



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

Immunization Program
March 4, 2016

Chicago Department of Public Health
Julie Morita, MD, Commissioner

What is the risk?

Currently, the risk of influenza infection continues to increase. 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 Clinics](#)¹ 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.

Are severe cases of influenza occurring?

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. For the week of February 21-27, 2016 (week 8), 27 influenza-associated ICU hospitalizations were reported. The cumulative number of reported influenza-associated ICU hospitalizations remains lower than the previous three influenza seasons during the same time period (**Figure 1**).

Since October 4, 2015, 130 influenza-associated ICU hospitalizations have been reported; 129 were positive for influenza A (5 H3N2, 73 (H1N1)pdm09 and 51 unknown subtype [subtyping not attempted or not all subtypes tested]) and 1 was positive for influenza B. Seventy-two (55%) were non-Hispanic Black, 75 (58%) were male, and 34 (26%) were 65 years of age or older (median age of 51 years with a range of 3 months-89 years). Forty-two (32%) had reported lung disease (e.g. asthma, COPD), 34 (26%) had active cardiac disease and 33 (25%) required ventilator support. Seven deaths were reported. Three outbreaks consisting of two or more confirmed cases of influenza were reported in long-term care facilities.

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). All hospitals in Chicago that provide emergent care are required to report on a weekly basis the total number of emergency department visits, and of those visits, the number with ILI. For the week of February 21-27, 2016 with 10 hospitals reporting, 6.7% 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 participating 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, 10 Chicago hospitals submit data to ESSENCE. For the week of February 21-27, 2016, 3.5% of emergency department visits were due to ILI (**Figure 3**).

Figure 1. Cumulative number of reported influenza-associated ICU hospitalizations among Chicago residents, for current season (2015-2016) and previous five seasons, Chicago, October-May.

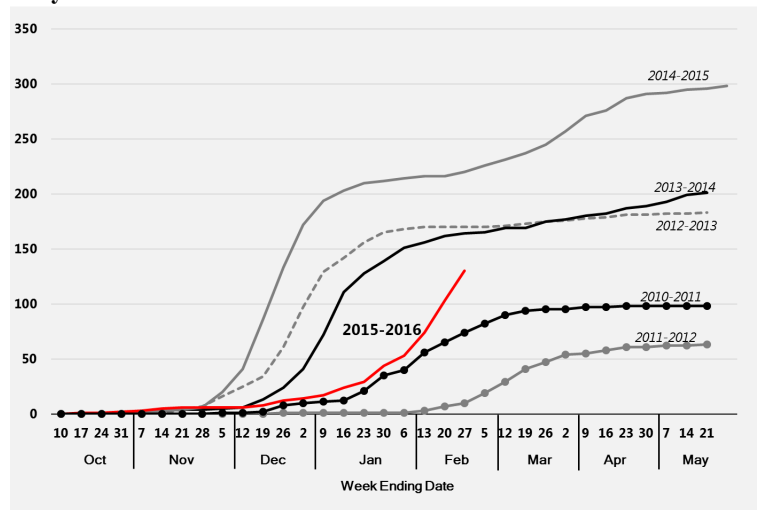
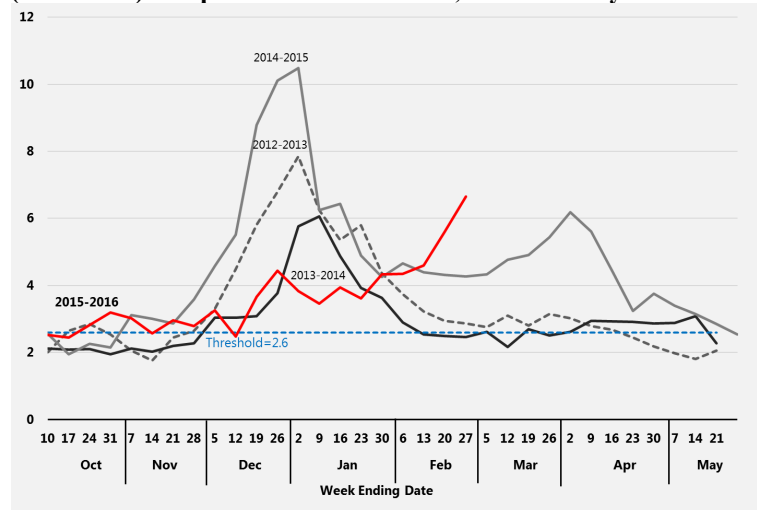


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for the current season (2015-2016) and previous three seasons, October-May.



¹ http://www.cityofchicago.org/city/en/depts/cdph/supp_info/clinical_health/immunizations_walk-inclinics.html; ² <http://www.dph.illinois.gov/sites/default/files/publications/publicationsohpinfluenza-testing-and-reporting-memo-09.2015.pdf>; ³ <https://>

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. From February 21-27, 2016, with 26 facilities reporting, 7.4% 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 the week of February 21-27, 2016, with 6 laboratories reporting, 188 of the 987 (19%) specimens tested for influenza were positive (136 A (H1N1)pdm09, 5 A (H3N2), 41 A [unknown subtype] and 6 influenza B). Since October 4, 2015, 708 of 12,049 (6%) specimens tested for influenza have been positive; 681 typed as influenza A (20 H3N2, 540 (H1N1)pdm09, 121 unknown subtype [subtyping not attempted or not all subtypes tested]) and 27 were 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 (Table 1).

