



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

August 2016



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, one influenza A (H3) was detected at SHL. Other respiratory viruses reported in this period include: 69 cases of rhinovirus/enterovirus, 17 adenovirus, two para influenza 2, 27 para influenza 3, two para influenza 4, six RSV and one hMPV. No new outbreaks or deaths due to influenza were reported during this reporting month.

Note that this data is included in the 2015-2016 influenza season (10/4/15-10/1/16) and the weekly reports will begin again in October with the start of the 2016-2017 season.

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 has varied in South American and has increased steadily in South Africa and across Oceania in the last few weeks. Detailed information can be found online at

www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. It was last updated 09/05/2016.

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	AUGUST 2016				YEAR TO DATE (10/4/15 – 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%)	36(13%)	0(0%)	0(0%)	0(0%)
5-17	0(0%)	1(100%)	0(0%)	0(0%)	43(16%)	3(8%)	0(0%)	1(14%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	35(13%)	10(26%)	0(0%)	2(29%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	77(29%)	4(11%)	0(0%)	1(14%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	53(20%)	11(29%)	0(0%)	3(43%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	27(10%)	10(26%)	0(0%)	0(0%)
Total	0	1	0	0	271	38	0	7

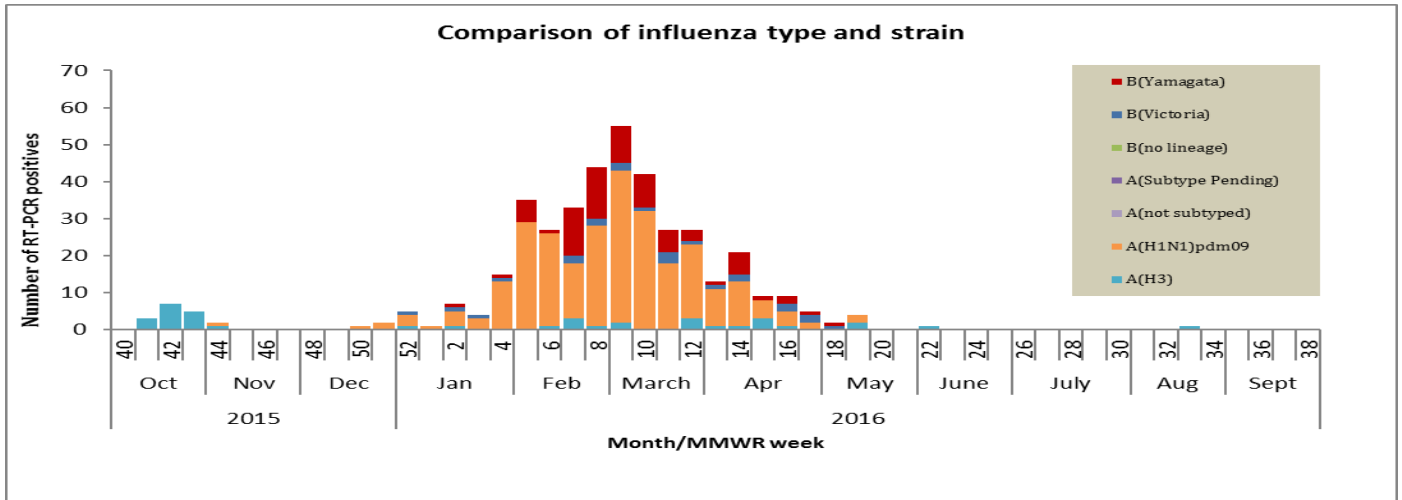
*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included
"Not subtyped" column is due to weak detections. This can be due to poor collection, timing of collection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

