

CDC FluSurv-NET Interactive: Laboratory-Confirmed Influenza-Associated Hospitalizations Application Quick Reference Guide

Introduction

This Quick Reference Guide provides guidance on using the FluSurv-NET web application on this webpage: <https://gis.cdc.gov/GRASP/Fluview/FluHospRates.html> and gives an overview of the influenza hospitalization surveillance network (FluSurv-NET).

This application features data shown in the CDC FluView report, which provides a weekly summary and interpretation of key indicators about the United States Influenza season. This includes information related to influenza-related outpatient visits, emergency department visits, hospitalizations, deaths, and laboratory data. The CDC FluView report is accessible through the following weblink: <https://www.cdc.gov/flu/weekly/index.htm>.

About the Data

Laboratory-confirmed influenza-associated hospitalization rates are monitored through the Influenza-Associated Hospitalization Surveillance Network (FluSurv-NET). [FluSurv-NET](#) conducts population-based surveillance for laboratory-confirmed influenza-associated hospitalizations in children (persons younger than 18 years) and adults. The current network covers over 90 counties or county equivalents in the 10 Emerging Infections Program (EIP) states (CA, CO, CT, GA, MD, MN, NM, NY, OR, and TN) and four additional states (MI, NC, OH, and UT) through the Influenza Hospitalization Surveillance Project (IHSP). Approximately 9% of US population is covered by this surveillance system.

Note: FluSurv-NET hospitalization data are preliminary and subject to change as more data become available.

Accessing the FluSurv-NET Web-based Application

The FluSurv-NET application is available online and accessible by the public through the following internet link:

<http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html>.

Application requirements:

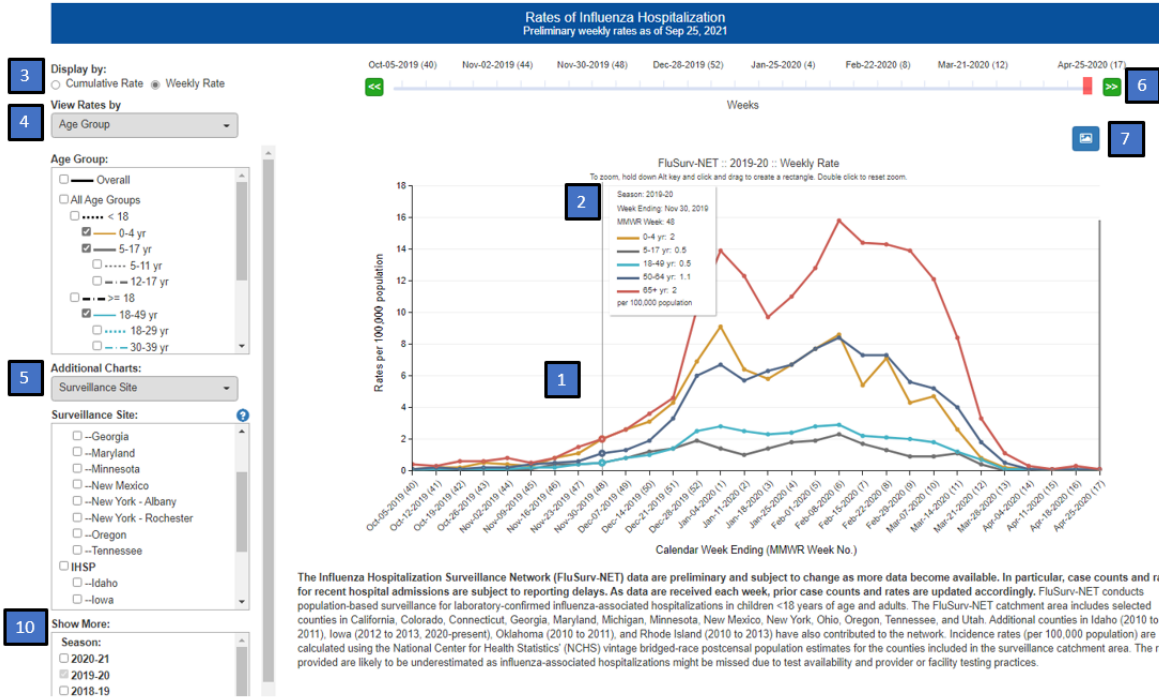
- Preferred browsers are Google Chrome, Edge, Safari or Mozilla Firefox. Internet Explorer is supported, but not a preferred browser due to decreased functionality and visualizations of the interactive web application.

