



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

September 2015



All data presented in this report are provisional and may change as additional reports are received

Iowa statewide activity summary:

Influenza activity in Iowa remains low. During this reporting month, four influenza A (H3) were detected at SHL. Other respiratory viruses reported in this period include: 142 cases of rhinovirus/enterovirus, nine adenovirus, nine para influenza 1, eight para influenza 4, and three hMPV. During the 2014-2015 influenza season, 63 influenza outbreaks were reported in Iowa long-term care facilities and three confirmed influenza-related deaths in children (age 0-17).

National activity summary - (CDC):

Condensed reports over the summer months are available at www.cdc.gov/flu/weekly/

International activity summary - (WHO):

Globally, influenza activity continued in the Southern hemisphere, with overall slightly decreased activity in Oceania, further decreases in temperate South America and low activity in South Africa. Detailed information can be found online at www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. It was last updated 09/21/2015.

Laboratory surveillance program:

The State Hygienic Laboratory (SHL) is the primary lab for influenza testing and reporting 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.

Table 1: Influenza A viruses detected by SHL by age group

Age Group	SEPTEMBER 2015					YEAR TO DATE (9/1/14 – PRESENT WEEK)				
	Flu A					Flu A				
	A(H1N1) pdm09	A(H3)	H1N1v	Subtype Pending	Not subtyped	A(H1N1) pdm09	A(H3)	H1N1v	Subtype Pending	Not subtyped
0-4	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(38%)	64(9%)	0(0%)	0(0%)	1(9%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(13%)	122(17%)	0(0%)	0(0%)	2(18%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	62(8%)	0(0%)	0(0%)	1(9%)
25-49	0(0%)	1(25%)	0(0%)	0(0%)	0(0%)	2(25%)	84(11%)	0(0%)	0(0%)	1(9%)
50-64	0(0%)	2(50%)	0(0%)	0(0%)	0(0%)	1(12%)	65(9%)	0(0%)	0(0%)	3(27%)
>64	0(0%)	1(25%)	0(0%)	0(0%)	0(0%)	1(12%)	346(46%)	0(0%)	0(0%)	3(27%)
Total	0	4	0	0	0	8	743	*1	0	11

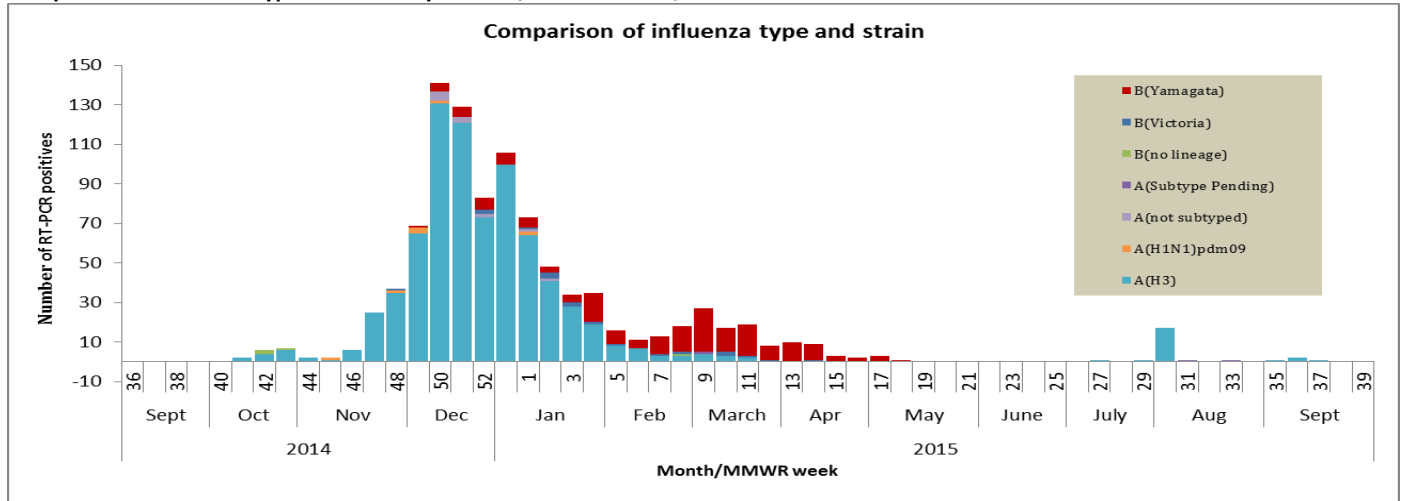
*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included
"Not subtyped" column is due to weak detections. This can be due to poor collection, timing of collection or stage of infection.

