



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

April 19, 2013

Chicago Department of Public Health
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Seasonal Influenza Activity

The risk of influenza infection in Chicago is low. However, seasonal influenza viruses continue to circulate with influenza B strains predominating for the past two months. During the week of April 7-13, 2013, 79% of all specimens tested for influenza were positive for influenza B. Vaccination remains the best form of protection against influenza infections and is recommended as long as influenza virus is circulating in the community. 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.

Novel influenza A (H7N9)

As of April 18, 2013, Chinese public health officials have reported 87 laboratory confirmed human cases with avian influenza A (H7N9) virus including 17 deaths from four different provinces in China. No person-to-person transmission or epidemiologic link between any of the cases has been identified. At this time, no cases of human infection with avian influenza A (H7N9) viruses have been detected in the United States. For additional information about the situation in China and CDC's updated recommendations for clinicians and public health department staff, please log on to the [Chicago Health Alert Network \(HAN\)](#). The rest of this report summarizes seasonal influenza activity in Chicago.

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 April 7-13, 2013 (week 15), **no influenza-associated ICU hospitalizations** were reported. This week last season, three ICU hospitalization was reported.

Since September 30, 2012, **178 influenza-associated ICU hospitalizations** have been reported (**Figure 1**). Among the total ICU hospitalizations reported, 169 (95%) were positive for influenza A (71 H3N2, 7 H1N1, and 91 not subtyped) and 9 were positive for influenza B. One-hundred five (60%) were female, 66 (37%) were African-American, and 132 (74%) were 50 years of age or older (median age of 64 years with a range between 8 months-97 years). Seventy-one (40%) had lung disease, 65 (37%) had cardiac disease and 43 (24%) required ventilator support. Sixteen deaths have been reported including one under 18 years of age. All were positive for influenza A (44% subtyped as H3N2 and 56% were not subtyped), 15 (94%) were 50 years of age or older, 69% were female, 62% were NH-White, and 56% had cardiac disease.

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 April 7-13, 2013, with 12 hospitals reporting, **2.9%** of emergency department visits were due to ILI. This is similar to levels seen during the same week for the past two influenza seasons (**Figure 2**).

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.

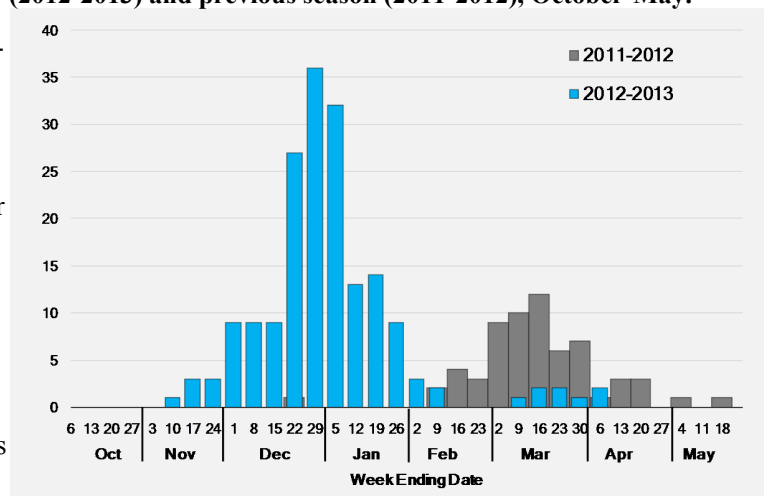
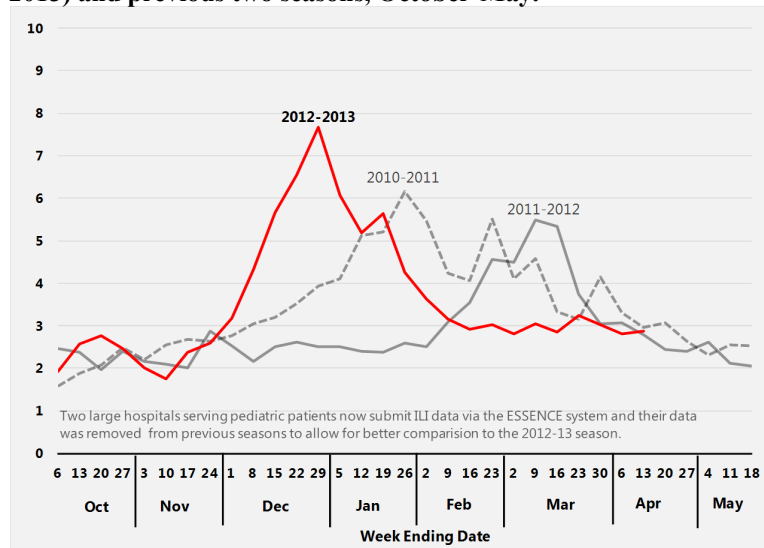


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.