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

Age Group	AUGUST 2016			YEAR TO DATE (10/4/15 – 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%)	5(22%)	8(11%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	8(35%)	22(29%)	0(0%)
18-24	0(0%)	0(0%)	0(0%)	3(13%)	2(3%)	0(0%)
25-49	0(0%)	0(0%)	0(0%)	3(13%)	16(21%)	0(0%)
50-64	0(0%)	0(0%)	0(0%)	1(4%)	12(16%)	0(0%)
>64	0(0%)	0(0%)	0(0%)	3(13%)	16(21%)	0(0%)
Total	0	0	0	23	76	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, 2015-2016 season



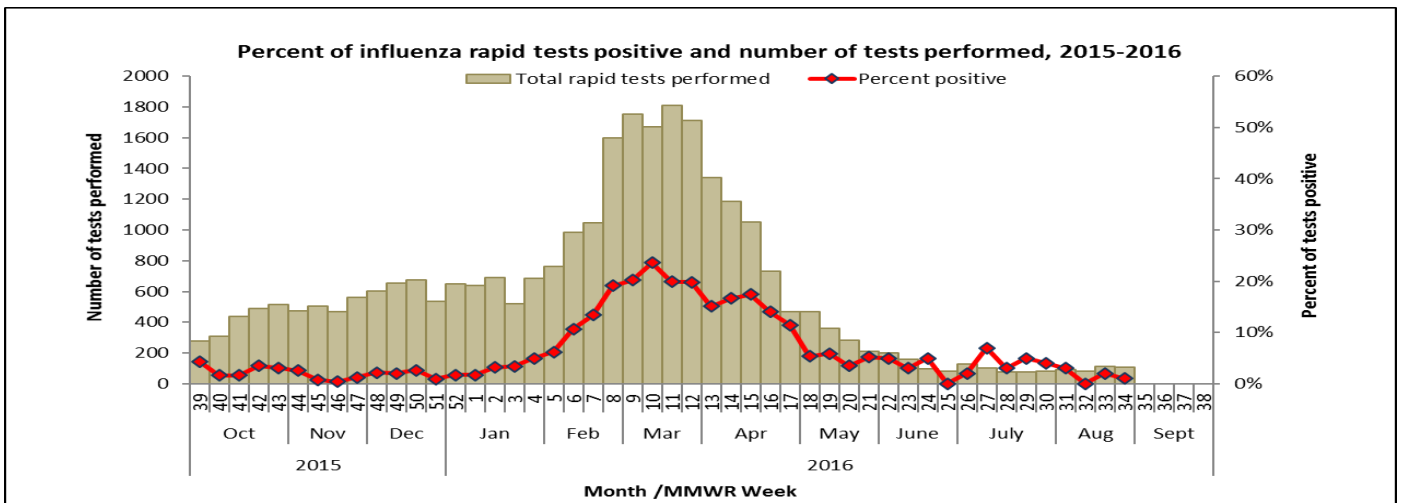
Rapid influenza and RSV test surveillance: August 2016

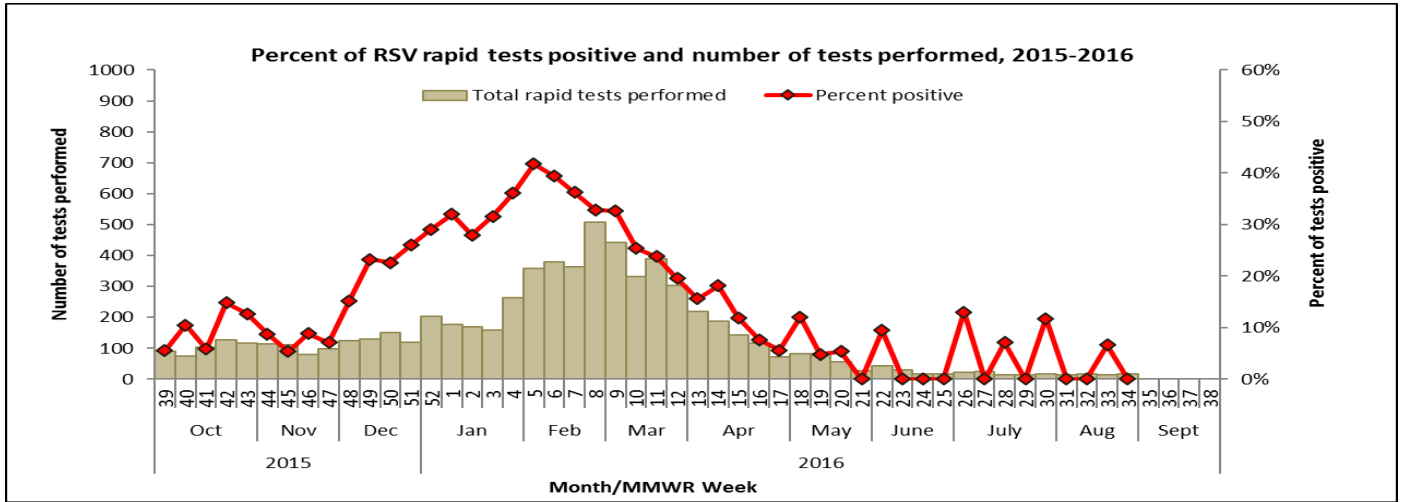
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory 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 month

