



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
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What is the risk?

Currently, the risk of influenza infection is low. 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 vaccine 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.org²

Are severe cases of influenza occurring?

The Illinois Department of Public Health (IDPH) has issued interim influenza testing and reporting recommendations. 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 October 12-18, 2014, no influenza-associated ICU hospitalizations were reported. Since the 2010-2011 influenza season, the majority (42%) of all reported influenza-associated ICU hospitalizations have been positive for influenza A (not subtyped) followed by influenza A (H1N1)pdm09 (24%), A (H3N2) (17%) and influenza B (16%) which accounts for the majority of reported cases towards the end of the season (**Figure 1**).

How much influenza-like illness is occurring?

CDPH receives data from over 60 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 October 12-18, 2014 (week 42), with 12 hospitals reporting, 2.2% 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 October 12-18, 2014, <1% of emergency department visits were due to ILI (**Figure 3**). Several outpatient clinics and hospital emergency departments throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (**ILINet**) by reporting on the number of patients with ILI seen weekly. From Oc-

Figure 1. Total number of reported influenza-associated ICU hospitalizations by week and subtype, 2010-2014 influenza seasons, Chicago, October-May.

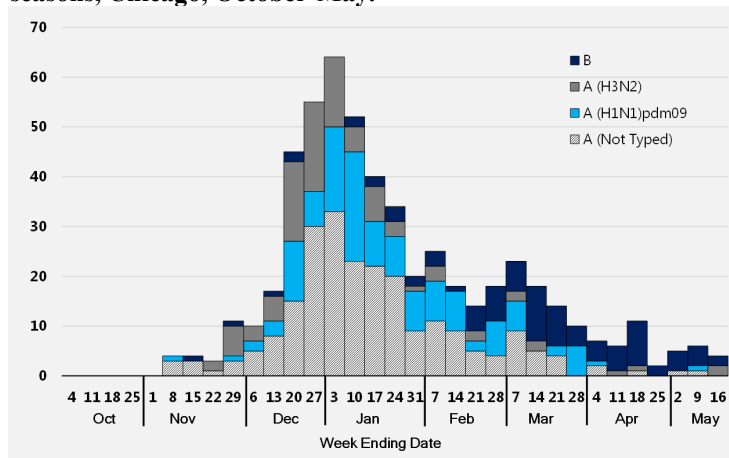
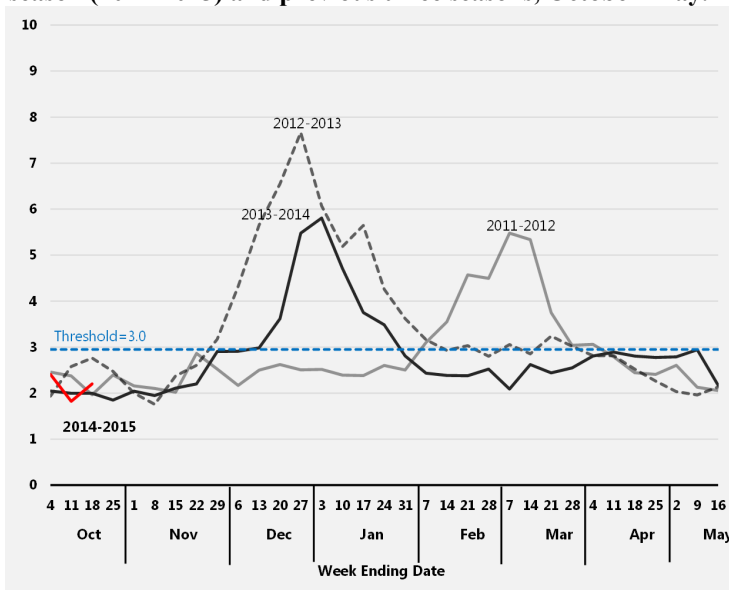


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for the current season (2014-2015) and previous three seasons, October-May.



¹http://www.cityofchicago.org/city/en/depts/cdph/provdrs/flu/svcs/cdph_flu_shot_sitesacrosschicago.html; ²<http://chicagoflushots.org/>; ³<https://dph.partner.illinois.gov/>

tober 12-18, 2014, with 47 facilities reporting, 2.5% 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 October 12-18, 2014, with 6 laboratories reporting, 2 of the 370 (<1%) specimens tested for influenza were positive for influenza A; 1 A (H3N2) and 1 A (not subtyped) (**Figure 5**). Since September 28, 2014, 5 of 1,031 (<1%) specimens tested for influenza have been positive; 3 typed as influenza A (2 H3N2, 1 unknown subtype) and 1 was typed as influenza B.

