



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
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What is the risk?

The risk of influenza infection in the Chicago area continues to increase. 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. It is not too late to get vaccinated. Healthcare providers and retail pharmacies continue to have vaccine available. For those without healthcare providers or insurance, a complete [list of CDPH Immunization clinics¹](#) 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 [INEDSS²](#). For the week of December 9-December 15, 2012 (week 50), **6 influenza-associated ICU hospitalizations** were reported; 6 were positive for influenza A by PCR (3 H3N2 and 3 not subtyped).

Since September 30, 2012, 29 influenza-associated ICU hospitalizations have been reported; 27 were positive for influenza A (13 H3N2, 1 H1N1, and 13 not subtyped) and 2 were positive for influenza B. Over sixty percent were female and African-American, the median age was 66 years (range 5-96 years); 9 (31%) had lung disease and 8 (28%) required ventilator support. One adult death has 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 December 9-December 15, 2012, with **14** hospitals reporting, **5.6%** 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 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, 9 Chicago hospitals submit data to ESSENCE. Essence data for the week of December 9-December 15th are not currently available. **Figure 2** shows the percent of the total emergency department visits due to ILI for pediatric patients (**2.2%**) and adult patients (**<1%**) for the week of December 2-December 8, 2012 plus the ILI activity by age group for the previous season.

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.

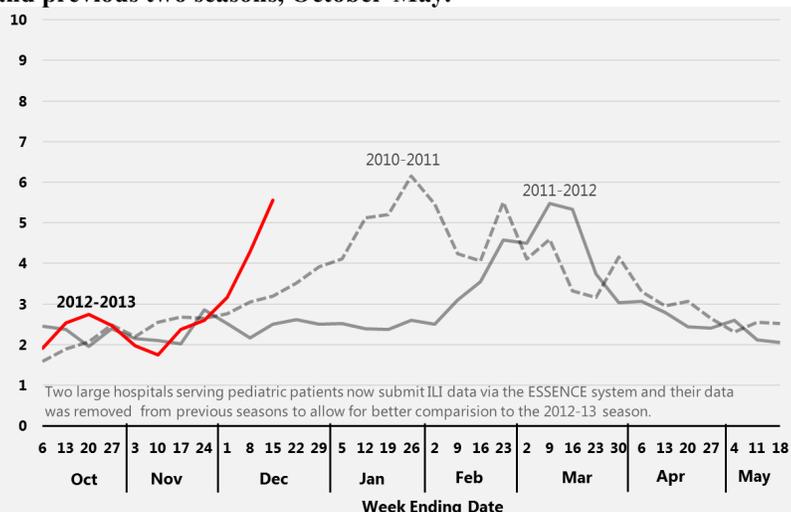
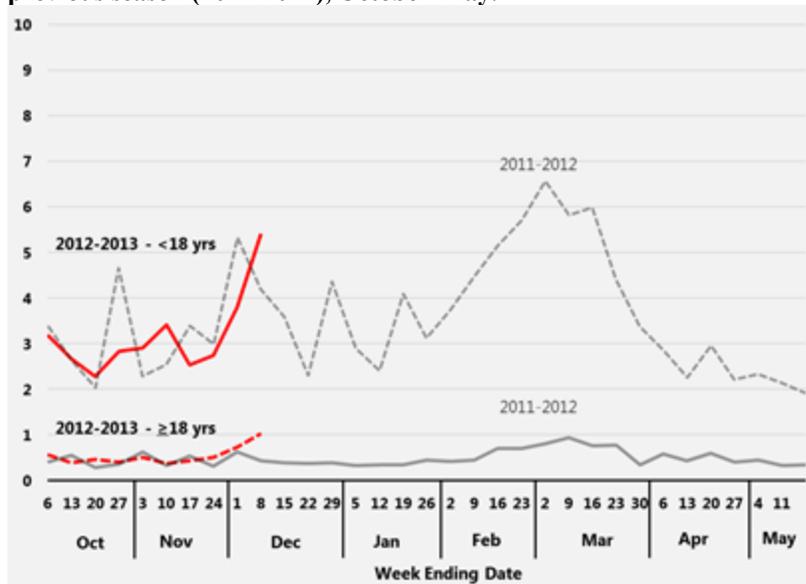


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for current season (2012-2013) and previous season (2011-2012), October-May.



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 9-December 15, 2012, with 37 outpatient clinics reporting, **6.2%** of doctor's office visits were due to influenza-like illness (**Figure 3**).

