



Iowa Influenza Surveillance Network (IISN)
Influenza-like Illness (ILI) and Other Respiratory Viruses
Monthly Activity Report
September 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	1% (23/2109)
Percent of RSV rapid tests positive	0% (0/156)
Percent of outpatient visits for ILI	0.29% (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.

Iowa statewide activity summary:

Iowa influenza activity was low this month. The State Hygienic Laboratory detected six influenza A(H1N1)pdm09, five influenza A(H3) and two influenza B(Victoria lineage) viruses from submitted samples. The proportion of outpatient visits due to influenza-like illness (ILI) is 0.29%, which is below the regional baseline of 1.6%. 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: 622 rhinovirus/enterovirus and 63 adenovirus.

*****Note that this data is included in the 2018-2019 influenza season (09/30/18-09/28/19). The weekly reports will begin again this Friday (10/11/19) for the start of the 2019-2020 season.*****

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/](http://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.

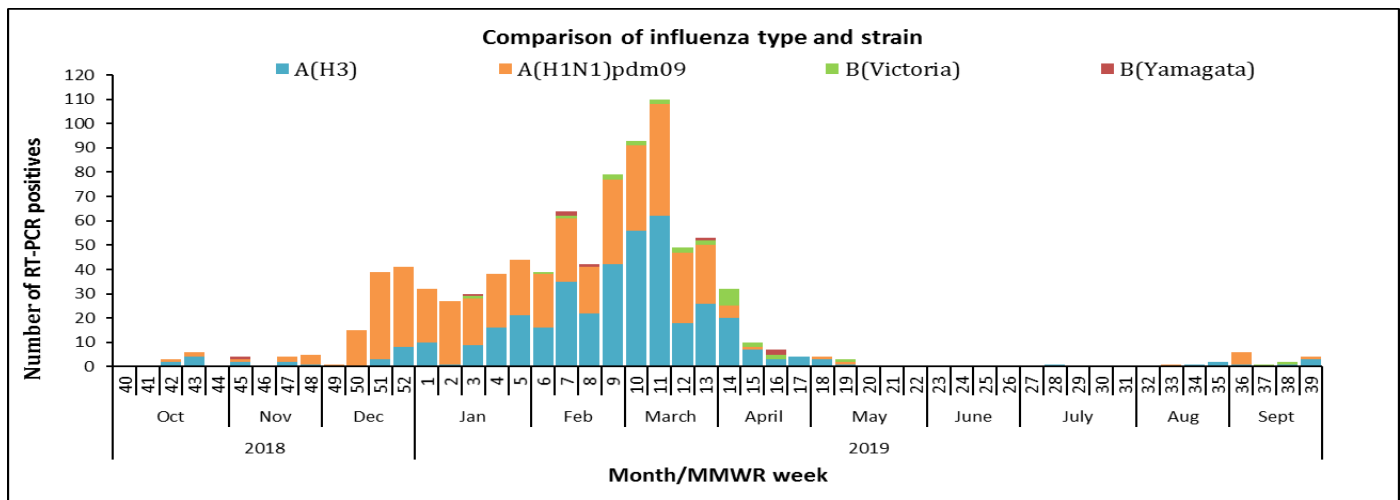
Table 1: Influenza A viruses detected by SHL by age group

Age Group	CURRENT MONTH				CUMULATIVE (9/30/18– CURRENT MONTH)			
	A(H1N1) pdm09	A(H3)	Not subtyped	Total	A(H1N1) pdm09	A(H3)	Not subtyped	Total
0-4	2	0	0	2 (18%)	76	20	0	96 (11%)
5-17	0	1	0	1 (9%)	73	50	1	124 (14%)
18-24	1	0	0	1 (9%)	32	100	2	134 (15%)
25-49	2	2	0	4 (36%)	92	35	2	129 (15%)
50-64	1	2	0	3 (27%)	100	43	3	146 (17%)
>64	0	0	0	0	85	155	11	251 (29%)
Total	6	5	0	11	458	403	19	880
Pct.	55%	45%	0%		52%	46%	2%	

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

Age Group	CURRENT MONTH				CUMULATIVE (9/30/18– CURRENT MONTH)			
	Victoria Lineage	Yamagata Lineage	Not subtyped	Total	Victoria Lineage	Yamagata Lineage	Not subtyped	Total
0-4	2	0	0	2 (100%)	5	0	0	5 (14%)
5-17	0	0	0	0	12	3	0	15 (42%)
18-24	0	0	0	0	4	1	0	5 (14%)
25-49	0	0	0	0	5	3	0	8 (22%)
50-64	0	0	0	0	1	0	0	1 (3%)
>64	0	0	0	0	0	1	1	2 (6%)
Total	2	0	0	2	27	8	1	36
Pct.	100%	--	--		75%	22%	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.



