



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending January 21, 2012, Week 3

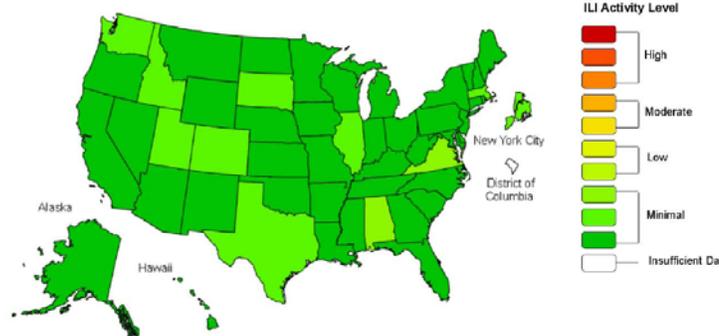
Quick Stats for this reporting week

Iowa activity level ¹	Sporadic
Percent of outpatient visits for ILI ²	0.3% (baseline 2.3%)
Percent of influenza rapid test positive	5.7% (16/280)
Percent of RSV rapid tests positive	20.9% (37/177)
Percent school absence due to illness	2.7%
Number of schools with ≥10% absence due to illness	1
Influenza-associated hospitalizations*	3/6236 inpatients surveyed
Influenza-associated pediatric mortality**	0

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

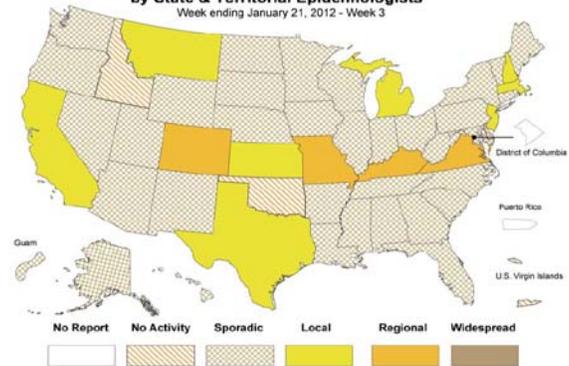
**CDC asks states to report any pediatric death (<18 years old) associated with influenza

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2011-12 Influenza Season Week 3 ending Jan 21, 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 January 21, 2012 - Week 3



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

Iowa statewide activity summary

Influenza activity remains sporadic in Iowa. There were six new laboratory confirmed cases of seasonal influenza A identified in this reporting week. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.3 percent, which is well below the regional baseline of 2.3 percent. The percent of influenza rapid tests that tested positive increased from the previous week, while the percent of respiratory syncytial virus (RSV) rapid tests that tested positive decreased slightly but remained high. There were three influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. Of these hospitalizations, two occurred in people aged 5 to 24 years while the other was in the 25-49 year age range. One school in Emmet County reported 10 percent or greater absenteeism due to various illnesses, including respiratory and gastrointestinal illnesses. There were also five cases of RSV, one adenovirus, one parainfluenza virus 1 and one parainfluenza virus 2 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 3 (January 15-21, 2012), influenza activity in the United States remained relatively low.

- **U.S. Virologic Surveillance:** Of the 3,572 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, 175 (4.9 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: 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.

- **Pneumonia and Influenza (P&I) Mortality Surveillance:** The proportion of deaths attributed to P&I was slightly above the epidemic threshold.
- **Influenza-associated Pediatric Mortality:** One influenza-associated pediatric death was reported and was associated with an influenza B virus infection.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.4 percent, which is below the national baseline of 2.4 percent. All 10 regions reported ILI below region-specific baseline levels. New York City and all 50 states experienced minimal ILI activity and the District of Columbia had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in four states was reported as regional; eight states reported local activity; Guam and 35 states reported sporadic activity; the U.S. Virgin Islands and three states reported no influenza activity, and the District of Columbia and Puerto Rico did not report.