Once the website is loaded, a disclaimer dialog box will appear. Please review the disclaimer for important reference information.

Application Functions and Tool Overview

Below is an image of the default view of the current influenza season in laboratory-confirmed influenza hospitalizations web application. This interactive tool allows users to display and query information about laboratory-confirmed influenza hospitalizations by age group, sex, race and ethnicity, and influenza season. The numbered blue boxes highlight various functions of the web application, with the corresponding numbered descriptions for each tool function listed below.

The screenshots below contain preliminary data that are subject to change. These are examples of the appearance of the interactive web application.



The Influenza Hospitalization Surveillance Network (FluSurv-NET) data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to reporting delays. As data are received each week, prior case counts and rates are updated accordingly. FluSurv-NET conducts population-based surveillance for laboratory-confirmed influenza-associated hospitalizations in children <18 years of age and adults. The FluSurv-NET catchment area includes selected counties in California, Colorado, Connecticut, Georgia, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Tennessee, and Utah. Additional counties in Idaho (2010 to 2011), Iowa (2012 to 2013, 2020-present), Oklahoma (2010 to 2011), and Rhode Island (2010 to 2013) have also contributed to the network. Incidence rates (per 100,000 population) are calculated using the National Center for Health Statistics' (NCHS) vintage bridged-race postcensal population estimates for the counties included in the surveillance catchment area. The rates provided are likely to be underestimated as influenza-associated hospitalizations might be missed due to test availability and provider or facility testing practices.

1. **Laboratory-Confirmed Influenza-Associated Hospitalizations Graph** – The default graph displays the cumulative age-stratified rates per 100,000 population of laboratory-confirmed influenza-associated hospitalizations.
2. **Zoom/Info Tool** – To see detailed information, use your mouse to hover over a point on a line. If lines are overlapping, the tool will display information for all the overlapping points. To zoom in on a specific area of the graph, press the Alt key, hold down your mouse and drag a box around the area of interest. To reset the zoom, double click within the chart area.
3. **Display By** – Click on the buttons to choose between cumulative or weekly rates. “Cumulative Rate” will display the preliminary cumulative crude hospitalization rates for the selected surveillance groups. “Weekly Rate” will display the preliminary weekly crude hospitalization rates for the selected surveillance groups.
4. **View Rates by** – A single click on the drop-down menu will reveal four options to select from: hospitalization rates by age group, sex, race and ethnicity, and season. For each selection, overall rates will be represented by a black solid line. This drop-down menu appears only when “Surveillance Site” is selected under “Additional Charts”.
 - a. To view age-stratified rates, select “Age Group” to display a box with checkboxes to view overall rates and rates for specific age groups: <18, 0-4, 5-17, 5-11, 12-17, ≥18, 18–49, 18–29, 30–39, 40–49, 50–64, 65+, 65–74, 75–84, and 85+ years. Additionally, selecting multiple sites under the “Surveillance Site” box and/or multiple seasons under the “Show More” box will produce separate surveillance site and/or season graphs.

