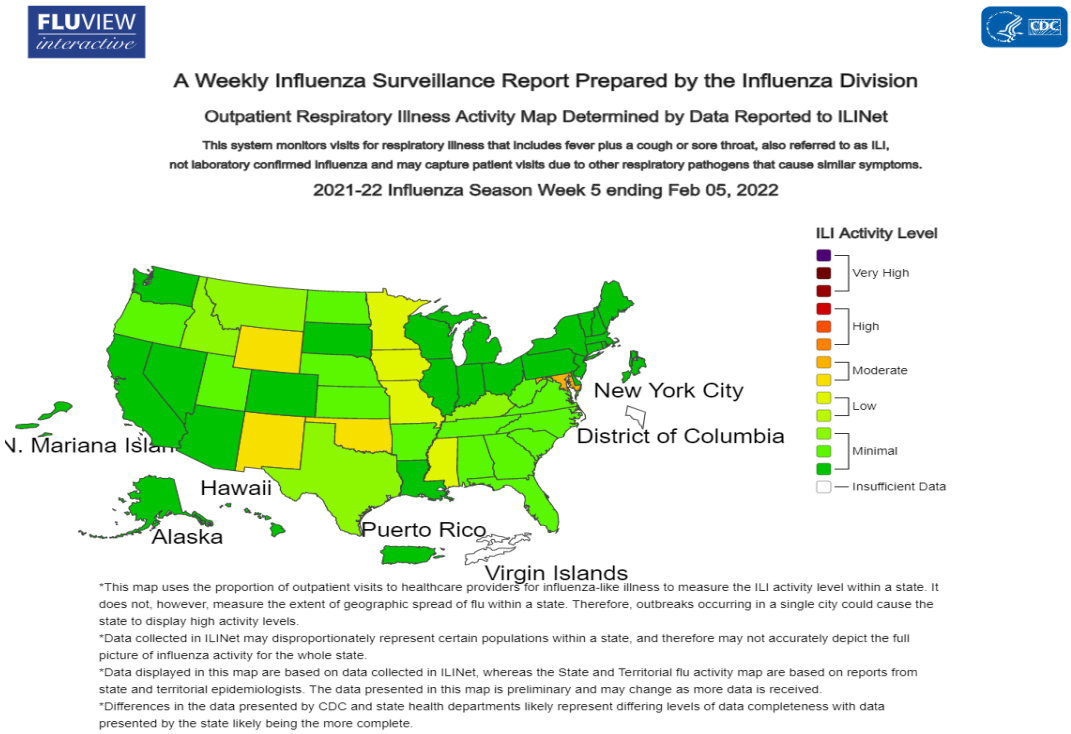
Delaware Weekly Influenza Report
MMWR Week 5 (January 30, 2022-Febuary 5, 2022)
Delaware Division of Public Health

National Influenza Synopsis 2021-2022:

National influenza data is 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 2.0% this week. Zero new influenza-associated pediatric deaths were reported to the CDC this week. The total for the 2021-2022 season is five influenza associated pediatric deaths. This week, National Outpatient ILI data showed 4 jurisdictions experienced moderate influenza-like-illness activity and zero jurisdictions experienced high or very high influenza-like-illness activity.



