



# Iowa Influenza Surveillance Network (IISN)

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

For the week ending March 24, 2012, Week 12

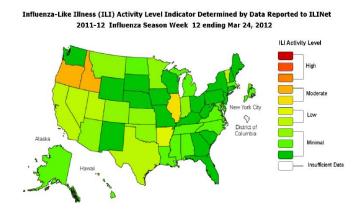


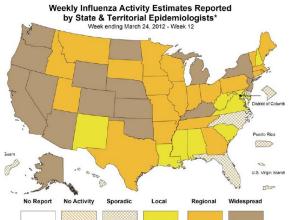
#### Quick Stats for this reporting week

lowa activity level <sup>1</sup>	Regional
Percent of outpatient visits for ILI <sup>2</sup>	0.7 % (baseline 2.3%)
Percent of influenza rapid test positive	15.2% (91/599)
Percent of RSV rapid tests positive	28.4% (67/236)
Percent school absence due to illness	1.8%
Number of schools with ≥10% absence due to illness	1
Influenza-associated hospitalizations*	8/6169 inpatients surveyed
Influenza-associated pediatric mortality**	0
* Handle Parking days to the first and a state of the sta	

<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 LI 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.

#### Iowa statewide activity summary

Influenza activity in Iowa is decreasing and it is now being downgraded from widespread activity to regional. In this reporting week, the State Hygienic Laboratory (SHL) confirmed 118 seasonal influenza cases, including 99 influenza A (H3), 12 influenza A (2009 H1N1), five influenza A (subtype pending), and two influenza B. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.7 percent, which is below the regional baseline of 2.3 percent. The percent of both influenza and respiratory syncytial virus (RSV) rapid tests that tested positive decreased from the previous week. There were eight influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. One school reported 10 percent or greater absenteeism due to illness. In addition, twelve cases of RSV were also 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 12 (March 18-24, 2012), influenza activity was elevated in some areas of the United States, but remained relatively low nationally.

• **U.S. Virologic Surveillance**: Of the 4,624 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, 908 (19.6 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: Four influenza-associated pediatric deaths were reported and were associated with one 2009 H1N1 and three influenza A viruses for which the subtype was not determined.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.0 percent, which is below the national baseline of 2.4 percent. Regions 5 and 10 reported ILI above region-specific baseline levels. Three states experienced moderate ILI activity; six states experienced low ILI activity; New York City and 41 states experienced minimal ILI activity, and the District of Columbia had insufficient data to calculate ILI activity.
- **Geographic Spread of Influenza**: Sixteen states reported widespread geographic activity; 21 states reported regional influenza activity; nine states reported local activity; the District of Columbia, Guam, Puerto Rico, and four states reported sporadic activity, and the U.S. Virgin Islands reported no influenza activity.

#### International activity summary - www.who.int

This influenza season started late, but seems to be reaching the peak or is decreasing in most countries in the northern hemisphere temperate regions. Severe acute respiratory infections were mainly observed in the age group above 65 years. The most commonly detected virus type or subtype throughout most of the temperate areas of northern hemisphere temperate zone has been influenza A (H3N2), although the proportion of influenza B detection is increasing. In Mexico influenza A (H1N1) pdm09 is the predominant subtype circulating and China and the surrounding countries 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

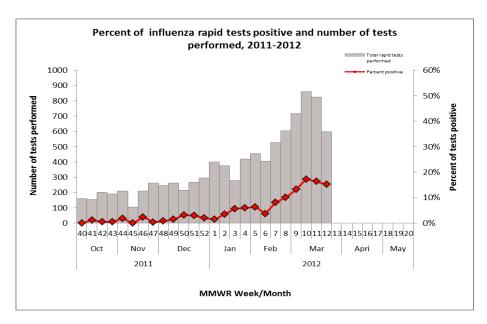
Table 1. Influenza viruses isolated 10/2/11 to present week			
	Current week	Cumulative	
Flu A	116 (60%)	1034 (51%)	
Flu A (2009 H1N1)	12 (6%)	100 (5%)	
Flu A (H3)	99 (51%)	910 (45%)	
Novel A (H3N2)	0 (0%)	3 (<1%)	
Subtyping not reported	5 (3%)	21 (1%)	
Flu B	2 (1%)	19 (1%)	
Equivocal	0 (0%)	3 (<1%)	
Indeterminate	1 (<1%)	9 (<1%)	
Negative	76 (39%)	942 (47%)	
Total	195	2007	

