



Chicago Respiratory Virus Weekly Surveillance Report



Brandon Johnson, Mayor

January 3, 2025

Olusimbo Ige, MD, MS, MPH, Commissioner

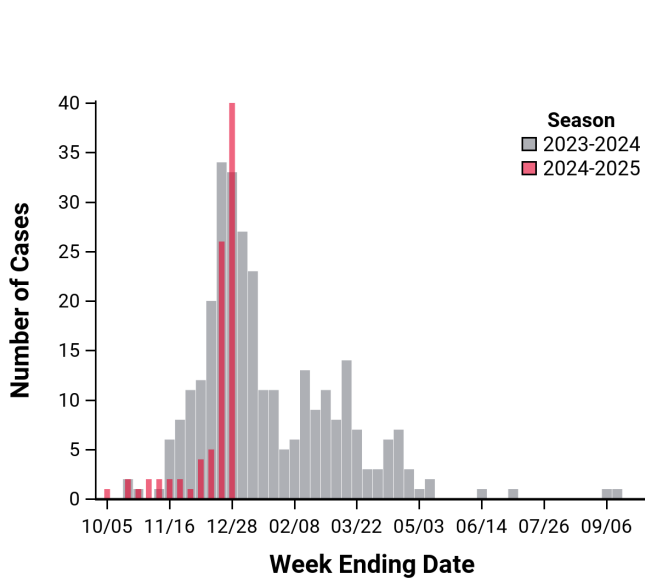
This report summarizes key respiratory virus surveillance indicators. The indicators are compiled from laboratory-based data as well emergency department visit data. All data are preliminary and may change as additional reports are received. Historical and seasonal summary reports can be found here: [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. Flu and RSV levels are particularly elevated, and COVID-19 continues to increase.**
- The first pediatric influenza death in Chicago of the 2024-25 season was reported this week.
- The percentage of ED visits for flu has more than doubled since last week, surpassing last year's peak; ICU admissions for flu are also rapidly increasing. ED visits for RSV remain very high, especially among children <5 years, and those for COVID-19 continue to increase modestly across all ages.
- The percentage of specimens that tested positive for flu has increased substantially. Almost all (99%) flu specimens that were typed are flu A; among those subtyped, about half (54%) have been H1N1. Test positivity for RSV remains elevated, likely at or near the season's peak. Test positivity for COVID-19 continues to increase modestly.
- Wastewater data is unavailable for week of Dec 22–28, 2024, but during the last week of available data concentrations of flu, RSV, and the COVID-19 virus were all increasing.
- **[Flu](#) and [COVID-19](#) vaccine coverage across the city remain low.** There is still time to get vaccinated! Other ways to protect yourself can be found [here](#) and [here](#).
- For information on the national bird flu outbreak, see: [H5 Bird Flu: Current Situation](#).
- Healthcare personnel: please see 12/20/24 IDPH SIREN for consideration of enhanced precautions at your facilities including temporary visitor restrictions and broader source control measures (i.e., masking).

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.



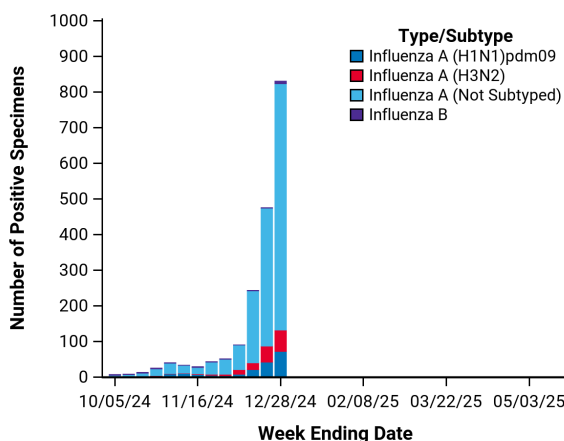
Group	Week Ending December 28, 2024		Since September 29, 2024	
	#	%	#	%
Citywide	40	100	88	100
Age				
0-4	3	7.5	6	6.8
5-17	2	5.0	8	9.1
18-24	1	2.5	1	1.1
25-49	8	20.0	18	20.5
50-64	7	17.5	14	15.9
65+	19	47.5	41	46.6
Gender				
Male	15	37.5	42	47.7
Female	25	62.5	46	52.3
Race-Ethnicity				
White Non-Latinx	8	20.0	20	22.7
Black Non-Latinx	24	60.0	42	47.7
Latinx	6	15.0	19	21.6
Asian Non-Latinx	1	2.5	5	5.7
Other Non-Latinx	0	0.0	1	1.1
Unknown-Race	1	2.5	1	1.1

