



2017-2018 Influenza Season, Update for Week 18*

(Week ending Saturday, 05/05/2018)

Key Points

- ✓ Influenza activity is continuing to decline throughout the country while remaining elevated in a few areas including several states in the Northeast. This national decline can be seen in the decrease (from 1.7 to 1.5%) recently reported by the U.S. Centers for Disease Control and Prevention (CDC) in the percentage of people seeing their health care provider with influenza-like-illness (ILI).
- ✓ The small second wave of influenza activity recently observed in Connecticut has continued to decrease from its peak in early April. Although decreasing, Connecticut flu activity remains elevated compared to most areas of the country as seen in the percentage of patients with influenza-like illness presenting to hospital emergency departments and outpatient providers, along with the increased number of laboratory confirmed flu cases and flu-associated hospitalizations. We have received reports of three additional flu-associated deaths during the past week in Connecticut.
- ✓ Classification of Connecticut geographic activity is transitioning from **widespread** to **regional**** as flu activity decreases throughout Connecticut.
- ✓ Although influenza A (H3N2) viruses have been predominate within the US and Connecticut for most of the 2017-2018 season, numbers of influenza B viruses are now circulating in far greater numbers than influenza A viruses.
- ✓ As elevated flu activity will likely continue well into May 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>

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 from week 6 to week 12, increased for two weeks to 7.3% during week 14 and has now decreased from 5.5 to 5.3% during week 18; remaining above 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), which had decreased from weeks 6 through 12, increased to 4.2% during week 13, has now decreased to 2.3% during week 18, but remains above the levels seen in recent seasons and above the level of 1% statewide; generally considered the baseline when there are increased influenza-associated visits in the outpatient setting (Figure 2).

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- The percentage of unscheduled hospital admissions due to pneumonia, which had decreased from weeks 9 through 13, increased to 3.4% during week 14, and recently decreased to 3.3%, below the level of 4% statewide; generally considered the baseline when there may be increased pneumonia hospitalizations due to influenza (Figure 3).
- A total of 3,411 hospitalized patients with laboratory-confirmed influenza admitted between August 27 and May 5, 2018 have been reported to date. Of these 3,411 reports, 1,778 were Type A (subtype unspecified), 568 were Type A (H3N2), 47 were Type A (2009 H1N1), 1,012 were influenza B virus, and 6 of unknown type. A total of 150 influenza-associated deaths (100 associated with flu A, 49 with flu B, 1 of unknown type) have been reported to date. Three new flu-associated deaths have been reported during this week. Of the 150 deaths reported to date, 125 were among patients greater than 65 years of age, 14 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 150 deaths is above the range of influenza-associated deaths (1-65) reported during the previous five seasons (Figures 4 & 5).
- A total of 11,604 influenza positive laboratory tests have been reported during the current season (August 27 – May 5, 2018): Fairfield (3,538 reports), New Haven (3,160), Hartford (2,281), New London (722), Middlesex (642), Litchfield (485), Windham (451), Tolland (256) and currently unknown county (69). Of the 11,604 positive influenza reports: 5,893 were Type A (subtype unspecified), 1,281 were Type A (H3N2), 201 were Type A (2009 H1N1), 4,215 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).

