Seasonal Influenza Activity

The risk of influenza infection in Chicago is low. However, seasonal influenza viruses continue to circulate at low levels. 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. This will be the last Chicago Flu Update issued for this influenza season. The next update will be issued in October 2013. The Chicago Department of Public Health will continue to monitor surveillance indicators throughout the summer months.

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 May 12-18, 2013 (week 20), one influenza-associated ICU hospitalization was reported.

Since September 30, 2012, 183 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 14 were positive for influenza B. One-hundred eight (59%) were female, 67 (37%) were African-American, and 135 (74%) were 50 years of age or older (median age of 64 years with a range between 8 months-97 years). Seventy-three (40%) had lung disease, 68 (37%) had cardiac disease and 45 (25%) required ventilator support. Twenty-seven deaths have been reported including two under 18 years of age. Nearly all (85%) were positive for influenza A (39% subtyped as H3N2 and 61% were not subtyped), 25 (93%) were 50 years of age or older, 63% were female, 59% were NH-White, and 63% 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 May 12-18, 2013, with 14 hospitals reporting, 2.2% of emergency department visits were due to ILI. This is similar to levels seen during the same week for the past two influenza seasons and is one of the lowest levels reported all season (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 (2.7%) and adult patients (<1%) for the week of May 12-18, 2013, 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 with pediat-

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\(^2\) [https://dph.partner.illinois.gov/]

Report is preliminary and may change as additional data is received
ric levels slightly higher than levels seen during the same week last season and adult ILI levels lower than levels seen 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 May 12-18, 2013, with 38 outpatient clinics reporting, 3.2% of doctor’s office visits were due to influenza-like illness. ILI levels are similar to levels seen during the same week least season and is at the lowest level reported since late October (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 May 12-18, 2013, with 7 laboratories reporting, 4 of the 274 (1.5%) specimens tested for influenza were positive. This is the lowest percentage reported since early November and is nearly thirty percentage points lower than the peak reached in late December. Among this week’s positive specimens, two typed as influenza A (H3N2) and 2 typed as influenza B (Figure 5). Since September 2012, 1,652 of 13,495 (12.2%) specimens tested for influenza have been positive; 1,371 typed as influenza A (1,071 H3N2, 98 2009 H1N1, and 202 not subtyped) and 281 typed as influenza B.

Where can I get more information?
The Centers for Disease Control and Prevention’s FluView³ 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 Illinois⁴ and Suburban Cook County⁵ 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 Chicago⁶.

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.

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