



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

July 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 is very low. There was one laboratory confirmed case of influenza A (H3) reported in July. Other respiratory viruses reported in this period include: 79 cases of rhinovirus/enterovirus, 14 adenovirus, 24 para influenza 3, one RSV, and four hMPV. During the 2014-2015 influenza season, 62 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 <http://www.cdc.gov/flu/weekly/>

International activity summary - (WHO):

Globally, the Southern hemisphere had increased influenza activity whereas influenza activity was at low levels in the Northern hemisphere. Detailed information can be found online at www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. It was last updated 7/27/2015.

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	JULY 2015				YEAR TO DATE (9/1/14 – PRESENT WEEK)			
	Flu A				Flu A			
	A(H1N1)pdm09	A(H3)	Subtype Pending	Not subtyped	A(H1N1)pdm09	A(H3)	Subtype Pending	Not subtyped
0-4	0(0%)	0(0%)	0(0%)	0(0%)	3(38%)	64(9%)	0(0%)	1(9%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	1(13%)	122(17%)	0(0%)	2(18%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	62(8%)	0(0%)	1(9%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	2(25%)	83(12%)	0(0%)	1(9%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	1(12%)	63(9%)	0(0%)	3(27%)
>64	0(0%)	1(100%)	0(0%)	0(0%)	1(12%)	328(45%)	0(0%)	3(27%)
Total	0	1	0	0	8	722	0	11

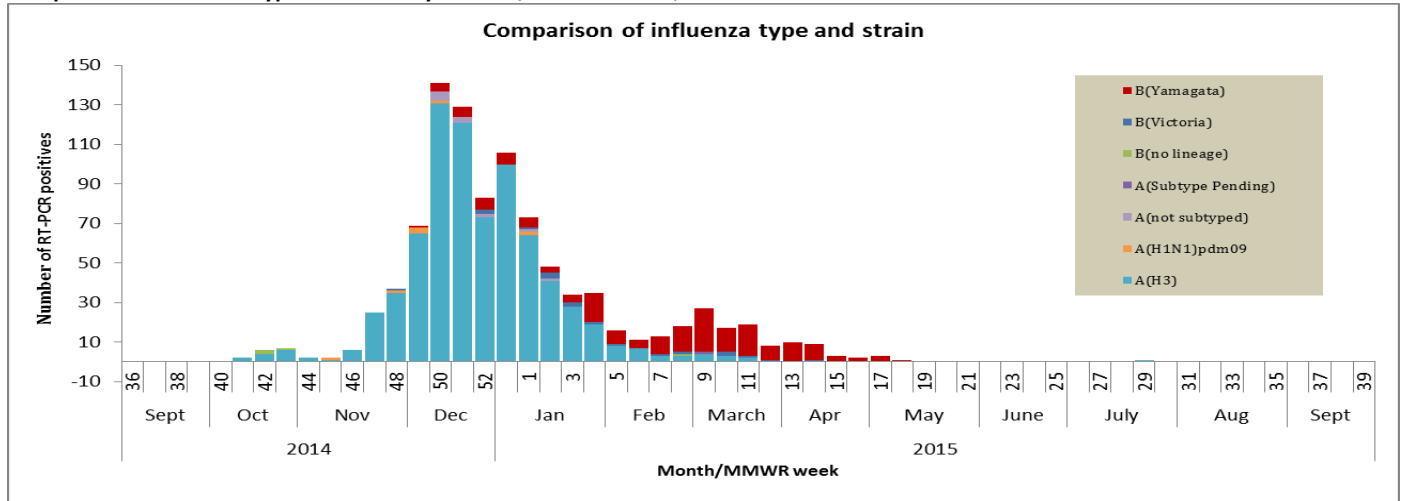
*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
 Only cases of Iowa residents are included
 "Not subtyped" column is due to weak detections. This can be due to poor collection, timing of collection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

