Influenza Season, Update for Week 8*

(Week ending Saturday, 02/25/2017)

Key Points

- ✓ Influenza activity appears to have peaked in Connecticut and throughout the region.
- ✓ Current flu activity is high** and is classified geographically as widespread**.
- ✓ Predominant circulating influenza virus is Type A; the predominant subtype is influenza A (H3N2).
- ✓ 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.

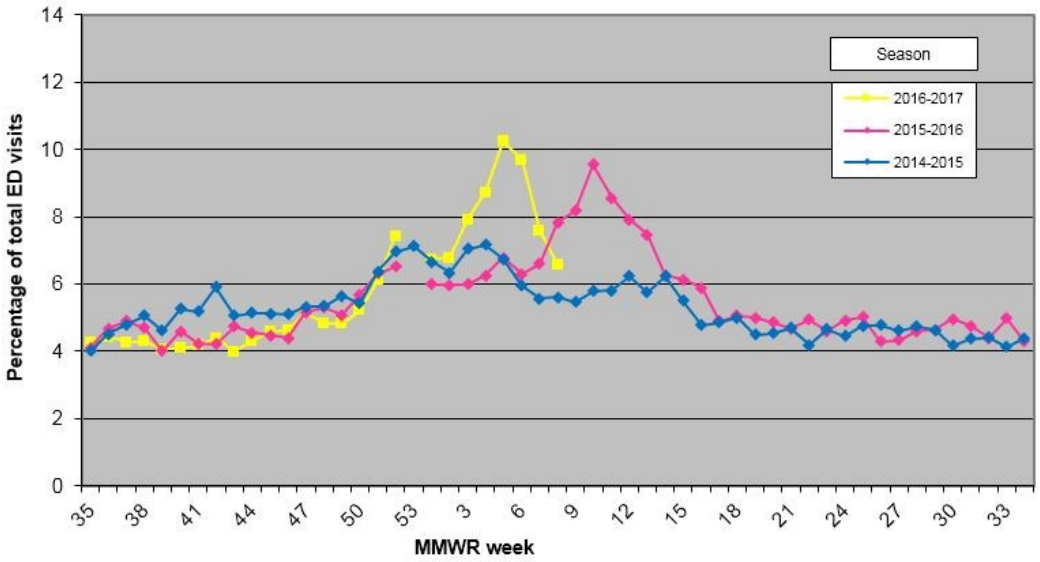
- Statewide emergency department visits attributed to the "fever/flu syndrome," which had peaked at a level of 10.25% during week 5, are currently at a level of 6.6%, well above the level of 5% statewide that is generally considered the minimum threshold when there are elevated influenza-associated ED visits (Figure 1).
- The percentage of outpatient visits with influenza-like illness (ILI) which had peaked at a level of 5.7% during week 6, is currently at a level of 5.0%, well above the level of 1% statewide that is 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, which had peaked at a level of 5.2% during week 1 and is currently at a level of 4.3%, above the level of 4% statewide that is generally considered the baseline when there may be increased pneumonia hospitalizations due to influenza (Figure 3).
- A total of 1,213 hospitalized patients with laboratory-confirmed influenza admitted between August 28, 2016 and February 25, 2017 have been reported to date. Of these 1,213 reports, 984 were Type A (subtype unspecified), 155 were Type A (H3N2), 3 were Type A (2009 H1N1), and 71 were influenza B virus. A total of 22 influenza-associated deaths, with 21 in individuals greater than 65 years of age, and one between 50-64 years of age, have been reported during this season (Figures 4 & 5).
- A total of 3,589 positive influenza reports have been reported during the current season (August 28, 2016 – February 25, 2017). Influenza was reported in all eight counties: Fairfield (1,297 reports), Hartford (944), New Haven (841), Windham (145), New London (107), Litchfield (98), Tolland (86), and Middlesex County (71). Of the 3,589 influenza reports: 2,765 were Type A (subtype unspecified), 615 were Type A (H3N2), 20 were Type A (2009 H1N1), and 189 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 flu activity (outpatient ILI activity) and the estimated levels of geographic spread of influenza activity are available at: http://www.cdc.gov/flu/weekly/overview.htm*

