



Chicago Flu Update



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February 14, 2020

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News & Updates

The CDC Health Advisory¹ reminds clinicians on the importance of prompt antiviral treatment in patients with influenza and to continue influenza vaccination efforts as long as influenza viruses are circulating. Vaccination is the best way to protect against influenza infection and all Chicagoans six months and older are encouraged to get vaccinated. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org. Uninsured or underinsured adults and children 0-18 years old who are uninsured, underinsured, or Medicaid (Title XIX) insured can visit any [CDPH Walk-in Immunization Clinic](#)² to receive the flu vaccine.



What is the risk?

Currently, the risk of influenza infection is high.

Are severe cases of influenza occurring?

For the week of February 2-8, 2020, 49 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 29, 2019, 244 influenza-associated ICU hospitalizations have been reported; 165 (68%) were positive for influenza A (6 H3N2, 49 H1N1_{pdm09}, 110 unknown subtype [subtyping not performed or not all subtypes tested]) and 79 (32%) were positive for influenza B. The median age of influenza A cases is 56 years and the median age of influenza B cases is 35 years (overall range of 1 month-96 years); two pediatric deaths were reported and 12 cases were admitted from long-term care facilities; selected attributes are summarized in Table 1.

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May.

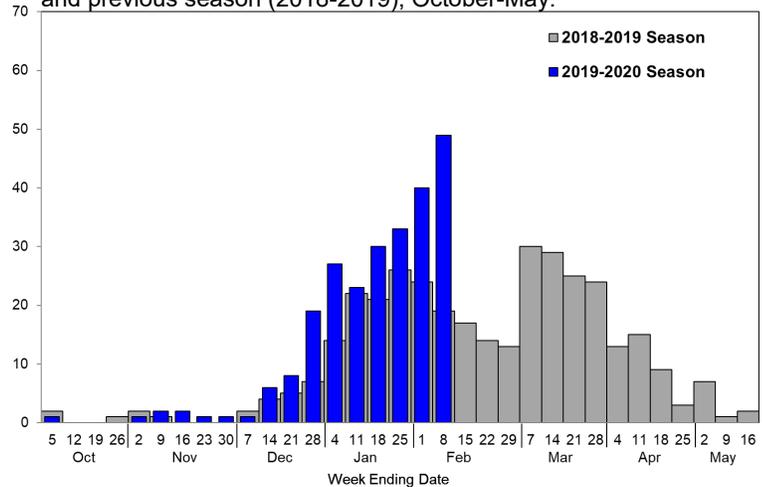
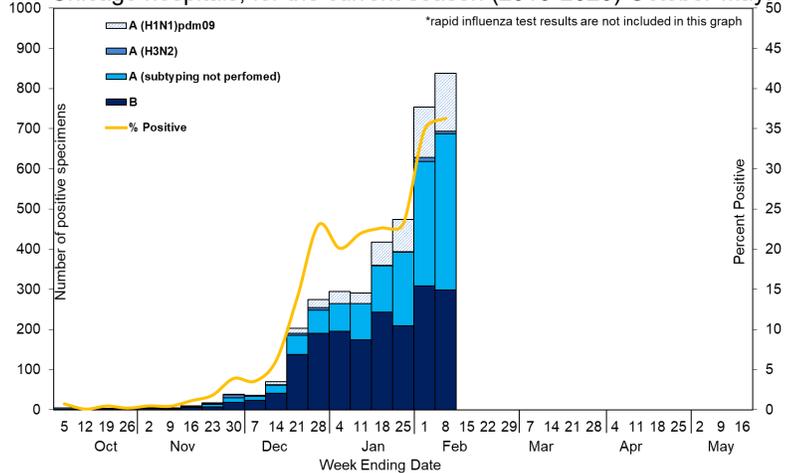


Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2019-2020 season, October-May.