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

Age Group	JULY 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



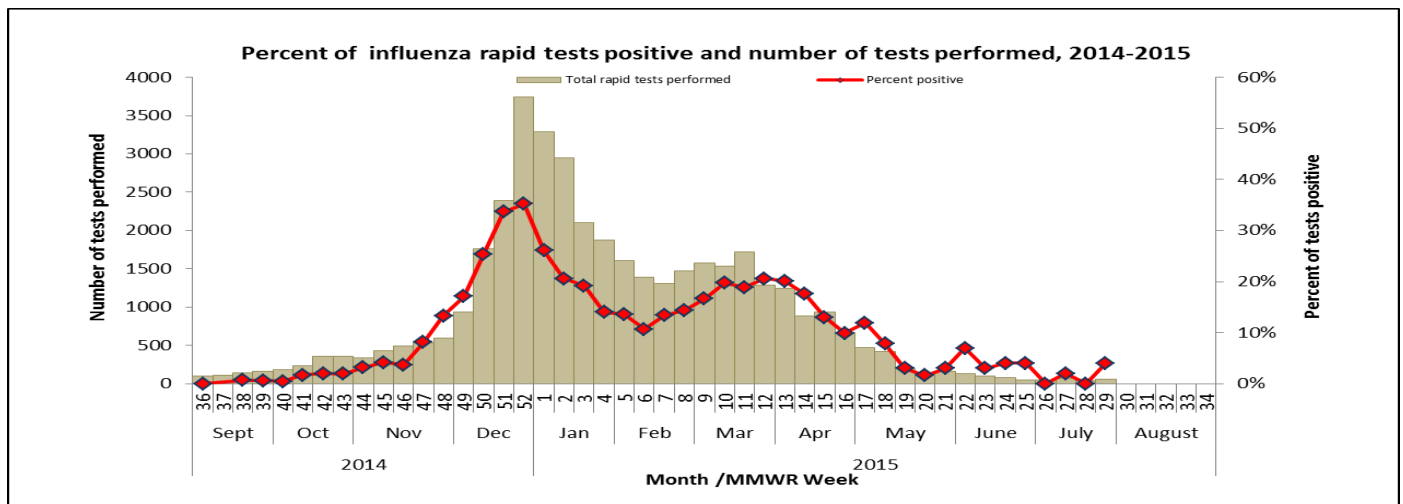
Rapid influenza and RSV test surveillance: July 2015

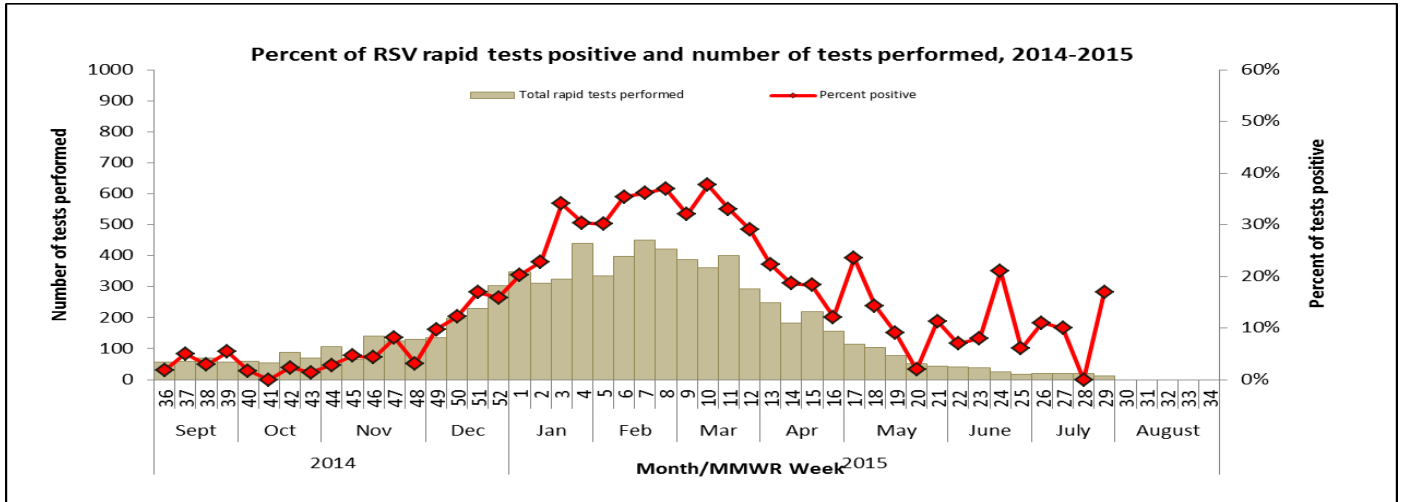
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory 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	15	0	0	0	0.0	10	2	20.0
Region 2	3	1	0	0	33.3	4	0	0.0
Region 3	21	0	0	0	0.0	22	3	13.6
Region 4	6	0	0	0	0.0	1	0	0.0
Region 5	49	1	1	0	4.1	15	0	0.0
Region 6	119	0	0	0	0.0	19	0	0.0
Total	213	2	1	0	1.4	71	5	7.0

