



Chicago Flu Update



Rahm Emanuel, Mayor

February 1, 2019

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 list of City of Chicago [Walk-In Immunization Clinics](#)¹ 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 high.

Are severe cases of influenza occurring?

For the week of January 20-26, 2019, 19 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 90 influenza-associated ICU hospitalizations have been reported; 83 were positive for influenza A (46 H1N1pdm09, 1 H3N2, and 36 unknown subtype [subtyping not attempted or not all subtypes tested]) and seven were positive for influenza B. The median age of reported cases is 56 years (range 6 months-92 years); five cases were admitted from long-term care facilities; selected attributes are summarized in Table 1.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2018-2019 season, October-May.

Age Group	#	%*	Sex	#	%
0-4	12	13	Male	41	46
5-17	6	7	Female	49	54
18-24	2	2	Med. Cond./Complication [†]		
25-49	17	19	Lung Disease	38	42
50-64	23	26	Cardiac Disease	25	28
≥65	30	33	Diabetes	25	28
Race/Ethnicity			Ventilator Support	24	27
NH-White	20	22	Reported Deaths [‡]	5	6
NH-Black	50	56	Treatment/Vaccination [†]		
Hispanic	18	20	Reported Antiviral Tx	77	86
Asian/Other	2	2	Reported Flu Shot	21	23

* Percentages may not add up to 100 due to rounding; † As reported in INEDSS (Illinois National Electronic Disease Surveillance System); ‡ Date of death occurring within one week of positive influenza test among reported influenza-associated ICU hospitalizations.

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of January 20-26, 2019, with 6 laboratories reporting, 186 of the 1,203 (15.5%) specimens tested for influenza were positive; 179 typed as influenza A (62 H1N1pdm09, 0 H3N2, and 117 unknown subtype) and seven typed as influenza B (Figure 3).

Since September 30, 2018, 692 of 13,451 (5.1%) specimens tested for influenza have been positive; 680 typed as influenza A (241 H1N1pdm09, 12 H3N2, and 427 unknown subtype [subtyping not performed or not all subtypes tested]) and 12 typed as influenza B.

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

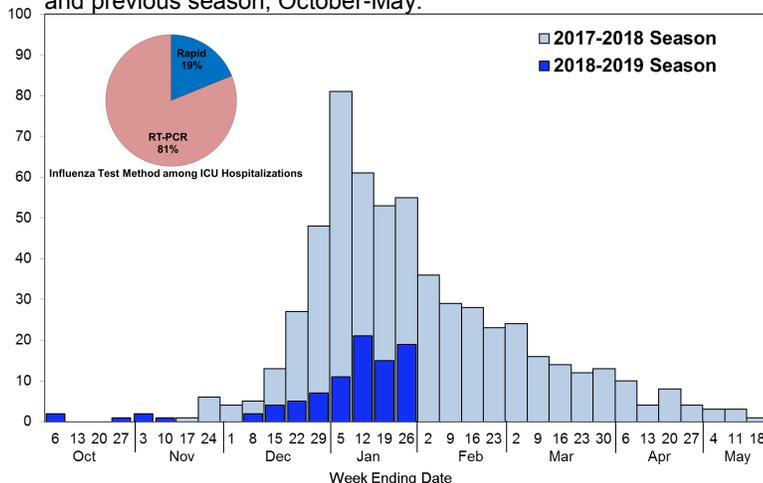
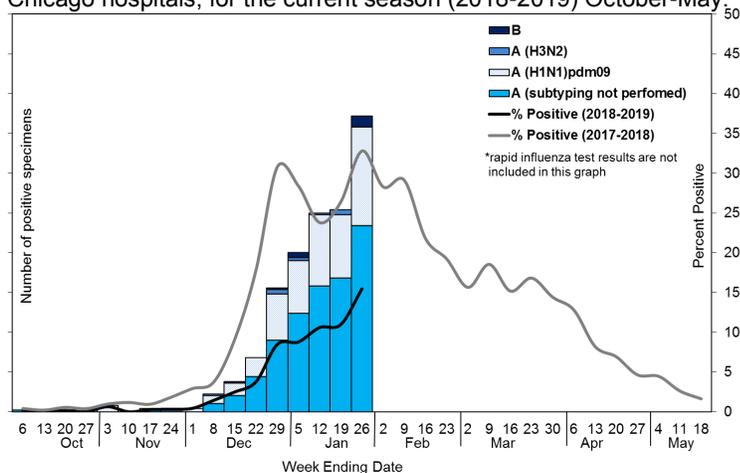


Figure 3. Percent of specimens testing positive (by RT-PCR*) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2018-2019) October-May.



