



Iowa Influenza Surveillance Network (IISN)

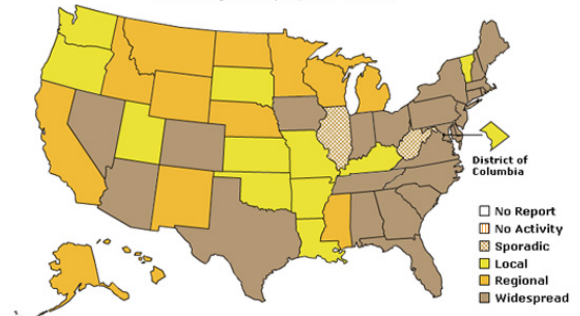
Influenza and Other Respiratory Virus Weekly Activity Report

For the week ending February 21, 2009 Week 7

Influenza Quick Stats:

Iowa activity level: **Widespread¹**
 Lab-confirmed cases: 63
 Sentinel % ILI²: 1.74% (threshold 2.1%)
 Hospitalizations: 3
 School % absence: 3.56% (threshold 3.06%)
 School days ≥10% absence: 6

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
Week Ending February 14, 2009- Week 6



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

Iowa activity summary:

Iowa is currently experiencing widespread influenza activity. The dominant strain is influenza AH1, which is covered by this year's influenza vaccine. A large proportion of cases are occurring in people school and college age. There have been no reports of pediatric deaths due to influenza however several hospitalizations attributed to flu were reported in children 18 years and younger.

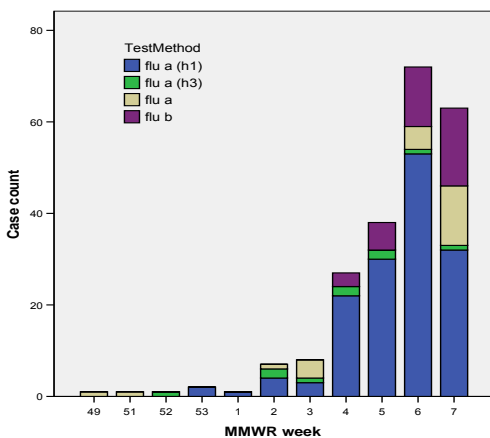
National activity summary: Widespread influenza activity was reported by 24 states. Regional influenza activity was reported by 13 states. Local influenza activity was reported by the District of Columbia and 11 states. Sporadic activity was reported by Puerto Rico and two states.

National virologic surveillance: The results of tests performed during the current week and cumulative totals for the season are Influenza A 79.3% and Influenza B 20.7%. Since week 1 (the week ending January 10, 2009), when influenza activity began to increase nationally, influenza A (H1) viruses have predominated circulation nationally each week and for the season overall in all regions. Since week 1, 90% of subtyped influenza A viruses reported to CDC were influenza A (H1).

Oseltamivir resistance: Of specimens sent to CDC from states, approximately 98% of all specimens for influenza AH1 have been reported as resistant to oseltamivir (Tamiflu®). Influenza A (H1N1) viruses from 33 states have been tested for antiviral resistance to oseltamivir so far this season. To date, all influenza A (H3N2) viruses tested are resistant to the adamantanes and all oseltamivir-resistant influenza A (H1N1) viruses tested are sensitive to the adamantanes. Influenza activity in the United States increased this week with influenza A (H1N1) viruses predominating overall. However, the level of activity and the relative proportion of circulating virus types or subtypes have varied by region and may vary over the course of the season. This presents challenges for the selection of antiviral medications for the treatment and chemoprophylaxis of influenza and highlights the importance of testing patients for influenza and consulting local surveillance data when evaluating patients with acute respiratory infections during the influenza season. CDC issued interim recommendations for the use of influenza antiviral medications in the setting of oseltamivir resistance among circulating influenza A (H1N1) viruses on December 19, 2008. These interim recommendations are available at <http://www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00279>

Laboratory-confirmed cases (excludes rapid test positives; only weeks with cases are included in the table; includes several labs)

Laboratory-confirmed cases by influenza type and strain



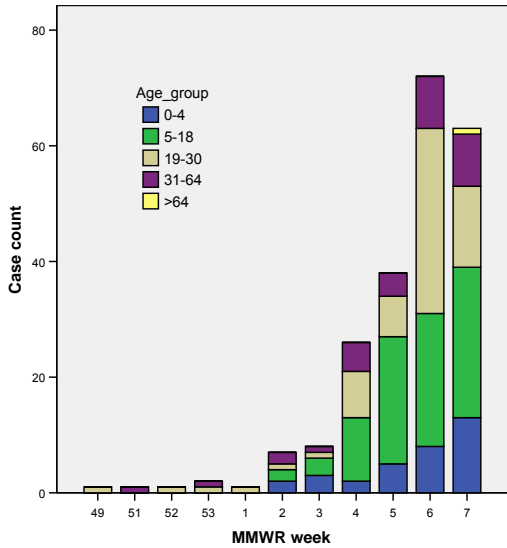
MMWR week	flu a (h1)	flu a (h3)	flu a	flu b	Total
49	0	0	1	0	1
51	0	0	1	0	1
52	0	1	0	0	1
53	2	0	0	0	2
1	1	0	0	0	1
2	4	2	1	0	7
3	3	1	4	0	8
4	22	2	0	3	27
5	30	2	0	6	38
6	53	1	5	13	72
7	32	1	13	17	63
Total	147	10	25	39	221

¹ **No Activity:** No laboratory-confirmed cases of influenza and no reported increase in the number of cases of influenza-like illness (ILI).
Sporadic: Small numbers of laboratory-confirmed influenza cases or a single influenza outbreak has been reported, but there is no increase in cases of ILI.
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.

