



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending December 31, 2011, Week 52

Quick Stats for this reporting week

Iowa activity level¹	Sporadic
Percent of outpatient visits for ILI ²	0.1% (baseline 2.3%)
Percent of influenza rapid test positive	2.0% (6/295)
Percent of RSV rapid tests positive	23.4% (39/167)
Percent school absence due to illness	NA
Number of schools with ≥10% absence due to illness	NA
Influenza-associated hospitalizations*	0/5241 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

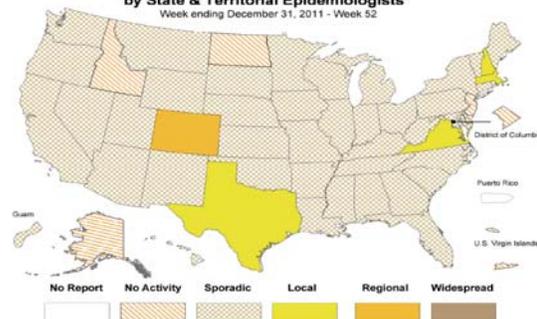
NA: Not available due to holidays

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2011-12 Influenza Season Week 52 ending Dec 31, 2011



*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 December 31, 2011 - Week 52



*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 seven new laboratory confirmed cases of seasonal influenza A (H3) identified in this reporting week. The proportion of outpatient visits due to influenza-like illness (ILI) decreased to 0.1 percent, which is well below the regional baseline of 2.3 percent. The percent of respiratory syncytial virus (RSV) rapid tests that tested positive increased dramatically from the previous weeks. There was no influenza-associated hospitalization reported from sentinel hospitals for this reporting period. There were also two cases of RSV and one case of parainfluenza virus 1 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 52 (December 25-31, 2011), influenza activity increased in the United States, but remains relatively low.

- **U.S. Virologic Surveillance:** Of the 3,310 specimens tested by U.S. World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories and reported to CDC/Influenza Division, 95 (2.9 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.

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.

- **Influenza-associated Pediatric Mortality:** No influenza-associated pediatric deaths were reported.
- **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. Three of the 10 regions (Regions 1, 5, and 10) reported ILI at or above region-specific baseline levels. One state experienced moderate ILI activity, New York City and six states experienced low ILI activity, 42 states experienced minimal ILI activity, and the District of Columbia and one state had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in one state was reported as regional; four states reported local activity; Guam and 40 states reported sporadic activity; the District of Columbia, the U.S. Virgin Islands and five states reported no influenza activity, and Puerto Rico did not report.

International activity summary - www.who.int

Influenza activity in the temperate regions of the northern hemisphere remains below seasonal threshold levels, though notable increases in activity have been reported in some areas of Canada, Europe (Spain and Turkey), northern Africa (Tunisia and Algeria), and the middle East (Iran). The persistence of the increased activity over the last few weeks in these areas likely represents the start of the influenza transmission season. The viruses detected throughout the northern hemisphere temperate zone have been predominantly of the A (H3N2) subtype. Only very small numbers of influenza A (H1N1) pdm09 have been reported in recent weeks. Countries in the tropical zone reported low levels of influenza activity except for Costa Rica, which is primarily detecting influenza A (H3N2). Influenza activity in the temperate countries of the southern hemisphere is at inter-seasonal levels though Chile and Australia both report persistent transmission of A (H3N2) with smaller numbers of influenza type B in Australia.

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 and the Dunes Medical Laboratories at Mercy Medical Center-Sioux City.

