



Surveillance Week 43 (October 21-27, 2018)



## Rahm Emanuel, Mayor 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.

### What is the risk?

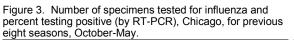
Currently, the risk of influenza infection is low.

### Are severe cases of influenza occurring?

For the week of October 21-27, 2018, no influenzaassociated ICU hospitalizations were reported. Since September 30, 2018, three influenza-associated ICU hospitalizations were reported; all were positive for influenza A by rapid test (not subtyped) (**Figure 1**).

### Influenza Laboratory Surveillance

Since the 2009 H1N1 pandemic, CDPH has collected influenza laboratory data from five large medical center laboratories in Chicago plus one commercial laboratory serving several other medical centers. These data consist of influenza tests that utilize RT-PCR methods and include sub-typing results when performed (non-RT-PCR methods such as rapid influenza diagnostic tests are not included in data presented in figure 2). Since 2010-2011, the percentage of all specimens testing positive for influenza has fluctuated, from approximately 10%-13% to less than 10% in alternating seasons This trend did not continue during the 2017-2018 season, where the highest overall percent positive since the pandemic was recorded. In addition, the number of specimens tested for influenza (and other viruses) has steadily increased with the 2017-2018 season seeing the highest number of specimens tested to date at nearly 31,000 specimens (Figure 3).



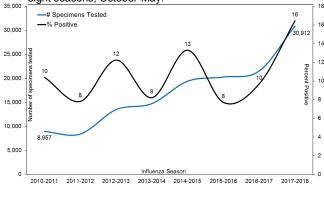


Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2018-2019) by influenza type and subtype, October-May.

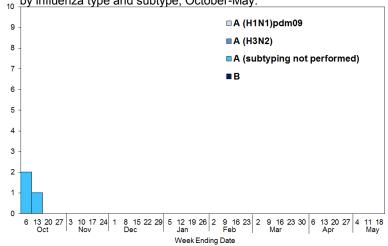
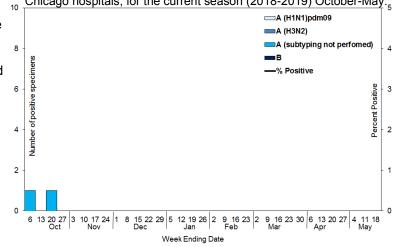


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2018-2019) October-May.<sub>5</sub>



#### 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 21-27, 2018, with 6 laboratories reporting, 0 of the 624 specimens tested for influenza were positive (**Figure 2**). Since September 30, 2018, 2 of 2,318 (<1%) specimens tested for influenza have been positive for influenza A (unknown subtype [subtyping not performed or not all subtypes tested]).

# How much influenza-like illness is occurring?

ESSENCE is an electronic syndromic surveillance system used to monitor influenza-like illness by utilizing the chief complaints of patients visiting emergency departments. Currently, all Chicago hospitals submit data to ESSENCE on a daily basis, covering every emergency department visit in the city. For the week of October 21-27, 2018, 477 of the 23,848 (2.0%) total emergency department visits were due to influenza-like illness (ILI) (**Figure 4**).

In addition to emergency departments, several outpatient clinics throughout Chicago participate in CDC's Influenza -like Illness Surveillance Network (**ILINet**) by also 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 21-27, 2018, with 21 facilities reporting, 1.5% of outpatient clinic visits were due to influenza-like illness, which is similar to Illinois (1.2%), to the U.S. (1.7%) and to Region 5 (1.2%) (**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 21-27, 2018, 23 of 59 (39%) zip codes had ILI activity levels in the moderate to high categories and 36 (61%) had ILI activity levels in the minimal to low categories.

# 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**

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations<sup>7</sup>. In addition, The Chicago Department of Public Health recently 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>. Contact

SyndromicSurveillance@cityofchicago.org for more information.



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 (2018-2019) and previous two seasons, October-May.

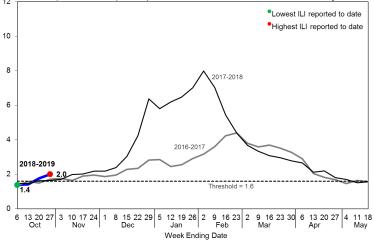


Figure 5. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week for the current season (2018-2019) and for Illinois, Region 5, and U.S., October-May.

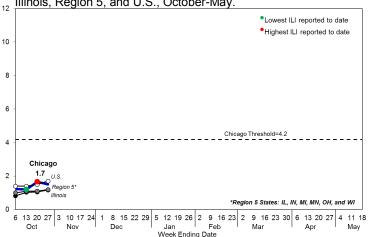
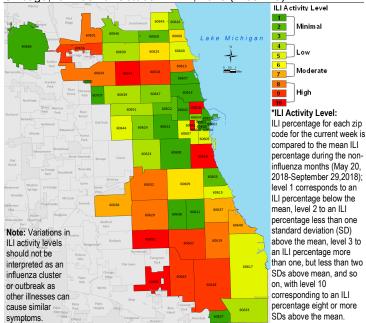


Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of October 21-27, 2018 (Week 43).



<sup>3</sup> http://www.cdc.gov/flu/weekly/index.htm;<sup>4</sup> http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance;<sup>5</sup> http://cookcountypublichealth.org/datareports/communicable-diseases;<sup>6</sup> https://www.cityofchicago.org/city/en/depts/cdph/supp\_info/health-protection/current\_flu\_situationinchicago2011.html; <sup>7</sup> dph.illinois.gov/ sites/default/files/publications/ohp-annual-flu-testing-guidance-09182018.pdf; <sup>8</sup> https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41; <sup>9</sup> https://dph.partner.illinois.gov/