



Chicago Flu Update



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News & Updates

Influenza activity continues to decrease in Chicago; however influenza viruses are detected throughout the year at low levels and can cause disease. 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 continues to decrease.

Are severe cases of influenza occurring?

For the week of April 21-27, 2019, three influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 339 influenza-associated ICU hospitalizations have been reported; 322 were positive for influenza A (130 H1N1pdm09, 24 H3N2, and 168 unknown subtype [subtyping not attempted or not all subtypes tested]) and 17 were positive for influenza B. The median age of reported cases is 59 years (range 1 month-92 years); one pediatric death was reported and 19 cases were admitted from long-term care facilities; selected attributes are summarized in **Table 1**.

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

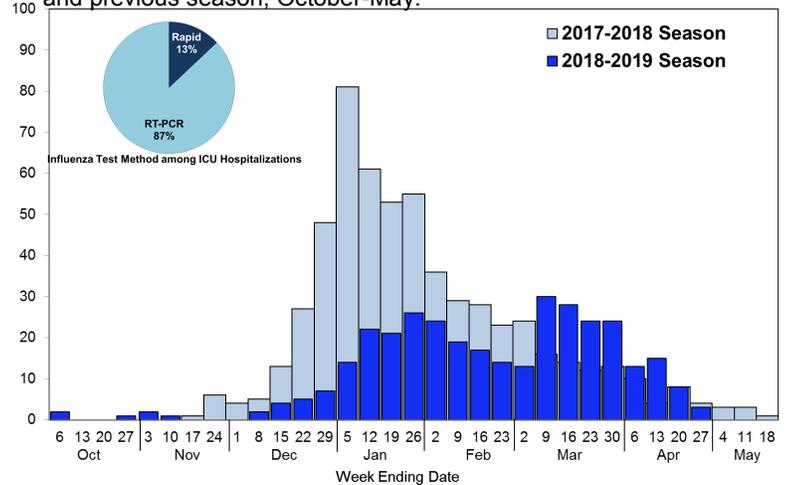
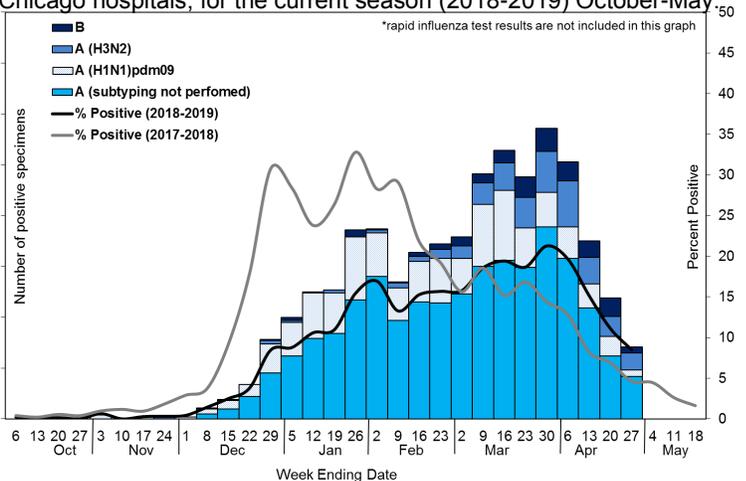


Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2018-2019 season, October-May.

Age Group	#	%	Sex	#	%
0-4	42	12	Male	169	50
5-17	19	6	Female	170	50
18-24	6	2	Med. Cond./Complication [†]		
25-49	56	17		Lung Disease	135
50-64	94	28	Cardiac Disease	124	37
≥65	122	36	Diabetes	86	25
			Ventilator Support	85	25
Race/Ethnicity			Reported Deaths [‡]	16	5
NH-White	72	21	Treatment/Vaccination [†]		
NH-Black	183	54		Reported Antiviral Tx	287
Hispanic	70	21	Reported Flu Shot	99	29
Asian/Other	14	4			

* 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.

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.



Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of April 21-27, 2019, 71 of the 835 (8.5%) specimens tested for influenza were positive; 65 typed as influenza A (6 H1N1pdm09, 17 H3N2, and 42 unknown subtype) and 6 typed as influenza B (Figure 2).

Since September 30, 2018, 3,176 of 28,502 (11.1%) specimens tested for influenza have been positive; 3,021 typed as influenza A (718 H1N1pdm09, 272 H3N2, and 2,031 unknown subtype [subtyping not performed or not all subtypes tested]) and 155 typed as influenza B.



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

¹ https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/immunizations_walk-inclinics.html

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 April 21-27, 2019, 78 of the 5,890 (1.3%) reported outpatient clinic visits were due to influenza-like illness, which is similar to Illinois (1.3%), Region 5 (1.1%) and the U.S. (1.8%) (Figure 3).

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 April 21-27, 2019, 432 of the 24,073 (1.8%) total emergency department visits were due to influenza-like illness (Figure 4).

Figure 5 represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of April 21-27, 2019, 16 of 59 (27%) zip codes had ILI activity levels in the moderate to high categories; this is similar to last season where 20% of zip codes were at moderate to high levels for the same time period (Figure 6).

Figure 3. 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.

