



Delaware Weekly Influenza Report

MMWR Week 49 (November 29, 2020-December 5, 2020)

Delaware Division of Public Health

National Influenza Synopsis 2020-2021:

National data are updated Friday of each week. Please visit <https://www.cdc.gov/flu/weekly/> for the most current information. The percentage of respiratory specimens testing positive increased to 0.2% this week. The first national influenza-associated pediatric death occurring during the 2020-2021 season was reported to CDC this week. For this flu season, geographic spread of influenza will not be reported per official CDC communication.

Summary of International Influenza Activity:

- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic have influenced to varying extents health seeking behaviors, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.
- Globally, despite continued or even increased testing for influenza in some countries, influenza activity remained at lower levels than expected for this time of the year.
- In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels, though sporadic influenza detections were reported in some countries.
- In the temperate zones of the southern hemisphere, no influenza detections were reported across countries.
- In the Caribbean and Central American countries, sporadic influenza detections were reported. Severe acute respiratory infection (SARI) activity, likely due to COVID-19, decreased in most reporting countries.
- In tropical South America, there were no influenza detections across reporting countries.
- In tropical Africa, influenza activity was reported in West Africa in Côte d'Ivoire and Niger, and in East Africa in Kenya.
- In Southern Asia, influenza activity of predominately influenza A(H3N2) was reported in Bangladesh and India in recent weeks.
- In South East Asia, influenza detections continued to be reported in Cambodia and Lao People's Democratic Republic (PDR).
- Worldwide, of the very low numbers of detections reported, seasonal influenza A(H3N2) viruses accounted for the majority of detections.

Sources:

Centers for Disease Control and Prevention (CDC). 2020. Decreased Influenza Activity During the COVID-19 Pandemic — United States, Australia, Chile, and South Africa, 2020.
https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Delaware Influenza Surveillance 2020-2021:

During MMWR Week 49, there was 2 laboratory-confirmed case of influenza reported among Delaware Residents. Reports of influenza-like-illness (ILI) received from participating providers, facilities, and institutions in Delaware show ILI is 0.81% compared to Delaware’s 2020-2021 baseline of 1.9%. Nationally, 1.6% of visits to a healthcare provider were for ILI, which is below the 2020-2021 national baseline of 2.6%. All regions were below baselines.

Level of Influenza Activity in Delaware, MMWR Week 49:

SPORADIC
<p>CDC Definitions:</p> <p>No Activity: No laboratory-confirmed cases² of influenza and no reported increase in the number of cases of ILI.</p> <p>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.</p> <p>Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.</p> <p>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</p> <p>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.</p> <p><i>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.</i></p>

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 does not apply to states with ≤ four counties.

Summary of Figures for the MMWR Week 49 Report:

	<u>Page</u>
Table 1: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed Influenza Cases Reported Statewide by County and Age Group	4
Table 2: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed Influenza Cases Reported Statewide by Age	5
Table 3: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed Influenza Cases Reported Statewide by County and subtype/lineage	6
Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2020-2021 Influenza Season	7
Table 4: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Influenza-related Hospitalizations and Deaths	7
Table 5: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2020-21	8
Figure 2: Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2020-2021	9
Figure 3: Percentage of Emergency Department (ED) Visits Due to ILI/Influenza by MMWR Week, Delaware 2020-2021	10

Table 1: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed¹ Influenza Cases Reported Statewide by County

Confirmed Flu Cases by County	2019-2020 Influenza Season			2020-2021 Influenza Season		
	Week 49	YTD ²	YTD County Percentage (%)	Week 49	YTD ²	YTD County Percentage (%)
STATEWIDE	65	225	--	2	3	--
New Castle County	32	139	61.78	0	0	0
Kent County	25	61	27.11	1	2	.67
Sussex County	8	25	11.11	1	1	.33

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 2019-20 and 2020-21 influenza seasons, respectively.

