



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. Based on CDC

FluView¹ data, influenza-like illness at the national level was at or above baseline for 21 weeks this season, making it the longest influenza season in a decade and CDC estimates² that more than 500,000 people have been hospitalized from influenza and over 36,000 people have died due to influenza. Vaccination is the best way to protect against influenza infection and all Chicagoans six months and older are encouraged to get vaccinated.



What is the risk?

Currently, the risk of influenza infection continues to decrease.

Are severe cases of influenza occurring?

For the week of April 28-May 4, 2019, three influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 343 influenza-associated ICU hospitalizations have been reported; 324 were positive for influenza A (130 H1N1pdm09, 25 H3N2, and 169 unknown subtype [subtyping not attempted or not all subtypes tested]) and 19 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 20 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	42	12	Male	171	50
5-17	19	6	Female	172	50
18-24	6	2	Med. Cond./Complication[†]		
25-49	57	17		Lung Disease	137
50-64	95	28	Cardiac Disease	125	36
≥65	124	36	Diabetes	88	26
Race/Ethnicity			Ventilator Support	85	25
	NH-White	73	21	Reported Deaths [‡]	16
NH-Black	184	54	Treatment/Vaccination[†]		
Hispanic	71	21		Reported Antiviral Tx	291
Asian/Other	15	4	Reported Flu Shot	100	29

* 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 April 28-May 4, 2019, 34 of the 814 (4.2%) specimens tested for influenza were positive; 23 typed as influenza A (3 H1N1pdm09, 9 H3N2, and 11 unknown subtype) and 11 typed as influenza B (Figure 2).

Since September 30, 2018, 3,210 of 29,316 (11%) specimens tested for influenza have been positive; 3,044 typed as influenza A (721 H1N1pdm09, 281 H3N2, and 2,042 unknown subtype [subtyping not performed or not all subtypes tested]) and 166 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.

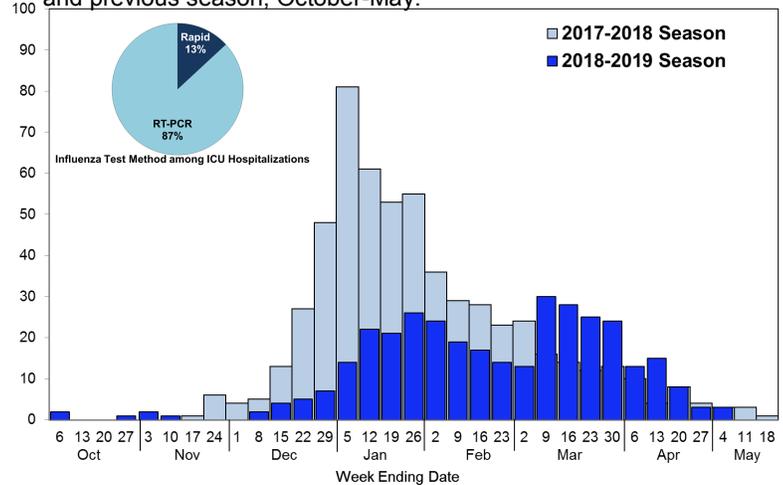
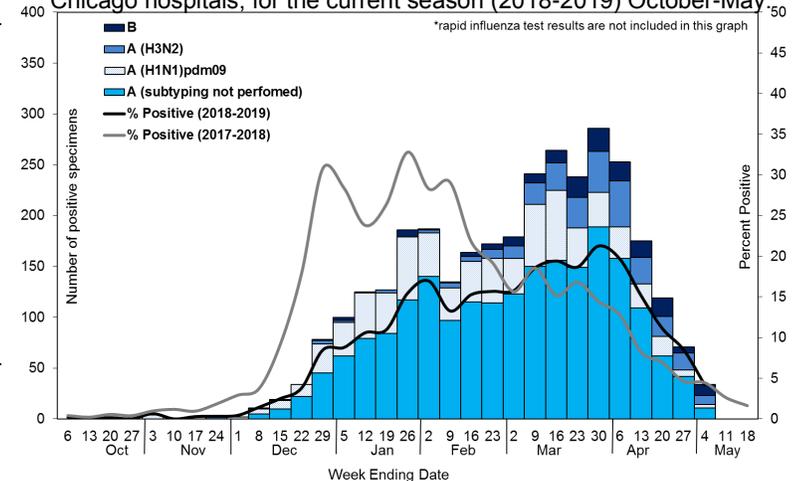


Figure 2. Percent of specimens testing positive (by RT-PCR*) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2018-2019) October-May.



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

¹ <http://www.cdc.gov/flu/weekly/index.htm>; ² <https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates.htm>

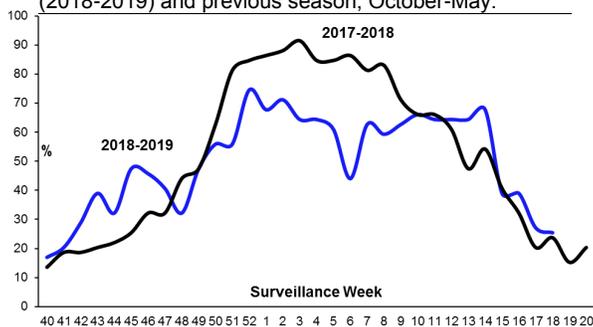
How much influenza-like illness is occurring?

