



# Iowa Influenza Surveillance Network (IISN)

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



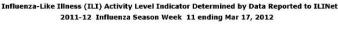


#### Quick Stats for this reporting week

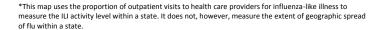
Widespread
1.2% (baseline 2.3%)
16.4% (135/824)
36.0% (102/283)
2.2%
2
22/6294 inpatients surveyed
0

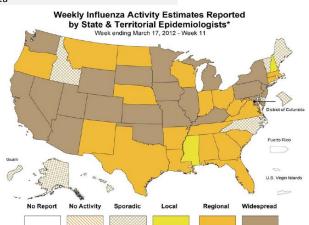
<sup>\*</sup> Hospitalizations due to influenza are voluntarily reported through a weekly survey of lowa sentinel hospitals.

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









 $\hbox{$^*$ This map indicates geographic spread \& does not measure the severity of influenza activity.}$ 

#### Iowa statewide activity summary

Influenza activity in Iowa remains widespread. In this reporting week, the State Hygienic Laboratory (SHL) confirmed 217 seasonal influenza cases, including 150 influenza A (H3), 39 influenza A (subtype pending), and 28 influenza A (2009 H1N1). The proportion of outpatient visits due to influenza-like illness (ILI) was 1.2 percent, which is below the regional baseline of 2.3 percent. The percent of influenza rapid tests that tested positive decreased slightly, while the percent of respiratory syncytial virus (RSV) rapid tests that tested positive increased. There were 22 influenza-associated hospitalizations reported from sentinel hospitals for this reporting period. Most of these hospitalizations occurred in people aged 0-4 and over 65 years of age. Two schools reported 10 percent or greater absenteeism due to respiratory illness. In addition, sixteen 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 11 (March 11-17, 2012), influenza activity was elevated in some areas of the United States, but remained relatively low nationally.

<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.

- U.S. Virologic Surveillance: Of the 5,088 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, 1,353 (26.6 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: Three influenza-associated pediatric deaths were reported and were associated with 2009 H1N1 (2) and influenza B (1) viruses.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.4 percent, which is at the national baseline of 2.4 percent. Regions 5, 6, 7, 8, and 10 reported ILI at or above region-specific baseline levels. Four states experienced high ILI activity; five state experienced moderate ILI activity; 10 states experienced low ILI activity; New York City and 31 states experienced minimal ILI activity, and the District of Columbia had insufficient data to calculate ILI activity.
- **Geographic Spread of Influenza**: Twenty states reported widespread geographic activity; 20 states reported regional influenza activity; 2 states reported local activity; the District of Columbia, Guam, and 8 states reported sporadic activity, and Puerto Rico and the U.S. Virgin Islands did not report.

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

Active influenza transmission continued in the temperate regions of the Northern Hemisphere with increasing activity in North America, northern China and several countries in Europe. A few countries in southern Europe and North Africa have peaked as well as Japan and the Republic of Korea. Most countries of the tropical zone reported low levels of influenza activity. The most commonly detected virus type or subtype throughout most of the temperate areas of northern hemisphere temperate zone has been influenza A (H3N2). In Mexico and Central America, influenza A (H1N1) pdm09 is the predominant subtype circulating. China and the surrounding countries are still reporting a predominance of influenza type B virus. Antiviral resistance continues to be observed at very low levels and has not increased notably over levels reported in previous seasons.

#### <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	217 (72%)	914 (51%)	
Flu A (2009 H1N1)	28 (9%)	82 (5%)	
Flu A (H3)	150 (50%)	751 (43%)	
Novel A (H3N2)	0 (0%)	3 (<1%)	
Subtyping not reported	39 (13%)	48 (3%)	
Flu B	0 (0%)	7 (<1%)	
Equivocal	0 (0%)	5 (<1%)	
Indeterminate	1 (<1%)	8 (<1%)	
Negative	82 (27%)	840 (48%)	
Total	300	1744	