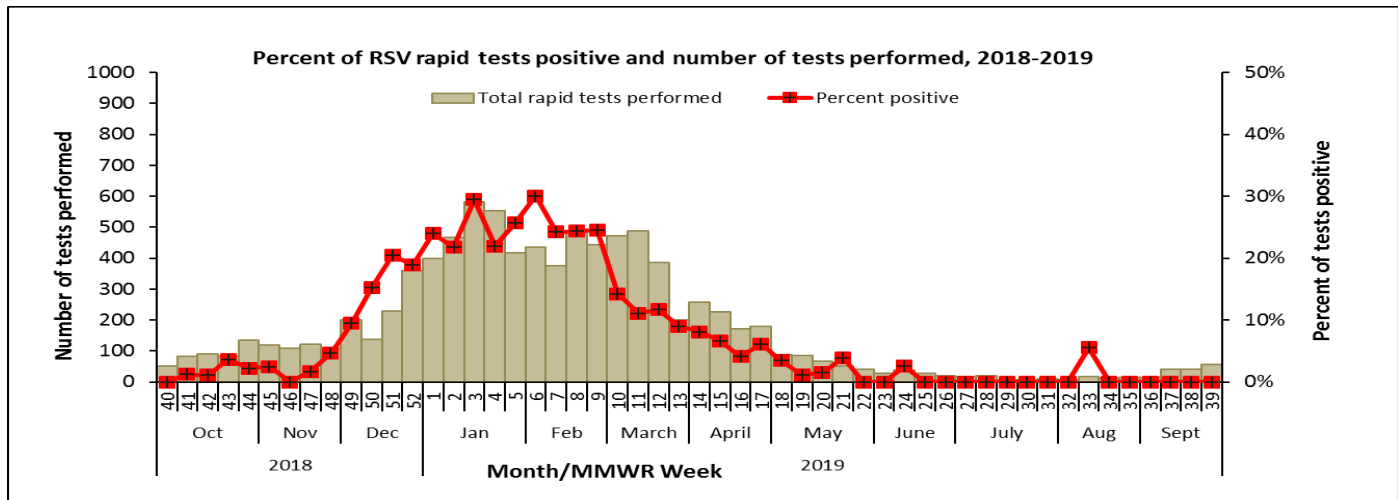
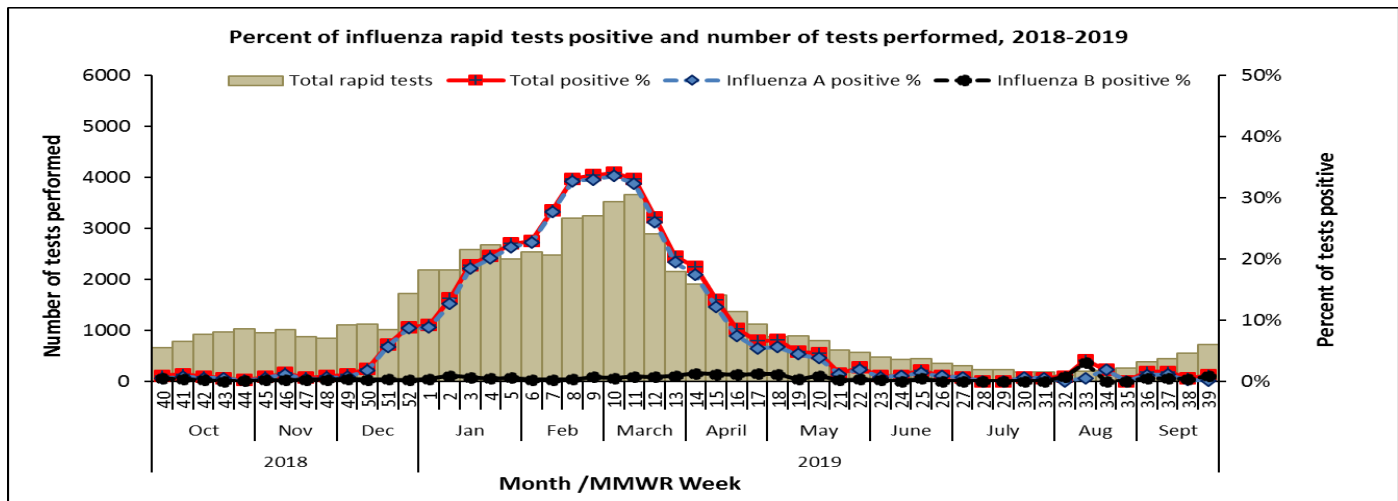
Rapid influenza and RSV test surveillance:

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 INFLUENZA TESTS – CURRENT MONTH				RAPID RSV TESTS – CURRENT MONTH		
	Tested	Flu A	Flu B	% Positive	Tested	Positive	% Positive
Region 1 (Central)	691	4	7	2	29	0	0
Region 2 (NE)	53	0	1	2	17	0	0
Region 3 (NW)	61	2	0	3	24	0	0
Region 4 (SW)	110	3	2	5	13	0	0
Region 5 (SE)	114	0	0	0	38	0	0
Region 6 (Eastern)	1080	2	2	0	35	0	0
Total	2109	11	12	1	156	0	0

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



Outpatient health care provider surveillance program (ILINet):

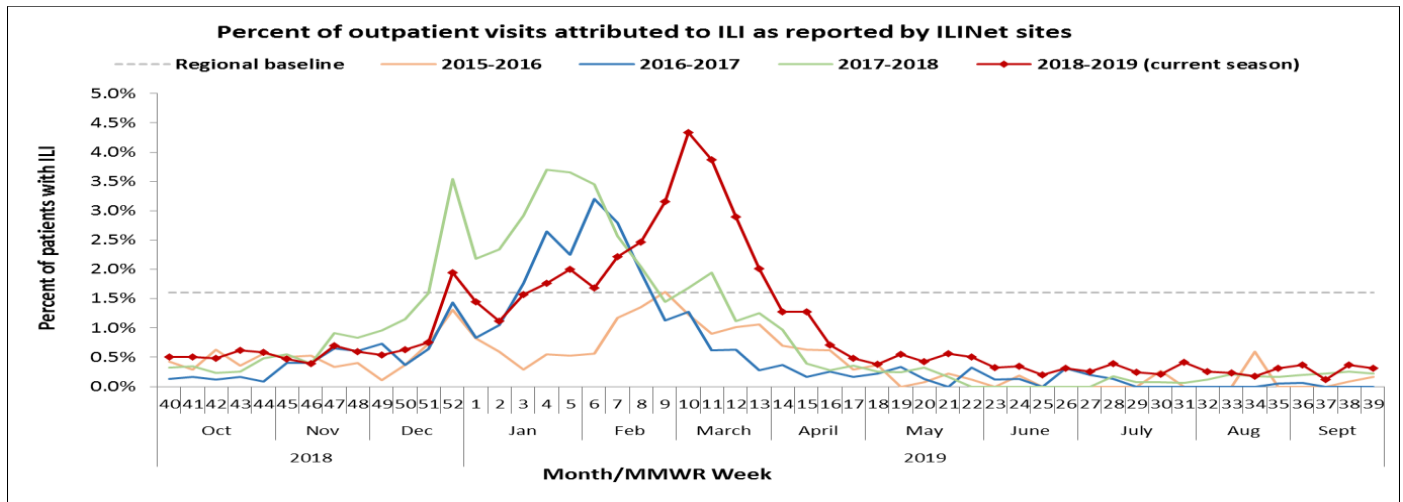
Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each

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.

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

Week	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64	Total ILI	ILI Percent
Week 36, ending Sep 7	7	9	0	0	1	17	0.37
Week 37, ending Sep 14	1	3	2	1	0	7	0.12
Week 38, ending Sep 21	10	6	4	1	0	21	0.37
Week 39, ending Sep 28	3	12	2	2	0	19	0.31
Total	21	30	8	4	1	64	0.29

Note: Influenza-like illness is defined as a fever of $\geq 100^{\circ}$ F as well as cough and/or sore throat.

