Influenza & Other Respiratory Viruses Surveillance Report

2020-2021 Season

Week 39, Ending October 2, 2021

Viral Respiratory Disease Surveillance Program

Infectious Disease Epidemiology

LOUISIANA DEPARTMENT OF HEALTH

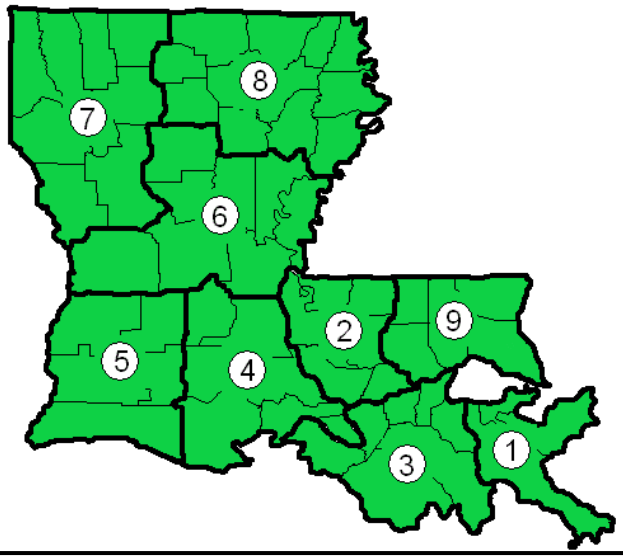
2020-2021 End of Season Report

- **ILI activity and intensity remained low for the entire 2020-2021 season.**
- **Based on clinical laboratory data, there were 412 influenza A and 648 influenza B rapid test positives this season. Only one influenza A virus was identified at the State Public Health Laboratory.**
- **One influenza-associated pediatric death was reported in the United States during the season.**
- **Rhinovirus had the highest circulation of non-influenza viruses.**
- **After peaking this summer, RSV activity has remained low for the last 7 weeks.**

Statewide ILI Activity

Minimal			Low		Moderate		High			Very High		
1	2	3	4	5	6	7	8	9	10	11	12	13

2020-2021 Season: Average Regional ILI Activity



Overall Severity* 2020-2021 Season

LOW

ILI – Low
Laboratory –Low
Mortality – Moderate

2020-2021 Season
Predominant Strain Nationally

Influenza A

*Beginning with the 2019-2020 influenza season, Infectious Disease Epidemiology began using a new methodology to determine influenza season severity – the Moving Epidemic Method (MEM). Based on data from past seasons, key indicators are used to develop intensity thresholds (ITs) to classify the severity of the season from low to very high. **Activity of influenza and severity are separate measures.** For example, ILI activity in 2018-2019 was similar to levels seen in 2017-2018 but last season was not as severe as 2017-2018 when we saw record numbers of hospitalizations and mortality. The indicators chosen to assess severity in Louisiana are: 1) ILI activity, 2) Laboratory Activity, and 3) Mortality Data. Severity is estimated based on data for all three indicators. Previous season rankings and further on MEM methodology can be found on page 8.

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***Note:** This report includes data from numerous sources and should be viewed as preliminary each surveillance week. The information may be updated in future reports as additional data are received.*

