Iowa Influenza Surveillance Network (IISN)

IDPH lowa Department of Public Health

Influenza-like Illness (ILI) and Other Respiratory Viruses

Monthly Activity Report

August 2019



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

Quick Stats	
Percent of influenza rapid test positive	2% (12/802)
Percent of RSV rapid tests positive	2% (1/52)
Percent of outpatient visits for ILI	0.25% (baseline 1.6%)
Number of long-term care outbreaks	0
Influenza-associated mortality - all ages (Cumulative)	89
Influenza-associated pediatric mortality (Cumulative)	1
Predominate non-influenza virus	Rhinovirus/enterovirus

Note: Deaths are considered influenza-associated when influenza is listed on the death certificate. This is an underestimate of influenza-related deaths. Cumulative mortality totals are from 9/30/2018 to the current week.

lowa statewide activity summary:

Iowa influenza activity was low this month. The State Hygienic Laboratory detected one influenza A(H1N1)pdm09 and three influenza A(H3) from submitted samples. The proportion of outpatient visits due to influenza-like illness (ILI) is 0.25 percent, which is below the regional baseline of 1.6 percent. No long-term care influenza outbreaks and no influenza deaths were reported. Surveillance sites most frequently detected the following non-influenza respiratory illnesses this month: 229 rhinovirus/enterovirus and 34 adenovirus.

National activity summary - (CDC):

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

International activity summary - (WHO):

Detailed information can be found online at www.who.int/influenza/surveillance monitoring/updates/latest update GIP surveillance/en/.

Laboratory surveillance program:

The State Hygienic Laboratory (SHL) is the primary laboratory in Iowa characterizing specimens for influenza surveillance. SHL reports the number of tests performed and the type and subtype/lineage of positive tests to the influenza surveillance network daily. SHL also sends a portion of specimens to CDC for further characterization.

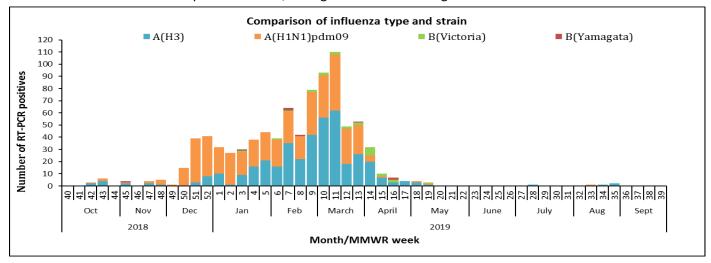
		CURRENT	r month		CUMULATIVE (9/30/18- CURRENT MONTH)			
Age Group	A(H1N1) pdm09	A(H3)	Not subtyped	Total	A(H1N1) pdm09	A(H3)	Not subtyped	Total
0-4	0	0	0	0	74	20	0	94 (11%)
5-17	0	0	0	0	73	49	1	123 (14%)
18-24	0	0	0	0	31	100	2	133 (15%)
25-49	1	0	0	1 (25%)	90	33	2	125 (14%)
50-64	0	1	0	1 (25%)	99	41	3	143 (16%)
>64	0	2	0	2 (50%)	85	155	11	251 (29%)
Total	1	3	0	4	452	398	19	869
Pct.	25%	75%	0%		52%	46%	2%	

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

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

		CURRENT	MONTH		CUMULATIVE (9/30/18– CURRENT MONTH)			
Age Group	Victoria Lineage	Yamagata Lineage	Not subtyped	Total	Victoria Lineage	Yamagata Lineage	Not subtyped	Total
0-4	0	0	0	0	3	0	0	3 (9%)
5-17	0	0	0	0	12	3	0	15 (44%)
18-24	0	0	0	0	4	1	0	5 (15%)
25-49	0	0	0	0	5	3	0	8 (24%)
50-64	0	0	0	0	1	0	0	1 (3%)
>64	0	0	0	0	0	1	1	2 (6%)
Total	0	0	0	0	25	8	1	34
Pct.					74%	24%	3%	

Table 1 and 2 Notes: Cell counts of three or less are sometimes suppressed to protect confidentiality. Totals by age may not add up to totals by subtype/lineage due to missing age information. Only cases of Iowa residents are included. Specimens listed as "not subtyped" may be pending or were not able to be subtyped due to weak positive lab results. This can be due to poor collection, timing of collection or stage of infection.



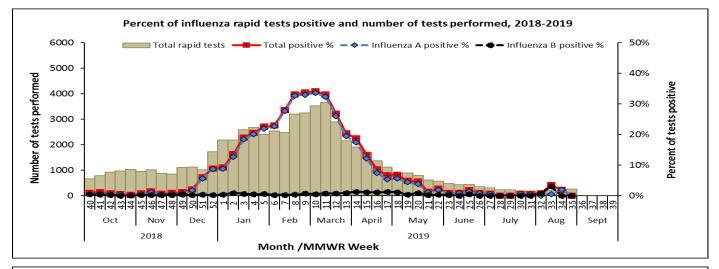
Rapid influenza and RSV test surveillance:

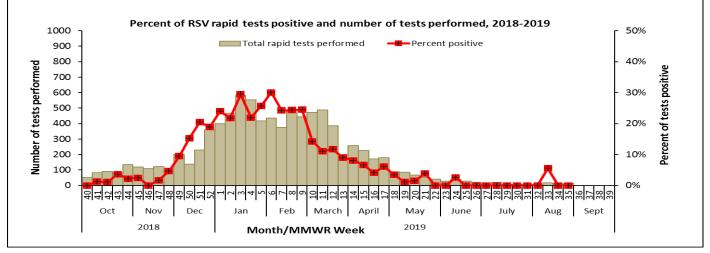
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory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

REGION	RAPID IN	FLUENZA	TESTS – CURR	RAPID RSV TESTS – CURRENT MONTH			
REGION	Tested	Flu A	Flu B	% Positive	Tested	Positive	% Positive
Region 1 (Central)	173	0	2	1	5	0	0
Region 2 (NE)	14	1	0	7	11	0	0
Region 3 (NW)	17	0	0	0	12	1	8
Region 4 (SW)	49	1	0	2	6	0	0
Region 5 (SE)	27	0	1	4	6	0	0
Region 6 (Eastern)	522	3	4	1	12	0	0
Total	802	5	7	2	52	2	2

Note: see map in the later section for the counties in each region.





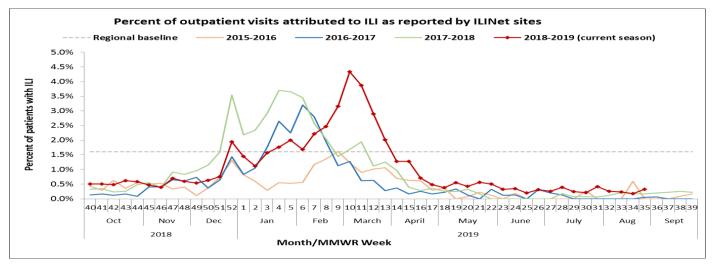
Outpatient health care provider surveillance program (ILINet):

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 Andy Weigel at 515-322-1937 or andy.weigel@idph.iowa.gov for more information.

Week	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64	Total ILI	ILI Percent
Week 32, ending Aug 10	6	1	2	0	0	9	0.26
Week 33, ending Aug 17	2	4	1	2	0	9	0.23
Week 34, ending Aug 24	4	3	0	1	0	8	0.18
Week 35, ending Aug 31	8	7	1	0	1	17	0.18
Total	20	15	4	3	1	43	0.25

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

Note: Influenza-like Illness is defined as a fever of ≥100° F as well as cough and/or sore throat.

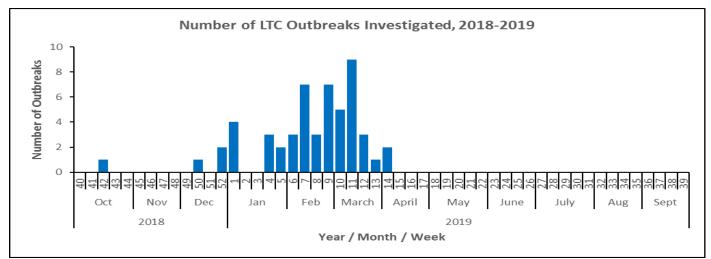


Long-term Care Outbreaks:

REGION	CURRENT MONTH	CUMULATIVE (9/30/18– CURRENT MONTH)
Region 1 (Central)	0	24
Region 2 (NE)	0	2
Region 3 (NW)	0	5
Region 4 (SW)	0	7
Region 5 (SE)	0	7
Region 6 (Eastern)	0	8
Total	0	53

Table 6: Number of long-term care outbreaks investigated

Note: see map in the next section for the counties in each region.

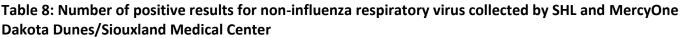


Iowa Influenza Region Map

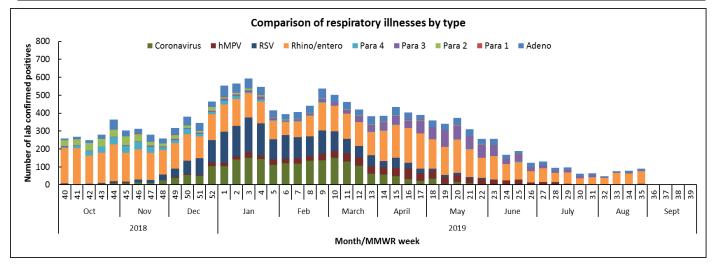


Non-influenza respiratory viruses:

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 noninfluenza virus tests reported from MercyOne Dakota Dunes Medical Laboratories with MercyOne Siouxland 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.



Viruses	CURRENT MONTH	CUMULATIVE (9/30/18–CURRENT MONTH)
Adenovirus	34	1515
Parainfluenza Virus Type 1	3	41
Parainfluenza Virus Type 2	1	453
Parainfluenza Virus Type 3	10	1079
Parainfluenza Virus Type 4	4	421
Rhinovirus/Enterovirus	229	6117
Respiratory syncytial virus (RSV)	6	2282
Human metapneumovirus (hMPV)	6	935
Coronavirus	0	2176
Total	293	15019



Other resources:

Vaccine:

Influenza vaccine recommendation: <u>idph.iowa.gov/immtb/immunization/vaccine</u> CDC vaccine information: <u>www.cdc.gov/flu/faq/flu-vaccine-types.htm</u> Vaccine finder: <u>http://vaccinefinder.org/</u>

Neighboring states' influenza information:

Illinois: www.dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenzasurveillance#publications 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