Display by:
 Cumulative Rate Weekly Rate

View Rates by
 Age Group

Age Group:

- 0-4 yr
- 5-17 yr
- 5-11 yr
- 12-17 yr
- ≥ 18
- 18-49 yr
- 18-29 yr
- 30-39 yr
- 40-49 yr
- 50-64 yr
- 65+ yr

Additional Charts:
 Surveillance Site

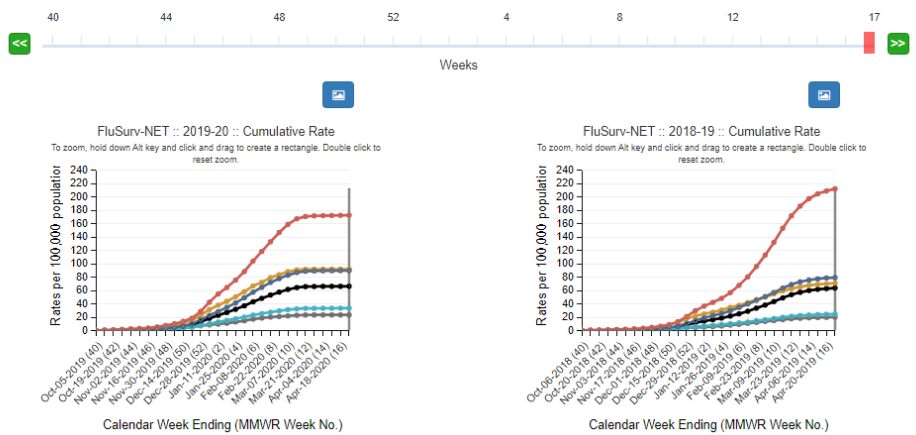
Surveillance Site:

- FluSurv-NET
- EIP
- California
- Colorado
- Connecticut
- Georgia
- Maryland
- Minnesota
- New Mexico
- New York - Albany
- New York - Rochester

Show More:

Season:

- 2020-21
- 2019-20
- 2018-19



The Influenza Hospitalization Surveillance Network (FluSurv-NET) data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to reporting delays. As data are received each week, prior case counts and rates are updated accordingly. FluSurv-NET conducts population-based surveillance for laboratory-confirmed influenza-associated hospitalizations in children <18 years of age and adults. The FluSurv-NET catchment area includes selected counties in California, Colorado, Connecticut, Georgia, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Tennessee, and Utah. Additional counties in Idaho (2010 to 2011), Iowa (2012 to 2013, 2020-present), Oklahoma (2010 to 2011), and Rhode Island (2010 to 2013) have also contributed to the network. Incidence rates (per 100,000 population) are calculated using the National Center for Health Statistics' (NCHS) vintage bridged-race postcensal population estimates for the counties included in the surveillance catchment area. The rates provided are likely to be underestimated as influenza-associated hospitalizations might be missed due to test availability and provider or facility testing practices.

- b. To view sex-stratified rates, select “Sex” to display a box with checkboxes to view overall rates and rates by sex (male and female). Additionally, selecting multiple sites under the “Surveillance Site” box and/or multiple seasons under the “Show More” box will produce separate surveillance site and/or season graphs.
 - c. To view rates stratified by race and ethnicity, select “Race/ Ethnicity” to display a box with checkboxes to view overall rates and rates by non-Hispanic White, non-Hispanic Black, Hispanic or Latino, non-Hispanic Asian or Pacific Islander, and non-Hispanic American Indian or Alaska Native. Additionally, selecting multiple sites under the “Surveillance Site” box and/or multiple seasons under the “Show More” box will produce separate surveillance site and/or season graphs.
 - d. To view seasonal rates, select “Season” to display a box with checkboxes to view rates by influenza season. Additionally, selecting multiple sites under the “Surveillance Site” box and/or multiple seasons under the “Show More” box will produce separate surveillance site and/or season graphs.
5. **Additional Charts** – A single click on the drop-down menu will reveal additional options to view site-specific hospitalization rates by various demographics. The networks are the Influenza-Associated Hospitalization Surveillance Network (FluSurv-NET) (EIP and IHSP surveillance networks combined), Emerging Infections Program (EIP) only, and Influenza Hospitalization Surveillance Project (IHSP) only.
- a. Selecting “Surveillance Site” will display rates for participating FluSurv-NET surveillance sites. Additionally, selecting multiple seasons can be displayed across influenza seasons in the “Show More” box. Selecting multiple seasons will produce separate graphs.

