



Chicago 2023-2024 Influenza Season Surveillance Summary



Brandon Johnson, Mayor

May 31, 2024

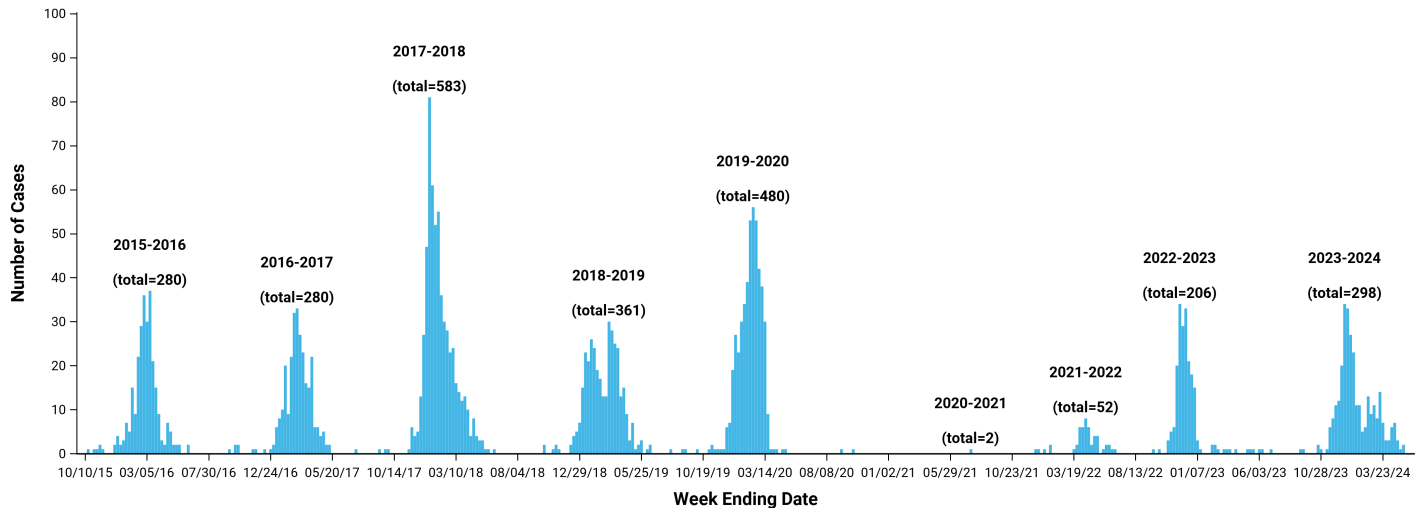
Olusimbo Ige, MD, MS, MPH, Commissioner

This report summarizes key influenza surveillance indicators for the 2023-2024 season. The indicators are compiled from influenza ICU hospitalizations, laboratory-based data as well emergency department and outpatient visits data. More detailed information on [influenza](#) and [COVID-19](#) activity can be found on their respective online dashboards. All data are preliminary and may change as additional reports are received.

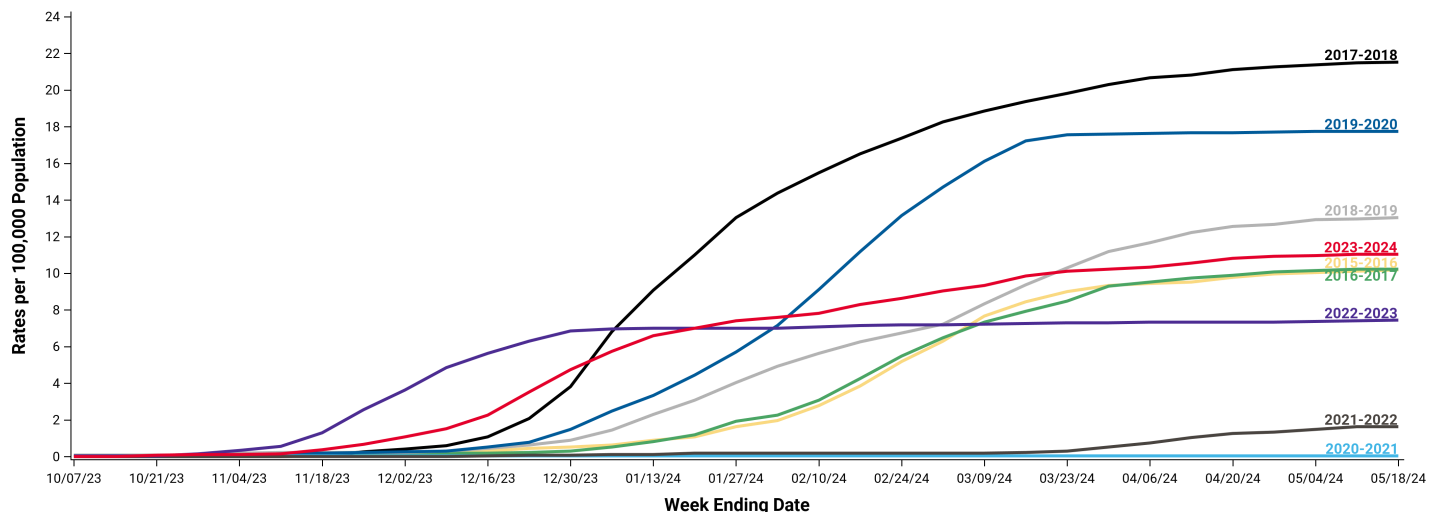
Overall, the 2023-2024 season had moderate influenza activity similar to other pre-pandemic seasons and no influenza-associated pediatric deaths were reported. This season saw two distinct peaks of activity with the second peak associated mainly with influenza B.

