



COVID-19

COVID-19 Forecasts: Deaths

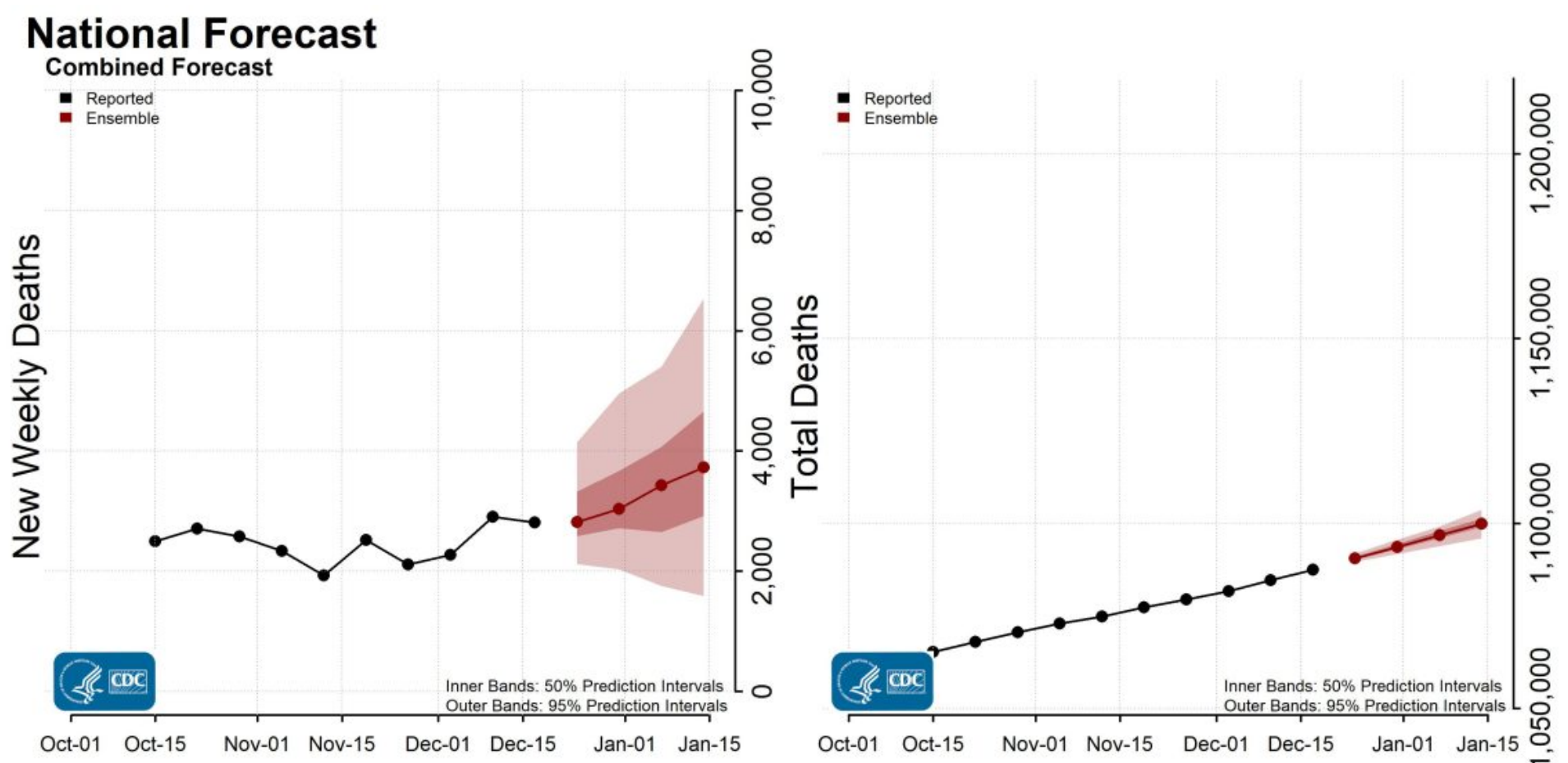
Updated Dec. 22, 2022

Reported and forecasted new and total COVID-19 deaths as of December 22, 2022.

Interpretation of Forecasts of New and Total Deaths

- This week's national ensemble predicts that the number of newly reported COVID-19 deaths will likely increase over the next 4 weeks, with 1,600 to 6,500 new deaths likely reported in the week ending January 14, 2023. The national ensemble predicts that a total of 1,096,000 to 1,104,000 COVID-19 deaths will be reported by this date.
- The state- and territory-level ensemble forecasts predict that over the next 4 weeks, the number of newly reported deaths per week will likely increase in 6 jurisdictions, which are indicated in the forecast plots below. Trends in numbers of future reported deaths are uncertain or predicted to remain stable in the other 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 October 15 through December 17 and forecasted over the next 4 weeks, through January 14.
- This week, 13 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 – 9 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 – 382 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 specific team forecast performance is evaluated using a variety of metrics, including the assessment of prediction interval coverage. This assessment is 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 .
 - [Bob Pagano](#)  (Model: BPagano)
 - [Columbia University](#)  (Model: Columbia)
 - [Georgia Institute of Technology, College of Computing](#)  (Model: GT-DeepCOVID)
 - [Hong Kong University of Science and Technology](#)  (Model: DNN)
 - [Institute of Health Metrics and Evaluation](#)  (Model: IHME)
 - [Johns Hopkins University, Infectious Disease Dynamics Lab](#)  (Model: JHU-IDD)
 - [Karlen Working Group](#)  (Model: Karlen)
 - [Massachusetts Institute of Technology, Cassandra](#)  (Model: MIT-Cassandra)
 - [Massachusetts Institute of Technology, Institute for Data, Systems, and Society](#)  (Model: MIT-ISOLAT)

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

Additional Resources:

[Previous COVID-19 Forecasts: Deaths – 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](#) 

Last Updated Dec. 22, 2022