



# Chicago Flu Update



Lori E. Lightfoot, Mayor

March 6, 2020

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## News & Updates

The CDC has released [interim influenza vaccine effectiveness estimates](#)<sup>1</sup> for the 2019-2020 season, showing that getting a flu vaccine reduces flu-related doctor's visits by about half overall and by 55% in children. 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](http://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 Clinic](#)<sup>2</sup> to receive the flu vaccine.



## What is the risk?

Currently, the risk of influenza infection remains high.

## Are severe cases of influenza occurring?

For the week of February 23-29, 2020, 38 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 29, 2019, 400 influenza-associated ICU hospitalizations have been reported; 301 (75%) were positive for influenza A (8 H3N2, 101 H1N1pdm09, 192 unknown subtype [subtyping not performed or not all subtypes tested]) and 99 (25%) were positive for influenza B. The median age of influenza A cases is 55 years and the median age of influenza B cases is 36 years (overall range of 1 month-96 years); three pediatric deaths were reported and 12 outbreaks in long-term care facilities; selected attributes are summarized in Table 1.

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*	#	% <sup>†</sup>	Sex	#	%
0-4	71	18	Male	205	51
5-17	26	7	Female	194	49
18-24	15	4	<b>Med. Cond./Complication<sup>‡</sup></b>		
25-49	69	17	Lung Disease	136	34
50-64	113	28	Cardiac Disease	116	29
≥65	105	26	Diabetes	91	23
<b>Race/Ethnicity</b>			Ventilator Support	87	22
NH-White	82	21	Reported Deaths <sup>§</sup>	13	3
NH-Black	217	54	<b>Treatment/Vaccination<sup>†</sup></b>		
Hispanic	80	20	Reported Antiviral Tx	320	80
Asian/Other	20	6	Reported Flu Shot	121	30

\* One patient missing age and race/ethnicity at time of report; † 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 February 23-29, 2020, 593 of the 1,965 (30%) specimens tested for influenza were positive; 477 typed as influenza A (1 H3N2, 138 H1N1pdm09, and 338 unknown subtype [subtyping not performed or not all subtypes tested]) and 116 typed as influenza B (Figure 2).

Since September 29, 2019, 5,603 of 29,402 (19%) specimens tested for influenza have been positive; 3,344 (60%) typed as influenza A (59 H3N2, 1,015 H1N1pdm09, and 2,270 unknown subtype [subtyping not performed or not all subtypes tested]) and 2,259 (40%) typed as influenza B. The cumulative number of specimens testing positive for influenza so far this season is higher than last season (8%) and similar to the 2017-2018 season (19%) for the same time period.<sup>§</sup>

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.

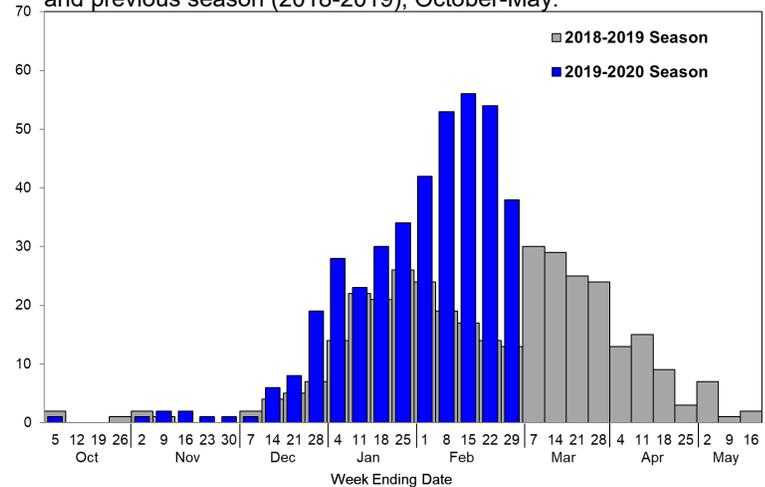
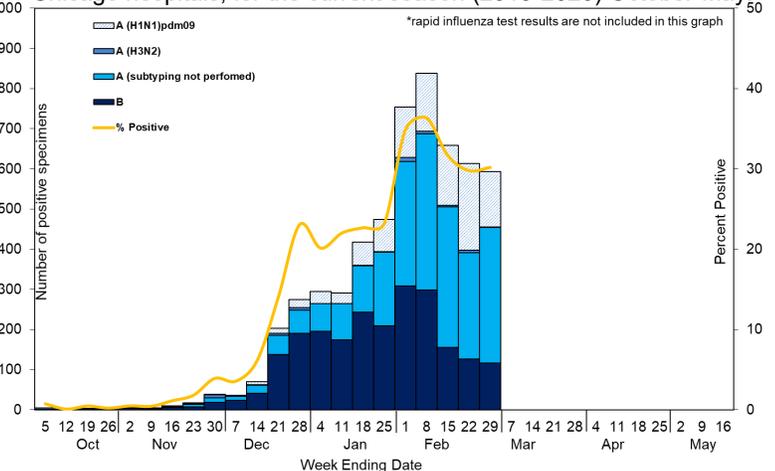


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May.



§ 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.

