



Delaware Weekly Influenza Report

MMWR Week 45 (November 7, 2021-November 13, 2021)

Delaware Division of Public Health

National Influenza Synopsis 2021-2022:

National data are updated Friday of each week. Please visit <https://www.cdc.gov/flu/weekly/> for the most current information. The percentage of national respiratory specimens testing positive was at 0.7% this week. No new influenza-associated pediatric deaths were reported to the CDC this week. The total for the 2021-2022 season is zero influenza associated pediatric deaths.

Summary of International Influenza Activity:

- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has 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 zones of the northern hemisphere, influenza activity remained at inter-seasonal levels. Both influenza A and B were detected, and respiratory syncytial virus (RSV) was increased and higher than in previous years in some countries.
- In the Caribbean and Central American countries, sporadic influenza A and B virus detections, as well as elevated RSV activity were reported in some countries.
- In tropical South America, no influenza detections were reported, however RSV activity remained elevated in some countries.
- In tropical Africa, a few influenza detections of predominately influenza A and some influenza B viruses were reported. Previously increased activity in West African appeared to be decreasing.
- In Southern Asia, the number of influenza virus detections reported was in a similar range to previous seasons with detections of influenza A and B viruses. Previously elevated levels of severe acute respiratory infections (SARI) in some countries appeared to decrease.
- In South-East Asia, few detections of influenza A(H3N2) and influenza B were reported from Myanmar.
- In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels. Elevated RSV activity continued to be reported in some countries.
- Globally, among influenza detections, influenza B viruses predominated.
- National Influenza Centres (NICs) and other national influenza laboratories from 102 countries, areas or territories reported data to FluNet for the time period from 11 October 2021 to 24 October 2021 (data as of 2021-11-05 10:02:16 UTC). The WHO GISRS laboratories tested more than 307999 specimens during that time period. 2199 were positive for influenza viruses, of which 875 (39.8%) were typed as influenza A and 1324 (60.2%) as influenza B. Of the sub-typed influenza, A viruses, 186 (36.2%) were influenza A(H1N1) pdm09 and 328 (63.8%) were influenza A(H3N2). Of the characterized B viruses, 1 (0.1%) belonged to the B-Yamagata lineage and 1176 (99.9%) to the B-Victoria lineage.

Sources:

Centers for Disease Control and Prevention (CDC) <https://www.cdc.gov/flu/weekly/index.htm>

WHO <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update>

Delaware Influenza Surveillance 2021-2022:

During MMWR Week 45, there was 3 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 0.68% compared to Delaware’s 2021-2022 baseline of 2.0%. Nationally, 2.1% of visits to a healthcare provider were for ILI, which is below the 2021-2022 national baseline of 2.5%. All regions were below baselines.

Past Delaware Influenza Surveillance from 2020-2021:

Last Season, during MMWR Week 45, there was 1 laboratory confirmed cases of influenza among Delaware Residents. The ILI rate was 0.80% compared to Delaware’s 2020-2021 baseline of 1.9%. The rate nationally for the 2020-2021 season, MMWR Week 45, was 1.5% of visits to a healthcare provider were for ILI compared to the 2020-2021 national baseline of 2.6%.

Past Delaware Influenza Surveillance from 2019-2020:

The previous season, during MMWR Week 45, there was 12 laboratory confirmed cases of influenza among Delaware Residents. The ILI rate was 0.16% compared to Delaware’s 2019-2020 baseline of 1.9%. The rate nationally for the 2019-2020 season, MMWR Week 45, was 2.3% of visits to a healthcare provider were for ILI compared to the 2019-2020 national baseline of 2.4%.

Level of Influenza Activity in Delaware, MMWR Week 45:

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.</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.