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 December 28, 2024		Since September 29, 2024	
	# Tested	% Positive	# Tested	% Positive
Influenza*	4,551	18.3	42,539	4.5
RSV*	3,421	14.1	32,965	7.4
SARS-CoV-2*	3,361	4.9	34,075	3.1
Parainfluenza	1,799	1.1	24,276	1.9
Rhinovirus/Enterovirus	968	9.6	12,982	18.8
Adenovirus	968	0.8	12,982	2.0
Human Metapneumovirus	969	0.7	13,084	0.3
Seasonal Coronaviruses [†]	1,790	2.8	14,671	1.6

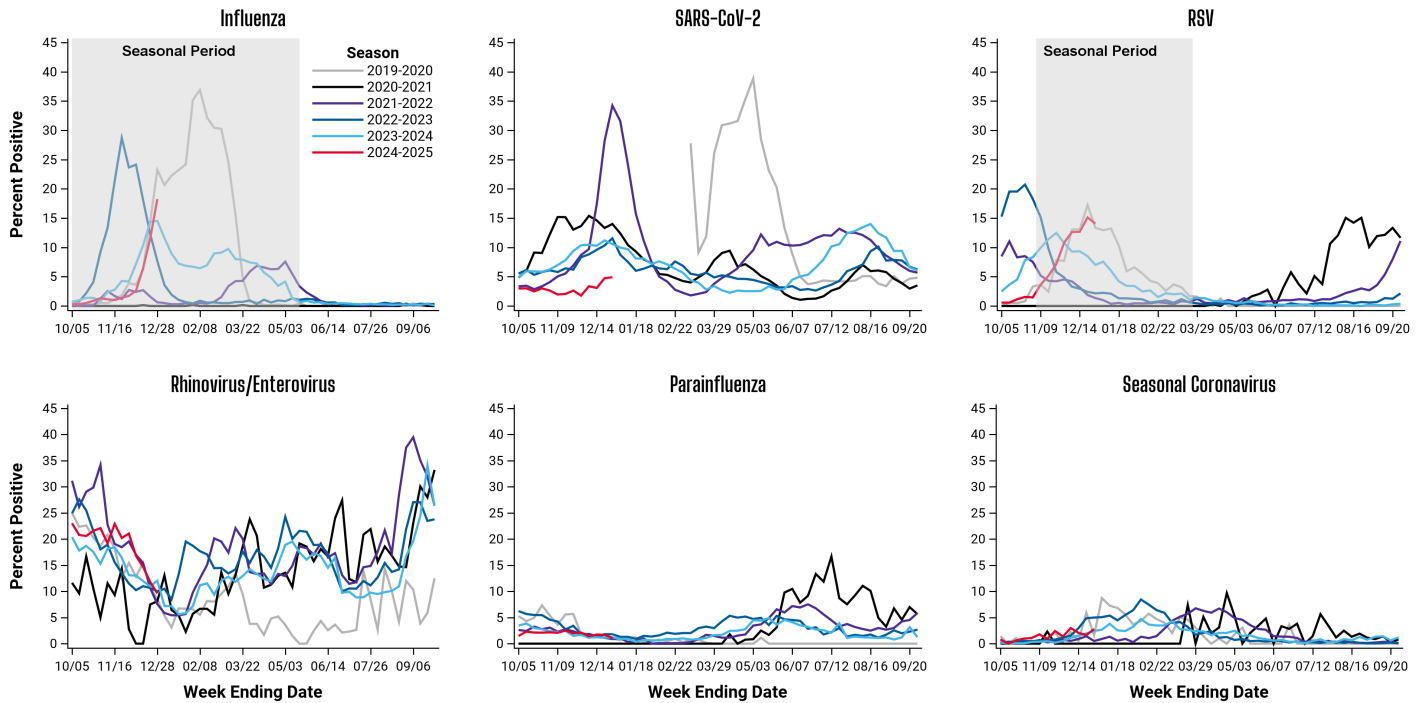
*Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.

