

Iowa Influenza Surveillance Network (IISN)

Influenza and Other Respiratory Virus Weekly Activity Report For the week ending March 21, 2009 Week 11- AMENDED



Influenza Quick Stats:

Iowa activity level: Regional¹

Lab-confirmed cases: 28

Sentinel % ILI² 2.38% (threshold 2.1%)

Hospitalizations:

School % absence: 2.58% (threshold 3.06%)

School days ≥10% absence: 0

<u>lowa activity summary:</u> UHL confirmed 10 influenza A specimens and 18 influenza B specimens. Overall influenza activity is down with influenza B cases exceeding influenza A. RSV cases are down this week.



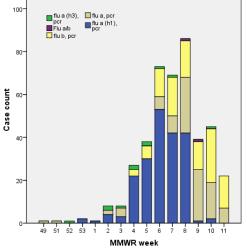
<u>National activity summary:</u> Widespread influenza activity was reported by 30 states. Regional influenza activity was reported by 18 states. Local influenza activity was reported by two states. Sporadic activity was reported by Puerto Rico and the District of Columbia.

National virologic surveillance: Since week 2 (the week ending January 17, 2009), when influenza activity increased nationally, influenza A (H1) viruses have predominated during the season overall. However, the relative proportion of influenza B viruses is increasing nationally and regionally. While influenza activity slightly decreased nationally, several surveillance regions reported an increase in influenza virus circulation, and six regions (East North Central, Mid-Atlantic, New England, Pacific, South Atlantic, and West South Central) reported an equal or higher proportion of influenza B viruses compared to influenza A viruses this week. The results of tests performed during the current week and cumulative totals for the season are 70.8% influenza A and 29.2% influenza B.

Antiviral resistance: Since October 1, 2008, 474 influenza A (H1N1), 77 influenza A (H3N2), and 227 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir and zanamivir). Four hundred seventy-six influenza A (H1N1) and 77 influenza A (H3N2) viruses have been tested for resistance to the adamantanes (amantadine and rimantadine). Influenza A (H1N1) viruses from 40 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. 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

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



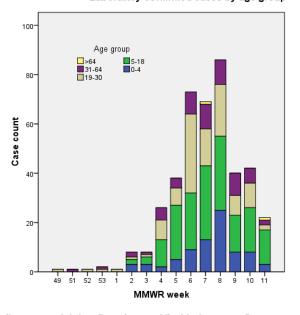


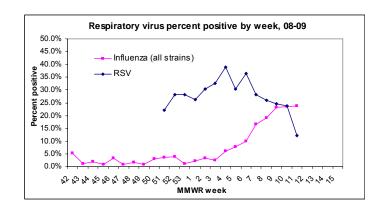
	Flu a/b	flu a (h1)	flu a (h3)	flu a	flu b	Total
49	0	0	0	1	0	1
51	0	0	0	1	0	1
52	0	0	1	0	0	1
53	0	2	0	0	0	2
1	0	1	0	0	0	1
2	0	4	2	2	0	8
3	0	3	1	4	0	8
4	0	22	2	0	3	27
5	0	30	2	0	6	38
6	0	53	1	6	13	73
7	0	42	1	8	18	69
8	1	42	0	26	17	86
9	1	1	0	24	13	39
10	0	2	1	17	25	45
11	0	0	0	7	15	22
Total	2	202	11	96	110	421

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:

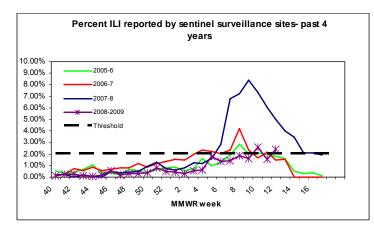
Laboratory-confirmed cases are primarily reported by the University Hygienic Laboratory (UHL only). UHL also determines the type and strain (AH1, AH3). Influenza is not a required reportable disease. Laboratory data is used to confirm the presence of influenza and the types and strains circulating, not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

	INFLUENZA			RSV*				
Region	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	191	26	9	0	18.3%	56	10	17.9%
Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright	46	6	2	0	17.4%	13	1	7.7%
Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury	236	38	15	0	22.5%	71	11	15.5%
Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union	70	5	1	0	8.6%	18	1	5.6%
Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne	<mark>84</mark>	8	9	10	<mark>32.1%</mark>	<mark>60</mark>	<mark>6</mark>	<mark>10.0%</mark>
Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott	1391	147	175	30	25.3%	167	18	10.8%
TOTAL	2018	230	211	40	23.8%	385	47	12.2%

^{*}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):

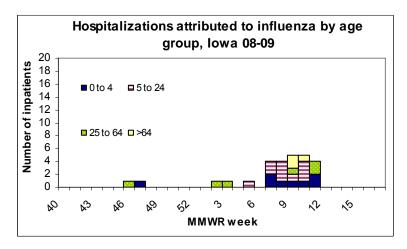
There are 18 sentinel surveillance sites throughout lowa surveying patient populations for influenza-like illness (ILI).



# sites reporting	6
Age 0-4	18
Age 5-24	19
Age 25-64	16
Age over 64	6
Total ILI	59
Total patients	2477
% ILI	2.38%

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 4,797.



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.

Number of sites reporting	21
Total students surveyed	9,615
Total absences due to illness	1,441
Average percent absence due to illness	2.58%
Median percent absence due to illness	2.71%

