Chicago Department of Public Health



Chicago Flu Update CHICAGO

October 18, 2013

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What is the risk?

This is the first *Chicago Flu Update* for the 2013-2014 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 <u>City of Chicago influenza vaccine clinics</u>¹ is available on the City website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, go to <u>www.chicagoflushots.org</u>²

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 <u>INEDSS</u>³. Since September 29, 2013 (week 40), CDPH has not received any reports of these types of influenza cases.

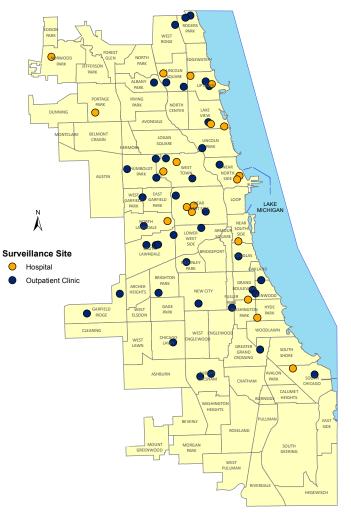
How much influenza-like illness is occurring?

CDPH receives data from over 50 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 October 6-12, 2013 (week 41), with 14 hospitals reporting, 2.0% of emergency department visits were due to ILI. **Figure 2** shows Chicago emergency department ILI activity for the current season and 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.

Figure 1. Geographic distribution of surveillance sites reporting influenza-like illness (ILI) data to CDPH for the 2013-2014 influenza season, Chicago.



Currently, 10 Chicago hospitals submit data to ESSENCE. **Figure 3** shows the percent of the total emergency department visits due to ILI for pediatric patients (2.9%) and adult patients (<1%) for the week of October 6-12, 2013 plus the ILI activity by age group for the previous season.

Several outpatient clinics and hospital emergency departments throughout Chicago participate in CDC's Influenzalike Illness Surveillance Network (**ILINet**) by reporting on the number of patients with ILI seen weekly. From October 6-12, 2013, with 50 facilities reporting, 2.4% of outpatient visits were due to influenza-like illness (**Figure 4**).

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

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza subtyping. For the week of October 6-12, 2013, with 6 laboratories reporting, 2 of the 314 (<1%) specimens tested for influenza were positive; 1 positive for influenza A (H3N2) and 1 positive for influenza B.

Influenza by the Numbers.

The circulating influenza type and subtype cannot be predicted based on previous influenza seasons. Table 1 summarizes the specimens tested and the influenza types and subtypes detected during the past four influenza seasons. During the second half of the 2009-2010 pandemic, nearly all influenza subtypes identified were influenza A (H1N1) (97%). The following season (2010-2011), although the majority of influenza strains were type A (77%), no subtype was predominant. In the 2011-2012 influenza season, half of all influenza positive specimens were identified as influenza B. Last Figure 3. Percent of emergency department visits attributed to season (2012-2013), the majority of influenza positive specimens were influenza A (83%), but unlike the 2010 -2011 season, A (H3N2) was the predominant subtype (65%). The variability of influenza types and subtypes detected in the past four seasons underscores the important role laboratory based influenza surveillance plays in informing prevention and treatment recommendations every year.

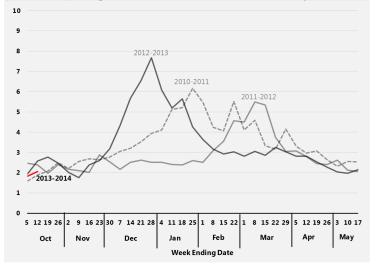
Table 1. Influenza laboratory testing results reported by Chicago laboratories performing influenza subtyping for the past four influenza seasons, October-May.

SEASON	TESTED	POSITIVE	A (H1N1)	A (H3N2)	A (not typed)	В
2009-2010	26,712	5,201	5,052	3	138	8
			97%	0%	3%	<mark>0%</mark>
2010-2011	8,957	932	222	242	248	220
			24%	26%	27%	24%
2011-2012	6,996	522	115	97	49	261
			22%	19%	9%	50%
2012-2013	13,495	1,652	98	1,071	202	281
			6%	65%	12%	17%

Where can I get more information?

The Centers for Disease Control and Prevention's FluView⁴ 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 Illinois⁵ and Suburban Cook County⁶ 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 Chicago⁷. The Metropolitan Chicago Healthcare Council (MCHC) and CDPH recently released "Stop the Spread: A Health Care Guide to Influenza Preparedness"⁸. This report provides an overview of influenza, it's 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 current season (2013-2014) and previous three seasons, October-May.



influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for current season (2013-2014) and previous season (2012-2013), October-May.

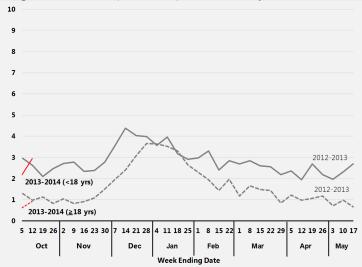
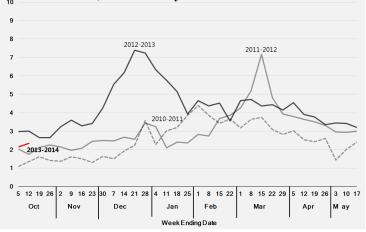


Figure 4. Percent of medically attended visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for current season (2013-2014) and previous three influenza seasons, October-May.



⁴http://www.cdc.gov/flu/weekly/index.htm; ⁵http://www.idph.state.il.us/flu/surveillance.htm; ⁶http://www.cookcountypublichealth.org/datareports#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