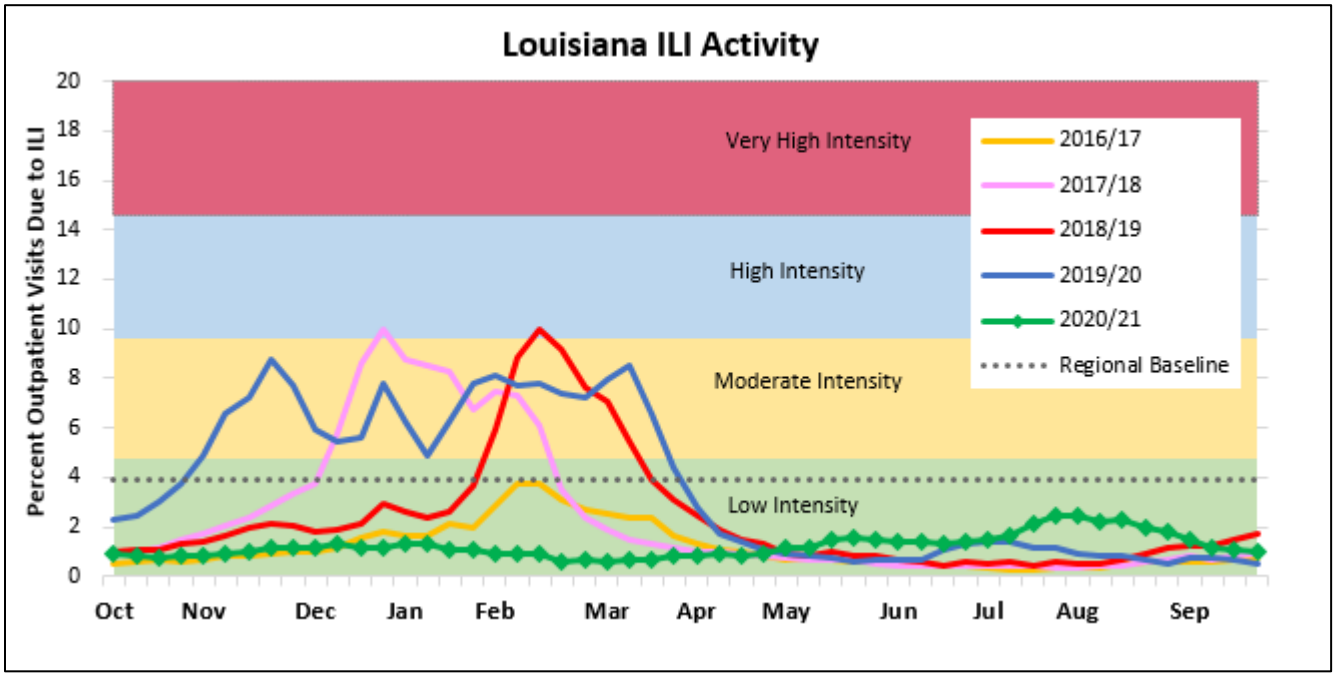
ILI Activity

In Louisiana, during Week 39, <1% of patient visits reported through the U.S. Outpatient Influenza-like illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is lower than the regional baseline of 3.9%. ILI is defined as fever >100°F and cough and/or sore throat in the absence of another diagnosis.

Week 2139: Louisiana ILI: 0.98 % **Low Intensity**

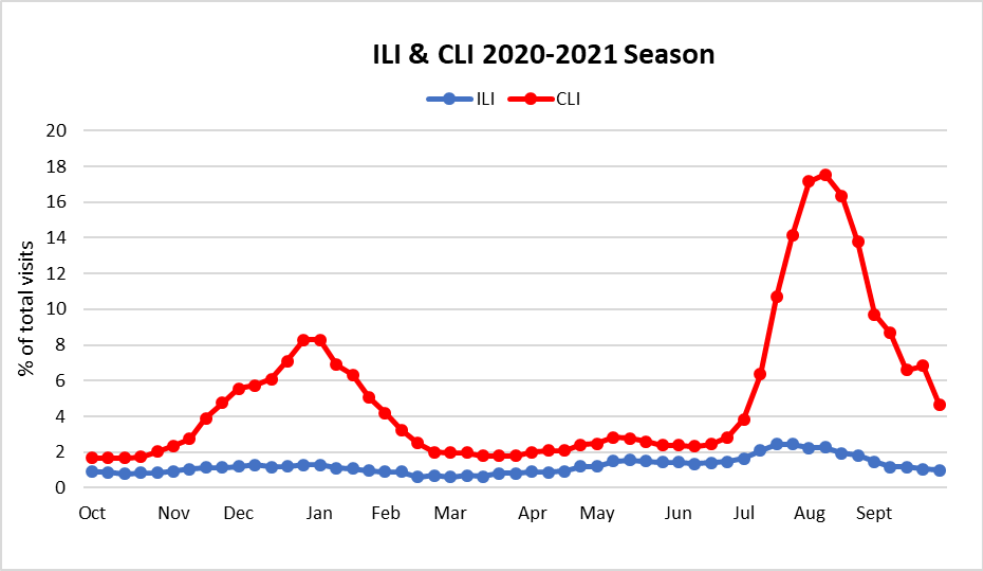
U.S. ILI: 1.9% **Below** the national baseline