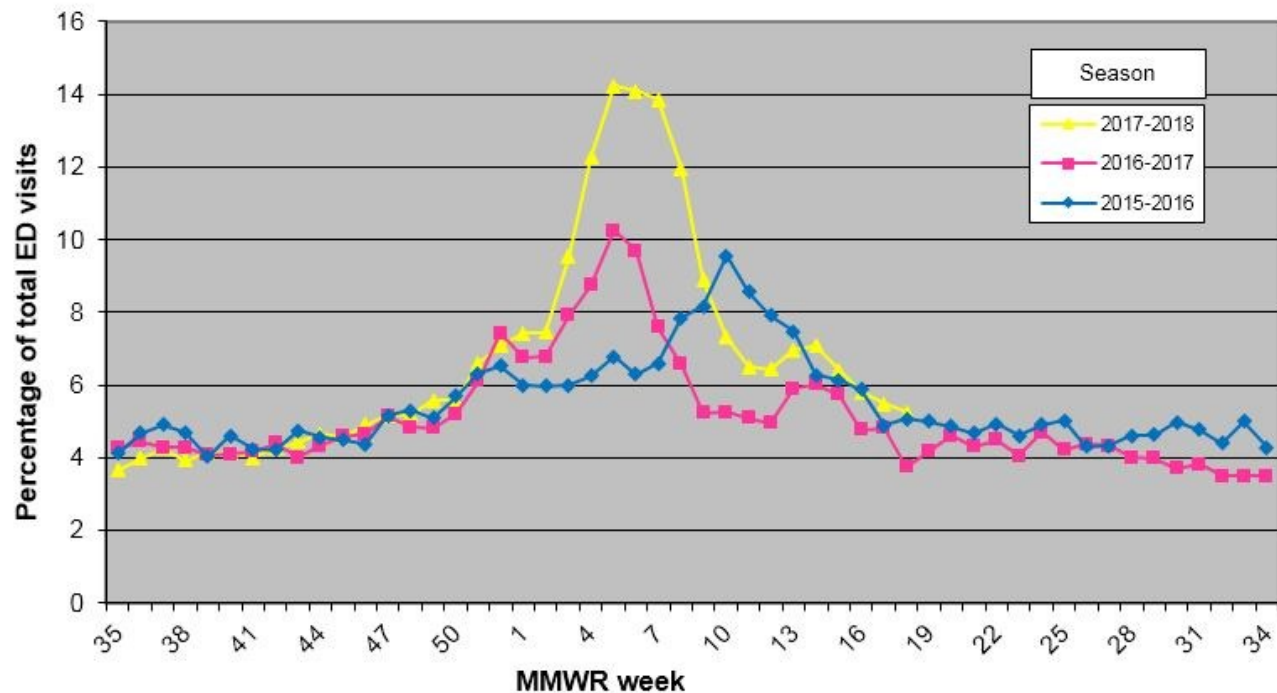
** Week numbers refer to the Morbidity and Mortality Weekly Report calendar used by the federal Centers for Disease Control and Prevention (CDC) for national disease surveillance.*

*** Definitions for the estimated levels of geographic spread of influenza activity available at:*

<http://www.cdc.gov/flu/weekly/overview.htm>

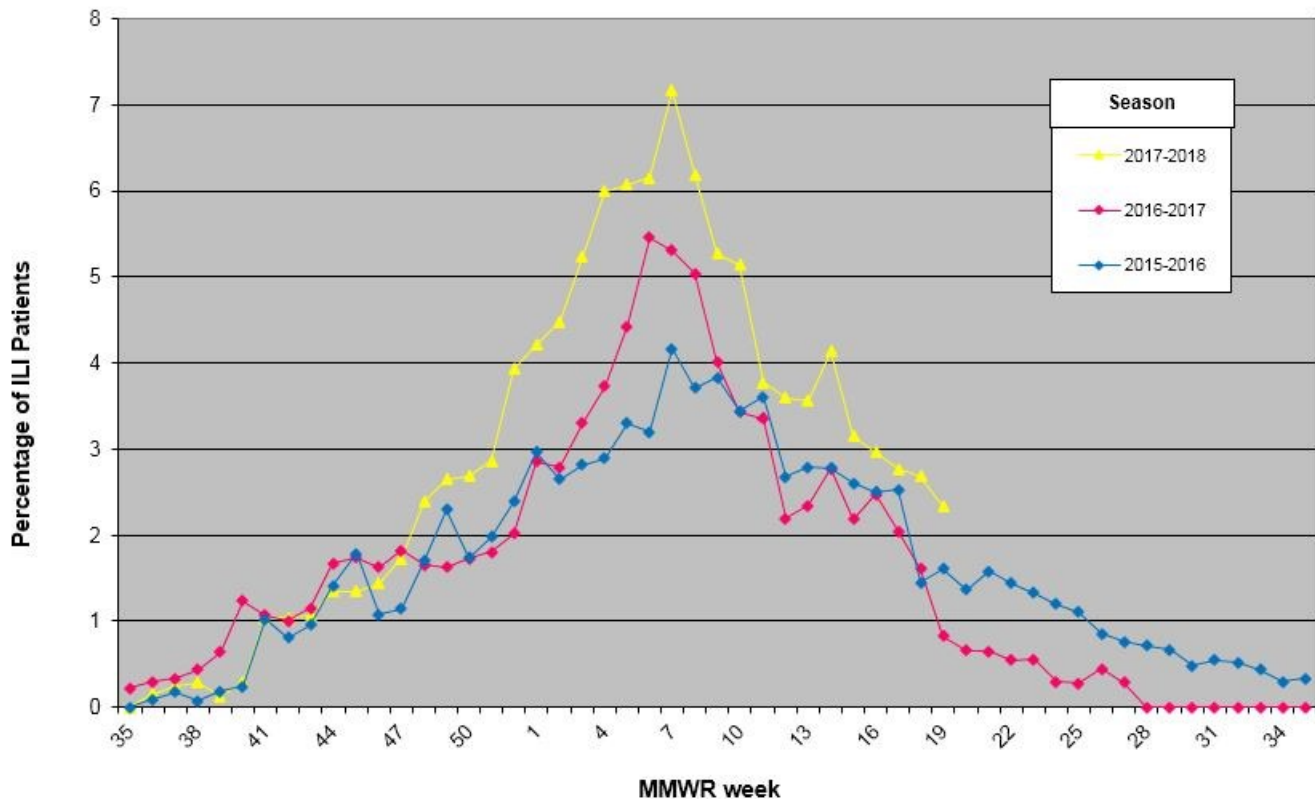
The **Hospital Emergency Department Syndromic Surveillance (HEDSS) System** receives daily electronic reports on ED visits from all 33 hospital-affiliated emergency departments in Connecticut. Data include a listing of total patient visits with information on their chief complaint, including fever/flu.

