Division of Acute Disease Prevention and Emergency Response Center for Acute Disease Epidemiology



Iowa Influenza Surveillance Network (IISN)

Influenza and Other Respiratory Virus Weekly Activity Report For the week ending April 4, 2009 Week 13



Influenza Quick Stats:

Iowa activity level: Local¹
Lab-confirmed cases: 8

Sentinel % ILI² 1.68% (threshold 2.1%)

Hospitalizations: 4

School % absence: 2.62% (threshold 3.06%)

School days ≥10% absence: 3

<u>lowa activity summary:</u> This week UHL confirmed 5 influenza A and 3 B specimens. Hospitalizations occurred in the 0 to 4 year age range. School absence has decreased. RSV cases have decreased in prevalence.



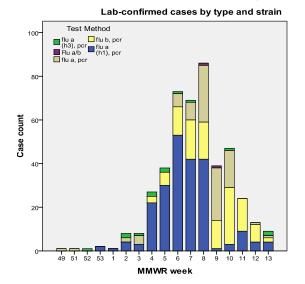
<u>National activity summary:</u> Widespread influenza activity was reported by 13 states. Regional influenza activity was reported by 19 states. Local influenza activity was reported by 14 states. Sporadic activity was reported by the District of Columbia, Puerto Rico, and three states. One state did not report.

<u>National virologic surveillance:</u> WHO and NREVSS collaborating laboratories located in all 50 states and Washington D.C. report to CDC the number of respiratory specimens tested for influenza each week. The results of tests performed during the current week and cumulative totals for the season are influenza A 67.9% and influenza B 32.1%. 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, while influenza activity continued to decrease nationally, the relative proportion of influenza B viruses is increasing nationally and regionally.

Antiviral resistance: Since October 1, 2008, 654 influenza A (H1N1), 94 influenza A (H3N2), and 274 influenza B viruses have been tested for resistance to the neuraminidase inhibitors (oseltamivir and zanamivir). Six hundred five influenza A (H1N1) and 94 influenza A (H3N2) viruses have been tested for resistance to the adamantanes (amantadine and rimantadine). Influenza A (H1N1) viruses from 43 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. Nationally, influenza A (H1N1) viruses have predominated during the season overall. While influenza activity continued to decrease nationally, the relative proportion of influenza B viruses is increasing. During week 12, influenza B viruses accounted for 55% of the influenza viruses identified nationally, and more than 50% of the influenza viruses identified in six of the nine surveillance regions. 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)

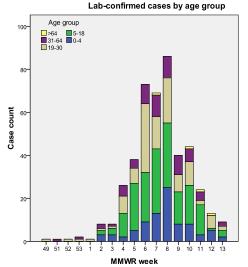


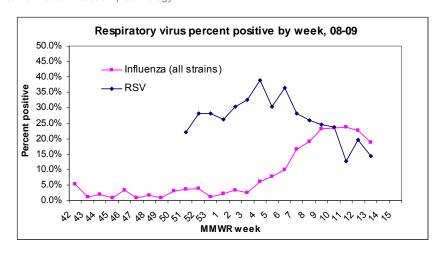
		flu a	flu a	flu	Flu	flu	Total
		(h1)	(h3)	a	a/b	b	. ota.
MMWR_wk	1	1	0	0	0	0	1
	2	4	2	2	0	0	8
	3	3	1	4	0	0	8
	4	22	2	0	0	3	27
	5	30	2	0	0	6	38
	6	53	1	6	0	13	73
	7	42	1	8	0	18	69
	8	42	0	26	1	17	86
	9	1	0	24	1	13	40
	10	3	1	17	0	26	47
	11	9	0	0	0	15	24
	12	4	0	1	0	8	13
	13	4	2	1	0	2	9
	49	0	0	1	0	0	1
	51	0	0	1	0	0	1
	52	0	1	0	0	0	1
	53	2	0	0	0	0	2
Total		220	13	91	2	121	448

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.

Division of Acute Disease Prevention and Emergency Response enter for Acute Disease Epidemiology





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 lowa.

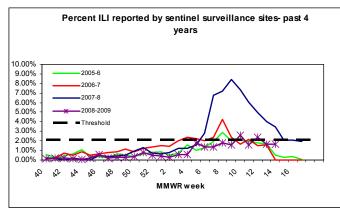
	INFLUENZA			RSV*				
Region	Tested	Flu A	Flu B	Both	% Positive	Tested	Positive	% Positive
Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster	113	4	7	0	9.7%	50	7	14.0%
Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright	41	3	3	0	14.6%	23	4	17.4%
Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury	175	25	7	0	18.3%	60	5	8.3%
Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union	46	1	0	0	2.2%	6	0	0.0%
Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne	32	4	2	0	18.8%	33	7	21.2%
Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott	634	39	85	15	21.9%	107	17	15.9%
TOTAL	1041	76	104	15	18.7%	279	40	14.3%

^{*}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):

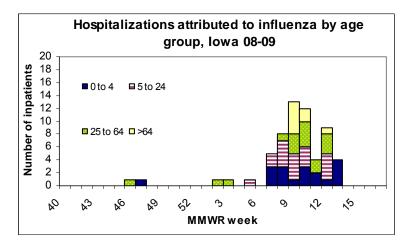
There are 18 sentinel surveillance sites throughout Iowa surveying patient populations for influenza-like illness (ILI).



# sites reporting	4
Age 0-4	12
Age 5-24	14
Age 25-64	13
Age over 64	3
Total ILI	42
Total patients	2,494
% ILI	1.68%

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 7,447.



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. Two schools reported absence of >10%.

Number of sites reporting	19
Total students surveyed	13,031
Total absences due to illness	1,706
Average percent absence due to illness	2.62%
Median percent absence due to illness	2.42%

