



# Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses Weekly Activity Report

For the week ending April 21, 2012, Week 16

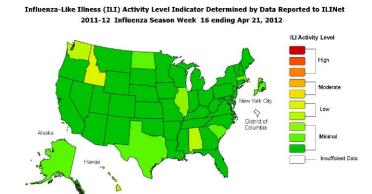


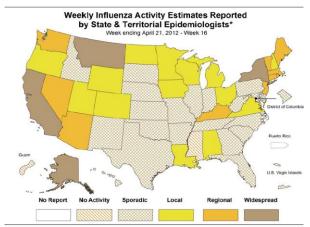
## Quick Stats for this reporting week

lowa activity level <sup>1</sup>	Local
Percent of outpatient visits for ILI <sup>2</sup>	0.3 % (baseline 2.3%)
Percent of influenza rapid test positive	5.4% (16/299)
Percent of RSV rapid tests positive	15.0% (18/120)
Percent school absence due to illness	2.0%
Number of schools with ≥10% absence due to illness	1
Influenza-associated hospitalizations*	0/4219 inpatients surveyed
Influenza-associated pediatric mortality**	0

<sup>\*</sup> Hospitalizations due to influenza are voluntarily reported through a weekly survey of lowa sentinel hospitals.

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





<sup>\*</sup>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.

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

### <u>Iowa statewide activity summary</u>

Influenza activity in Iowa remains local. In this reporting week, the State Hygienic Laboratory (SHL) confirmed 27 seasonal influenza cases, including 22 influenza A (H3), two influenza A (subtype pending), and three 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 both influenza and RSV rapid tests that tested positive was slightly decreased from the previous week. The rapid test data by region (see table 4) is included again in this report. There was no influenza-associated hospitalization reported from sentinel hospitals for this reporting period. One school reported 10 percent or greater absenteeism due to respiratory illness, probably pertussis. In addition, there were two cases of RSV 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 16 (April 15-21, 2012), influenza activity was elevated in some areas of the United States, but declined nationally and in most regions.

• U.S. Virologic Surveillance: Of the 2,987 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, 662 (22.2 percent) were positive for influenza.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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 below the epidemic threshold.
- Influenza-associated Pediatric Mortality: Three influenza-associated pediatric deaths were reported. One was associated with a 2009 H1N1 virus, one was associated with a seasonal influenza A (H3) virus, and one 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 1.3 percent, which is below the national baseline of 2.4 percent. Region 10 reported ILI above its region-specific baseline level. Four states experienced low ILI activity; New York City and 46 states experienced minimal ILI activity, and the District of Columbia had insufficient data to calculate ILI activity.
- **Geographic Spread of Influenza**: Four states reported widespread geographic activity; 10 states reported regional influenza activity; 14 states reported local activity; the District of Columbia and 21 states reported sporadic activity; Guam, the U.S. Virgin Islands, and one state 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.

## <u>Laboratory surveillance program – influenza and other respiratory viruses</u>

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

Table 1. Influenza viruses isolated 10/2/11 to present week					
	Current week	Cumulative			
Flu A	24 (42%)	1152 (49%)			
Flu A (2009 H1N1)	0 (0%)	115 (5%)			
Flu A (H3)	22 (39%)	1012 (43%)			
Novel A (H3N2)	0 (0%)	3 (<1%)			
Subtyping not reported	2 (3%)	22 (1%)			
Flu B	3 (5%)	27 (1%)			
Equivocal	0 (0%)	3 (<1%)			
Indeterminate	0 (0%)	11 (<1%)			
Negative	31 (53%)	1135 (49%)			
Total	58	2328			

Table 2. Influenza viruses by age group 10/2/11 to present week						
Age group	Flu A (2009 H1N1)	Flu A (H3)	Novel A (H3N2)	Flu A (no typing)	Flu B	
0-4	16 (14%)	229 (23%)	* (*%)	4 (18%)	6 (22%)	
<i>5-17</i>	23 (20%)	256 (25%)	* (*%)	2 (9%)	9 (33%)	
18-24	22 (19%)	73 (7%)	0 (0%)	2 (9%)	2 (7%)	
25-49	49 (43%)	209 (21%)	0 (0%)	8 (36%)	4 (15%)	
50-64	4 (3%)	94 (9%)	0 (0%)	1 (5%)	4 (15%)	
>64	1 (1%)	149 (15%)	0 (0%)	5 (22%)	2 (7%)	
Total	115	1012	3	22	27	

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 and all data in this report are provisional and may change as reports are updated

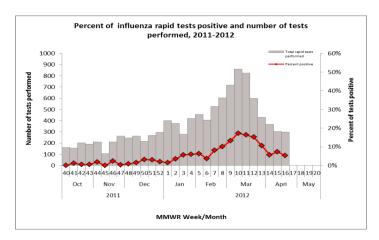
Table 3. Number of positive results for non-influenza respiratory virus isolated since 10/2/11 by the State Hygienic Laboratory, Mercy Dunes in Sioux City, and Iowa Methodist Medical Center

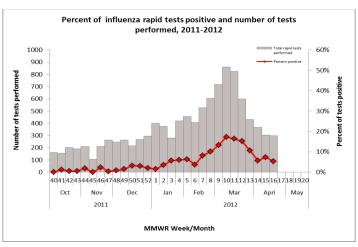
	Current week	Cumulative
Adenovirus	0	33
Parainfluenza Virus Type 1	0	32
Parainfluenza Virus Type 2	0	10
Parainfluenza Virus Type 3	0	0
Rhinovirus	0	46
Respiratory syncytial virus (RSV)	2	185
human metapneumovirus (hMPV)	0	16

Table 4. Percent of influenza rapid tests positive and number of tests performed by region for week 16

	Influenza				RSV			
Region <sup>*</sup>	Tested	Flu A	Flu B	Both	% Positive	Tested	Positive	% Positive
Region 1	42	1	0	0	2.4%	16	4	25%
Region 2	7	1	0	0	14.3%	4	1	25%
Region 3	1	0	0	0	0.0%	5	0	0.0%
Region 4	18	1	0	0	5.6%	13	5	38.5%
Region 5	31	5	0	0	16.1%	6	0	0.0%
Region 6	200	7	1	0	4.0%	76	8	10.5%

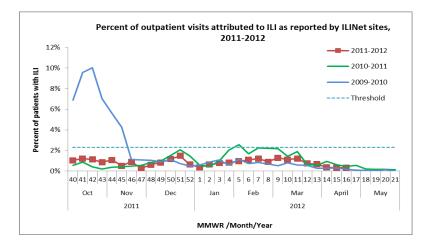
Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury, Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.





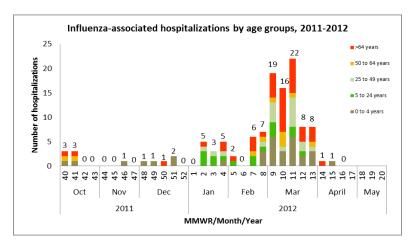
## Outpatient health care provider surveillance program (ILINet)

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.

