



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
Bechara Choucair, MD, Commissioner

What is the risk?

This is the first *Chicago Flu Update* for the 2014-2015 influenza season. 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. Since September 28, 2014 (week 40), CDPH has not received any reports of these types of influenza cases.

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) (**Figure 1**).

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 September 28-October 4, 2014 (week 40), with 11 hospitals reporting, 2.4% of emergency department visits were due to ILI. **Figure 2** shows Chicago emergency department ILI activity for the previous three seasons.

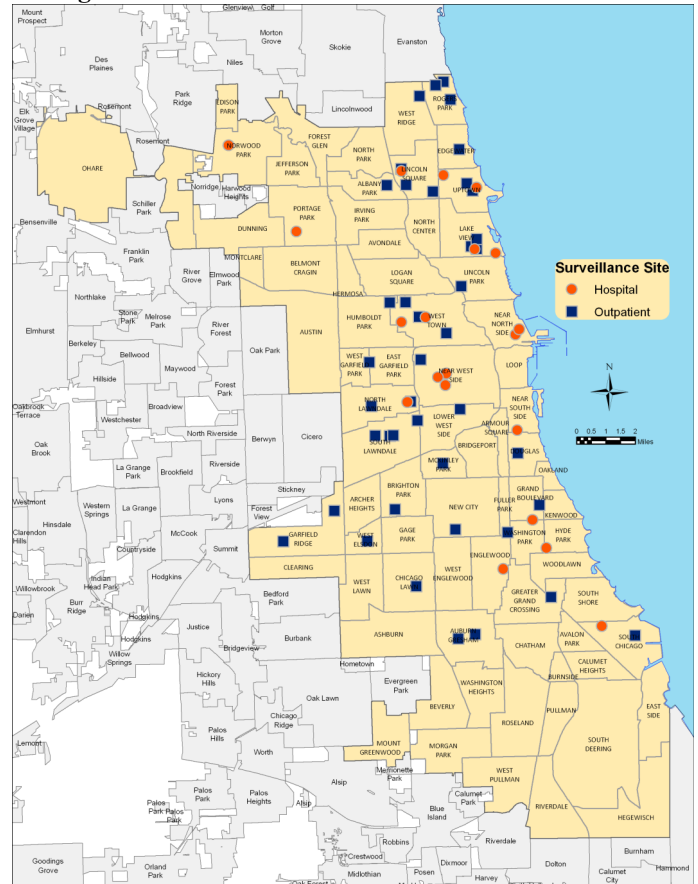
ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. ILI activity is determined solely based on the patient's chief complaint and does not take into account the entire medical record, as the ILI activity reported in **Figure 2** does.

Currently, 10 Chicago hospitals submit data to **ESSENCE**. For the week of September 28-October 4, 2014, <1% of emergency department visits were due to ILI. **Figure 3** shows the percent of the total emergency department visits due to ILI for the previous three seasons. 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. For the 2013-2014 season (including summer months) nearly one million patients were seen in ILINet facilities. From September 28-October 4, 2014, with 47 facilities reporting, 2.4% 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 September 28-October 4, 2014, with 6 laboratories reporting, 1 of the 331 (<1%) specimens tested for influenza was positive for 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 laborato-

Figure 1. Geographic distribution of influenza-like illness (ILI) surveillance sites for the 2014-2015 influenza season, Chicago.

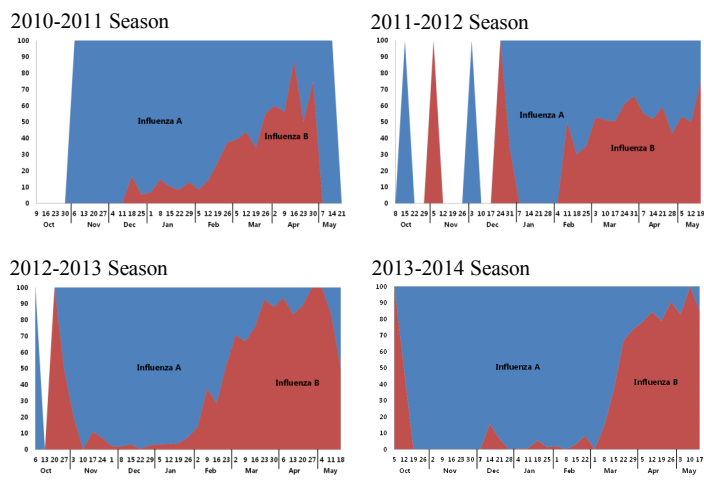


¹http://www.cityofchicago.org/city/en/depts/cdph/provdrs/flu/svcs/cdph_flu_shot_sitesacrosschicago.html; ²<http://chicagoflushots.org/>; ³<https://dph.partner.illinois.gov/>

ry surveillance has changed every season making it difficult to predict which strain will predominate during the current season. For example during the 2013-2014 season, influenza A (H1N1) 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.

Influenza B.

