



Chicago Flu Update



Rahm Emanuel, Mayor

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News & Updates

In 2014-2015 (a high severity H3N2 season), 73% of the total number of influenza-associated ICU hospitalizations for the season were reported by this time and so far this season, the number of ICU hospitalizations is up 66% compared to the same time period in 2014-2015. Influenza activity continues to be widespread throughout most of the U.S. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. In partnership with Walgreens pharmacy, CDPH has made additional influenza vaccine available for no out-of-pocket cost to individuals who are uninsured or unable to pay; see the [January 23rd press release](#)¹ for specific pharmacy locations. Also available is the City's easy-to-use [interactive map](#)² to find a location near you to get a flu shot and more information about how to stay healthy is available on [CDPH's website](#)³.

What is the risk?

Currently, the risk of influenza infection is high.

Are severe cases of influenza occurring?

For the week of January 28-February 3, 2018, 29 influenza-associated ICU hospitalizations were reported (Figure 1).

Since October 1, 2017, 358 influenza-associated ICU hospitalizations have been reported; 325 were positive for influenza A (101 H3N2, 13 H1N1, and 211 unknown subtype [subtyping not attempted or not all subtypes tested]) and 33 were positive for influenza B. The median age of reported cases is 63 years (range of 5 days-102 years); 34 (9.5%) cases were admitted from long-term care facilities (LTCF) and 11 outbreaks have been reported in LTCF; two pediatric deaths were reported including one ICU hospitalization; 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	27	8	Male	156	44
5-17	23	6	Female	202	56
18-24	12	3	Med. Cond./Complication [†]		
25-49	43	12	Lung Disease	112	31
50-64	92	26	Cardiac Disease	92	26
≥65	161	45	Diabetes	88	25
Race/Ethnicity			Ventilator Support	97	27
NH-White	93	26	Reported Deaths [‡]	24	7
NH-Black	189	53	Treatment/Vaccination [†]		
Hispanic	67	19	Reported Antiviral Tx	258	72
Asian/Other	9	3	Reported Flu Shot	100	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.

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 28-February 3, 2018, with 6 laboratories reporting, 475 of the 1,680 (28.3%) specimens tested for influenza were positive [143 A (H3N2), 12 A (H1N1)pdm09, 256 A unknown subtype and 64 influenza B] (Figure 2). Since October 1, 2017, 2,962 of 16,657 (17.8%) specimens tested for influenza have been positive; 2,700 typed as influenza A (951 H3N2, 128 (H1N1)pdm09, 1,621 unknown subtype [subtyping not performed or not all subtypes tested]) and 262 typed as influenza B.

How much influenza-like illness is occurring?

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

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

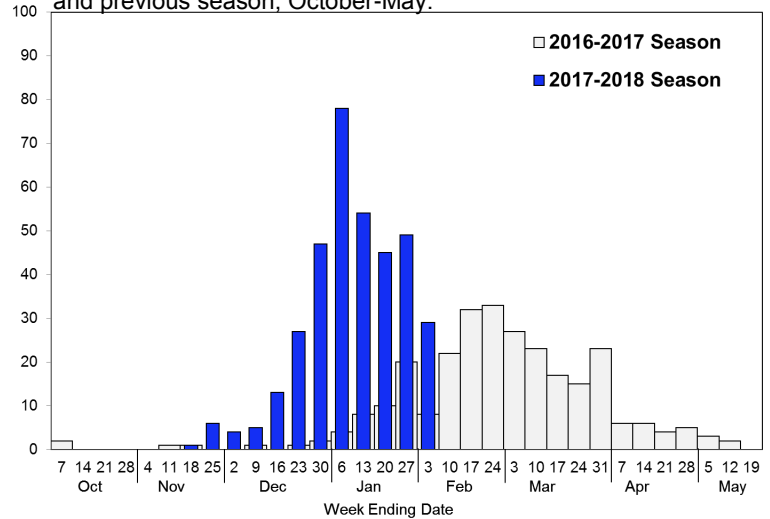
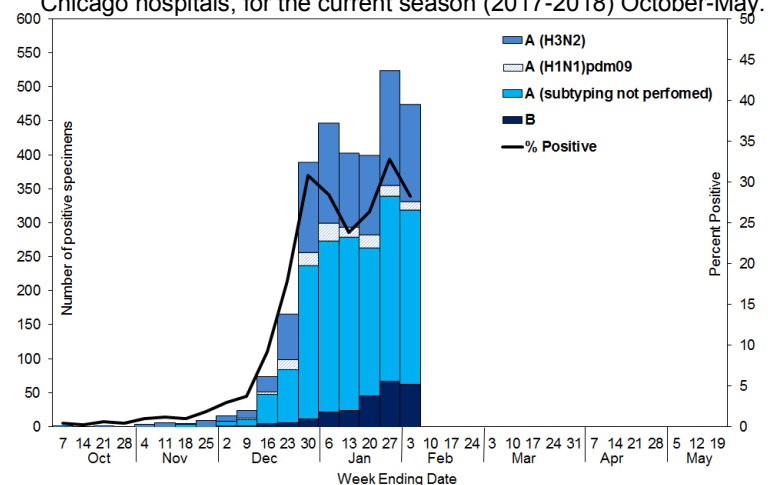