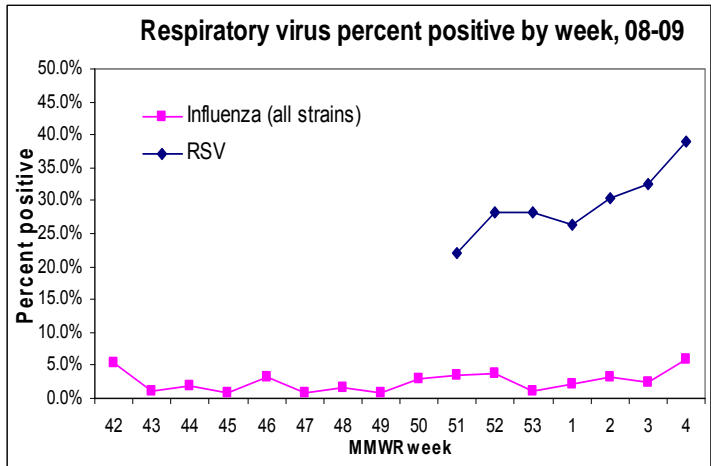
² Influenza-like illness is defined as fever ≥100°F and cough and/or sore throat.

* Laboratory-confirmed cases do not include rapid influenza positives. **Count does not reflect ACTUAL number of flu cases in IA.**

Laboratory-confirmed cases by age group



Respiratory virus percent positive by week, 08-09



Influenza and Other Respiratory Viral Laboratory Data:

Laboratory-confirmed cases are primarily reported by the University Hygienic Laboratory (UHL) only). UHL also determines the type and strain (AH1, AH3). Influenza is not a required reportable disease. Laboratory data is used to confirm the presence of influenza and the types and strains circulating, not determine the exact number of cases in Iowa.

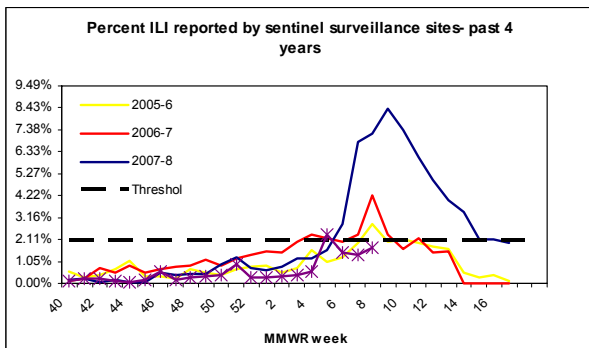
Region	RAPID INFLUENZA +					RSV**		
	Tested	Flu A	Flu B	Both	% Positive	Tested	Positive	% Positive
Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster	285	22	3	0	8.8%	162	46	28.4%
Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright	73	14	0	0	19.2%	32	7	21.9%
Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury	49	7	1	0	16.3%	69	22	31.9%
Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union	11	0	0	0	0.0%	8	0	0.0%
Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne	55	2	0	0	3.6%	65	29	44.6%
Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott	917	129	49	3	19.7%	287	71	24.7%
TOTAL	1390	174	53	3	16.5%	623	175	28.1%*

*The CDC epidemic threshold for RSV is ~10% of all test results reported as positive.

**Additional RSV trends may be viewed at <http://www.cdc.gov/surveillance/nrvss/rsv/state.html>.

Outpatient Health Care Provider Influenza Surveillance (Sentinel Surveillance):

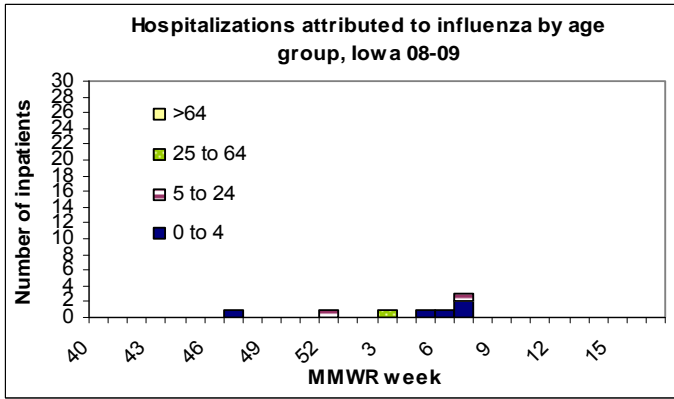
There are 18 sentinel surveillance sites throughout Iowa surveying patient populations for influenza-like illness (ILI).



# sites reporting	7
Age 0-4	20
Age 5-24	25
Age 25-64	9
Age over 64	0
Total ILI	54
Total patients	3095
% ILI	1.74%

Hospital and Long-term Care Facility Influenza Surveillance:

There are 29 hospitals participating in influenza surveillance. Hospitals track the total number of patients hospitalized weekly with influenza and/or pneumonia who also have a positive influenza laboratory result. The total number of patients surveyed this week was 5,493. There were two flu-associated hospitalizations in the 0-4 age range and one in the 5-24 age range.



There were no cases of influenza reported in long-term care facilities.

School Illness Surveillance:

There are approximately 50 school sites reporting into the IISN. All sites track the average number of students enrolled and the number absent due to illness weekly. There were four school reporting absence of >10%.

Number of sites reporting	24
Total students surveyed	14,292
Total absences due to illness	2,247
Average percent absence due to illness	3.56%
Median percent absence due to illness	3.52%
2007-2008 percent absence due to illness same week	4.09%

