

Delaware Weekly Influenza Report MMWR WEEK 15 (APRIL 5, 2020- April 11, 2020) Delaware Division of Public Health

National Influenza Synopsis 2019-2020:

National data are updated Friday of each week. Please visit http://www.cdc.gov/flu/weekly/ for the most current information. Geographic spread of influenza during MMWR WEEK 15 (April 5, 2020- April 11, 2020) was reported as follows:

- Sporadic Influenza Activity was reported in the U.S. Virgin Islands and 19 states (Alabama, Alaska, Arkansas, California, Connecticut, Florida, Hawaii, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, New York, North Dakota, South Dakota, Utah, Vermont and West Virginia).
- Local Influenza Activity was reported in the District of Columbia and 11 states (Colorado, Illinois, Kansas, Massachusetts, Michigan, Montana, Oregon, Pennsylvania, Texas, Washington and Wyoming)
- Regional Influenza Activity was reported in Puerto Rico and 13 states (Arizona, Georgia, Idaho, Maine, Nevada, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee and Wisconsin)
- Widespread Influenza Activity was reported in 3 states (Indiana, Louisiana, and Maryland)
- No Activity four states (Delaware, New Mexico, Rhode Island and Virginia)
- Guam did not report.

Summary of International Influenza Activity:

- In the temperate zone of the northern hemisphere, influenza activity appeared to decrease overall.
 - In North America, influenza activity continued to decline but influenza-like illness (ILI) levels remained elevated.
 - In Europe, influenza activity decreased in most countries, but increased ILI activity was reported in some countries.
 - o In Central Asia, influenza activity was low.
 - o In Northern Africa, decreasing influenza activity was reported in Tunisia.
 - o In Western Asia, influenza activity was low in most reporting countries.
 - o In East Asia, ILI and influenza activity returned to baseline levels.
- In the Caribbean and Central American countries, influenza activity was reported in some countries. In Mexico, influenza activity continued to decrease, with influenza A(H1N1)pdm09 and B-Victoria lineage viruses co-circulating.
- In tropical South American countries, influenza activity decreased from the previous reporting period.
- In tropical Africa, influenza detections were low in most reporting countries.
- In Southern Asia, increased ILI activity was reported in Bhutan.
- In South East Asia, influenza activity decreased across reporting countries.
- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels.
- Worldwide, seasonal influenza A viruses accounted for the majority of detections.

Reference: World Health Organization (WHO), 2017. Influenza Update number 364 (03162020). Retrieved February 16, 2020, from http://www.who.int/influenza/surveillance monitoring/updates/latest update GIP surveillance/en/_ Reports are updated biweekly.

Delaware Influenza Surveillance 2019-2020:

During MMWR WEEK 15, there were 0 laboratory-confirmed cases of influenza reported among Delaware Residents. Reports of influenza-like-illness (ILI) received from participating providers, facilities, and institutions in Delaware show ILI is 0.0 % compared to Delaware's 2019-2020 baseline of 1.9%. Nationally, 2.9% of visits to a healthcare provider were for ILI, which is a decrease from last week, and is still above the 2019-2020 national baseline of 2.4%. All regions are above baseline, but hospitalization rates differ by age group, with high rates among children and young adults.

Level of Influenza Activity in Delaware, MMWR WEEK 15:

No Activity:

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.

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.

CDC Definitions:

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

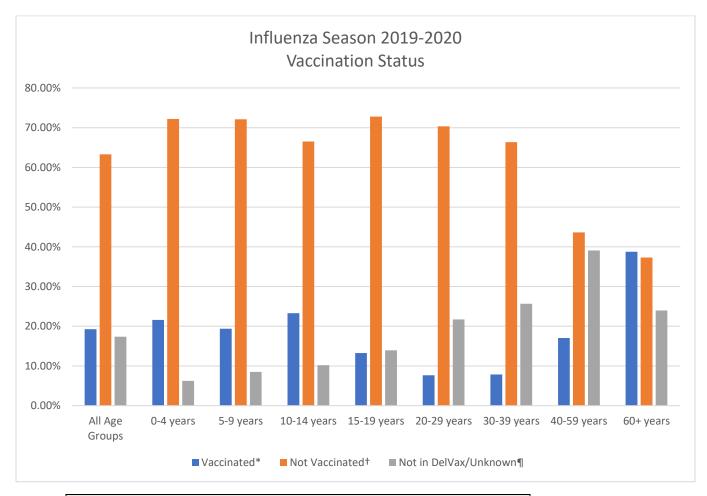
Regional: Outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.³

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.