Since the 2009-2010 influenza season, participating laboratories have tested over 70,000 specimens with an average of over 14,000 specimens tested per season. The predominant circulating strain based on laboratory surveillance has changed every season making it difficult to predict which strain will predominate during the current season. In the 2013-2014 season, influenza A [H1N1]pdm09 was the predominant strain accounting for 71% of all positive specimens. However, during the 2012-2013 season A (H3N2) accounted for 78% of all positive specimens making it the predominant strain. In 2011-2012, influenza B was the predominant strain accounting for 50% of all positive specimens.

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.



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 (2014-2015) and the previous three seasons, October-May.

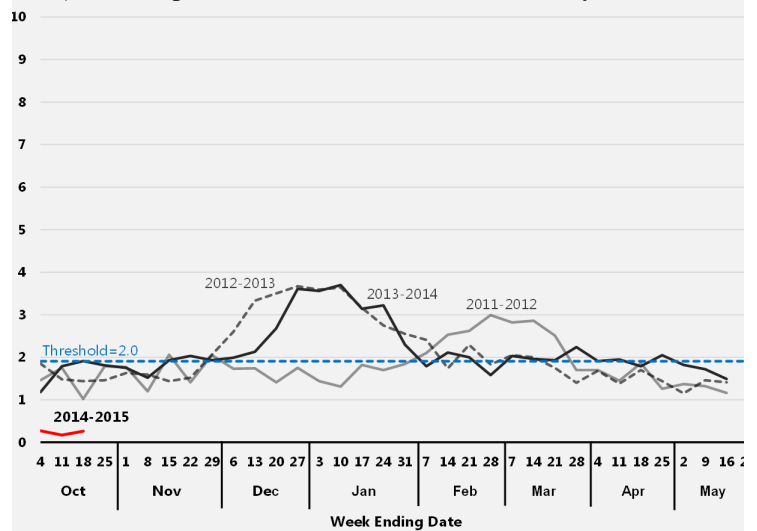


Figure 4. Percent of medically attended visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2014-2015) and the previous three seasons, October-May.

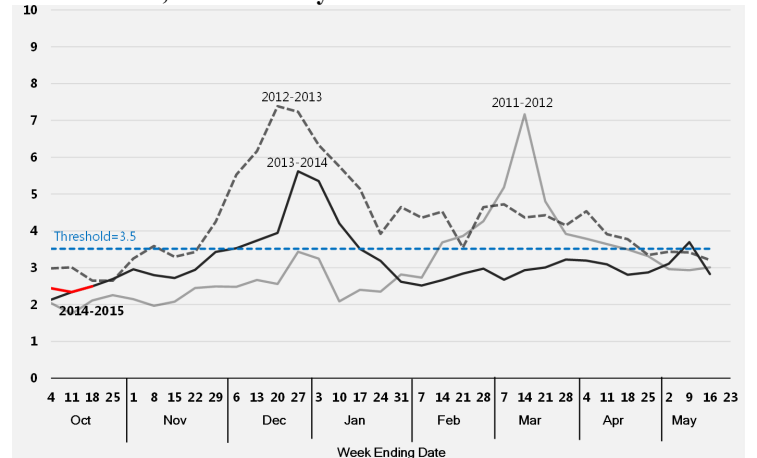
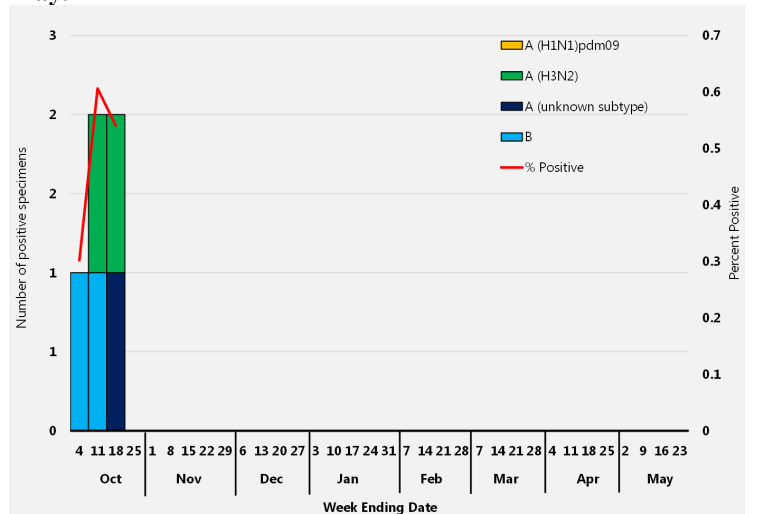


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2014-2015) October-May.



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; ⁸http://www.mchc.com/EWEB/upload/MCHC_Influenza_2013.pdf