



# Chicago Respiratory Virus Weekly Surveillance Report



Brandon Johnson, Mayor

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Olusimbo Ige, MD, MS, MPH, Commissioner

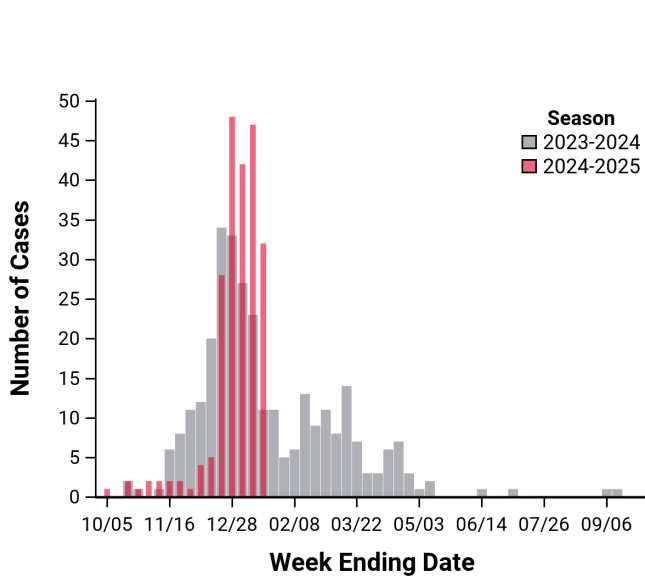
*This report summarizes key respiratory virus surveillance indicators. The indicators are compiled from laboratory-based data as well emergency department visit data. All data are preliminary and may change as additional reports are received. Historical and seasonal summary reports can be found here: Chicago [Influenza and Respiratory Virus Surveillance Report](#).*

**A new Respiratory Illness Dashboard is now available on the [CDPH website](#).** This dashboard summarizes information about respiratory virus disease activity in Chicago, with a focus on COVID-19 (caused by the SARS-CoV-2 virus), influenza, and respiratory syncytial virus (RSV). The dashboard will be updated every Friday at 1pm.

## Weekly Surveillance Key Points

- **Overall acute respiratory illness activity level is High across Chicago, driven mostly by elevated flu activity. Flu activity remains high and COVID-19 activity remains low. RSV activity decreased from high to moderate and is declining across all clinical surveillance indicators.**
- The first pediatric RSV death in Chicago of the 2024-25 season was reported this week.
- ED visits for flu remain significantly elevated across all age groups, as do flu hospital and ICU admissions. ED visits, hospitalizations, and ICU admissions for RSV continue to decrease and are likely past peak for the season. Although ICU admissions for COVID-19 have increased since last week, COVID-19 ED visits have remained similar or decreased across all ages.
- The percentage of specimens that tested positive for flu remains high. Almost all (99%) typed flu specimens are flu A; among those subtyped, about half (55%) have been H1N1. Test positivity for RSV has been decreasing over the past 4 weeks. Test positivity for COVID-19 has begun to decrease.
- In the most recent week, 100% of wastewater samples tested positive for all three pathogens. Wastewater concentrations for flu and RSV are high compared to baseline and COVID-19 is low compared to baseline.
- **[Flu](#) and [COVID-19](#) vaccine coverage across the city remain low.** See CDPH's [Mid-Season Seasonal Respiratory Vaccine Coverage Report](#) for more details.
- For information on the national bird flu outbreak, see: [H5 Bird Flu: Current Situation](#).

**Influenza-Associated ICU Hospitalizations - In Illinois, influenza-associated ICU hospitalizations are reportable as soon as possible but within three days. The graph below shows the weekly number of reported ICU hospitalizations for Chicago residents for previous two seasons. The table summarizes selected characteristics of reported cases for the current week and cumulative for the season.**