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Table 1: Comparison the MMWR Week 45 of the 2019-2020 Influenza Season, 2020-2021 Influenza Season, and current 2021-2022 Influenza Season Confirmed¹ Influenza Cases Reported Statewide by County

Confirmed Flu Cases by County	2019-2020 Influenza Season			2020-2021 Influenza Season			Current 2021-2022 Influenza Season		
	Week 45	YTD ²	YTD County Percentage (%)	Week 45	YTD ²	YTD County Percentage (%)	Week 45	YTD ²	YTD County Percentage (%)
STATEWIDE	12	46	--	1	1	--	3	7	--
New Castle County	7	28	60.87%	0	0	0	0	2	28.57%
Kent County	1	6	1304%	1	0	100%	1	2	28.57%
Sussex County	4	12	26.09%	0	5	0	2	3	42.86%

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 2020-21 and 2021-22 influenza seasons, respectively.

³There may be technical discrepancies of reporting numbers week to week due to retroactive reporting of cases

Table 2: Comparison of MMWR Week 45 of the 2019-2020 Influenza Season, 2020-2021 Influenza Season, and current 2021-2022 Influenza Season Confirmed¹ Influenza Cases Reported Statewide by Age

Confirmed Flu Cases by Age Group		2019-2020 Influenza Season			2020-2021 Influenza Season			Current 2021-2022 Influenza Season		
		Week 45	Total Count	YTD ²	Week 45	Total Count	YTD ²	Week 45	Total Count	YTD ²
STATEWIDE	0-4 years	-	12	46	-	1	1	-	3	7
	5-11 years	-			-			-		
	12-17 years	-			-			-		
	18-34 years	-			-			-		
	35-49 years	-			-			-		
	60-64 years	-			-			-		
	65+years	-			-			-		

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 2020-21 and 2021-22 influenza seasons, respectively.

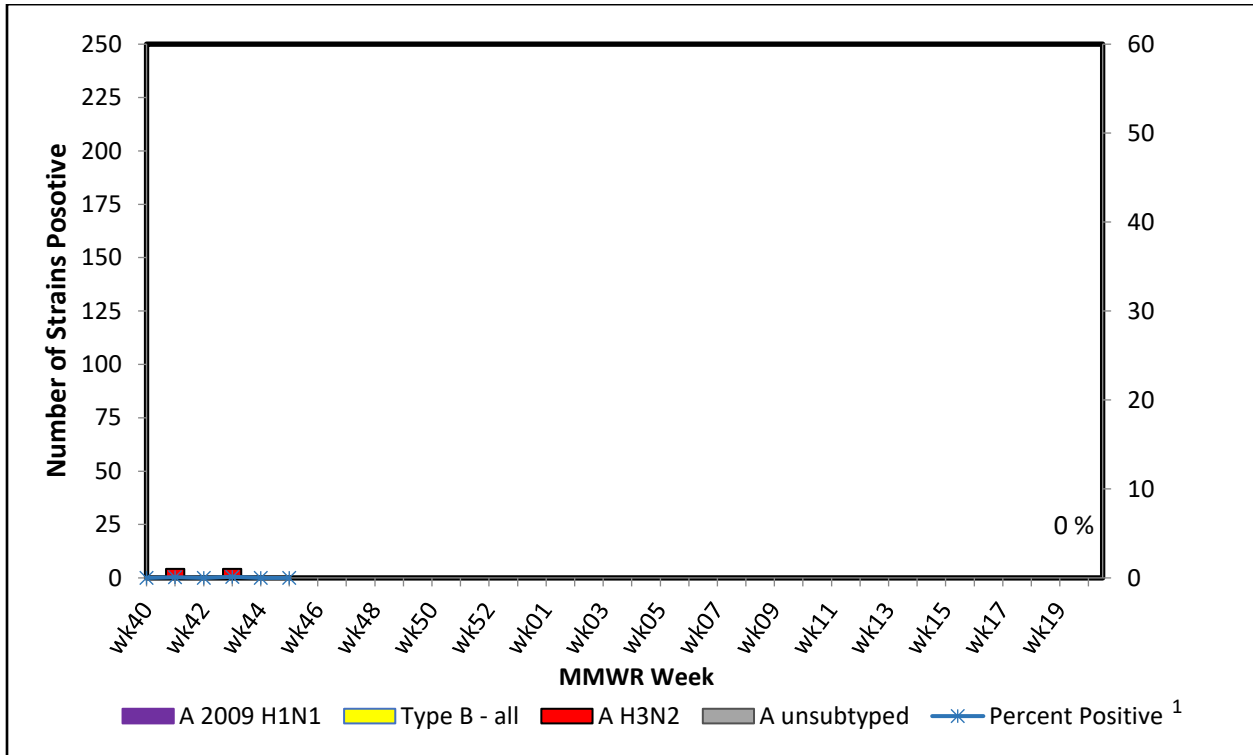
*Cell counts with less than 10 cases are suppressed. Due to suppression guidelines, stratification by age group, within each county, is not shown in the table above.