Display by:
 Cumulative Rate Weekly Rate

View Rates by
 Age Group

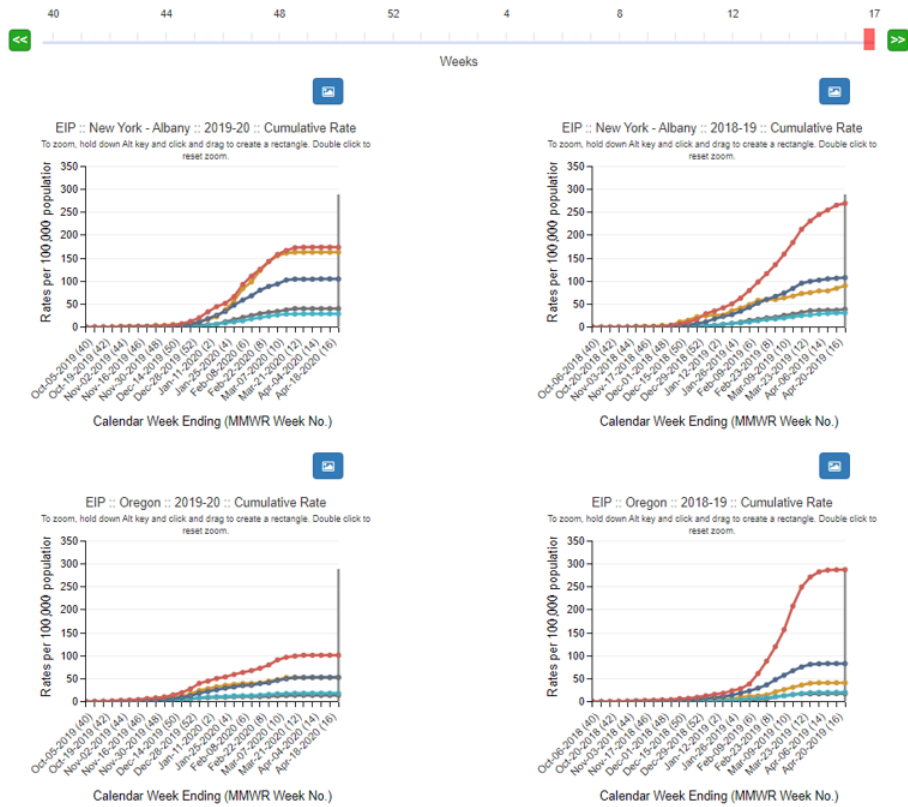
Age Group:
 Overall
 All Age Groups
 0-4 yr
 5-17 yr
 18-49 yr
 50-64 yr
 65-74 yr
 75-84 yr
 85-94 yr
 >= 95 yr

Additional Charts:
 Surveillance Site

Surveillance Site:
 --Maryland
 --Minnesota
 --New Mexico
 --New York - Albany
 --New York - Rochester
 --Oregon
 --Tennessee

IHSP
 --Idaho
 --Iowa
 --Michigan

Show More:
 Season:
 2020-21
 2019-20
 2018-19
 2017-18
 2016-17



- b. Selecting “Season by Site” will display rate graphs by participating FluSurv-NET surveillance sites by influenza season selected in the “Season by Site” box. Selecting multiple seasons will produce separate graphs by season.