Summary of Figures for the MMWR WEEK 15 Report:

- **Table 1:** Influenza Season 2019-2020 Vaccination Status
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- Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2019-2020 Influenza Season
- **Table 2:** Comparison of the 2018-2019 MMWR WEEK 15 and the 2019-2020 MMWR WEEK 15 Influenza-related Hospitalizations and Deaths
- Table 3: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2019-20
- **Figure 2:** Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2019-2020
- **Figure 3A:** Percentage of Emergency Department (ED) Visits Due to ILI/Influenza by MMWR Week, Delaware 2019-2020
- Figure 3B: County-Specific Percentage of ED visits Due to ILI/Influenza by MMRW Week, Delaware 2019-2020

Table 1: Influenza Season 2019-2020 – "Vaccination Status of Confirmed Cases"



*Received influenza vaccination this season per DelVax

†Not vaccinated for influenza this season per DelVax

¶No record in the Delaware Immunization Registry (DelVax)

Table 1A: Comparison of the 2018-2019 MMWR WEEK 15 and the 2019-2020 MMWR WEEK 15 Confirmed¹ Influenza Cases Reported Statewide by County and Age Group

Confirmed Flu Cases by Age Group		2018-2019 Influenza Season						2019-2020 Influenza Season					
		WEEK 15	Total Counts	County Percentage (%)	YTD ²	YTD County Percentage (%)	WEEK 15	Total Counts	County Percentage (%)	YTD ²	YTD County Percentage (%)		
STATEWIDE	0-4	23	111		6318								
	5-9	7											
	10-14	8								7075			
	15-19	3						0					
	20-29	13											
	30-39	6											
	40-59	16											
	60+	35											
New Castle County	0-4	7	31	27.93	2403	38.03							
	5-9	2											
	10-14	1											
	15-19	1						0	0	3186	45.04		
	20-29	4								3100	45.04		
	30-39	0											
	40-59	5											
	60+	11											
	0-4	5	30	27.03	1670	26.43							
	5-9	5											
nty	10-14	5						0	0	1810	25.58		
Kent County	15-19	2											
Ħ	20-29	2											
Ke	30-39	3											
	40-59	5											
	60+	3											
Sussex County	0-4	11	50		2245	35.53		0	0	2078	29.37		
	5-9	0		45.05									
	10-14	2											
	15-19	0											
	20-29	7											
	30-39	3											
	40-59	6											
	60+	21											

¹Influenza Cases are confirmed via PCR testing

²YTD stands for "Year to Date" and represents the cumulative number of cases through the current MMWR Week being assessed for the 2018-19 and 2019-20 influenza seasons, respectively.

Table 1B: Comparison of the 2018-2019 MMWR WEEK 15 and the 2019-2020 MMWR WEEK 15 Confirmed¹ Influenza Cases Reported Statewide by County and subtype/lineage

Confi	irmed Flu	2018-2019 In	fluenza Season	2019-2020 Influenza Season				
Commined Fid Cases by Subtype / Lineage		WEEK 15	Total Counts	WEEK 15	Total Counts			
DE	A / 2009 H1N1	3						
	A / 2012 H3N2	22						
	A / no subtype	77						
EWI	Co-infection	0	111		0			
STATEWIDE	B / Yamagata	0						
32	B / Victoria	1						
	B / no lineage	8	-					
	A / 2009 H1N1							
	A / 2012 H3N2	11						
<u> </u>	A / no subtype	20						
New Castle County	Co-infection		31		0			
New Co	B / Yamagata							
	B / Victoria		-					
	B / no lineage							
	A / 2009 H1N1	1						
	A / 2012 H3N2	4	-					
t t	A / no subtype	24	30					
Kent County	Co-infection ²				0			
	B / Yamagata							
	B / Victoria							
	B / no lineage	1						
Sussex County	A / 2009 H1N1	2						
	A / 2012 H3N2	7	_					
	A / no subtype	33						
	Co-infection		50		0			
	B / Yamagata		_					
	B / Victoria	1	_					
	B/ no lineage	7						

¹Influenza Cases are confirmed via PCR testing

Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2019-2020 Influenza Season

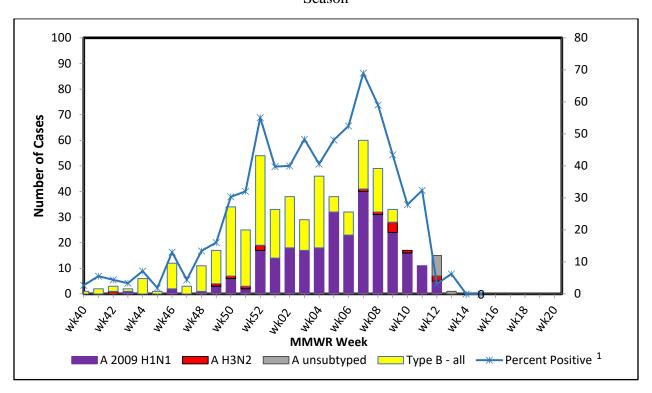


Figure 1: During MMWR WEEK 15 for the 2019-2020 Influenza season, there was 0 confirmed case of Influenza reported by ILINet providers. The percent positive for samples tested was 0 %.

