



Influenza (Flu)

Forecasts of Flu Hospitalizations

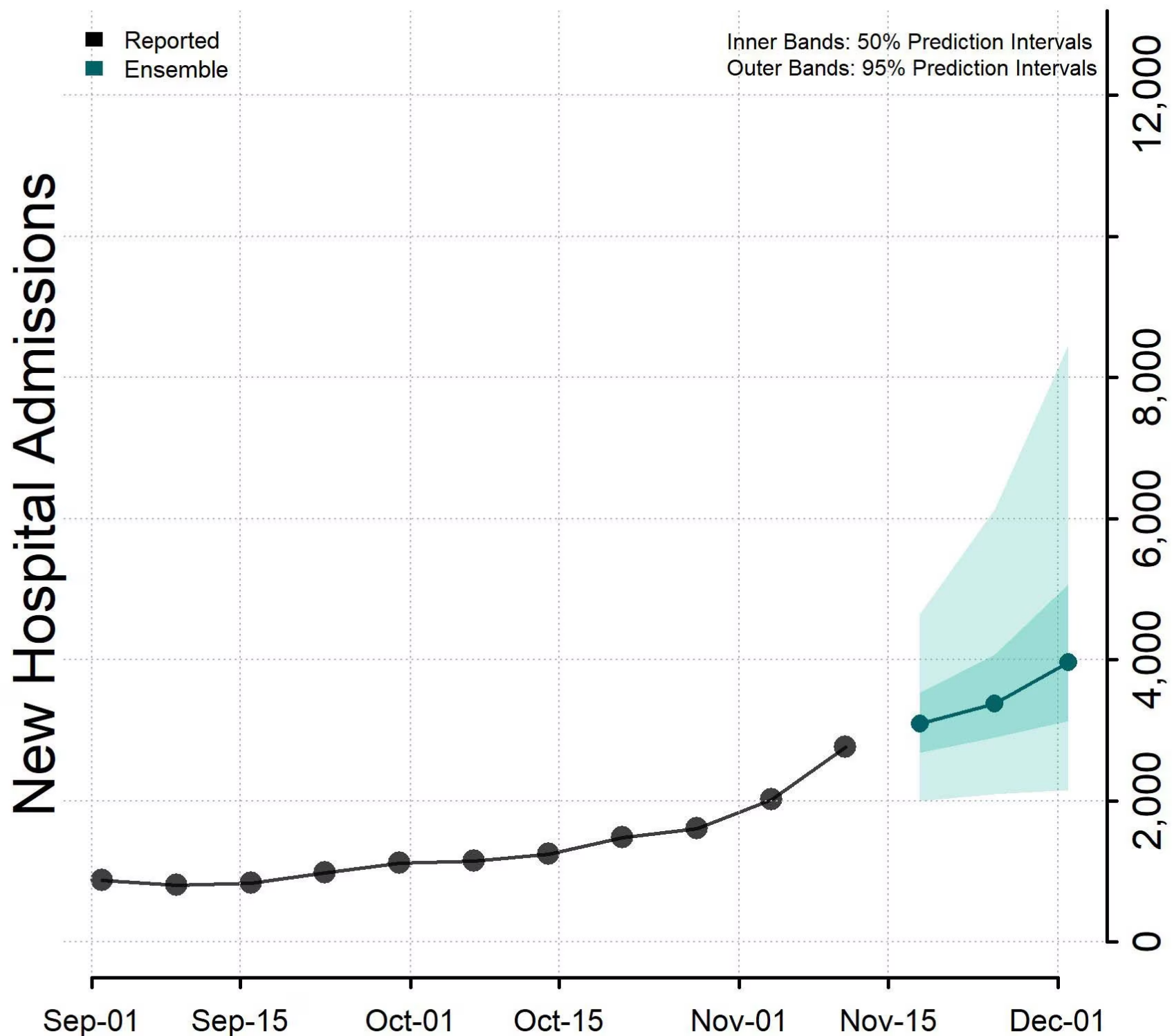
Updated November 17, 2023

Reported and forecasted new influenza hospital admissions as of November 15, 2023.

