



Chicago Flu Update



Rahm Emanuel, Mayor

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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 schedule of [City of Chicago influenza vaccination clinics](#) is available on the City website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org.

The Illinois Department of Public Health (IDPH) has issued [influenza testing and reporting recommendations](#)²; healthcare facilities can report cases to the Chicago Department of Public Health via [INEDSS](#)³.

What is the risk?

Currently, the risk of influenza infection continues to increase.

Are severe cases of influenza occurring?

During surveillance week 1, four influenza-associated ICU hospitalizations were reported. (Figure 1).

Since October 2, 2016, 12 influenza-associated ICU hospitalizations have been reported; 8 were positive for influenza A (5 H3N2 and 3 unknown subtype [subtyping not attempted or not all subtypes tested]) and 4 were positive for influenza B. The median age of reported cases was 59 years (range of 22-85 years); selected attributes are summarized in **Table 1**.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents for current season (2016-2017), October-May.

Age Group	#	%	Race/Ethnicity	#	%
0-4	0	0	NH-White	3	25
5-17	0	0	NH-Black	5	42
18-24	1	8	Hispanic	2	16
25-49	2	17	Asian	2	17
50-64	4	33	Other/Unknown	0	0
≥65	5	42			
Total	12	100	Medical Condition/Complication		
			Lung Disease	5	42
			Cardiac Disease	4	33
Sex			Ventilator Support	3	25
Male	3	25	Reported Deaths	1	8
Female	9	75			

How much influenza-like illness is occurring?

CDPH receives data from influenza surveillance sites across Chicago, which report the total number of patient visits seen weekly, and of those visits, the number with influenza-like illness (ILI) (i.e., fever of 100°F or greater, with cough or sore throat).

Several hospitals in Chicago that provide emergent care report on a weekly basis the total number of emergency department visits, and of those visits, the number with ILI. For surveillance week 1, with 9 hospitals reporting, 4.5% of emergency department visits were due to ILI (Figure 2).

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2016-2017) and previous season (2015-2016), October-May.

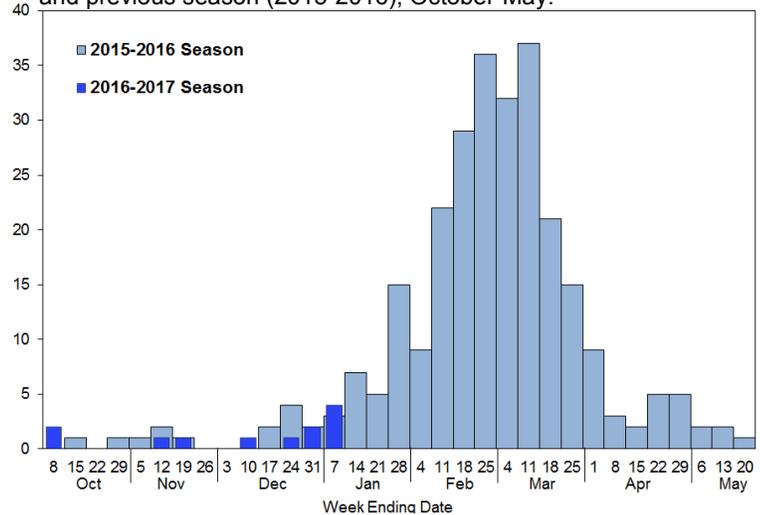
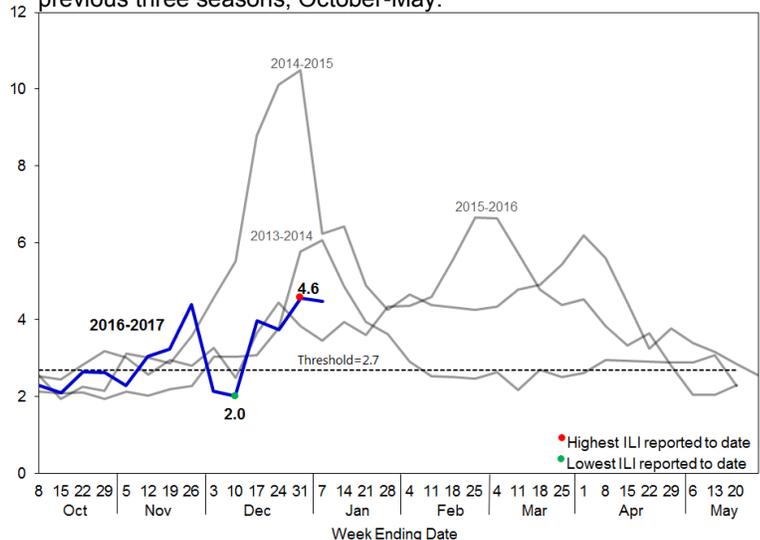


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reports by individual hospitals, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.



ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data

¹ https://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/2015-influenza-walk-in-clinic-schedule.html

² <http://www.dph.illinois.gov/sites/default/files/publications/ohp-labs-influenzaannual-testing-and-reportingmemo-09222016.pdf>, ³ <https://dph.partner.illinois.gov/>

submitted daily by Chicago hospitals. ILI activity is determined solely based on the patient's chief complaint and does not take into account the entire medical record, as the ILI activity reported in Figure 2 does.

Currently, all Chicago hospitals submit data to ESSENCE, covering every emergency department visit in the city. For surveillance week 1, 2.5% of all emergency department visits were due to ILI; Northside hospitals had slightly higher ILI at 2.9%, Southside hospitals at 2.6% and Westside hospitals had the lowest at 2.0% (Figure 3).

Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by reporting on the number of patients with ILI seen weekly. For surveillance week 1, with 22 facilities reporting, 5.8% of outpatient visits were due to influenza-like illness (Figure 4).