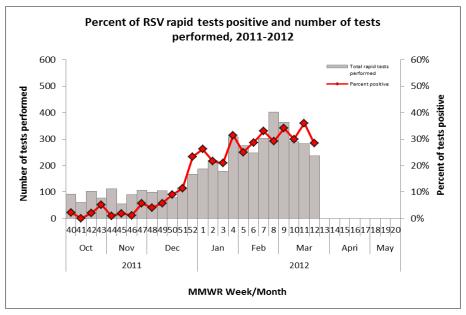
Table 2. Influenza viruses by age group 10/2/11 to present week					
Age group	Flu A (2009 H1N1)	Flu A (H3)	Novel A (H3N2)	Flu A (no typing)	Flu B
0-4	13 (13%)	208 (22%)	* (*%)	3 (14%)	4 (21%)
5-17	19 (19%)	242 (27%)	* (*%)	2 (9%)	7 (37%)
18-24	18 (18%)	61 (7%)	0 (0%)	1 (5%)	2 (11%)
25-49	46 (46%)	191 (21%)	0 (0%)	8 (38%)	2 (11%)
50-64	4 (4%)	88 (10%)	0 (0%)	2 (9%)	4 (21%)
>64	0 (0%)	119 (13%)	0 (0%)	5 (24%)	0 (0%)
Total	100	910	3	21	19

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

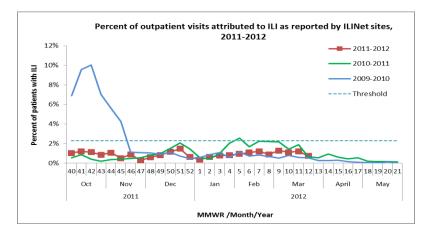
	Current week	Cumulative
Adenovirus	0	24
Parainfluenza Virus Type 1	0	28
Parainfluenza Virus Type 2	0	8
Parainfluenza Virus Type 3	0	0
Rhinovirus	0	35
Respiratory syncytial virus (RSV)	12	141
human metapneumovirus (hMPV)	0	11





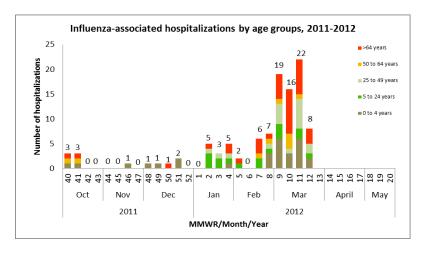
# Outpatient health care provider surveillance program (ILINet)

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.



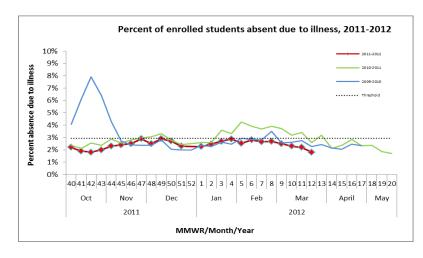
# Influenza-associated hospitalizations

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.



# **Regional activity**

Region 1 (Central)	
Percent of outpatient visits for ILI*	0.6%
Percent of influenza rapid test positive	11.8% (13/110)
Percent of RSV rapid tests positive	41.9% (18/43)
Schools with ≥10% absence due to illness	1

Region 2 (North Central)		
Percent of outpatient visits for ILI*	0.5%	
Percent of influenza rapid test positive	16.2% (6/37)	
Percent of RSV rapid tests positive	17.6% (3/17)	
Schools with ≥10% absence due to illness	0	

Region 3 (Northwest)	
Percent of outpatient visits for ILI*	3.6%
Percent of influenza rapid test positive	14.3% (9/63)
Percent of RSV rapid tests positive	29.7% (11/37)
Schools with ≥10% absence due to illness	0

Region 4 (Southwest)	
Percent of outpatient visits for ILI*	0.0%
Percent of influenza rapid test positive	17.5% (11/63)
Percent of RSV rapid tests positive	23.3% (7/30)
Schools with ≥10% absence due to illness	0

Region 5 (Southeast)	
Percent of outpatient visits for ILI*	0.4%
Percent of influenza rapid test positive	20.0% (23/115)
Percent of RSV rapid tests positive	25.0% (6/24)
Schools with ≥10% absence due to illness	0

Region 6 (East Central)		
Percent of outpatient visits for ILI*	1.2%	
Percent of influenza rapid test positive	13.7% (29/211)	
Percent of RSV rapid tests positive	25.9% (22/85)	
Schools with ≥10% absence due to illness	0	

<sup>\*</sup> ILI data are voluntarily reported from the outpatient health care providers that participate in the ILINet. Some regions may have one or two clinics reporting for the week.

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

#### lowa map with regions and in red the number of schools that have ≥10% absence due to illness