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2017-2018) October-May.



¹ https://www.cityofchicago.org/city/en/depts/cdph/provdrs/health_protection/news/2018/January/the-chicago-department-of-public-health-reminds-residents-its-no.html

² <http://chicagoflushots.org/>; ³ <https://www.cityofchicago.org/city/en/depts/cdph.html>

daily basis, covering every emergency department visit in the city. For the week of January 28-February 3, 2018, 2,189 of the 27,409 (8.0%) total emergency department visits were due to influenza-like illness (ILI) (**Figure 3**). Children less than five years of age had the highest percentage of visits due to ILI at 19.4%.

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 January 28-February 3, 2018, with 22 facilities reporting, 5.5% of outpatient clinic 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 28-February 3, 2018, 50 of 52 (88.1%) zip codes had ILI activity levels in the moderate to high categories and 7 (11.9%) had ILI activity levels in the minimal to low categories; the median percent ILI was 7.0% with a range from <1% to 40% (**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.

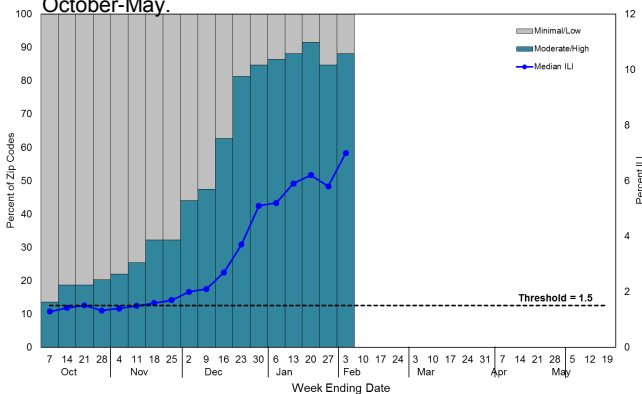


Figure 3. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current season (2017-2018) and previous season, October-May.