Table 3: Comparison of the MMWR Week 45 of the 2019-2020 Influenza Season, 2020-2021 Influenza Season, and current 2021-2022 Influenza Season Confirmed¹ Influenza Cases Reported Statewide by County and subtype/lineage

Confirmed Flu Cases by Subtype / Lineage		2019-2020 Influenza Season		2020-2021 Influenza Season		Current 2021-2022 Influenza Season	
		Week 45	Total Count	Week 45	Total Count	Week 45	Total Count
STATEWIDE	A / 2009 H1N1	0	12	0	1	0	3
	A / 2012 H3N2	0		0		0	
	A / no subtype	1		0		3	
	Co-infection	0		0		0	
	B / Yamagata	0		0		0	
	B / Victoria	4		0		0	
	B / no lineage	7		1		0	
New Castle County	A / 2009 H1N1	0	7	0	0	0	0
	A / 2012 H3N2	0		0		0	
	A / no subtype	0		0		0	
	Co-infection	0		0		0	
	B / Yamagata	0		0		0	
	B / Victoria	4		0		0	
	B / no lineage	3		0		0	
Kent County	A / 2009 H1N1	0	1	0	1	0	1
	A / 2012 H3N2	0		0		0	
	A / no subtype	0		0		1	
	Co-infection ²	0		0		0	
	B / Yamagata	0		0		0	
	B / Victoria	0		0		0	
	B / no lineage	1		1		0	
Sussex County	A / 2009 H1N1	0	4	0	0	0	2
	A / 2012 H3N2	0		0		0	
	A / no subtype	1		0		2	
	Co-infection	0		0		0	
	B / Yamagata	0		0		0	
	B / Victoria	0		0		0	
	B / no lineage	3		0		0	

¹Influenza Cases are confirmed via PCR testing

Figure 1: Confirmed Cases of Influenza by Type and Subtype/Lineage, Delaware 2021-2022 Influenza Season



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

During MMWR Week 45 for the 2021-2022 Influenza season, there was **zero** confirmed cases of Influenza reported by ILINet providers.

Table 4: Comparison of the 2019-2020 MMWR Week 45 and the 2010-2022 MMWR Week 45 Influenza-related Hospitalizations and Deaths Statewide

Hospitalizations and Deaths due to Influenza	2019-2020 Influenza Season				2020-2021 Influenza Season				Current 2021-2022 influenza Season			
	Week 45	YTD Totals ¹	Percentage of Confirmed Cases (%) ²	YTD Percentage of Confirmed Cases (%) ³	Week 45	YTD Totals ¹	Percentage of Confirmed Case (%) ²	YTD Percentage of Confirmed Cases (%) ³	Week 45	YTD Totals ¹	Percentage of Confirmed Cases (%) ²	YTD Percentage of Confirmed Cases (%) ^{3,2}
Hospitalizations	1	4	8.33%	8.70%	0	0	0	0	0	1	0	50%
Deaths	0	0	0	0	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.