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

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. 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 (**1.9%**) and adult patients (**<1%**) for the week of April 7-13, 2013 plus the ILI activity by age group for the previous season. Both pediatric and adult ILI levels are similar to levels seen before the peak in December and during the same week last 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 April 7-13, 2013, with **35** outpatient clinics reporting, **3.9%** of doctor's office visits were due to influenza-like illness. ILI levels are higher than levels seen during the same week for past two influenza seasons, however is over three percentage points lower than the peak reached in December (**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 April 7-13, 2013, with 7 laboratories reporting, **24 of the 346 (6.9%)** specimens tested for influenza were positive. This week last season, 10.1% of specimens tested positive for influenza. Among this week's positive specimens, 4 were typed as influenza A (3 2009 H1N1 and 1 H3N2) and 20 typed as influenza B (**Figure 5**). Since September 2012, **1,589 of 12,174 (13.1%)** specimens tested for influenza have been positive; 1,364 typed as influenza A (1,064 H3N2, 98 2009 H1N1, and 202 not subtyped) and 225 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.

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.

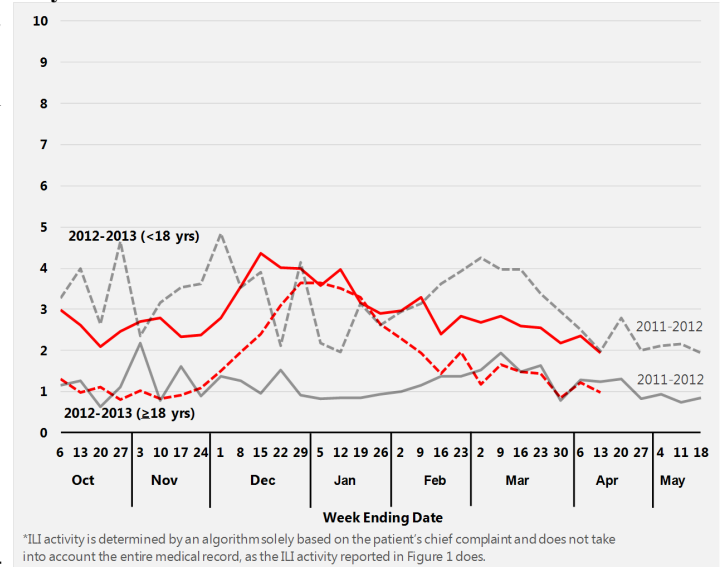


Figure 4. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

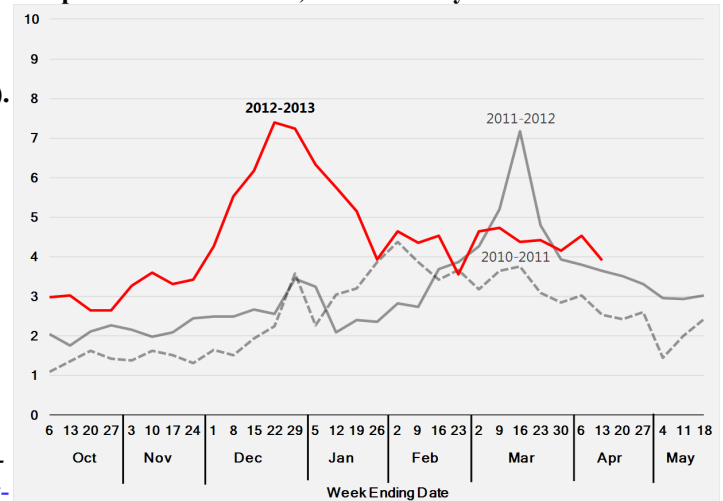
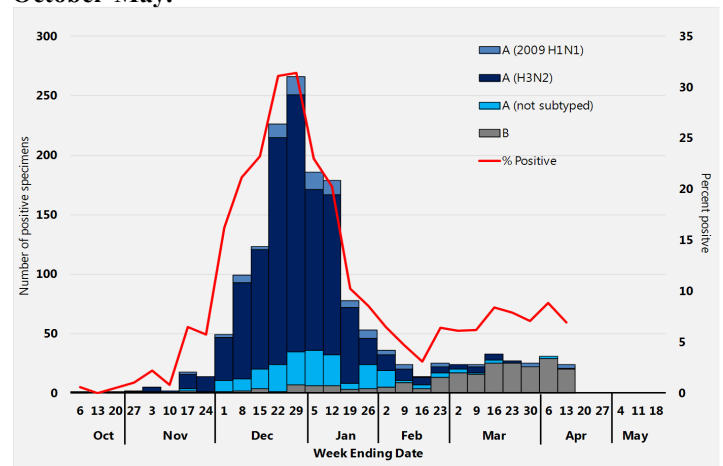


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.



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