Influenza-Associated ICU Hospitalizations - In Illinois, [influenza-associated ICU hospitalizations are reportable](#) as soon as possible but within 24 hours. The graph below shows the weekly number of reported ICU hospitalizations for Chicago residents.

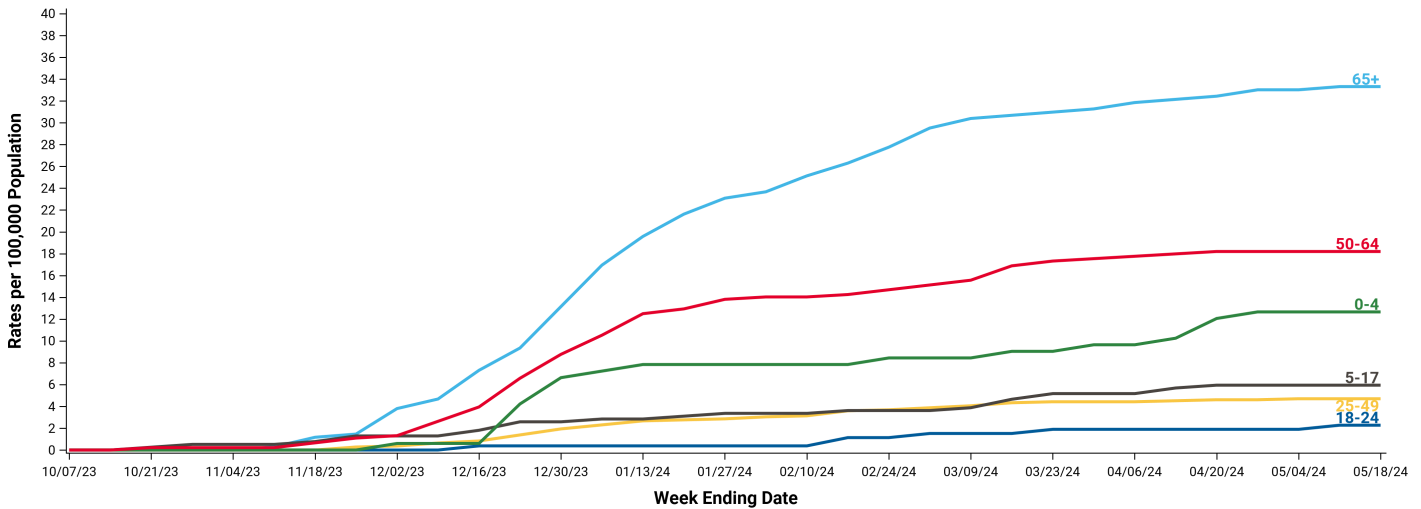
There were 298 influenza-associated ICU hospitalizations reported during the 2023-2024 season. Excluding the two pandemic seasons (2020-21 and 2021-22), this is higher than last season and the fourth highest number of ICU hospitalizations reported in the last nine seasons. The peak number of reported hospitalizations (34) occurred in December with less than half (43%) of cases reported by December 30, 2023 compared to last season where over 90% were reported by the end of December.



Excluding the two pandemic seasons, the overall cumulative rate of influenza-associated ICU hospitalizations landed in the middle of the previous nine influenza seasons; the cumulative rate was lower than three seasons (2017-18 to 2019-20) and higher than three seasons (2015-16, 2016-17, 2022-23). Rates began to increase in late December and continued to increase until mid-March and leveling off by April 2024.