for more information on the U.S. ILI Activity assessment: FluView Interactive



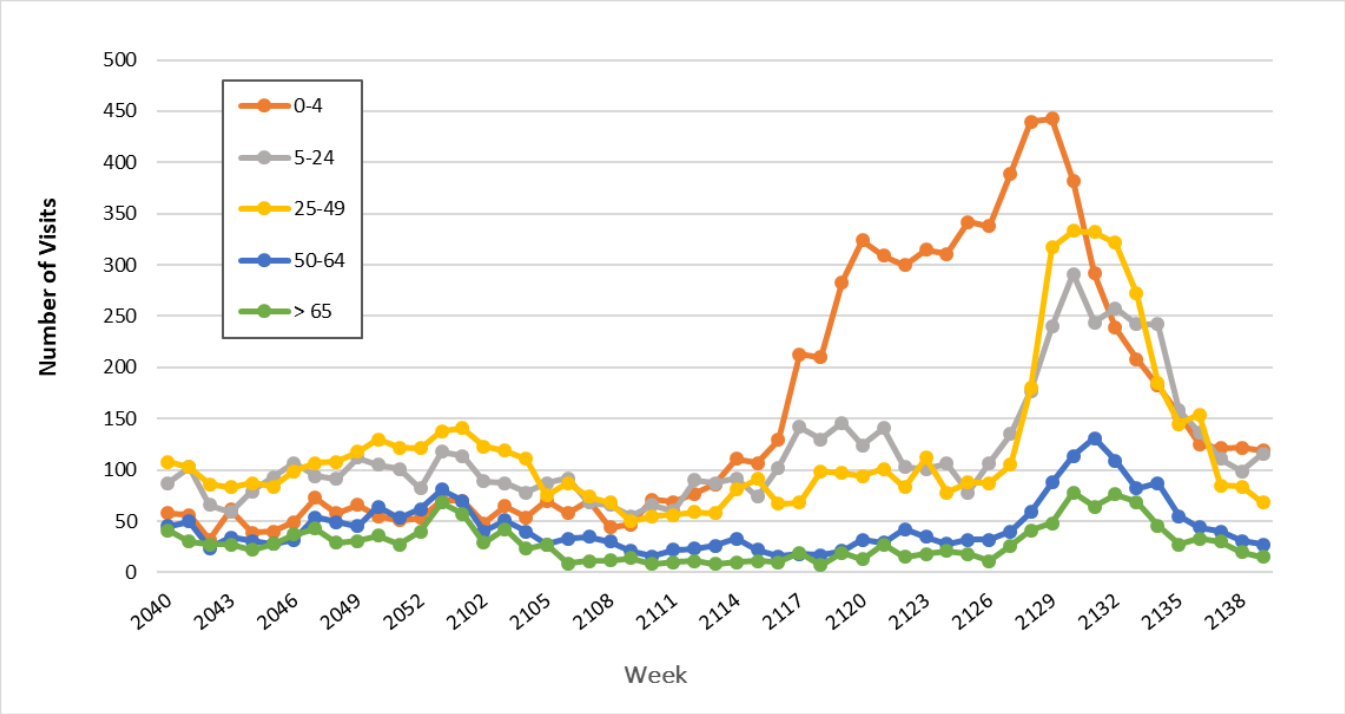
ILI & CLI Activity

In addition to ILINet, COVID-19 surveillance is being monitored through the National Syndromic Surveillance Program (NSSP) using a CLI syndrome. CLI is defined as fever and cough or shortness of breath or difficulty breathing or the presence of a coronavirus diagnosis code. ILI and CLI are used to monitor trends in outpatient and emergency department visits that may be related to COVID-19.



