CDC Centers for Disease Control and Prevention
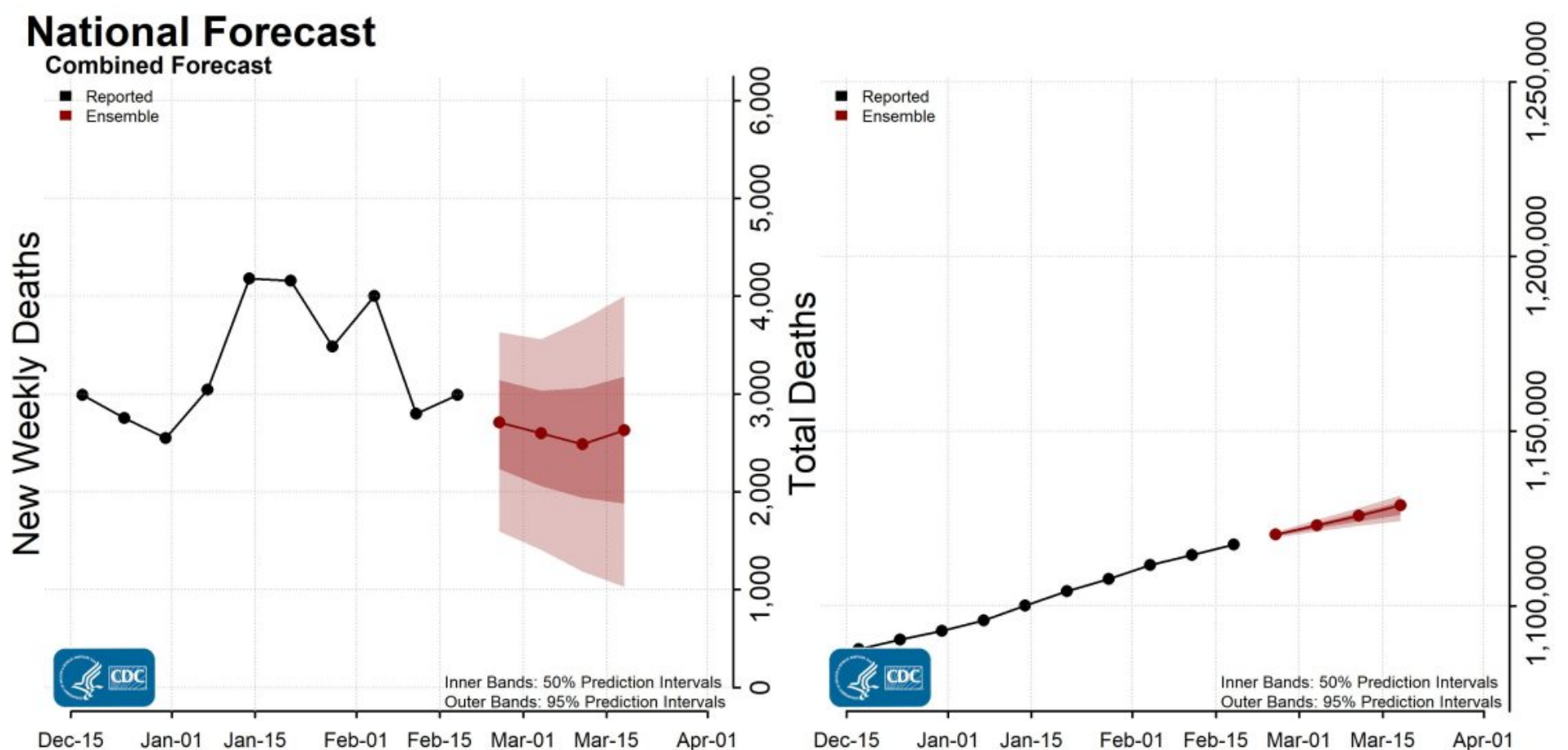
COVID-19

COVID-19 Forecasts: Deaths

Updated Feb. 23, 2023

Reported and forecasted new and total COVID-19 deaths as of February 20, 2023.

