

Flu Forecasting Dashboard

Influenza forecasting uses statistical and computational models to predict key aspects of seasonal flu activity, including weekly hospital admissions data, changes in epidemic trends, and peak activity. FluSight is the CDC's collaborative influenza forecasting initiative that brings together academic institutions, private companies, and public health agencies to generate real-time predictions about flu activity across the nation¹. Participating teams submit weekly forecasts using diverse modeling approaches, which are then synthesized into ensemble predictions that help public health officials make informed decisions about resource allocation, vaccination campaigns, and public health messaging during the flu season.



The Epistorm consortium employs multiple models using different methodologies to provide influenza forecasts to the FluSight forecasting challenge. This platform presents weekly forecasts of hospital admissions, predicted epidemic trend changes, and seasonal activity levels, along with an evaluation page to assess forecast performance. The forecast page displays three types of information: hospital activity forecast, trend forecasts and weekly hospital admission forecasts. The evaluations page shows model performance aggregated across time and geographic location using standard scoring metrics including the weighted interval score, mean absolute percentage error, and coverage.

 ${\it 1. https://www.cdc.gov/flu-forecasting/index.html}\\$

At a glance

Our dashboard enables decision makers and the public to stay informed during the flu season and examine forecast performance, with up-to-date forecasts up to three weeks out. Anticipating flu activity helps manage uncertainty and risk from both the public health and individual perspectives. CDC's FluSight forecast hub coordinates the efforts of research teams across the country, with consistent forecasting since the 2021-2022 season.

The dashboard presents several models affiliated with Epistorm as well as FluSight's ensemble of the dozens of models participating in the forecast hub. Our Forecasts page displays observed ongoing and anticipated flu activity with characterizations of its relative severity and directional trends. Our Evaluations page provides easy comparison of model performance in both immediate retrospect and season-by-season, as well as a detailed view of individual models' weekly performance over time.

Public health relevance

Equips US public health officials, policymakers, health care providers, and the public with easily digestible and explorable visualizations of up-to-date flu activity forecasts and evaluations of forecast performance.