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. 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, influenza activity remained low and appeared to decrease. In some countries influenza activity reached the levels seen this time of year in pre-COVID-19 period.
- With the increasing detections of influenza during COVID-19 pandemic, countries are recommended to prepare for co-circulation of influenza and SARS-CoV-2. They are encouraged to enhance integrated surveillance to monitor influenza and SARS-CoV-2 at the same time, and step-up their influenza vaccination campaign to prevent severe disease and hospitalizations associated with influenza. Clinicians should consider influenza in differential diagnosis especially for high-risk groups for influenza, and test and treat according to national guidance.
- In the temperate zones of the northern hemisphere, influenza activity although still low appeared to increase in some countries with detections of mainly influenza A(H3N2) viruses and in China B-Victoria lineage viruses.
- In North America, influenza virus detections were predominately A(H3N2) among those detected and subtyped. Influenza detections remained low compared to similar periods in past seasons (except 2020-2021). RSV activity continued to decrease in the USA and Canada.
- In Europe, influenza activity appeared to decrease. Influenza A(H3N2) predominated.
- In East Asia, influenza activity continued on an increasing trend in China, while influenza illness indicators and activity remained low in the rest of the subregion. Influenza B-Victoria lineage viruses predominated.
- In Western Asia and Northern Africa, continuous influenza transmission has been reported in some countries.
- In the Caribbean and Central American countries, some influenza activity was reported with influenza A(H3N2) predominating.
- In tropical South America, influenza A(H3N2) detections remained elevated. Severe acute respiratory infection (SARI) levels were above the epidemic threshold in some countries.
- In tropical Africa, overall influenza activity continued on a decreasing trend.
- In Southern Asia, influenza virus detections of predominately influenza A(H3N2) increased overall, although several countries are reporting already declining influenza activity trends.
- In South-East Asia, sporadic influenza detections were reported in the Philippines.
- In the temperate zones of the southern hemisphere, influenza activity remained low overall, although increased detections of influenza A(H3N2) were reported in some countries in temperate South America.

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

Influenza Surveillance 2021-2022:

During MMWR Week 5, there were **10** 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 the ILI rate is at .38% which is below Delaware's 2021-2022 baseline rate of 2.0%. Nationally, 1.7% of visits to a healthcare provider were for ILI, which is below the 2021-2022 national baseline of 2.5%.

Past Influenza Surveillance from 2020-2021:

Last Season, during MMWR Week 5, there was 0 laboratory confirmed cases of influenza among Delaware Residents. The ILI rate was at 0.41% compared to Delaware's 2020-2021 baseline of 1.9%. The rate nationally for the 2020-2021 season, MMWR Week 5, was 1.1% of visits to a healthcare provider were for ILI compared to the 2020-2021 national baseline of 2.6%.

Past Influenza Surveillance from 2019-2020:

The previous season, during MMWR Week 5, there were 639 laboratory confirmed cases of influenza among Delaware Residents. The ILI rate was 2.6% compared to Delaware's 2019-2020 baseline of 1.9%. The rate nationally for the 2019-2020 season, MMWR Week 5, was 6.7% 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 5

SPORADIC
CDC Definitions: **No Activity:** No laboratory-confirmed cases[2] 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. *Influenza-like illness (ILI) is defined as patients presenting with fever of 100º F or greater, cough and/or sore throat.*

[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 5 Report:

Table 1: Comparison the MMWR Week 5 of the 2019-2020 Influenza Season, 2020-2021 Influenza Season, and current 2021-2022 Influenza Season Confirmed[1] Influenza Cases Reported Statewide by County

Confirmed Flu Cases by County	2019-2020 Influenza Season			2020-2021 Influenza Season			Current 2021-2022 Influenza Season[3]		
	Week 5	YTD[2]	YTD County Percentage (%)	Week 5	YTD[2]	YTD County Percentage (%)	Week 5	YTD[2]	YTD County Percentage (%)
STATEWIDE	639	3592	--	0	11	--	10	626	--
New Castle County	271	1640	45.7%	0	3	37.5%	4	432	69.01%
Kent County	166	903	25.1%	0	7	50%	2	84	13.42%
Sussex County	202	1049	29.2%	0	1	12.5%	4	110	17.57%

[1]Influenza Cases are confirmed via PCR testing

[2]YTD 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.

[3] There may be technical discrepancies of reporting numbers week to week due to retroactive reporting or reclassification of cases.

Table 2: Comparison of MMWR Week 5 of the 2019-2020 Influenza Season, 2020-2021 Influenza Season, and current 2021-2022 Influenza Season Confirmed[1] Influenza Cases Reported Statewide by Age