¹http://www.cityofchicago.org/city/en/depts/cdp/supp_info/clinical_health/immunizations_walk-inclinics.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 December 9-December 15, 2012, with 6 laboratories reporting, **120 of the 455 (26.3%)** specimens tested for influenza were positive. Among the positive specimens, 116 were typed as influenza A (92 H3N2, 2 H1N1, 6 unable to subtype and 16 not subtyped) and 4 typed as influenza B (**Figure 4**). **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. Since September 2012, 307 of 2,983 (10.3%) specimens tested for influenza have been positive

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 (December 9-December 15, 2012)

Viral Surveillance: Of 9,562 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories in week 50, 2,709 (28.3%) were positive for influenza.

Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below 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 3.2%; above the national baseline of 2.2%. Nine of ten regions reported ILI above region-specific baseline levels. Twelve states experienced high ILI activity, New York City and 5 states experienced moderate ILI activity; 11 states experienced low ILI activity; 22 states experienced minimal ILI activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: Twenty-nine states reported widespread geographic influenza activity; 12 states reported regional activity; the District of Columbia and 5 states reported local activity; 3 states reported sporadic activity; Guam 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.

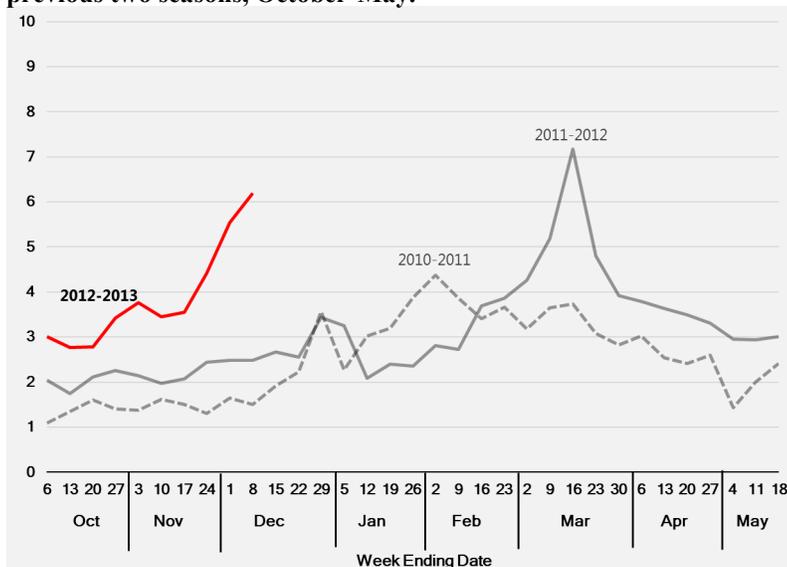


Figure 4. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.

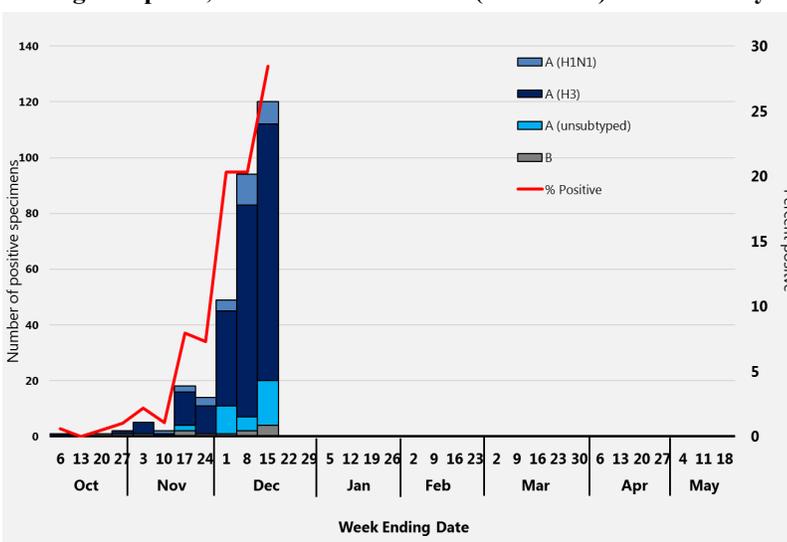


Table 1. Influenza testing results reported for surveillance weeks 40 through 48 by season, Chicago.

Laboratory Results	Influenza Season	
	2011-2012	2012-2013
# Specimens Tested*	1447	2983
# Specimens Positive	3	307
Positive for Influenza A	2	294
Subtype H3N2	1	232
Subtype 2009 H1N1	0	12
Not Subtyped	1	50
Positive for Influenza B	1	13

*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