



Chicago Respiratory Virus Weekly Surveillance Report



Brandon Johnson, Mayor

December 6, 2024

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](#).

Weekly Surveillance Key Points

Overall respiratory illness activity in Chicago is low. The activity level is a [measure](#) of how frequently a wide variety of respiratory symptoms and conditions are diagnosed during emergency department visits among Chicago residents, ranging from the common cold to COVID-19, influenza, and RSV.

COVID-19:

- COVID-19 activity in Chicago is minimal.
- The proportion of emergency department visits attributed to COVID-19 diagnoses remains at <1%.
- The test positivity for SARS-CoV-2 has decreased from 2.4% to 1.6%.

Influenza:

- Influenza activity in Chicago is low.
- One influenza-associated ICU hospitalization was reported for the current surveillance week. Since September 29, 2024, 13 influenza-associated ICU hospitalizations have been reported.
- 44 of 2,552 (1.7%) reported specimens tested for influenza were positive. Since September 29, 2024, 222 of 22,340 (1.0%) reported specimens tested for influenza were positive.
- The proportion of emergency department visits for influenza-like illness (ILI) is above the local threshold, and the proportion of outpatient visits for ILI is below the local threshold.
- The Illinois Department of Public Health has issued [Influenza Testing and Reporting Guidance](#) for the 2024-2025 season. Visit the CDPH [HAN website](#) for more information on how to report.
- For situational awareness of the ongoing outbreak of highly pathogenic avian influenza see, [H5 Bird Flu: Current Situation](#).

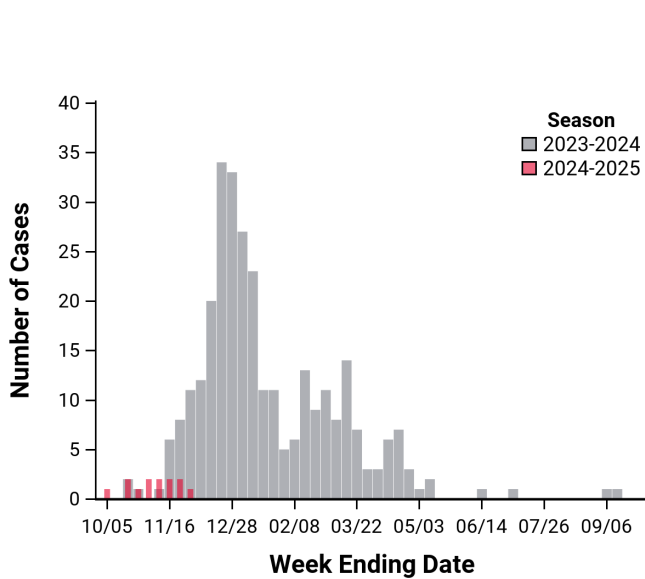
Other Respiratory Viruses:

- RSV activity in Chicago is high.
 - The percent of emergency department visits for RSV in children <5 years has increased from 4.1% to 7.0%.
 - The number of pediatric admissions due to RSV increased 43% from the previous week.
 - The test positivity for RSV has increased from 6.9% to 12.1%.
- The test positivity for parainfluenza has decreased from 2.0% to 1.6%.
- The test positivity for rhinovirus/enterovirus has decreased from 26.4% to 21.7%.
- The test positivity for adenovirus has increased from 3.1% to 4.3%.

Vaccination:

- CDC recommends [immunizations](#) as a core prevention strategy to lower the risk from respiratory viruses. Influenza, COVID-19, and RSV vaccines can be given at the same visit if the timing coincides.
- Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. For those without a healthcare provider or whose healthcare providers do not have the influenza or COVID-19 vaccine, a schedule of [City of Chicago influenza and COVID-19 vaccination clinics](#) is available on the city website and by calling 311.
- Influenza vaccine coverage estimates for Chicago residents are now available on the [CDPH website](#).

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.