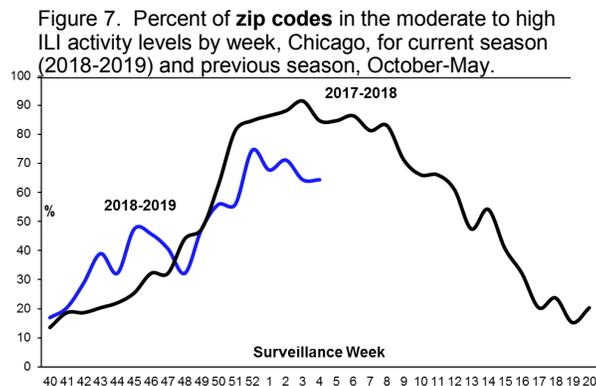
¹ https://www.chicago.gov/city/en/depts/cdp/supp_info/health-protection/immunizations_walk-inclinics.html; ² <http://chicagoflushots.org/>

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 January 20-26, 2019, 122 of the 5,148 (2.4%) reported outpatient clinic visits were due to influenza-like illness, which is similar to both Illinois (2.2%) and Region 5 (2.5%) but lower than the U.S. (3.8%) (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 every emergency department visit in the city on a daily basis. For the week of January 20-26, 2019, 777 of the 23,775 (3.3%) 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 January 20-26, 2019, 38 of 59 (64%) zip codes had ILI activity levels in the moderate to high categories; this is lower than last season where 85% of zip codes were at moderate to high levels for the same time period (Figure 7).



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.

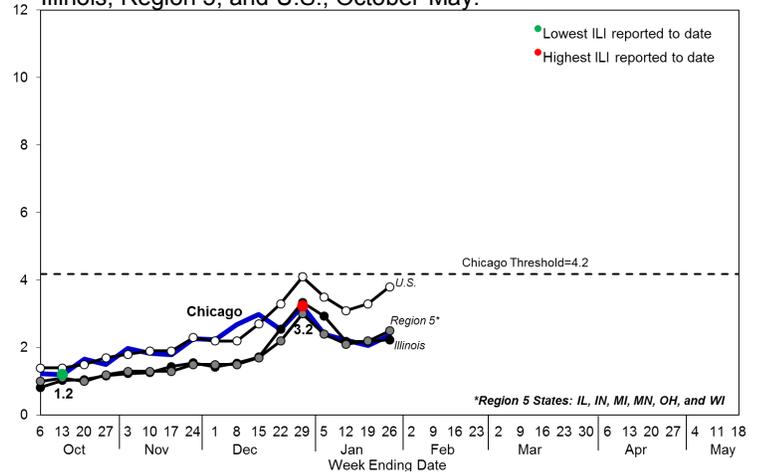


Figure 5. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2018-2019) and previous two seasons, October-May.

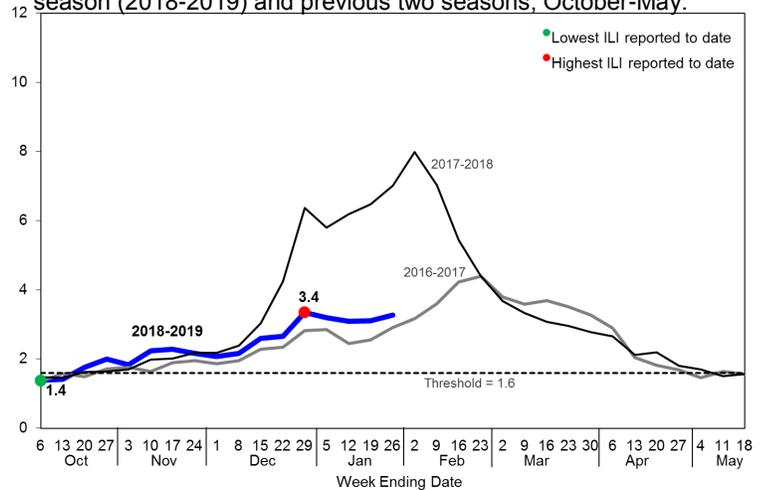
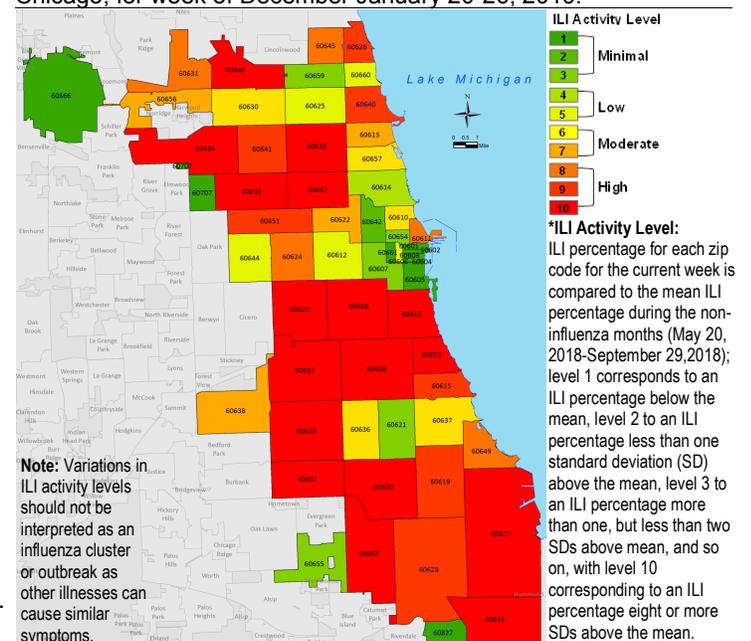


Figure 6. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of December January 20-26, 2019.



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

⁵ <http://cookcountypublichealth.org/data-reports/communicable-diseases>; ⁶ https://www.cityofchicago.org/city/en/depts/cdp/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/>