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 some areas of Canada, Europe (Turkey, Spain, Italy and Malta), northern Africa (Tunisia and Algeria), China and the middle East (the Islamic Republic of Iran). Countries in the tropical zone reported generally low or undetectable levels of influenza activity with the exception of southern China, where influenza type B detections are increasing, and Costa Rica, which continues to report influenza A (H3N2) but at declining levels. Influenza activity in the temperate countries of the southern hemisphere is at inter-seasonal levels though Chile, Paraguay and Australia all report persistent low level transmission of A (H3N2) during their summer season. The most commonly detected virus type or subtype throughout the northern hemisphere temperate zone has been influenza A (H3N2) with the exception of Mexico, where influenza A (H1N1) pdm09 is the predominant subtype circulating, and China which is reporting a predominance of influenza type B. Other than Mexico, only very small numbers of influenza A (H1N1) pdm09 have been reported globally. Reports from countries that do antigenic characterization indicate that nearly all influenza A viruses tested are antigenically related to those viruses included in the current trivalent influenza vaccine. While many of the influenza type B viruses are of the Yamagata lineage, which is not included in the current vaccine, overall numbers of influenza B virus detections are quite low compared to influenza type A (with the exception of China noted above). Oseltamivir resistance continues to be 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

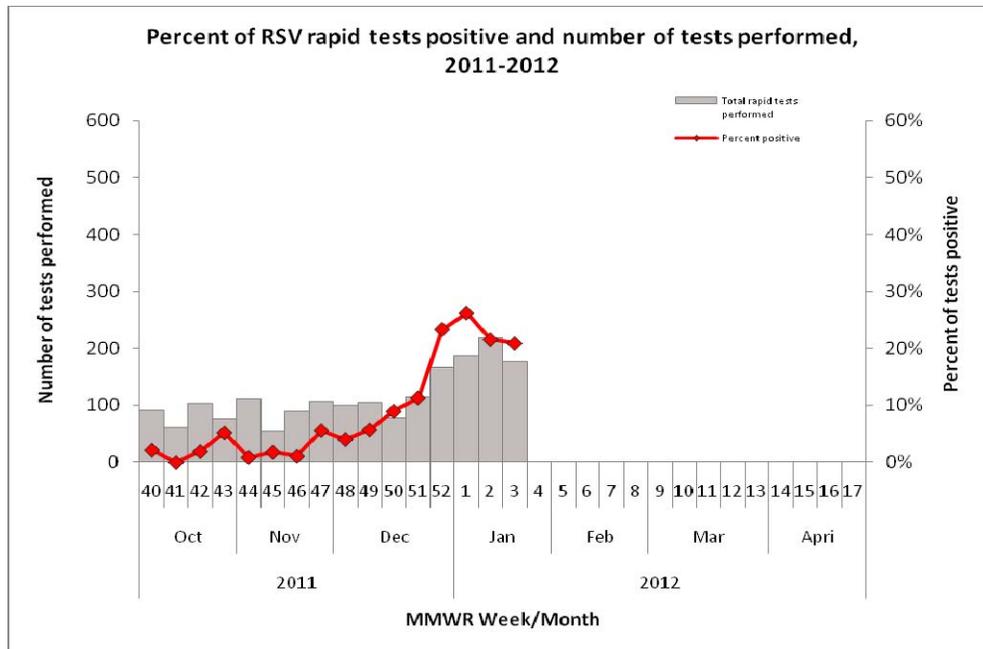
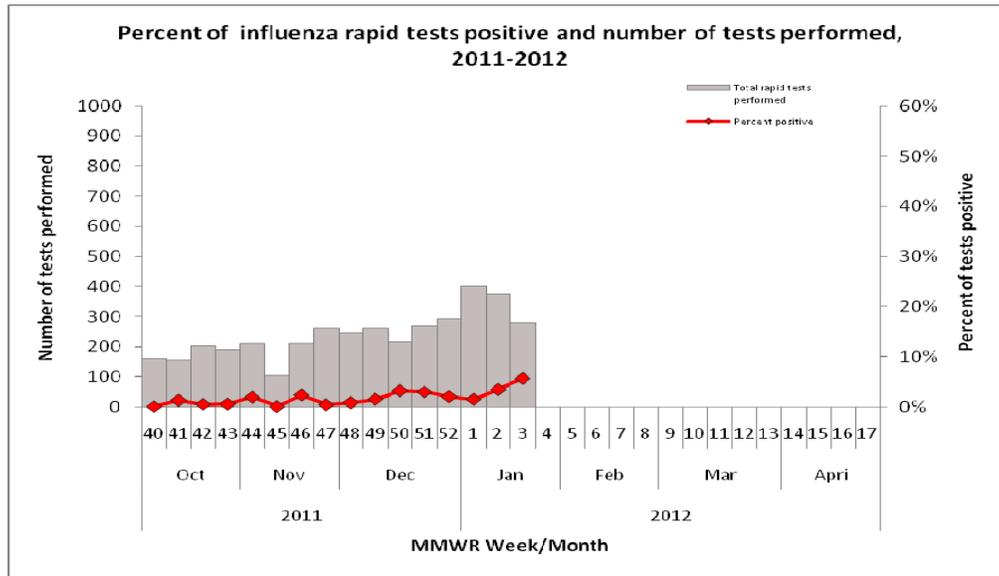
	<i>Current week</i>	<i>Cumulative</i>
Flu A	6 (19%)	50 (12%)
Flu A (2009 H1N1)	0 (0%)	1 (<1%)
Flu A (H3)	5 (16%)	46 (11%)
Novel A (H3N2)	0 (0%)	3 (1%)
Subtyping not reported	1 (3%)	1 (<1%)
Flu B	0 (0%)	1 (<1%)
Equivocal	0 (0%)	0 (0%)
Indeterminate	0 (0%)	6 (1%)
Negative	25 (81%)	373 (87%)
Total	31	431

