

Coronavirus Disease 2019 (COVID-19)



COVID-19 Forecasts: Deaths

Updated Sept. 10, 2020

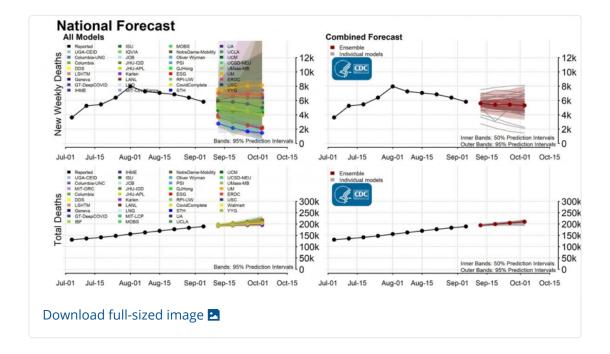
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Observed and forecasted new and total reported COVID-19 deaths as of September 7, 2020.

Interpretation of Forecasts of New and Total Deaths

- This week CDC received forecasts of national COVID-19 deaths over the next 4 weeks from 39 modeling groups. Of the 39 groups, 33 provided forecasts for both new and total deaths, four groups forecasted total deaths only, and two forecasted new deaths only.
- This week's national ensemble forecast indicates an uncertain trend in new COVID-19 deaths reported over the next four weeks and predicts that 3,300 to 8,000 new deaths will likely be reported during the week ending October 3, 2020. The national ensemble predicts that a total of 205,000 to 217,000 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 may increase in 1 jurisdiction and decrease in 10 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.

National Forecast



- The top row of the figure shows the number of new COVID-19 deaths reported in the United States each week from July 4 through September 5 and forecasted new deaths over the next four weeks, through October 3.
- The bottom row of the figure shows the number of total COVID-19 deaths in the United States each week from July 4 through September 5 and the forecasted number of total COVID-19 deaths over the next four weeks, through October 3.
- Models make various assumptions about the levels of social distancing and other interventions, which may not reflect recent changes in behavior.

State Forecasts

This week, 41 modeling groups submitted a forecast for new or total deaths in at least one state or territory. Plots of these forecasts and the underlying data can be downloaded below. Each state forecast figure uses a different scale, due to differences in the number of COVID-19 deaths between states.

Download state forecasts <a> [29 pages]

Download forecast data [1 sheet]

Forecast Assumptions

The forecasts make different assumptions about social distancing measures. Information about individual models is available here: https://github.com/cdcepi/COVID-19-Forecasts/blob/master/COVID-19_Forecast_Model_Descriptions.md 🖸 . The list below includes all models that submitted a national- or state-level forecast.

MIT-CovAlliance)

MIT-ORC)

Physiology ☑ (Model: MIT-LRC)

technical Systems ☑ (Model: MOBS)

○ Oliver Wyman 🖸 (Model: Oliver Wyman)

∘ Qi-Jun Hong 🖸 (Model: QJHong)

| orecas | sts | fall into one of two categories: |
|--------|---------|--|
| | ar | se modeling groups make assumptions about how levels of social distancing will age in the future: |
| | | Columbia University (Model: Columbia) |
| | | Google and Harvard School of Public Health (Model: Google-HSPH) |
| | 0 | Georgia Institute of Technology, Center for Health and Humanitarian Systems (Model: GT-CHHS) |
| | 0 | Institute of Health Metrics and Evaluation 🖸 (Model: IHME) |
| | 0 | John Burant ☑ (Model: JCB) |
| | 0 | Johns Hopkins University, Infectious Disease Dynamics Lab 🖸 (Model: JHU-IDD) |
| | 0 | Notre Dame University [4] (Model: NotreDame-FRED) |
| | 0 | Predictive Science Inc. [4] (Model: PSI) |
| | 0 | University of California, Los Angeles 🖸 (Model: UCLA) |
| | 0 | Youyang Gu (COVID-Projections) |
| | nt ° | inue through the projected four-week time period: Carnegie Mellon Delphi Group (Model: CMU) Columbia University and University of North Carolina (Model: Columbia- |
| | | UNC) |
| | 0 | Discrete Dynamical Systems (Model: DDS) |
| | 0 | Georgia Institute of Technology, College of Computing ☐ (Model: GT-DeepCOVID) |
| | 0 | Institute for Business Forecasting [2] (Model: IBF) |
| | 0 | Iowa State University (Model: ISU) |
| | 0 | IQVIA Analytics Center of Excellence [(Model: IQVIA) |
| | 0 | Johns Hopkins University Applied Physics Lab 🔀 (Model: JHU-APL) |
| | 0 | Karlen Working Group ☑ (Model: Karlen) |
| | 0 | LockNQuay [4] (Model: LNQ) |
| | 0 | London School of Hygiene and Tropical Medicine 🖸 (Model: LSHTM) |
| | 0 | Los Alamos National Laboratory 🖸 (Model: LANL) |
| | 0 | Massachusetts Institute of Technology, COVID-19 Policy Alliance [7] (Model: |

• Massachusetts Institute of Technology, Laboratory for Computational

• Massachusetts Institute of Technology, Operations Research Center 🖸 (Model:

• Northeastern University, Laboratory for the Modeling of Biological and Socio-

| c | Rensselaer Polytechnic Institute and University of Washington (Model: RPI-UW) |
|---|--|
| c | Robert Walraven 🖸 (Model: ESG) |
| c | Steve Horstman 🖸 (Model: STH) |
| c | Steve McConnell [2] (Model: CovidComplete) |
| c | US Army Engineer Research and Development Center 🔟 🔀 (Model: ERDC) |
| c | University of Arizona 🖸 (Model: UA) |
| c | University of California, Merced 🖸 (Model: UCM) |
| C | University of California, San Diego and Northeastern University (Model: UCSD-NEU) |
| c | University of Geneva/Swiss Data Science Center (one-week ahead forecasts only) [2] (Model: Geneva) |
| C | University of Georgia, Center for the Ecology of Infectious Disease 🖸 (Model: UGA-CEID) |
| C | University of Massachusetts, Amherst 🖸 (Models: UMass-MB and Ensemble) |
| c | University of Michigan 🖸 (Model: UM) |
| C | University of Southern California 🖸 (Model: USC) |
| c | Walmart Labs Data Science Team 🔤 🗹 (Model: Walmart) |

| Additional Resources: | | | |
|-------------------------------------|--|--|--|
| Previous COVID-19 Forecasts: Deaths | | | |
| FAQ: COVID-19 Data and Surveillance | | | |
| CDC COVID Data Tracker | | | |
| COVID-19 Mathematical Modeling | | | |

Last Updated Sept. 10, 2020

Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases

¹ The full range of the prediction intervals is not visible for all state plots. Please see the forecast data for the full range of state-specific prediction intervals.