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# **Online Influenza Dashboard**

#### About this report

Lori E. Lightfoot, Mayor

The Chicago Department of Public Health utilizes various surveillance indicators to monitor influenza activity in Chicago. This includes surveillance for influenza-associated intensive care unit (ICU) hospitalizations, monitoring circulating influenza viruses, as well outpatient and emergency department visits that are due to influenza-like illness (ILI). Influenza surveillance data are typically aggregated by week. This report is updated on Fridays for the previous Saturday through Sunday. On all graphs, the week ending date is displayed. Ending dates are accurate for the current season but are approximations for all other years. All data presented here are preliminary and may change as more reports are received. Reported percentages for previous seasons represent final, end of season data and may differ from previously published reports. All data presented on this page, except where otherwise noted, are available through the <a href="Chicago">Chicago</a> <a href="Data Portal">Data Portal</a>.

Note for the 2021-2022 season: The COVID-19 pandemic has influenced influenza activity and surveillance in several ways. Surveillance indicators that monitor outpatient and emergency department visits for influenza-like illness will capture visits for other respiratory illnesses, like COVID-19, that have similar symptoms. Additionally, health care seeking behavior has changed during the COVID-19 pandemic which may limit our ability to monitor influenza activity. As a result, our typical indicators may be less reliable in measuring influenza activity and should be interrupted with caution and in context with other respiratory pathogens circulating at the time. COVID-19 mitigation measures, like masking and social distancing may also change the timing and intensity of influenza activity this year. Information about the current COVID-19 situation in Chicago can be found on the COVID-19 Dashboard<sup>2</sup>.

### Weekly Influenza Surveillance Summary

- Currently, the risk of influenza infection is low.
- Vaccination is the best way to protect against influenza infection and all Chicagoans six months and older are encouraged to get vaccinated.
- Influenza vaccines may be administered on the same day as COVID-19 vaccines. No waiting between COVID-19 and other vaccines is required.
- 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 vaccine, a schedule of <u>City of Chicago</u>
  influenza vaccination clinics<sup>3</sup> is available on the city website and by calling 311.

#### **Intensive Care Unit (ICU) Hospitalizations**

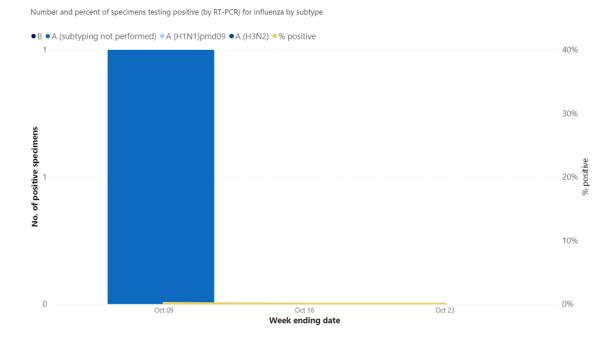
In Illinois, influenza associated Intensive Care Unit (ICU) hospitalizations are reportable as soon as possible, but within 24 hours. Influenza associated ICU hospitalizations are defined as individuals hospitalized in an ICU with a positive laboratory test for influenza A or B, including specimens identified as influenza A/H3N2, A/H1N1pdm09, and specimens not subtyped (e.g., influenza positive cases by PCR or any rapid test such as EIA).

No influenza-associated hospitalizations have been reported yet this season.

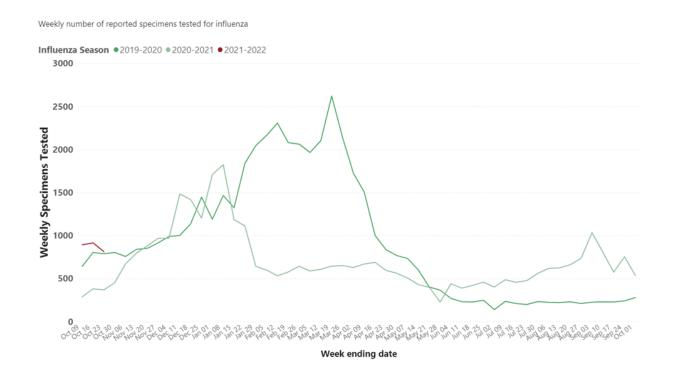
### **Laboratory Surveillance**

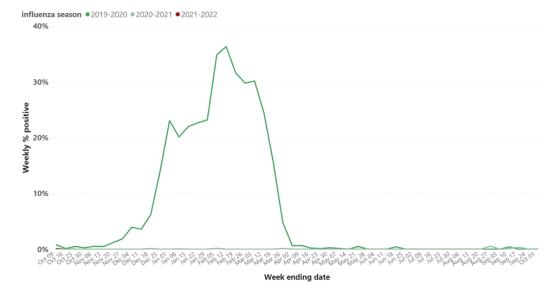
Data on influenza virus test results are reported by several Chicago hospital laboratories performing influenza RT-PCR. Laboratories submit aggregate data for all influenza tests performed; therefore, data may contain results for individuals that reside outside of Chicago. It is meant as an indicator of circulating influenza viruses in the area. Data represents positive laboratory results regardless of hospitalization status. Data does not represent all cases of influenza since many individuals with influenza do not seek medical care or get tested for influenza.

This chart shows the percent of specimens tested for influenza that were positive (line graph) and the number of positive influenza tests by influenza virus subtype (bar graph).

