Chicago Flu Update

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

| Lori E. Lightfoot, Mayor | **January 3, 2020** | Allison Arwady, MD, MPH, Acting Commissioner |

No Activity | Sporadic | Local | Regional | Widespread ✓

Illinois Influenza Geographic Spread

News & Updates

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[1] 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 December 22-28, 2019, 16 influenza-associated ICU hospitalizations were reported (**Figure 1**).

Since September 29, 2019, 37 influenza-associated ICU hospitalizations have been reported; 23 (62%) were positive for influenza A (5 H3N2, 5 H1N1pdm09, 13 unknown subtype [subtyping not performed or not all subtypes tested]) and 14 (38%) were positive for influenza B.

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of December 22-28, 2019, 274 of the 1,189 (23%) specimens tested for influenza were positive; 84 typed as influenza A (6 H3N2, 20 H1N1pdm09, and 58 unknown subtype [subtyping not performed or not all subtypes tested]) and 190 typed as influenza B (**Figure 2**).

Since September 29, 2019, 669 of 12,154 (5.5%) specimens tested for influenza have been positive; 235 typed as influenza A (28 H3N2, 49 H1N1pdm09, and 158 unknown subtype [subtyping not performed or not all subtypes tested]) and 434 typed as influenza B. Influenza B continues to be the predominant strain identified among reporting sentinel surveillance laboratories (**Figure 3**).
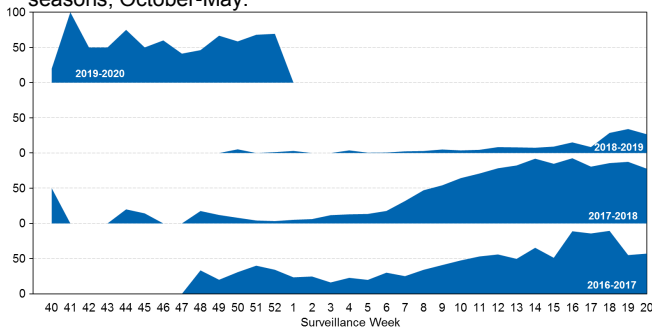

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May.
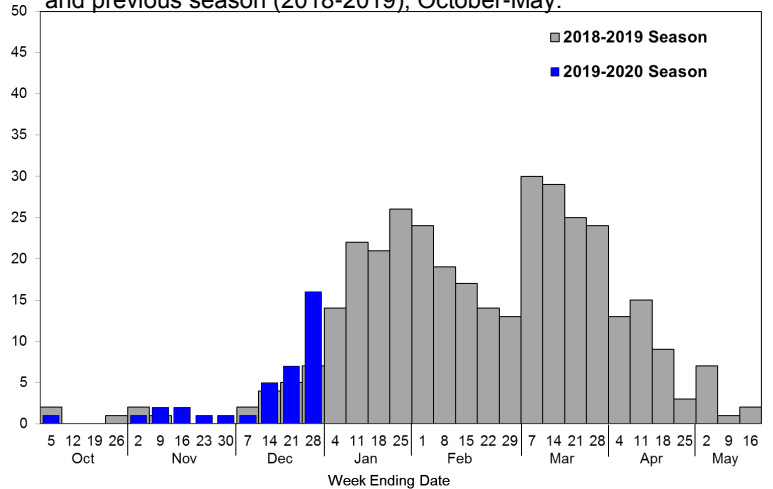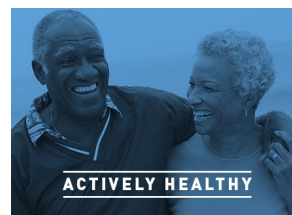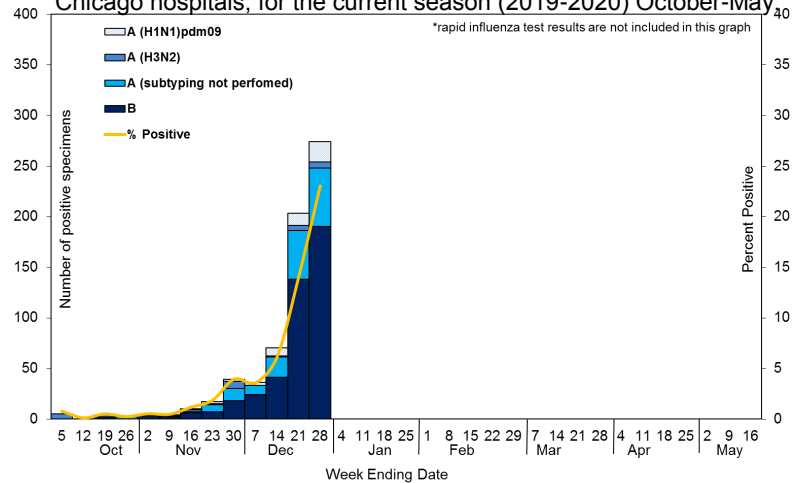

Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May.

Figure 3. Percent of specimens testing positive (by RT-PCR) for **influenza B** as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) and previous three seasons, October-May.

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

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 December 22-28, 2019, 203 of the 3,486 (5.8%) reported outpatient clinic visits were due to influenza-like illness, which is at the same level as Illinois at 5.8% (**Figure 4**).