REGION*	RAPID ANTIGEN INFLUENZA TESTS					RAPID ANTIGEN RSV TESTS		
	Tested	Flu A	Flu B	Undefined	% Positive	Tested	Positive	% Positive
Region 1	77	1	1	0	3	18	0	0
Region 2	7	1	0	0	14	2	0	0
Region 3	4	0	0	0	0	4	0	0
Region 4	20	0	0	0	0	8	0	0
Region 5	49	0	0	0	0	6	0	0
Region 6	230	1	2	0	1	25	1	4
Total	387	3	3	0	2	63	1	2

*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 collected by SHL, Mercy Dunes in Sioux City and Iowa Methodist Medical Center

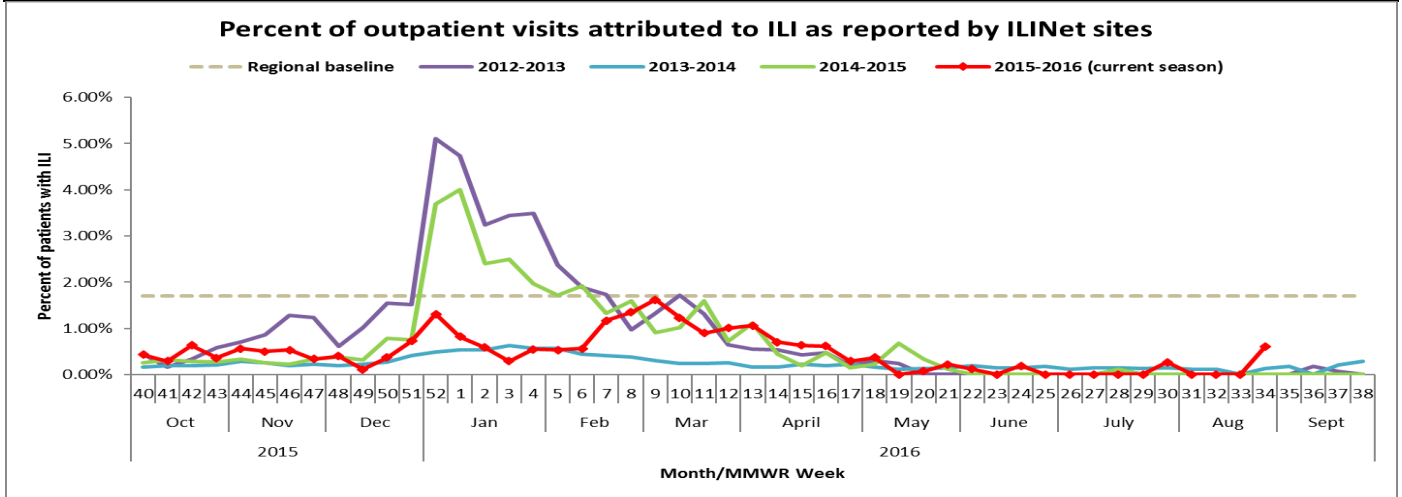
Viruses	AUGUST 2016	CUMULATIVE (10/4/15 – PRESENT WEEK)
Adenovirus	17	529
Parainfluenza Virus Type 1	0	174
Parainfluenza Virus Type 2	2	7
Parainfluenza Virus Type 3	27	153
Parainfluenza Virus Type 4	2	72
Rhinovirus/Enterovirus	69	1414
Respiratory syncytial virus (RSV)	6	722
Human metapneumovirus (hMPV)	1	379
Total	124	3450

