



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
Bechara Choucair, MD, Commissioner

Seasonal Influenza Activity

The risk of influenza infection in Chicago is low. However, seasonal influenza viruses continue to circulate with influenza B strains predominating since February. During the week of April 14-20, 2013, 89% 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 26, 2013, Chinese public health officials have reported 109 laboratory confirmed human cases with avian influenza A (H7N9) virus including 23 deaths from four different provinces in China. There is no evidence of sustained human-to-human spread of this virus. 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 14-20, 2013 (week 16), **two influenza-associated ICU hospitalizations** were reported. This week last season, three ICU hospitalization was reported.

Since September 30, 2012, **181 influenza-associated ICU hospitalizations** have been reported (**Figure 1**). This is nearly three times as many cases reported during the same time period last season. Among the total ICU hospitalizations reported, 169 (93%) were positive for influenza A (71 H3N2, 7 H1N1, and 91 not subtyped) and 12 were positive for influenza B. One-hundred seven (59%) were female, 67 (37%) were African-American, and 133 (73%) were 50 years of age or older (median age of 64 years with a range between 8 months-97 years). Seventy-two (40%) had lung disease, 67 (37%) had cardiac disease and 44 (24%) required ventilator support. Seventeen deaths have been reported including two under 18 years of age. Nearly all (94%) were positive for influenza A (44% subtyped as H3N2 and 56% were not subtyped), 15 (88%) were 50 years of age or older, 71% were female, 59% were NH-White, and 53% 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 14-20, 2013, with **14** hospitals reporting, **2.6%** 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.

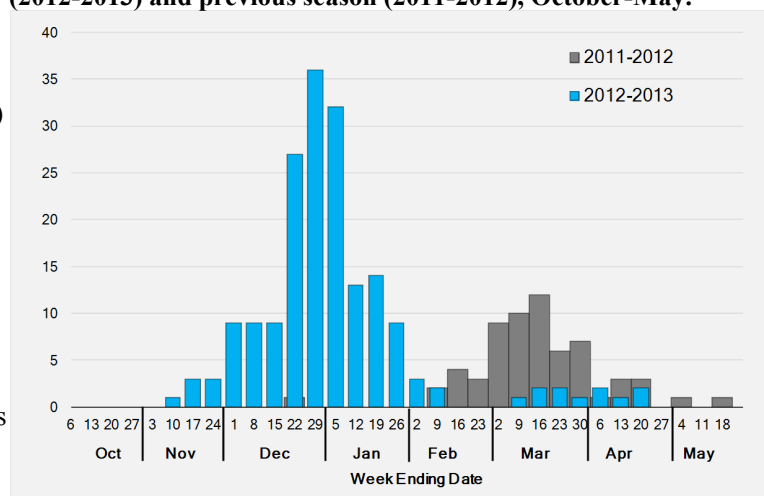
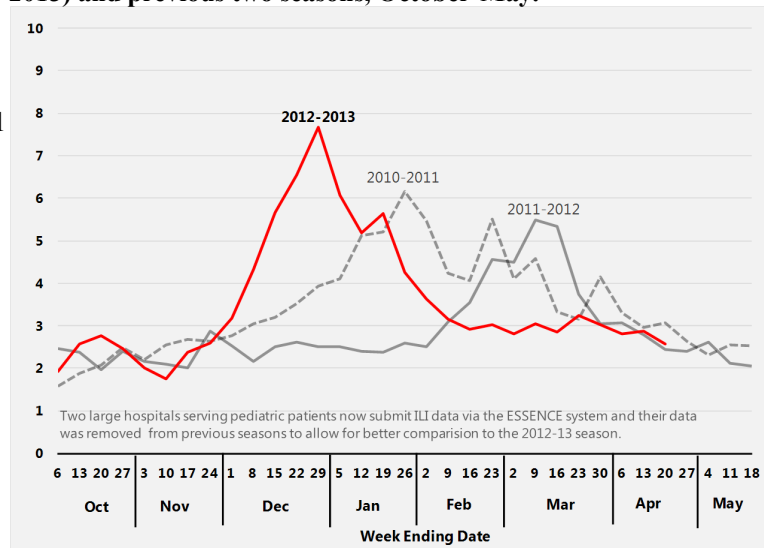


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.