Louisiana ILI Activity by Age Group:

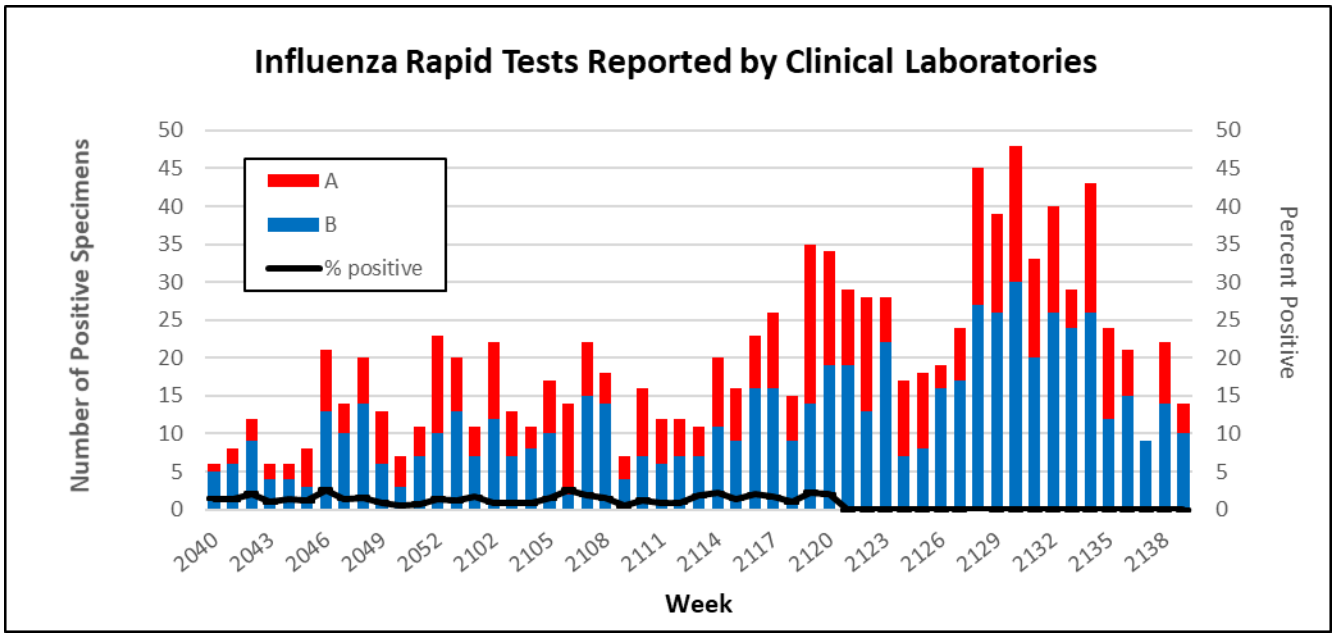
ILINet activity is reported by age group: 0-4 years, 5-24 years, 25-49 years, 50-64 years, and ≥65 years. Below is the cumulative summary of the 2019-20 influenza season by age group.