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For surveillance week 1, with 6 laboratories reporting, 47 of the 749 (6.3%) specimens tested for influenza were positive (31 A (H3N2), 1 A (H1N1) pdm09, 4 A [unknown subtype], and 11 influenza B).

Since October 2, 2016, 133 of 7,480 (1.8%) specimens tested for influenza have been positive; 96 typed as influenza A (77 H3N2, 4 H1N1pdm09, and 15 unknown subtype [subtyping not attempted or not all subtypes tested]) and 37 typed as influenza B (Figure 5). The cumulative percent of specimens testing positive for influenza is lower than previous seasons during the same time period where influenza A (H3N2) was the predominant strain (Table 2).

Table 2. Cumulative percent of specimens testing positive for influenza by RT-PCR by type for the current season (2016-2017) and the previous three seasons, Chicago, Weeks 40-01.

Influenza Season	% Pos.	% A H3N2	% A H1N1pdm09	% A Not Subtyped	% B
2013-2014	7.2	1.5	61.7	33.9	2.9
2014-2015	19.8	78.7	0	18.2	3.0
2015-2016	1.1	6.5	54.5	32.5	6.5
2016-2017	1.8	57.9	3.0	11.3	27.8

Where can I get more information?

The Centers for Disease Control and Prevention's FluView⁴ 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 Illinois⁵ and Suburban Cook County⁶ 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.

Figure 3. Percent of emergency department visits attributed to influenza-like illness by hospital region based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.

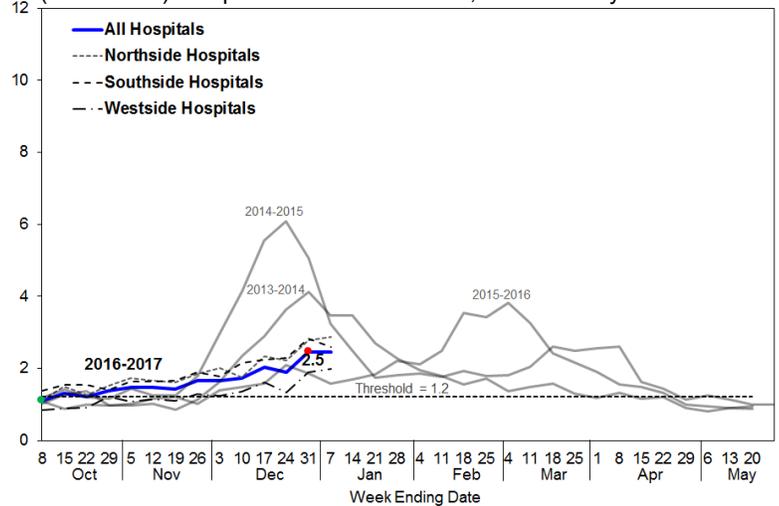


Figure 4. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.

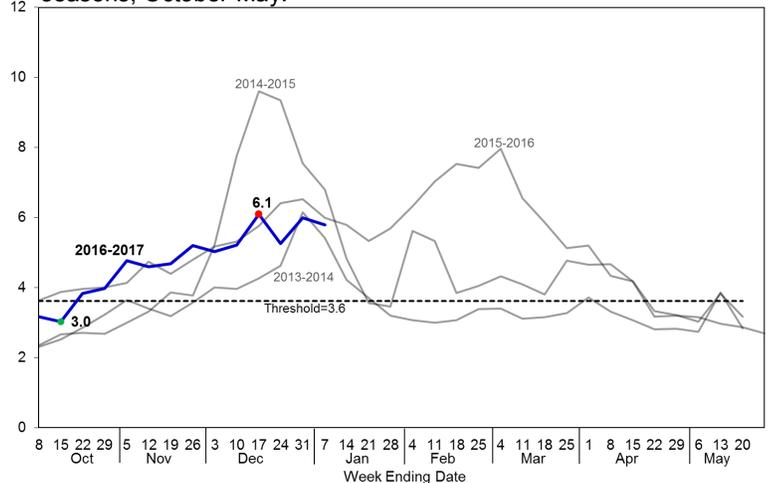
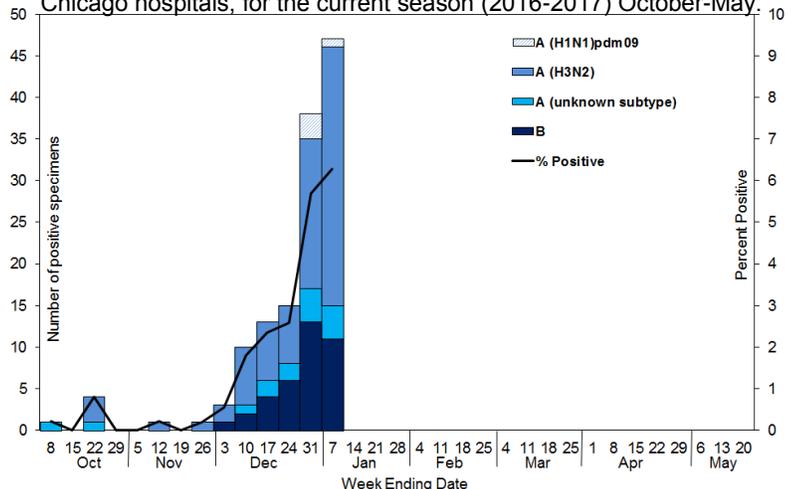


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2016-2017) October-May.



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

⁴<http://www.cdc.gov/flu/weekly/index.htm>; ⁵<http://www.idph.state.il.us/flu/surveillance.htm>; ⁶<http://www.cookcountypublichealth.org/data-reports#Influenza>; ⁷http://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/current_flu_situationinchicago2011.html