Key Points

- National influenza activity remains low, with Type A viruses predominating.
- In Connecticut, influenza activity has been increasing since the end of August.
- Classification of Connecticut geographic activity increased from sporadic to local**.
- Predominant circulating influenza viruses within Connecticut are Type A.
- It is time to obtain your flu vaccine and take other steps to prevent influenza-related illness and hospitalization: http://www.ct.gov/dph/cwp/view.asp?a=3115&q=500340

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” are beginning to increase and are now at 4.4%, which is below the level of 5% statewide; generally considered the minimum threshold when there are elevated influenza-associated ED visits (Figure 1).

- The percentage of outpatient visits with influenza-like illness (ILI) has continued above the level of 1% statewide; 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 are beginning to increase but remain below a level of 4% statewide; generally considered the baseline when there may be increased pneumonia hospitalizations due to influenza (Figure 3).

- A total of 27 hospitalized patients with laboratory-confirmed influenza admitted between August 27 and October 28, 2017 have been reported to date. Of these 27 reports, 20 were Type A (subtype unspecified), 4 were Type A (H3N2), 1 was Type A (2009 H1N1), and 2 were influenza B virus. No influenza-associated deaths have been reported to date, this season (Figures 4 & 5).

- A total of 57 influenza positive laboratory tests have been reported during the current season (August 27 – October 28, 2017). Influenza was reported in six of eight counties: Fairfield (27 reports), Hartford (15), New Haven (10), New London (2), Tolland County (2), and Middlesex (1). Of the 57 positive influenza reports: 44 were Type A (subtype unspecified), 7 were Type A (H3N2), 2 were Type A (2009 H1N1), and 4 were influenza B virus (Figures 6 & 7).

* Week numbers refer to the Morbidity and Mortality Weekly Report calendar used by the federal Centers for Disease Control and Prevention 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 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.** 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 43 (week ending 10/28/17)
**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); 2015-16, 2016-17, 2017-18](image-url)
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.
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 =27) with Positive Lab Tests by Subtype & Week, Connecticut, Through 10/28/2017

Figure 5. Hospitalized Patients (n=27) with Positive Laboratory Tests by Influenza Subtype and Age Group, Connecticut, Through 10/28/2017
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 =57) by Influenza Subtype and Week, Connecticut, Through 10/28/2017

Figure 7. Proportion of Cumulative Positive Laboratory Tests (n =57) by Influenza Subtype, Connecticut, Through 10/28/2017