2018-2019 Influenza Season Update for Week 52*
(The week ending on Saturday, December 29, 2018)

Key Points
✓ Classification of Connecticut geographic activity remains at widespread** for week 52.
✓ Influenza activity has rapidly increased in Connecticut during the past two weeks.
✓ Influenza A viruses are the predominate type circulating; very few flu B viruses are now being reported.
✓ The U.S. Centers for Disease Control and Prevention (CDC) recent reports on the percentage of people nationally seeing their health care provider with influenza-like-illness (ILI) has increased to 3.3%, above the national baseline of 2.2% for elevated ILI activity.
✓ There is still time for you and your family to obtain your flu vaccine and take steps to prevent influenza-related illness and hospitalization: https://portal.ct.gov/DPH/Immunizations/Seasonal-Influenza

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

- The percentage of statewide emergency department visits attributed to the “fever/flu syndrome” has increased from 8.5% in week 51 to 10.8% in week 52 (Figure 1). Caution should be used when comparing the 2018-2019 EpiCenter syndromic surveillance data to 2016-2017 and 2017-2018 Hospital Emergency Department Syndromic Surveillance System data†.
- The percentage of outpatient visits with influenza-like illness (ILI) is currently 4.6%, above the level of 1%, generally considered the minimum threshold for elevated influenza-associated visits in the outpatient setting in Connecticut (Figure 2).
- To date, a total of 268 hospitalized patients with laboratory-confirmed influenza admitted between August 26 and December 29, 2018 have been reported. Of these, 233 were associated with type A (subtype unspecified), 17 with influenza A (2009 H1N1), 6 with influenza A (H3N2), and 12 with influenza B viruses (Figures 3 & 4).
- One new flu-associated death is being reported in this update resulting in a total of 4 deaths reported through week 52 in Connecticut. Three flu-associated deaths were associated with influenza A (unspecified) and one with influenza B. Of the 4 total reported flu-associated deaths, 3 occurred in persons >65 years of age and 1 in a person 50-64 years of age.
- A total of 787 influenza positive laboratory tests have been reported during the current season (August 26 – December 29, 2018): Hartford County (242), New Haven (240), Fairfield (140), Middlesex (44), New London (42), Litchfield (38), Tolland (23), Windham (15) and 3 in currently unknown counties. Of the positive reports, 662 were influenza A (subtype unspecified), 64 influenza A (2009 H1N1), 11 were influenza A (H3N2), and 50 were influenza B (Figures 5 & 6).

* Week numbers refer to the Morbidity and Mortality Weekly Report calendar used by the 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 EpiCenter system replaced the Hospital Emergency Department Syndromic Surveillance System; 18 additional emergency department facilities send data to the EpiCenter.
Figure 1. Percentage of Statewide Emergency Department Visits Attributed to “Fever/Flu Syndrome”, 2016-17, 2017-18, 2018-19*

*Caution should be used when comparing EpiCenter surveillance data to 2016-17 and 2017-18 Hospital Emergency Department Syndromic Surveillance system data.

Figure 2. Outpatient Influenza-Like Illness Surveillance Network (ILINet), Percentage of Patients with Influenza-Like Illness (ILI); 2016-17, 2017-18, 2018-19
Figure 3. Hospitalized Patients (n = 268) with Positive Lab Tests by Subtype & Week, Connecticut, through 12/29/2018

Figure 4. Hospitalized Patients (n= 268) with Positive Laboratory Tests by Influenza Subtype and Age Group, Connecticut, through 12/29/2018
Figure 5. Positive Laboratory Tests (n = 787) by Influenza Subtype and Week, Connecticut, through 12/29/2018

Figure 6. Proportion of Cumulative Positive Laboratory Tests (n = 787) by Influenza Subtype, Connecticut, through 12/29/2018
Influenza Surveillance System Definitions

**The EpiCenter System:** This system receives near real-time reports on ED visits from all 38 licensed, hospital emergency departments in Connecticut. Data include a description of the chief complaint, or reason for visit, including fever/flu. The EpiCenter system replaced the Hospital Emergency Department Syndromic Surveillance system (HEDSS). During 2017-2018, 18 additional emergency department facilities began sending data to the EpiCenter, and caution should be used when comparing EpiCenter surveillance data to historical HEDSS data.

**Sentinel Provider Surveillance:** 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 and/or sore throat in the absence of a known cause, and the presence of a fever $\geq 100^\circ$F.

**Influenza-associated Hospitalizations and/or Deaths:** Providers are required to report influenza-associated hospitalizations and influenza-associated deaths, they are not required to report any positive influenza test results. Data collected describe the more serious illnesses associated with influenza infections.

**Laboratory Surveillance.** In Connecticut, positive influenza results are reportable by the laboratory conducting the test. Rapid antigen results are only reportable by laboratories with electronic file reporting. These results are used to determine what types, subtypes, and strains are circulating.