



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

June 2017



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, no influenza viruses were confirmed at the State Hygienic Laboratory. Other respiratory viruses reported in this period include 39 adenovirus, four para influenza 1, one para influenza 2, 35 para influenza 3, five para influenza 4, 143 cases of rhinovirus/enterovirus, two RSV, 20 hMPV and four coronavirus. No new influenza outbreaks were reported. One death due to influenza was reported during this reporting month, but no deaths reported occurred in June.

Note that this data is included in the 2016-2017 influenza season (10/2/16-09/30/17) and the weekly reports will begin again in October with the start of the 2017-2018 season.

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 sub-type of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs on a weekly basis for the number of rapid-antigen tests performed, the number positive and the positive non-influenza virus tests. This report also includes the positive non-influenza virus tests reported from the Dunes Medical Laboratories at Mercy Medical Center in Sioux City.

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

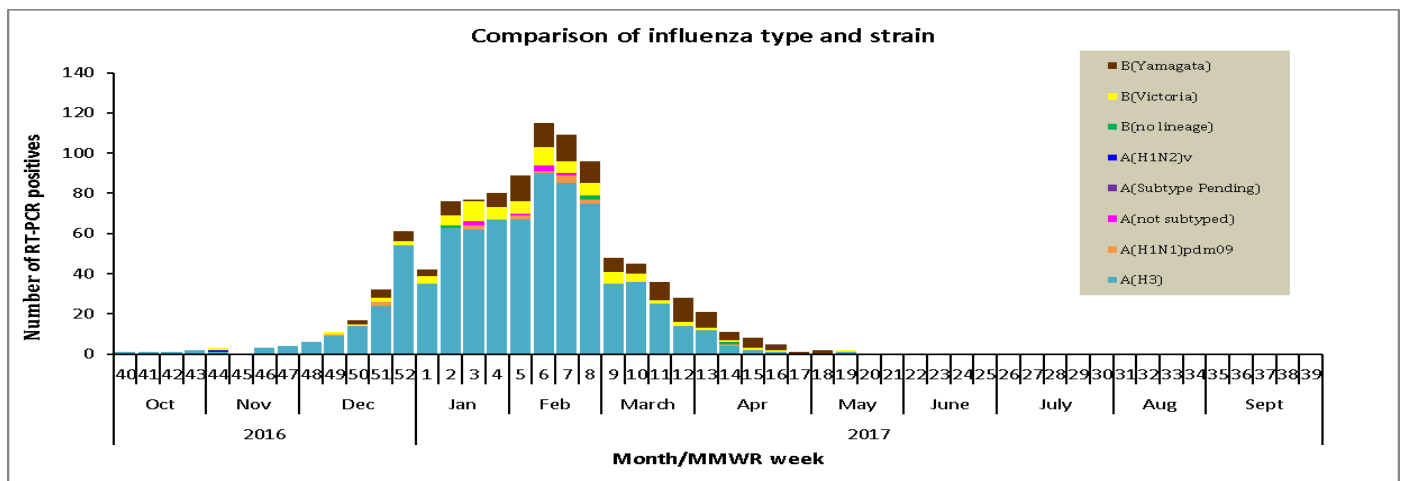
Age Group	JUNE 2017					CUMULATIVE (10/2/16 – CURRENT MONTH)				
	Flu A					Flu A				
	A(H1N1)pdm09	A(H3)	A(H1N2v)	Subtype Pending	Not subtyped	A(H1N1)pdm09	A(H3)	A(H1N2v)	Subtype Pending	Not subtyped
0-4	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	4(27%)	32(4%)	0(0%)	0(0%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(13%)	49(6%)	0(0%)	0(0%)	0(0%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	117(15%)	0(0%)	0(0%)	1(14%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	4(27%)	65(8%)	0(0%)	0(0%)	2(29%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(13%)	91(11%)	1(100%)	0(0%)	1(14%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(20%)	440(55%)	0(0%)	0(0%)	3(43%)
Total	0	0	0	0	0	15	794	1	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	JUNE 2017			CUMULATIVE (10/2/16 – CURRENT MONTH)		
	Flu B			Flu B		
	Victoria Lineage	Yamagata Lineage	Lineage Pending	Victoria Lineage	Yamagata Lineage	Lineage Pending
0-4	0(0%)	0(0%)	0(0%)	8(10%)	7(5%)	2(50%)
5-17	0(0%)	0(0%)	0(0%)	31(40%)	28(21%)	1(25%)
18-24	0(0%)	0(0%)	0(0%)	14(18%)	15(11%)	1(25%)
25-49	0(0%)	0(0%)	0(0%)	12(15%)	16(12%)	0(0%)
50-64	0(0%)	0(0%)	0(0%)	4(5%)	26(19%)	0(0%)
>64	0(0%)	0(0%)	0(0%)	9(12%)	42(32%)	0(0%)
Total	0	0	0	78	134	4

