

Chicago Flu Update



Rahm Emanuel, Mayor

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News & Updates

Currently, the Illinois Department of Public Health continues to recommend temporary hospital visitor restrictions¹ during times of increased influenza-like



illness in the community. 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 Clinics² 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 March 10-16, 2019, 24 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 244 influenza-associated ICU hospitalizations have been reported; 235 were positive for influenza A (102 H1N1pdm09, 8 H3N2, and 125 unknown subtype [subtyping not attempted or not all subtypes tested]) and nine were positive for influenza B. The median age of reported cases is 58 years (range 1 month-92 years); one pediatric death was reported and 14 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	32	13	Male	124	51
5-17	12	5	Female	120	49
18-24	4	2	Med. Cond./Complication [†]		
25-49	43	18	Lung Disease	98	40
50-64	68	28	Cardiac Disease	85	35
≥65	85	35	Diabetes	61	25
Race/Ethnicity			Ventilator Support	62	25
NH-White	53	22	Reported Deaths [‡]	9	4
NH-Black	131	54	Treatment/Vaccination [†]		
Hispanic	48	20	Reported Antiviral Tx	211	87
Asian/Other	12	5	Reported Flu Shot	70	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 March 10-16, 2019, 264 of the 1,360 (19.4%) specimens tested for influenza were positive; 252 typed as influenza A (69 H1N1pdm09, 27 H3N2, and 156 unknown subtype) and 12 typed as influenza B (**Figure 2**).

Since September 30, 2018, 2,034 of 21,534 (9.4%) specimens tested for influenza have been positive; 1,981 typed as influenza A (565 H1N1pdm09, 94 H3N2, and 1,322 unknown subtype [subtyping not performed or not all subtypes tested]) and 53 typed as influenza B.

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

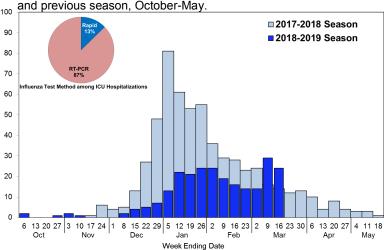
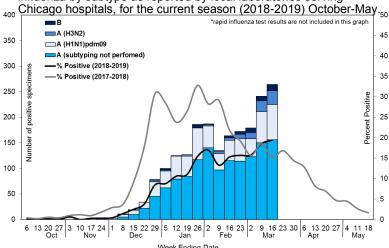


Figure 2. Percent of specimens testing positive (by RT-PCR*) for influenza by subtype as reported by local laboratories serving





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

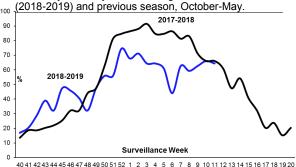
How much influenza-like illness is occurring?

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 March 10 -16, 2019, 165 of the 6,057 (2.7%) reported outpatient clinic visits were due to influenza-like illness, which is lower than Illinois (4.1%), Region 5 (3.7%) and the U.S. (4.4%) **(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 March 10-16, 2019, 812 of the 26,171 (3.1%) 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 March 10-16, 2019, 38 of 59 (64%) zip codes had ILI activity levels in the moderate to high categories; this is similar to last season where 66% of zip codes were also 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



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

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.

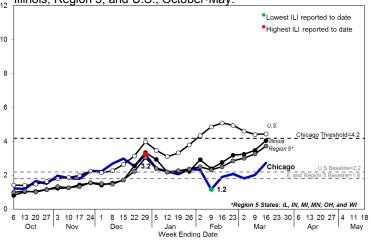


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

season (2018-2019) and previous two seasons, October-May.

*Lowest ILI reported to date

*Highest ILI reported to date

*A season (2018-2019)

*A season (2018-2

Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of March 10-16, 2019 (Week 11).

ILI Activity Level Minimal Moderate High *ILI Activity Level: ILI percentage for each zip code for the current week is compared to the mean ILI percentage during the noninfluenza months (May 20, 2018-September 29.2018): level 1 corresponds to an ILI percentage below the mean, level 2 to an ILI percentage less than one standard deviation (SD) Note: Variations in above the mean, level 3 to ILI activity levels an ILI percentage more should not be than one, but less than two interpreted as an SDs above mean, and so influenza cluster on, with level 10 or outbreak as corresponding to an ILI other illnesses can percentage eight or more cause similar SDs above the mean. symptoms.

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/cdph/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/