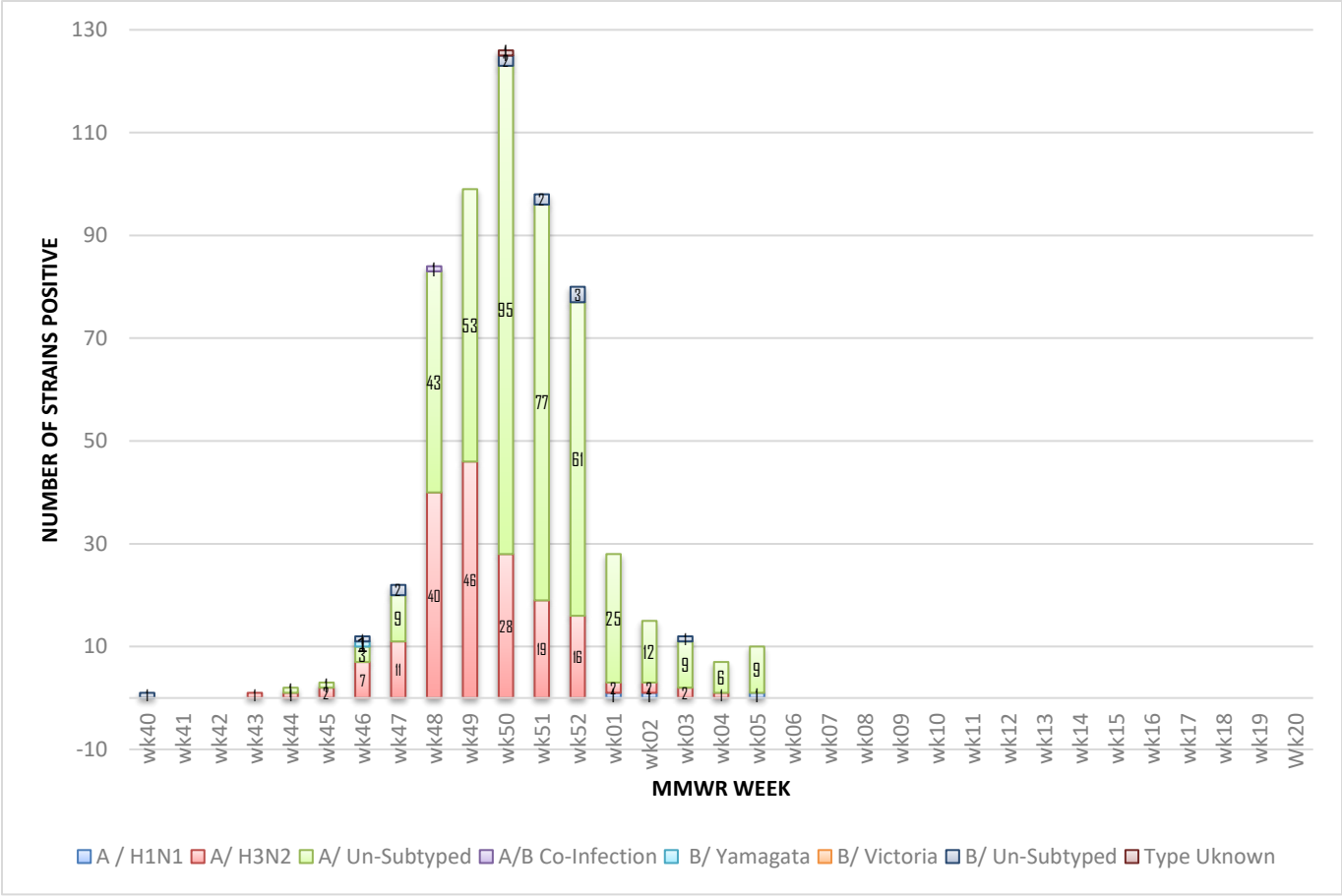
Confirmed Flu Cases by Age Group*		2019-2020 Influenza Season			2020-2021 Influenza Season			Current 2021-2022 Influenza Season		
		Week 5	Total Count	YTD[2]	Week 5	Total Count	YTD[2]	Week 5	Total Count	YTD[2]
STATEWIDE	0-4 years	116	639	3592	-	0	11	-	10	626
	5-11 years	64			-			-		
	12-17 years	64			-			-		
	18-34 years	28			-			-		
	35-49 years	28			-			-		
	50-64 years	31			-			-		
	65+years	67			-			-		

[1]Influenza Cases are confirmed via PCR testing

[2]YTD 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 for smaller age groups. Due to suppression guidelines, stratification by age group, within each county, is not shown in the table above.

