



Influenza (Flu)

Forecasts of Flu Hospital Admissions

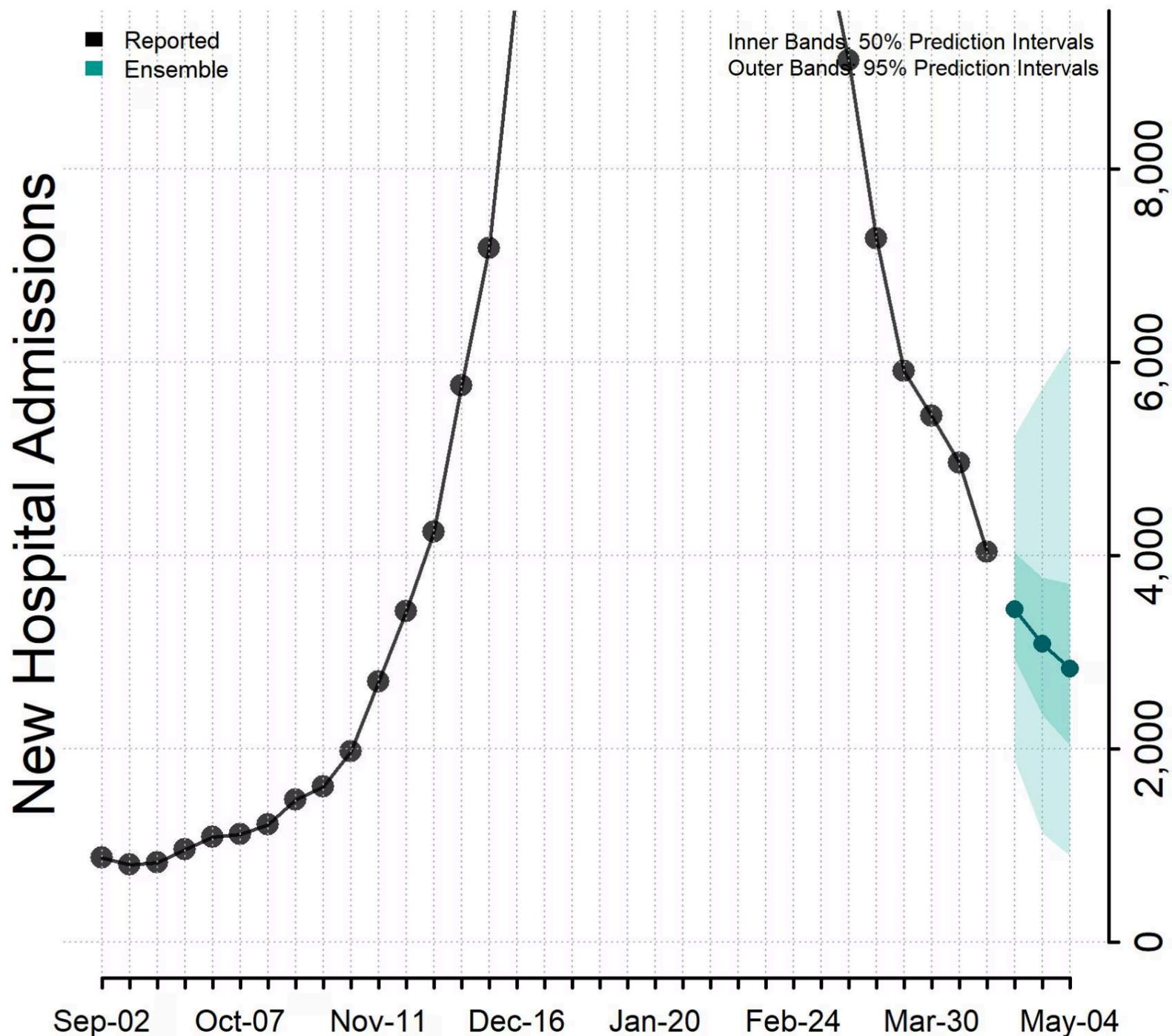
Updated April 19, 2024

Reported and forecasted new influenza hospital admissions as of April 17, 2024.

Interpretation of Forecasts of New Hospital Admissions

- This week's ensemble predicts that the number of new weekly laboratory confirmed influenza hospital admissions will likely decrease nationally, with **890 to 6,200** laboratory confirmed influenza hospital admissions likely reported in the week ending May 4, 2024.
- 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 April 13 and forecasted new influenza hospital admissions per week for this week and the next 2 weeks, through May 4. Hospitals are required to report daily laboratory-confirmed influenza hospitalizations to the National Healthcare Safety Network (NHSN). [See COVID-19 Guidance for Hospital Reporting and FAQs](#)  [658 KB, 52 pages] [↗](#) for additional details on this guidance.

National Forecast



[Download all national data](#) [XLS - 13 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](#) [965 KB, 14 pages]

[Download all forecast data](#) [XLS - 403 KB]

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

Contributing Teams and Models

- [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)
- [Northeastern University & University of California San Diego](#)  (Model: GLEAM_AI_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)
- [The Center for Systems Science and Engineering at Johns Hopkins University](#)  (Model: CSSE Ensemble)
- [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)
- [Virginia Tech, Sanghani Center for Artificial Intelligence and Data Analytics](#)  (Model: Ensemble Model)

Last Reviewed: April 19, 2024