

Delaware Weekly Influenza Report MMWR Week 11 (March 10 - 16, 2019) **Delaware Division of Public Health**

National Influenza Synopsis 2018-2019:

National data are updated Friday of each week. Please visit http://www.cdc.gov/flu/weeklv/ for the most current information. During MMWR Week 11 (March 10 - 16, 2019) influenza activity remains elevated in the United States. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate. Geographic spread during week 11 is: Widespread influenza activity was reported by 44 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio. Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Virginia, Washington, Wisconsin and Wyoming). Regional influenza activity was reported by Puerto Rico and four states (Nebraska, Tennessee, Texas and West Virginia). Local influenza activity was reported by the District of Columbia and two states (Hawaii and Vermont). Sporadic influenza activity was reported by the U.S. Virgin Islands. Guam did not report. Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2018-2019:

During MMWR Week 11 there were 466 laboratory-confirmed cases of influenza reported among Delaware residents, bringing the total to 5.551 for the 2018-2019 season. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in Delaware show ILI remains at 1.3%, below the 2018-2019 baseline of 2.0%. Nationally, ILI remains at 4.4%, above the national baseline of 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 11:

Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at Widespread least half the regions of the state with recent laboratory evidence of influenza in the state. Influenza-like illness (ILI) is defined as patients presenting with fever of 100° F or greater, cough and/or sore throat in the absence of a known cause other than influenza. No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.

Sporadic: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.

Regional: Outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.³

Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

¹ 2018-2019 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 2.0%.

² Laboratory-confirmed case = case confirmed by viral culture or PCR.

³ Region = population under surveillance in a defined geographical subdivision of a state. Regions typically include several counties. Regional doesn't apply to states with < four counties.

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Summary of International Influenza Activity

	rmed Flu s by Subtype / lge	Wks 40-49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	YTD	YTD Total	YTD County %
	A / 2009 H1N1	38	26	42	36	43	33	47	55	50	39	24	42	24	21	26	546		
	A / 2012 H3N2	3	2	5	5	4	0	4	7	26	37	59	92	74	38	46	402		
BE	A / no subtype	140	68	132	182	155	130	196	253	347	539	502	542	445	459	377	4,467		
STATEWIDE	Co-infection	2	0	0	0	0	0	0	1	0	0	0	1	0	1	0	5	5,551	
TAT	B / Yamagata	3	0	0	0	0	0	0	0	0	0	1	0	0	1	0	5		
ò	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3		
	B / no lineage	2	2	0	1	4	4	8	6	4	16	14	11	10	26	15	123		
	A / 2009 H1N1	23	21	31	24	29	26	32	39	34	24	16	20	10	8	11	348		
	A / 2012 H3N2	1	2	3	5	3	0	3	6	16	27	36	71	52	26	24	275		
< tle	A / no subtype	35	27	41	55	34	52	67	104	131	209	175	176	142	130	131	1,509		
New Castle County	Co-infection	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	2,150	38.7%
န္ခရိ	B / Yamagata	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1		
2	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2		
	B / no lineage	0	1	0	1	1	0	0	0	1	0	1	2	5	0	1	13		
	A / 2009 H1N1	13	4	6	6	6	2	6	9	10	15	3	12	10	8	7	117		
	A / 2012 H3N2	2	0	2	0	1	0	0	0	4	6	16	14	13	10	10	78		
누순	A / no subtype	83	27	48	50	47	20	35	51	63	133	103	141	132	138	116	1,187		
Kent County	Co-infection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,432	25.8%
0	B / Yamagata	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B / no lineage	0	0	0	0	0	2	7	4	2	13	10	2	2	4	1	47		
	A / 2009 H1N1	2	1	5	6	8	5	9	7	6	0	5	10	4	5	8	81		
	A / 2012 H3N2	0	0	0	0	0	0	1	1	6	4	7	7	9	2	12	49		
rty ity	A / no subtype	22	14	43	77	74	58	94	98	153	197	224	225	171	191	130	1,771		
Sussex County	Co-infection	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	1,969	35.5%
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	B / Yamagata	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		
	B / Victoria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
	B / no lineage	2	1	0	0	3	2	1	2	1	3	3	7	3	22	13	63		

Table 1a. Influenza positive¹ cases reported² statewide and county by subtype (A) or lineage (B)³, Delaware 2018-19