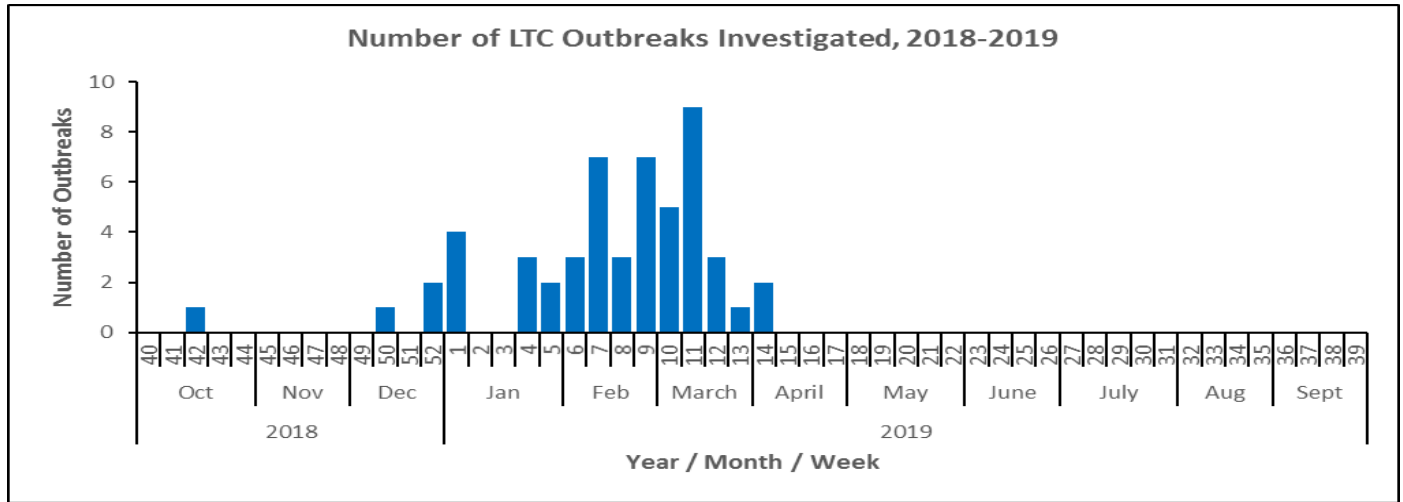


Long-term Care Outbreaks:

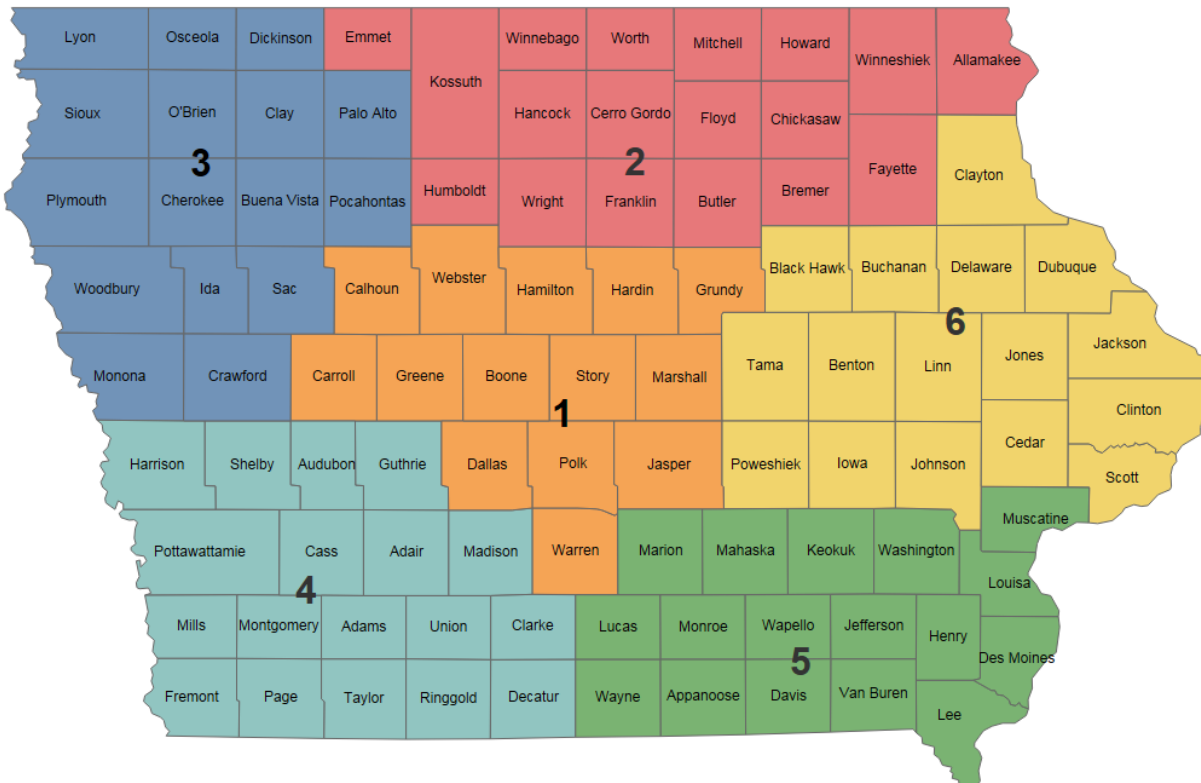
Table 6: Number of long-term care outbreaks investigated