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).



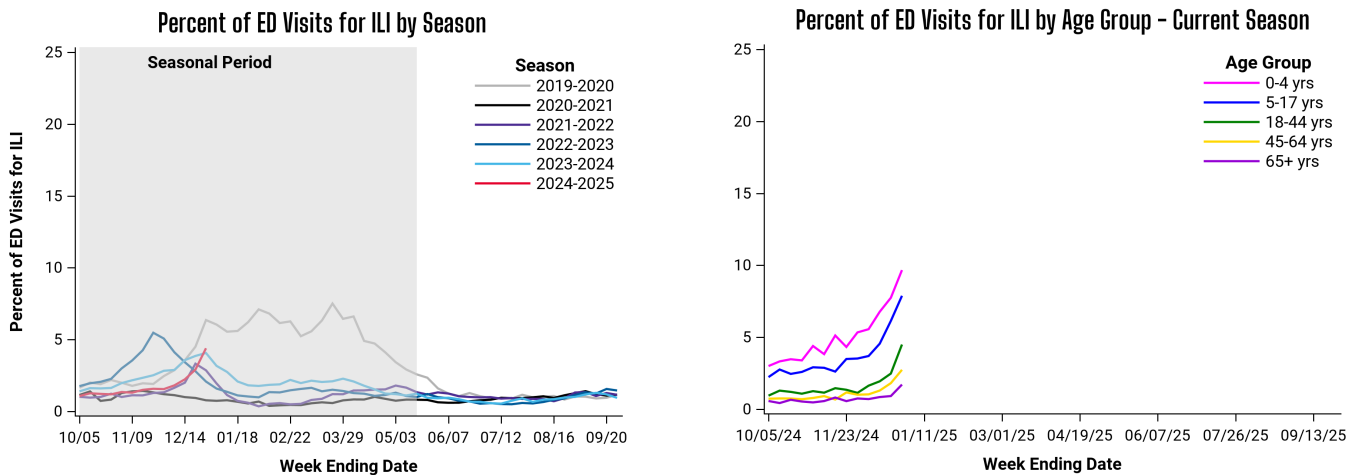
Type / Subtype	Week Ending December 28, 2024		Since September 29, 2024	
	# Positive	%	# Positive	%
Influenza A	823	99.0	1,866	98.2
(H1N1)pdm09	72	8.7	184	9.9
H3N2	60	7.3	151	8.1
Subtyping not performed	691	84.0	1,531	82.0
Influenza B	8	1.0	34	1.8
Total Positive	831	100	1,900	100

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.