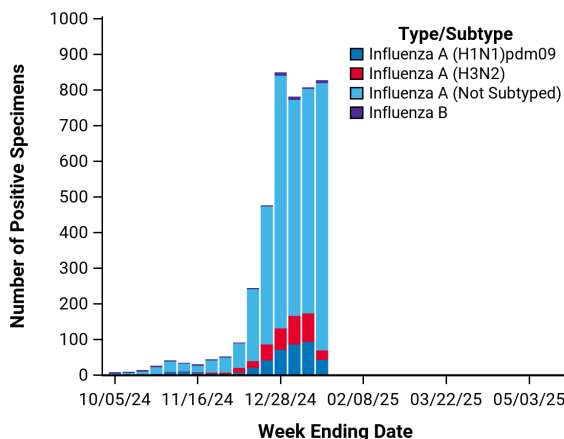
Group	Week Ending January 18, 2024		Since September 29, 2024	
	#	%	#	%
<b>Citywide</b>	32	100	219	100
<b>Age</b>				
0-4	4	12.5	16	7.3
5-17	0	0.0	10	4.6
18-24	0	0.0	4	1.8
25-49	5	15.6	41	18.7
50-64	8	25.0	44	20.1
65+	15	46.9	104	47.5
<b>Gender</b>				
Male	14	43.8	104	47.5
Female	18	56.3	115	52.5
<b>Race-Ethnicity</b>				
White Non-Latinx	8	25.0	51	23.3
Black Non-Latinx	15	46.9	99	45.2
Latinx	6	18.8	53	24.2
Asian Non-Latinx	0	0.0	9	4.1
Other Non-Latinx	2	6.3	4	1.8
Unknown-Race	1	3.1	3	1.4

**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.

Respiratory Pathogen	Week Ending January 18, 2024		Since September 29, 2024	
	# Tested	% Positive	# Tested	% Positive
Influenza*	4,104	20.2	56,587	7.7
RSV*	3,339	6.2	45,257	8.0
SARS-CoV-2*	3,343	4.5	45,920	3.6
Parainfluenza	1,972	0.5	31,811	1.7
Rhinovirus/Enterovirus	917	5.9	17,081	16.3
Adenovirus	917	0.9	17,053	1.9
Human Metapneumovirus	950	0.5	17,343	0.5
Seasonal Coronaviruses <sup>†</sup>	1,967	1.8	22,211	1.9

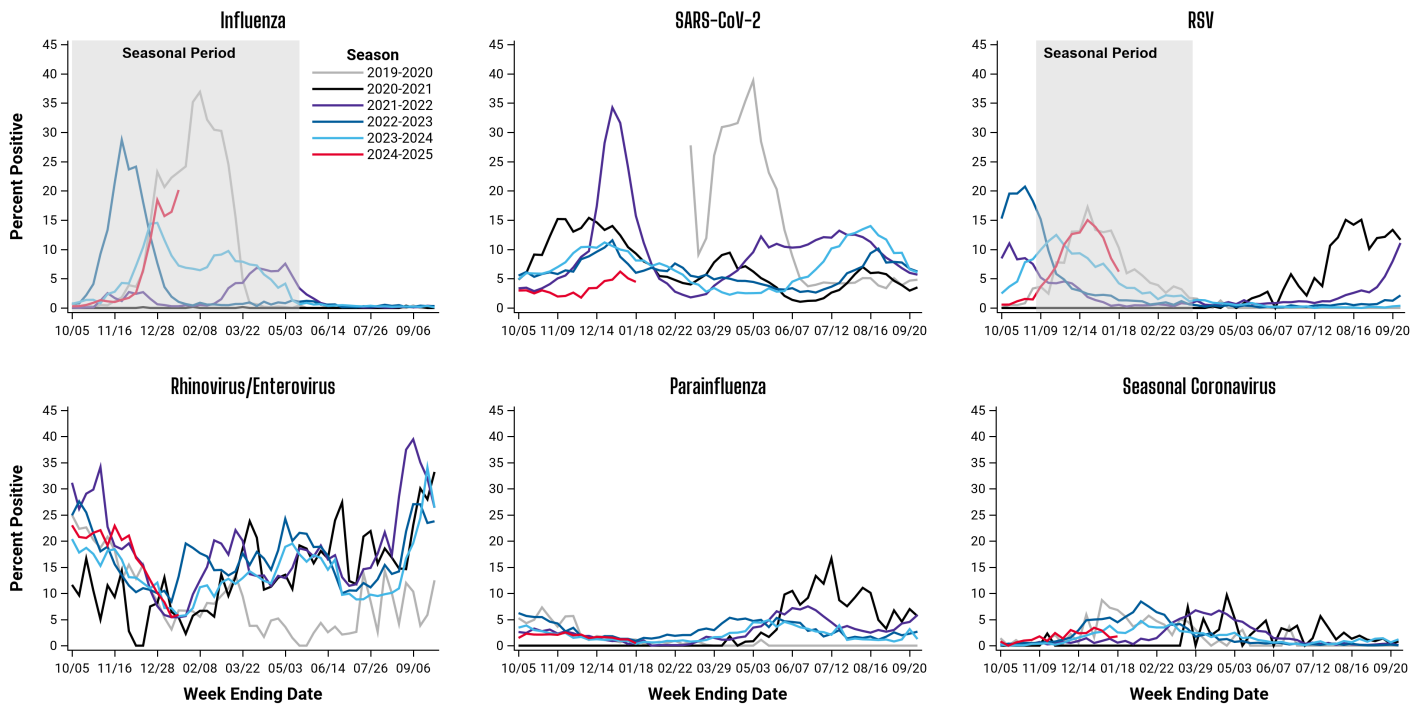
\*Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.

