# Chicago Influenza Surveillance Activity Report

# Chicago Flu Update



Rahm Emanuel, Mayor

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#### **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 7-13, 2018, no influenza-associated ICU hospitalizations were reported. Since September 30, 2018, two influenza-associated ICU hospitalizations were reported; both were positive for influenza A (not subtyped) (**Figure 1**).

### 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 7-13, 2018, with 6 laboratories reporting, 0 of the 596 specimens tested for influenza were positive (**Figure 2**).

Since September 30, 2018, 1 of 1,050 (<1%) specimens tested for influenza has been positive for influenza A (unknown subtype [subtyping not performed or not all subtypes tested]).

#### Influenza B Activity

The first influenza-associated pediatric death reported in the U.S. this season occurred in Florida and was positive for influenza B. Influenza B virus co-circulates with influenza A at low levels during the first half of the influenza season. However, activity increases towards the second half of the season becoming the predominant circulating virus during that time (Figure 3). Influenza B accounted for 25% of all influenza-associated ICU hospitalizations in 2017-2018 and for nearly one-third of reported deaths among ICU hospitalizations. Last season, the influenza vaccine was 49% effective in protecting against influenza B infection and Chicagoans aged six months and older should get vaccinated.

Figure 3. Percent of specimens testing positive (by RT-PCR) for influenza B as reported by local laboratories serving Chicago hospitals, for previous four seasons, October-May.

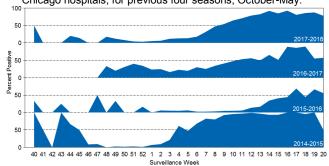


Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2018-2019) by influenza type and subtype, October-May.

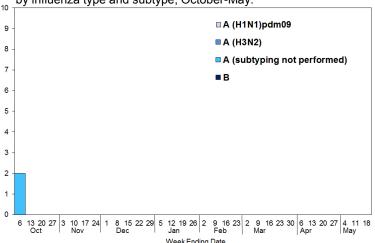
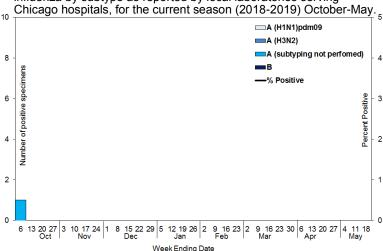


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving





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

### 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 7-13, 2018, 349 of the 24,637 (1.4%) 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 7-13, 2018, with 21 facilities reporting, 1.2% of outpatient clinic visits were due to influenza-like illness, which is similar to Illinois excluding Chicago (1.0%), to the U.S. (1.4%) and to Region 5 (1.1%) (**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 7-13, 2018, 12 of 59 (20%) zip codes had ILI activity levels in the moderate to high categories and 47 (80%) 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.

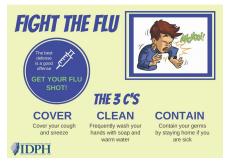


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current season (2018-2019) and previous two seasons, October-May.

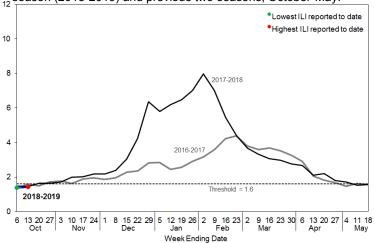


Figure 5. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week for the current season (2018-2019) and for Illinois, Region 5, and U.S., October-May.

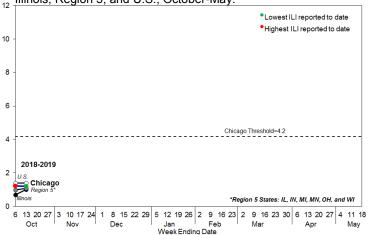
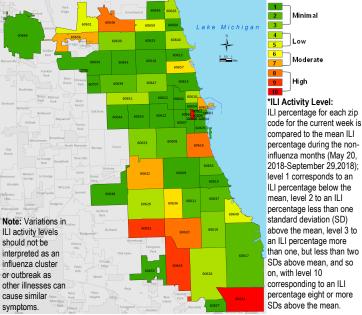


Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of October 7-13, 2018 (Week 41).



ILI Activity Level