Hospitalization Rates [Hospitalizations by Virus Type or Age](#) [Characteristics](#) [Underlying Conditions](#) [Disclaimer](#) [Download Data](#) [Help](#)

Rates of Influenza Hospitalization
 Preliminary cumulative rates as of Sep 25, 2021

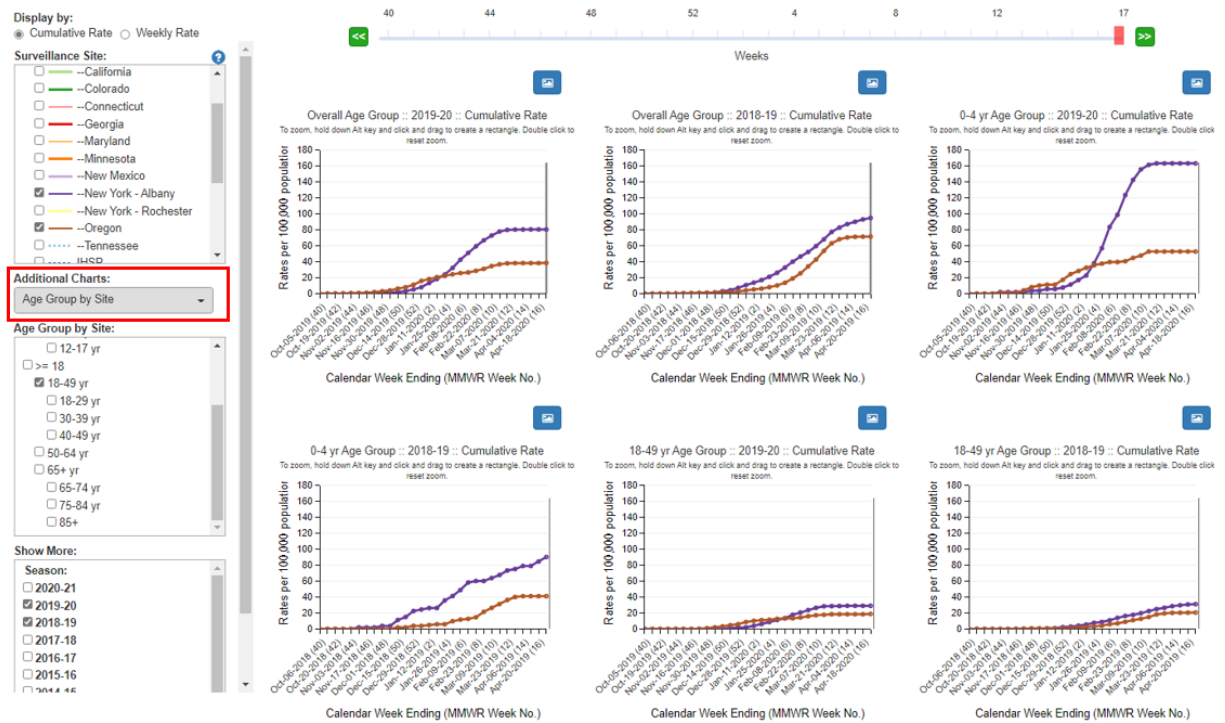
Display by:
 Cumulative Rate Weekly Rate

Surveillance Site:
 All Networks
 FluSurv-NET
 EIP
 --California
 --Colorado
 --Connecticut
 --Georgia
 --Maryland
 --Minnesota
 --New Mexico
 --New York - Albany

