



# Chicago Flu Update



Rahm Emanuel, Mayor

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## News & Updates

In recent weeks, influenza activity in Chicago and across the U.S. has increased sharply. Although this is the earliest influenza season in Chicago since 2014-2015, where for the same time period, 203 influenza-associated ICU hospitalizations were reported (Figure 1), there is no way to predict how severe the season will be or when it will end. Vaccination is the best way to protect against influenza infection and all Chicagoans aged 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 [Fast-Track Immunization Clinics](#)<sup>1</sup> is available on the City website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, visit [www.chicagoflushots.org](http://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 December 31, 2017-January 6, 2018, 62 influenza-associated ICU hospitalizations were reported (Figure 1).

Since October 1, 2017, 153 influenza-associated ICU hospitalizations have been reported; 142 were positive for influenza A (45 H3N2, 6 H1N1, and 91 unknown subtype [subtyping not attempted or not all subtypes tested]) and 11 were positive for influenza B. The median age of reported cases is 63 years (range of 3 weeks-102 years); selected attributes are summarized in Table 1.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2017-2018 season, October-May.

Age Group	#	%	Sex	#	%
0-4	9	6	Male	63	41
5-17	9	6	Female	90	59
18-24	6	4	<b>Med. Cond./Complication</b> <sup>†</sup>		
25-49	19	12	Lung Disease	40	26
50-64	40	26	Cardiac Disease	40	26
≥65	70	46	Diabetes	37	24
<b>Race/Ethnicity</b>			Ventilator Support	43	28
NH-White	21	32	Reported Deaths	9	6
NH-Black	27	42	<b>Treatment/Vaccination</b> <sup>†</sup>		
Hispanic	15	23	Reported Antiviral Tx	108	71
Asian	2	3	Reported Flu Shot	47	31

\* Percentages may not add up to 100 due to rounding; † As reported in INEDSS (Illinois National Electronic Disease Surveillance System).

## Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of December 31, 2017-January 6, 2018, with 6 laboratories reporting, 386 of the 1,578 (24.5%) specimens tested for influenza were positive [147 A (H3N2), 27 A (H1N1)pdm09, 189 A unknown subtype and 23 influenza B] (Figure 2). Since October 1, 2017, 1,096 of 10,162 (10.8%) specimens tested for influenza have been positive; 1,038 typed as influenza A (413 H3N2, 66 (H1N1)pdm09, 559 unknown subtype [subtyping not performed or not all subtypes tested]) and 58 typed as influenza B.

## How much influenza-like illness is occurring?

CDPH receives data from several hospitals in Chicago that provide emergent care, which report on a weekly basis the total number of emergency department visits, and of those visits, the number with influenza-like illness (*fever of 100°F or greater and cough and/or sore throat*). For the week of December 31, 2017-January 6, 2018, with seven hospitals reporting, 5.9% of emergency department visits were due to ILI (Figure 3).

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2017-2018) and previous season, October-May.

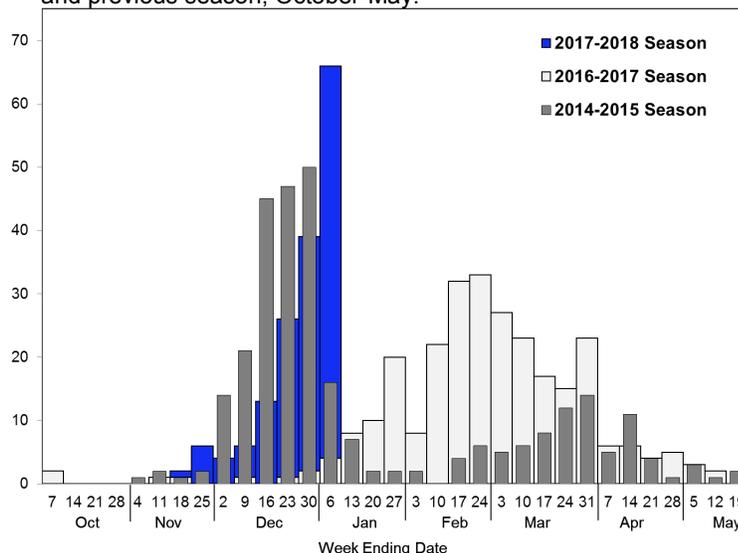
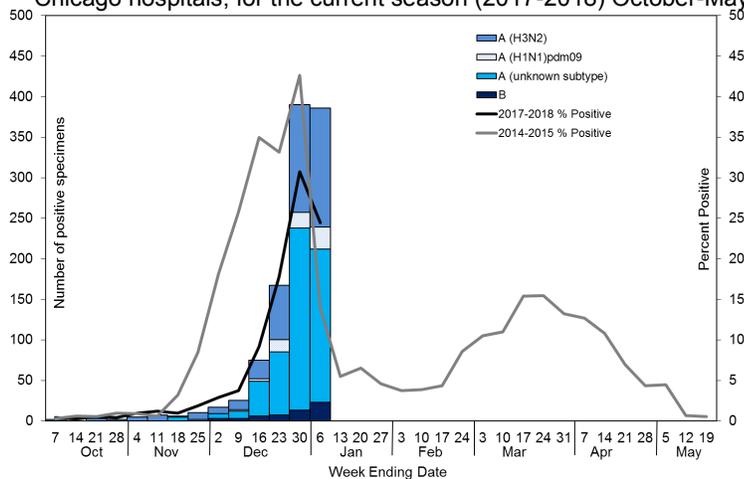