Weekly number of specimens testing positive for influenza by type and subtype (graph) and the number of positive specimens by type and subtype for the current week and cumulative for the season (table).



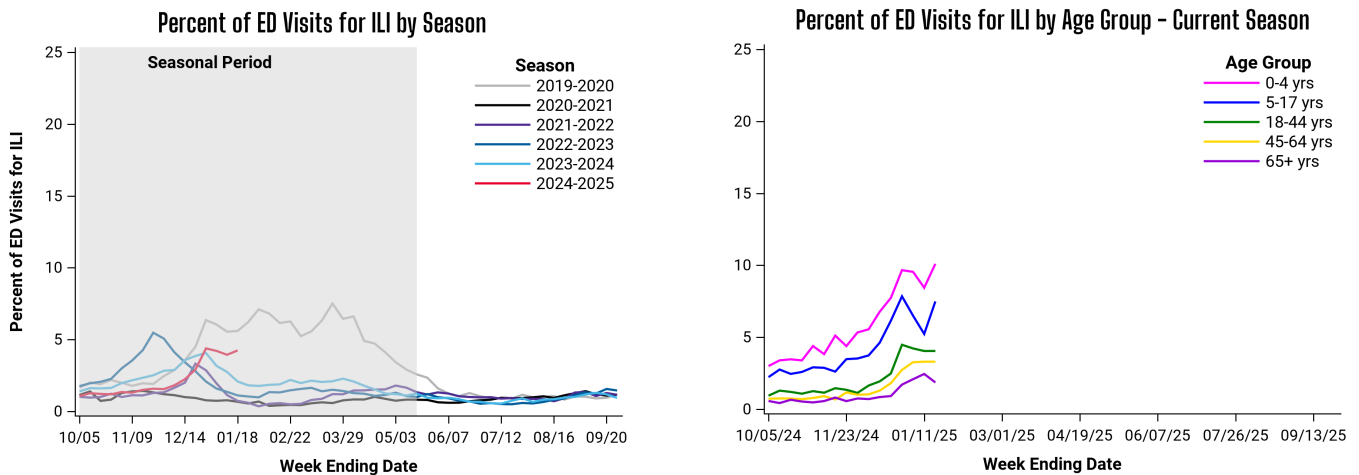
Type / Subtype	Week Ending January 18, 2024		Since September 29, 2024	
	# Positive	%	# Positive	%
<b>Influenza A</b>	820	99.2	4,281	98.8
(H1N1)pdm09	44	5.4	409	9.6
H3N2	26	3.2	337	7.9
Subtyping not performed	750	91.5	3,535	82.6
<b>Influenza B</b>	7	0.8	52	1.2
<b>Total Positive</b>	827	100	4,333	100

**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.

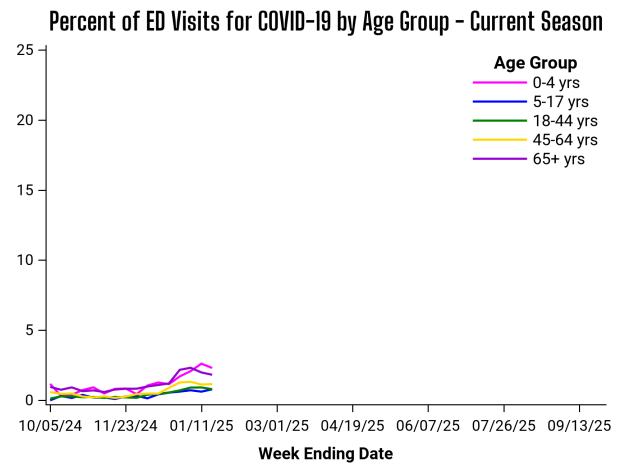
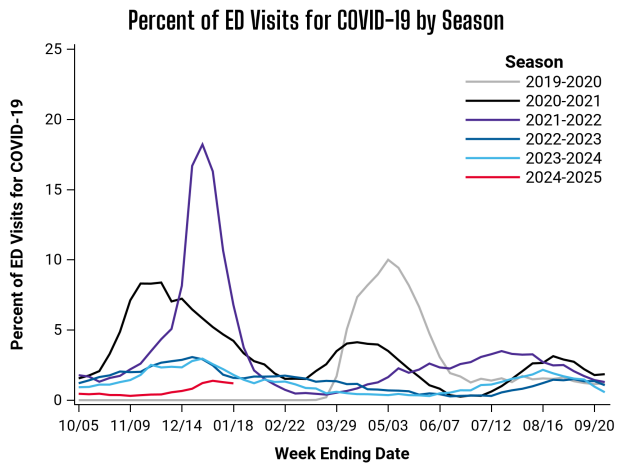