Table 2: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed¹ Influenza Cases Reported Statewide by Age

Confirmed Flu Cases by Age Group		2019-2020 Influenza Season					2020-2021 Influenza Season				
		Week 49	Total Counts	County Percentage (%)	YTD ²	YTD County Percentage (%)	Week 49	Total Counts	County Percentage (%)	YTD ²	YTD County Percentage (%)
STATEWIDE	0-4	20	*60	--	225	--		2*	--	3	--
	5-24	28									
	25-49	12									
	50-64	*									
	65+	*									

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 2019-20 and 2020-21 influenza seasons, respectively.

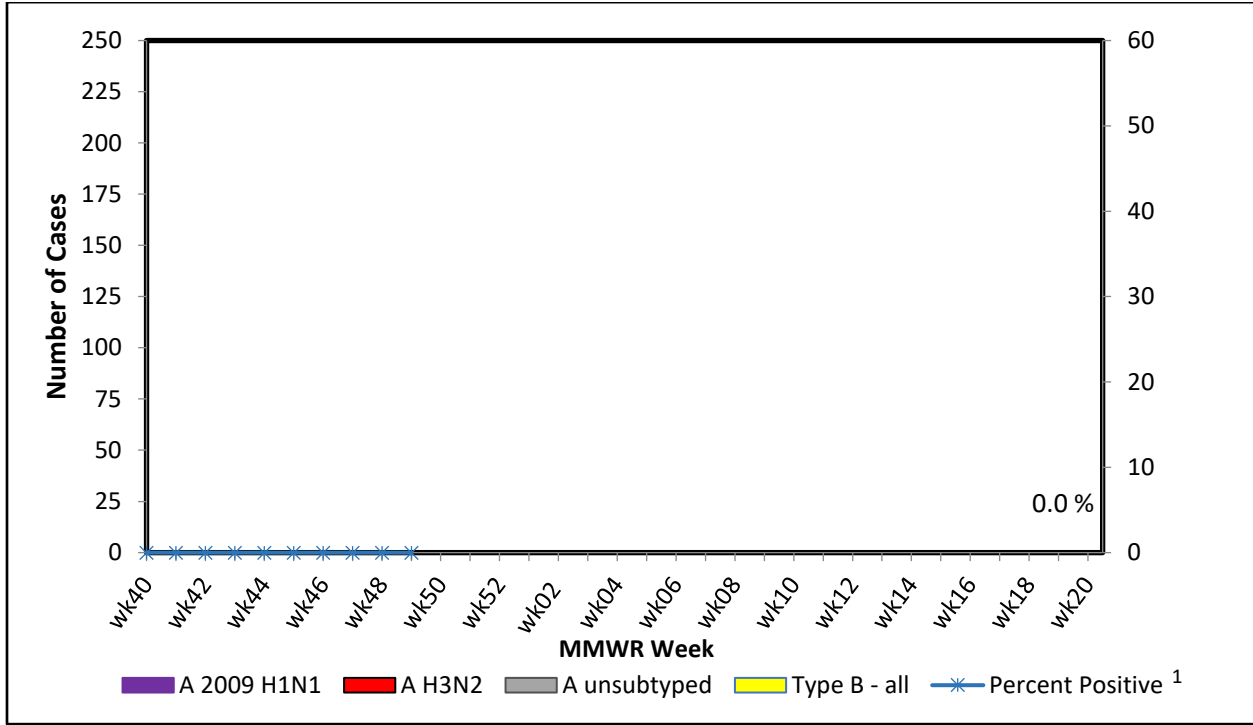
*Cell counts with less than 10 cases are suppressed. Due to suppression guidelines, stratification by age group, within each county, is not shown in the table above.