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2017-2018) October-May.



<sup>1</sup> [https://www.cityofchicago.org/city/en/depts/cdp/h/supp\\_info/health-protection/immunizations\\_walk-inclinics.html](https://www.cityofchicago.org/city/en/depts/cdp/h/supp_info/health-protection/immunizations_walk-inclinics.html)

In addition to emergency departments, several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by also 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 December 31, 2017-January 6, 2018, with 22 facilities reporting, 2.4% of outpatient clinic visits were due to influenza-like illness (Figure 4).

**ESSENCE** is an electronic syndromic surveillance system used to monitor influenza-like illness by utilizing the chief complaints of patients visiting emergency departments. Currently, all Chicago hospitals submit data to ESSENCE on a daily basis, covering every emergency department visit in the city. For the week of December 31, 2017-January 6, 2018, 1,511 of the 25,844 (5.8%) total emergency department visits were due to influenza-like illness (ILI); children less than five years of age had the highest percentage of visits due to ILI at 15.7%

**Figure 5** represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of December 31, 2017-January 6, 2018, 51 of 59 (86%) zip codes had ILI activity levels in the moderate to high categories and 8 (14%) had ILI activity levels in the minimal to low categories; the median percent ILI was 5.2% with a range from <1% to 15% (Figure 6).

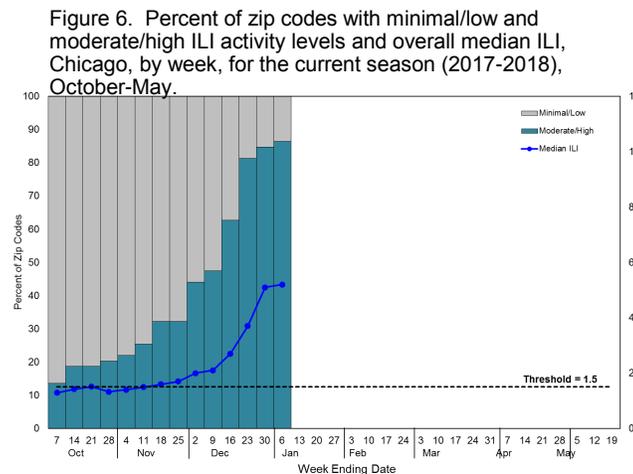


Figure 6. Percent of zip codes with minimal/low and moderate/high ILI activity levels and overall median ILI, Chicago, by week, for the current season (2017-2018), October-May.

### Where can I get more information?

The Centers for Disease Control and Prevention's **FluView<sup>2</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>3</sup>** and **Suburban Cook County<sup>4</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>5</sup>**.