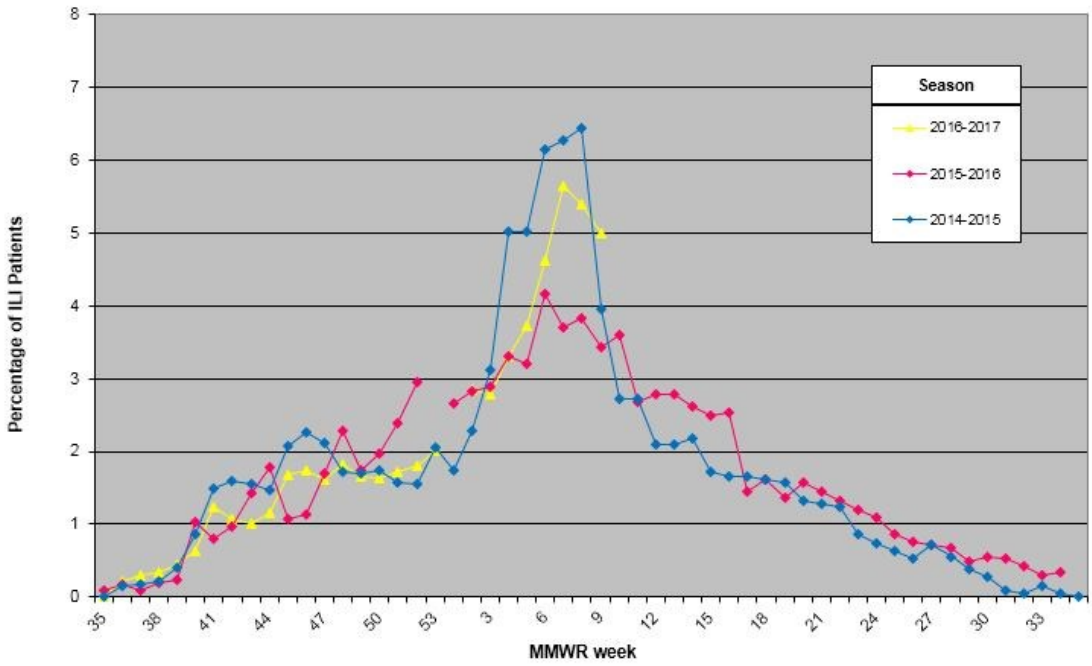
The **Hospital Emergency Department Syndromic Surveillance (HEDSS) System** receives daily electronic reports on ED visits from more than half of Connecticut's acute care hospitals. Data include a listing of total patient visits with information on their chief complaint, including fever/flu.

Figure 1. Connecticut Hospital Emergency Department Syndromic Surveillance (HEDSS) System: Percentage of total ED visits for "fever/flu" syndrome category, 2016-2017 influenza season compared to past seasons, MMWR Week 08 (week ending 2/25/17)



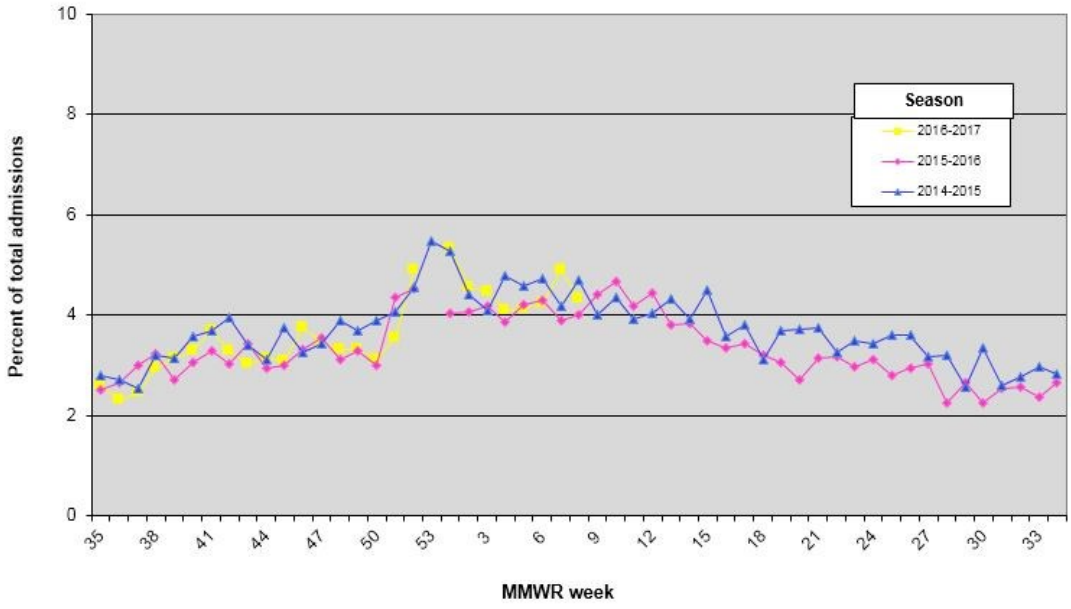
Sentinel Provider Surveillance System: Reporting of influenza-like illness (ILI) is conducted through a statewide network of volunteer outpatient providers known as ILINet. The proportion of patients exhibiting ILI is reported to the DPH on a weekly basis. ILI is defined as a cough or sore throat in 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); 2014-15, 2015-16, 2016-17



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; 2014-15, 2015-16, 2016-17



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 =1213) with Positive Lab Tests by Subtype & Week, Connecticut, through 2/25/2017

