



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

November 30, 2012

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. **Vaccinate Chicago Week** is December 2 through December 8. CDPH has scheduled numerous activities to remind Chicagoans that “It’s Not Too Late to Get a Flu Shot” and will be offering vaccine clinics throughout the city. A complete [list of activities and clinics](#)¹ is available on the City website and by calling 311.

Are severe cases of influenza occurring?

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](#)². For the week of November 18-24, 2012 (week 47), **3 influenza-associated ICU hospitalizations** were reported; all were positive for influenza A (2 H3N2 by PCR and 1 unsubtype by rapid test). Two were male and African-American, all were over 65 years of age, and all had end stage renal disease. Since September 30, 2012, 5 influenza-associated ICU hospitalizations have been reported. 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 per week, 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 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 18-24, 2012, with 15 hospitals reporting, **2.6%** of emergency department visits were due to ILI. Currently, ILI activity is at similar levels seen in previous influenza seasons (**Figure 1**).

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. ILI activity is determined by an algorithm 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 1 does. Currently, 10 Chicago hospitals submit data to ESSENCE. **Figure 2** shows the percent of the total emergency department visits due to ILI for pediatric patients (2.6%) and adult patients (<1%) for the week of November 18-24, 2012 plus the ILI activity by age group for the previous season.

Several outpatient clinics and two large outpatient clinic networks located in Chicago participate in CDC’s Influenza-like Illness Surveillance Network (**ILINet**) by reporting on the number of patients with ILI seen weekly. From November 18-24, 2012, with 33 outpatient clinics reporting, **3.6%** of doctor’s office visits were due to influenza-like illness (**Figure 3**).

Figure 1. 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 (2012-2013) and previous two seasons, October-May.

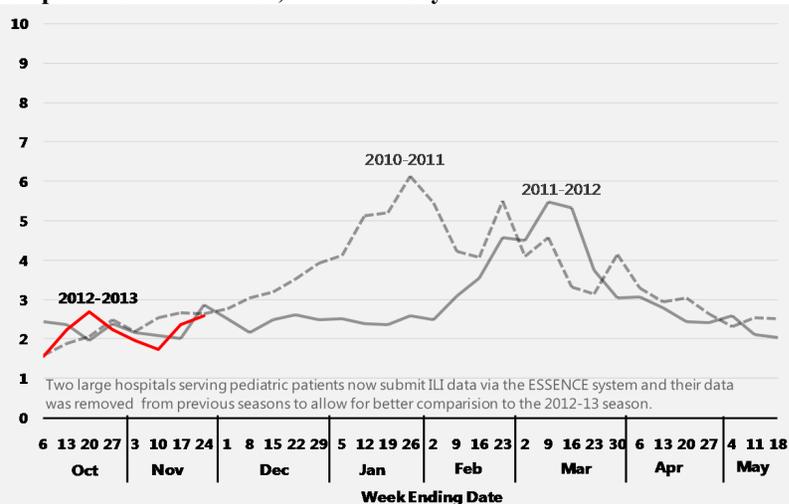
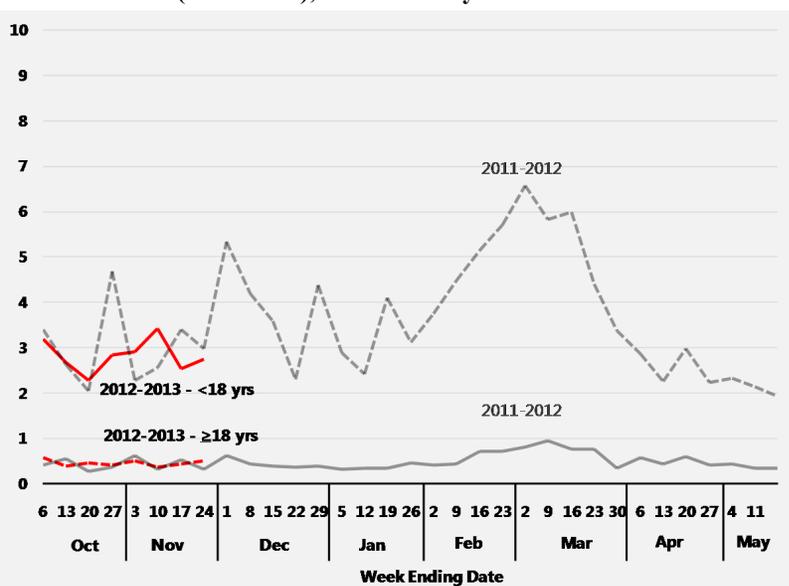


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for current season (2012-2013) and previous season (2011-2012), October-May.



¹http://www.cityofchicago.org/city/en/depts/cdph/provdrs/flu/svcs/cdph_flu_shot_sitesacrosschicago.html; ²<https://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 November 18-24, 2012, with 6 laboratories reporting, **7 of the 192 (3.6%)** specimens tested for influenza were positive. Among the positive specimens, all were typed as influenza A (H3N2) (**Figure 4**). Since September 2012, 29 of 1,610 (1.8%) specimens tested for influenza have been positive. **Table 1** shows the total number of specimens tested for influenza this season and the number positive by subtype compared to the same time period last season.

