



Chicago Flu Update



Rahm Emanuel, Mayor

October 21, 2016

Julie Morita, MD, Commissioner

News & Updates

This is the first *Chicago Flu Update* for the 2016-2017 influenza season. 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. Suspected novel and variant influenza, pediatric influenza-associated deaths, influenza-associated ICU hospitalizations and outbreaks of influenza-like illness in a congregate setting should all be reported to CDPH via [INEDSS](#)³.

What is the risk?

Currently, the risk of influenza infection is low.

Are severe cases of influenza occurring?

During surveillance week 41, two influenza-associated ICU hospitalizations were reported (**Figure 1**).

Since October 2, 2016, 2 influenza-associated ICU hospitalizations have been reported; both were positive for influenza A (1 H3N2 and 1 unknown subtype [subtyping not attempted or not all subtypes tested]).

2015-2016 Quick Summary

During the 2015-2016 season, 275 influenza-associated ICU hospitalizations were reported with the majority (50%) being positive for influenza A (H1N1) pdm09 and over half (59%) fifty years of age or older (**Table 1**).

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations for Chicago residents for the **2015-2016** influenza season, October-May.

Selected Attribute				
Age group (yrs)	#	%	Race/Ethnicity	# %
0-4	18	7	NH-White	75 27
5-17	19	7	NH-Black	129 47
18-24	14	5	Hispanic	55 20
25-49	60	22	Asian	8 3
50-64	76	27	Other/Unknown	8 3
≥65	88	32	Medical Condition	
Total	275	100	Lung Disease	82 30
			Cardiac Disease	71 26
Sex			Treatment/Vaccination	
Male	120	44	Reported Vaccination	70 25
Female	155	56	Antiviral Treatment	188 68
Deaths	17	6		

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 41, with 8 hospitals reporting, 1.4% of emergency department visits were due to ILI (**Figure 2**).

Figure 1. Number of influenza-associated intensive care unit hospitalizations reported for Chicago residents, for current season (2016-2017) by influenza type and last season (2015-2016), October-May.

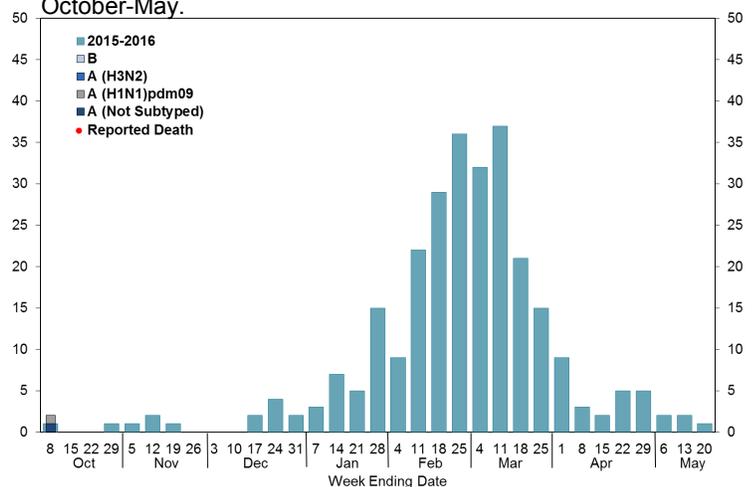
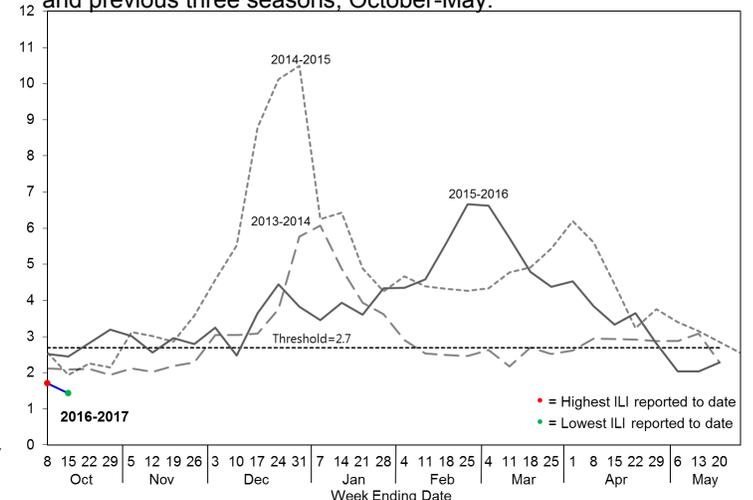


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reports by individual hospitals, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.



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

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/>

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

Since July 2016, 27 out of the 28 acute care hospitals in Chicago began submitting data to the ESSENCE platform, covering nearly every emergency department visit in the city of Chicago. **Figure 3** represents ILI by hospital location (Northside, Southside, Westside) encompassing approximately ten hospitals within each area. For surveillance week 41, 1.3% of all emergency department visits were due to ILI; Northside and Southside hospitals had slightly higher ILI at 1.6% and Westside hospitals had the lowest at <1.0%.

