



Influenza (Flu)

Forecasts of Flu Hospital Admissions

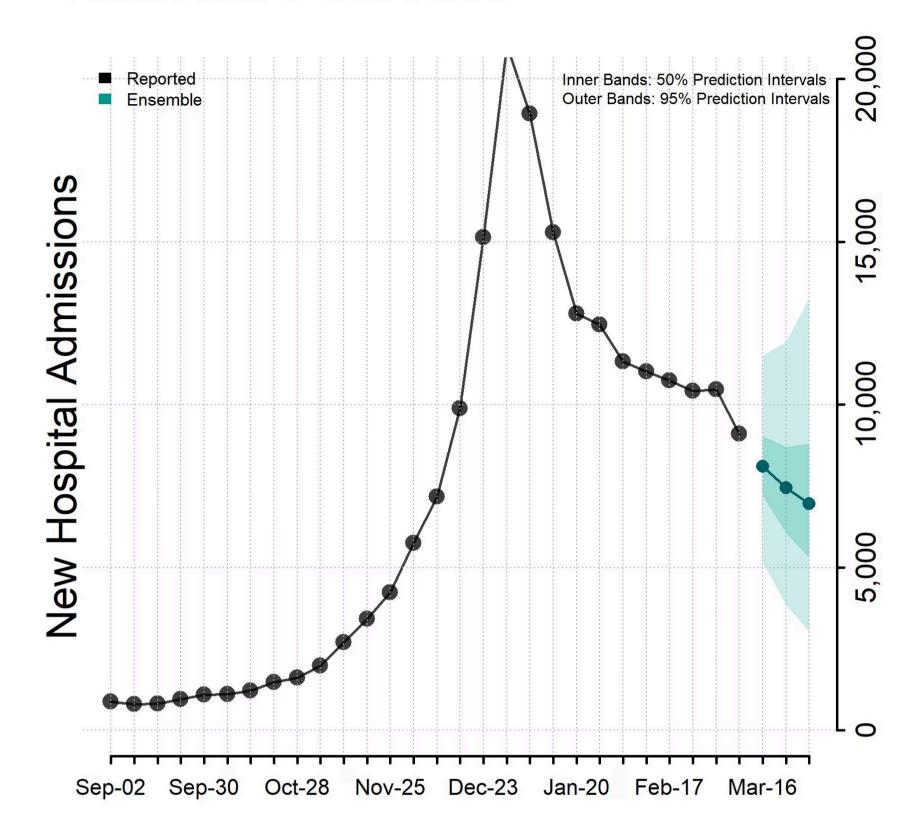
Updated March 15, 2024

Reported and forecasted new influenza hospital admissions as of March 13, 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 **3,000 to 13,000** laboratory confirmed influenza hospital admissions likely reported in the week ending March 30, 2024.
- This week, 26 modeling groups contributed 31 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 March 9 and forecasted new influenza hospital admissions per week for this week and the next 2 weeks, through March 30. 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] [7] for additional details on this guidance.

National Forecast



Download all national data 📵 [XLS – 10.2 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 <a> [1.05 MB, 14 pages]

Download all forecast data [XLS – 427 KB]

Additional forecast data and information about submitting forecasts are available at https://github.com/cdcepi/FluSight-forecast-hub [4].

Contributing Teams and Models

- California Department of Public Health (CADPH) ☐ (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 [1] (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 [4] (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 [2] (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 [4] (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 [4] (Model: Ensemble Model)

Last Reviewed: March 15, 2024