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 December 22-28, 2019, 1,638 of the 25,694 (6.4%) total emergency department visits were due to influenza-like illness (**Figure 5**).

Figure 6 represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of December 22-28, 2019, 49 of 59 (83%) zip codes had moderate to high ILI activity levels; this is higher than last season where 75% of zip codes were at moderate to high levels for the same time period and the fourth 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 FluView[2] 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 Illinois[3] and Suburban Cook County[4] 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[5].

Reporting Information

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance[6]. The Chicago Department of Public Health has previously issued guidance on reporting influenza-associated ICU hospitalizations[7]. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)[8]. For more information contact: SyndromicSurveillance@cityofchicago.org

Figure 4. 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 season, October-May.
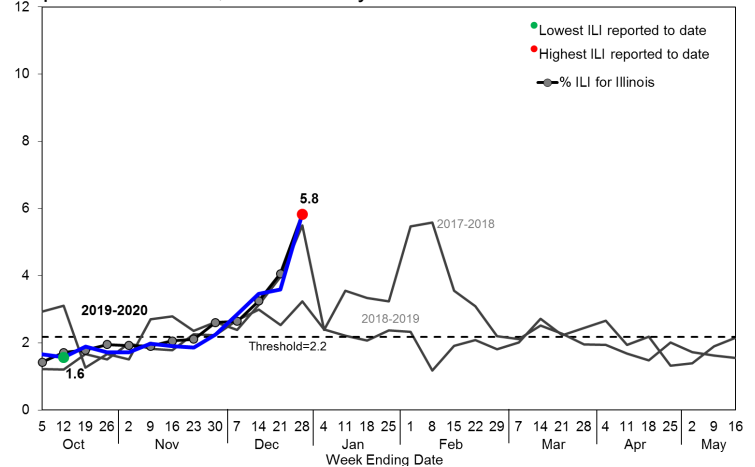

Figure 5. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current season (2019-2020) and previous two seasons, October-May.
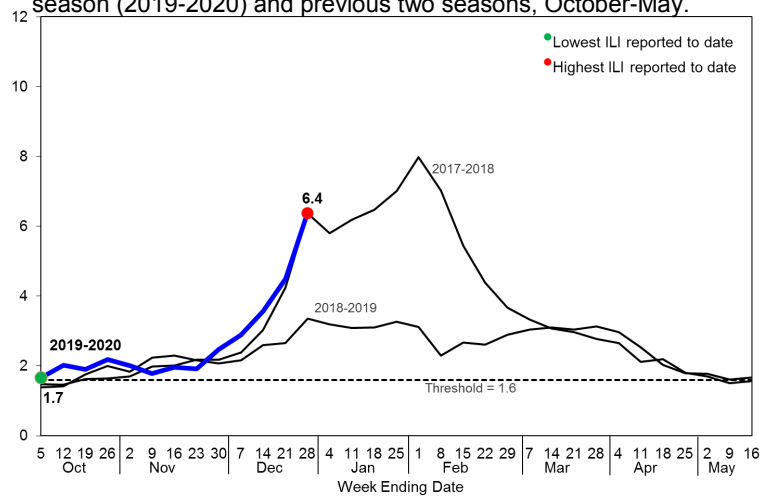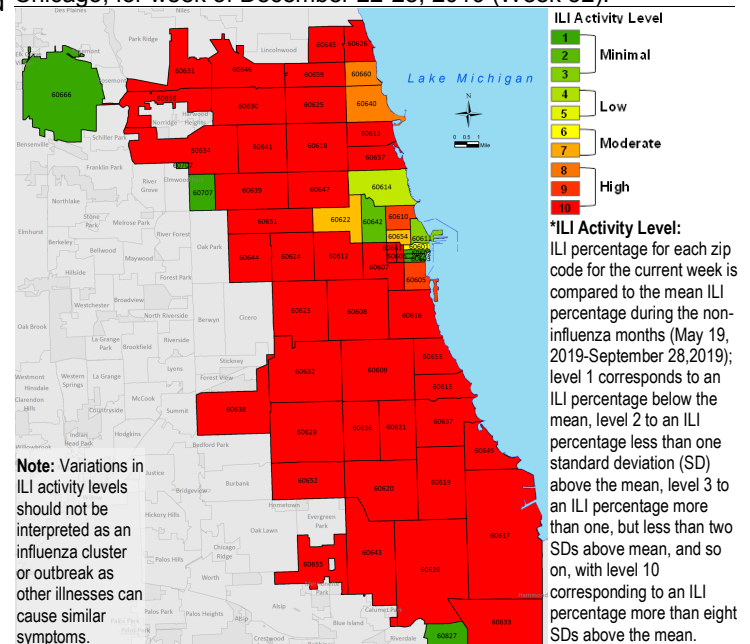

Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of December 22-28, 2019 (Week 52).

Note: Variations in ILI activity levels should not be interpreted as an influenza cluster or outbreak as other illnesses can cause similar symptoms.

ILI Activity Level:

Level	
1, 2, 3	Minimal
4, 5	Low
6, 7	Moderate
8, 9	High
10	

*ILI Activity Level: ILI percentage for each zip code for the current week is compared to the mean ILI percentage during the non-influenza months (May 19, 2019-September 28,2019); 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 SDs above mean, and so on, with level 10 corresponding to an ILI percentage more than eight SDs above the mean.

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

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

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

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