



# **Chicago Respiratory Virus Weekly Surveillance Report**



Lori E. Lightfoot, Mayor

September 30, 2022

Allison Arwady, MD, MPH, Commissioner

This report summarizes key respiratory virus surveillance indicators. The indicators are compiled from laboratory-based data as well emergency department visit data. This report is meant to provide more context for the ongoing COVID-19 pandemic, particularly as co-circulation of respiratory viruses increases. More detailed information on <u>influenza</u> and <u>COVID-19</u> activity can be found on their respective online dashboards.

## **Weekly Respiratory Virus Surveillance Key Points**

## COVID-19: metrics are based on 7-day averages

- Chicago's <u>local COVID-19 Community Level</u> is Low.
- The number of new cases per 100,000 population is 86.
- The number of new hospitalizations per 100,000 population has decreased from 6.6 to 6.4.
- The proportion of staffed inpatient beds occupied by COVID-19 patients has decreased from 3.6% to 3.5%.

#### Influenza:

- The risk of influenza infection is low; the percent of specimens testing positive for influenza is <1%.</li>
- The proportion of emergency department visits for influenza-like illness (ILI) is below local thresholds.
- Clinicians should <u>review guidelines</u> for prescribing influenza anti-viral medications as prophylaxis or empiric treatment.
- The Illinois Department of Public Health has issued <u>Influenza Testing and Reporting Guidance</u> for the 2022-2023 season. Visit the CDPH <u>HAN website</u> for more information on how to report.

## **Other Respiratory Viruses:**

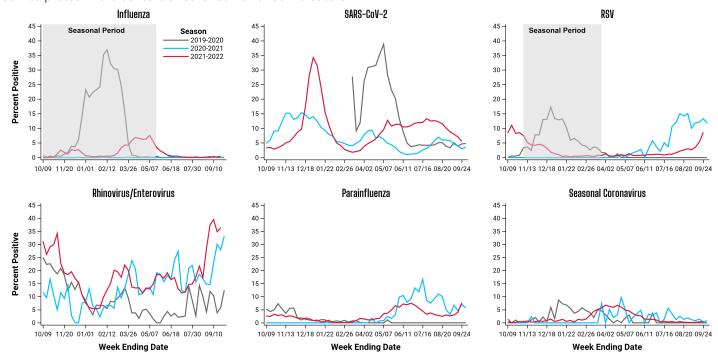
- The percent of emergency department visits in children <5 years old due to RSV has increased from 2.1% last week to 4.8% for the current week.
- The test positivity for RSV PCR has increased from 5.4% last week to 8.6% for the current week.
- The test positivity for Parainfluenza has increased from 4% to 7.7% for the current week.
- Test positivity for rhinovirus/enterovirus has increased from 32.1% last week to 36% for the current week: CDC has issued a <u>health advisory</u> and <u>MMWR</u> about increases in severe respiratory illnesses associated with rhinovirus and/or enterovirus seen in several regions across the county. Some of the specimens have been typed as enterovirus D68 (EV-D68).

**Respiratory Virus Laboratory Surveillance - Current Week and Cumulative** The table below includes respiratory viral PCR tests performed by several hospital laboratories in Chicago as well as two commercial laboratories serving Chicago facilities. Reporting facilities represent nearly half of all acute care hospitals in the city. Data reported include Chicago and non-Chicago residents.

	Week Ending September 24, 2022		Since October 3, 2021	
Respiratory Pathogen	# Tested	% Positive	# Tested	% Positive
Influenza*	2,548	<1%	192,949	2.0%
RSV*	2,293	8.6%	139,558	2.1%
SARS-CoV-2*	5,325	5.6%	460,691	11.7%
Parainfluenza	809	7.7%	64,860	2.8%
Rhinovirus/Enterovirus	809	36.3%	41,983	18.5%
Adenovirus	809	2.3%	41,983	3.1%
Human Metapneumovirus	809	<1%	42,013	3.1%
Seasonal Coronaviruses <sup>†</sup>	809	<1%	64,395	1.9%

