

# FLUSURV-NEWS

## CONNECTICUT EMERGING INFECTIONS PROGRAM



### WELCOME TO THE 2018-2019 FLU SEASON

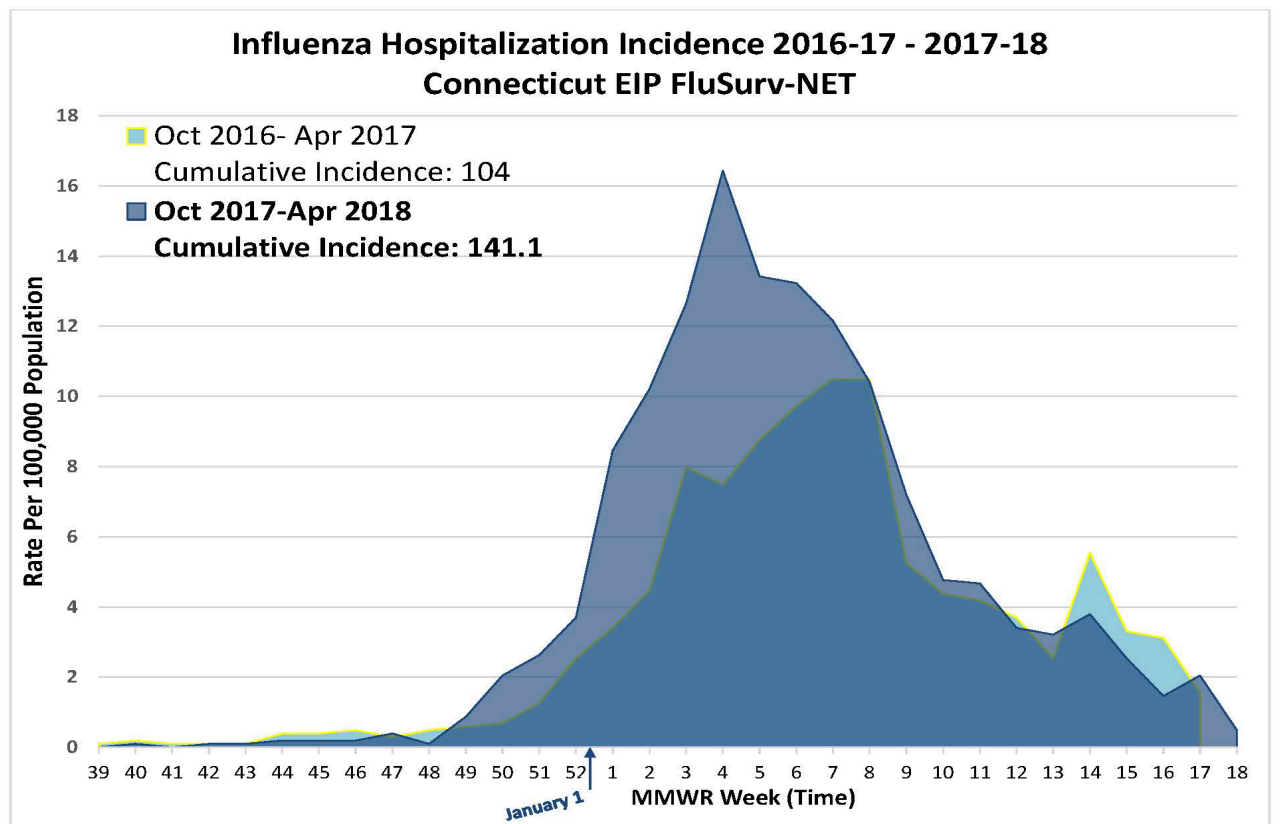
It's the most wonderful time of the year! At least, we, the Connecticut FluSurv-NET team, think so! During each flu season, influenza hospitalization data collected through FluSurv-NET are used for timely assessments of national influenza incidence, severity, and disease burden. Our data are valuable for evaluating interventions like influenza vaccines and antiviral medications. You can access FluSurv-NET data here: [FluView](#)