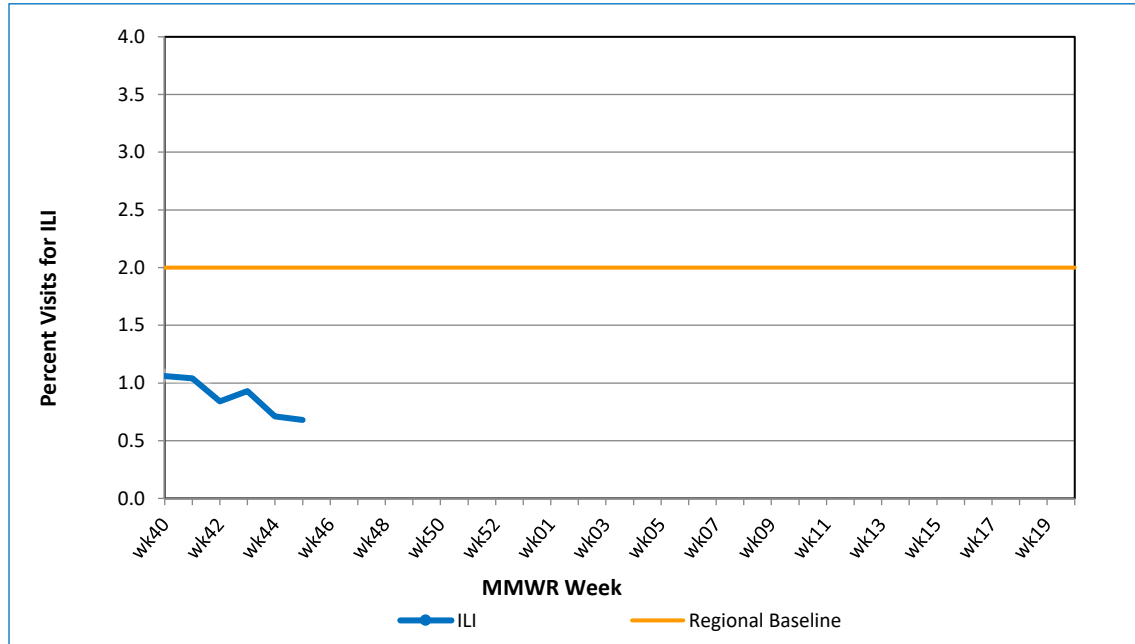
Table 5: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2021-22

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	26
2021-2022 (YTD)	7

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-Like Illness Reported by Sentinel Providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2021-2022

