



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
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Influenza Activity

Influenza viruses continue to circulate in Chicago. However, activity is low and more influenza B than influenza A strains were detected during the week of February 17-23, 2013. 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.

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 February 17-23, 2013 (week 8), **no influenza-associated ICU hospitalizations** were reported. This is the second consecutive week where no cases have been reported.

Since September 30, 2012, **170 influenza-associated ICU hospitalizations** have been reported (Figure 1). Among the total ICU hospitalizations reported, 164 (96%) were positive for influenza A (71 H3N2, 6 H1N1, and 87 not subtyped) and 6 were positive for influenza B. One-hundred one (60%) were female, 62 (36%) were African-American, and 127 (75%) were 50 years of age or older (median age of 64 years with a range between 8 months-97 years). Sixty-nine (41%) had lung disease, 63 (37%) had cardiac disease and 39 (23%) 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 February 17-23, 2013, with 12 hospitals reporting, **3.1%** of emergency department visits were due to ILI. This is a slight uptick from the previous week, yet remains lower than levels seen during the same week for the past two influenza seasons (Figure 2).

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. Currently, 8 Chicago hospitals submit data to ESSENCE. Figure 3 shows the percent of the total emergency department visits due to ILI for pediatric patients (2.8%) and adult patients (2.1%) for the week of February 17-23, 2013 plus the ILI activity by age group for the previous season. Pediatric ILI levels remain lower than levels seen during the same week last season by over one percentage point and adult ILI levels remain higher than levels seen during the same week last season.

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.

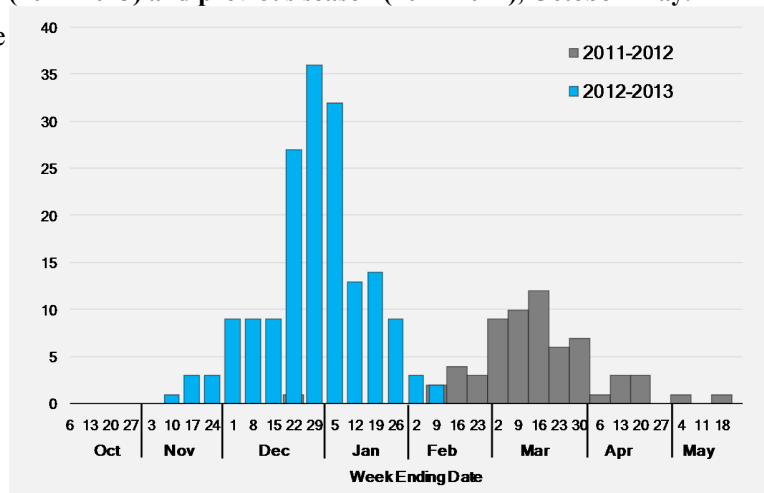
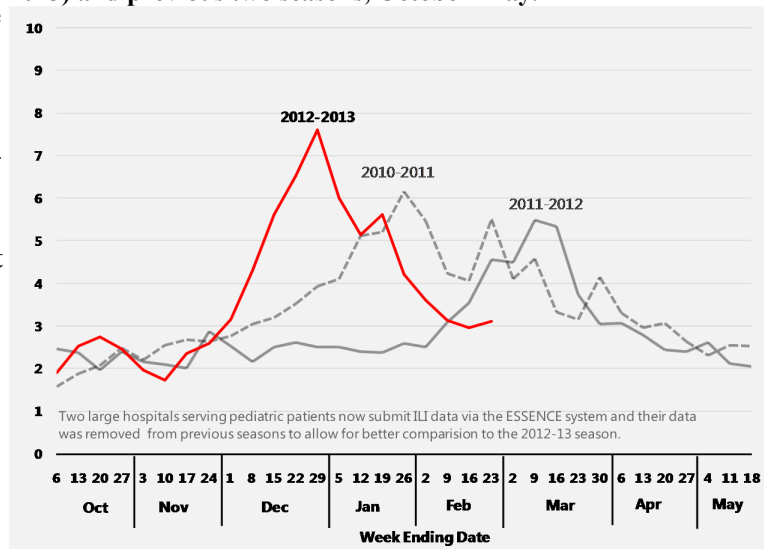


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.



Two large hospitals serving pediatric patients now submit ILI data via the ESSENCE system and their data was removed from previous seasons to allow for better comparison to the 2012-13 season.

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

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 February 17-23, 2013, with 35 outpatient clinics reporting, 3.6% of doctor's office visits were due to influenza-like illness. This is similar to levels seen for the same week during the past two influenza seasons (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 February 17-23, 2013, with 7 laboratories reporting, 25 of the 392 (6.4%) specimens tested for influenza were positive. Among the positive specimens, 12 were typed as influenza A (5 H3N2, 3 2009 H1N1, and 4 were not subtyped) and 13 typed as influenza B (Figure 5). This is the first week where the percentage of specimens testing positive for influenza B (52%) is higher than those testing positive for influenza A (48%). Since September 2012, 1,401 of 9,616 (15%) specimens tested for influenza have been positive; 1,330 typed as influenza A (1,047 H3N2, 90 2009 H1N1, and 193 not subtyped) and 71 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 (February 17-23, 2013)

Viral Surveillance: Of 7,609 specimens tested and reported by collaborating laboratories, 1,288 (16.9%) were positive for influenza.

