

Chicago Flu Update



City of Chicago Rahm Emanuel, Mayor

December 2, 2013

Chicago Department of Public Health Bechara Choucair, MD, Commissioner

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 <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 influenza testing and reporting guidance³. 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>I-NEDSS</u>⁴. For the week of November 17-23, 2013 (week 47), no influenza-associated ICU hospitalizations were reported. This week last season, there were 3 reported ICU hospitalizations.

Since September 29, 2013, 4 influenza-associated ICU hospitalizations have been reported (**Figure 1**). Among the total ICU hospitalizations reported all were positive for influenza A (3 not subtyped and 1 H1N1). Three (75%) were female, two (50%) were NH-White, and all were 50 years of age or older (median age of 62.5 years with a range of 60-83 years). Three (75%) had lung disease (including asthma) and two (50%) required ventilator support. No deaths have been reported.

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). 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 November 17-23, 2013, with 13 hospitals reporting, 2.1% of emergency department visits were due to ILI. Currently, ILI activity is similar to levels seen during the same period of the past three influenza seasons (**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.

Figure 1. Number of influenza-associated intensive care unit hospitalizations reported for Chicago residents, for current season (2013-2014) and previous season (2012-2013), October-May.

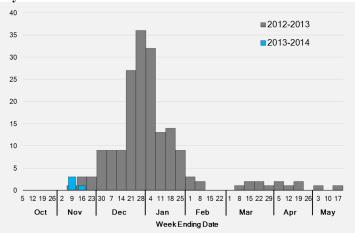
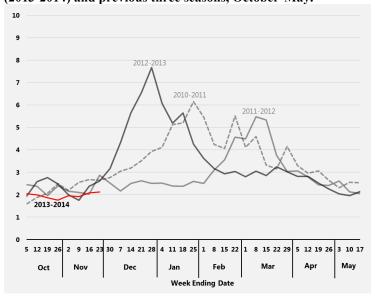


Figure 2. Percent of <u>emergency department</u> visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2013-2014) and previous three seasons, October-May.



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 (3.1%) and adult patients (1.4%) for the week of November 17-23, 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 Influenza-like Illness Surveillance Network (**ILINet**) by reporting on the number of patients with ILI seen weekly. From November 17-23,

2013, with 46 facilities reporting, 3.0% 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 the week of November 17-23, 2013, with 5 laboratories reporting, 7 of the 351 (2.0%) specimens tested for influenza were positive. This week last season, 5.8% of specimens tested were positive for influenza. Among this week's positive specimens, all were typed as influenza A (3 H1N1 and 4 were not subtyped) (**Figure 5**). Since September 29, 2013, 20 of 2,598 (<1%) tested for influenza have been positive; 18 typed as influenza A (10 H1N1, 1 H3N2, and 7 were not subtyped) and 2 typed as influenza B.

Where can I get more information?

The Centers for Disease Control and Prevention's FluView⁵ 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 Illinois⁶ and Suburban Cook County⁷ 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 Chicago⁸. The Metropolitan Chicago Healthcare Council (MCHC) and CDPH recently released "Stop the Spread: A Health Care Guide to Influenza Preparedness". 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.

National Snapshot (November 17-23, 2013)

<u>Viral Surveillance:</u> Of 4,996 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 47,397 (7.9%) were positive for influenza.

<u>Pneumonia and Influenza Mortality:</u> The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.

<u>Influenza-Associated Pediatric Deaths:</u> No influenza-associated pediatric deaths were reported.

Outpatient Influenza Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.7%, below the national baseline of 2.0%. Two regions reported ILI at or above region-specific baseline levels. Two states experienced high ILI activity, one state experienced moderate ILI activity, one state experienced low ILI activity, 45 states and New York City experienced minimal ILI activity and the District of Columbia and one state had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in six states was reported as regional; 10 states reported local influenza activity; the District of Columbia, Guam, Puerto Rico, and 32 states reported sporadic influenza activity, and the U.S. Virgin Islands and two states reported no influenza activity.

Figure 3. Percent of <u>emergency department</u> visits attributed to influenza-like illness based on chief complaint data submitted to <u>ESSENCE</u>, Chicago, by week, for current season (2013-2014) and previous season (2012-2013), October-May.

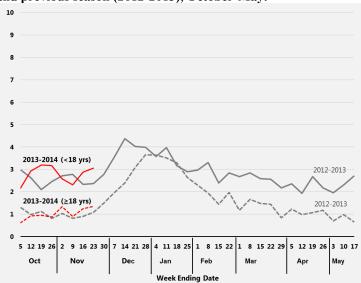


Figure 4. Percent of medically attended visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for current season (2013-2014) and previous three influenza seasons, October-May.

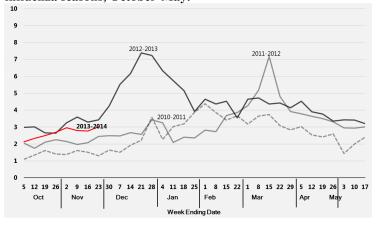


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2013-2014) October-May.