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 28-May 4, 2019, 79 of the 5,684 (1.4%) reported outpatient clinic visits were due to influenza-like illness, which is similar to Illinois (1.2%), Region 5 (1.2%) and the U.S. (1.6%) (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 28-May 4, 2019, 412 of the 23,204 (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 28-May 4, 2019, 15 of 59 (25%) zip codes had ILI activity levels in the moderate to high categories; this is similar to last season where 24% of zip codes were at moderate to high levels for the same time period (Figure 6).

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.



Where can I get more information?

The Centers for Disease Control and Prevention's FluView¹ 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

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.

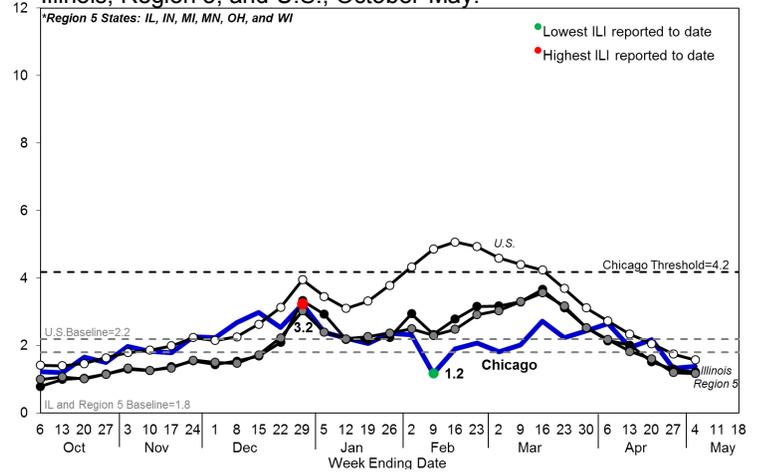


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2018-2019) and previous two seasons, October-May.

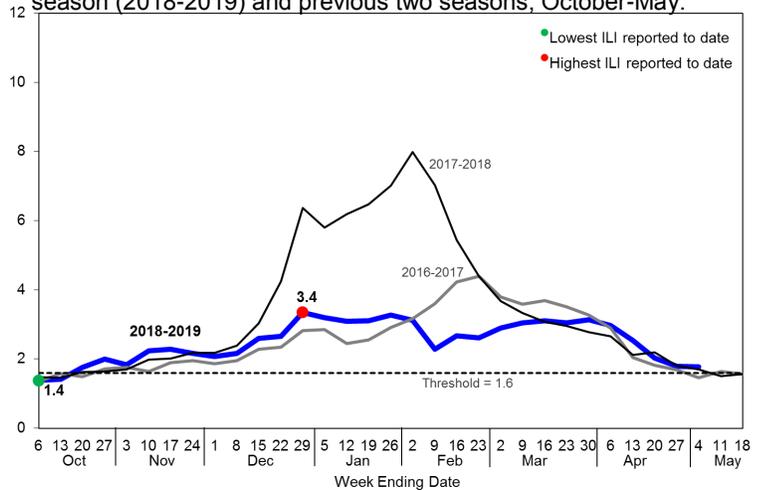
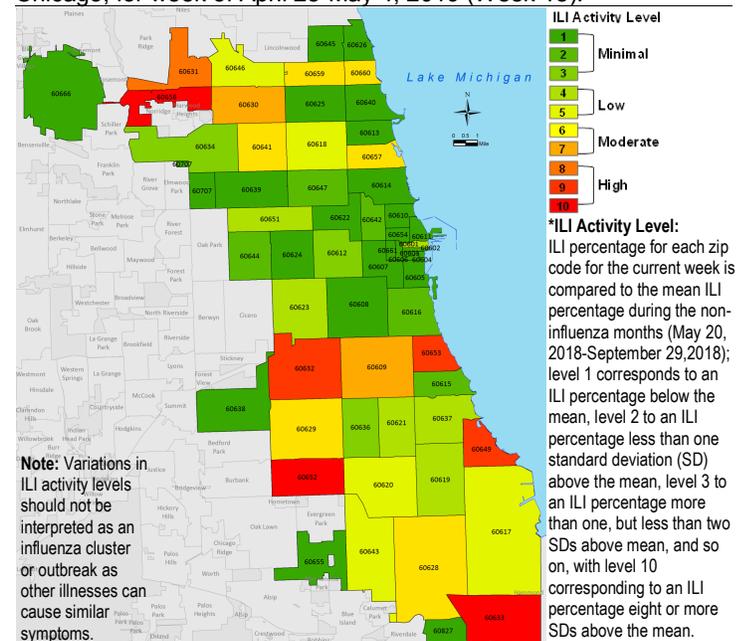


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of April 28-May 4, 2019 (Week 18).



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>;

⁸ <https://dph.partner.illinois.gov/>