Table 2: Influenza B viruses detected by SHL by age group

Age Group	SEPTEMBER 2015			YEAR TO DATE (9/1/14 – PRESENT WEEK)		
	Flu B			Flu B		
	Victoria Lineage	Yamagata Lineage	Lineage Pending	Victoria Lineage	Yamagata Lineage	Lineage Pending
0-4	0(0%)	0(0%)	0(0%)	4(23%)	15(9%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	4(23%)	45(27%)	0(0%)
18-24	0(0%)	0(0%)	0(0%)	3(12%)	6(4%)	0(0%)
25-49	0(0%)	0(0%)	0(0%)	2(12%)	33(19%)	0(0%)
50-64	0(0%)	0(0%)	0(0%)	2(12%)	26(16%)	0(0%)
>64	0(0%)	0(0%)	0(0%)	3(18%)	42(25%)	0(0%)
Total	0	0	0	18	167	0

*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included

Comparison of influenza type and strain by MMWR/calendar week, 2014-2015 season



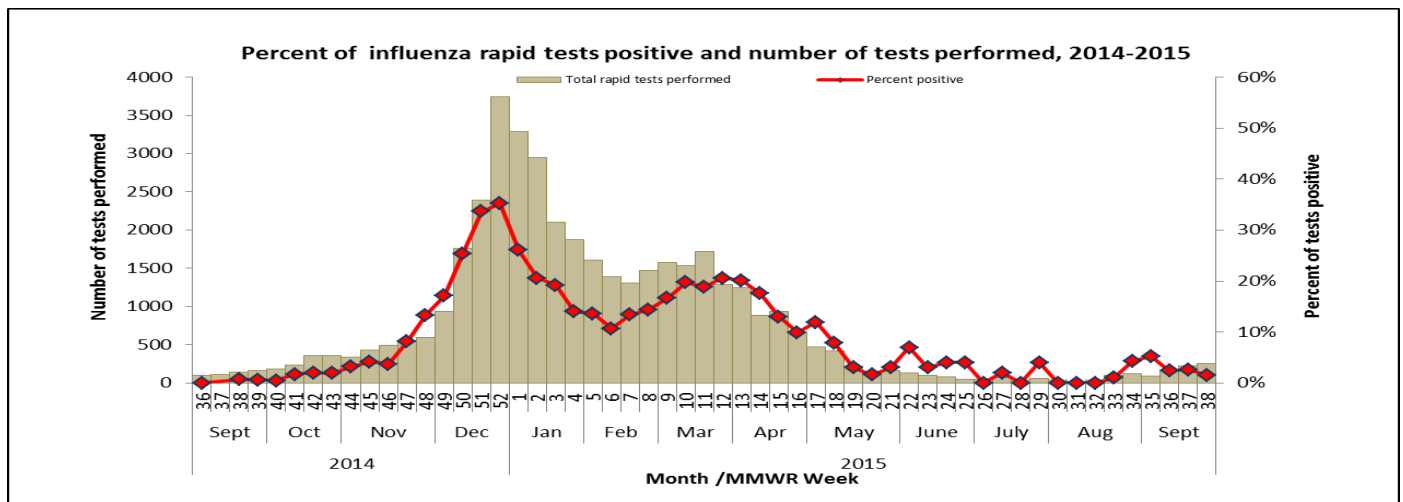
Rapid influenza and RSV test surveillance: September 2015

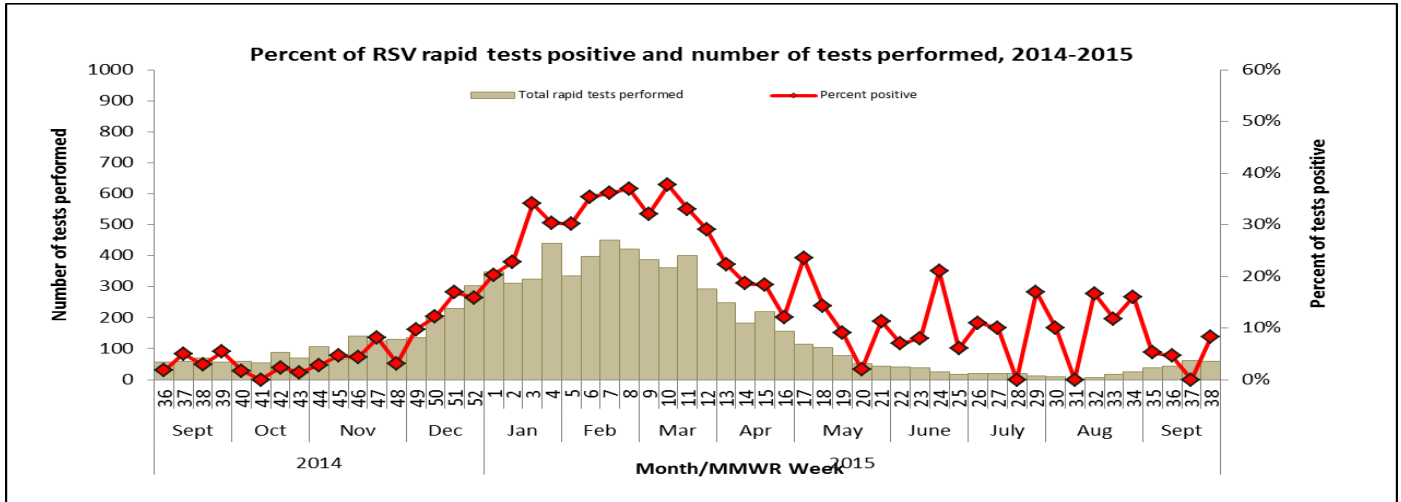
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory surveillance sites throughout the state. This table does not provide case counts.