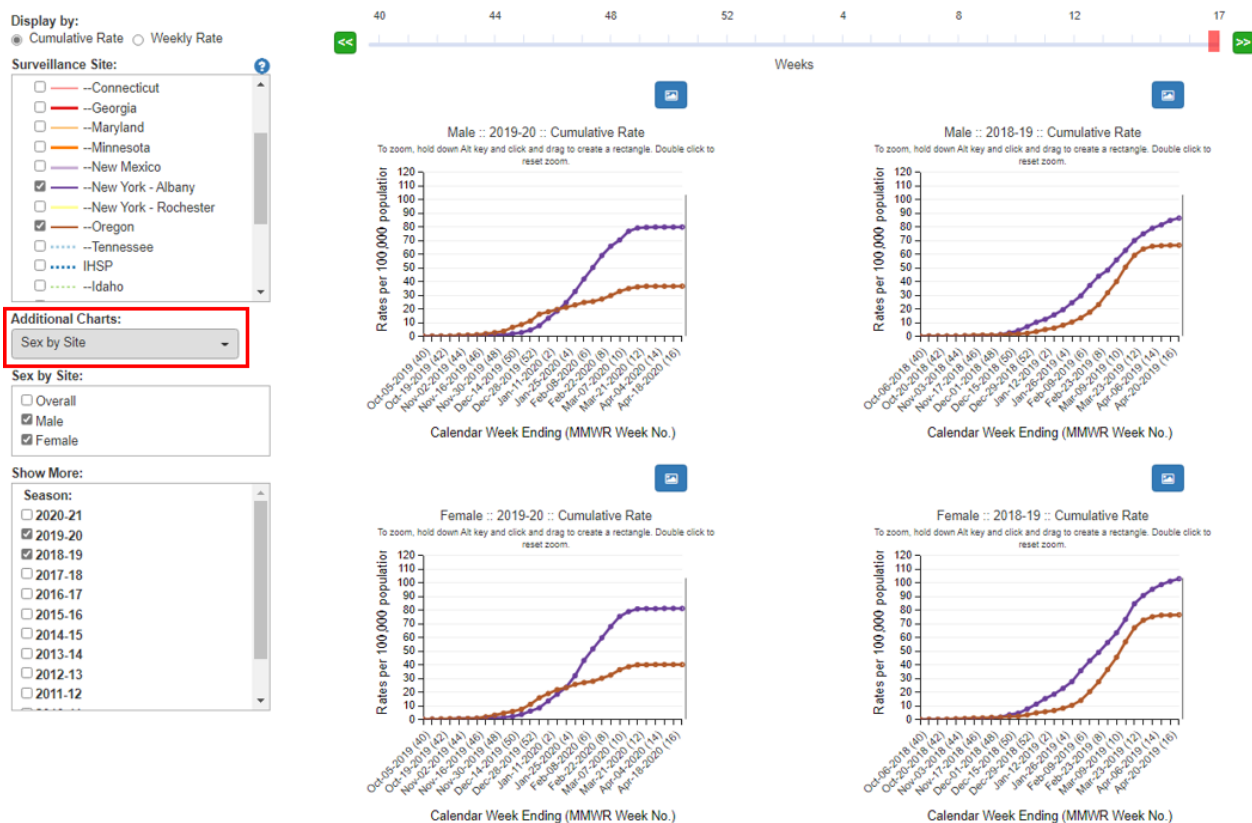
Additional Charts:
 Season by Site

Season by Site:
 2020-21
 2019-20
 2018-19
 2017-18

- c. Selecting “Age Group by Site” will display rate graphs for participating FluSurv-NET surveillance sites by age groups selected in the “Age Group by Site” box. Additionally, site-specific rates can be displayed across influenza seasons in the “Show More” box. Selecting multiple age groups or seasons will produce separate graphs.



- d. Selecting “Sex by Site” will display rate graphs for participating FluSurv-NET surveillance sites by sex selected in the “Sex by Site” box. Additionally, site-specific rates can be displayed across influenza seasons in the “Show More” box. Selecting multiple sexes or seasons will produce separate graphs.



- e. Selecting “Race/Ethnicity” by Site will display rate graphs for participating FluSurv-NET surveillance sites by race and ethnicity selected in the “Race/Ethnicity by Site” box. Additionally, site-specific rates can be displayed across influenza seasons in the “Show More” box. Selecting multiple race and ethnicity or seasons will produce separate graphs.