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 18 (week ending 05/05/18)



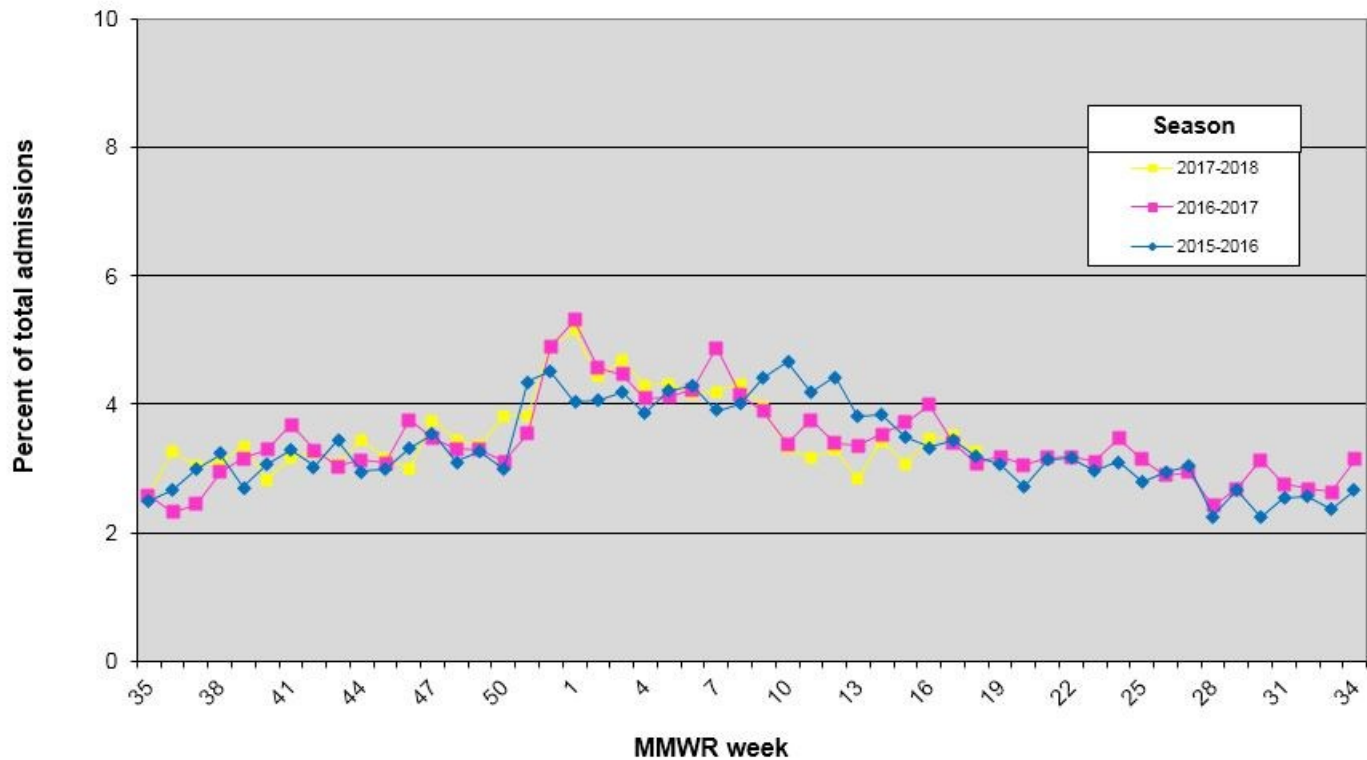
Sentinel Provider Surveillance System: Reporting of influenza-like illness (ILI) is conducted through a statewide network of volunteer outpatient providers known as ILINet. The proportion of patients exhibiting ILI is reported to the DPH on a weekly basis. ILI is defined as a cough or sore throat in the absence of a known cause, and the presence of a fever > 100° F.