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

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



Iowa Influenza Region Map

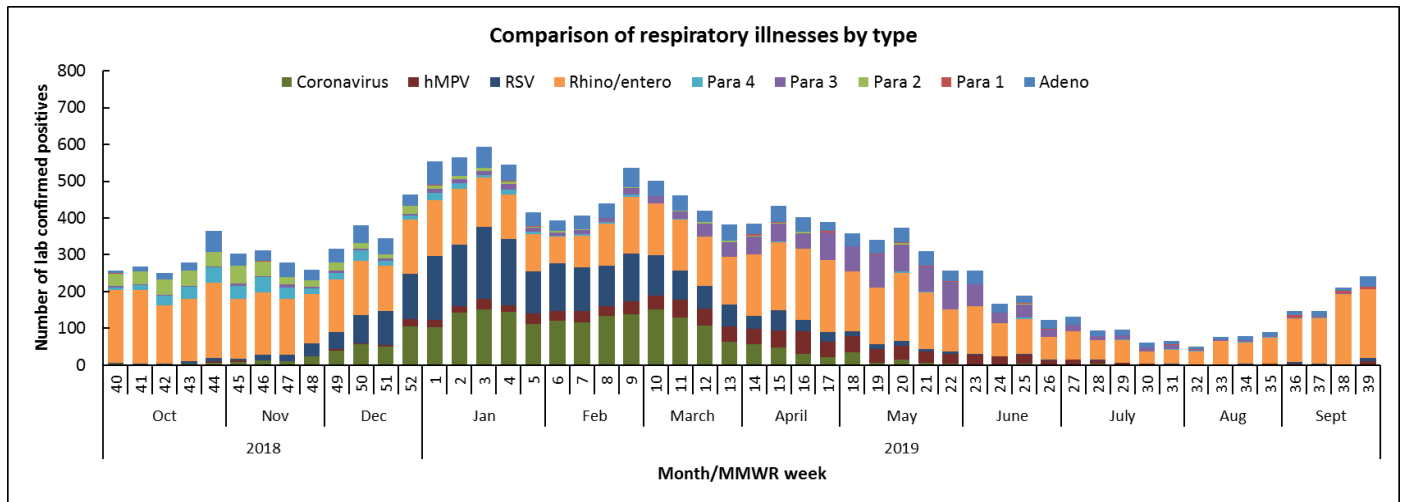


Non-influenza respiratory viruses:

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 non-influenza 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.

Table 8: Number of positive results for non-influenza respiratory virus collected by SHL and MercyOne Dakota Dunes/Siouxland Medical Center

Viruses	CURRENT MONTH	CUMULATIVE (9/30/18–CURRENT MONTH)
Adenovirus	63	1578
Parainfluenza Virus Type 1	21	64
Parainfluenza Virus Type 2	1	454
Parainfluenza Virus Type 3	4	1083
Parainfluenza Virus Type 4	2	423
Rhinovirus/Enterovirus	622	6739
Respiratory syncytial virus (RSV)	16	2298
Human metapneumovirus (hMPV)	13	948
Coronavirus	4	2180
Total	746	15767



Other resources:

Vaccine:

Influenza vaccine recommendation: idph.iowa.gov/imm/tb/immunization/influenza/recommendations

CDC vaccine information: www.cdc.gov/flu/fag/flu-vaccine-types.htm

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

Neighboring states' influenza information:

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