- This week's national ensemble predicts that the number of newly reported COVID-19 deaths will remain stable or have an uncertain trend over the next 4 weeks, with 1,000 to 4,000 new deaths likely reported in the week ending March 18, 2023. The national ensemble predicts that a total of 1,124,000 to 1,132,000 COVID-19 deaths will be reported by this date.

- The state- and territory-level ensemble forecasts predict that over the next 4 weeks, trends in numbers of future reported deaths are uncertain or predicted to remain stable in all states and territories.

- 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 Forecast

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- The figures show the number of new (left) and total (right) COVID-19 deaths reported in the United States each week from December 17 through February 18 and forecasted over the next 4 weeks, through March 18.

- This week, 15 modeling groups contributed a forecast that was eligible for inclusion in the new or total deaths ensemble forecasts 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 📊 [XLS – 14 KB]

State Forecasts

State-level forecasts show the predicted number of new COVID-19 deaths for the next 4 weeks by state. Each state forecast figure uses a different scale due to differences in the number of COVID-19 deaths 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 forecast and the underlying data can be downloaded below.

Download state forecasts 📕 [PDF – 1 MB]

Download forecast data 📊 [CSV – 407 KB]

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

Forecasts on COVID Data Tracker
View interactive visualizations of current and past cumulative and weekly COVID-19 death forecasts for the U.S. states and territories. Also, find maps and charts tracking cases, deaths, and trends of COVID-19 in the U.S.

Forecast Inclusion, Evaluation, and Assumptions

Forecasts are listed when they meet a set of submission and data quality requirements and a subset are included in the ensemble. Further details are available here: https://covid19forecasthub.org/doc/ensemble ↗ .

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/ ↗ .

Details on the ensemble's accuracy in short-term predictions and its usefulness as a real-time tool to help guide policy and planning can be found here: Ensemble Forecasts of Coronavirus Disease 2019 (COVID-19) in the U.S. ↗

Contributing Teams

- Individual model details are available here: https://github.com/cdcepi/COVID-19-Forecasts/blob/master/COVID-19_Forecast_Model_Descriptions.md ↗ .
  - Columbia University ↗ (Model: Columbia)
  - Predictive Science Inc. ↗ (Model: PSI)
  - Bob Pagano ↗ (Model: BPagano)
  - Georgia Institute of Technology, College of Computing ↗ (Model: GT-DeepCOVID)
  - Hong Kong University of Science and Technology ↗ (Model: DNN)
  - Johns Hopkins University, Applied Physics Lab ↗ (Model: ICATTML)
  - Johns Hopkins University, Infectious Disease Dynamics Lab ↗ (Model: JHU-IDD)
  - Karlen Working Group ↗ (Model: Karlen)
  - Masaryk University ↗ (Model: Masaryk)
  - Massachusetts Institute of Technology, Cassandra ↗ (Model: MIT-Cassandra)
  - Massachusetts Institute of Technology, Institute for Data, Systems, and Society ↗ (Model: MIT-ISOLAT)
  - Microsoft AI ↗ (Model: Microsoft)

- [Northeastern University, Laboratory for the Modeling of Biological and Socio-technical Systems](#) ↗ (Model: MOBS)
- [University of California, San Diego and Northeastern University](#) ↗ (Model: UCSD-NEU)
- [University of Southern California](#) ↗ (Model: USC)

Additional Resources:

Previous COVID-19 Forecasts: Deaths – [2023](#) | [2022](#) | [2021](#) | [2020](#)

[FAQ: COVID-19 Data and Surveillance](#)

[CDC COVID Data Tracker](#)

[COVID-19 Mathematical Modeling](#)

[Ensemble Forecasts of Coronavirus Disease 2019 (COVID-19) in the U.S.](#) ↗

[Evaluation of Individual and Ensemble Probabilistic Forecasts of COVID-19 Mortality in the U.S. | medRxiv](#) ↗

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