Chicago Influenza Surveillance Activity Report
Surveillance Week 44 (October 30-November 5, 2016)

Chicago Flu Update

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

Rahm Emanuel, Mayor | **November 10, 2016** | 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 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].

On Saturday, November 12th, CDPH will be offering influenza vaccinations at Arturo Velasquez Institute (2800 S. Western Ave.), Daley College (7500 S. Pulaski Rd.) and Wright College (4300 N. Narragansett) from 9am until 2pm.

What is the risk?

Currently, the risk of influenza infection is low.

Are severe cases of influenza occurring?

During surveillance week 44, no 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]).

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 44, with 9 hospitals reporting, 2.3% of emergency department visits were due to ILI (**Figure 2**).

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,

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.
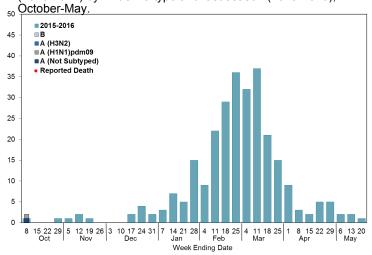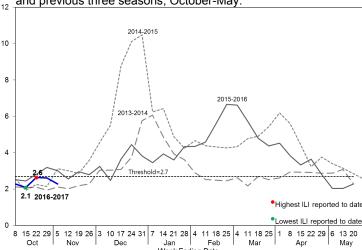

Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reports by individual hospitals, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.

[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/

Westside) encompassing approximately ten hospitals within each area. For surveillance week 44, 1.5% of all emergency department visits were due to ILI; Northside hospitals had slightly higher ILI at 1.8%, Southside hospitals at 1.6% and Westside hospitals had the lowest at 1.1%.

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 44, with 19 facilities reporting, 4.8% 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 subtyping. For surveillance week 44, with 5 laboratories reporting, 0 of the 308 specimens tested for influenza were positive.

Since October 2, 2016, 5 of 2,276 specimens tested for influenza were positive for influenza A (3 H3N2 and 2 (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 40-44.

Influenza Season	% Positive	% A H3N2	% A H1N1pdm09	% A Not Subtyped	% B
2013-2014	<1	17	17	33	33
2014-2015	<1	27	0	9	64
2015-2016	<1	23	31	31	15
2016-2017	<1	60	0	40	0

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].

Figure 3. Percent of underlined 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.
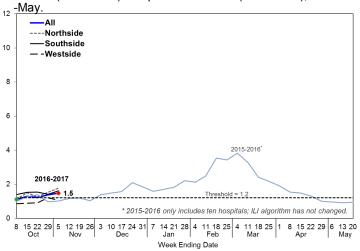
Figure 4. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2016-2017) and previous three seasons, October-May.
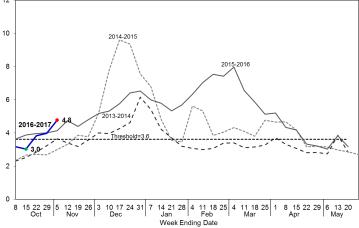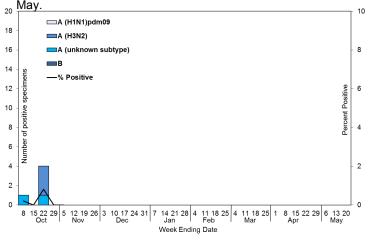
Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2016-2017) October-May.

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;
[7]http://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/current_flu_situationinchicago2011.html