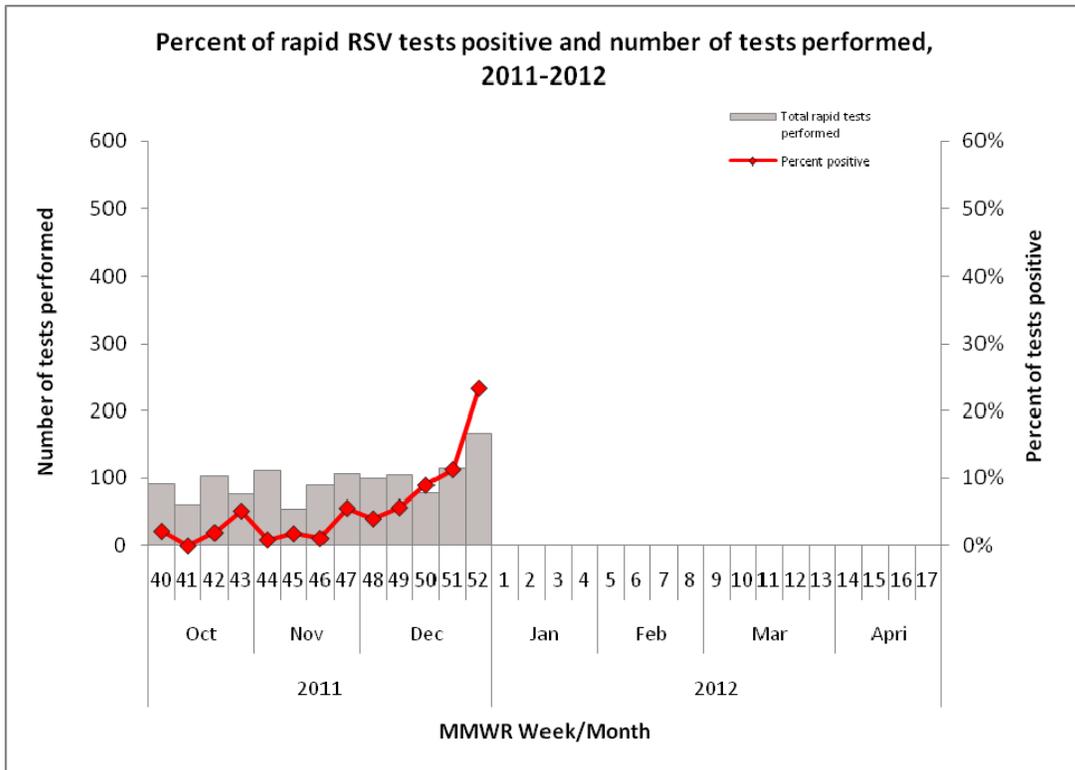
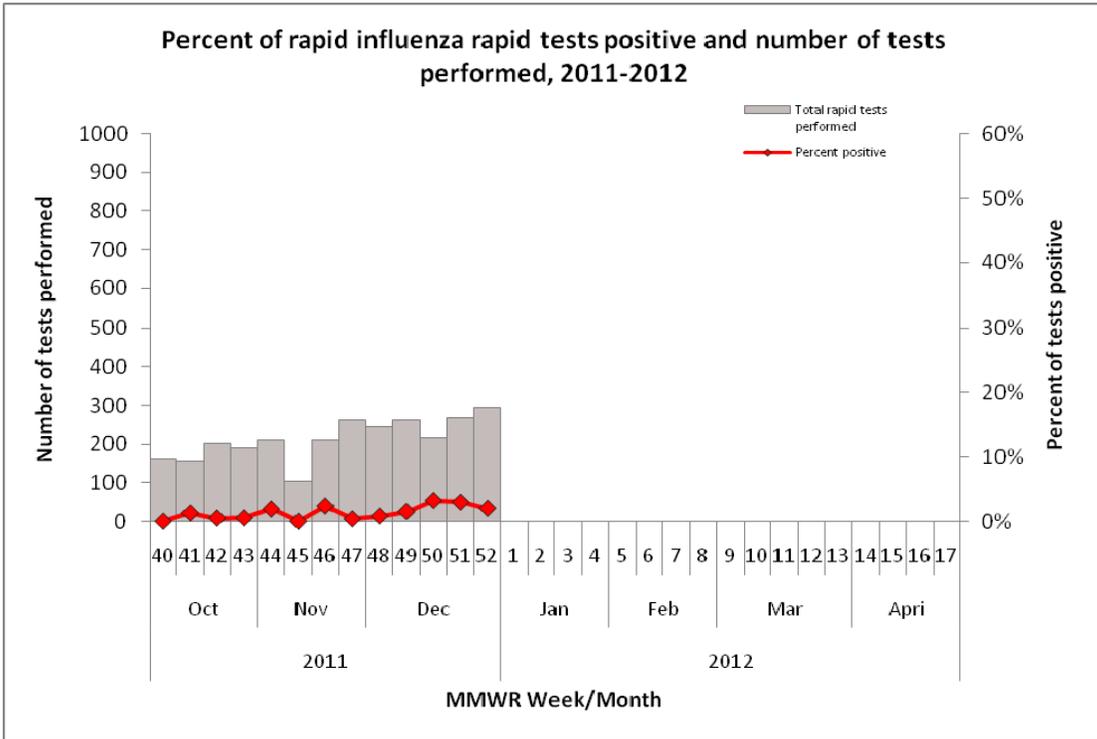
Specimens tested by the State Hygienic Laboratory