### Reporting Information

The Illinois Department of Public Health (IDPH) has issued **influenza testing and reporting recommendations<sup>6</sup>** healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)<sup>7</sup>

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

Figure 3. Percent of **emergency department** visits attributed to influenza-like illness based on manual reports by individual hospitals, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

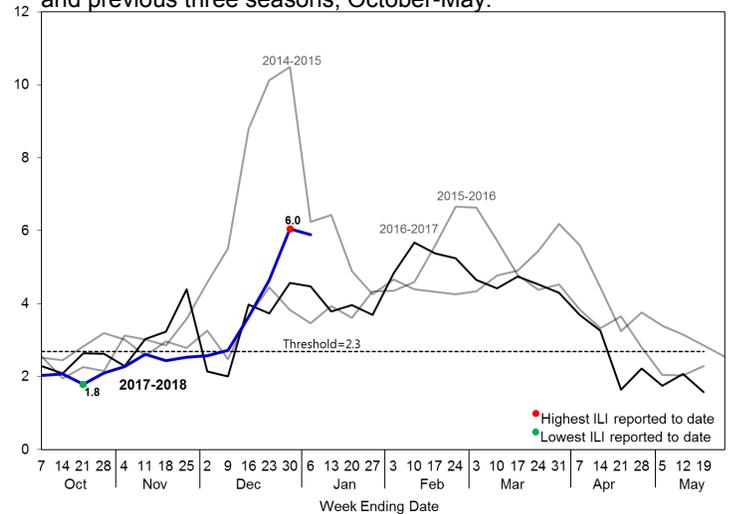


Figure 4. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

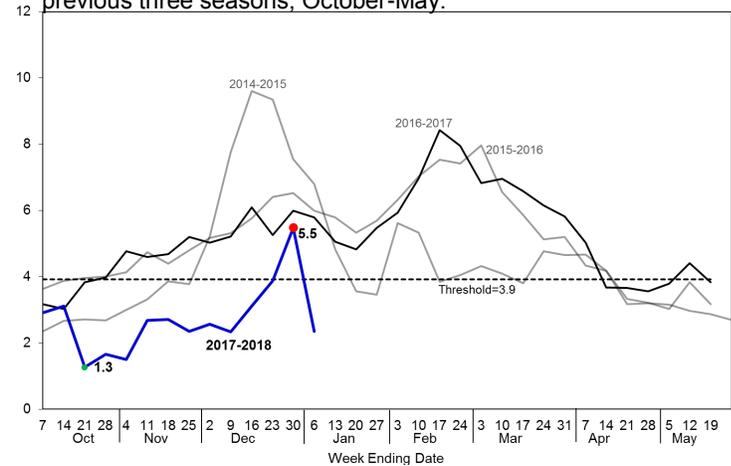
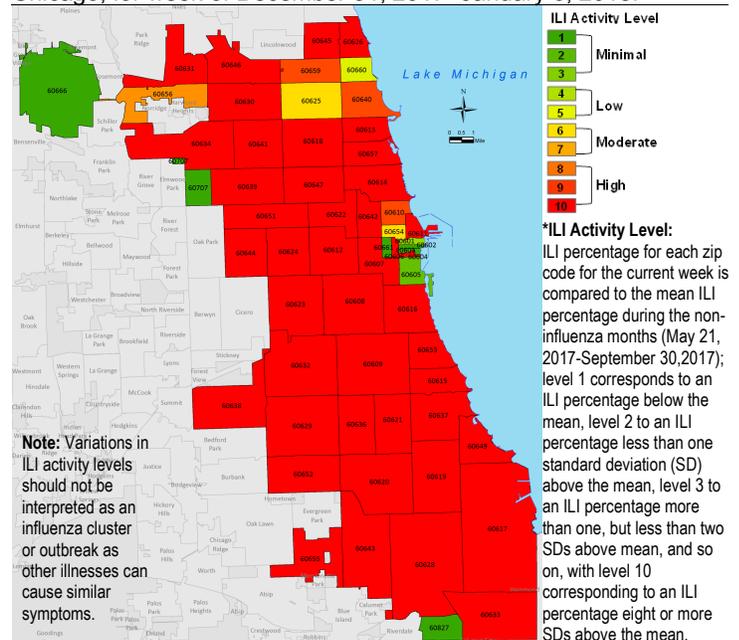


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of December 31, 2017- January 6, 2018.



<sup>2</sup> <http://www.cdc.gov/flu/weekly/index.htm>; <sup>3</sup> <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance>; <sup>4</sup> <http://cookcountypublichealth.org/data-reports/communicable-diseases>; <sup>5</sup> [https://www.cityofchicago.org/city/en/depts/cdp/supp\\_info/health-protection/current\\_flu\\_situationinchicago2011.html](https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html); <sup>6</sup> <http://dph.illinois.gov/sites/default/files/publications/publications-ohp-annual-flu-testing-guidance-10132017.pdf>; <sup>7</sup> <https://dph.partner.illinois.gov/>