1
Influenza-associated hospitalizations*	1/6022 inpatients surveyed
Influenza-associated pediatric mortality**	0

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

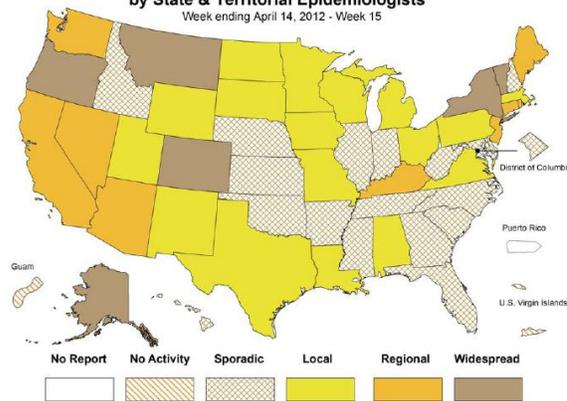
**CDC asks states to report any pediatric death (<18 years old) associated with influenza

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to IILNET
2011-12 Influenza Season Week 15 ending Apr 14, 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 April 14, 2012 - Week 15



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

Iowa statewide activity summary

Influenza activity in Iowa is decreasing and has been downgraded from regional to local. Beginning this reporting week, only statewide activity will be reported. If activity increases, we will again expand the report.

In this reporting week, the State Hygienic Laboratory (SHL) confirmed 23 seasonal influenza cases, including 17 influenza A (H3), five influenza A (2009 H1N1), and one influenza B. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.3 percent, which is below the regional baseline of 2.3 percent. The percent of influenza rapid tests that tested positive increased slightly from the previous week, while the percent of respiratory syncytial virus (RSV) rapid tests that tested positive decreased. There were one influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. One school reported 10 percent or greater absenteeism due to illness. There was also one case of adenovirus 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 15 (April 8-14, 2012), influenza activity was elevated in some areas of the United States, but declined nationally and in most regions.

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 3,730 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, 653 (17.5 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:** Two influenza-associated pediatric deaths were reported. One was associated with a 2009 H1N1 virus and one was associated with a seasonal influenza A (H3) virus.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.5 percent, which is below the national baseline of 2.4 percent. Region 10 reported ILI above its region-specific baseline level. Two states experienced low ILI activity; New York City and 48 states experienced minimal ILI activity, and the District of Columbia had insufficient data to calculate ILI activity.
- **Geographic Spread of Influenza:** Six states reported widespread geographic activity; nine states reported regional influenza activity; 17 states reported local activity; the District of Columbia and 18 states reported sporadic activity; Guam and the U.S. Virgin Islands reported no influenza activity, and Puerto Rico did not report.

International activity summary - www.who.int

In most areas of the northern hemisphere temperate regions, influenza activity appears to have peaked and is declining. In North America, influenza indicators have remained elevated in some areas of the United States of America, but declined in the last couple of weeks. Although, activity remains elevated across several regions in Canada, declining trends have started to be observed. Similarly, in Europe and northern Asia, nearly every country has now passed its peak of transmission and has reported declining activity. The most commonly detected virus type or subtype throughout Europe and North America (except Mexico) has been influenza A (H3N2), although the proportion of influenza B detection has been increasing toward the end of the season in North America. In Mexico influenza A (H1N1) pdm09 has been the most common influenza virus circulating and China and the surrounding countries of northern Asia are still reporting a predominance of influenza type B virus. Increasing genetic and antigenic diversity has been noted in H3N2 viruses in the later part of the influenza season. No significant change in antiviral resistance has been reported so far this season.

