Chicago Flu Update



Rahm Emanuel, Mayor April 19, 2019 Julie Morita, MD, Commissioner

News & Updates

As long as influenza viruses are circulating and unexpired vaccine is available, influenza vaccinations should continue to be offered. 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 Clinics¹ 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 7-13, 2019, 15 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 328 influenza-associated ICU hospitalizations have been reported; 313 were positive for influenza A (129 H1N1pdm09, 22 H3N2, and 162 unknown subtype [subtyping not attempted or not all subtypes tested]) and 15 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 18 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.

residents during the 2016-2019 season, October-May.					
Age Group	#	%*	Sex	#	%
0-4	40	12	Male	163	50
5-17	18	5	Female	165	50
18-24	6	2	Med. Cond./Complication [†]		
25-49	56	17	Lung Disease	131	40
50-64	90	27	Cardiac Disease	122	37
≥65	118	36	Diabetes	82	25
Race/Ethnicity			Ventilator Support	82	25
NH-White	71	22	Reported Deaths [‡]	15	5
NH-Black	175	53	Treatment/Vaccination [†]		
Hispanic	67	20	Reported Antiviral Tx	277	84
Asian/Other	15	5	Reported Flu Shot	93	28

^{*} 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.

reported for Chicago residents, for the current season (2018-2019) and previous season, October-May.

Figure 1. Number of influenza-associated ICU hospitalizations

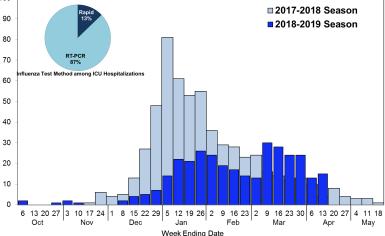
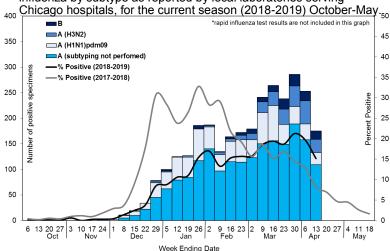


Figure 2. Percent of specimens testing positive (by RT-PCR*) for influenza by subtype as reported by local laboratories serving



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 7-13, 2019, 175 of the 1,155 (15.1%) specimens tested for influenza were positive; 159 typed as influenza A (24 H1N1pdm09, 26 H3N2, and 109 unknown subtype) and 16 typed as influenza B (**Figure 2**).

Since September 30, 2018, 2,986 of 26,596 (11.2%) specimens tested for influenza have been positive; 2,855 typed as influenza A (693 H1N1pdm09, 235 H3N2, and 1,927 unknown subtype [subtyping not performed or not all subtypes tested]) and 131 typed as influenza B.



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

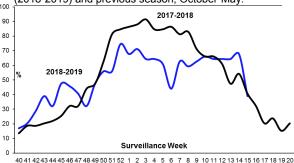
How much influenza-like illness is occurring?

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 7-13, 2019, 110 of the 5,653 (2.0%) reported outpatient clinic visits were due to influenza-like illness, which is similar to Illinois (2.0%), Region 5 (1.9%) and the U.S. (2.4%) (**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 7-13, 2019, 632 of the 24,920 (2.5%) 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 7-13, 2019, 23 of 59 (39%) zip codes had ILI activity levels in the moderate to high categories; this is similar to last season where 40% 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 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.

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.

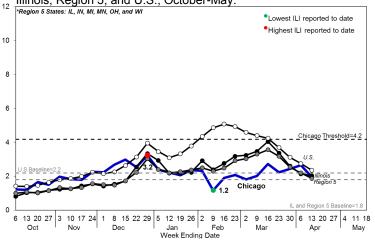
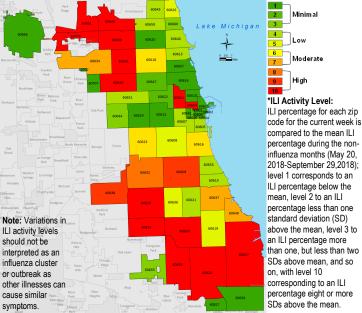


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

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 7-13, 2019 (Week 15).



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

ILI Activity Level

⁴ http://cookcountypublichealth.org/data-reports/communicable-diseases;5 https://www.cityofchicago.org/city/en/depts/cdph/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/