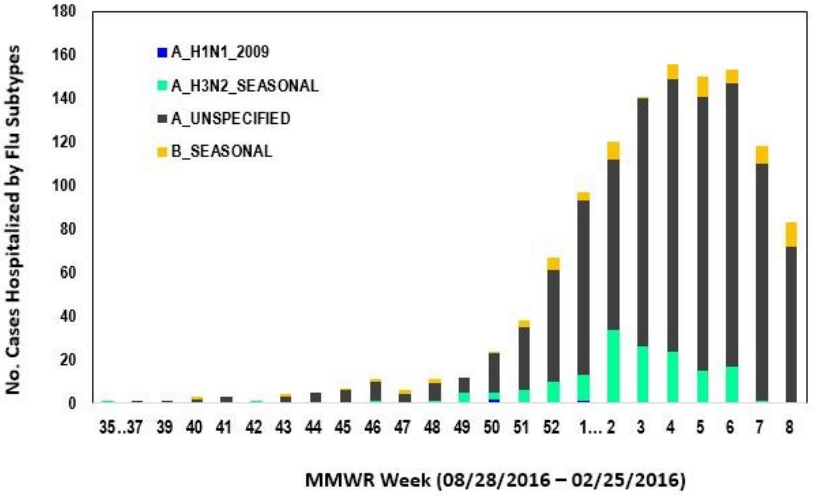
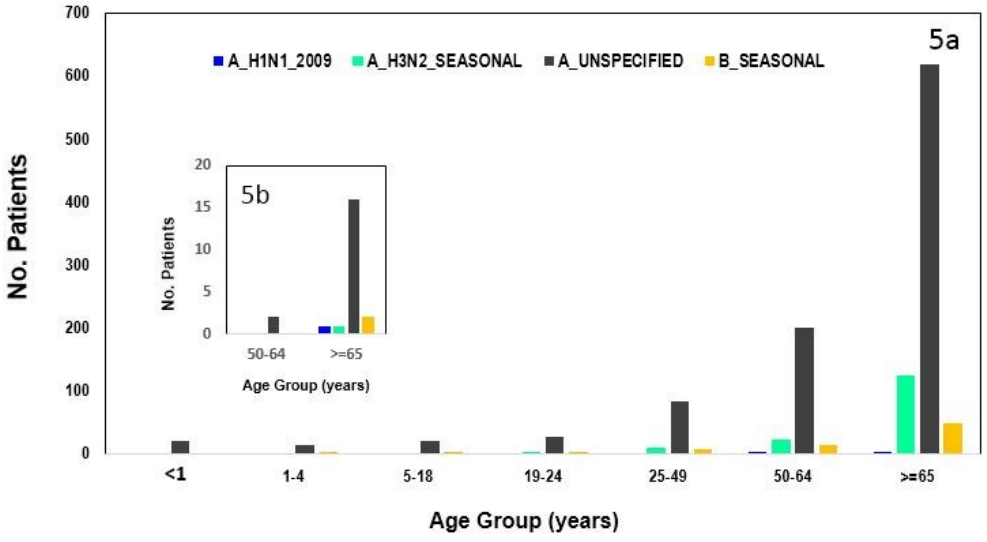


Figure 5. Hospitalized Patients (5a, n=1213) and Flu-Associated Deaths (5b, n=22) with Positive Laboratory Tests by Influenza Subtype and Age Group, Connecticut, through 2/25/2017



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 =3589) by Influenza Subtype and Week, Connecticut, through 2/25/2017

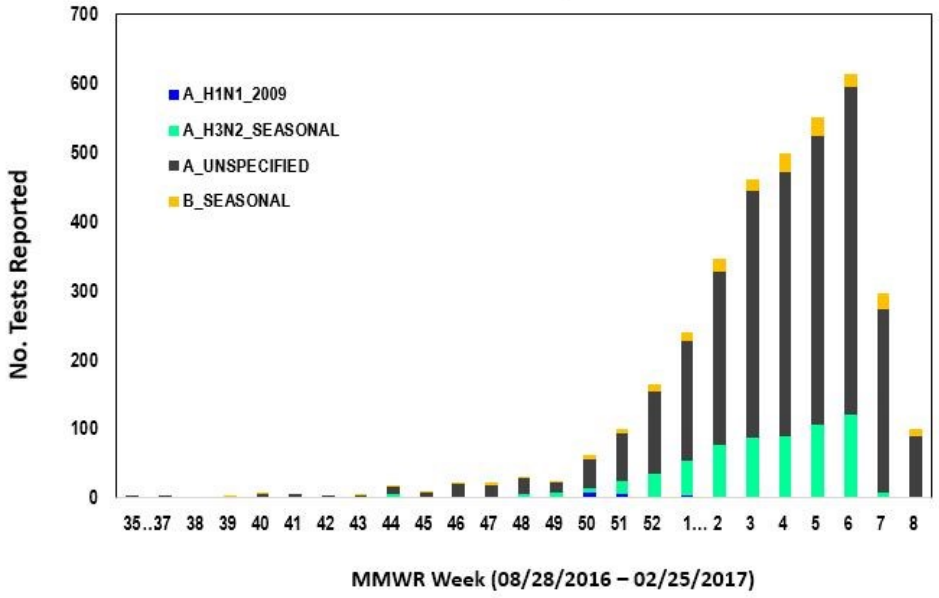


Figure 7. Proportion of Cumulative Positive Laboratory Tests (n =3589) by Influenza Subtype, Connecticut, through 3/1/2017