| Age Group* | # | % [†] | Sex | # | % |
|-----------------------|-----|----------------|--|-----|----|
| 0-4 | 43 | 18 | Male | 124 | 51 |
| 5-17 | 17 | 7 | Female | 120 | 49 |
| 18-24 | 10 | 4 | Med. Cond./Complication[‡] | | |
| 25-49 | 43 | 18 | Lung Disease | 83 | 34 |
| 50-64 | 63 | 26 | Cardiac Disease | 62 | 25 |
| ≥65 | 67 | 28 | Diabetes | 61 | 25 |
| Race/Ethnicity | | | Ventilator Support | 56 | 23 |
| NH-White | 54 | 22 | Reported Deaths [§] | 7 | 3 |
| NH-Black | 125 | 51 | Treatment/Vaccination[‡] | | |
| Hispanic | 52 | 21 | Reported Antiviral Tx | 189 | 77 |
| Asian/Other | 12 | 5 | Reported Flu Shot | 68 | 28 |

* One patient missing age and race/ethnicity at time of report; † Percentages may not add up to 100 due to rounding; ‡ As reported in INEDSS (Illinois National Electronic Disease Surveillance System); § Date of death occurring within one week of positive influenza test among reported influenza-associated ICU hospitalizations.

Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May.



Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of February 2-8, 2020, 838 of the 2,307 (36%) specimens tested for influenza were positive; 539 typed as influenza A (7 H3N2, 144 H1N1_{pdm09}, and 388 unknown subtype [subtyping not performed or not all subtypes tested]) and 299 typed as influenza B (Figure 2).

Since September 29, 2019, 3,738 of 23,296 (16%) specimens tested for influenza have been positive; 1,876 (50%) typed as influenza A (48 H3N2, 512 H1N1_{pdm09}, and 1,316 unknown subtype [subtyping not performed or not all subtypes tested]) and 1,862 (50%) typed as influenza B. The cumulative number of specimens testing positive for influenza so far this season is higher than last season (6.5%) but lower than 2017-2018 (18.7%) for the same time period.[§]

§ Reported percentages represent final end of season data and may differ from previously published reports. All data are preliminary and may change as more reports are received.

¹ <https://emergency.cdc.gov/han/han00425.asp>; ² https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/immunizations_walk-inclinics.html

How much influenza-like illness is occurring?

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). For the week of February 2-8, 2020, 222 of the 5,956 (3.7%) reported outpatient clinic visits were due to influenza-like illness, which is lower than the percentage (2.4%) during same time period last season (Figure 3).

In addition to ILINet, ESSENCE is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor for influenza-like illness. Currently, ESSENCE captures nearly every emergency department visit in the city on a daily basis. For the week of February 2-8, 2020, 1,767 of the 25,892 (6.8%) total emergency department visits were due to influenza-like illness (Figure 4).

Figure 5 represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of February 2-8, 2020, 52 of 59 (88%) zip codes had moderate to high ILI activity levels; this is higher than last season where 44% of zip codes were at moderate to high levels for the same time period and the eighth consecutive week where over half of zip codes had moderate to high ILI activity levels.

Where can I get more information?

The Centers for Disease Control and Prevention's FluView³ report 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 Illinois⁴ and Suburban Cook County⁵ 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 Chicago⁶.

Reporting Information

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance⁷. The Chicago Department of Public Health has previously issued guidance on reporting influenza-associated ICU hospitalizations⁸. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)⁹. For more information contact: SyndromicSurveillance@cityofchicago.org

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Figure 3. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week for the current season (2019-2020) and previous two seasons, October-May.