Table 1. Influenza viruses isolated 10/2/11 to present week			Table 2. Influenza viruses by age group 10/2/11 to present week				
	Current week	Cumulative	Age group	Flu A (2009 H1N1)	Flu A (H3)	Novel A (H3N2)	Flu B
Flu A	7 (37%)	27 (8%)	0-4	0 (0%)	8 (33%)	* (*%)	0 (0%)
Flu A (2009 H1N1)	0 (0%)	0 (0%)	5-17	0 (0%)	3 (12%)	* (*%)	0 (0%)
Flu A (H3)	7 (37%)	24 (7%)	18-24	0 (0%)	2 (8%)	0 (0%)	0 (0%)
Novel A (H3N2)	0 (0%)	3 (1%)	25-49	0 (0%)	4 (17%)	0 (0%)	0 (0%)
Flu B	0 (0%)	0 (0%)	50-64	0 (0%)	3 (12%)	0 (0%)	0 (0%)
Equivocal	0 (0%)	0 (0%)	>64	0 (0%)	4 (17%)	0 (0%)	0 (0%)
Indeterminate	0 (0%)	6 (2%)	Total	0	24	3	0
Negative	12 (63%)	297 (90%)					
Total	19	330					

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

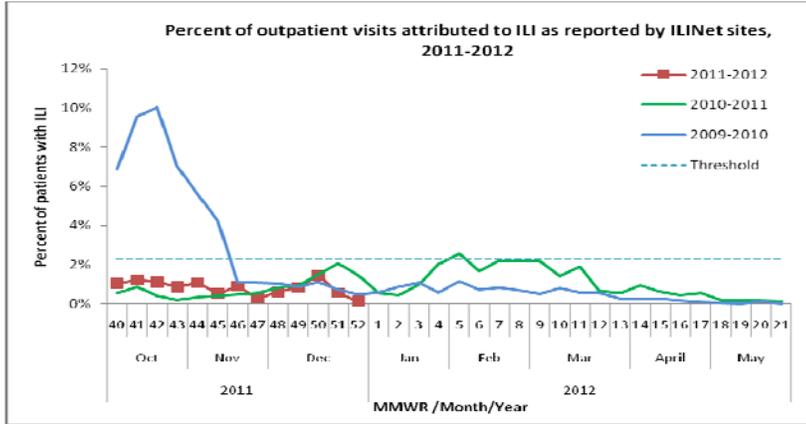
Table 3. Number of positive results for non-influenza respiratory virus isolated since 10/2/11 by the State Hygienic Laboratory and Mercy Dunes in Sioux City

	Current week	Cumulative
Adenovirus	0	16
Parainfluenza Virus Type 1	1	20
Parainfluenza Virus Type 2	0	7
Parainfluenza Virus Type 3	0	0
Rhinovirus	0	23
Respiratory syncytial virus (RSV)	2	8
human metapneumovirus (hMPV)	0	3



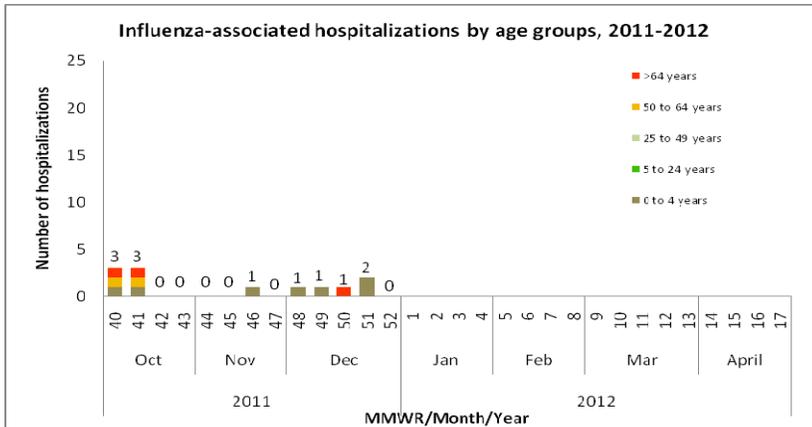
Outpatient health care provider surveillance program (ILINet)

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.