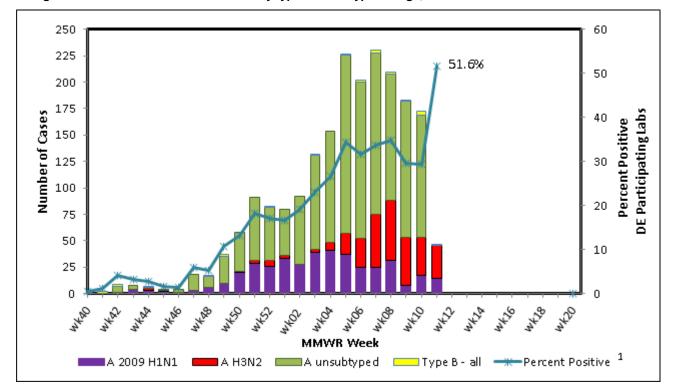
	rmed Flu s by Age o	Wks 40-49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	YTD	YTD Total	YTD County %
	0-4 years	38	25	40	62	58	55	69	77	87	121	128	137	114	97	113	1,221	2	
STATEWIDE	5-24 years	48	31	64	48	28	36	65	91	161	248	223	255	199	187	126	1,809		
TEV	25-49 years	45	20	45	54	48	32	57	71	80	114	81	120	93	87	69	1,016		
STA.	50-64 years	28	16	17	31	33	24	37	46	56	69	81	96	53	80	62	729		
0	65+ years	29	6	13	29	39	20	27	37	43	79	87	80	94	97	96	776		
	0-4 years	12	10	21	28	17	25	25	45	42	58	42	44	45	32	41	487		
y stle	5-24 years	14	18	27	20	12	14	22	40	64	86	73	108	74	45	37	653	2,150	38.7%
ew Castle County	25-49 years	14	11	13	21	16	17	25	25	39	51	36	50	30	24	26	398		
Nev Co	50-64 years	9	9	9	7	8	14	17	20	24	31	34	34	21	32	20	289		
2	65+ years	10	3	5	9	14	8	13	20	13	34	44	34	39	33	44	323		
	0-4 years	19	10	9	8	18	7	13	11	15	34	25	54	39	32	35	329		
	5-24 years	27	10	24	10	7	5	16	19	28	64	52	53	67	55	51	488		
Kent County	25-49 years	27	7	17	13	10	7	13	18	14	35	16	27	25	30	17	276	1,432	25.8%
Š≚	50-64 years	14	2	6	13	6	2	4	9	13	17	17	23	10	17	18	171		
	65+ years	14	2	0	12	13	3	2	7	9	17	22	12	16	26	13	168		
	0-4 years	7	5	10	26	23	23	31	21	30	29	61	39	30	33	37	405	1,969	
ty se	5-24 years	7	3	13	18	9	17	27	32	69	98	98	94	58	87	38	668		35.5%
Sussex County	25-49 years	4	2	15	20	22	8	19	28	27	28	29	43	38	33	26	342		
so	50-64 years	5	5	2	11	19	8	16	17	19	21	30	39	22	31	24	269		
	65+ years	5	1	8	8	12	9	12	10	21	28	21	34	39	38	39	285		

¹ Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health.

² Reports are by the date the laboratory results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

³ The Division of Public Health Laboratory now has the capability to identify lineage for Influenza B. Since some laboratories in the state do not have this capability, those influenza cases are categorized as Influenza B, no lineage identified.

MMWR Week 11 = March 10 - 16, 2019



	italized Flu s by Age o	Wks 40-49	Wk 50	Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	YTD	YTD Total	YTD County %
	0-4 years	1	2	5	4	2	5	5	8	1	12	5	9	9	1	3	72		
STATEWIDE	5-24 years	0	1	5	0	1	2	4	4	5	4	7	4	4	2	4	47		
ΤĒ	25-49 years	7	3	3	4	5	4	7	11	9	8	8	9	8	9	6	101	885	
TA.	50-64 years	7	9	6	14	9	6	12	14	21	17	27	25	10	37	17	231		
0	65+ years	19	5	7	18	24	10	17	30	21	45	48	42	40	54	54	434		
	0-4 years	0	1	1	2	1	3	4	6	1	5	4	7	6	0	1	42		
<pre>%</pre>	5-24 years	0	1	4	0	1	2	2	3	3	2	6	1	4	1	4	34	447	50.5%
ew Castle County	25-49 years	3	2	1	2	2	3	5	5	6	7	5	6	4	3	5	59		
Nev Co	50-64 years	2	6	1	4	2	4	7	6	9	10	14	9	5	18	7	104		
z	65+ years	6	2	4	5	11	7	8	19	6	22	28	19	20	24	27	208		
	0-4 years	0	1	3	1	1	0	0	0	0	4	0	2	0	0	1	13		
	5-24 years	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	4		
Kent County	25-49 years	4	1	2	1	2	0	1	3	2	0	1	1	2	0	1	21	202	22.8%
δ¥	50-64 years	4	1	4	7	3	0	1	4	9	5	8	9	2	8	4	69		
	65+ years	10	2	0	6	7	0	1	6	5	9	11	6	10	13	9	95		
	0-4 years	1	0	1	1	0	2	1	2	0	3	1	0	3	1	1	17		
ity ex	5-24 years	0	0	1	0	0	0	1	1	1	1	1	2	0	1	0	9	236	26.7%
Sussex County	25-49 years	0	0	0	1	1	1	1	3	1	1	2	2	2	6	0	21		
ωO	50-64 years	1	2	1	3	4	2	4	4	3	2	5	7	3	11	6	58		
	65+ years	3	1	3	7	6	3	8	5	10	14	9	17	10	17	18	131		