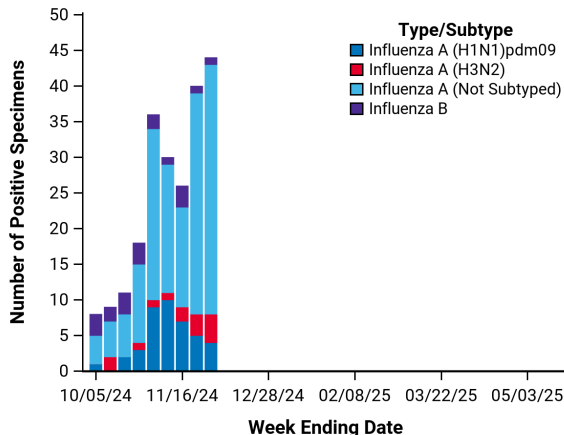
| Group | Week Ending November 30, 2024 | | Since September 29, 2024 | |
|-----------------------|----------------------------------|-----|-----------------------------|------|
| | # | % | # | % |
| Citywide | 1 | 100 | 13 | 100 |
| Age | | | | |
| 0-4 | 0 | 0.0 | 1 | 7.7 |
| 5-17 | 0 | 0.0 | 2 | 15.4 |
| 18-24 | 0 | 0.0 | 0 | 0.0 |
| 25-49 | 1 | 100 | 2 | 15.4 |
| 50-64 | 0 | 0.0 | 1 | 7.7 |
| 65+ | 0 | 0.0 | 7 | 53.8 |
| Gender | | | | |
| Male | 1 | 100 | 7 | 53.8 |
| Female | 0 | 0.0 | 6 | 46.2 |
| Race-Ethnicity | | | | |
| White Non-Latinx | 0 | 0.0 | 2 | 15.4 |
| Black Non-Latinx | 1 | 100 | 4 | 30.8 |
| Latinx | 0 | 0.0 | 7 | 53.8 |
| Asian Non-Latinx | 0 | 0.0 | 0 | 0.0 |
| Other Non-Latinx | 0 | 0.0 | 0 | 0.0 |
| Unknown-Race | 0 | 0.0 | 0 | 0.0 |

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 November 30, 2024 | | Since September 29, 2024 | |
|-------------------------------------|----------------------------------|------------|-----------------------------|------------|
| | # Tested | % Positive | # Tested | % Positive |
| Influenza* | 2,552 | 1.7 | 22,340 | 1.0 |
| RSV* | 1,673 | 12.1 | 15,969 | 3.9 |
| SARS-CoV-2* | 1,668 | 1.6 | 16,960 | 2.5 |
| Parainfluenza | 1,596 | 1.6 | 14,908 | 2.0 |
| Rhinovirus/Enterovirus | 690 | 21.7 | 7,220 | 22.1 |
| Adenovirus | 690 | 4.3 | 7,220 | 2.3 |
| Human Metapneumovirus | 699 | 0.6 | 7,288 | 0.2 |
| Seasonal Coronaviruses [†] | 1,587 | 0.6 | 14,840 | 0.5 |

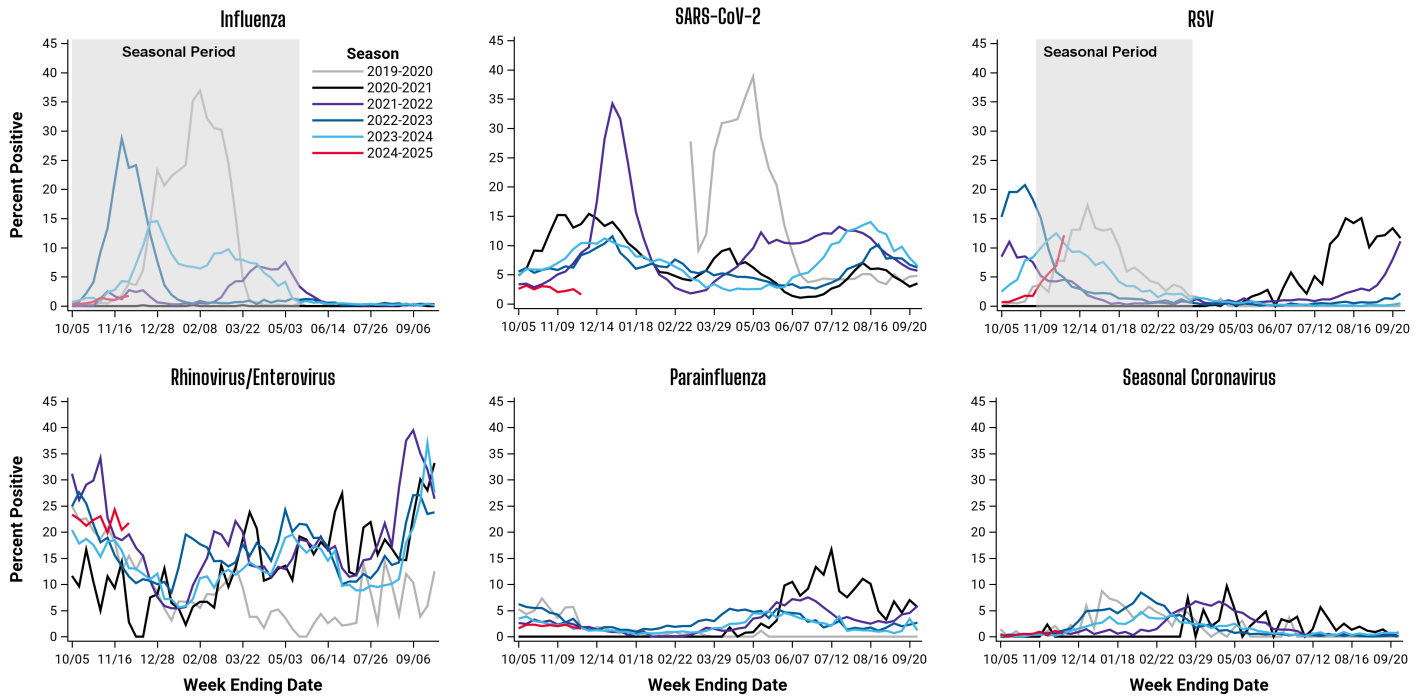
*Represents both dualplex and multiplex PCR data. All other data represents only multiplex panels that include the specified pathogens;† Four seasonal coronavirus strains include 229E, NL63, OC43, and HKU1.