Although influenza A is usually the predominant circulating influenza type per season, the percentage of specimens testing positive for influenza B increases towards the end of the season. The four graphs below show the total percentage of specimens testing positive for influenza A (in blue) and influenza B (in red) by week for the past four influenza seasons. Beginning in March, influenza B accounts for 50% or higher of the total positive specimens per week. This should serve as a reminder that even though influenza A activity may be decreasing towards the end of the season, influenza B may account for more disease towards the later months and vaccination should still be recommended throughout the influenza season.



Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](http://www.cdc.gov/flu/weekly/index.htm)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](http://www.idph.state.il.us/flu/surveillance.htm)⁵ and [Suburban Cook County](http://www.cookcountypublichealth.org/data-reports#Influenza)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](http://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/current_flu_situationinchicago2011.html)⁷. In 2013, the Metropolitan Chicago Healthcare Council (MCHC) and CDPH released "[Stop the Spread: A Health Care Guide to Influenza Preparedness](http://www.mchc.com/EWEB/upload/MCHC_Influenza_2013.pdf)"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 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week for previous three seasons, October-May.

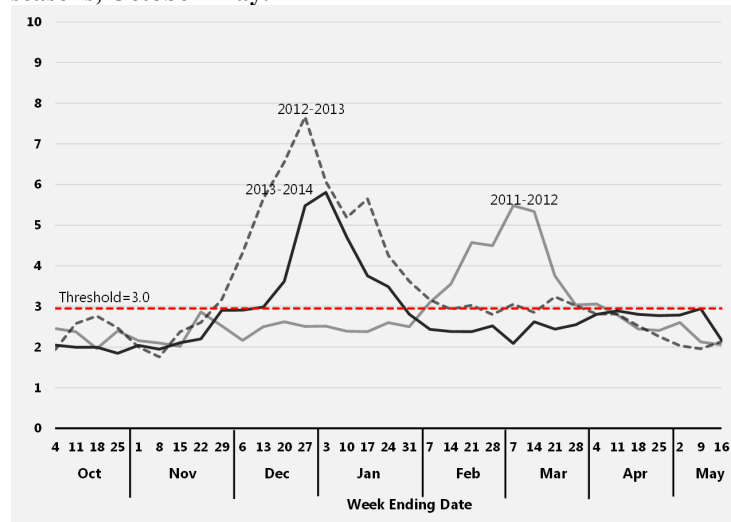


Figure 3. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week for the previous three seasons, October-May.

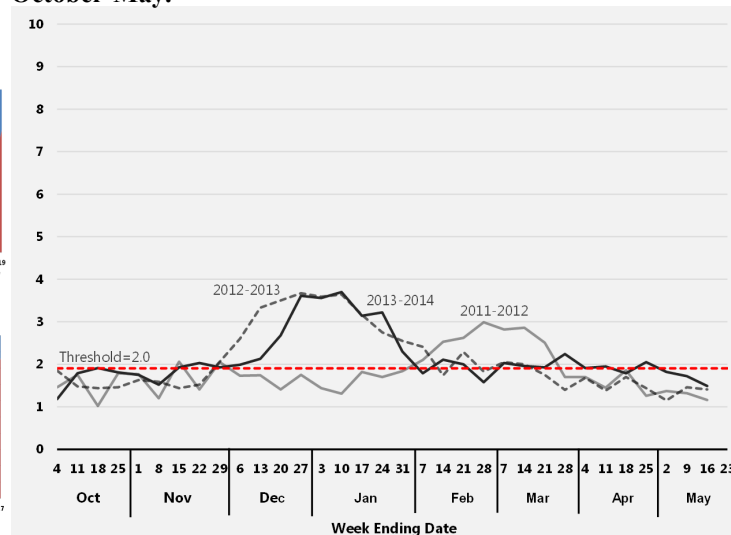
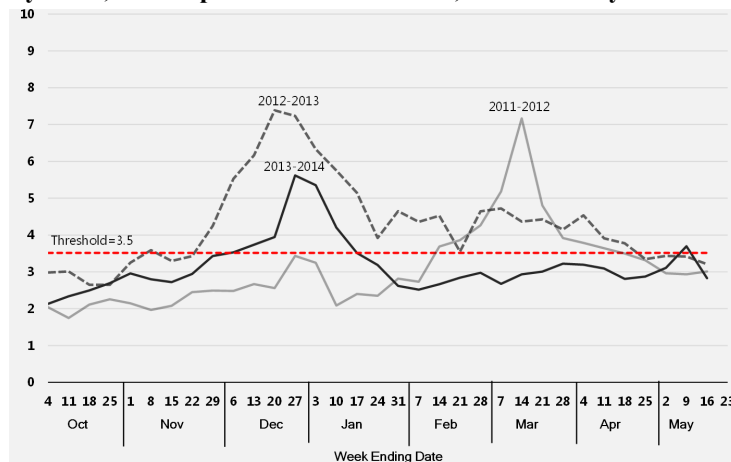


Figure 4. Percent of medically attended visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the previous three seasons, October-May.



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