Table 3. Influenza-related deaths, Delaware 2018-19

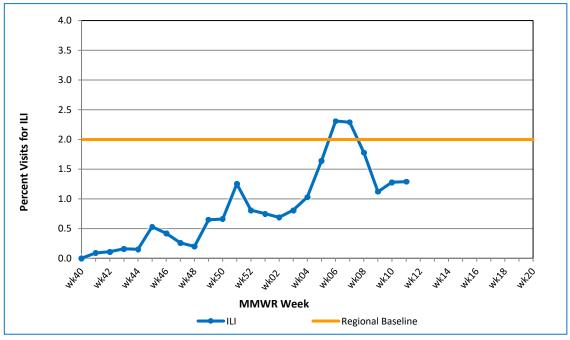
Related	Wks 40-49		Wk 51	Wk 52	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	YTD
Deaths	0	0	0	1	2	2	0	2	4	1	1	2	2	1	1	19

Influenza Season	Total Annual Influenza Cases
2004 – 2005	995
2005 – 2006	541
2006 – 2007	508
2007 – 2008	1,401
2008 – 2009	738
2009 – 2010	2,247
2010 – 2011	1,479
2011 – 2012	267
2012 – 2013	1,781
2013 – 2014	1,842
2014 – 2015	2,390
2015 – 2016	1,842
2016 – 2017	4,590
2017 – 2018	9,051
2018 – 2019 (YTD)	5,551

Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2018-19

U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet) Sentinel Providers

An ILINet (sentinel) provider conducts surveillance for influenza-like illness (ILI) in collaboration with the Delaware Division of Public Health and the Centers for Disease Control and Prevention (CDC). Data reported by ILINet providers, in combination with other influenza surveillance data, provide a national and statewide picture of influenza activity in the U.S.





¹ Ten of 12 sentinel providers reported.

² Regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is in Region 3 that also includes DC, MD, PA, VA and WV.

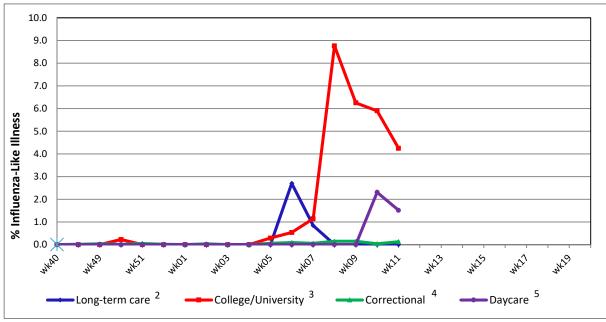


Figure 3. Influenza-like illness reported by influenza surveillance ILI reporting partners¹, Delaware 2018-19

¹ ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities and daycare facilities.

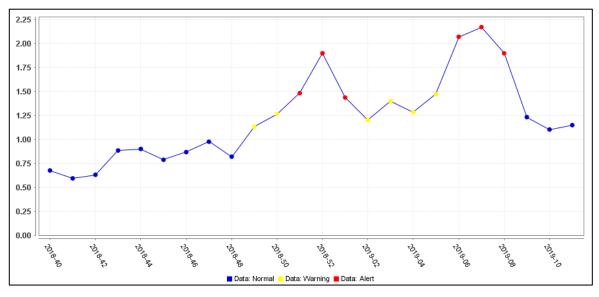
² % ILI= percentage of residents with ILI symptoms. Seven long-term care facilities reported.

 3 % ILI= percentage of student visits for ILI; Two universities reported.

⁴ % ILI= percentage of visits for ILI at the correctional facility; Nine correctional facilities reported.