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



During MMWR Week 5 for the 2021-2022 Delaware Influenza season, there were **10** confirmed cases of Influenza. Currently in this season the predominate strain of influenza in Delaware is Influenza A (un-subtyped) followed by Influenza A(H3N2).

Table 3: Comparison of the 2019-2020 MMWR Week 5 and the 2010-2022 MMWR Week 5 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 5	YTD Totals[1]	Percentage of Confirmed Cases (%)[2]	YTD Percentage of Confirmed Cases (%)[3]	Week 5	YTD Totals[1]	Percentage of Confirmed Case (%)[2]	YTD Percentage of Confirmed Cases (%)[3]	Week 5	YTD Totals[1]	Percentage of Confirmed Cases (%)[2]	YTD Percentage of Confirmed Cases (%)[3]
Hospitalizations	32	197	5%	5.5%	0	1	0	9.09%	1	35	10%	5.59%
Deaths	1	7	.19%	.16%	0	1	0	9.09%	0	0	0	0

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

[2]Percentage of cases confirmed during the single MMWR Week

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

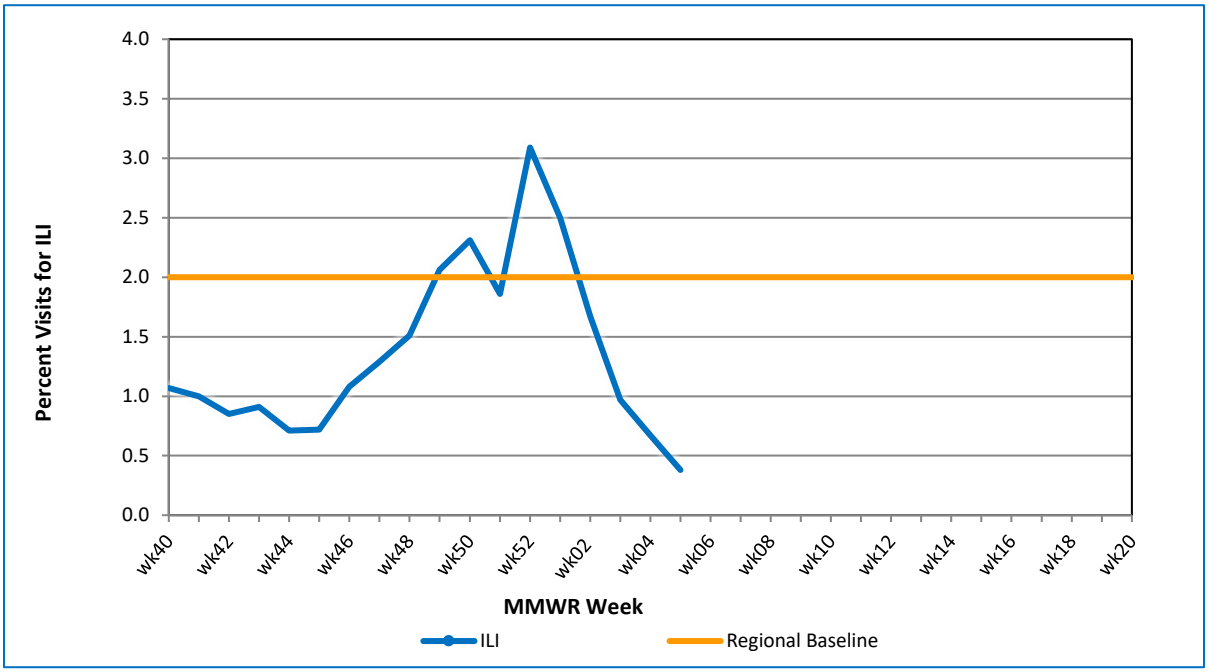
Table 4: Annual Number of Influenza Cases Reported by Flu Season, Delaware 2004-05 through 2021-22

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)	**626**

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.