Table 2: Percent of influenza rapid tests positive and number of tests performed by region for the present week

REGION*	RAPID ANTIGEN INFLUENZA TESTS					RAPID ANTIGEN RSV TESTS		
	Tested	Flu A	Flu B	Undefined	% Positive	Tested	Positive	% Positive
Region 1	65	0	1	0	1.6	26	5	19.2
Region 2	29	1	0	0	3.4	19	0	0
Region 3	148	1	3	0	2.7	32	0	0
Region 4	5	0	0	0	0.0	0	0	0
Region 5	132	3	0	0	2.3	33	0	0
Region 6	359	6	4	0	2.8	93	4	4.3
Total	738	11	8	0	2.6	203	9	4.4

*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.





Non-influenza respiratory virus:

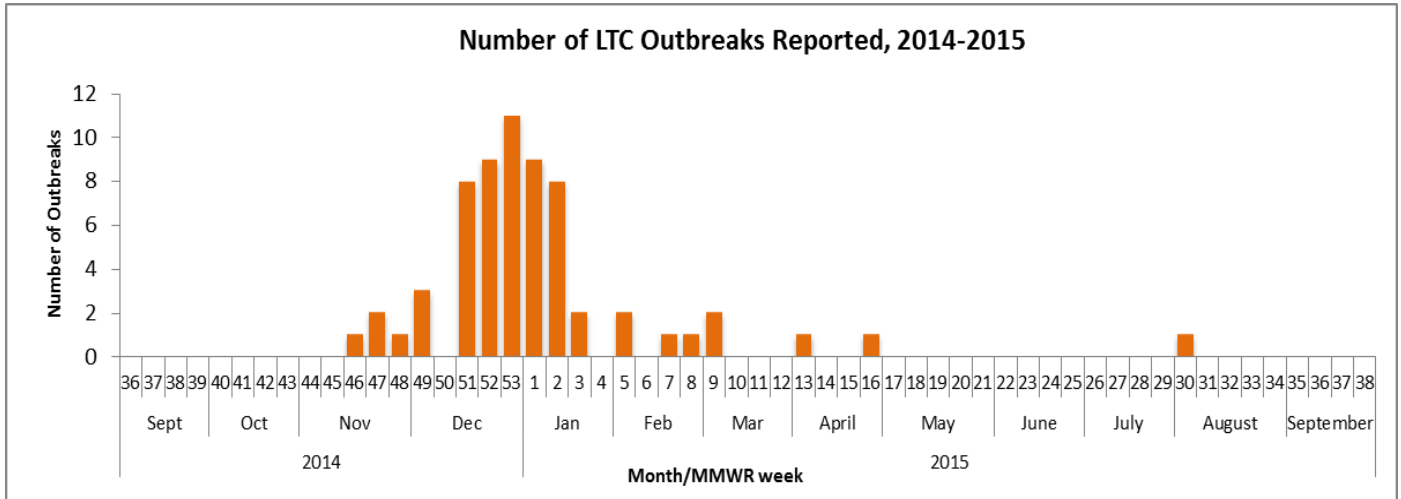
Table 4: Number of positive results for non-influenza respiratory virus isolated by SHL, Mercy Dunes in Sioux City and Iowa Methodist Medical Center

Viruses	SEPTEMBER	CUMULATIVE (9/1/14 – PRESENT WEEK)
Adenovirus	9	344
Parainfluenza Virus Type 1	9	14
Parainfluenza Virus Type 2	0	101
Parainfluenza Virus Type 3	0	237
Parainfluenza Virus Type 4	8	37

Long-term Care Outbreaks

REGION*	CURRENT WEEK	CUMULATIVE (9/1/14 – PRESENT WEEK)
Region 1 (Central)	0	16
Region 2 (NE)	0	12
Region 3 (NW)	0	11
Region 4 (SW)	0	11
Region 5 (SE)	0	4
Region 6 (Eastern)	0	9
Total	0	63

*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.



Other resources:

Vaccine:

Influenza vaccine recommendation: www.idph.state.ia.us/ImmTB/Immunization.aspx?prog=Imm&pg=Flu

CDC vaccine information: www.cdc.gov/flu/faq/flu-vaccine-types.htm

Vaccine finder: <http://vaccinefinder.org/>

Neighboring states' influenza information:

Illinois: www.idph.state.il.us/flu/surveillance.htm

Minnesota: www.health.state.mn.us/divs/idepc/diseases/flu/stats/index.html

Missouri: <http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>

South Dakota: <http://doh.sd.gov/diseases/infectious/flu/>

Wisconsin: www.dhs.wisconsin.gov/influenza/index.htm