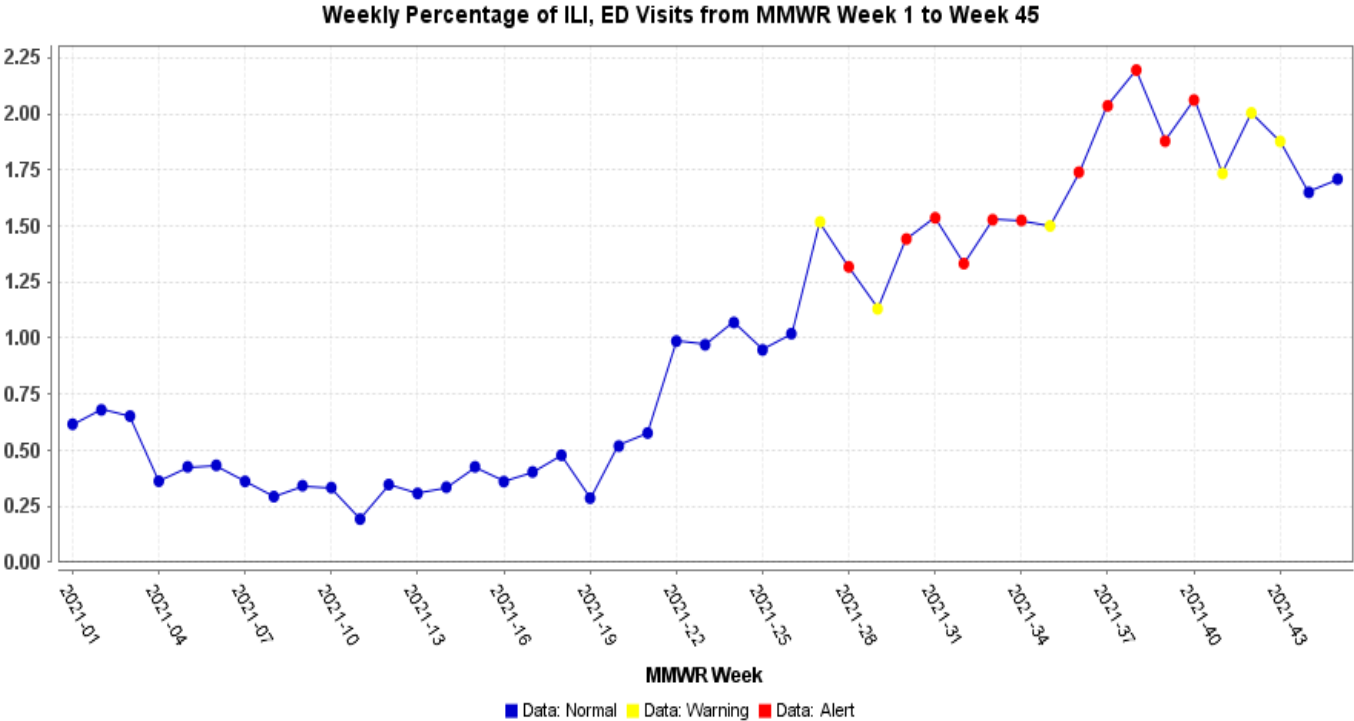


Delaware's regional baseline² for healthcare visits relating to ILI symptoms in the 2021-2022 Influenza Season is 2.0 % and the national baseline³ is 2.5%. In MMWR Week 45, the amount of ILI related visits reported by sentinel provider was 0.68%.

¹The 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.

²The 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 Influenza-Like Illness MMWR Week 1-Week 45, Delaware 2021



Syndromic data collected from ESSENCE shows that from Week 1 through Week 45, the percentage of ED visits due to ILI/Flu symptoms has been rising. The percentage of ED visits for ILI for Week 45 was highest in Sussex County (3.45%), followed by Kent County (1.82%), and New Castle County (1.01%).

Additional Respiratory Virus Surveillance

Table 6: Current 2021-2022 Respiratory syncytial virus (RSV) Season Confirmed¹ Influenza Cases Reported Statewide by County

Confirmed RSV Cases by County	Current 2021-2022 Respiratory syncytial virus (RSV) Season		
	Week 45	YTD ²	YTD County Percentage (%)
STATEWIDE	0	14	-
New Castle County	0	1	7.14%
Kent County	0	13	92.86%
Sussex County	0	0	0

¹Respiratory syncytial virus, (RSV) 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 2020-21 and 2021-22 ¹Respiratory syncytial virus, respectively.

³There may be technical discrepancies of reporting numbers week to week due to retroactive reporting of cases

Table 7: Current 2021-2022 Respiratory syncytial virus (RSV) Confirmed¹ Influenza Cases Reported Statewide by Age

