Influenza & Other Respiratory Viruses Surveillance Report 2021 - 2022 Season Week 1 ending January 8, 2022



Statewide ILI Activity

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

Regional ILI Activity



Overall Severity

LOW

Laboratory –Low Mortality – Low

Louisiana COVID-19 data: LDH COVID dashboard

Page 2 – Influenza-like Illness (ILI) & COVID-like Illness (CLI) Activity

Page 3 – ILI activity by age group & ILI activity indicator

Page 4&5 – Influenza virologic surveillance

Page 6 – State and National influenza subtyping/characterization data and National surveillance updates

Page 7 – Mortality data

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Page 9 - Methodology

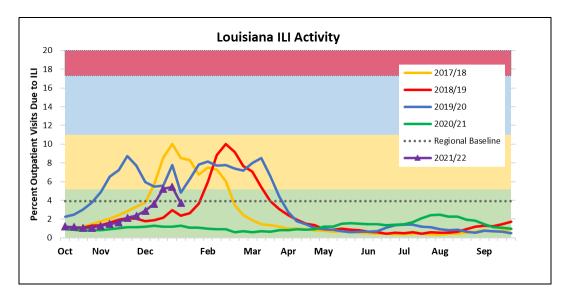
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Note: This report includes data from numerous sources and should be viewed as preliminary each surveillance week. The information may be updated in future reports as additional data are received.

ILI Activity

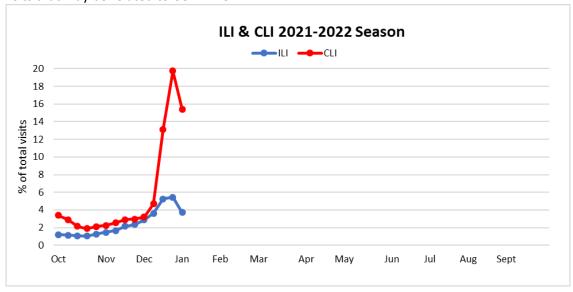
In Louisiana, during Week 1, 3.71% of patient visits reported through the U.S. Outpatient Influenza-like illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the regional baseline of 3.9%. The ILI case definition changed starting with the 2021-2022 season: fever ≥100.3 AND cough and/or sore throat. Week 2201: Louisiana ILI: 3.71 % Low Intensity

U.S. ILI: 4.3% **Above** the national baseline for more information on the U.S. ILI Activity assessment: <u>FluView Interactive</u>

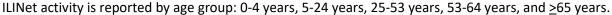


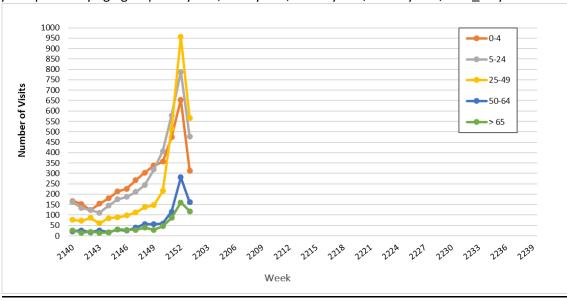
ILI & CLI Activity

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.



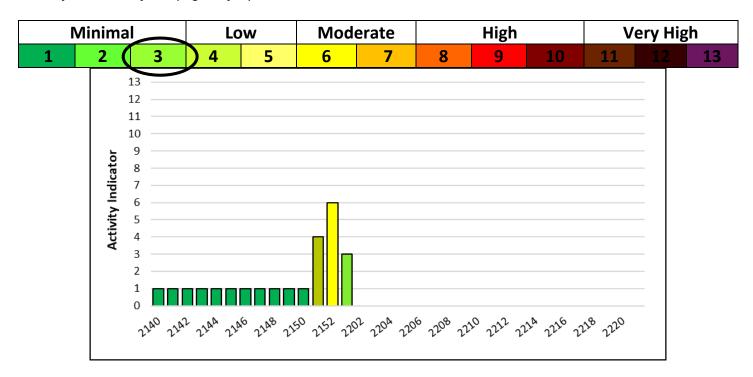
Louisiana ILI Activity by Age Group:





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.