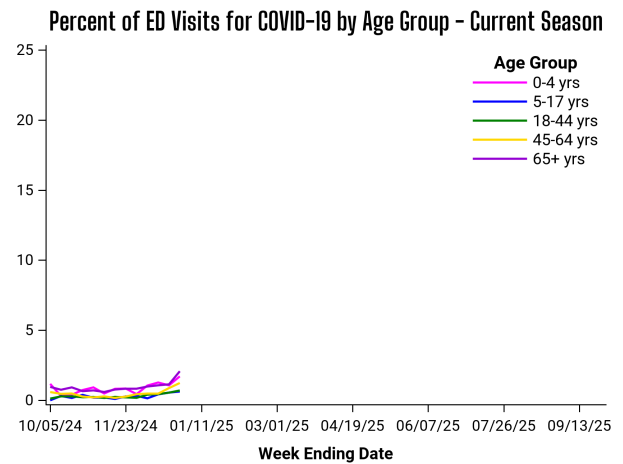
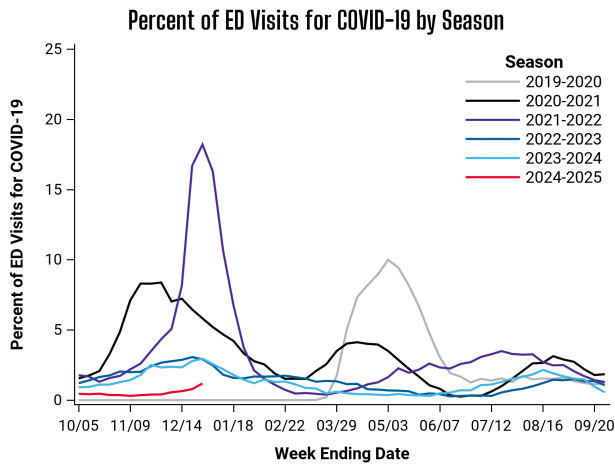


Emergency Department Illness Surveillance In Illinois, all 185 acute-care hospitals report emergency department visit data in near-real time to the Illinois Department of Public Health (IDPH). By tracking symptoms (or chief complaints) of patients in emergency departments, public health can promptly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

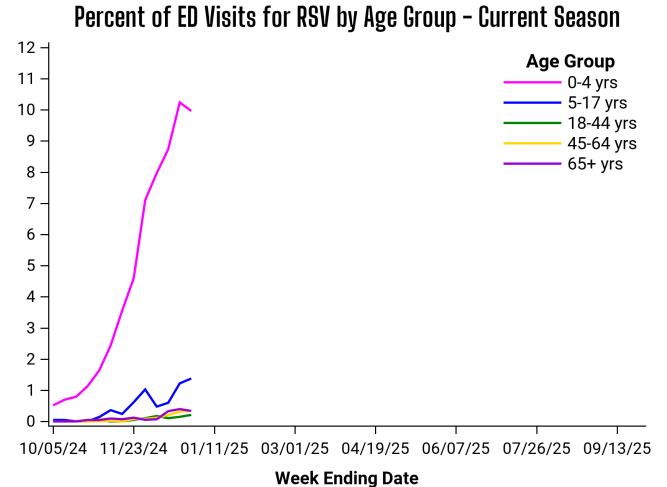
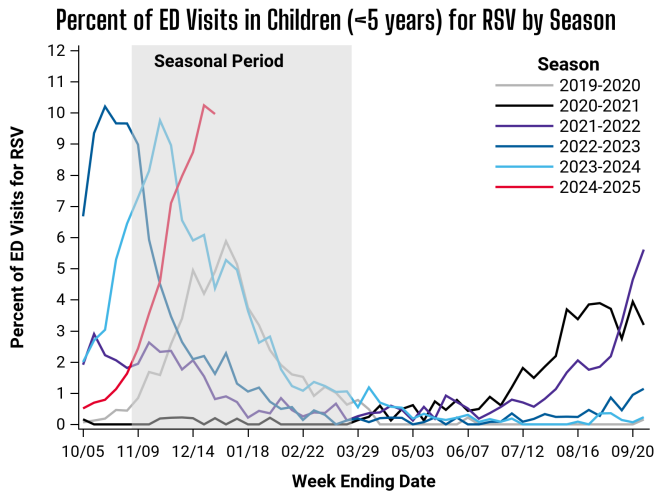
Percent of emergency department visits attributed to **influenza-like illness (ILI)** for residents of Chicago zip codes based on chief complaint data.



