



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

September 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, four influenza A (H3)'s and one influenza B (Victoria lineage) were detected at SHL. Other respiratory viruses reported in this period include: 160 cases of rhinovirus/enterovirus, 25 adenovirus, 2 para influenza 1, 8 para influenza 2, 31 para influenza 3, 3 para influenza 4, 6 RSV and 3 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 October 14th, 2016 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 America and has remained steady in South Africa and decreased across Oceania in the last few weeks. Influenza levels also remain low in Asia, Europe and North America. Detailed information can be found online at www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. It was last updated 10/03/2016.

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	SEPTEMBER 2016				YEAR TO DATE (10/4/15 – 10/1/16)			
	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%)	1(25%)	0(0%)	0(0%)	36(13%)	1(2%)	0(0%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	43(16%)	3(7%)	0(0%)	1(14%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	35(13%)	10(24%)	0(0%)	2(29%)
25-49	0(0%)	1(25%)	0(0%)	0(0%)	77(29%)	5(12%)	0(0%)	1(14%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	53(20%)	11(26%)	0(0%)	3(43%)
>64	0(0%)	2(50%)	0(0%)	0(0%)	27(10%)	12(29%)	0(0%)	0(0%)
Total	0	4	0	0	271	42	0	7

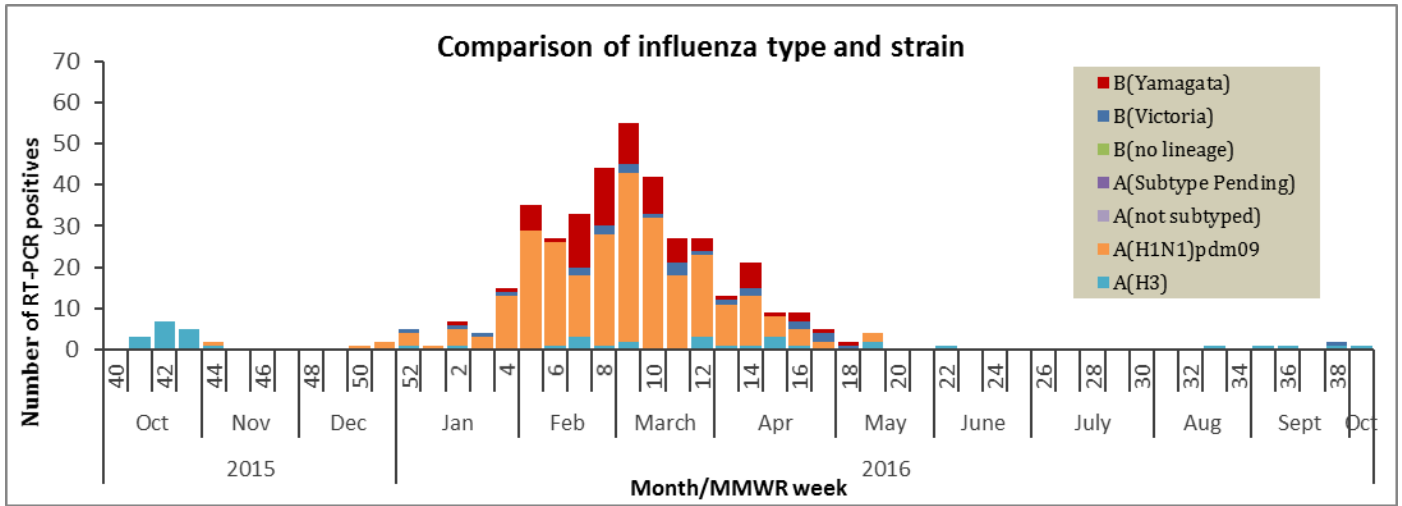
*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included
"Not subtyped" column is due to weak detections. This can be due to poor collection, timing of collection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

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

Age Group	SEPTEMBER 2016			YEAR TO DATE (10/4/15 – 10/1/16)		
	Flu B			Flu B		
	Victoria Lineage	Yamagata Lineage	Lineage Pending	Victoria Lineage	Yamagata Lineage	Lineage Pending
0-4	1(100%)	0(0%)	0(0%)	6(25%)	8(11%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	8(33%)	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	1	0	0	24	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