**Figure 2. Outpatient Influenza-Like Illness Surveillance Network (ILINet),
Percentage of Patients with Influenza-Like Illness (ILI);
2015-16, 2016-17, 2017-18**



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 = 3411) with Positive Lab Tests by Subtype & Week, Connecticut, through 5/5/2018

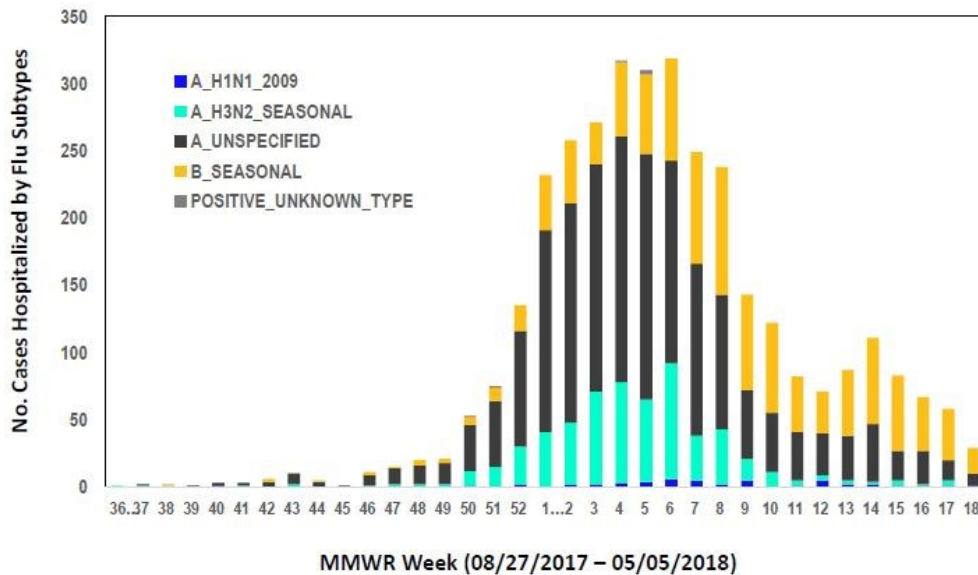
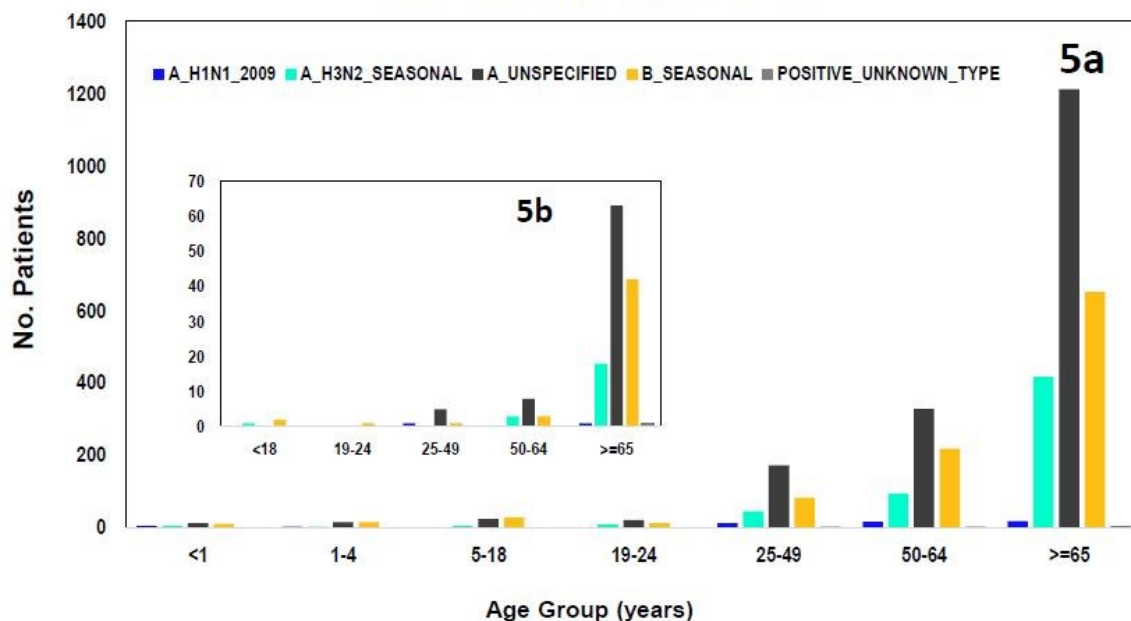
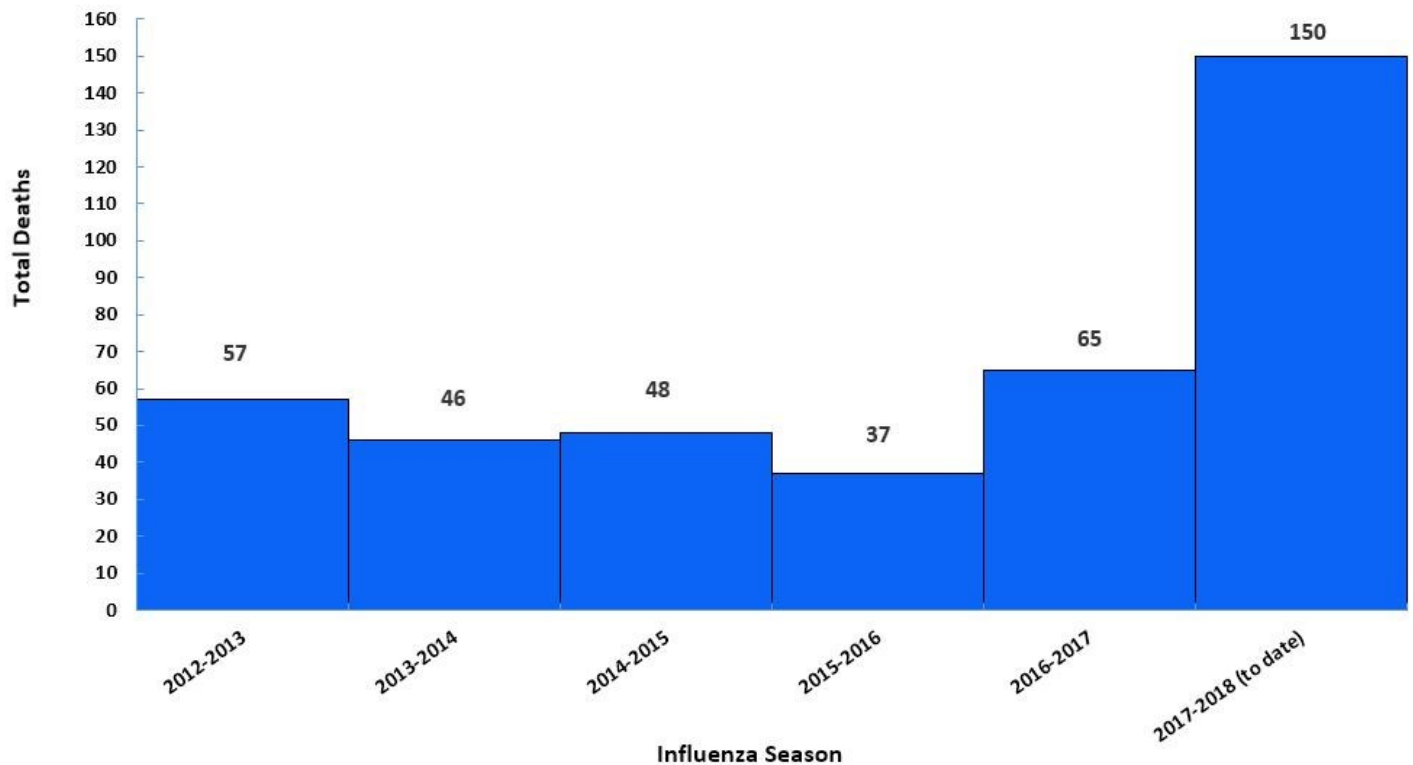


