



Iowa Influenza Surveillance Network (IISN)

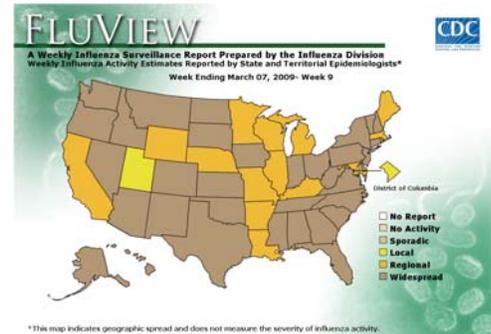
Influenza and Other Respiratory Virus Weekly Activity Report

For the week ending March 14, 2009 Week 10



Influenza Quick Stats:

Iowa activity level: **Widespread¹**
 Lab-confirmed cases: 26
 Sentinel % ILI²: 1.56% (threshold 2.1%)
 Hospitalizations: 5
 School % absence: 4.08% (threshold 3.06%)
 School days ≥10% absence: 10



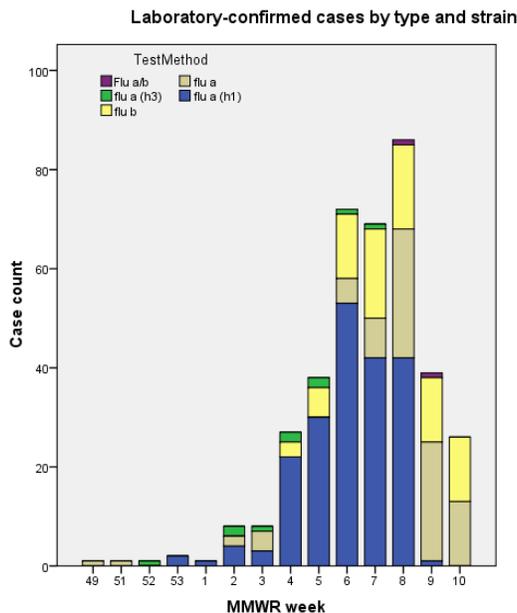
Iowa activity summary: Influenza activity is declining for the first week since peak activity began approximately five weeks ago. An equal number of flu A and B cases are being reported and school absence due to illness remains high.

National activity summary: Widespread influenza activity was reported by 35 states. Regional influenza activity was reported by 14 states. Local influenza activity was reported by the District of Columbia and one state. Sporadic activity was reported by Puerto Rico.

National virologic surveillance: The results of tests performed during the current week and cumulative totals for the season are 73.4% influenza A and 26.6% influenza B. Since week 2 (the week ending January 17, 2009), when influenza activity increased nationally, influenza A (H1) viruses have predominated circulation nationally each week and for the season overall in all regions. However, the relative proportion of influenza B viruses is increasing nationally and regionally. While influenza activity remains at approximately the same level nationally as in the previous week, several surveillance regions reported an increase in influenza virus circulation, and four regions (East North Central, East South Central, Pacific, and West South Central) reported an equal or higher proportion of influenza B viruses compared to influenza A viruses this week.

Antiviral resistance: Since October 1, 2008, 422 influenza A (H1N1), 64 influenza A (H3N2), and 200 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir and zanamivir). Four hundred twenty-two influenza A (H1N1) and 61 influenza A (H3N2) viruses have been tested for resistance to the adamantanes (amantadine and rimantadine). Influenza A (H1N1) viruses from 37 states have been tested for antiviral resistance to oseltamivir so far this 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>

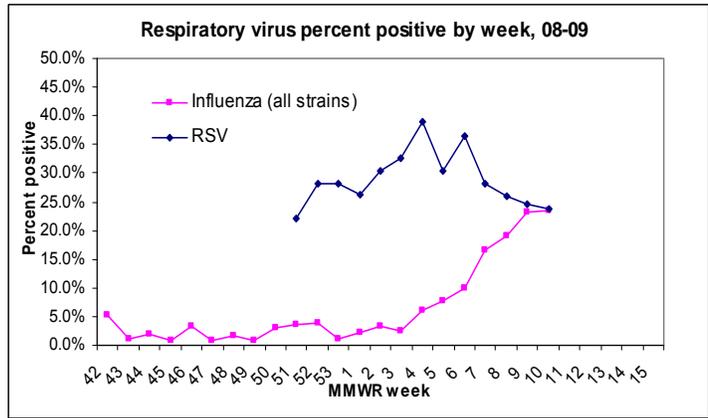
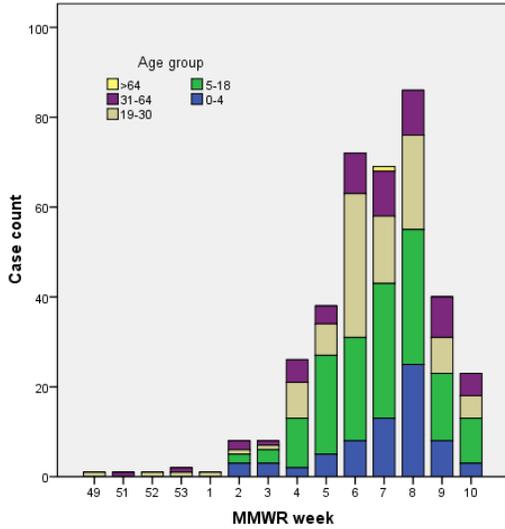
Laboratory-confirmed cases: (excludes rapid test positives; only weeks with cases are included in the table; includes several labs)