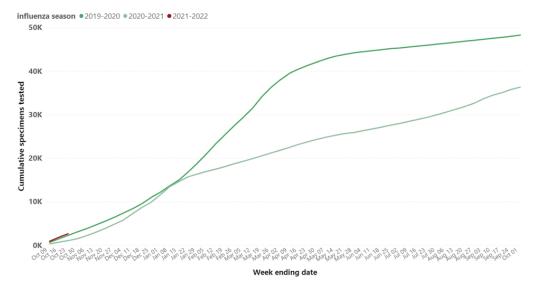


The following charts show the weekly and cumulative number of specimens tested for influenza and the weekly and cumulative percent that were positive.

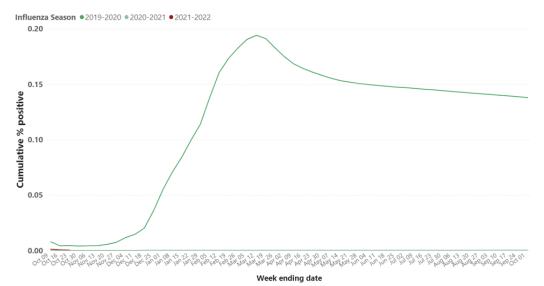




Cumulative number of reported specimens tested for influenza



Cumulative percent of reported specimens testing positive for influenza

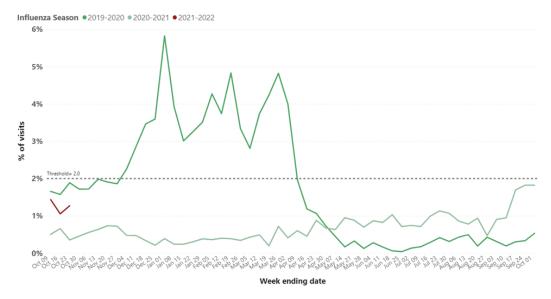


## **Outpatient Illness Surveillance**

Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (<a href="LLINet">ILINet</a>) by reporting on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with influenza-like illness (ILI). ILI is defined as fever plus cough or sore throat.

This chart shows the percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities in Chicago by week. By default, the chart shows the current season and previous two seasons.



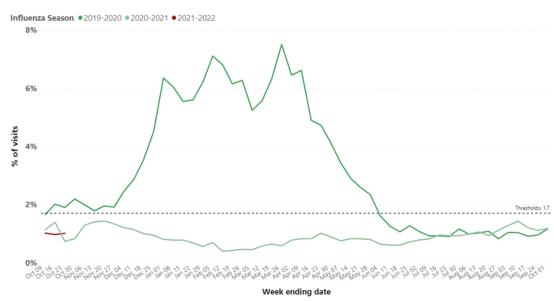


### **Emergency Department Illness Surveillance**

ESSENCE<sup>5</sup> is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor for influenza-like illness. All acute-care hospitals in Illinois report emergency department data to this system. Currently, ESSENCE captures nearly every emergency department visit in the city on a daily basis.

This chart shows the percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE by week. By default, the chart shows the current season and previous two seasons.



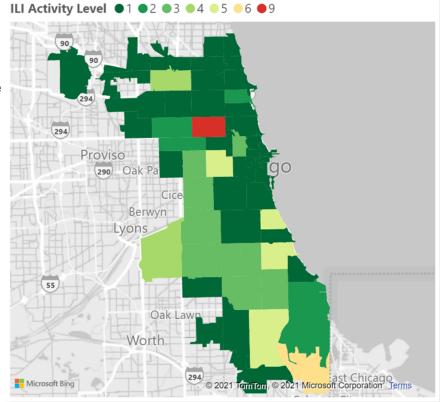


The threshold value reflects the mean percentage of outpatient visits due to ILI during 'non-influenza' weeks for the previous three seasons plus two standard deviations. Here non-influenza weeks are defined as the summer months (usually May through September).

### Influenza-like Illness Activity Map

ILI Activity Level is determined by comparing the ILI percentage for each zip code for the current week to the mean ILI percentage during the non-influenza weeks for the previous season (usually the summer months of May through September). Level 1 corresponds to an ILI percentage below the mean, level 2 to an ILI percentage less than one standard deviation (SD) above the mean, level 3 to an ILI percentage more than one, but less than two standard deviations above mean, and so on, with level 10 corresponding to an ILI percentage more than eight standard deviations above the mean. Variations in ILI activity levels should not be interpreted as an influenza cluster or outbreak as other illnesses can cause similar symptoms (including COVID-19).

This map shows the influenza-like Illness (ILI) activity levels by patient zip code determined by the chief complaint data submitted to ESSENCE for the current season.



### **National and State Surveillance**

The Centers for Disease Control and Prevention's FluView report<sup>6</sup> provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to Illinois<sup>7</sup> and Suburban Cook County<sup>8</sup> are also available online. Current and archived issues of the Chicago Flu Update can be found on the CDPH website section Current Flu Situation in Chicago.<sup>9</sup>

#### **Referenced Websites**

- 1. https://data.cityofchicago.org/browse?q=flu&sortBy=relevance&tags=flu
- 2. https://www.chicago.gov/city/en/sites/covid-19/home/covid-dashboard.html
- 3. https://www.chicago.gov/city/en/sites/flu/home/flu-schedule.html
- 4. https://www.cdc.gov/flu/weekly/overview.htm
- 5. https://dph.illinois.gov/data-statistics/syndromic-surveillance
- 6. https://www.cdc.gov/flu/weekly/index.htm
- 7. http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance
- 8. https://ccdphcd.shinyapps.io/influenza/
- 9. https://www.chicago.gov/city/en/depts/cdph/supp\_info/health-protection/current\_flu\_situationinchicago.html