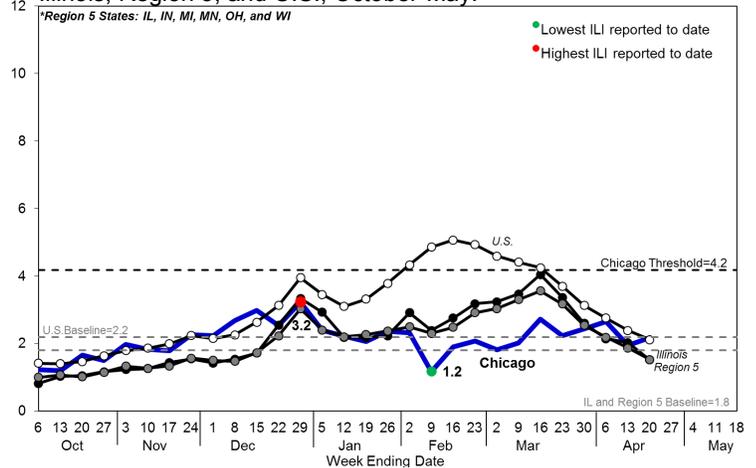


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2018-2019) and previous two seasons, October-May.

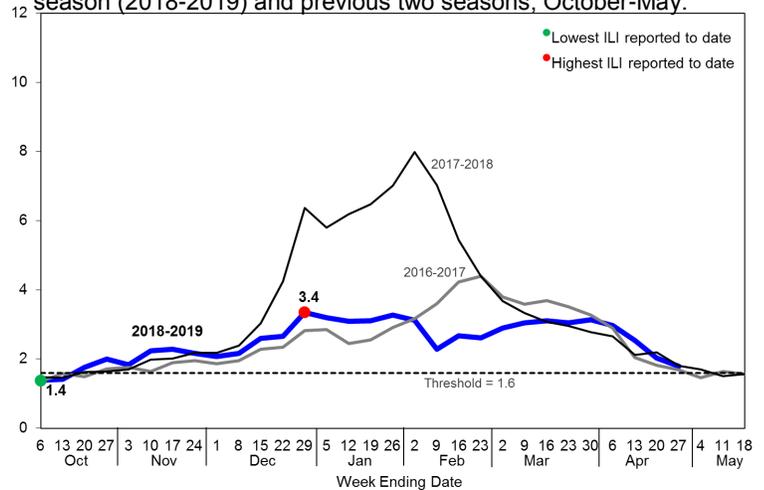


Figure 6. Percent of zip codes in the moderate to high ILI activity levels by week, Chicago, for current season (2018-2019) and previous season, October-May.

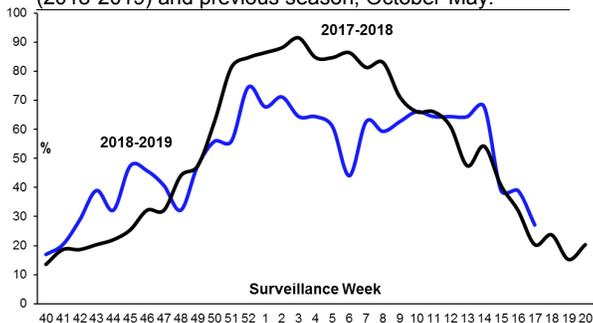
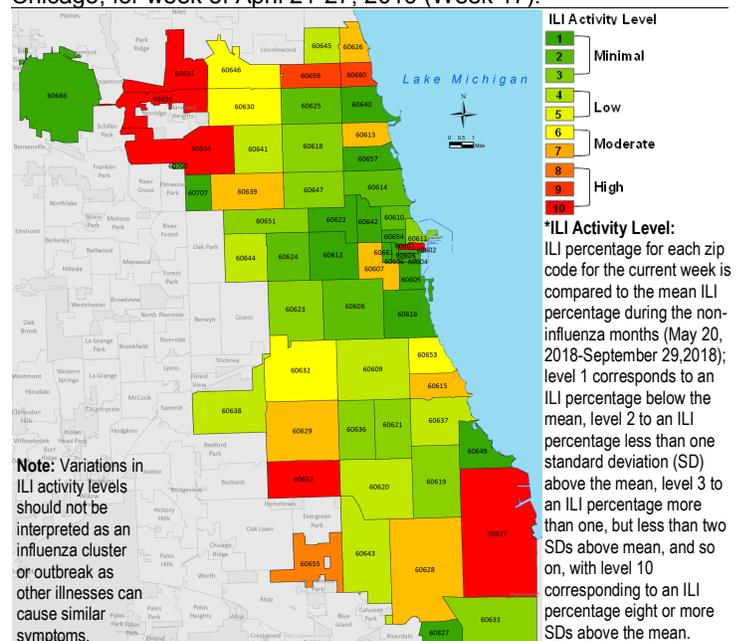


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of April 21-27, 2019 (Week 17).



Where can I get more information?

The Centers for Disease Control and Prevention's FluView² 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 Illinois³ and Suburban Cook County⁴ 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 Chicago⁵.

Reporting Information

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations⁶. In addition, The Chicago Department of Public Health recently issued guidance on reporting influenza-associated ICU hospitalizations⁷. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)⁸

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

² <http://www.cdc.gov/flu/weekly/index.htm>; ³ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance#publications>;

⁴ <http://cookcountypublichealth.org/data-reports/communicable-diseases>; ⁵ https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html; ⁶ dph.illinois.gov/sites/default/files/publications/ohp-annual-flu-testing-guidance-09182018.pdf; ⁷ <https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41>; ⁸ <https://dph.partner.illinois.gov/>