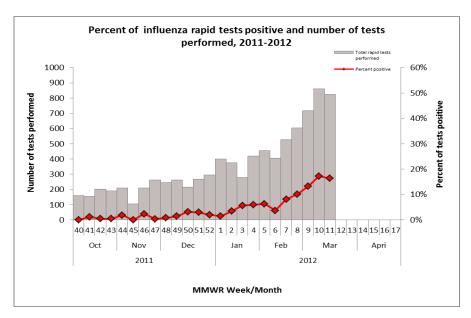
Table 2. Influenza viruses by age group 10/2/11 to present week					
Age group	Flu A (2009 H1N1)	Flu A (H3)	Novel A (H3N2)	Flu A (no typing)	Flu B
0-4	10 (12%)	176 (23%)	* (*%)	10 (21%)	2 (29%)
5-17	17 (21%)	204 (27%)	* (*%)	13 (27%)	0 (0%)
18-24	13 (16%)	48 (6%)	0 (0%)	4 (8%)	1 (14%)
25-49	39 (48%)	154 (21%)	0 (0%)	10 (20%)	1 (14%)
50-64	3 (4%)	73 (10%)	0 (0%)	1 (2%)	3 (43%)
>64	0 (0%)	95 (13%)	0 (0%)	10 (21%)	0 (0%)
Total	82	751	3	48	7
Total		751	3	48	

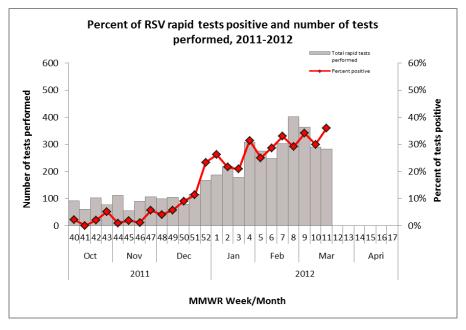
Counts of three or less of reportable diseases are suppressed to protect confidentiality.

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

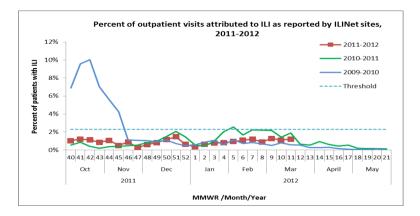
	Current week	Cumulative
Adenovirus	0	24
Parainfluenza Virus Type 1	0	28
Parainfluenza Virus Type 2	0	8
Parainfluenza Virus Type 3	0	0
Rhinovirus	0	35
Respiratory syncytial virus (RSV)	16	129
human metapneumovirus (hMPV)	0	11





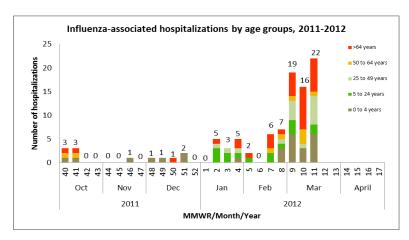
### Outpatient health care provider surveillance program (ILINet)

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.



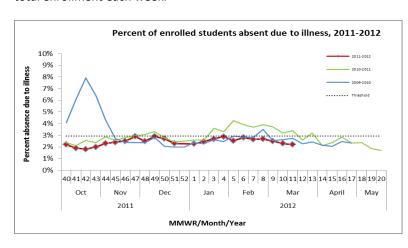
## Influenza-associated hospitalizations

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*	0.0%
Percent of influenza rapid test positive	14.0% (14/100)
Percent of RSV rapid tests positive	39.0% (16/41)
Schools with ≥10% absence due to illness	0

Region 2 (North Central)		
Percent of outpatient visits for ILI*	1.3%	
Percent of influenza rapid test positive	31.8% (14/44)	
Percent of RSV rapid tests positive	44.4% (8/18)	
Schools with ≥10% absence due to illness	0	

Region 3 (Northwest)	
Percent of outpatient visits for ILI*	1.6%
Percent of influenza rapid test positive	21.4% (27/126)
Percent of RSV rapid tests positive	28.3% (15/53)
Schools with ≥10% absence due to illness	1

Region 4 (Southwest)	
Percent of outpatient visits for ILI*	2.7%
Percent of influenza rapid test positive	18.2% (18/99)
Percent of RSV rapid tests positive	48.6% (17/35)
Schools with ≥10% absence due to illness	0

Region 5 (Southeast)	
Percent of outpatient visits for ILI*	0.5%
Percent of influenza rapid test positive	14.4% (15/104)
Percent of RSV rapid tests positive	40.0% (4/10)
Schools with ≥10% absence due to illness	1

Region 6 (East Central)		
Percent of outpatient visits for ILI*	3.5%	
Percent of influenza rapid test positive	13.4% (47/351)	
Percent of RSV rapid tests positive	33.3% (42/126)	
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