### In the News

#### First Universal Flu Vaccine Enters Phase 3 Trials, M-001

A universal influenza vaccine – a vaccine that would provide protection for more than one season against multiple flu strains – is a major goal in the fight against influenza and we may be one step closer to achieving it. BiondVax launched a Phase 3 Clinical Trial of M-001, a universal influenza vaccine, in Eastern Europe this past August with hopes of showing that M-001 reduces illness caused by any influenza strain. Unlike current influenza vaccines, M-001 contains neither an attenuated or inactivated virus, rather, it contains nine highly conserved viral epitopes, from three different viral proteins, that are common to 40,000 influenza viruses identified by the National Institutes of Health. This is the first universal vaccine to progress to this stage, with results expected to be released by BiondVax in late 2020. For additional information, please see the link below.

[The Scientist](#)



Influenza Hospitalization incidence for residents of New Haven and Middlesex Counties is shown here. The 2017-18 influenza season was a big one! The graph indicates that, influenza hospitalizations during 2017-18 almost completely eclipsed influenza hospitalization rates from the previous year.



### IN THIS ISSUE

**Artificial Antibody to Fight the Flu**

**New FDA-Approved Antiviral Treatment**

## Who We Are

### Connecticut FluSurv-NET

FluSurv-NET is a network of epidemiologists across the nation gathering data on influenza severity each year. Our data are used to estimate age-specific hospitalization rates on a weekly basis and describe characteristics of persons hospitalized with influenza illness. To explore how these data are being utilized check out FluView Interactive, a weekly influenza surveillance report, which allows you to make comparisons across flu seasons, regions and a variety of other demographics. [FluView Interactive](#)

In Connecticut, FluSurv-NET functions under a cooperative agreement with the Centers for Disease Control and Prevention and is a collaborative effort involving the Connecticut Department of Public Health and Yale School of Public Health. Connecticut FluSurv-NET conducts enhanced surveillance for influenza cases in New Haven and Middlesex Counties. More information is available here: [FluSurv-NET](#)



Need influenza data for an upcoming meeting or report? Contact us! We're always happy to talk flu.

## Thank you!



Thank you for all your efforts and support throughout the year! We could not conduct surveillance for hospitalized influenza cases without you! Thank you.

Please continue to report influenza-related hospitalizations electronically through [CTEDSS](#)

### Contact Us



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## New Antiviral

### Xofluza

The FDA has approved a new antiviral drug to treat flu, sold under the name Xofluza (generic=baloxavir marboxil), that has been found to be at least as effective as Tamiflu (generic=oseltamivir) in shortening duration of illness. It has been found to combat both A and B flu strains, and may work against drug-resistant strains of flu. It is a single-dose treatment intended for patients 12 years of age and older who have had symptoms for less than 48 hours. It works by blocking viral polymerase, an enzyme that is necessary for the virus to make copies of itself. In two randomized controlled trials, a single oral dose was found to significantly reduce not only the duration of fever and other flu symptoms but also the duration of viral shedding and viral concentration in the nose and throat compared with placebo or Tamiflu. The most commonly reported side effects among patients taking Xofluza were bronchitis and diarrhea. This is the first new flu drug to be approved by the FDA in 20 years. Research is ongoing to determine if the drug is safe to use among children under age 12 and to see if it has the potential to lower rates of hospitalization and death due to flu. For additional information, please see the link below. [FDA](#)

## Universal Protection

### International Team of Scientists Produce Mega-Antibody to Fight against Flu

Following the discovery that people sometimes produce rare antibodies that are effective at neutralizing a wide range of flu strains, these so-called broadly neutralizing antibodies (bnAbs) are currently undergoing clinical trials as potential therapeutic agents. BnAbs work by targeting a component nearly identical to all flu strains instead of hemagglutinin (HA). By giving flu vaccines to llamas, researchers isolated the resulting BnAbs (both influenza A and B) and strung the antibodies together to engineer a multi-domain antibody (MDAb): MD3606. Intranasal administration to mice showed protection against all influenza strains tested, except for an avian H12 virus. The discovery of MDABs offers substantial benefit for future influenza prophylaxis and therapy, but human clinical trials are still needed to ensure these Multidomain antibodies will be safe and effective in humans. For additional information, please see link: [Science Magazine](#)