

Chicago Flu Update



Lori E. Lightfoot, Mayor

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Allison Arwady, MD, MPH, Commissioner

News & Updates

The CDC recently issued a Health Advisory¹ reminding clinicians on the importance of prompt antiviral treatment in patients with influenza and to continue influenza and to continue influenza vaccination efforts. 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. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org. Uninsured or underinsured adults and children 0-18 years old who are uninsured, underinsured, or Medicaid (Title XIX) insured can visit any CDPH Walk-in Immunization Clinic² to receive the flu vaccine.

What is the risk?

Currently, the risk of influenza infection is high.

Are severe cases of influenza occurring? For the week of January 5-11, 2020, 19 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 29, 2019, 88 influenza-associated ICU hospitalizations have been reported; 46 (52%) were positive for influenza A (5 H3N2, 11 H1N1_{pdm09}, 30 unknown subtype [subtyping not performed or not all subtypes tested]) and 42 (48%) were positive for influenza B. The median age of influenza A cases is 58 years and the median age of influenza B cases is 31.5 years (overall range of 1 month-96 years); one pediatric death was reported and three 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 2019-2020 season, October-May.

Age Group	#	% [*]	Sex	#	%	400
0-4	14	16	Male	38	43	
5-17	6	7	Female	50	57	350
18-24	3	3	Med. Cond./Complication [†]			
25-49	17	19	Lung Disease	32	36	300
50-64	25	28	Cardiac Disease	19	22	250
≥65	23	26	Diabetes	22	25	250
Race/Ethnicity			Ventilator Support	15	17	200
NH-White	19	22	Reported Deaths [‡]	4	5	
NH-Black	45	51	Treatment/Vaccination [†]			150
Hispanic	20	23	Reported Antiviral Tx	70	80	
Asian/Other	4	5	Reported Flu Shot	27	31	100

* 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 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May.

No Activity

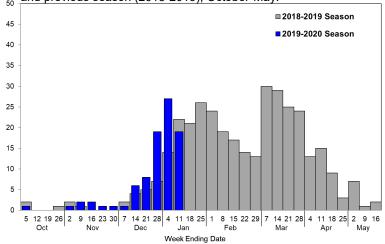
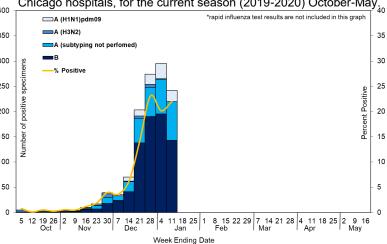


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May 40



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 5-11, 2020, 242 of the 1,102 (22%) specimens tested for influenza were positive; 99 typed as influenza A (0 H3N2, 22 H1N1pdm09, and 77 unknown subtype [subtyping not performed or not all subtypes tested]) and 143 typed as influenza B (**Figure 2**).

Since September 29, 2019, 1,206 of 14,721 (8.2%) specimens tested for influenza have been positive; 434 (36%) typed as influenza A (29 H3N2, 101 H1N1pdm09, and 304 unknown subtype [subtyping not performed or not all subtypes tested]) and 772 (64%) typed as influenza B. The cumulative number of specimens testing positive for influenza so far this season is higher than last season (3.4%) but lower than 2017-2018 (13.2%) for the same time period. $^{\$}$

[§] Reported percentages represent final end of season data and may differ from previously published reports. 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 January 5-11, 2020, 178 of the 5,914 (3.0%) reported outpatient clinic visits were due to influenza-like illness, which is lower than Illinois at 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 January 5-11, 2020, 1,438 of the 25,887 (5.6%) 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 January 5-11, 2020, 52 of 59 (88%) zip codes had moderate to high ILI activity levels; this is higher than last season where 71% of zip codes were at moderate to high levels for the same time period and the sixth consecutive week where over half of zip codes had moderate to high ILI activity levels.

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

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance⁷. The Chicago Department of Public Health has previously 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. For more information contact: SyndromicSurveillance@cityofchicago.org



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



 $^{{}^6\}text{ https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago.html;}$

⁷www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf;

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 (2019-2020) and previous season, October-May.

•Lowest ILI reported to date

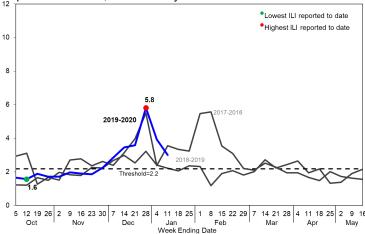


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

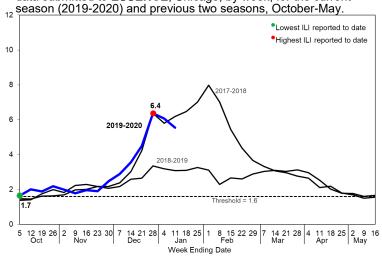


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of January 5-11, 2020 (Week 2)