Where can I get more information?

The Centers for Disease Control and Prevention's [Flu-View](#)³ 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](#)⁴ and [Suburban Cook County](#)⁵ 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](#)⁶.

National Snapshot (November 18-24, 2012)

Viral Surveillance: Of 5,342 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, 812 (15.2%) were positive for influenza.

Novel Influenza A Virus: One human infection with a influenza A (H3N2) variant virus (H3N2v) was reported. No contact with swine or other livestock was reported in the week prior to illness onset.

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

Influenza-associated Pediatric Deaths: No influenza-associated pediatric deaths were reported.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.2%, which is at the national baseline of 2.2%. Five regions reported ILI above region-specific baseline levels. Five states experienced high ILI activity, two states experienced moderate ILI activity; 4 states experienced low ILI activity; New York City and 39 states experienced minimal ILI activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in 4 states was reported as wide-spread; 7 states reported regional activity; 19 states reported local activity; the District of Columbia and 18 states reported sporadic activity; Guam and 1 state reported no influenza activity, and Puerto Rico, the U.S. Virgin Islands and 1 state did not report.

Figure 3. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

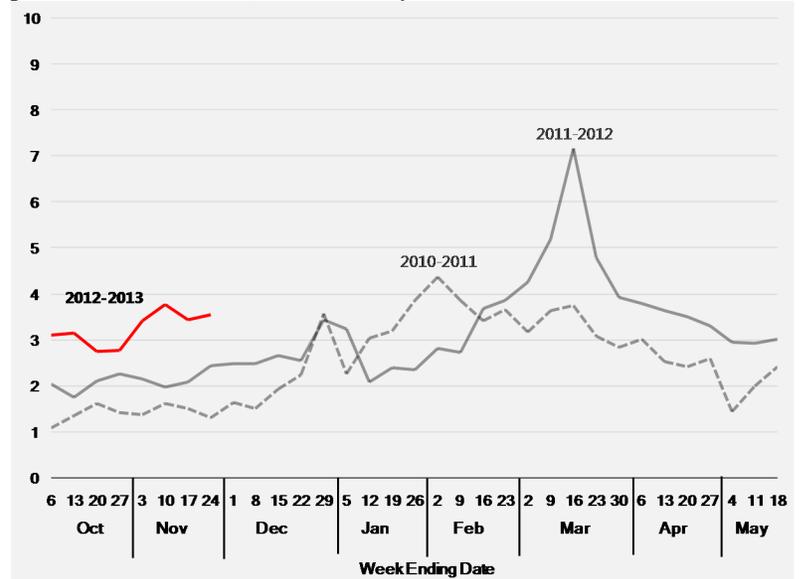


Figure 4. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.

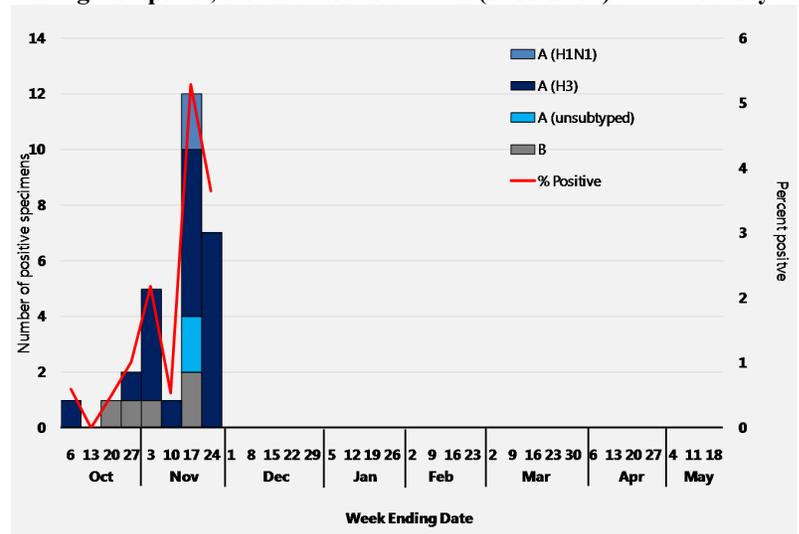


Table 1. Influenza testing results reported for surveillance weeks 40 through 47 by season, Chicago.

Laboratory Results	Influenza Season	
	2011-2012	2012-2013
# Specimens Tested*	1010	1610
# Specimens Positive	2	29
Positive for Influenza A	1	24
Subtype H3N2	0	20
Subtype 2009 H1N1	0	2
Unsubtyped	1	2
Positive for Influenza B	1	5

*Six Chicago laboratories performing influenza subtyping that have consistently reported results for both seasons.

Report is preliminary and may change as additional data is received

³<http://www.cdc.gov/flu/weekly/index.htm>; ⁴<http://www.idph.state.il.us/flu/surveillance.htm>; ⁵<http://www.cookcountypublichealth.org/data-reports#Influenza>; ⁶http://www.cityofchicago.org/city/en/depts/cdp/supp_info/influenza/current_flu_situationinchicago2011.html