*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



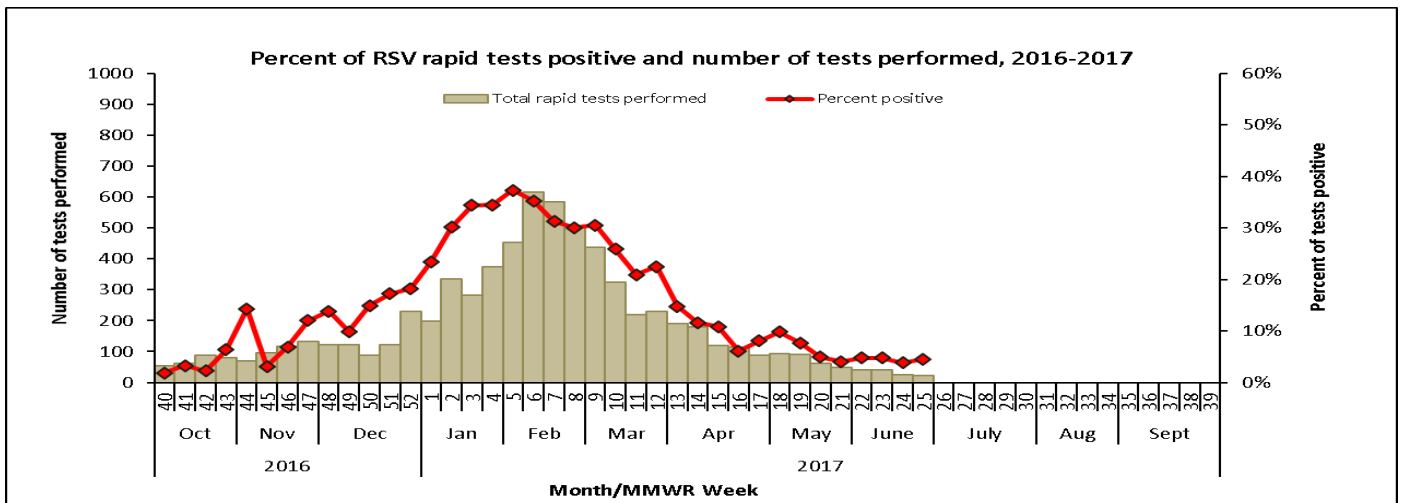
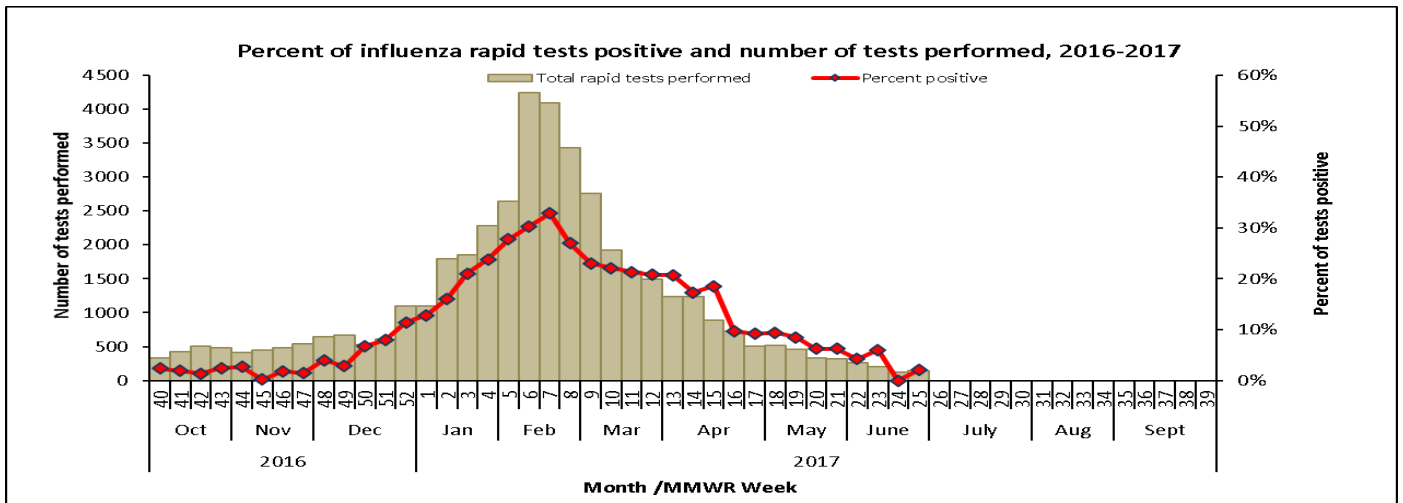
Rapid influenza and RSV test surveillance:

