Chicago Department of Public Health



Chicago Flu Update



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What is the risk?

Rahm Emanuel, Mayor

Currently, the risk of influenza infection is low. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. For those without a healthcare provider or whose healthcare providers do not have the influenza vaccine, a complete schedule of <u>City of Chicago influenza vaccine clinics</u>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 INEDSS². For the week of November 11-17, 2012 (week 46), **2 influenza-associated ICU hospitalizations** were reported; 1 positive for influenza A (unsubtyped) by PCR and 1 positive for influenza B by rapid test. Both were females over 50 years of age with chronic lung disease (including asthma) and one patient required ventilator support. Since September 30, 2012, 2 influenza-associated ICU hospitalizations have been reported. No deaths have 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 November 11-17, 2012, with 13 hospitals reporting, **2.4%** of emergency department visits were due to ILI. Currently, ILI activity is at similar levels seen in previous influenza 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, 10 Chicago hospitals submit data to ES-SENCE. **Figure 2** shows the percent of the total emergency department visits due to ILI for pediatric patients (**4.1%**) and adult patients (**<1%**) for the week of November 11-17, 2012 plus the ILI activity by age group for the previous season.

Several outpatient clinics and two large outpatient clinic networks located in Chicago participate in C Figure 1. Percent of <u>emergency department</u> 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.

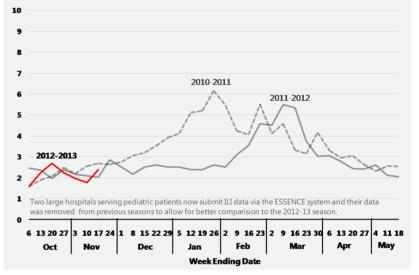
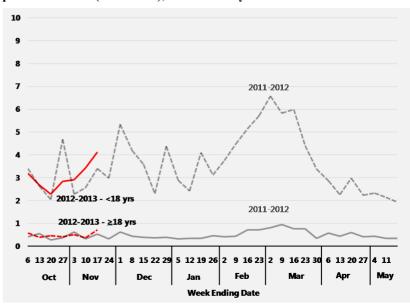


Figure 2. Percent of <u>emergency department</u> visits attributed to influenza-like illness based on chief complaint data submitted to <u>ESSENCE</u>, Chicago, by week, for current season (2012-2013) and previous season (2011-2012), October-May.



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 November 11-17, 2012, with 34 outpatient clinics reporting, **3.5%** of

doctor's office visits were due to influenza-like illness (Figure 3).

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza subtyping. For the week of November 11-17, 2012, with 6 laboratories reporting, **12 of the 227 (5.3%)** specimens tested for influenza were positive. Among the positive specimens, 10 typed as influenza A (6 H3, 2 H1N1, and 2 unsubtyped) and 2 typed as influenza B (Figure 4). Since September 2012, 22 of 1,418 (1.6%) specimens tested for influenza have been positive. 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.

Where can I get more information?

The Centers for Disease Control and Prevention's Flu-View³ 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 <u>Illinois</u>⁴ and <u>Suburban Cook County</u>⁵ are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section <u>Current Flu Situation in Chicago</u>⁶.

National Snapshot (November 11-17, 2012)

<u>Viral Surveillance</u>: Of 3,742 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 46, 494 (13.2%) were positive for influenza.

<u>Pneumonia and Influenza Mortality</u>: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.

<u>Influenza-associated Pediatric Deaths</u>: One influenzaassociated pediatric death was reported and was associated with an influenza A (H3) virus.

<u>Outpatient Illness Surveillance</u>: The proportion of outpatient visits for influenza-like illness (ILI) was 1.6%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. One state experienced high ILI activity, two states experienced moderate ILI activity; 3 states experienced low ILI activity; New York City and 41 states experienced minimal ILI activity, and the District of Columbia and 3 states had insufficient data.

<u>Geographic Spread of Influenza</u>: The geographic spread of influenza in 1 state was reported as widespread; 6 states reported regional activity; 8 states reported local activity; the District of Columbia, Guam, and 31 states reported sporadic activity; 3 states reported no influenza activity, and Puerto Rico, the U.S. Figure 3. Percent of <u>outpatient</u> visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

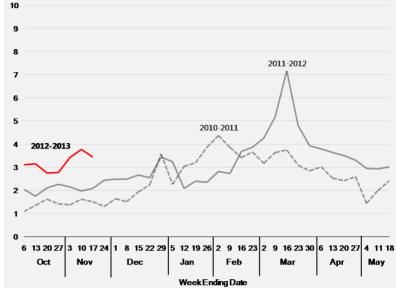


Figure 4. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.

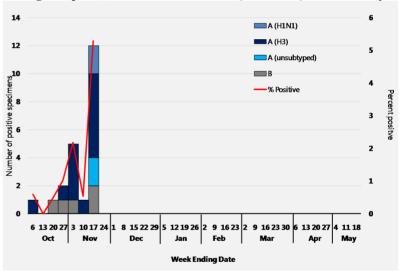


Table 1. Influenza testing results reported for surveillance weeks <u>40</u><u>through 46</u> by season, Chicago.

	Influenza Season	
Laboratory Results	2011-2012	2012-2013
# Specimens Tested*	880	1418
# Specimens Positive	2	22
Positive for Influenza A	1	17
Subtype H3	0	13
Subtype 2009 H1N1	0	2
Unsubtyped	1	2
Positive for Influenza B	1	5

*Six Chicago laboratories performing influenza subtyping that have consistently reported results for both seasons.

ported no influenza activity, and Puerto Rico, the U.S. Virgin Islands and 1 state did not report.