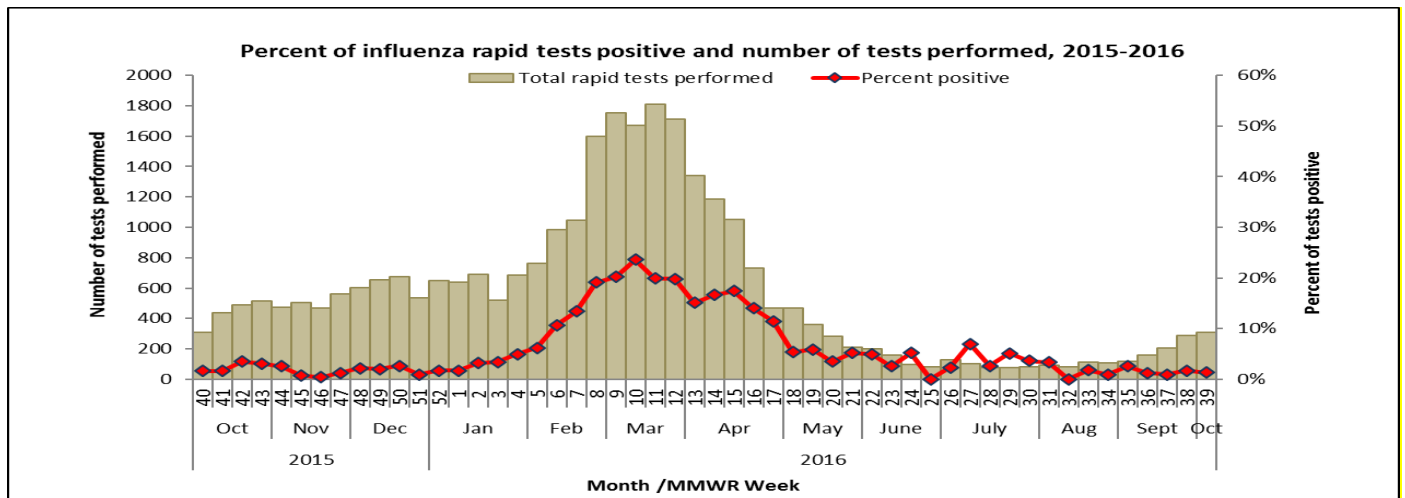
Rapid influenza and RSV test surveillance: September 2016

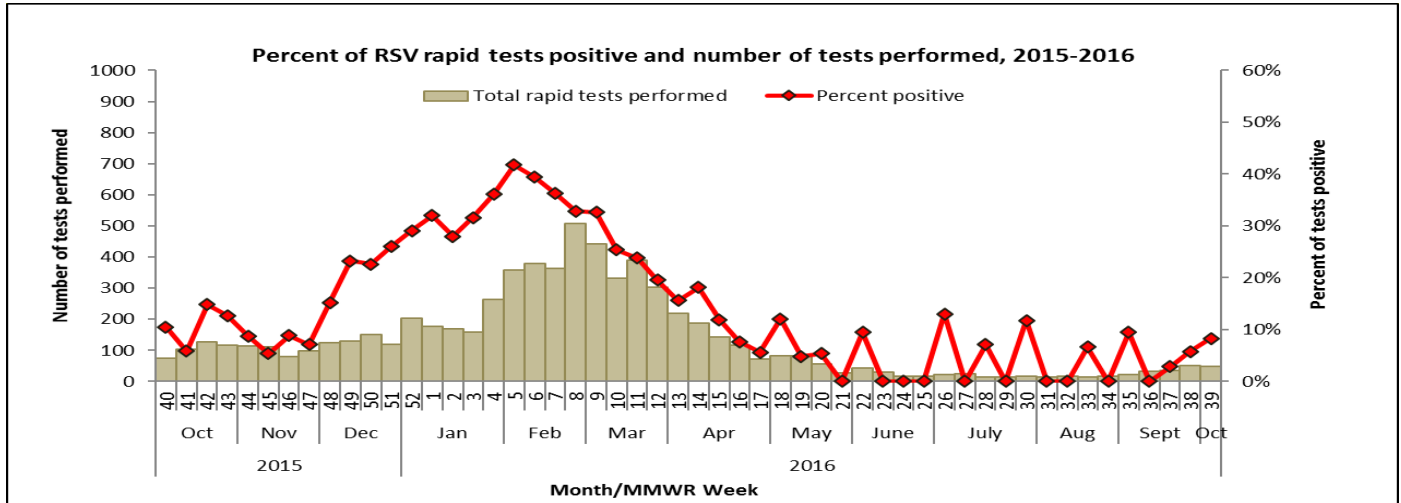
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory 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	203	1	1	0	1	35	3	9
Region 2	35	2	0	0	6	7	0	0
Region 3	60	0	0	0	0	19	1	5
Region 4	100	0	1	0	1	21	1	5
Region 5	94	1	0	0	1	29	1	3
Region 6	588	7	3	0	2	79	4	5
Total	1080	11	5	0	1	190	10	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:

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

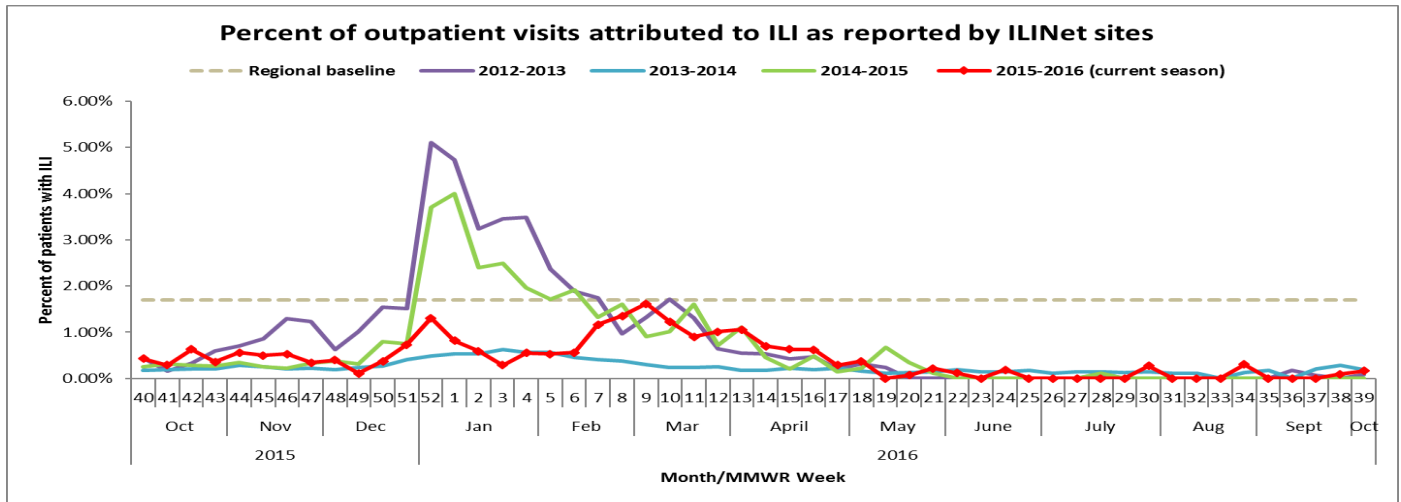
Viruses	SEPTEMBER 2016	CUMULATIVE (10/4/15 – 10/1/16)
Adenovirus	25	554
Parainfluenza Virus Type 1	2	176
Parainfluenza Virus Type 2	8	15
Parainfluenza Virus Type 3	31	184
Parainfluenza Virus Type 4	3	75
Rhinovirus/Enterovirus	160	1574
Respiratory syncytial virus (RSV)	6	728
Human metapneumovirus (hMPV)	3	382
Total	238	3688

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 35, ending September 3	0.00	0	0	0	0	0	0
Week 36, ending September 10	0.00	0	0	0	0	0	0
Week 37, ending September 17	0.00	0	0	0	0	0	0
Week 38, ending September 24	0.09	0	0	0	1	0	0
Week 39, ending October 1	0.16	2	0	0	1	1	0

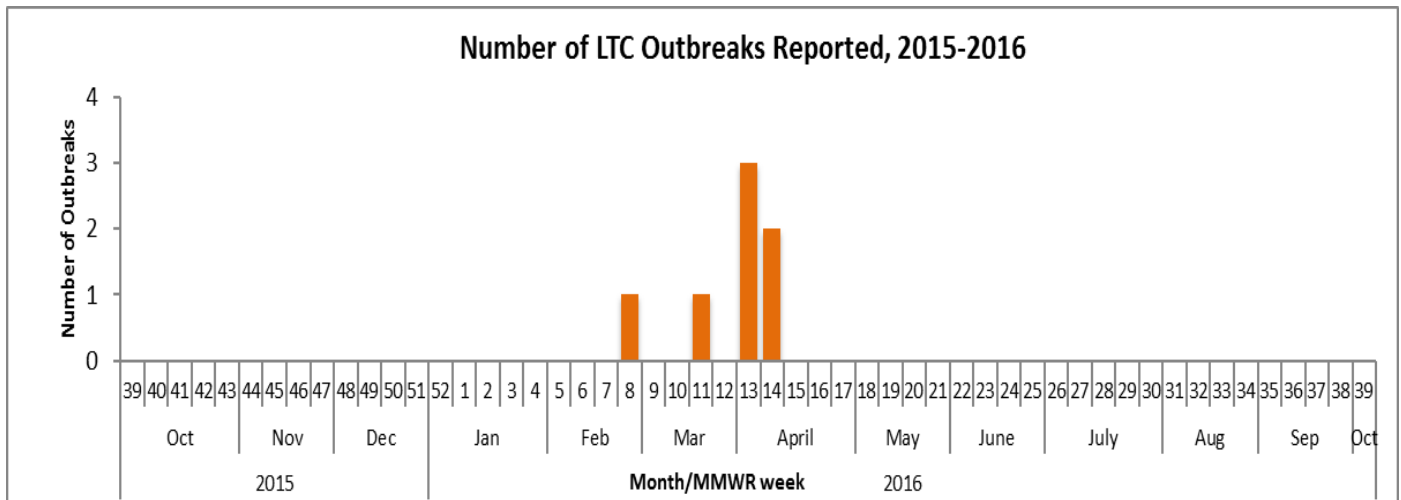


Long-term Care Outbreaks

Table 7: Number of long-term care outbreaks investigated

REGION*	SEPTEMBER 2016	CUMULATIVE (10/4/15 – 10/1/16)
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