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 3: 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	% Positive	Tested	Positive	% Positive
Region 1 (Central)	138	0	2	1	17	1	6
Region 2 (NE)	14	0	0	0	7	0	0
Region 3 (NW)	98	6	10	16	23	2	9
Region 4 (SW)	13	0	0	0	2	0	0
Region 5 (SE)	71	1	2	4	18	0	0
Region 6 (Eastern)	393	1	4	1	65	3	5
Total	727	8	18	4	132	6	5

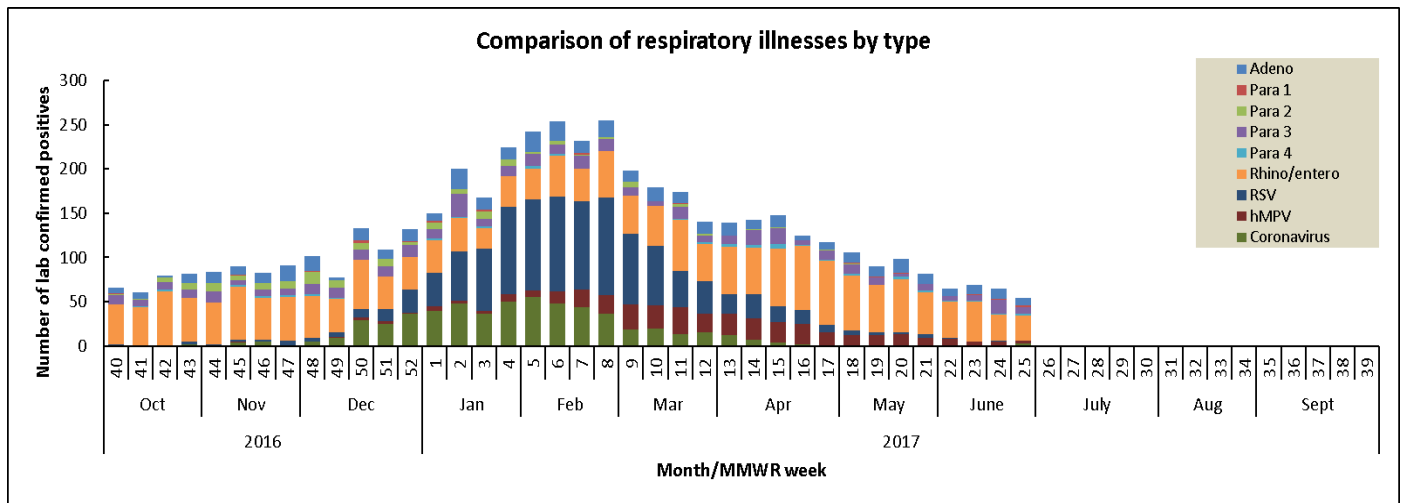
*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, 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:

The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of positive tests for non-influenza respiratory viruses. This table also includes the positive non-influenza virus tests reported from the Dunes Medical Laboratories at Mercy Medical Center in Sioux City. The table includes only the number of positive tests at laboratory surveillance sites throughout the state. The table does not provide case counts.

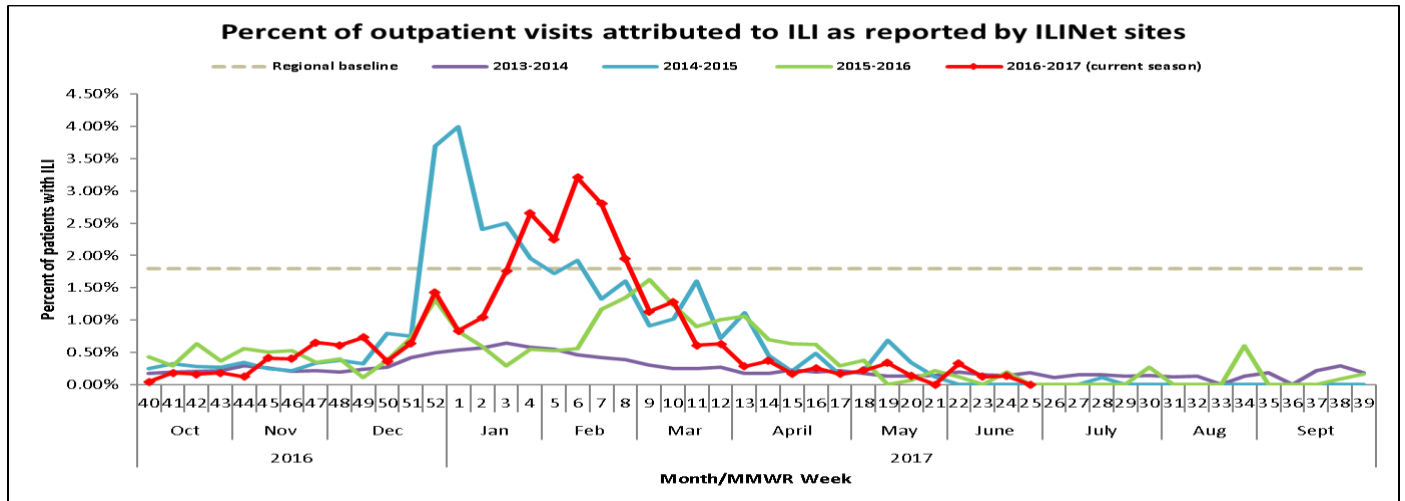
Table 4: Number of positive results for non-influenza respiratory virus collected by SHL and Mercy Dunes in Sioux City		
Viruses	JUNE 2017	CUMULATIVE (10/2/16 – CURRENT MONTH)
Adenovirus	39	472
Parainfluenza Virus Type 1	4	22
Parainfluenza Virus Type 2	1	138
Parainfluenza Virus Type 3	35	400
Parainfluenza Virus Type 4	5	52
Rhinovirus/Enterovirus	143	1782
Respiratory syncytial virus (RSV)	2	1093
Human metapneumovirus (hMPV)	20	373
Coronavirus	4	575
Total	253	4907