Display by: Cumulative Rate Weekly Rate

Surveillance Site:

- Connecticut
- Georgia
- Maryland
- Minnesota
- New Mexico
- New York - Albany
- New York - Rochester
- Oregon
- Tennessee
- IHSP
- Idaho

Additional Charts:

Race/Ethnicity by Site: Race/Ethnicity by Site

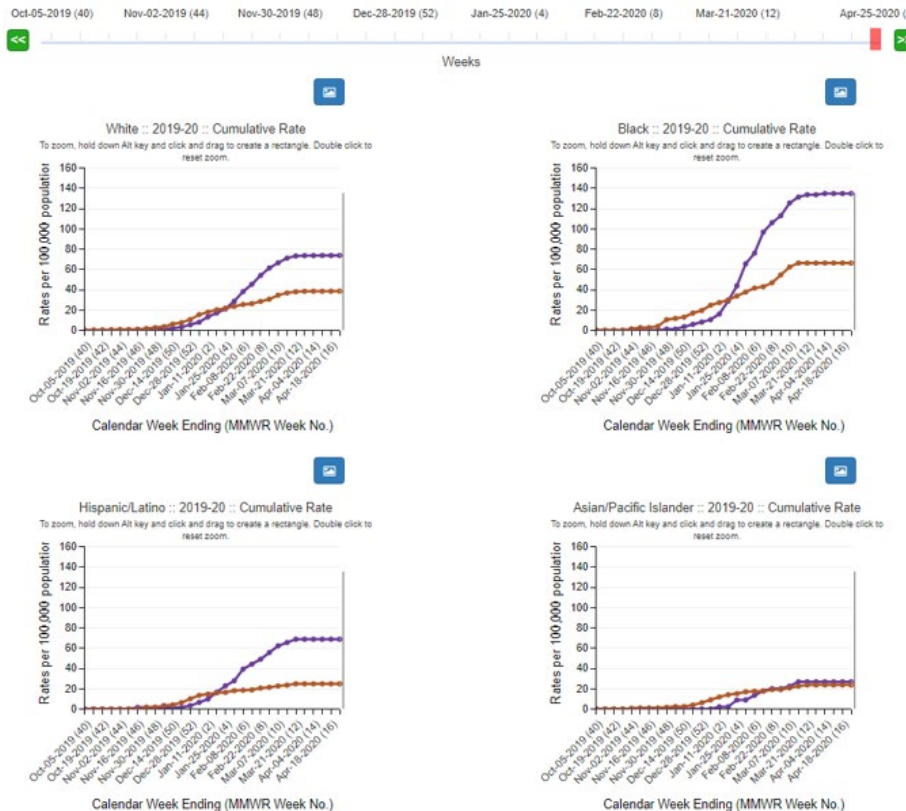
Race/Ethnicity by Site:

- Overall
- White
- Black
- Hispanic/Latino
- Asian/Pacific Islander
- American Indian/Alaska Native

Show More:

Season:

- 2020-21
- 2019-20
- 2018-19
- 2017-18
- 2016-17
- 2015-16
- 2014-15
- 2013-14
- 2012-13
- 2011-12



6. **MMWR Week Slider Bar** – Data are displayed by MMWR week. Located above the graph, the MMWR week is the week of the year that local or state health departments use for disease incidence reporting and publishing. The weeks are assigned according to the calendar date on which the week ends. Values for MMWR week range from 1–53, although most years consist of 52 weeks. To see data for a specific MMWR week, use the cursor to move the slider button across the week numbers. A grey line will be displayed on the graph(s) to indicate the location of the selected MMWR week on each graph. The buttons with green and white arrow icons can also be used to move the slider from week to week.
7. **Download Image Button** – To create an image of the data displayed in the current view, click the “Download Image” button. A file download dialog will appear with options to open, save or discard (cancel) the currently displayed graph(s).
8. **Download Data Button** – To create a copy of the data, click the “Download Data” button. A zip file will be created with the data stored in a separate comma separated values (*.csv) files.
9. **Help** – The “Help” menu button provides a detailed overview and describes the full functionality of the FluSurv-NET web application.
10. **Show More** – Click on the season of interest to display data in a separate graph by season.