**Emergency Department Illness Surveillance In Illinois**, all 185 acute-care hospitals report emergency department visit data in near-real time to the Illinois Department of Public Health (IDPH). By tracking symptoms (or chief complaints) of patients in emergency departments, public health can promptly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

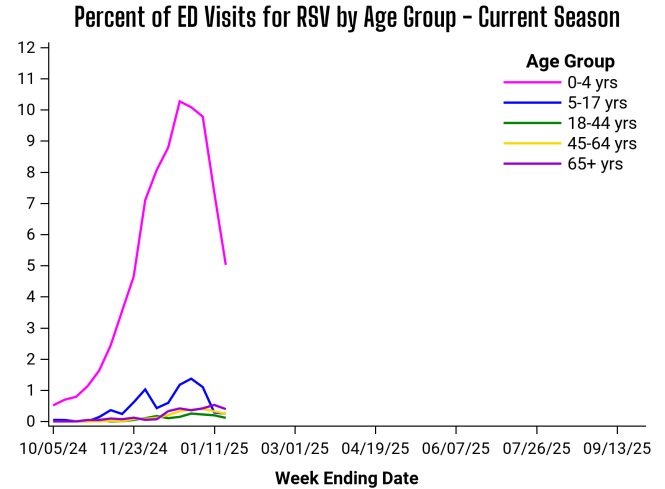
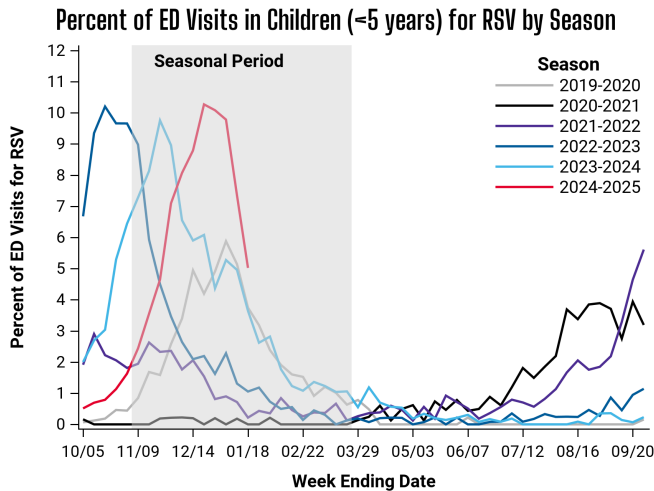
Percent of emergency department visits attributed to **influenza-like illness (ILI)** for residents of Chicago zip codes based on chief complaint data.



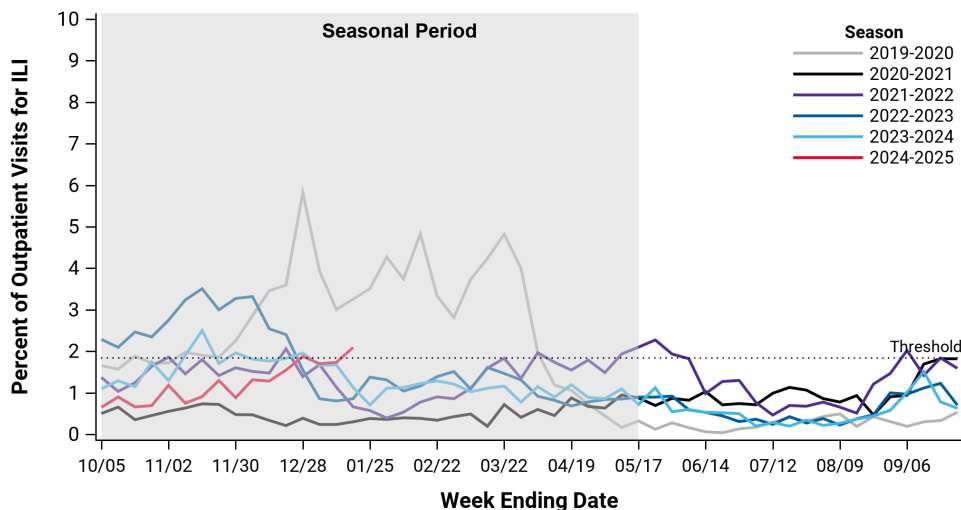
Percent of emergency department visits attributed to **COVID-19 diagnoses** for residents of Chicago zip codes based on chief complaint data.



