



Chicago Flu Update



Rahm Emanuel, Mayor

December 22, 2017

Julie Morita, MD, Commissioner



News & Updates

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 Clinics¹ 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.

What is the risk?

Currently, the risk of influenza infection has increased.

Are severe cases of influenza occurring?

For the week of December 10-16, 2017, seven influenza-associated ICU hospitalizations were reported (**Figure 1**).

Since October 1, 2017, 22 influenza-associated ICU hospitalizations have been reported; 19 were positive for influenza A (10 H3N2, 2 H1N1, and 7 unknown subtype [subtyping not attempted or not all subtypes tested]) and three were positive for influenza B. The median age of reported cases is 69 years (range of 5-96 years); five cases (23%) were admitted from long-term care facilities and one death was reported; 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	0	0	Male	8	36
5-17	1	5	Female	14	64
18-24	0	0	Med. Cond./Complication [†]		
25-49	2	9	Lung Disease	4	18
50-64	7	32	Cardiac Disease	9	41
≥65	12	55	Diabetes	5	23
			Ventilator Support	5	23
Race/Ethnicity			Reported Deaths	1	5
NH-White	7	32	Treatment/Vaccination [†]		
NH-Black	11	50	Reported Antiviral Tx	13	59
Hispanic	4	18	Reported Flu Shot	10	45
Asian	0	0			

* 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 10-16, 2017, with 6 laboratories reporting, 75 of the 820 (9.1%) specimens tested for influenza were positive [23 A (H3N2), 3 A (H1N1)pdm09, 43 A unknown subtype and 6 influenza B] (**Figure 2**).

Since October 1, 2017, 153 of 6,379 (2.4%) specimens tested for influenza have been positive; 138 typed as influenza A (66 H3N2, 5 (H1N1)pdm09, 67 unknown subtype [subtyping not performed or not all subtypes tested]) and 15 typed as influenza B.

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

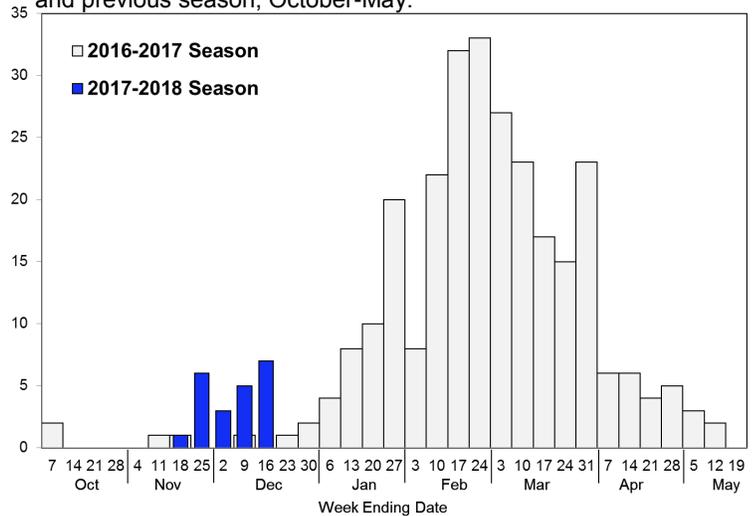
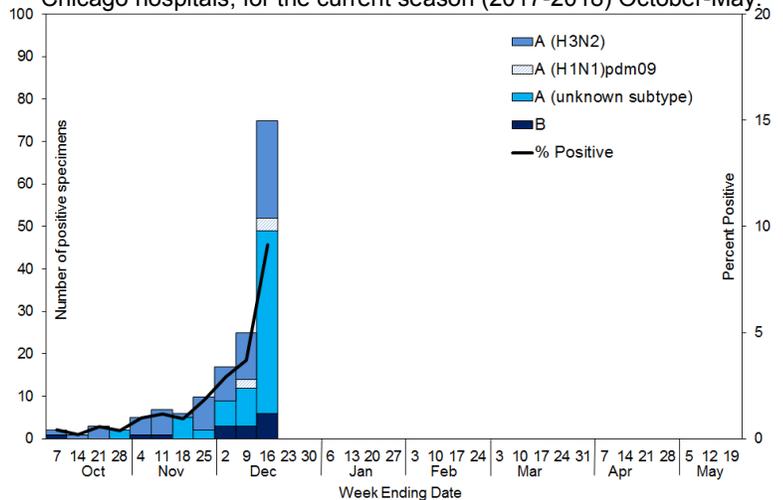


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2017-2018) October-May.



¹ https://www.cityofchicago.org/city/en/depts/cdph/supp_info/health-protection/immunizations_walk-inclinics.html

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 10-16, 2017, with seven hospitals reporting, 3.6% of emergency department visits were due to ILI (**Figure 3**).

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 10-16, 2017, 751 of the 24,251 (3.1%) total emergency department visits were due to influenza-like illness (ILI).

Figure 4 represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of December 10-16, 2017, 22 of 59 (37%) zip codes had ILI activity levels in the minimal to low categories and 37 (63%) had ILI activity levels in the moderate to high categories; the median percent ILI was 2.7% with a range from <1% to 6% (**Figure 5**).

Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](#)² 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](#)³ and [Suburban Cook County](#)⁴ 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](#)⁵.

Reporting Information

The Illinois Department of Public Health (IDPH) has issued [influenza testing and reporting recommendations](#)⁶ healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS).⁷



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.

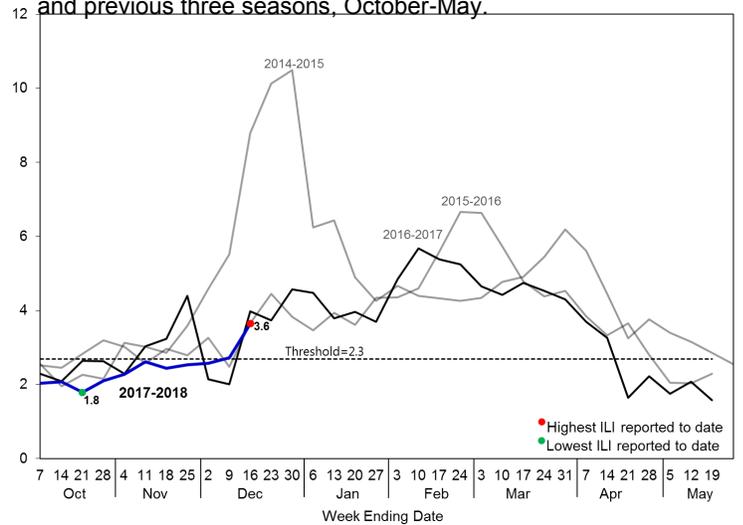


Figure 4. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of December 10-16, 2017(week 50).

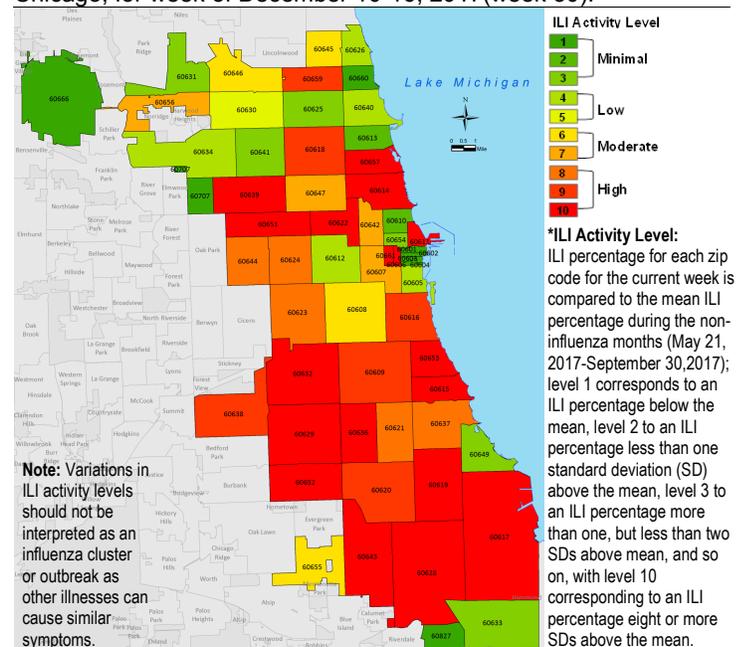
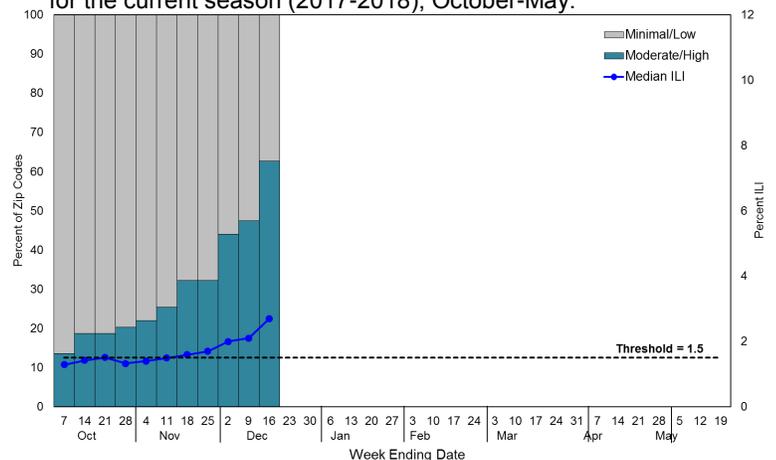


Figure 5. Percent of zip codes with minimal/low and moderate/high ILI activity levels and overall median ILI, Chicago, by week, for the current season (2017-2018), October-May.



² <http://www.cdc.gov/flu/weekly/index.htm>; ³ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance>; ⁴ <http://cookcountypublichealth.org/data-reports/communicable-diseases>; ⁵ https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html;

⁶ <http://dph.illinois.gov/sites/default/files/publications/publications-ohp-annual-flu-testing-guidance-10132017.pdf>; ⁷ <https://dph.partner.illinois.gov/>