*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.





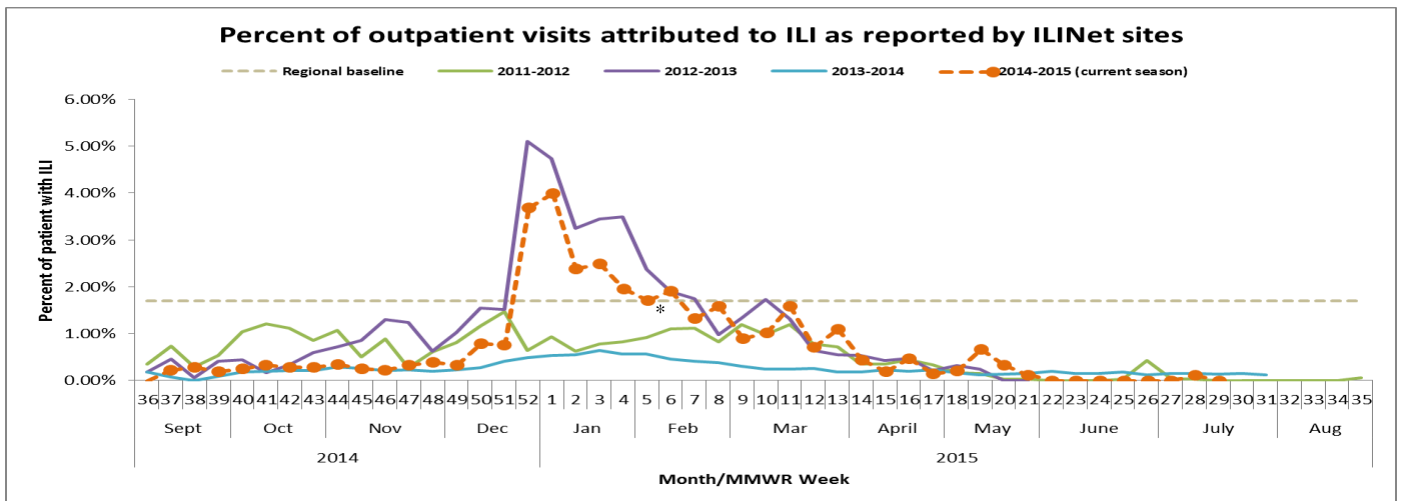
Non-influenza respiratory virus:

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	JULY	CUMULATIVE (9/1/14 – PRESENT WEEK)
Adenovirus	14	316
Parainfluenza Virus Type 1	0	3
Parainfluenza Virus Type 2	0	101
Parainfluenza Virus Type 3	24	233
Parainfluenza Virus Type 4	2	25
Rhinovirus/Enterovirus	79	1242
Respiratory syncytial virus (RSV)	1	473
Human metapneumovirus (hMPV)	4	216
Total	124	2609

Outpatient health care provider surveillance program (ILINet):

Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa’s influenza surveillance. Iowa health care providers interested in joining this surveillance program should contact Kemi Oni at 515-725-2136 or oluwakemi.oni@idph.iowa.gov for more information.



Other resources:

Vaccine:

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

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

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

Neighboring states' influenza information:

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

Minnesota: <http://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/>

Google Flu Trends: <http://www.google.org/flutrends/us/#US-IA>