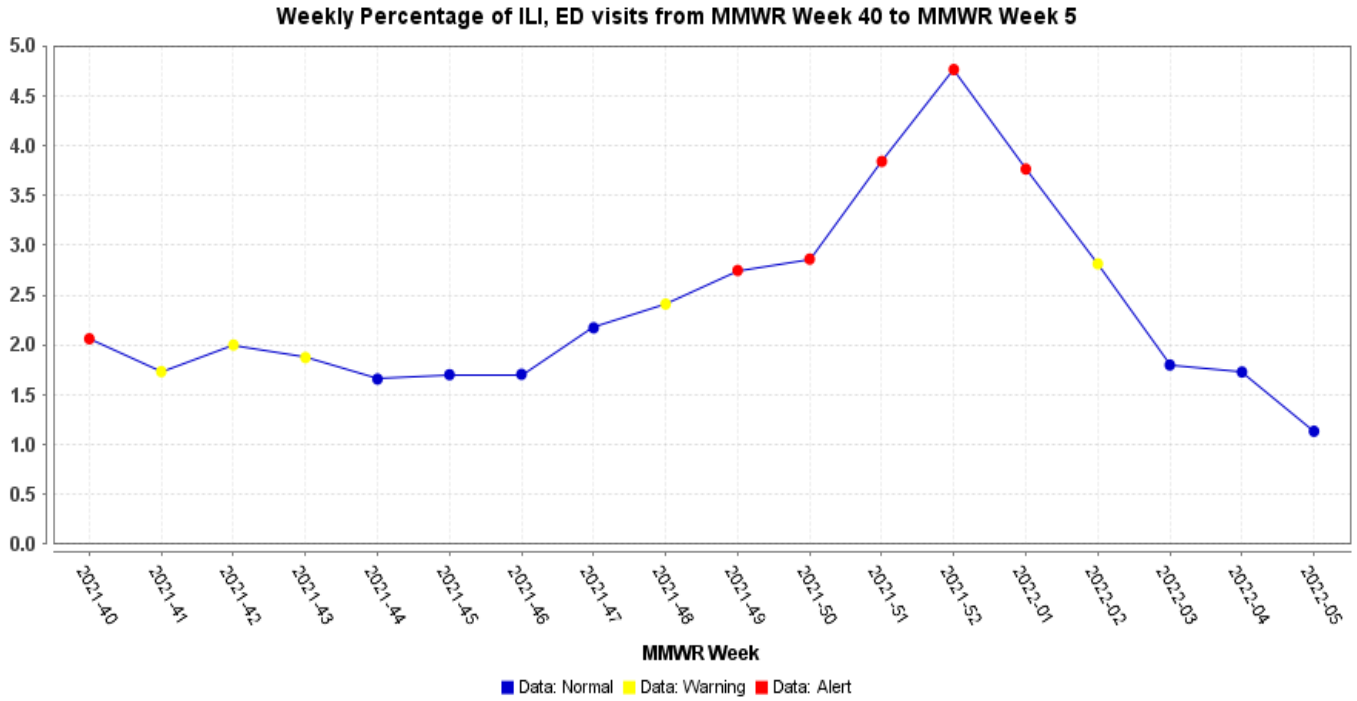
Figure 2: Percentage of Visits for Influenza-Like Illness Reported by Sentinel Providers[1] participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2021-2022



Delaware's regional baseline[1] for healthcare visits relating to ILI symptoms in the 2021-2022 Influenza Season is 2.0 % and the national baseline[2] is 2.5%. In MMWR Week 5, the amount of ILI related visits reported by sentinel providers in Delaware is at .38% and is below regional and national baselines.

[1]The 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.
[2]The 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 40-Week 5, Delaware 2021-2022



Syndromic data collected from ESSENCE shows that from Week 40 through Week 5, the percentage of ED visits due to ILI symptoms has decreased from past weeks and is significantly higher than last year's season. The percentage of ED visits for ILI for Week 5 was highest in Sussex County (2.3%), followed by New Castle County (0.88%), and Kent County (0.64%).

Additional Respiratory Virus Surveillance

Table 5: Current 2021-2022 Respiratory syncytial virus (RSV) Season Confirmed[1] Influenza Cases Reported Statewide by County

Confirmed RSV Cases by County[3]	Current 2021-2022 Respiratory syncytial virus (RSV) Cases		
	Week 5	YTD[2]	YTD County Percentage (%)
STATEWIDE	0	24	-
New Castle County	0	2	8.33%
Kent County	0	21	87.5%
Sussex County	0	1	4.17%

[1]Respiratory syncytial virus, (RSV) Cases are confirmed via PCR testing

[2]YTD 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 [1]Respiratory syncytial virus, respectively.

