Influenza Activity
The risk of influenza infection in Chicago is low. However, influenza viruses continue to circulate with influenza B strains predominating during the past several weeks. During the week of March 17-23, 2013, 88% 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.

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 March 17-23, 2013 (week 12), two influenza-associated ICU hospitalizations were reported. This week last season, there were 6 reported ICU hospitalizations.

Since September 30, 2012, 175 influenza-associated ICU hospitalizations have been reported (Figure 1). Among the total ICU hospitalizations reported, 168 (96%) were positive for influenza A (71 H3N2, 7 H1N1, and 90 not subtyped) and 7 were positive for influenza B. One-hundred four (60%) were female, 64 (37%) were African-American, and 131 (75%) were 50 years of age or older (median age of 64 years with a range between 8 months-97 years). Seventy-one (41%) had lung disease, 64 (37%) had cardiac disease and 41 (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 March 17-23, 2013, with 15 hospitals reporting, 3.2% of emergency department visits were due to ILI. This is a slight uptick from the previous week, however remains similar to 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, 10 Chicago hospitals submit data to ESSENCE. Figure 3 shows the percent of the total emergency department visits due to ILI for pediatric patients (2.6%) and adult patients (1.4%) for the week of March 17-23, 2013 plus the ILI activity by age group for the previous season. Pediatric and adult ILI levels remain lower than levels seen during the same week last season.

---


Report is preliminary and may change as additional data is received
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 March 17-23, 2013, with 35 outpatient clinics reporting, 4.4% of doctor’s office visits were due to influenza-like illness. This is similar to levels seen during the same week last season and is 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 March 17-23, 2013, with 5 laboratories reporting, 17 of the 188 (9.0%) specimens tested for influenza were positive. This week last season, 17% of specimens tested positive for influenza. Among this week’s positive specimens, 2 were typed as influenza A (H3N2) and 15 typed as influenza B (Figure 5). Since September 2012, 1,499 of 10,972 (13.7%) specimens tested for influenza have been positive; 1,355 typed as influenza A (1,063 H3N2, 92 2009 H1N1, and 200 not subtyped) and 144 typed as influenza B.

Where can I get more information?
The Centers for Disease Control and Prevention’s FluView 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 and Suburban Cook County 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.

National Snapshot (March 17-23, 2013)
Viral Surveillance: Of 5,332 specimens tested and reported by collaborating laboratories, 702 (13.2%) were positive for influenza.

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

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

Influenza-Associated Hospitalizations: A cumulative rate for the season of 41.8 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Of reported hospitalizations, 50% were among adults 65 years and older.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%. This is below the national baseline of 2.2%. Three of 10 regions reported ILI at or above region-specific baseline levels. One state experienced moderate activity; 3 states and New York City experienced low activity; 46 states experienced minimal activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: Six states reported widespread influenza activity; Puerto Rico and 8 states reported regional influenza activity; the District of Columbia and 23 states reported local influenza activity; 11 states reported sporadic influenza activity; Guam and one state reported no influenza activity, and the U.S. Virgin Islands and one state did not report.

Report is preliminary and may change as additional data is received