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 41, with 20 facilities reporting, 3.0% of 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 subtyping. For surveillance week 41, with 4 laboratories reporting, 0 of the 404 specimens tested for influenza were positive.

Since October 2, 2016, 1 of 879 specimens tested for influenza was positive for influenza A (unknown subtype [subtyping not attempted or not all subtypes tested]) (**Figure 5**). The cumulative percent of specimens testing positive for influenza is similar to previous seasons during the same time period (**Table 2**).

Table 2. Cumulative percent of specimens testing positive for influenza by subtype for the current season (2016-2017) and the previous three seasons, Chicago, Weeks 40-41.

Influenza Season	% Positive	% A H3N2	% A H1N1pdm09	% A Not Subtyped	% B
2013-2014	<1	33	0	0	67
2014-2015	<1	33	0	0	67
2015-2016	<1	33	33	17	17
2016-2017	<1	0	0	100	0

Where can I get more information?

The Centers for Disease Control and Prevention's **Flu-View**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.

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 season (2015-2016), October-May.

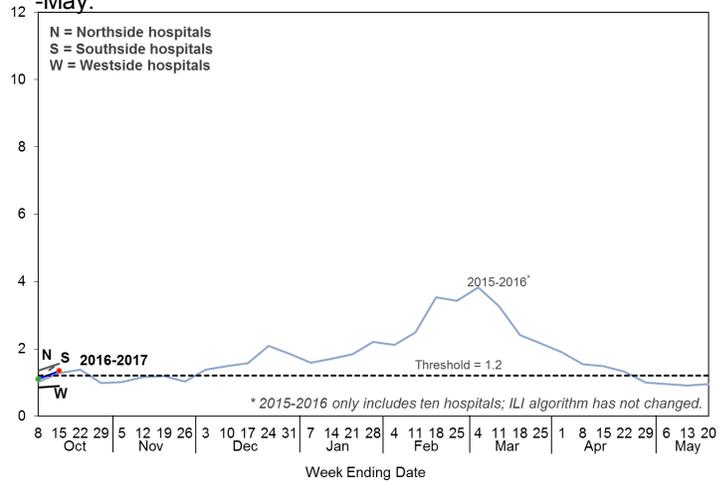


Figure 4. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.

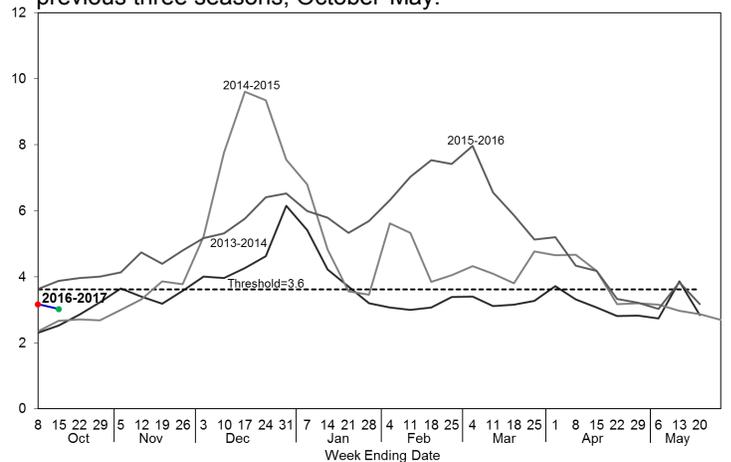
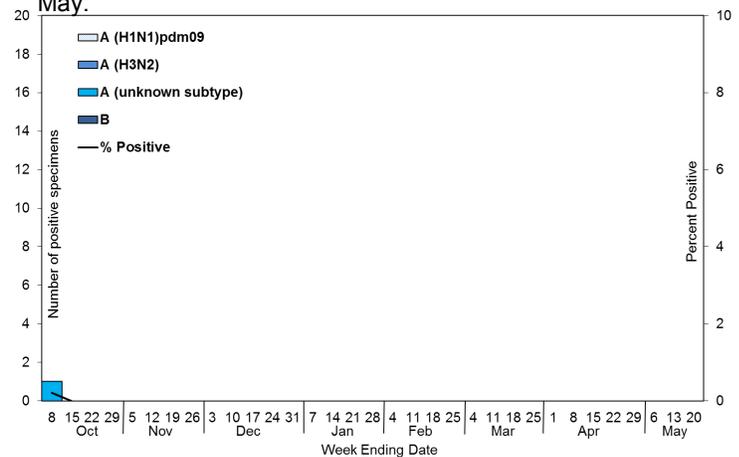


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2016-2017) October-May.



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