<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%)	11 (24%)	* (*%)	1 (100%)	0 (0%)
5-17	0 (0%)	12 (27%)	* (*%)	0 (0%)	0 (0%)
18-24	0 (0%)	2 (4%)	0 (0%)	0 (0%)	0 (0%)
25-49	1 (100%)	9 (20%)	0 (0%)	0 (0%)	0 (0%)
50-64	0 (0%)	6 (13%)	0 (0%)	0 (0%)	1 (100%)
>64	0 (0%)	5 (11%)	0 (0%)	0 (0%)	0 (0%)
Total	1	45	3	1	1

* Counts of three or less of reportable diseases are suppressed to protect confidentiality.

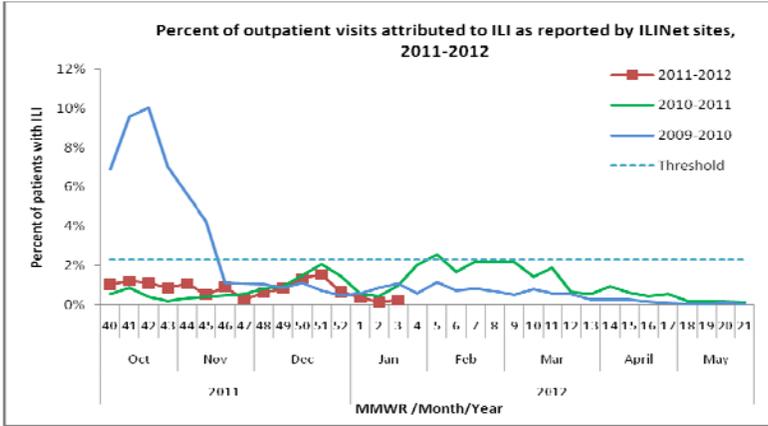
Table 3. Number of positive results for non-influenza respiratory virus isolated since 10/2/11 by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

	<i>Current week</i>	<i>Cumulative</i>
<i>Adenovirus</i>	1	17
<i>Parainfluenza Virus Type 1</i>	1	25
<i>Parainfluenza Virus Type 2</i>	1	8
<i>Parainfluenza Virus Type 3</i>	0	0
<i>Rhinovirus</i>	0	25
<i>Respiratory syncytial virus (RSV)</i>	5	19
<i>human metapneumovirus (hMPV)</i>	0	3



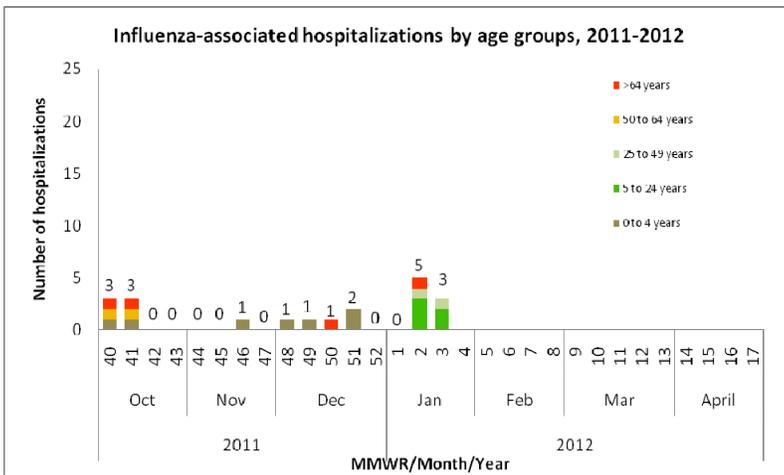
Outpatient health care provider surveillance program (ILINet)

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.