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. Across the state, 17 providers, ranging from family medicine to student health centers, participate weekly in the ILINet program. Iowa health care providers interested in joining this surveillance program should contact Andy Weigel at 515-322-1937 or andy.weigel@idph.iowa.gov for more information.

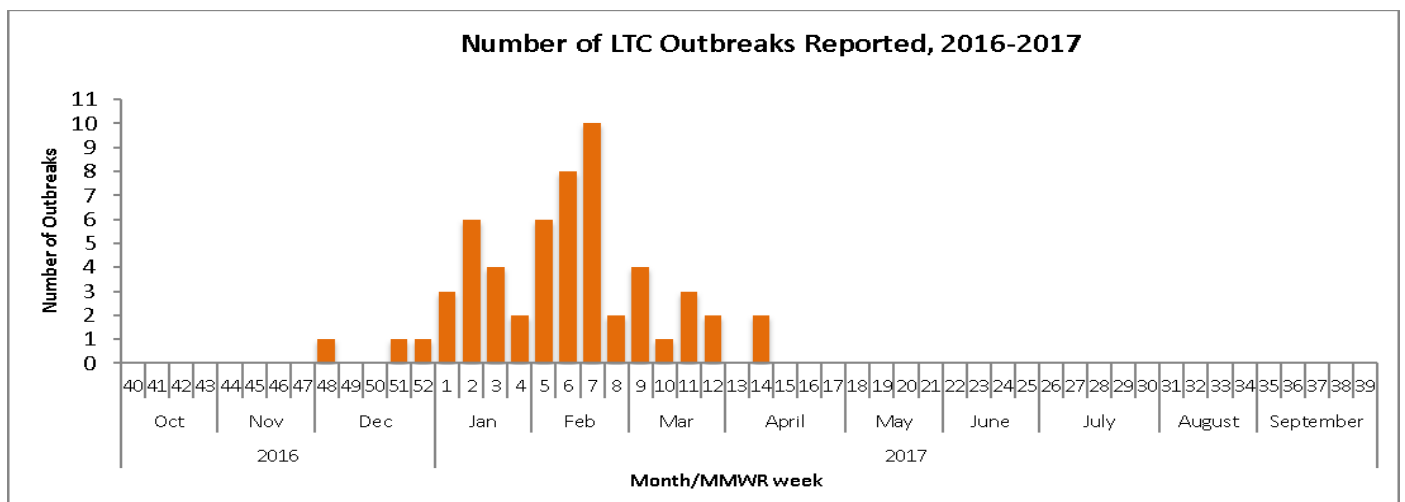
Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 22, ending June 3	0.33	2	0	0	2	0	0
Week 23, ending June 10	0.12	1	0	0	0	0	1
Week 24, ending June 17	0.13	1	0	1	0	0	0
Week 25, ending June 24	0.00	0	0	0	0	0	0



Long-term care outbreaks

REGION*	JUNE 2017	CUMULATIVE (10/2/16 – CURRENT MONTH)
Region 1 (Central)	0	19
Region 2 (NE)	0	4
Region 3 (NW)	0	7
Region 4 (SW)	0	9
Region 5 (SE)	0	8
Region 6 (Eastern)	0	9
Total	0	56

*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: 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.dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance

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

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

South Dakota: doh.sd.gov/diseases/infectious/flu/

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

National activity summary - (CDC):

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

International activity summary - (WHO):

Detailed information can be found online at www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.