 5 % ILI= percentage of children absent with ILI; One daycare provider reported.







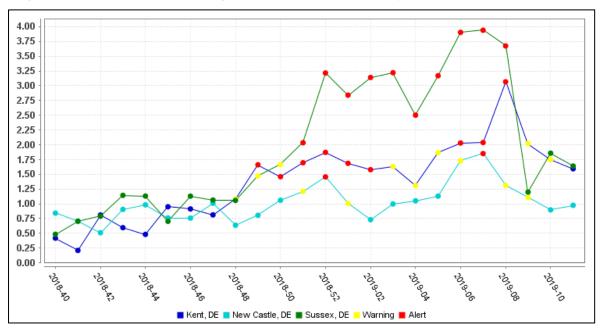
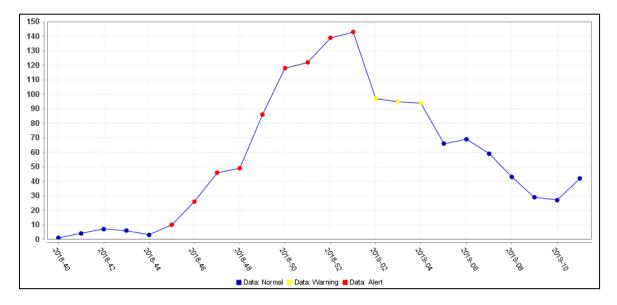
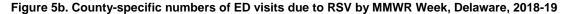
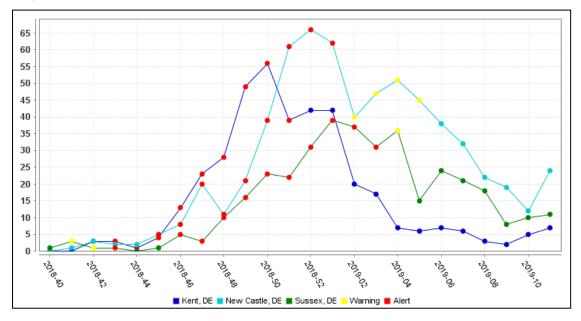


Figure 5a. Number of ED visits due to Respiratory Syncytial Virus (RSV) by MMWR Week, Delaware, 2018-19







Summary of Worldwide Influenza Activity

Worldwide, seasonal influenza A viruses accounted for the majority of detections.

In the temperate zone of the northern hemisphere influenza activity continued to be reported. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels, with the exception of some parts of Australia where influenza activity remained above inter-seasonal levels.

In North America, influenza activity continued but in recent weeks influenza A(H3N2) was the dominant virus, followed by influenza A(H1N1)pdm09.

In the United States, influenza detections decreased slightly but remained elevated, and influenza detections increased in Canada. Influenza A(H3N2), influenza A(H1N1)pdm09 and influenza B co-circulated. In Mexico, influenza activity continued low and decreasing with a predominance of influenza A(H1N1)pdm09.

In the Caribbean, Central American countries, and the tropical countries of South America, influenza and RSV activity were low in general.

In Europe, influenza activity decreased across the continent, with two thirds of countries still above baseline for influenza-like illness activity. Influenza A viruses co-circulated.

In North Africa, influenza activity was still reported in some countries.

In Western Asia, influenza activity appeared to decrease overall, with exception of some countries where activity remained elevated. In East Asia, influenza activity appeared to decrease overall, with influenza A(H1N1)pdm09 virus predominating. In Southern Asia, influenza activity remained elevated overall with influenza A viruses predominating.

Reference: World Health Organization (WHO), 2019. Influenza Update number 337 (3/18/2019). Retrieved 3/22/19 from http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ Reports are updated biweekly.

NOTE: Data provided do not reflect the total number of individuals who have been infected with the influenza virus in Delaware during the reporting period due to the following factors:

- Many people ill with influenza-like symptoms do not seek medical care.
- > Many who do seek medical care are not tested for influenza.
- The Delaware Public Health Laboratory is limited by capacity to processing a maximum of three specimens per day from each reporting entity.

The Delaware Division of Public Health (DPH) is committed to serving you better by providing the most accurate, up-to-date influenza data available.

- For general information on influenza, visit <u>flu.delaware.gov</u> or <u>http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html.</u>
- For specific information on DPH flu clinics, visit <u>http://dhss.delaware.gov/dhss/dph/fluclinics.html</u>.
- For questions on Delaware's weekly flu report, call the DPH Office of Infectious Disease Epidemiology: 302-744-4990.
- ➢ For questions regarding influenza vaccination, please call 302-744-1060.