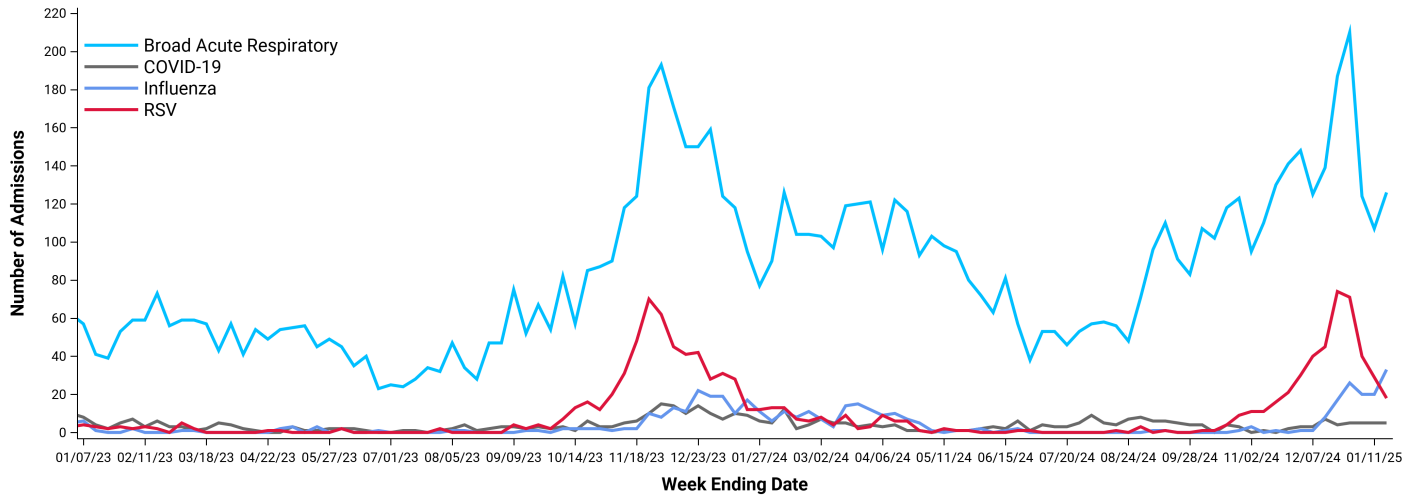
Percent of emergency department visits attributed to **respiratory syncytial virus (RSV)** diagnoses for residents of Chicago zip codes based on chief complaint data. Seasonal trends are displayed for children younger than 5 years old who are most impacted by RSV.



**Outpatient Visit Illness Surveillance\*** Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network ([ILINet](#)) by reporting on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with influenza-like illness (ILI). This graph shows the percent of medically-attended outpatient visits attributed to ILI as reported by ILINet facilities in Chicago.



**Weekly Pediatric Admissions** Emergency department visit data includes information on whether the visit resulted in a hospital admission at any time during the course of the clinical encounter. The syndromes or disease associated with the hospitalization are based on chief complaint and discharge diagnosis codes and do not necessarily represent lab-confirmed cases. The chart below represents hospital admissions among children <18 years-old at Chicago hospitals due to acute respiratory illnesses.



### National and State Respiratory Virus Surveillance

The Centers for Disease Control and Prevention’s [FluView](#) report provides national updates and trends related to influenza activity across the United States, and the National Respiratory and Enteric Virus Surveillance System ([NREVSS](#)) 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 ([RSV-NET](#)) 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. The Respiratory Virus Hospitalization Surveillance Network ([RESP-NET](#)) monitors laboratory-confirmed hospitalizations associated with influenza, COVID-19, and respiratory syncytial virus (RSV) among children and adults. The [Illinois](#) and [Suburban Cook County](#) 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 [Historical and Seasonal Summary Reports](#).