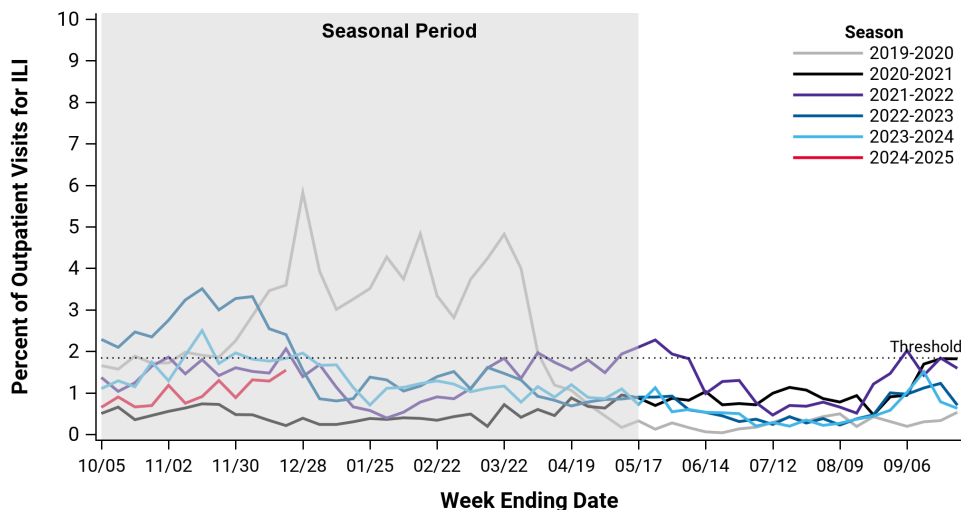
Percent of emergency department visits attributed to **COVID-19 diagnoses** for residents of Chicago zip codes based on chief complaint data.



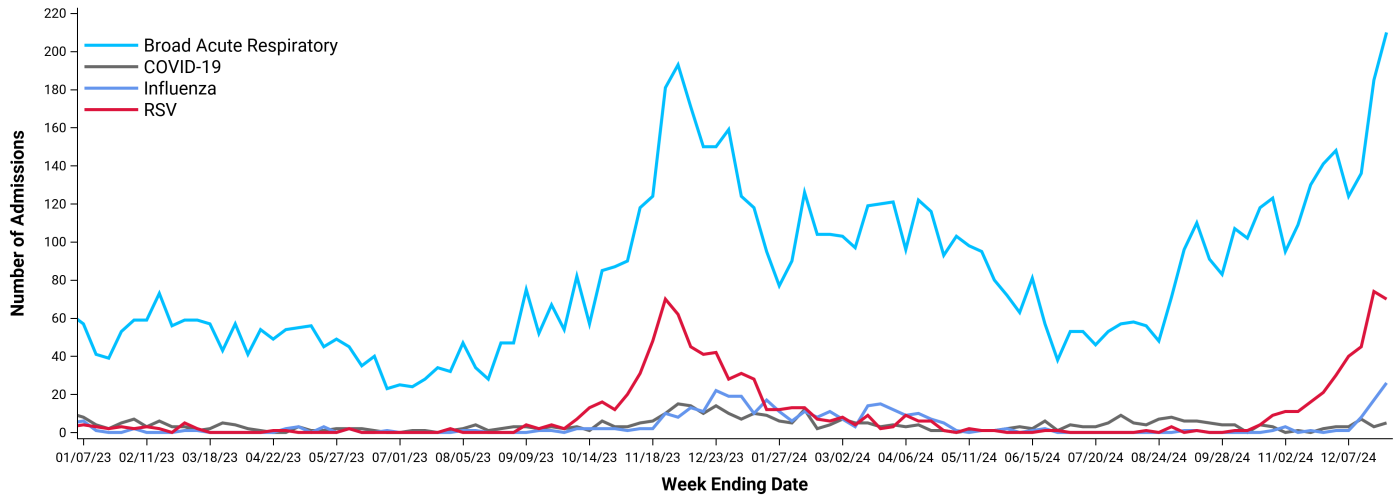
Percent of emergency department visits attributed to **respiratory syncytial virus (RSV)** diagnoses for residents of Chicago zip codes based on chief complaint data. Seasonal trends are displayed for children younger than 5 years old who are most impacted by RSV.



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](#).