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).



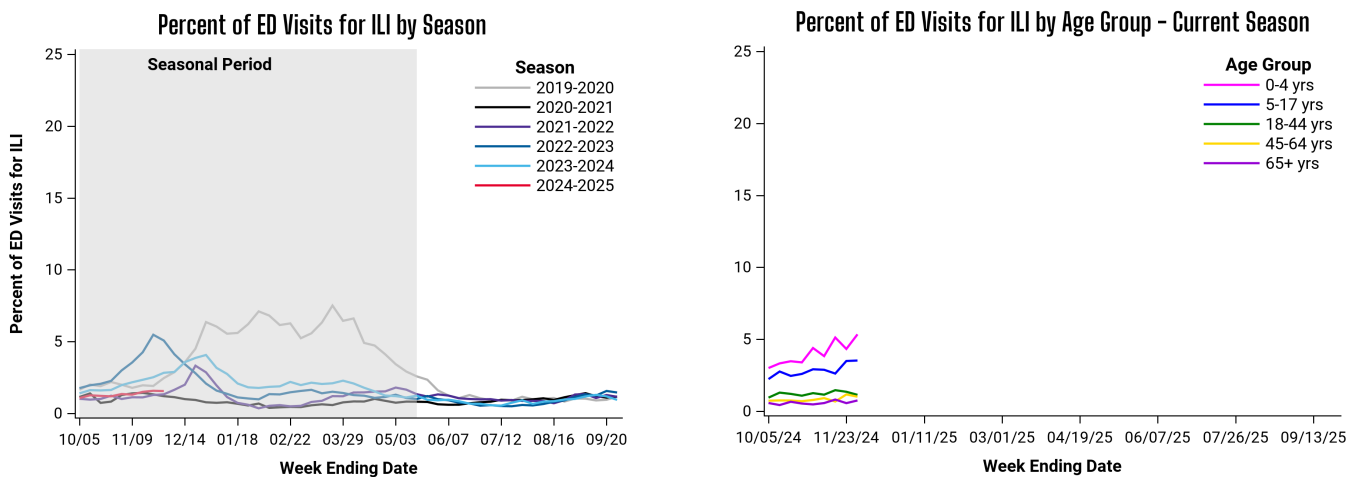
| Type / Subtype | Week Ending November 30, 2024 | | Since September 29, 2024 | |
|-------------------------|----------------------------------|------|-----------------------------|------|
| | # Positive | % | # Positive | % |
| Influenza A | 43 | 97.7 | 203 | 91.4 |
| (H1N1)pdm09 | 4 | 9.3 | 41 | 20.2 |
| H3N2 | 4 | 9.3 | 14 | 6.9 |
| Subtyping not performed | 35 | 81.4 | 148 | 72.9 |
| Influenza B | 1 | 2.3 | 19 | 8.6 |
| Total Positive | 44 | 100 | 222 | 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.*

