

Chicago Influenza Surveillance Activity Report



Lori E. Lightfoot, Mayor

October 25, 2019

### **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 clinics<sup>1</sup> 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.

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# What is the risk?

Currently, the risk of influenza infection is low.

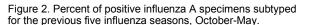
### Are severe cases of influenza occurring?

For the week of October 13-19, 2019, no influenzaassociated ICU hospitalizations were reported (Figure 1).

# Influenza A Subtyping

Since the 2009 pandemic, data on influenza virus test results have been reported by Chicago hospital laboratories performing influenza RT-PCR. During previous seasons, over 80% of all positive influenza A specimens were subtyped (e.g. H3N2, H1N1pdm09); however during the past two influenza seasons, the percentage of positive influenza A specimens being subtyped has continued to decrease (Figure 2). In 2018-2019, only a third of influenza A specimens were subtyped: of these 71% were positive for H1N1pdm09. It is important, for surveillance purposes, to monitor the subtypes of influenza A viruses circulating in the area in order to maintain situational awareness, detect any changes in local epidemiology and to identify the emergence of novel influenza A strains.

The virologic sentinel surveillance program<sup>2</sup> is a way to increase the number of specimens that are being tested and subtyped at the IDPH Laboratory. The program is free and outpatient clinics can participate.



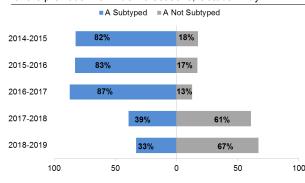


Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May

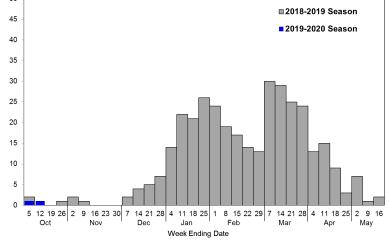
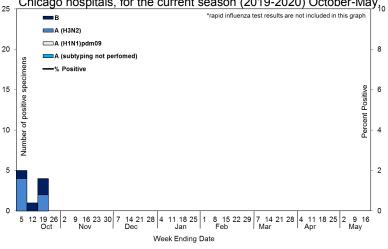


Figure 3. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May 10



# Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of October 13-19, 2019, 4 of the 711 (<1%) specimens tested

for influenza were positive; 2 typed as influenza A (H3N2) and 2 typed as influenza B (Figure 3).

Since September 29, 2019, 10 of 2,155 (<1%) specimens tested for influenza have been positive; 6 typed as influenza A (6 H3N2, 0 H1N1pdm09, and 0 unknown subtype [subtyping not performed or not all subtypes tested]) and 4 typed as influenza B.

# 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 October 13-19, 2019, 115 of the 6,100 (1.9%) reported outpatient clinic visits were due to influenza-like illness, which is similar to Illinois at 1.8% (**Figure 4**).

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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 October 13-19, 2019, 459 of the 24,113 (1.9%) 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 October 13-19, 2019, 16 of 59 (27%) zip codes had ILI activity levels in the moderate to high; this is similar to last season where 29% of zip codes were also at moderate to high levels for the same time period.

# Where can I get more information?

The Centers for Disease Control and Prevention's FluView<sup>3</sup> 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<sup>4</sup> and Suburban Cook County<sup>5</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>6</sup>.

# **Reporting Information**

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance<sup>7</sup>. The Chicago Department of Public Health has previously issued guidance on reporting influenza-associated ICU hospitalizations<sup>8</sup>. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)<sup>9</sup>. 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.

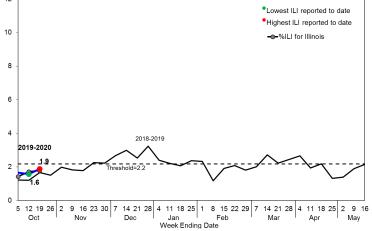


Figure 5. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current <sup>12</sup> season (2019-2020) and previous two seasons, October-May.

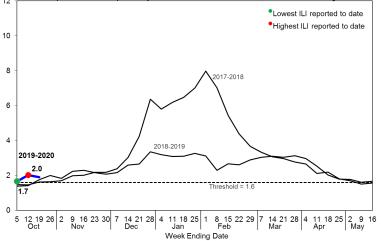
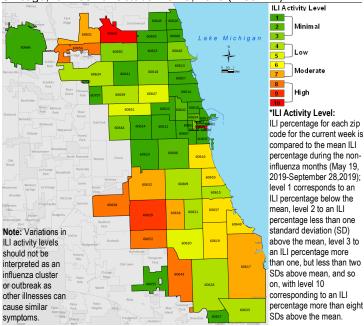


Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of October 13-19, 2019 (Week 42).



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

- <sup>6</sup> https://www.cityofchicago.org/city/en/depts/cdph/supp\_info/health-protection/current\_flu\_situationinchicago2011.html;

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