



COVID-19

# COVID-19 Forecasts: Hospitalizations

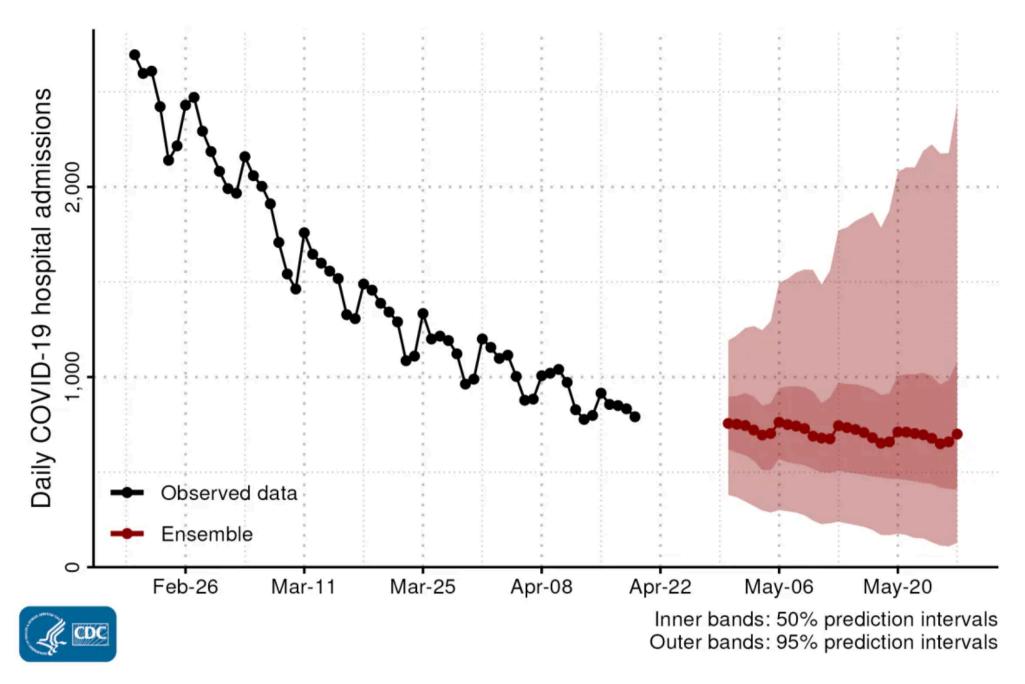
Updated May 2, 2024

Forecasted daily COVID-19 hospital admissions as of April 29, 2024

## Interpretation of Forecasts of New Hospitalizations

- This week's national ensemble predicts 130 to 2,400 daily COVID-19 hospital admissions likely reported on May 27. Ensemble hospitalization estimates for the next four weeks are also available for states and territories.
- Forecasts and recent hospitalization data for Arkansas and New Mexico should be interpreted with caution until technical data issues can be investigated and resolved.
- Ensemble forecasts combine diverse independent team forecasts into one forecast. While they have been among the most reliable forecasts in performance over time, even the ensemble forecasts have not reliably predicted rapid changes in the trends of reported cases, hospitalizations, and deaths. They should not be relied upon for making decisions about the possibility or timing of rapid changes in trends.

### **National Forecasts**



#### Download full-sized image

- The figure shows the number of daily COVID-19 hospital admissions reported in the United States each day from February 20 through April 19 and forecasted daily COVID-19 hospital admissions over the next four weeks, through May 27.
- This week, ensemble forecasts of daily COVID-19 hospital admissions included forecasts from 10 modeling groups, each of which contributed a forecast for at least one jurisdiction.
- Models make various assumptions about the levels of social distancing and other interventions, which may not reflect recent changes in behavior. See model descriptions below for details on the assumptions and methods used to produce the forecasts.

Download national forecast data <a> [CSV – 6 KB]</a>

### **State Forecasts**

State-level forecasts show the predicted number of daily COVID-19 hospital admissions for the next four weeks by state. Each state forecast figure uses a different scale due to differences in the number of daily COVID-19 hospital admissions between states and only forecasts meeting a set of ensemble inclusion criteria are shown. Further details are available here: https://covid19forecasthub.org/doc/ensemble/ . Plots of the state-level ensemble forecasts and the underlying data can be downloaded below.

Download state forecasts [PDF – 1 MB]

Download state forecast data **☐** [CSV – 2 MB]

Additional forecast data and information about submitting forecasts are available at the COVID-19 Forecast Hub ...

# Forecast Inclusion, Evaluation, and Assumptions

The teams with forecasts included in the ensembles are displayed below. Forecasts are included when they meet a set of submission and data quality requirements, further described at the COVID-19 Forecast Hub .

Ensemble and individual team forecast performance is evaluated using a variety of metrics, including the assessment of prediction interval coverage, available at https://delphi.cmu.edu/forecast-eval/ .

Reported hospitalizations can vary due to variable staffing and inconsistent reporting patterns within the week. Thus, daily variations in the reported values and the forecasts may not fully represent the true number of hospitalizations in each jurisdiction on a specific day.

### **Contributing Teams**

Individual model websites are linked where available; model details are also available at https://covid19forecasthub.org/community/  $\square$ .

- CEPH Lab at Indiana University (Model: CEPH)
- Carnegie Mellon Delphi Group (Model: CMU)
- Center for Forecasting and Outbreak Analytics (Model: CFA-WW)
- Northeastern University, Laboratory for the Modeling of Biological and Sociotechnical Systems (Model: MOBS)
- One Health Trust and Johns Hopkins University (Model: OHT-JHU-N-BEATS)
- Srivastava Group (Model: SGroup-RF)
- University of Massachusetts, Amherst (Model: UMass-GBQ)
- University of Massachusetts, Amherst (Model: UMass-Sarix)
- University of Massachusetts, Amherst (Model: UMass-TE)
- University of Texas, Austin (Model: UT)

Additional Resources
Previous COVID-19 Forecasts: Hospitalizations – 2024
FAQ: COVID-19 Data and Surveillance
CDC COVID Data Tracker
COVID-19 Mathematical Modeling

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