



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

January 11, 2012

Chicago Department of Public Health
Bechara Choucair, MD, Commissioner

Influenza Activity

Influenza activity remains elevated in Chicago. Data from all surveillance systems presented in this report suggest ongoing transmission of influenza virus in Chicago. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. People who have not already gotten a flu vaccine this season should do so now. Healthcare providers and retail pharmacies continue to have vaccine available. For those without healthcare providers or insurance, a complete [list of CDPH Immunization 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 December 30, 2012-January 5, 2013 (week 1), **31 influenza-associated ICU hospitalizations** were reported; all were positive for influenza A (12 H3N2, 1 H1N1, and 18 were not subtyped).

Since September 30, 2012, **121 influenza-associated ICU hospitalizations** have been reported, almost two times the total number of cases reported last season (**Figure 1**). Among the total ICU hospitalizations reported, 119 were positive for influenza A (56 H3N2, 6 H1N1, and 57 not subtyped) and 2 were positive for influenza B. Seventy-three (60%) were female, 48 (40%) were African-American, and 62 (74%) were 50 years of age or older (median age of 64 years with a range between 6 months-96 years). Fifty-one (42%) had lung disease, 43 (36%) had cardiac disease and 31 (26%) required ventilator support. Seven adult deaths were reported. All were 50 years of age or older and had underlying medical conditions.

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 December 30, 2012-January 5, 2013, with 13 hospitals reporting, **6.3%** of emergency department visits were due to ILI. Currently, ILI activity is higher than levels seen in the same period of the past two 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 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, 9 Chicago hospitals submit data to ESSENCE. **Figure 3** shows the percent of the total emergency department visits due to ILI for pediatric patients (**3.5%**) and adult patients (**3.7%**) for the week of December 30, 2012-January 5, 2013 plus the ILI activity by age group for the previous season (**Figure 3**).

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 December 30, 2012-

Figure 1. Number of influenza-associated intensive care unit hospitalizations reported for Chicago residents, for current season (2012-2013) and previous season (2011-2012), October-May.

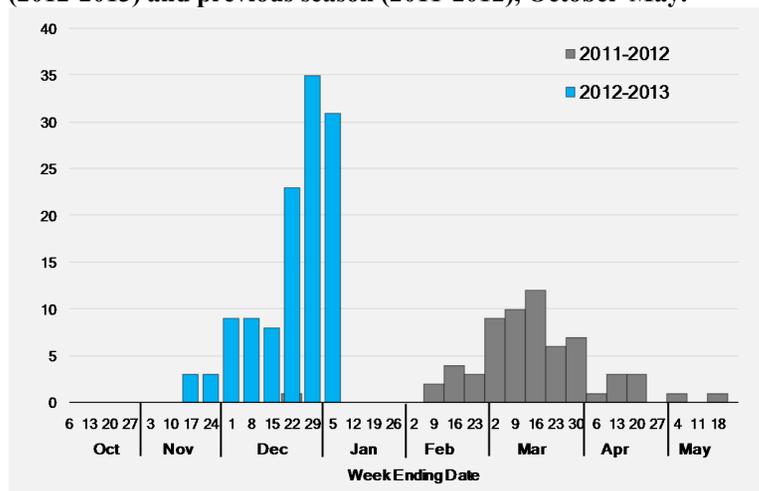
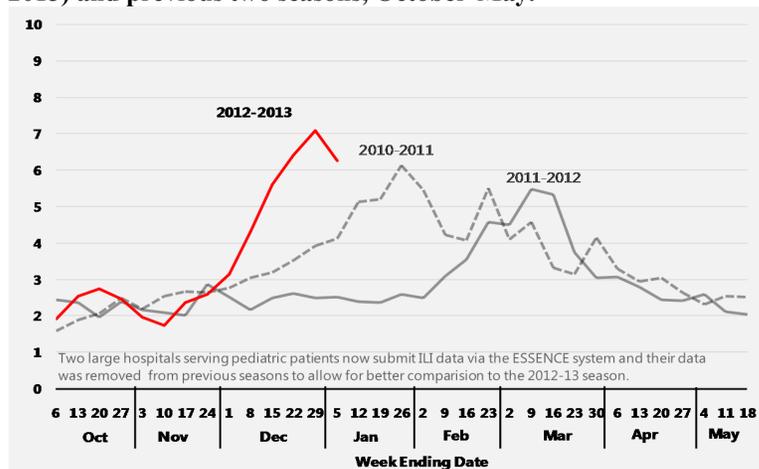


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.



¹http://www.cityofchicago.org/city/en/depts/cdp/supp_info/clinical_health/immunizations_walk-inclinics.html; ²<https://dph.partner.illinois.gov/>

January 5, 2013, with 32 outpatient clinics reporting, 6.3% of doctor's office visits were due to influenza-like illness. This is the third consecutive week that a decrease has been noted (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 December 30, 2012-January 5, 2013, with 7 laboratories reporting, 186 of the 809 (23%) specimens tested for influenza were positive. Among the positive specimens, 180 were typed as influenza A (124 H3N2 and 15 H1N1, and 30 were not subtyped) and 6 typed as influenza B (Figure 5). Since September 2012, 992 of 5,444 (18%) specimens tested for influenza have been positive; 965 typed as influenza A (782 H3N2, 53 H1N1, and 119 not subtyped) and 27 typed as influenza B.

Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](#)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 (December 30, 2012-January 5, 2013)

Viral Surveillance: Of 12,876 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, 4,222 (32.8%) were positive for influenza.

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

Influenza-associated Pediatric Deaths: Two influenza-associated pediatric deaths were reported. One was associated with an influenza A (H3) virus and one was associated with an influenza A virus for which the subtype was not determined.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 4.3%; above the national baseline of 2.2%. Nine of 10 regions reported ILI above region-specific baseline levels. Twenty-four states and New York City experienced high ILI activity; 16 states experienced moderate ILI activity; 5 states experienced low ILI activity; 5 states experienced minimal ILI activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: Forty-seven states reported widespread geographic influenza activity; 2 states reported regional activity; the District of Columbia reported local activity; 1 state reported sporadic activity; Guam reported no influenza activity, and Puerto Rico and the U.S. Virgin Islands did not report.

Figure 3. 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.

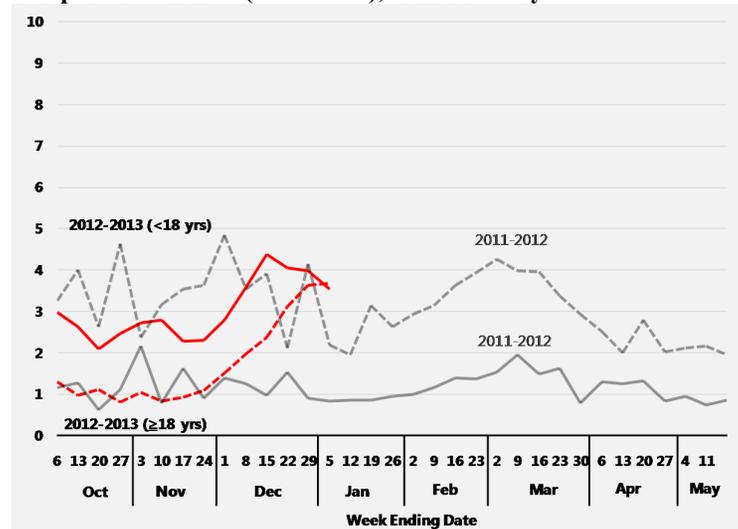


Figure 4. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

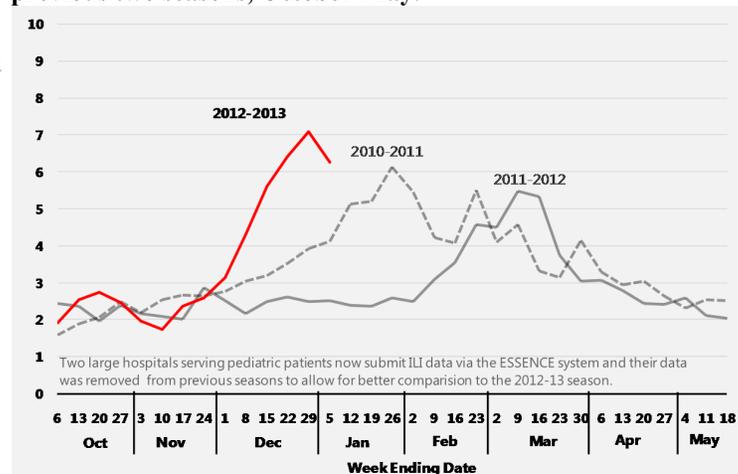
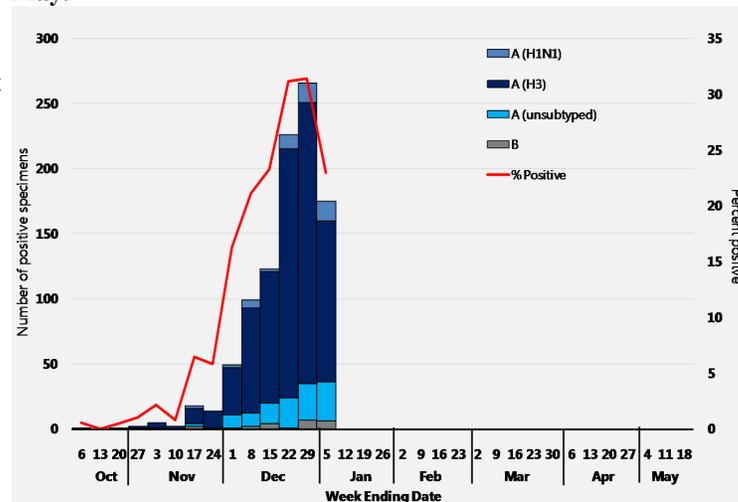


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.



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