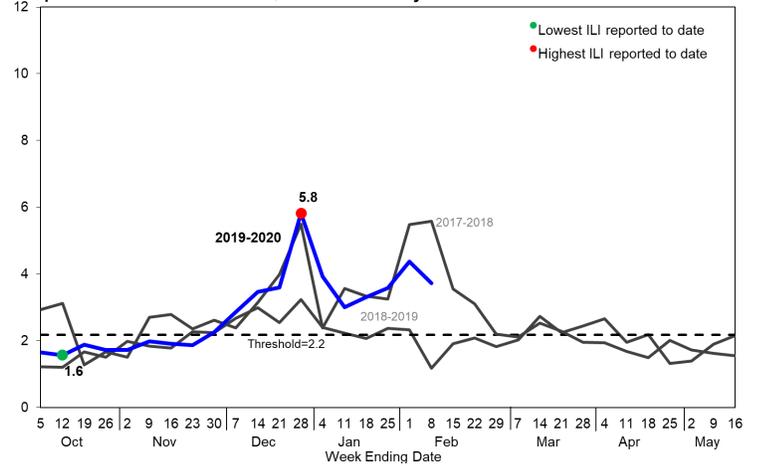


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2019-2020) and previous two seasons, October-May.

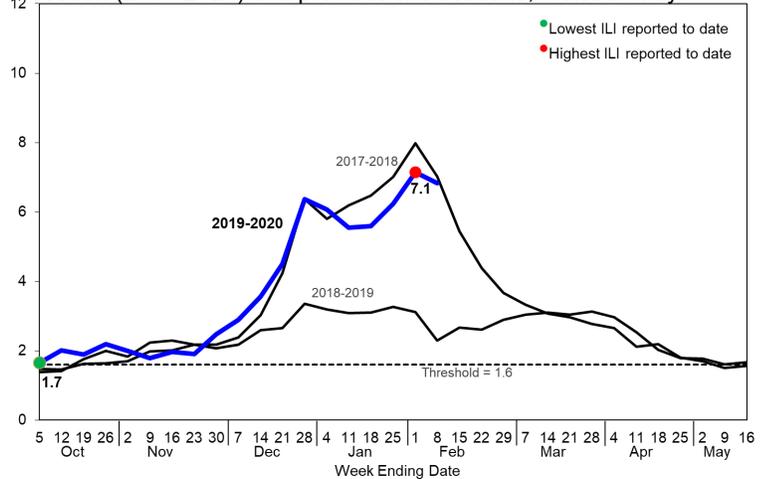
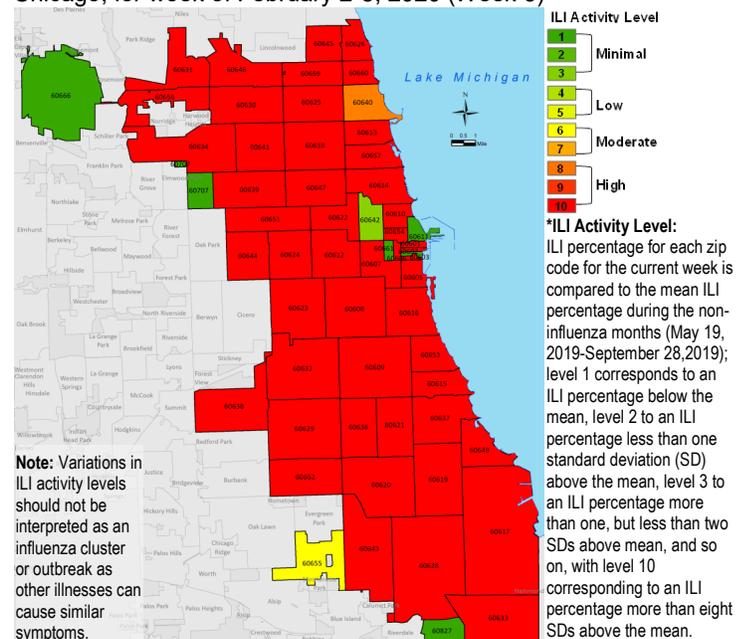


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of February 2-8, 2020 (Week 6)



All data are preliminary and may change as more reports are received.

³ <http://www.cdc.gov/flu/weekly/index.htm>, ⁴ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance>, ⁵ <https://ccdphcd.shinyapps.io/influenza/>;

⁶ https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago.html;

⁷ www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf ;

⁸ <https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41>; ⁹ <httpsdph.partner.illinois.gov/>