Connecticut Department of Public Health
Influenza Final Surveillance Summary for 2012-2013 Influenza Season

The following describes influenza activity in Connecticut from August 26, 2012 through August 24, 2013 including the 2012-2013 influenza season. Overall, influenza activity during the 2012-2013 influenza season ranks among the highest recorded during the past decade (see previous Connecticut annual influenza season summaries).

In Connecticut, the Department of Public Health utilized multiple surveillance systems to monitor circulating flu viruses and surveillance data were updated weekly. Surveillance findings for the included:

- The percentage of total emergency department visits attributed to the “fever/flu” syndrome category generally remained above 5% statewide from December 2012 through April 2013. The peak level of 12.4% was observed during the week ending January 19, 2013, MMWR week 3 (Figure 1).

- The percentage of outpatient visits with influenza-like illness remained above 1% statewide from December 2012 through April 2013. The peak level of 4.6% was observed during the week ending January 12, 2013, MMWR week 2 (Figure 2).

- The number of weekly hospital pneumonia admissions remained above 400, over 6% of all admissions, statewide during most of December 2012 and January 2013. The peak level of 696, over 9% of all admissions, was observed during the week ending January 5, 2013, MMWR week 1 (Figure 3).

- A total of 2,228 persons hospitalized with influenza-associated illness were reported and included 563 Type A (H3N2), 12 Type A (2009 H1N1), 1,261 Type A (subtype unspecified), 388 Type B, and 4 of unknown type (Figure 4).

- A total of 57 influenza associated deaths were reported, including 14 in patients with Type A (H3N2), 36 in patients with Type A subtype unspecified, and 7 in patients with Type B infections. All deaths were among patients at least 55 years of age including 48 (84%) who were greater than 65 years.

- The season was characterized by two waves. The first wave was predominantly influenza A and peaked during the week ending January 12, 2013, MMWR week 2. A second wave was predominantly influenza B and peaked during week ending March 23, 2013, MMWR week 12. Positive results were reported from residents of all 8 Connecticut counties and included: 4,177 from Fairfield County, 2,789 from New Haven County, 1,915 Hartford, 672 Windham, 638 New London, 613 Middlesex, 388 Litchfield, and 319 from Tolland County. Of the 11,511 positive influenza reports, 1,410 were Type A (H3N2), 95 Type A (2009 H1N1), 6,364 Type A (subtype unspecified), 2,083 influenza B viruses, and 1,559 of unknown type (Figure 5).
The Hospital Emergency Department Syndromic Surveillance (HEDSS) System receives daily electronic reports on ED visits from more than half of Connecticut’s acute care hospitals. Data include a listing of total patient visits with information on their chief complaint, including fever/flu.

**Figure 1**
CT Hospital Emergency Department Syndromic Surveillance (HEDSS): Percent of ED visits for fever/flu syndrome compared to past seasons
2012-2013 Flu Season

[Graphs showing percentage of ED visits for fever/flu syndrome by region and year.]
**Sentinel Provider Surveillance System:** Reporting of influenza-like illness (ILI) is conducted through a statewide network of volunteer outpatient providers known as ILINet. The proportion of patients exhibiting ILI is reported to the DPH on a weekly basis. ILI is defined as a cough or sore throat in the absence of a known cause, and the presence of a fever > 100° F.

![Figure 2. Outpatient Influenza-Like Illness Surveillance Network (ILINet), Percentage of Patients with Influenza-Like Illness (ILI); 2007-08, 2010-11, 2011-12, 20012-13](image)
The Hospital Admissions Syndromic Surveillance (HASS) System, receives daily electronic reports from all 32 acute care hospitals in Connecticut. Information on unscheduled admissions, including those for pneumonia that may be associated with influenza infections, is submitted.

Figure 3: Connecticut Hospital Admissions Syndromic Surveillance (HASS) System, Statewide Pneumonia Admissions; 2007-08, 2010-11, 2011-12, 2012-13
Influenza-associated Hospitalizations: Influenza-associated hospitalizations are reportable events in Connecticut. Data collected through this system describe the more serious illnesses associate with influenza infections.

Figure 4. Hospitalized Patients (n = 2228) with Positive Laboratory Tests by Subtype and Week, Connecticut

- Type A (H1N1) 2009
- Type A (H1N1)
- Type A (H3N2) Seasonal
- Type A (H5N1)
- Type A (H7N9)
- Type A (Unspecified)
- Type A (Unsubtypeable)
- Type B Seasonal
- Positive (Unknown Type)
Laboratory Surveillance: Positive influenza tests are laboratory reportable findings in Connecticut. The DPH tracks the number of persons with positive influenza tests to determine what types, subtypes, and strains are circulating.

Figure 5. Positive Laboratory Tests (n=11511) by Influenza Subtype and Week, Connecticut