Chicago Flu Update



Rahm Emanuel, Mayor

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Julie Morita, MD, Commissioner

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. For those without a healthcare provider or whose healthcare providers do not have the influenza vaccine, a schedule of City of Chicago influenza vaccination clinics¹ is available on the city website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org.

What is the risk?

Currently, the risk of influenza infection is low.

Are severe cases of influenza occurring?

For the week of December 2-8, 2018, one influenza-associated ICU hospitalization was reported.

Since September 30, 2018, seven influenzaassociated ICU hospitalizations have been reported; five were positive for influenza A (2 H1N1pdm09 and 3 unknown subtype [subtyping not attempted or not all subtypes tested]) and two were positive for influenza B (**Figure 1**).

Since 2010-2011, there have been four influenza A (H3N2) predominant seasons and two influenza A (H1N1pdm09) predominant seasons. The cumulative average number of influenza-associated ICU hospitalizations for H3N2 predominant seasons has been higher than H1N1pdm09 seasons, with 26 more cases reported weekly during H3N2 seasons than in H1N1pdm09 seasons (**Figure 2**).

Figure 2. Cumulative average number of influenza-associated ICU hospitalizations for previous eight seasons, for H3N2 seasons, and H1N1 ndm09 seasons. Chicago, October-May

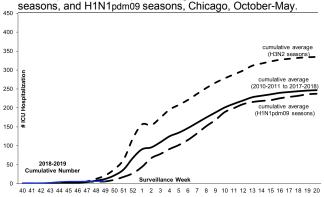


Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2018-2019) by influenza type and subtype, October-May.

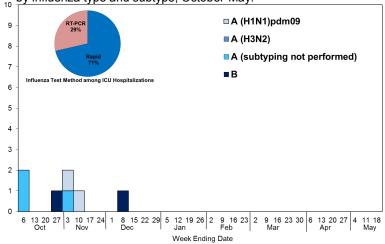
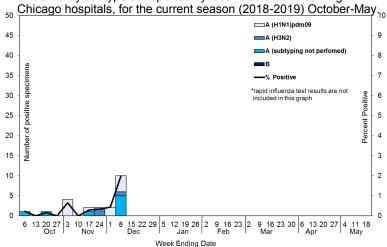


Figure 3. Percent of specimens testing positive (by RT-PCR*) for influenza by subtype as reported by local laboratories serving



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 2-8, 2018, with 5 laboratories reporting, 10 of the 505 (2.0%) specimens tested for influenza were positive for influenza A (4 H1N1pdm09, 1 H3N2, and 5 unknown subtype) (**Figure 3**).

Since September 30, 2018, 22 of 5,925 (<1%) specimens tested for influenza have been positive; 22 typed as influenza A (11 H1N1pdm09, 3 H3N2, and 8 unknown subtype [subtyping not performed or not all subtypes tested]).



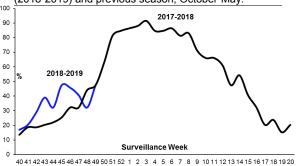
How much influenza-like illness is occurring?

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 2-8, 2018, 158 of the 5,904 (2.7%) reported outpatient clinic visits were due to influenza-like illness, which is slightly higher than Illinois (1.5%) and Region 5 (1.5) but similar to the U.S. (2.2%) **(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 every emergency department visit in the city on a daily basis. For the week of December 2-8, 2018, 524 of the 24,133 (2.2%) 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 2-8, 2018, 28 of 59 (47%) zip codes had ILI activity levels in the moderate to high categories; this is the same level as last season where 47% of zip codes were also at moderate to high levels for the same time period **(Figure 7).**

Figure 7. Percent of **zip codes** in the moderate to high ILI activity levels by week, Chicago, for current season (2018-2019) and previous season, October-May.



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

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations⁷. In addition, The Chicago Department of Public Health recently 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.

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 (2018-2019) and for Illinois, Region 5, and U.S., October-May.

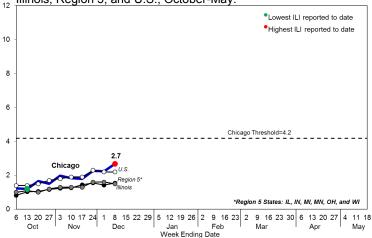


Figure 5. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

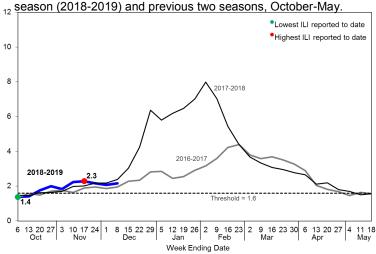
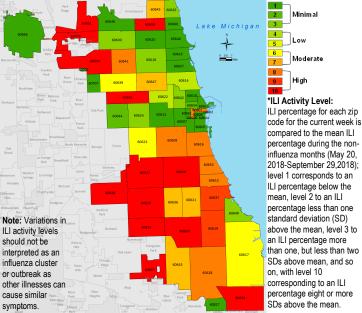


Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of December 2-8, 2018 (Week 49).



³ http://www.cdc.gov/flu/weekly/index.htm;4 http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance#publications;

ILI Activity Level

⁵ http://cookcountypublichealth.org/data-reports/communicable-diseases;6 https://www.cityofchicago.org/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago2011.html; 7 dph.illinois.gov/sites/default/files/publications/ohp-annual-flu-testing-guidance-09182018.pdf; 8 https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41; 9 https://dph.partner.illinois.gov/