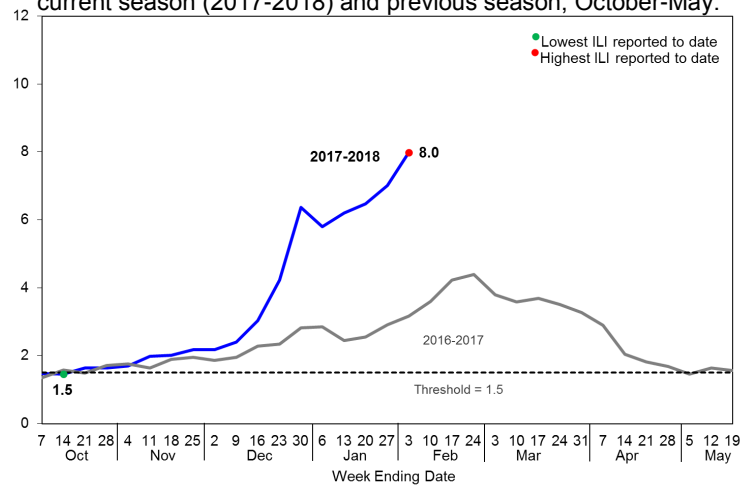


Figure 4. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

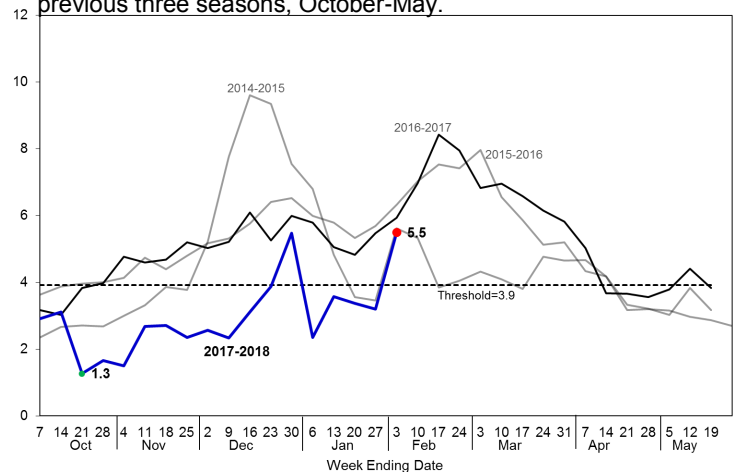
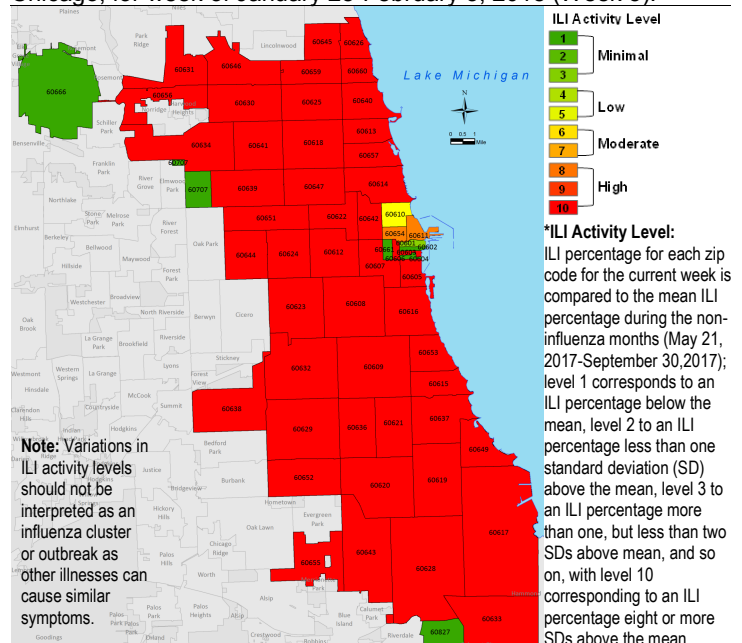


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of January 28-February 3, 2018 (**Figure 5**).



Where can I get more information?

The Centers for Disease Control and Prevention's **FluView**⁴ 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**⁵ and **Suburban Cook County**⁶ 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**⁷.

Reporting Information

The Illinois Department of Public Health (IDPH) has issued **influenza testing and reporting recommendations**⁸ 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.

⁴ <http://www.cdc.gov/flu/weekly/index.htm>; ⁵ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance>; ⁶ <http://cookcountypublichealth.org/data-reports/communicable-diseases>; ⁷ https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationininchicago2011.html;

⁸ <http://dph.illinois.gov/sites/default/files/publications/publications-ohp-annual-flu-testing-guidance-10132017.pdf>; ⁹ <https://dph.partner.illinois.gov/>