[3] There may be technical discrepancies of reporting numbers week to week due to retroactive reporting or reclassification of cases.

Table 6: Current 2021-2022 Respiratory syncytial virus (RSV) Confirmed[1] Influenza Cases Reported Statewide by Age

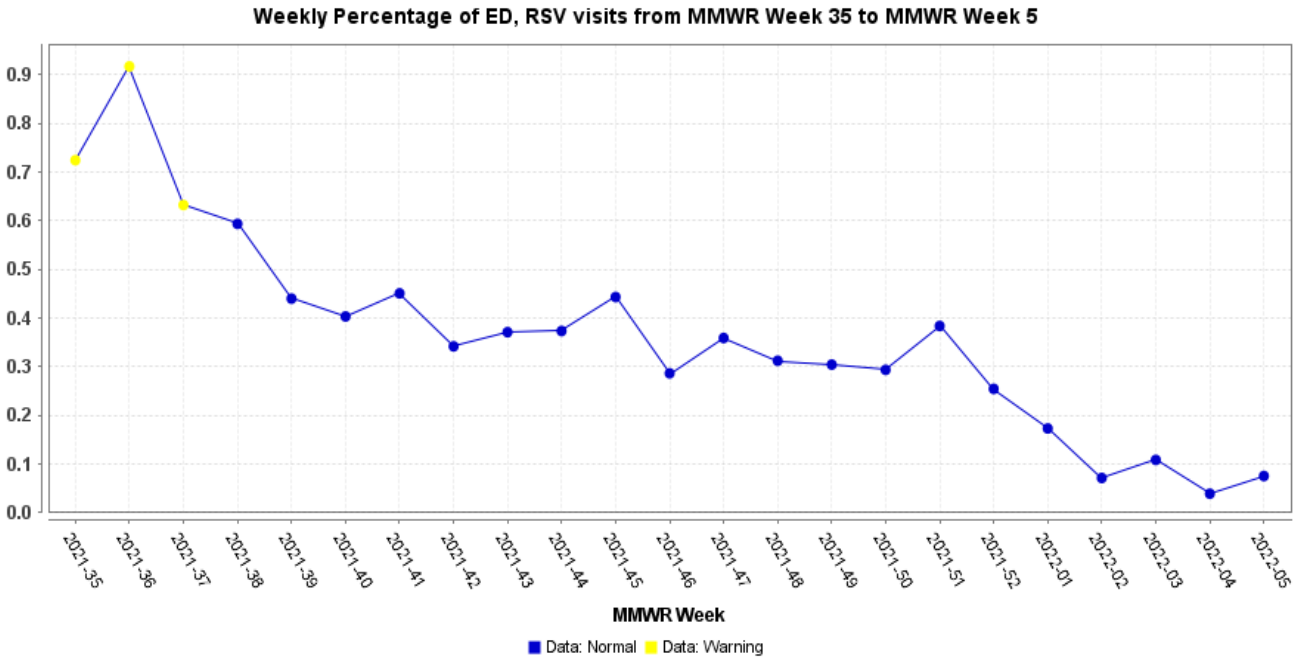
RSV Cases by Age Group*		Current 2021-2022 Respiratory syncytial virus (RSV) Cases		
		YTD by Age Group	Total Count Week 5	YTD[2]
STATEWIDE	0-4 years	15	0	24
	5-11 years	-		
	12-17 years	-		
	18-34 years	-		
	35-49 years	-		
	60-64 years	-		
	65+years	-		

[1]Respiratory syncytial virus, (RSV) Cases are confirmed via PCR testing

[2]YTD 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 Respiratory 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 35 to Week 5, Delaware 2021-2022



Syndromic data collected from ESSENCE shows that from Week 35 through Week 5, the percentage of ED visits due to RSV-related ED* visits has increased from past weeks. The percentage of ED visits for RSV for Week 5 was highest in Sussex County (0.20%), followed by Kent County (0.16%), and New Castle County (0.14%).

*The syndrome is defined a combination of chief complaints and discharge diagnoses

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.