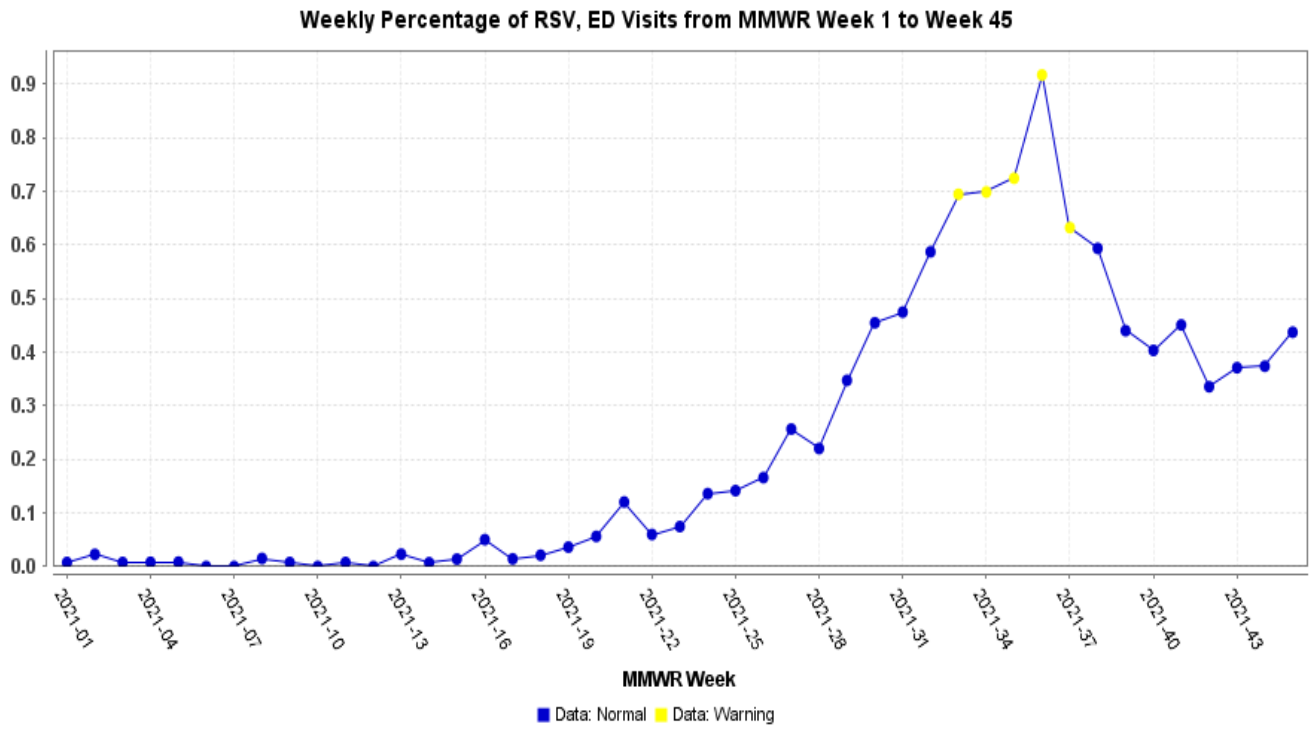
Probable RSV Cases by Age Group	Current 2021-2022 Respiratory syncytial virus (RSV) Season		
	Week 45	Total Count Week 45	YTD ²
STATEWIDE	-	0	14
0-4 years	-		
5-11 years	-		
12-17 years	-		
18-34 years	-		
35-49 years	-		
60-64 years	-		
65+years	-		

¹Respiratory syncytial virus, (RSV) 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 2020-21 and 2021-22 ¹Respiratory syncytial virus 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.

Figure 4: Percentage of Emergency Care Visits Due to Respiratory syncytial virus RSV MMWR Week 1 to Week 45, Delaware 2021



Syndromic data collected from ESSENCE shows that from Week 1 through Week 45, the percentage of ED visits due to RSV symptoms has been rising. The percentage of ED visits for ILI for Week 45 was highest in New Castle County (0.75%), followed by Kent County (0.48%), and Sussex County (0.22%).

NOTE: Data provided do not reflect the total number of individuals who have been infected with the Influenza virus or Respiratory Syncytial 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 more information on Respiratory syncytial virus (RSV) visit: <https://www.cdc.gov/rsv/index.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.