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

Influenza-associated Pediatric Deaths: Three pediatric deaths were reported.

Influenza-Associated Hospitalizations: A cumulative rate for the season of 36.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Of reported hospitalizations, over 51% were among adults 65 years and older.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 2.7%. This is above the national baseline of 2.2%. Eight of 10 regions reported ILI at or above region-specific baseline levels. Twelve states and New York City experienced moderate activity; 15 states experienced low activity, and 23 states and the District of Columbia experienced minimal activity.

Geographic Spread of Influenza: Twelve states reported widespread influenza activity; Puerto Rico and 28 states reported regional influenza activity; 7 states and the District of Columbia reported local influenza activity; 3 states reported sporadic influenza activity; Guam reported no influenza activity, 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.

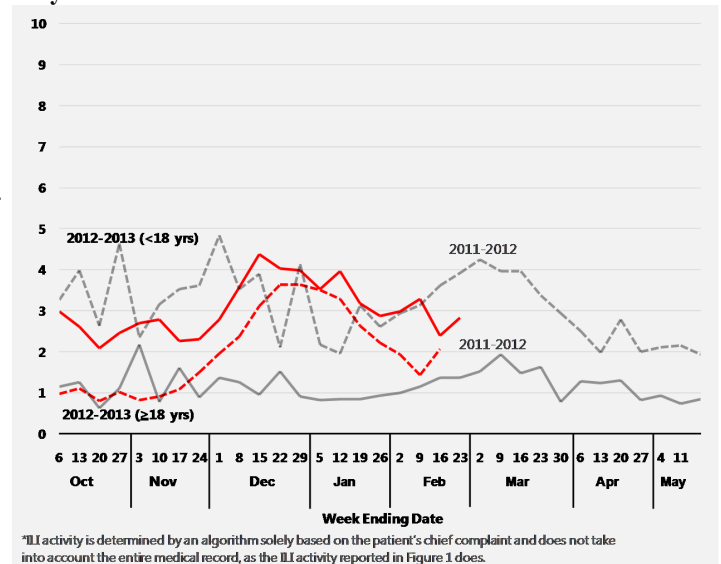


Figure 4. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

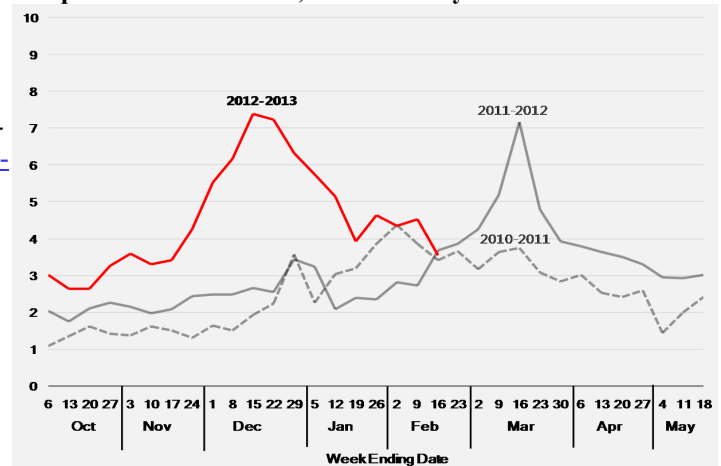
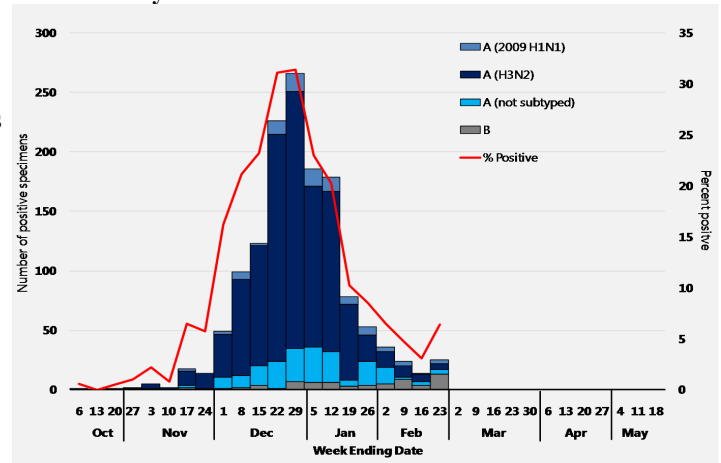


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.



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