Table 3: Comparison of the 2019-2020 MMWR Week 49 and the 2020-2021 MMWR Week 49 Confirmed¹ Influenza Cases Reported Statewide by County and subtype/lineage

Confirmed Flu Cases by Subtype / Lineage		2019-2020 Influenza Season		2020-2021 Influenza Season	
		Week 49	Total Counts	Week 49	Total Counts
STATEWIDE	A / 2009 H1N1	2	65	0	3
	A / 2012 H3N2	0		0	
	A / no subtype	5		0	
	Co-infection	1		0	
	B / Yamagata	0		0	
	B / Victoria	11		0	
	B / no lineage	33		3	
New Castle County	A / 2009 H1N1	2	32	0	0
	A / 2012 H3N2	0		0	
	A / no subtype	3		0	
	Co-infection	1		0	
	B / Yamagata	0		0	
	B / Victoria	11		0	
	B / no lineage	17		0	
Kent County	A / 2009 H1N1	0	25	0	2
	A / 2012 H3N2	0		0	
	A / no subtype	0		0	
	Co-infection ²	0		0	
	B / Yamagata	0		0	
	B / Victoria	0		0	
	B / no lineage	15		2	
Sussex County	A / 2009 H1N1	0	8	0	1
	A / 2012 H3N2	0		0	
	A / no subtype	2		0	
	Co-infection	0		0	
	B / Yamagata	0		0	
	B / Victoria	0		0	
	B / no lineage	1		1	

¹Influenza Cases are confirmed via PCR testing

Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2020-2021 Influenza Season



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

During MMWR Week 49 for the 2020-2021 Influenza season, there were **zero** confirmed cases of Influenza reported by ILINet providers.

Table 4: Comparison of the 2019-2020 MMWR Week 40 and the 2020-2021 MMWR Week 49 Influenza-related Hospitalizations and Deaths Statewide

Hospitalizations and Deaths due to Influenza	2019-2020 Influenza Season				2020-2021 Influenza Season			
	Week 49	YTD Totals ¹	Percentage of Confirmed Cases (%) ²	YTD Percentage of Confirmed Cases (%) ³	Week 49	YTD Totals ¹	Percentage of Confirmed Case (%) ²	YTD Percentage of Confirmed Cases (%) ³
Hospitalizations	2	10	3.08	4.44	0	0	0	0
Deaths	0	0	0	0	0	0	0	0

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

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.

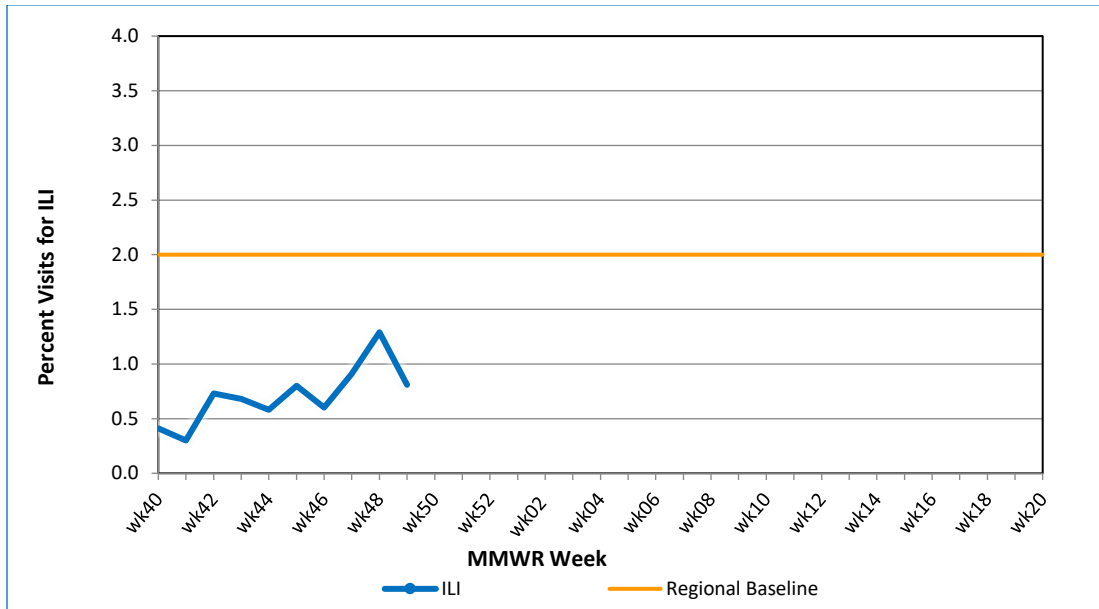
Table 5: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2020-21

