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Chicago 2022-2023 Influenza Season Surveillance Summary



Brandon Johnson, Mayor

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Allison Arwady, MD, MPH, Commissioner

This report summarizes key influenza surveillance indicators for the 2022-2023 season. The indicators are compiled from influenza ICU hospitalizations, laboratory-based data as well emergency department and outpatient visits data. More detailed information on <u>influenza</u> and <u>COVID-19</u> activity can be found on their respective online dashboards. All data are preliminary and may change as additional reports are received.

Overall, the 2022-2023 season had low to moderate influenza activity with most metrics rising quickly, peaking early in the season and decreasing by the end of 2022. Among positive influenza specimens that were subtyped, influenza A (H3N2) was the predominant subtype.

Influenza-Associated ICU Hospitalizations - In Illinois, <u>influenza-associated ICU hospitalizations are reportable</u> as soon as possible but within 24 hours. The graph below shows the weekly number of reported ICU hospitalizations for Chicago residents for the current season. The table summarizes selected characteristics of reported cases for the current week and cumulative for the season.

• There were 201 influenza-associated ICU hospitalizations reported during the 2022-2023 season. Excluding the previous two seasons, this is the lowest number of ICU hospitalizations in the last 10 seasons. The peak number of reported hospitalizations (40) occurred in November with 95% of cases reported by December 31, 2022.



11/02/13 04/19/14 10/04/14 03/21/15 09/05/15 02/20/16 08/06/16 01/21/17 07/08/17 12/23/17 06/09/18 11/24/18 05/11/19 10/26/19 04/11/20 09/26/20 03/13/21 08/28/21 02/12/22 07/30/22 01/14/23 Week Ending Date

 The overall cumulative rate of influenza-associated ICU hospitalizations was lower or similar to the previous nine seasons (excluding the prior two pandemic seasons). Rates began to increase earlier and faster than previous seasons but leveled off by the end of 2022.



The cumulative rate of **pediatric** influenza-associated ICU hospitalizations was higher than earlier seasons (2013-2014 to 2015-2016) but was lower than the more recent six seasons, excluding the previous two pandemic seasons. Similar to the overall cumulative rate for all age groups, rates of pediatric ICU hospitalizations increased earlier and faster than previous seasons and leveled off by the end of 2022. For the 2022-2023 season, the highest cumulative ICU hospitalization rates were among the younger (0-4 years) and older (65+ years) age groups. The lowest rates were among those 18-49 years.



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 8.0% for the season. Excluding the previous two seasons, this is
the lowest overall percent positivity since 2016-2017; however the number of influenza tests performed and reported was higher than any prior season. Peak positivity (28.7%) occurred in November with 94% of positive specimens
reported by December 31, 2022.



Influenza-like Illness (ILI) Surveillance Two data sources are utilized to conduct syndromic surveillance for influenzalike illness, emergency department visit data and outpatient visit data (<u>ILINet</u>). 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). 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 - 2022-2023 seasons.

- The proportion of emergency department visits for influenza-like illness (ILI) was 2.1% for the season. This is consistent with the previous seven seasons where the proportion ranged from 2-3%. The peak (5.5%) occurred in November with 63% of visits due to ILI reported by December 31, 2022; 95% were reported by the end of April.
- The proportion of outpatient visits for ILI was 1.7% for the season. This is slightly lower than the previous seven seasons where the proportion ranged from 2-4%. The peak (3.5%) occurred in November with 61% of visits due to ILI reported by December 31, 2022; 95% were reported by the end of April.



Influenza Outbreaks in Congregate Settings - In Illinois, <u>outbreaks of influenza or ILI in a congregate setting are reportable</u> 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 2022-2023 seasons.

 There were seven influenza outbreaks in congregate settings reported this season with a total of 27 laboratoryconfirmed influenza cases. Like other metrics, all but one were reported by December 31, 2022. The highest number of reported outbreaks occurred in 2017-2018 with 22 outbreaks reported.



Influenza-Associated Pediatric Deaths - Influenza-associated pediatric deaths are nationally notifiable to CDC and are also <u>reportable in Illinois</u>.

• There was one influenza-associated pediatric death reported for the season. This is consistent with the previous ten seasons where the median number of deaths reported was one (range of 1-4 deaths).