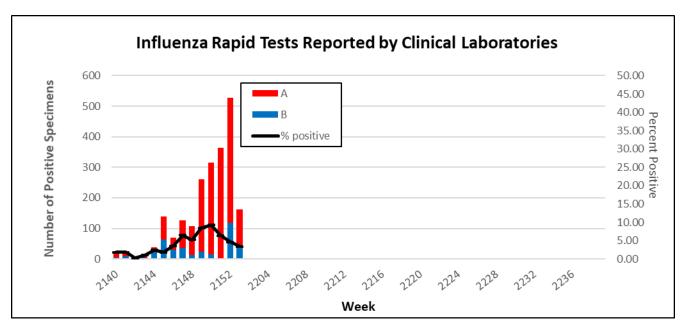


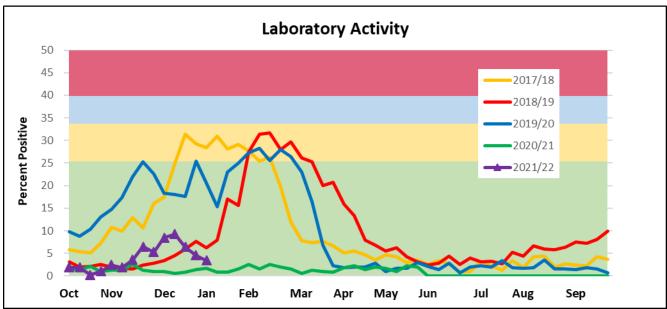
Virologic Surveillance:

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.

Week 2201: Louisiana % influenza positive tests: 3.43%

U.S. % influenza positive tests: 2.2%





Summary of Influenza Testing & Subtyping

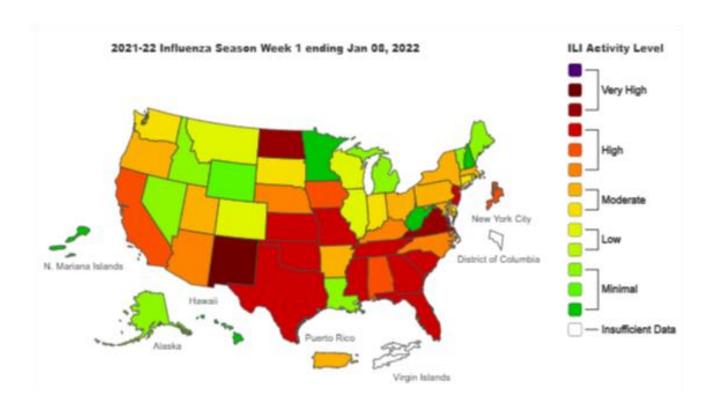
	Louisiana Public Health Laboratory	CDC/Public Health Laboratories		
Number of specimens tested	242	385,093		
Number of positive specimens	18	7,969		
Influenza A	18	7,893 (99.0%)		
Influenza A/H1N1	0	4 (0.1%)		
Influenza A/H3N2	18	5,747 (99.9%)		
Influenza A/H3N2v	0	1 (<0.1%)		
Influenza A not subtyped	0	2,141		
Influenza B	0	76 (1.0%)		
Influenza B/Victoria	0	1 (3.1%)		
Influenza B/Yamagata	0	31 (96.9%)		
Lineage not performed	0	44		

National Influenza Virus Characterizations

	Genetic Characterization							
	Total #	HA Clade	Number (% of	HA Subclade	Number (% of			
Virus Subtype or	Subtype/Lineage		subtype/lineage		subtype/lineage			
Lineage	Tested		tested)		tested)			
A/H1	3							
		6B.1A	3 (100%)	5a.1	2 (67%)			
				5a.2	1 (33%)			
A/H3	324							
		3C.2a1b	324 (100%)	1a	0			
				1b	1 (0.3%)			
				2a	0			
				2a.1	0			
				2a.2	323 (99.7%)			
		3C.3a	0	3a	0			
B/Victoria	20							
		V1A	20(100%)	V1A	0			
				V1A.1	0			
				V1A.3	11 (55%)			
				V1A.3a	0			
				V1A.3a.1	0			
				V1A.3a.2	9 (45%)			
B/Yamagata	0							
		Y3	0					