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	1,843
2014 – 2015	2,390
2015 – 2016	1,843
2016 – 2017	4,590
2017 – 2018	9,050
2018 – 2019	6,387
2019 – 2020	7,075
2020-2021 (YTD)	3

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.

Figure 2: Percentage of Visits for Influenza-Line Illness Reported by Sentinel Providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2020-2021



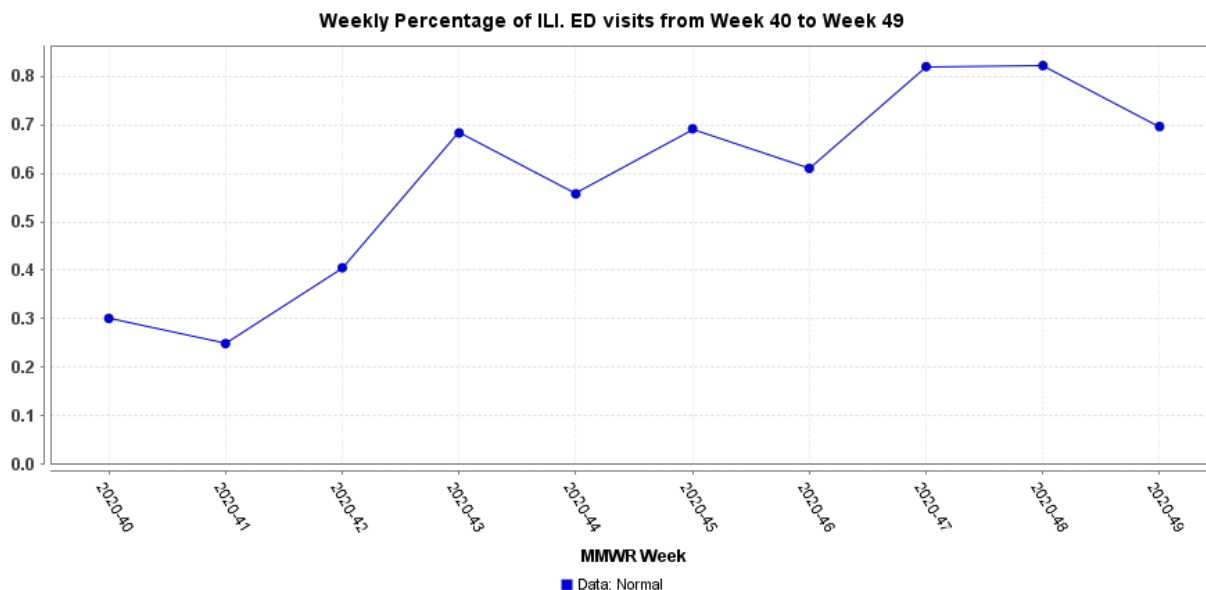
Delaware’s regional baseline² for healthcare visits relating to ILI symptoms in the 2020-2021 Influenza Season is 2.0 % and the national baseline³ is 2.6%. In MMWR Week 49, the amount of ILI related visits reported by sentinel provider was 0.81%.

¹six 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 3: Percentage of Emergency Care Visits Due to ILI/Influenza by MMWR Week 49, Delaware 2020-2021



Syndromic data collected from ESSENCE shows that from Week 40 through Week 49, the percentage of ED visits due to ILI/Flu symptoms has been low. The percentage of ED visits for Week 49 was highest in New Castle county (0.96%) followed by Kent county (0.38%) and Sussex county (0.16%).

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 flu.delaware.gov or <http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html>.
- 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.