¹http://www.cityofchicago.org/city/en/depts/cdp/supp_info/clinical_health/immunizations_walk-in-clinics.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 14-20, 2013, with 33 outpatient clinics reporting, 3.8% 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 nearly at half the peak level 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 14-20, 2013, with 7 laboratories reporting, 27 of the 300 (9.0%) specimens tested for influenza were positive. This week last season, 10.7% of specimens tested positive for influenza. Among this week's positive specimens, 3 were typed as influenza A (H3N2) and 24 typed as influenza B (**Figure 5**). Since September 2012, 1,616 of 12,474 (13.0%) specimens tested for influenza have been positive; 1,367 typed as influenza A (1,067 H3N2, 98 2009 H1N1, and 202 not subtyped) and 249 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.

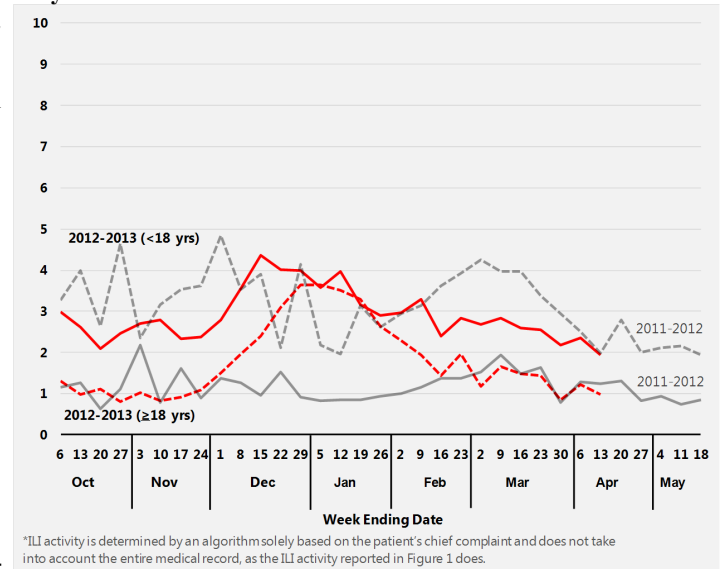


Figure 4. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

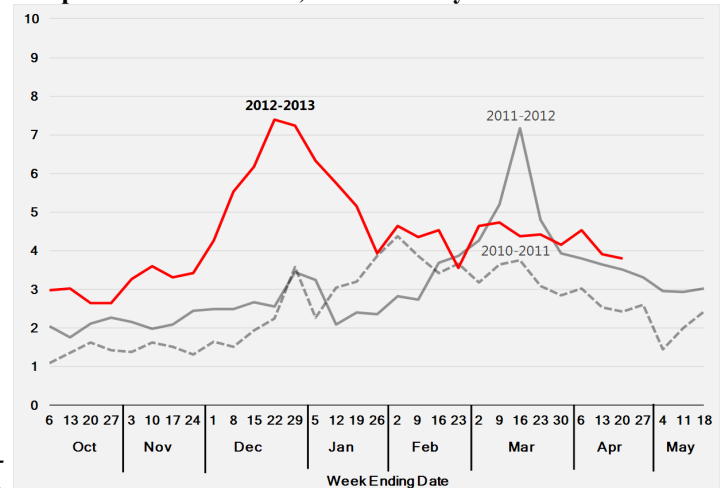
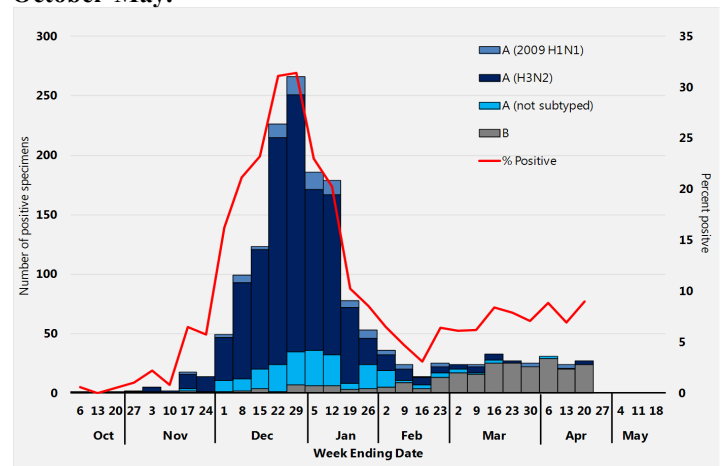


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.



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