National surveillance updates

- FluSurv-Net: 3.4 per 100,000 cumulative hospitalization rate
- HHS Protect Hospitalizations: 1,804 patients with laboratory-confirmed influenza were admitted to the hospital.
- NCHS Mortality: 23.1% of deaths attributed to pneumonia, influenza, or COVID-19 (above threshold of 5.7%).
- Long-term Care Facility (LTCF) Surveillance: 191(1.3%) of 14,208 LTCFs reported at least one laboratory-confirmed influenza tests among their residents.
- 3 influenza-associated pediatric deaths occurring during the 2021-2022 season have been reported nationwide to CDC



Mortality Surveillance:

In previous seasons, the 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. Because of the ongoing COVID-19 pandemic, during the 2020-2021 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. As of week 2201, Louisiana data shown below from NCHS has reverted to P&I.

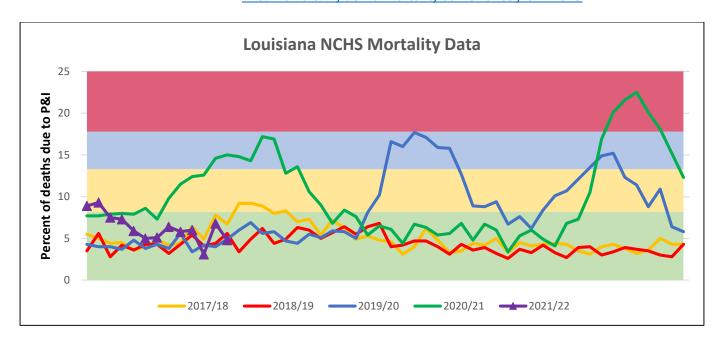
Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Due to the additional time needed for manual coding, the initially reported percentages are likely to increase as more data are received and processed. Data for the 2021-2022 season should become available in the next couple of weeks.

Week 2201: Louisiana Mortality: Low

U.S. Mortality: Above the epidemic threshold

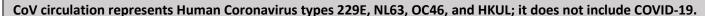
for more information on the U.S. mortality assessment:

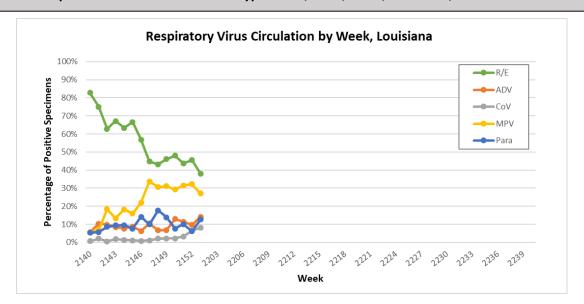
Pneumonia & Influenza Mortality Surveillance from NCHS



Non-Influenza Respiratory Viruses Update:

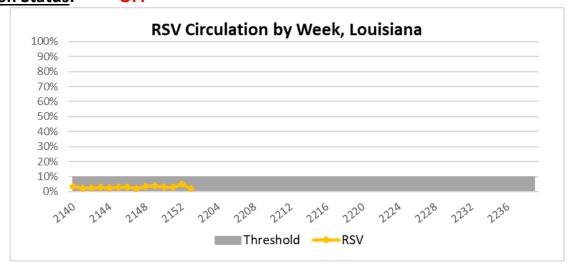
Surveillance for non-influenza respiratory virus surveillance is based on data from clinical laboratories statewide and testing done at the state public health laboratory. Data is collected on the following viruses: Rhino/Enterovirus (R/E), Adenovirus (ADV), Coronavirus (CoV), Human Metapneumovirus (MPV), 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.





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: CDC RSV surveillance





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
2019-2020	Moderate
2020-2021	*

^{*}Due to the COVID-19 pandemic the 2020-2021 season is excluded from calculating severity thresholds.

- 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.
- ILI Regional Baselines: Regional baselines are calculated by CDC at the beginning of the influenza season. Louisiana is in Region 6 which also includes: Arkansas, Texas, New Mexico, and Oklahoma. The Region 6 baseline for the 2019-2020 season is 3.8%. The regional baselines are developed by calculating the mean percentage of ILI visits during non-influenza weeks for the previous three seasons and adding two standard deviations. A non-influenza week is defined as periods of two or more consecutive weeks in which each week accounted for less than 2% of the season's total number of specimens that tested positive for influenza in public health laboratories.