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

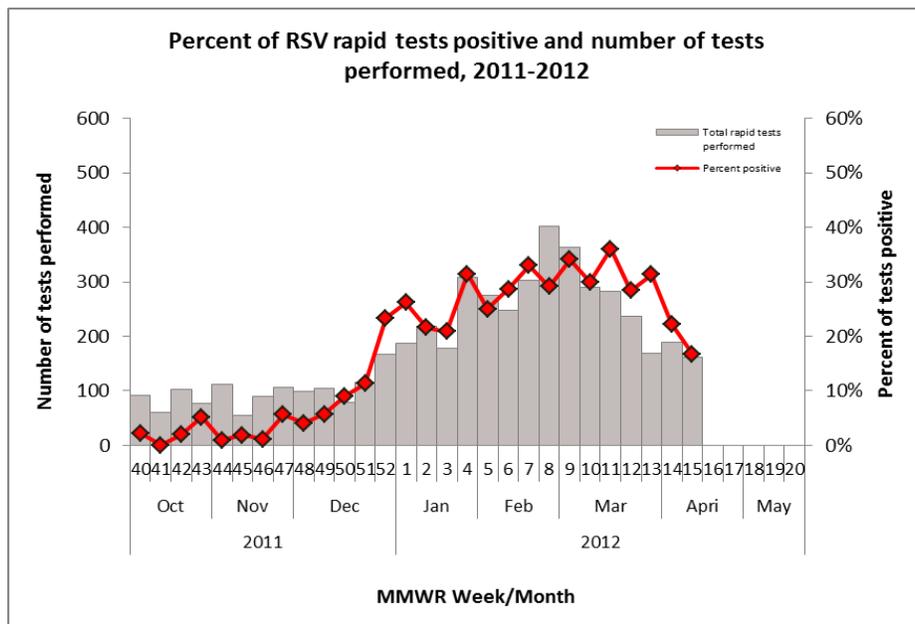
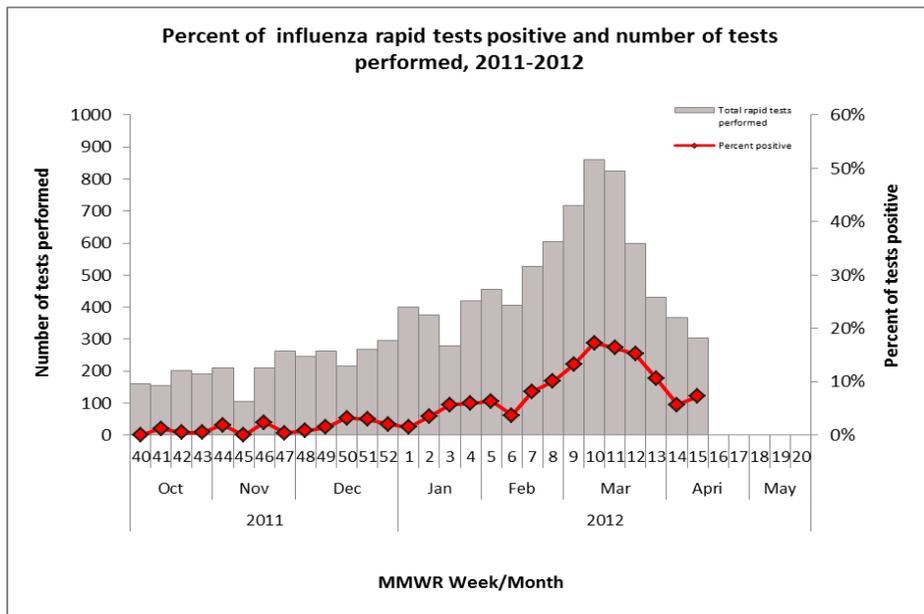
	<i>Current week</i>	<i>Cumulative</i>
Flu A	22 (32%)	1127 (50%)
Flu A (2009 H1N1)	5 (7%)	115 (5%)
Flu A (H3)	17 (25%)	990 (44%)
Novel A (H3N2)	0 (0%)	3 (<1%)
Subtyping not reported	0 (0%)	19 (1%)
Flu B	1 (1%)	24 (1%)
Equivocal	0 (0%)	3 (<1%)
Indeterminate	0 (0%)	11 (<1%)
Negative	46 (67%)	1094 (48%)
Total	69	2259

<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	16 (14%)	223 (23%)	* (*%)	3 (16%)	5 (21%)
5-17	23 (20%)	253 (26%)	* (*%)	2 (11%)	9 (37%)
18-24	22 (19%)	72 (7%)	0 (0%)	2 (11%)	2 (8%)
25-49	49 (43%)	207 (21%)	0 (0%)	8 (42%)	4 (17%)
50-64	4 (3%)	93 (9%)	0 (0%)	1 (5%)	4 (17%)
>64	1 (1%)	141 (14%)	0 (0%)	3 (14%)	0 (0%)
Total	115	990	3	19	24

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

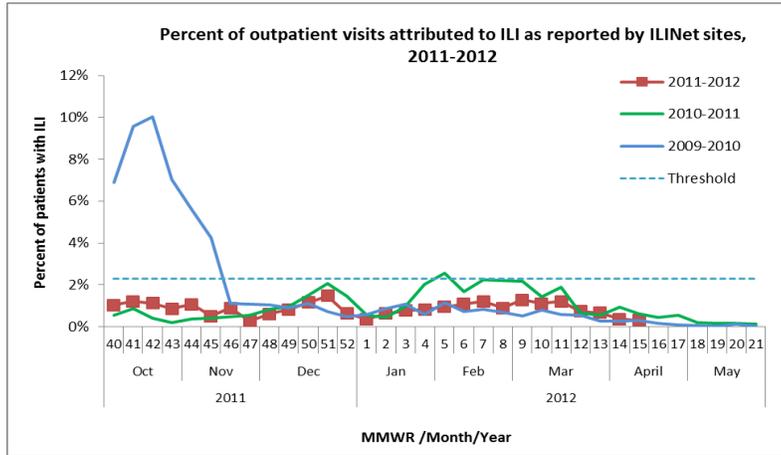
Table 3. Number of positive results for non-influenza respiratory virus isolated since 10/2/11 by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

	<i>Current week</i>	<i>Cumulative</i>
<i>Adenovirus</i>	1	33
<i>Parainfluenza Virus Type 1</i>	0	32
<i>Parainfluenza Virus Type 2</i>	0	10
<i>Parainfluenza Virus Type 3</i>	0	0
<i>Rhinovirus</i>	0	46
<i>Respiratory syncytial virus (RSV)</i>	0	183
<i>human metapneumovirus (hMPV)</i>	0	16



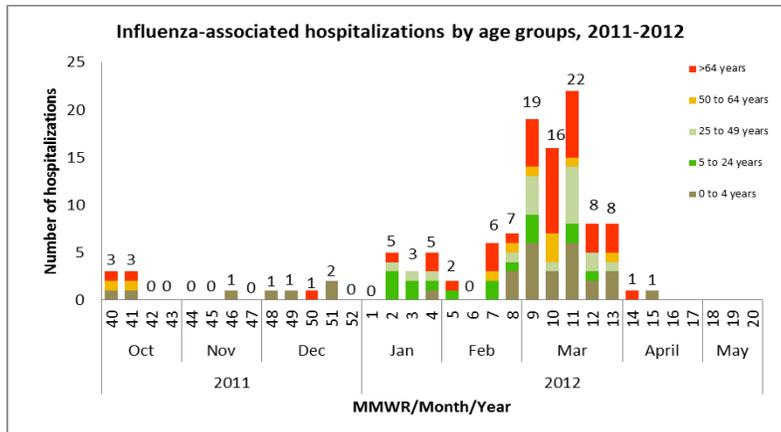
Outpatient health care provider surveillance program (ILINet)

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.