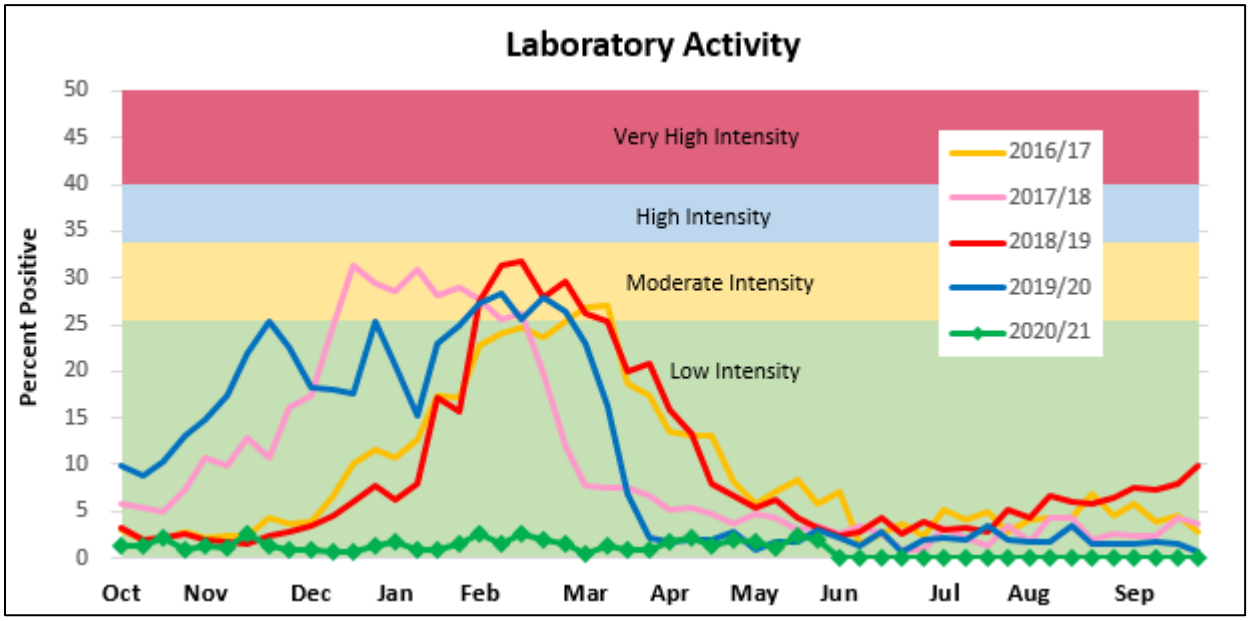


Age Group in Years	Cumulative data 2020/21 Season
0-4	8,098
5-24	6,232
25-49	6,298
50-64	2,350
≥65	1,519
Total	24,497

Virologic Surveillance:

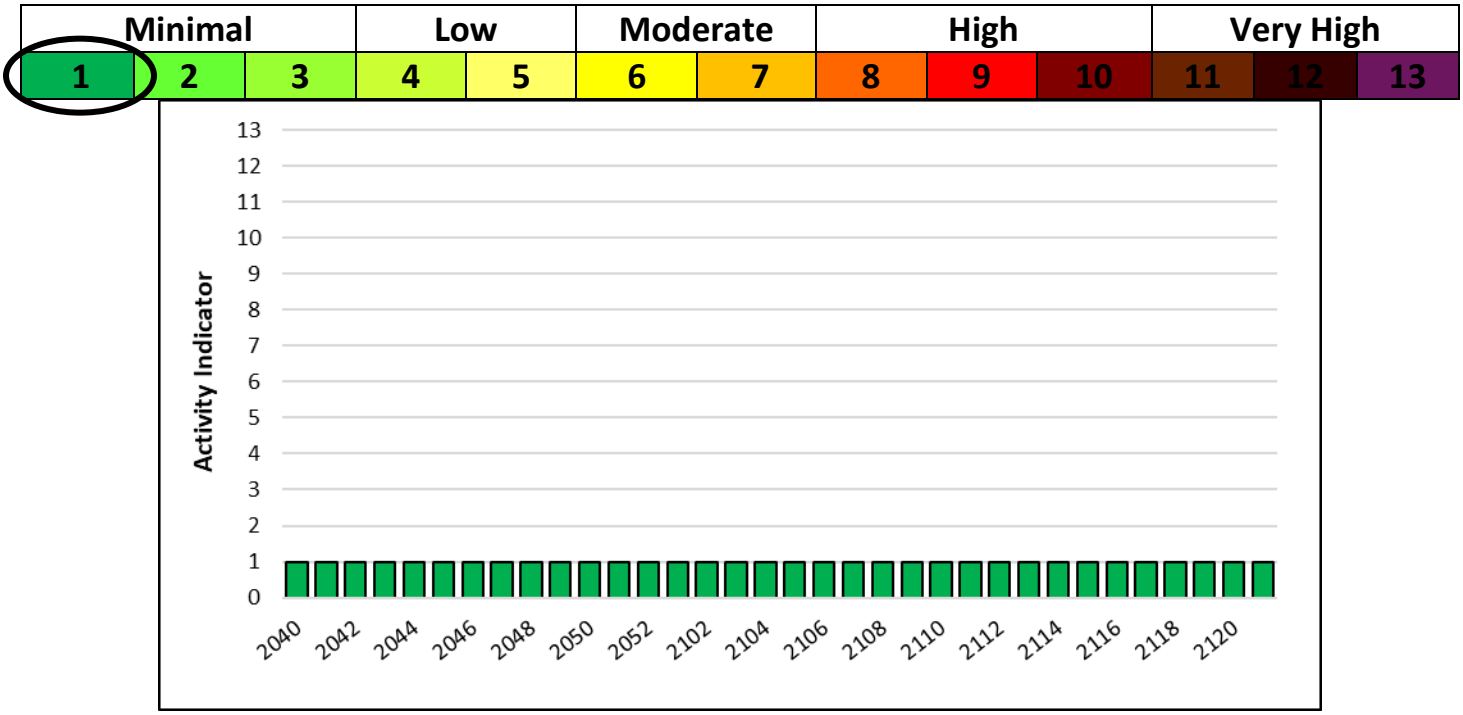
Louisiana virologic surveillance for respiratory viruses consists of data reported by clinical laboratories throughout the state and testing done at the State Public Health Laboratory. Data on influenza testing is presented below, data for other respiratory viruses is on page 7 of report.