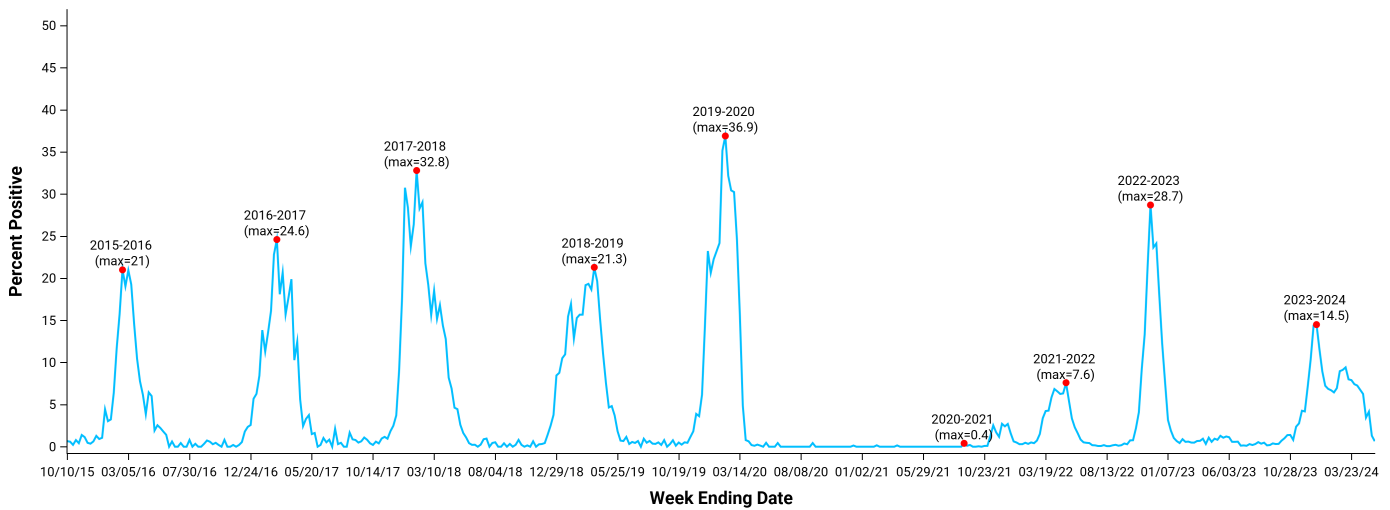


For the 2023-2024 season, the highest cumulative ICU hospitalization rates were among those 50-64 and 65+ years of age. Among pediatric cases, those 0-4 years had higher rates than school-aged children 5-17 years. The lowest rates were among those 18-49 years. This is consistent with national trends of [cumulative rates of influenza hospitalization](#).

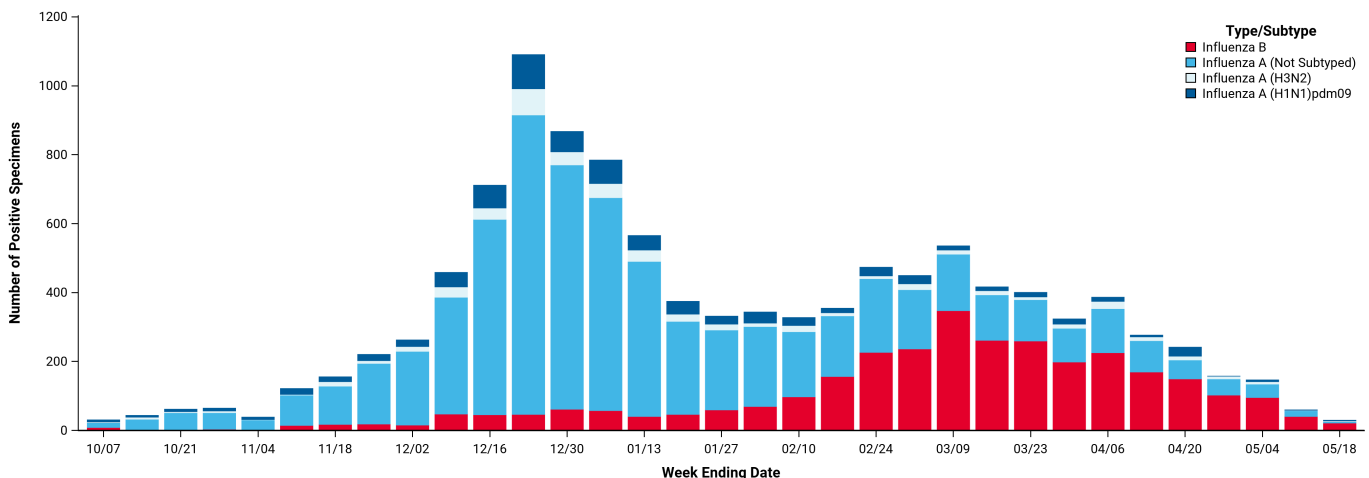


Influenza Virus Laboratory Surveillance The chart below includes data on influenza viral PCR tests performed by several hospital laboratories in Chicago as well as two commercial laboratories serving Chicago facilities. Reporting facilities represent nearly half of all acute care hospitals in the city. Data reported include Chicago and non-Chicago residents.

