![CDC Centers for Disease Control and Prevention]

Influenza (Flu)

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# Forecasts of Flu Hospitalizations

Updated April 5, 2023

Reported and forecasted new influenza hospitalizations as of April 4, 2023.

Interpretation of National Forecasts of New Hospitalizations

- This week's ensemble predicts that the number of new weekly confirmed influenza hospital admissions will remain stable or have an uncertain trend nationally, with **170 to 3,300** new confirmed influenza hospital admissions likely reported in the week ending April 29, 2023.

- This week, 17 modeling groups contributed 18 forecasts that were eligible for inclusion in the ensemble forecasts for at least one jurisdiction. Contributing teams are listed below.

- Ensemble forecasts combine forecasts from diverse models into one forecast. They have been among the most reliable forecasts in performance for previous influenza and COVID-19 forecasting efforts, but even the ensemble forecasts may not reliably predict rapid changes.

- The figure shows the number of new confirmed influenza hospital admissions reported in the United States each week from September 1 through April 1 and forecasted new influenza hospital admissions per week over the next 4 weeks, through April 29. Hospitals are required to report laboratory-confirmed influenza hospitalizations to HHS Protect daily. See COVID-19 Guidance for Hospital Reporting and FAQs 📄 ⧉ for additional details on this guidance.

National Forecast

Inner Bands: 50% Prediction Intervals
Outer Bands: 95% Prediction Intervals
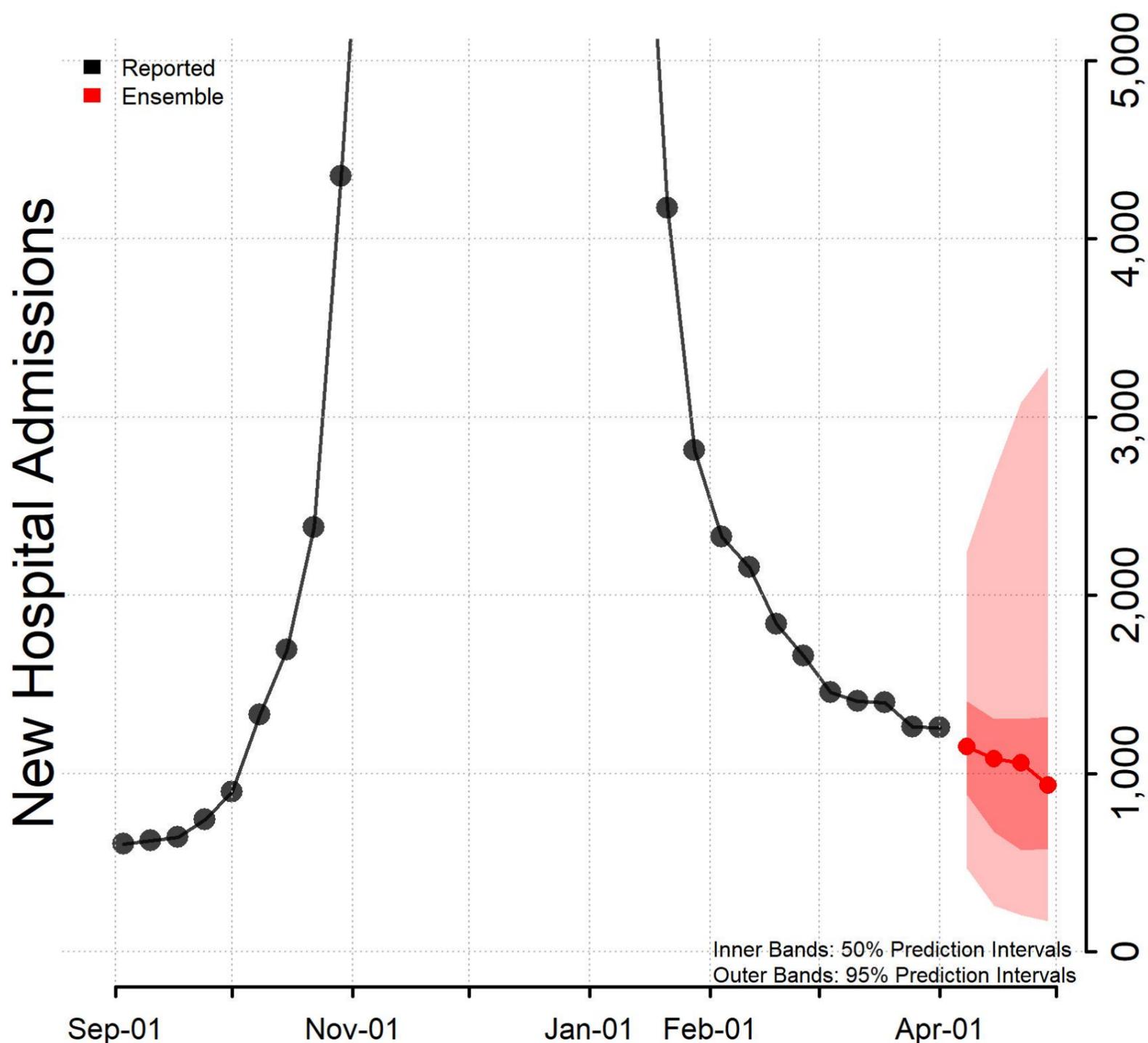
Download all national data [XLS – 10 KB]

State Forecasts

State-level forecasts show the predicted number of new influenza hospital admissions per week for the next 4 weeks by state. Each state forecast figure uses a different scale due to differences in the number of new influenza hospital admissions per week between states and only forecasts included in the ensemble are shown. Plots of the state-level ensemble forecasts and the underlying data can be downloaded below.

Download state forecasts [PDF – 757 KB]

Download all forecast data [XLS – 339 KB]

Additional forecast data and information about submitting forecasts are available at https://github.com/cdcepi/Flusight-forecast-data .

Contributing Teams

- California Department of Public Health (CADPH) (Model: FluCAT)
- Carnegie Mellon Delphi Group (Model: CMU-TimeSeries)
- CEPH Lab at Indiana University (Model: Rtrend_fluH)

- Fogarty International Center, National Institutes of Health (NIH) ↗ (Model: Flu_ARIMA)
- Georgia Institute of Technology ↗ (Model: GT-FluFNP)
- Los Alamos National Lab and Northern Arizona University ↗ (Model: LosAlamos_NAU-CModel_Flu)
- MIGHTE ↗ (Model: Nsemble)
- MOBS Lab at Northeastern ↗ (Model: MOBS-GLEAM_FLUH)
- Predictive Science Inc ↗ (Model: PSI-DICE)
- Signature Science ↗ (Model: SigSci-CREG)
- Signature Science ↗ (Model: SigSci-TSENS)
- Srivastava Group ↗ (Model: SGroup-RandomForest)
- UGA_flucast ↗ (Model: UGA_flucast-OKeeffe)
- UNC Infectious Disease Dynamics ↗ (Model: InfluPaint)
- University of Georgia Center for the Ecology of Infectious Diseases Forecasting Working Group ↗ (Model: CEID-Walk)
- University of Massachusetts-Amherst ↗ (Model: UMass-trends_ensemble)
- University of Virginia, Biocomplexity Institute ↗ (Model: UVAFluX-Ensemble)
- Virginia Tech, Sanghani Center for Artificial Intelligence and Data Analytics ↗ (Model: VTSanghani-ExogModel)

Last Reviewed: April 5, 2023