	Flu a/b	flu a (h1)	flu a (h3)	flu a	flu b	Total
49	0	0	0	1	0	1
51	0	0	0	1	0	1
52	0	0	1	0	0	1
53	0	2	0	0	0	2
1	0	1	0	0	0	1
2	0	4	2	2	0	8
3	0	3	1	4	0	8
4	0	22	2	0	3	27
5	0	30	2	0	6	38
6	0	53	1	5	13	72
7	0	42	1	8	18	69
8	1	42	0	26	17	86
9	1	1	0	24	13	40
10	0	0	0	13	13	26
Total	2	200	10	84	83	380

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 by age group



Influenza and Other Respiratory Viral Laboratory Data:

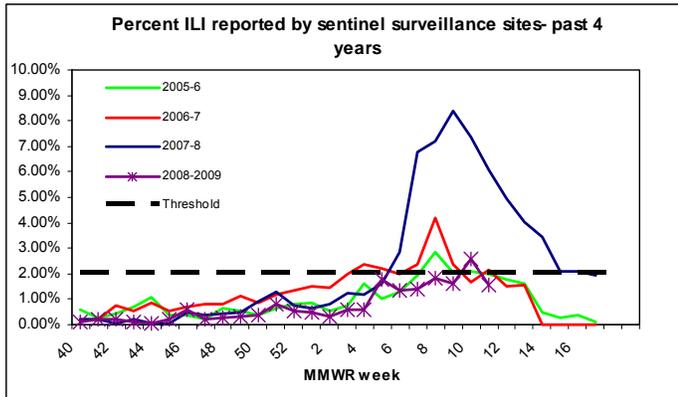
Laboratory-confirmed cases are primarily reported by the University Hygienic Laboratory (UHL only). UHL also determines the type and strain (AH1, AH3). Influenza is not a required reportable disease. Laboratory data is used to confirm the presence of influenza and the types and strains circulating, not determine the exact number of cases in Iowa. UHL confirmed 15 influenza A specimens and 23 influenza B specimens this week.

Region	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	355	48	16	0	18.0%	102	23	22.5%
Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright	64	5	5	0	15.6%	22	6	27.3%
Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury	85	16	4	3	27.1%	28	8	28.6%
Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union	45	4	1	2	15.6%	16	5	31.3%
Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne	83	6	5	5	19.3%	74	26	35.1%
Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott	1252	175	112	37	25.9%	179	32	17.9%
TOTAL	1884	254	143	47	23.6%	421	100	23.8%

*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/nrevss/rsv/state.html>.

Outpatient Health Care Provider Influenza Surveillance (Sentinel Surveillance):

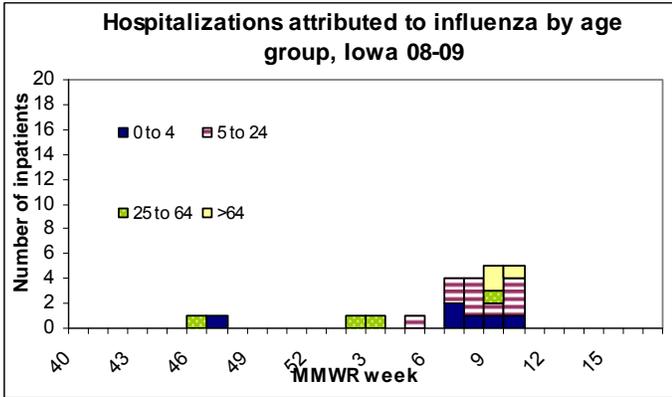
There are 18 sentinel surveillance sites throughout Iowa surveying patient populations for influenza-like illness (ILI).



# sites reporting	6
Age 0-4	16
Age 5-24	17
Age 25-64	14
Age over 64	3
Total ILI	50
Total patients	3,195
% ILI	1.56%

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 1,543.



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. This week five schools reported an absence of >10%.

Number of sites reporting	23
Total students surveyed	10,712
Total absences due to illness	49,792
Average percent absence due to illness	4.08%
Median percent absence due to illness	3.67%
2007-2008 percent absence due to illness same week	2.54%