Figure 5. Hospitalized Patients (5a, n= 3411) and Flu-Associated Death (5b, n=150) with Positive Laboratory Tests by Influenza Subtype and Age Group, Connecticut, through 5/5/2018



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 5/09/2018



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 = 11604) by Influenza Subtype and Week, Connecticut, through 5/5/2018

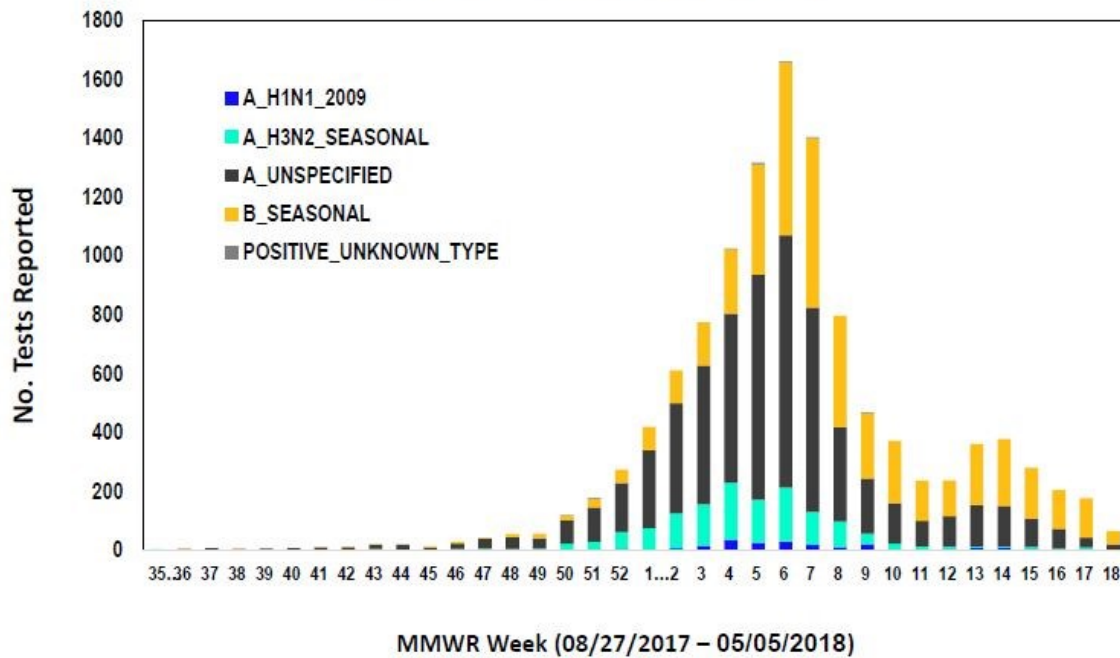


Figure 7. Proportion of Cumulative Positive Laboratory Tests (n = 11604) by Influenza Subtype, Connecticut, through 5/5/2018