CDC ILINet Activity Indicator:

ILI Activity Levels compare the mean reported percent of visits due to ILI for the current week to the mean reported percent of visits due to ILI for non-influenza weeks. The 13 activity levels correspond to the number of standard deviations below, at, or above the mean for the current week compared with the mean of the non-influenza weeks. *For more information, refer to page 8 of report.*



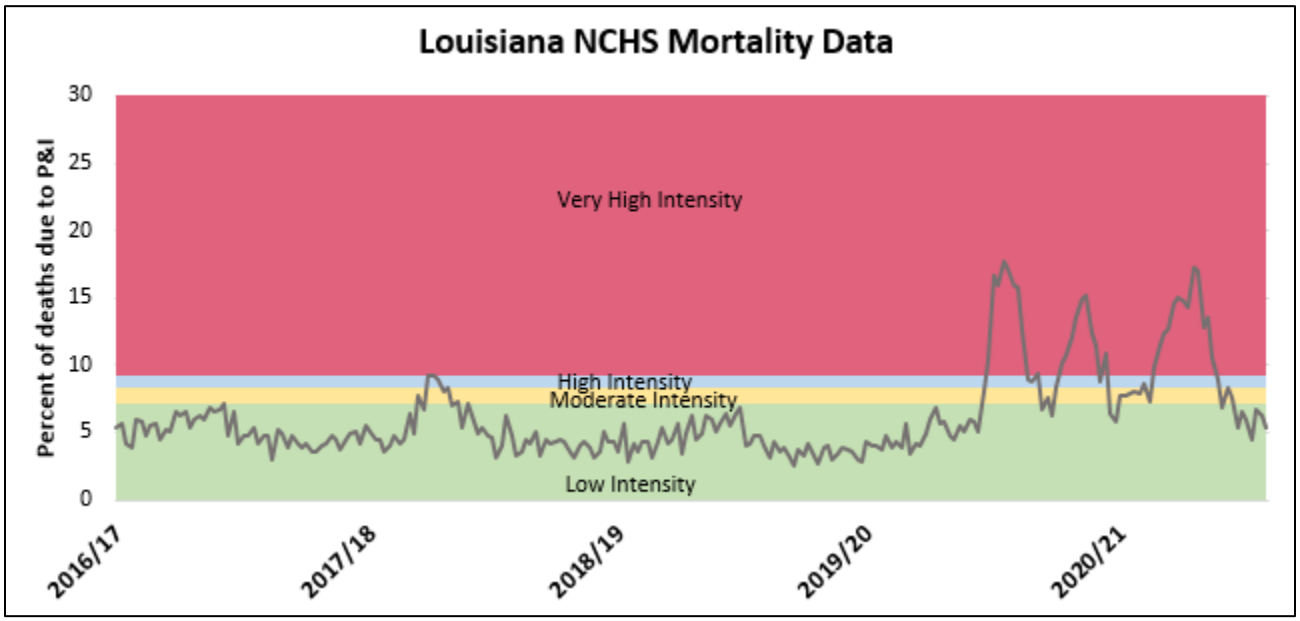
Summary of Influenza Viruses Genetically Characterized in the United States by CDC:

Virus Subtype or Lineage	Genetic Characterization				
	Total # of Subtype/Lineage Tested	Clade	Number (% of subtype/lineage tested)	Subclade	Number (% of subtype/lineage tested)
A/H1	2				
		6B.1A	1 (50%)		
A/H3	4				
		3C.2a	4 (100%)	1b2a	4 (100%)
		3C.3a	0 (0%)	3a	0
B/Victoria	4				
		V1A	4 (100%)	V1A	0
				V1A.1	0
				V1A.3	4 (100%)
B/Yamagata	0				

Mortality Surveillance:

Prior to the COVID-19 pandemic, National Center for Health Statistics (NCHS) surveillance data were used to calculate the percent of all deaths occurring each week that had pneumonia and/or influenza (P&I) listed as a cause of death. During the 2019-2020 season COVID-19 coded deaths were added to P&I to create the PIC (pneumonia, influenza, and/or COVID-19) classification. PIC includes all deaths with pneumonia, influenza, and/or COVID-19 listed on the death certificate. For the 2020-2021 season, the NCHS numbers have reverted to P&I.

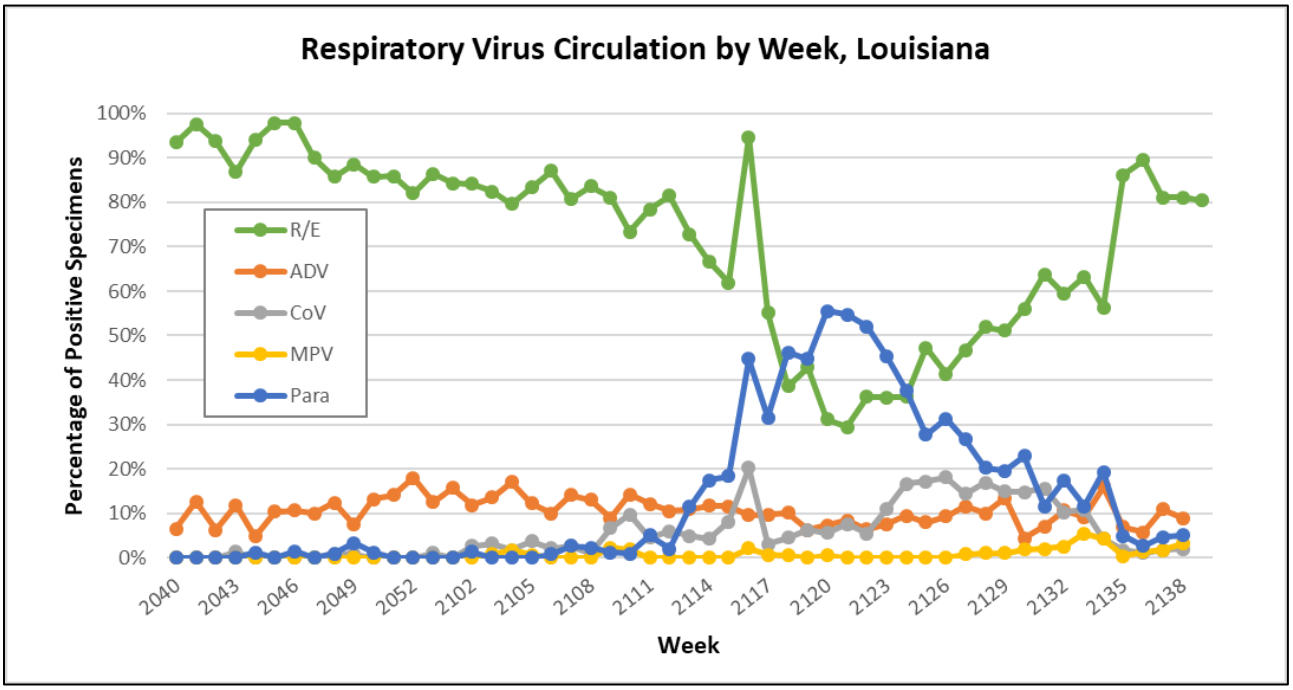
Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to PIC are higher among manually coded records than more rapidly available machine coded records. Due to the additional time needed for manual coding, the initially reported PIC percentages are likely to increase as more data are received and processed.



