2017-2018 Influenza Season, Update for Week 20*
(Week ending Saturday, 05/19/2018)

Key Points

- Influenza activity is rapidly decreasing throughout the country, remaining elevated in only a few areas including several states in the Northeast. The U.S. Centers for Disease Control and Prevention (CDC) recently reported that the percentage of people seeing their health care provider with influenza-like-illness (ILI) remains low (at 1.2%).
- Although Connecticut flu activity is continuing to rapidly decline, it remains slightly elevated compared to most areas of the country as seen in the percentage of patients with ILI presenting to hospital emergency departments and outpatient providers along with the continued receipt of additional reports of both laboratory-confirmed flu tests and flu-associated hospitalizations. We have also received reports of two additional flu-associated deaths during the past week in Connecticut.
- Classification of Connecticut geographic activity has decreased from regional to local** for week 20.
- Although influenza A (H3N2) viruses have been predominate within the US and Connecticut for most of the season, influenza B viruses now represent greater than 75% percent of the circulating flu viruses.
- As flu viruses will likely continue to circulate at low levels in Connecticut, there is still value in taking steps to prevent influenza-related illness and hospitalization: [http://www.portal.ct.gov/DPH/Infectious-Diseases/Immunization/Seasonal-Influenza](http://www.portal.ct.gov/DPH/Infectious-Diseases/Immunization/Seasonal-Influenza)
- This will be the last weekly update of the season; a 2017-2018 flu season summary will be posted to our Influenza Surveillance & Statistics page at the end of summer.

The Department of Public Health (DPH) uses multiple surveillance systems to monitor circulating flu viruses throughout the year. All data are considered preliminary and updated with available information each week starting in October and ending in May.

- Statewide emergency department visits attributed to the “fever/flu syndrome” had decreased to 5.1% during week 19 and remains at that level during week 20; 5% is generally considered the minimum threshold when there are elevated influenza-associated ED visits (Figure 1).

- The percentage of outpatient visits with ILI has decreased to 1.6%; remaining above the level of 1%, generally considered the baseline when there are increased influenza-associated visits in the outpatient setting (Figure 2).

- The percentage of unscheduled hospital admissions due to pneumonia has decreased to 2.7%; 4% is generally considered the baseline when there may be increased pneumonia hospitalizations due to influenza (Figure 3).
• A total of 3,490 hospitalized patients with laboratory-confirmed influenza admitted between August 27 and May 19, 2018 have been reported to date. Of these, 1,814 were Type A (subtype unspecified), 578 were Type A (H3N2), 48 were Type A (2009 H1N1), 1,044 were influenza B virus, and 6 of unknown type. A total of 154 influenza-associated deaths (103 associated with flu A, 50 with flu B, 1 of unknown type) have been reported. Two new flu-associated deaths have been reported during this week. Of the deaths, 128 were among patients greater than 65 years of age, 15 were 50-64 years of age, 7 were 25-49 years of age, 1 was between 19-24 years of age, and 3 were ≤18 years of age. The current season total of 154 deaths is above the range of influenza-associated deaths (1-65) reported during the previous five seasons (Figures 4 & 5).

• A total of 12,057 influenza positive laboratory tests have been reported during the current season (August 27 – May 19, 2018): Fairfield County (3,677 reports), New Haven (3,192), Hartford (2,402), New London (761), Middlesex (656), Litchfield (510), Windham (479), Tolland (291) and currently unknown county (89). Of the positive reports: 6,118 were Type A (subtype unspecified), 1,305 were Type A (H3N2), 206 were Type A (2009 H1N1), 4,414 were influenza B viruses, and 14 of unknown type. Please note that the percentage of influenza B infections is continuing to increase (Figures 6 & 7).

* Week numbers refer to the Morbidity and Mortality Weekly Report calendar used by the federal Centers for Disease Control and Prevention (CDC) for national disease surveillance.

** Definitions for the estimated levels of geographic spread of influenza activity available at:
http://www.cdc.gov/flu/weekly/overview.htm
The Hospital Emergency Department Syndromic Surveillance (HEDSS) System receives daily electronic reports on ED visits from all 33 hospital-affiliated emergency departments in Connecticut. Data include a listing of total patient visits with information on their chief complaint, including fever/flu.

Figure 1. Connecticut Hospital Emergency Department Syndromic Surveillance (HEDSS) System: Percentage of total ED visits for "fever/flu" syndrome category, 2017-2018 influenza season compared to past seasons, MMWR Week 20 (week ending 05/19/18)
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.
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, Percentage of total statewide admissions for pneumonia; 2015-16, 2016-17, 2017-18
Influenza-associated Hospitalizations: In Connecticut, influenza-associated hospitalizations and deaths are reportable. Data collected describe the more serious illnesses associated with influenza infections.

Figure 4. Hospitalized Patients (n = 3490) with Positive Lab Tests by Subtype & Week, Connecticut, through 5/19/2018

Figure 5. Hospitalized Patients (5a, n=3490) and Flu-Associated Death (5b, n=154) with Positive Laboratory Tests by Influenza Subtype and Age Group, Connecticut, through 5/19/2018
Influenza-associated Deaths: Comparison of the total number of flu-associated deaths reported in Connecticut during the current and previous five flu seasons starting with the onset of improved reporting during the 2012-13 flu season.

Figure 5c. Total Number of Influenza-associated Deaths in Connecticut by Influenza Season, 2012-13 through 5/23/2018
Laboratory Surveillance: Positive influenza tests are laboratory reportable findings in Connecticut. The DPH tracks these results to determine what types, subtypes, and strains are circulating.

Figure 6. Positive Laboratory Tests (n = 12057) by Influenza Subtype and Week, Connecticut, through 5/19/2018

Figure 7. Proportion of Cumulative Positive Laboratory Tests (n = 12057) by Influenza Subtype, Connecticut, through 5/19/2018