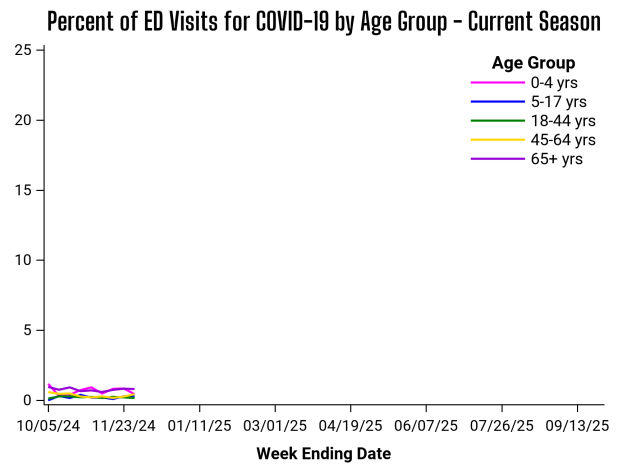
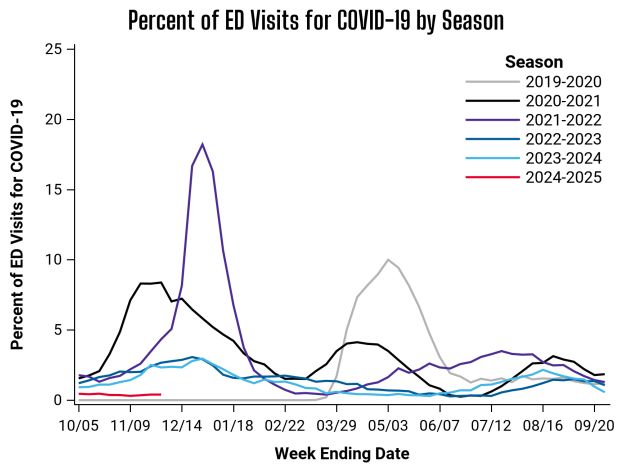


Emergency Department Illness Surveillance *In [Illinois](#), all 185 acute-care hospitals report emergency department visit data in near-real time to the Illinois Department of Public Health (IDPH). By tracking symptoms (or chief complaints) of patients in emergency departments, public health can promptly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

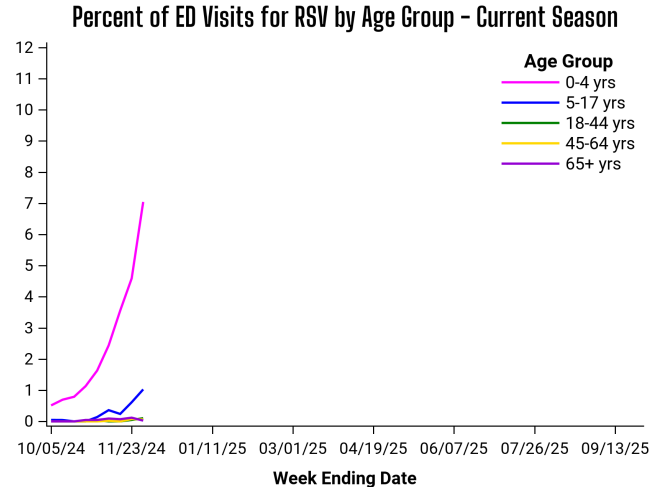
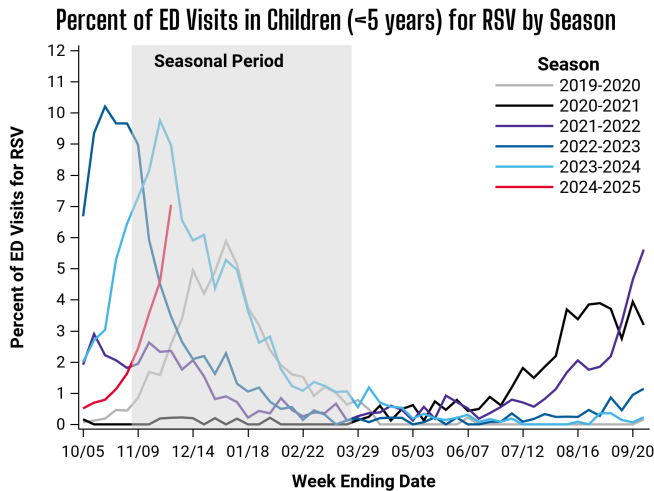
Percent of emergency department visits attributed to **influenza-like illness (ILI)** for residents of Chicago zip codes based on chief complaint data.