¹Percent Positive represents the amount of specimens that tested positive for influenza out of all samples tested for that MMWR week.

Table 2: Comparison of the 2018-2019 MMWR WEEK 15 and the 2019-2020 MMWR WEEK 15 Influenza-related Hospitalizations and Deaths Statewide

Hospitalizations and Deaths due	2018-2019 Influenza Season				2019-2020 Influenza Season				
to Influenza	WEEK 15	YTD Totals ¹	Percentage of Confirmed Cases (%) ²	YTD Percentage of Confirmed Cases (%) ³	WEEK 15	YTD Totals ¹	Percentage of Confirmed Case (%) ²	YTD Percentage of Confirmed Cases (%) ³	
Hospitalizations	22	867	19.8	13.7	0	362	0	5.11	
Deaths	0	17	0	.26	0	11	0	.15	

¹YTD stands for "Year to Date" and represents the cumulative number of cases through the current MMWR Week that were hospitalized or died

Table 3: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2019-

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	9,050
2018 – 2019	6,387
2019 – 2020 (YTD)	<mark>7,075</mark>

²Percentage of cases confirmed during the single MMWR Week

³Percentage of cases for the cumulative count of confirmed cases through the influenza season to the current MMWR Week.

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 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.

Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2019-2020

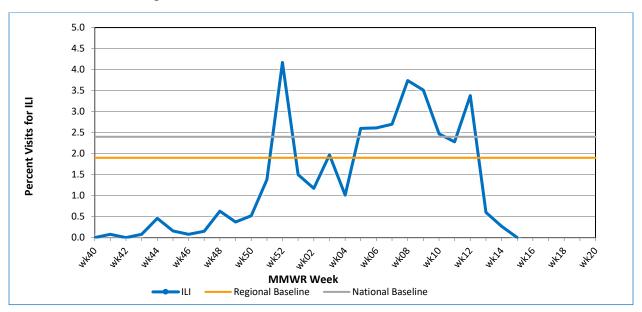


Figure 2: Delaware's regional baseline² for healthcare visits relating to ILI symptoms in the 2019-2020 Influenza Season is 1.9% and the national baseline³ is 2.4%. In MMWR WEEK 15, the amount of ILI related visits reported by sentinel providers increased from .26 % to .0% for WEEK 15.

¹seven of twelve sentinel providers reported

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

³The National baseline is calculated by the CDC using non-influenza weeks from the previous three influenza seasons.

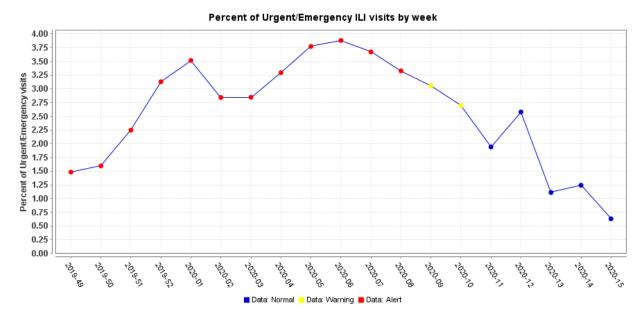


Figure 3A: Syndromic data collected from ESSENCE shows that in the weeks preceding the start of the 2019-2020 Influenza season and through MMWR WEEK 15, there is a decreasing trend in the percentage of ED visits due to ILI/Flu symptoms.

County-Specific Percentage of ED visits Due to ILI/Influenza by MMRW Week, Delaware 2019-20

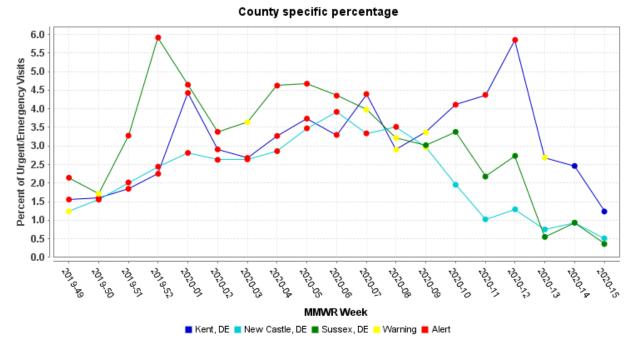


Figure 3B: Syndromic data collected from ESSENCE shows that in the weeks preceding the start of the 2019-2020 Influenza season and through MMWR WEEK 15 stratified by Delaware's three counties.

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 http://dhss.delaware.gov/dhss/dph/fluclinics.html.
- For questions on Delaware's weekly flu report, call the DPH Office of Infectious Disease Epidemiology at 302-744-4990.
- For questions regarding influenza vaccination, please call 302-744-1060.