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 Scott Seltrecht at 515-281-4985 or Scott.Seltrecht@idph.iowa.gov for more information.

Table 5: Outpatient visits for influenza-like illness (ILI)

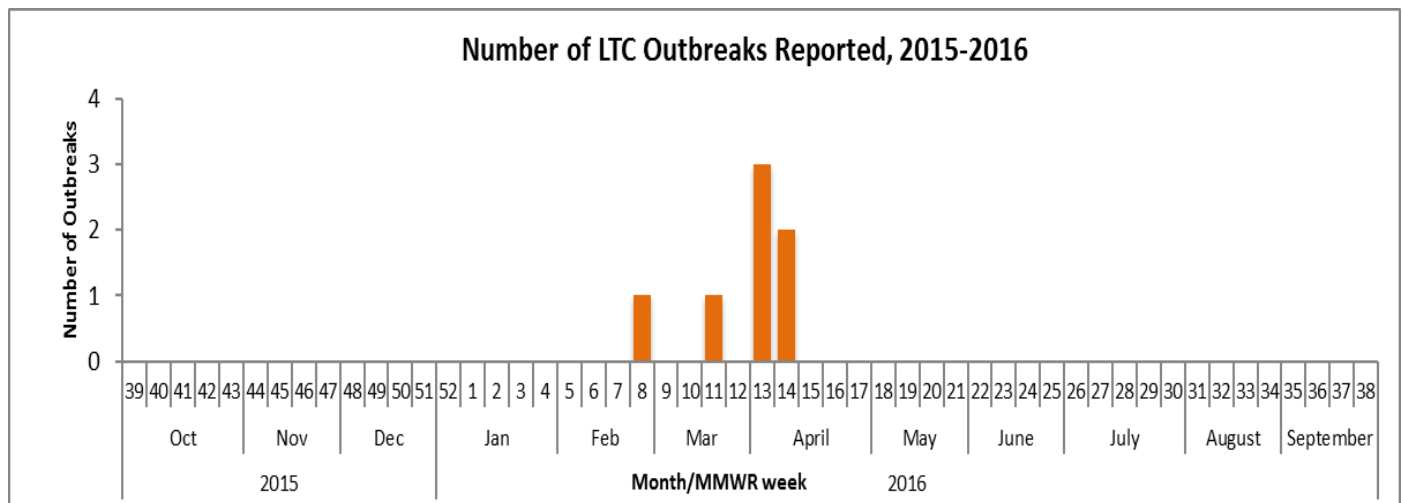
Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 31, ending August 6	0.00	0	0	0	0	0	0
Week 32, ending August 13	0.00	0	0	0	0	0	0
Week 33, ending August 20	0.00	0	0	0	0	0	0
Week 34, ending August 27	0.60	3	0	3	0	0	0



Long-term Care Outbreaks

REGION*	AUGUST 2016	CUMULATIVE (10/4/15 – PRESENT WEEK)
Region 1 (Central)	0	2
Region 2 (NE)	0	0
Region 3 (NW)	0	0
Region 4 (SW)	0	2
Region 5 (SE)	0	2
Region 6 (Eastern)	0	1
Total	0	7

*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: <http://idph.iowa.gov/immmtb/immunization/vaccine>

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