Non-Influenza Respiratory Viruses Update:

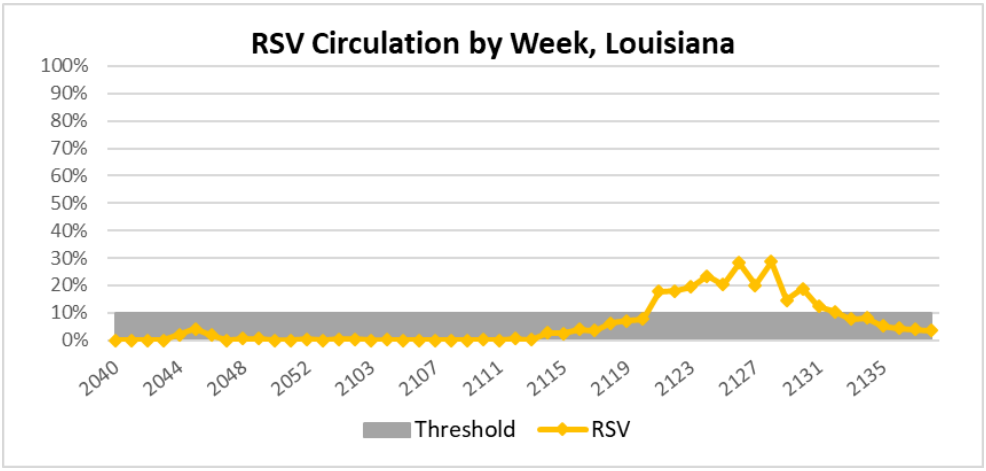
Surveillance for non-influenza respiratory virus surveillance is based on data from clinical laboratories statewide and testing done at the state public health laboratory. Data is collected on the following viruses: Rhino/Enterovirus (R/E), Adenovirus (ADV), Coronavirus (CoV), Human Metapneumovirus (MPV), Parainfluenza 1-4 (Para), and Respiratory Syncytial virus (RSV). RSV data is analyzed apart from other respiratory viruses due to the high prevalence of testing and seasonality of the virus.

CoV circulation represents Human Coronavirus types 229E, NL63, OC43, and HKUL; it does not include COVID-



RSV usually circulates during fall, winter, and spring, but the timing and severity of RSV season can vary from year to year. RSV season onset is defined as the first week of two consecutive weeks when the percent positive of ALL laboratory confirmed tests are greater than or equal to 10%. The end of RSV season is defined as the first of two consecutive weeks when the percent positive of ALL laboratory confirmed tests are less than 10%.
Information on National RSV surveillance can be found at: https://www.cdc.gov/surveillance/nrevss/rsv/index.html

RSV Season Status: OFF



Indicator Methodologies:

- **Intensity/Severity Measurements:** Intensity thresholds are calculated for activity measures to assess influenza season severity; for Louisiana these measurements are 1) ILI Activity, 2) Laboratory Activity, and 3) Mortality Data. Establishing these thresholds based on historical data allow epidemiologists to assign severity levels (low, moderate, high, very high) to weekly data points and overall seasons. This methodology was published in the American Journal of Epidemiology, October 2017.

Season	Severity Ranking
2015-2016	Low
2016-2017	Low
2017-2018	High
2018-2019	Moderate

- **ILI Activity Level Indicator:** Collected ILI data is used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during weeks with little or no influenza virus circulation. Activity levels range from minimal, which would correspond to ILI activity from outpatient clinics being below, or only slightly above, the average, to high, which would correspond to ILI activity from outpatient clinics being much higher than average. Intensity does not measure geographic spread within the state. For example, outbreaks occurring in a single city could cause the state to display high activity levels.