Interpretation of National Forecasts of New Hospitalizations

- This week's ensemble predicts that the number of new weekly laboratory confirmed influenza hospital admissions will likely increase nationally, with **2,200 to 8,500** laboratory confirmed influenza hospital admissions likely reported in the week ending December 2, 2023.
- This week, 24 modeling groups contributed 29 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 laboratory confirmed influenza hospital admissions reported in the United States each week from September 1 through November 11 and forecasted new influenza hospital admissions per week for this week and the next 2 weeks, through December 2. Hospitals are required to report daily laboratory-confirmed influenza hospitalizations to HHS Protect. See [COVID-19 Guidance for Hospital Reporting and FAQs](#)  [680 KB, 52 pages]  for additional details on this guidance.

National Forecast



[Download all national data](#)  [XLS – 10 KB]

State Forecasts

State-level forecasts show the predicted number of new laboratory confirmed influenza hospital admissions per week for this week and the next 2 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](#)  [750 KB, 14 Pages]

[Download all forecast data](#)  [XLS – 385 KB]

Additional forecast data and information about submitting forecasts are available at <https://github.com/cdcepi/FluSight-forecast-hub> .

Contributing Teams and Models

- [California Department of Public Health \(CDPH\)](#)  (Model: FluCAT)
- [Carnegie Mellon Delphi Group](#)  (Model: CMU-TimeSeries)
- [Center for Forecasting and Outbreak Analytics \(CFA/CDC\); renewal model team](#) (Model: cfa-flu-epidemia-light)

- [Center for Forecasting and Outbreak Analytics \(CFA/CDC\); SEIR model team](#) (Model: flu-mechanistic)
- [CEPH Lab at Indiana University](#) [↗](#) (Model: Rtrend_fluH)
- [Columbia University](#) [↗](#) (Model: CU-ensemble)
- [Fogarty International Center, National Institutes of Health \(NIH\)](#) [↗](#) (Model: Flu_ARIMA)
- [Georgia Institute of Technology](#) [↗](#) (Model: GT-FluFNP)
- [Iowa State Niemi Research Lab](#) [↗](#) (Model: Nonlinear ASG Hierarchical)
- [Los Alamos National Lab and Northern Arizona University](#) [↗](#) (Model: LosAlamos_NAU-CModel_Flu)
- [LU Computational Uncertainty Lab](#) [↗](#) (Model: Chimera)
- [MIGHTE](#) [↗](#) (Model: Nsemble)
- [MOBS Lab at Northeastern](#) [↗](#) (Model: MOBS-GLEAM_FLUH)
- [Norwegian Institute of Public Health – Fjordhest](#) (Model: fjordhest-ensemble)
- [Predictive Science Inc](#) [↗](#) (Model: PSI-PROF)
- [Signature Science](#) [↗](#) (Model: SigSci-CREG)
- [Signature Science](#) [↗](#) (Model: SigSci-TSENS)
- [Srivastava Group](#) [↗](#) (Model: SGroup-RandomForest)
- [Stevens Institute of Technology](#) [↗](#) (Model: Gradient Boosting Regressors)
- [UNC Infectious Disease Dynamics](#) [↗](#) (Model: Influpaint)
- [University of Georgia Center for the Ecology of Infectious Diseases Forecasting Working Group](#) [↗](#) (Model: Copycat)
- [University of Georgia Center for the Ecology of Infectious Diseases Forecasting Working Group](#) [↗](#) (Model: INFLAenza)
- [University of Guelph Dynamics Training Lab](#) [↗](#) (Model: Composite Curve)
- [University of Guelph Dynamics Training Lab](#) [↗](#) (Model: GRYPHON)
- [University of Massachusetts-Amherst](#) [↗](#) (Model: UMass-trends_ensemble)
- [University of Massachusetts-Amherst](#) [↗](#) (Model: flusion)
- [University of Michigan, Computer Science and Engineering](#) [↗](#) (Model: DeepOutbreak)
- [University of Virginia, Biocomplexity Institute](#) [↗](#) (Model: UVAFluX-Ensemble)
- [Virginia Tech, Sanghani Center for Artificial Intelligence and Data Analytics](#) [↗](#) (Model: Ensemble Model)

Last Reviewed: November 17, 2023