Table 1. Cumulative percent of specimens testing positive for influenza by subtype for the current season (2015-2016) and the previous five seasons, Chicago, Weeks 40-08.

Influenza Season	Total Positive	A H3N2	A H1N1pdm09	A Not Subtyped	B
2010-2011	13%	29%	26%	30%	15%
2011-2012	2%	21%	22%	26%	30%
2012-2013	15%	75%	6%	14%	5%
2013-2014	9%	2%	70%	26%	3%
2014-2015	15%	76%	0%	16%	8%
2015-2016	6%	3%	76%	17%	4%

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. In 2013, the Metropolitan Chicago Healthcare Council (MCHC) and CDPH released "[Stop the Spread: A Health Care Guide to Influenza Preparedness](#)"⁸. This report provides an overview of influenza, its impact on public health and how hospitals can prepare for, mitigate the impact of and respond to influenza infections and outbreaks.

The 21st Annual Chicago Infection Control Conference
May 20th, 2016 at the Chicago Cultural Center
Registration and Agenda Coming Soon!

Figure 3. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2015-2016) and the previous three seasons, October-May.

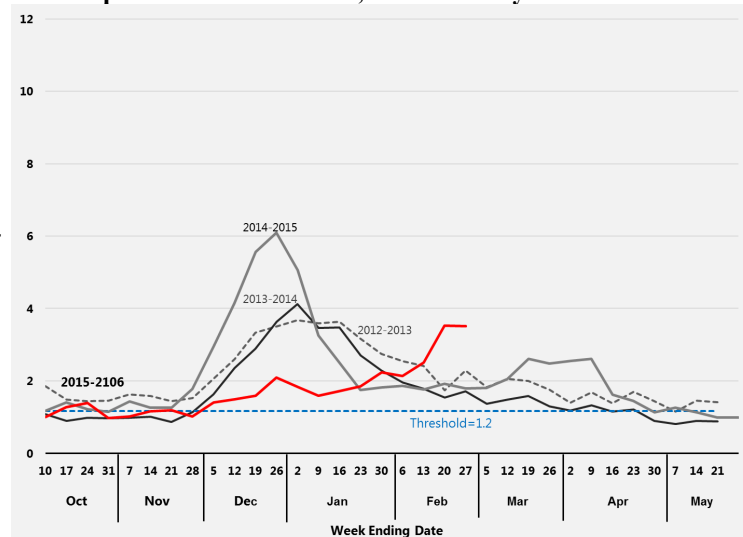


Figure 4. Percent of medically attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2015-2016) and the previous three seasons, October-May.

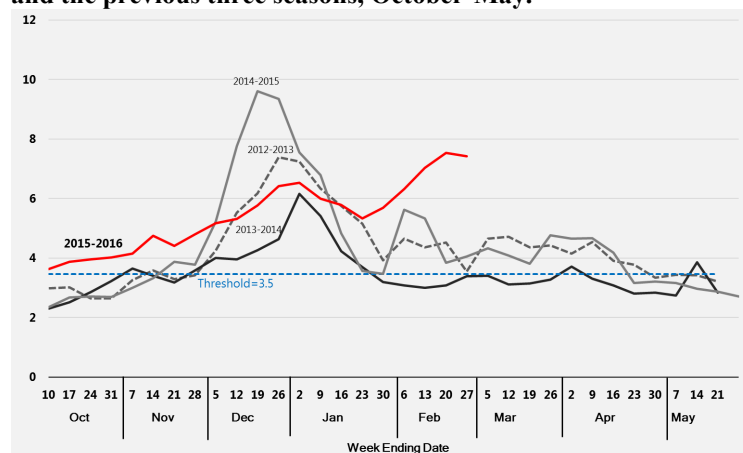
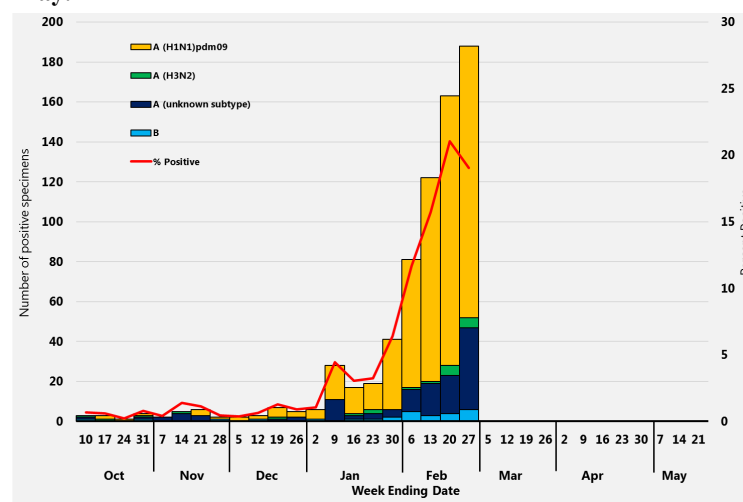


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2015-2016) October-May.



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/cdp/supp_info/influenza/current_flu_situationinchiicago2011.html; ⁸https://www.mchc.com/wp-content/uploads/2014/11/MCHC_Influenza_2013.pdf