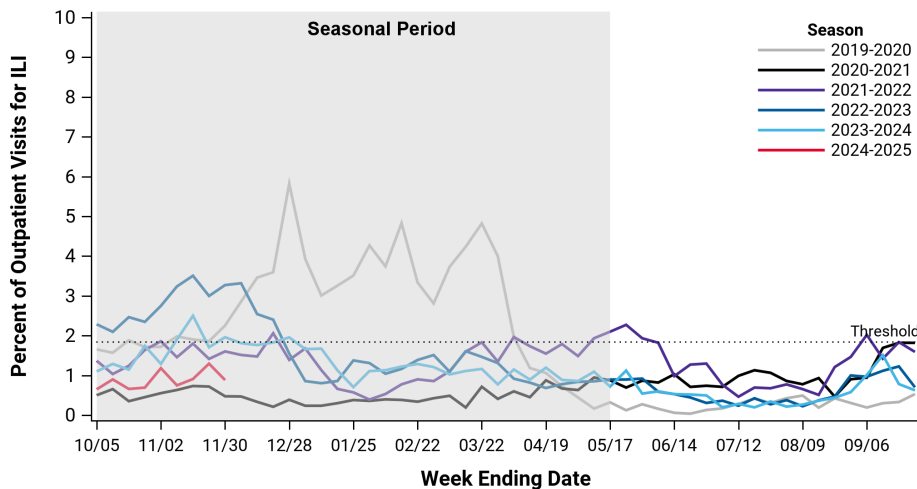
Percent of emergency department visits attributed to **COVID-19 diagnoses** for residents of Chicago zip codes based on chief complaint data.



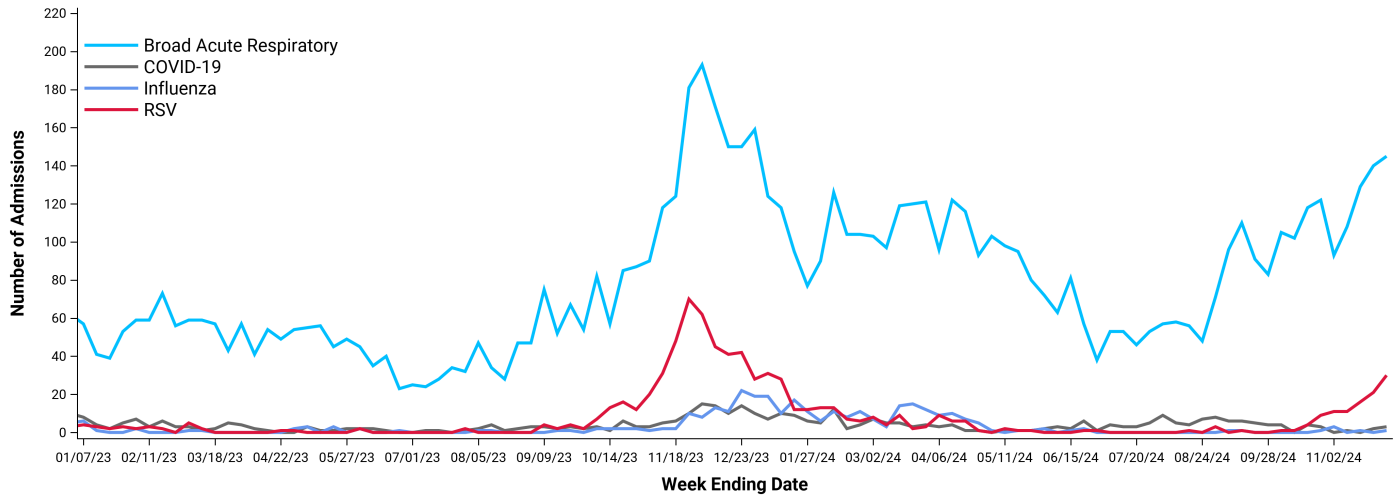
Percent of emergency department visits attributed to **respiratory syncytial virus (RSV)** diagnoses for residents of Chicago zip codes based on chief complaint data. Seasonal trends are displayed for children younger than 5 years old who are most impacted by RSV.



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](#).