<sup>1</sup> [https://www.cdc.gov/mmwr/volumes/69/wr/mm6907a1.htm?s\\_cid=mm6907a1\\_w](https://www.cdc.gov/mmwr/volumes/69/wr/mm6907a1.htm?s_cid=mm6907a1_w);

<sup>2</sup> [https://www.chicago.gov/city/en/depts/cdph/supp\\_info/health-protection/immunizations\\_walk-inclinics.html](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 February 23-29, 2020, 159 of the 5,525 (2.9%) reported outpatient clinic visits were due to influenza-like illness, which is higher than the percentage last season for same time period (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 February 23-29, 2020, 1,236 of the 23,875 (5.2%) 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 February 23-29, 2020, 48 of 59 (81%) zip codes had moderate to high ILI activity levels; this is higher than last season where 63% of zip codes were at moderate to high levels for the same time period and the thirteenth 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 FluView<sup>3</sup> 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 Illinois<sup>4</sup> and Suburban Cook County<sup>5</sup> 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 Chicago<sup>6</sup>.

## Reporting Information

Illinois Department of Public Health recently issued Influenza Testing and Reporting Guidance<sup>7</sup>. The Chicago Department of Public Health has previously issued guidance on reporting influenza-associated ICU hospitalizations<sup>8</sup>. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)<sup>9</sup>. For more information contact: SyndromicSurveillance@cityofchicago.org

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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 two seasons, October-May.

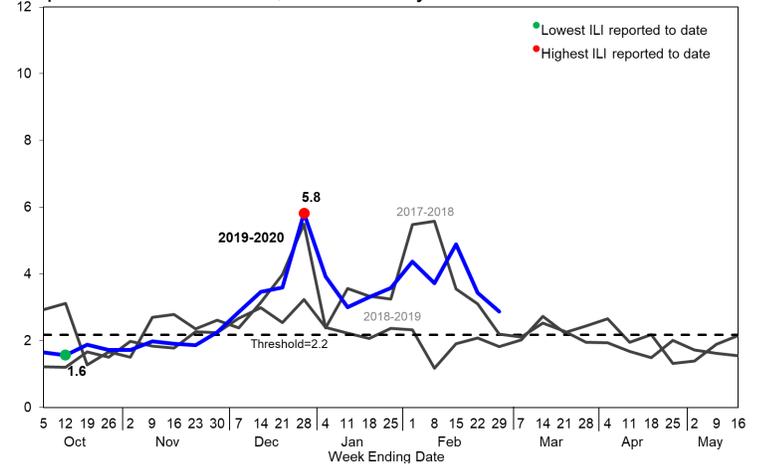


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2019-2020) and previous two seasons, October-May.

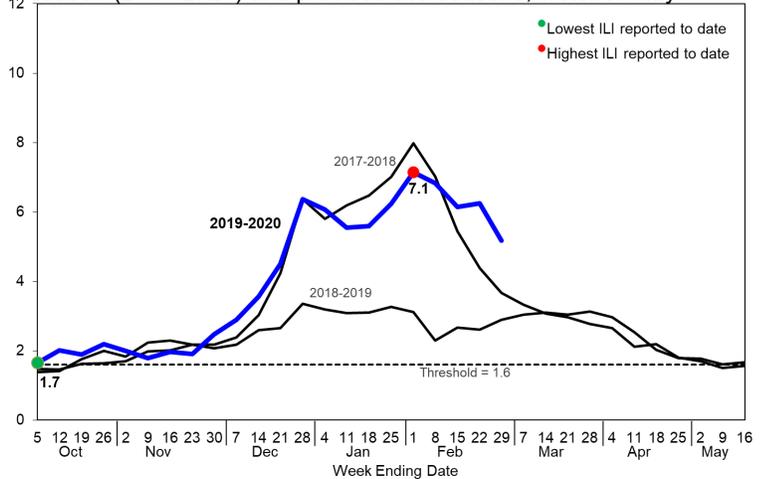
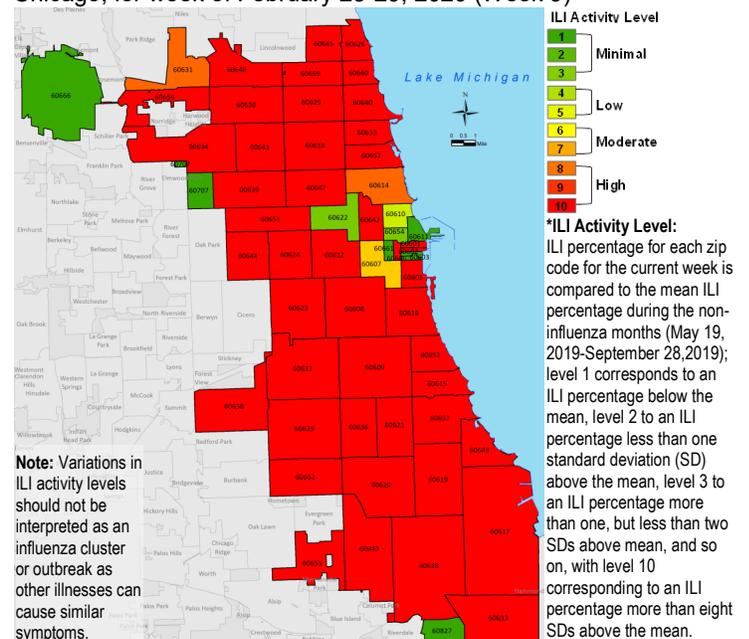


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to ESSENCE, Chicago, for week of February 23-29, 2020 (Week 9)



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

<sup>3</sup> <http://www.cdc.gov/flu/weekly/index.htm>, <sup>4</sup> <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance>, <sup>5</sup> <https://ccdphcd.shinyapps.io/influenza/>;

<sup>6</sup> [https://www.chicago.gov/city/en/depts/cdph/supp\\_info/health-protection/current\\_flu\\_situationinchicago.html](https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago.html);

<sup>7</sup> [www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf](http://www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf) ;

<sup>8</sup> <https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41>; <sup>9</sup> <httpsdph.partner.illinois.gov/>