Overall influenza laboratory percent positivity was 6.5% for the season peaking at 14.5% at the end of December 2023. Excluding the two pandemic seasons, this is the lowest overall percent positivity during the past nine seasons; however the number of influenza tests performed and reported was higher than any prior season.

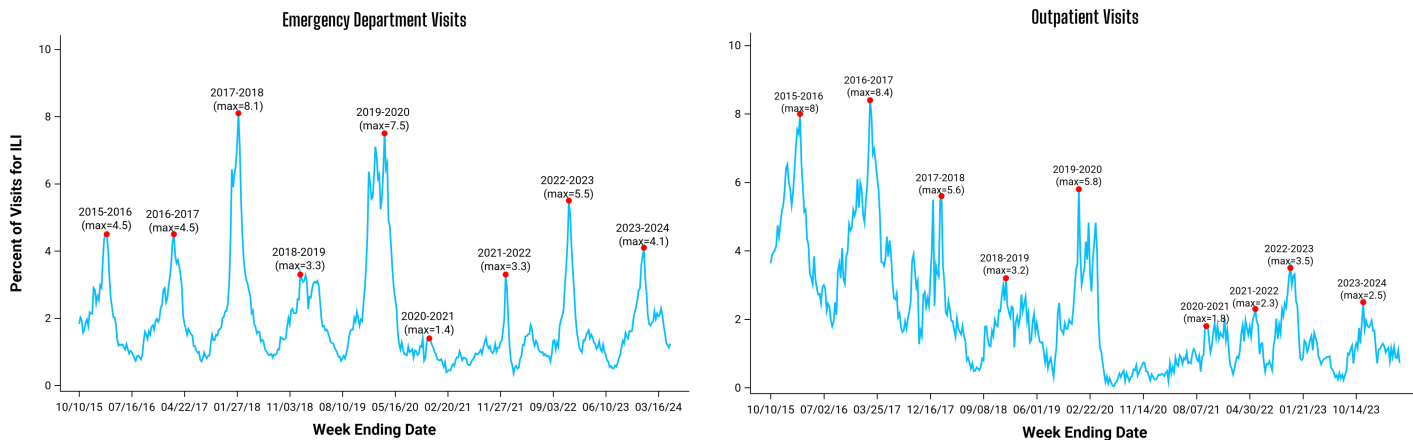


For the 2023-2024 season, 72% of positive specimens were influenza A with the majority not subtyped. Among those subtyped, 61% were A(H1N1)pdm09. Since early March, influenza B accounted for the majority of positive specimens.



Influenza-like Illness (ILI) Surveillance Two data sources are utilized to conduct syndromic surveillance for influenza-like illness, emergency department visit data and outpatient visit data ([ILINet](#)). In [Illinois](#), all 185 acute-care hospitals report emergency department visit data in near-real time to the Illinois Department of Public Health (IDPH). For ILINet, several outpatient clinics throughout Chicago report on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with ILI. The graphs below show the percent of emergency department and outpatient visits attributed to ILI by week for the 2015-2016 - 2023-2024 seasons.

- The proportion of emergency department visits for influenza-like illness (ILI) was 2.2% for the season. This is consistent with the previous eight-season average of 2.4%. The peak (4.1%) occurred in December with 47% of visits due to ILI reported by December 30, 2023; 95% were reported by early May.
- The proportion of outpatient visits for ILI was 1.3% for the season. This is lower than the previous eight-season average of 2.7%. The peak (2.5%) occurred in November with 49% of visits due to ILI reported by December 30, 2023; 95% were reported by early May.



Influenza Outbreaks in Congregate Settings - In [Illinois](#), [outbreaks of influenza or ILI in a congregate setting are reportable](#) as soon as possible but within 24 hours. The graph below shows the number of reported influenza outbreaks in congregate settings in Chicago for the 2013-2014 to 2023-2024 seasons.

- There were 15 influenza outbreaks in congregate settings reported this season with a total of 45 laboratory-confirmed influenza cases; this is almost double the number of reported outbreaks from last season. The highest number of reported outbreaks occurred in 2017-2018 with 22 outbreaks reported.