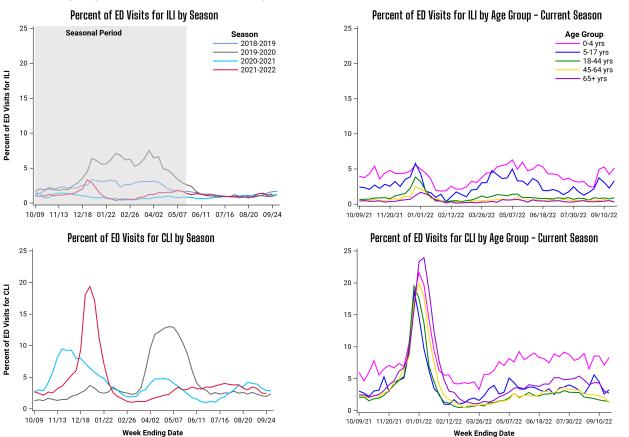
<sup>\*</sup>Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.

**Respiratory Virus Laboratory Surveillance - Seasonal Trends** These graphs show seasonal trends of selected respiratory virus testing data presented in the previous table. Typical seasonal periods when activity tends to increase for influenza and RSV are indicated by shaded areas. Elevated test positivity outside of typical seasonal periods suggests atypical activity, and increased clinician awareness and testing may be warranted. Yearly data can also be used to compare the timing and intensity of viral activity, although changes in testing patterns also influence yearly trends, and data should be interpreted in the context of other surveillance indicators.

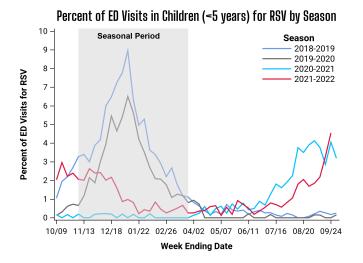


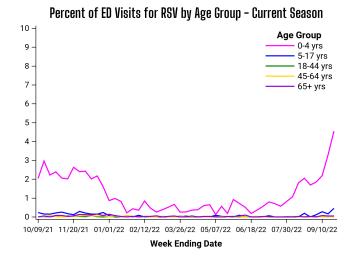
**Emergency Department Illness Surveillance** In <u>Illinois</u>, all 185 acute-care hospitals report emergency department visit data in near-real time to the Illinois Department of Public Health (IDPH). By tracking symptoms (or chief complaints) of patients in emergency departments, public health can promptly detect unusual levels of illness to determine whether a response is warranted.

Percent of emergency department visits attributed to **influenza-like illness** (ILI) and **COVID-like illness** (CLI) for residents of Chicago zip codes based on chief complaint data.



Percent of emergency department visits attributed to **respiratory syncytial virus (RSV)** diagnoses for residents of Chicago zip codes based on chief complaint data. Seasonal trends are displayed for children younger than 5 years old who are most impacted by RSV.





# **National and State Respiratory Virus Surveillance**

The Centers for Disease Control and Prevention's <u>FluView report</u> provides national updates and trends related to influenza activity across the United States, and the National Respiratory and Enteric Virus Surveillance System (<u>NREVSS</u>) is a voluntary laboratory-based system that monitors temporal and geographic circulation patterns of several respiratory viruses in the U.S. The Respiratory Syncytial Virus (RSV) Hospitalization Surveillance Network (<u>RSV-NET</u>) is a CDC population-based surveillance system that collects data on severe RSV hospitalizations, including those resulting in ICU admission or death, among children and adults. CDC is tracking the COVID-19 pandemic in a weekly publication called <u>COVID Data Tracker Weekly Review</u>. The <u>Illinois</u> and <u>Suburban Cook County</u> influenza surveillance reports are also available online. Current and archived issues of the *Chicago Influenza and Respiratory Virus Surveillance Report* can be found on the CDPH website section <u>Current Flu Situation in Chicago</u>.