Coronavirus Disease 2019 (COVID–19)

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COVID-19 Forecasts: Cases

Updated Sept. 17, 2020   Print

Interpretation of Forecasts of New Cases

- This week CDC received forecasts of new reported COVID-19 cases over the next 4 weeks from 29 modeling groups.

- This week's national ensemble forecast indicates an uncertain trend in new COVID-19 cases reported over the next four weeks and predicts that 150,000 to 310,000 new cases will likely be reported during the week ending October 10, 2020.

- The state- and territory-level ensemble forecasts predict that over the next four weeks, the number of new reported cases per week may decrease in 14 states and territories, which are labeled on the forecast plots below. Trends in numbers of future reported cases are uncertain or predicted to remain stable in the other states and territories.

National Forecasts
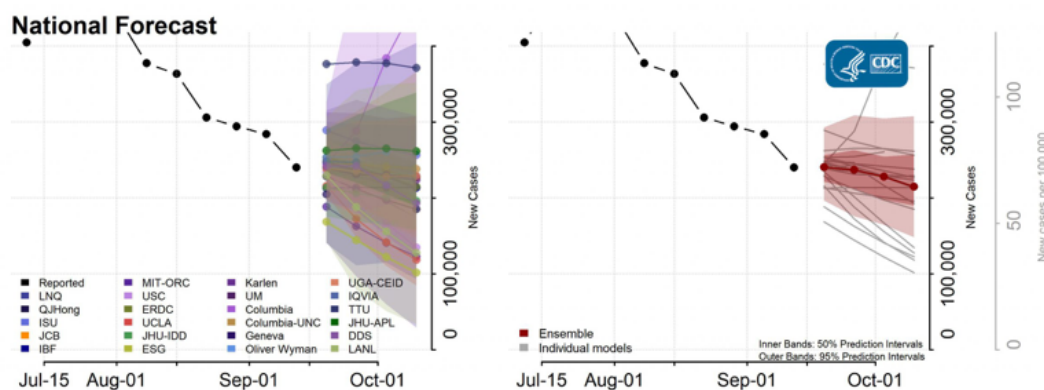
- The figure shows the number of new COVID-19 cases reported nationally in the United States each week from July 11 to September 12, 2020, and forecasted new cases over the next four weeks, through October 10, 2020.

- 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.

State & County Forecasts

State-level and county-level forecast figures show observed and forecasted new COVID-19 cases in each location. Each forecast uses a different scale, due to differences in the numbers of COVID-19 cases occurring in each jurisdiction. To aid in comparisons between jurisdictions, the ensemble plot for each location has a second axis (in grey) that shows the expected number of cases per 100,000 people.

Download forecasts for states and territories and for counties 📄 [PDF – 533 pages] [1]

Download forecast data 📊 [1 sheet]

Additional forecast data and information on forecast submission are available at the COVID-19 Forecasting Hub ↗ .

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 ↗ .

Intervention assumptions fall into one of three categories:

- These modeling groups make assumptions about how levels of social distancing will change in the future:
    - Columbia University ↗ (Model: Columbia)
    - Johns Hopkins University, Infectious Disease Dynamics Lab ↗ (Model: JHU-IDD)
    - John Burant ↗ (Model: JCB)
    - University of California, Los Angeles ↗ (Model: UCLA)
- These groups assume that existing social distancing measures will continue through the projected four-week time period:
    - Berkeley Yu Group ↗ (Model: Yu_Group)
    - Carnegie Mellon Delphi Group ↗ (Model: CMU)
    - Columbia University and University of North Carolina ↗ (Model: Columbia-UNC)
    - Discrete Dynamical Systems ↗ (Model: DDS)
    - Institute of Business Forecasting ↗ (Model: IBF)
    - Iowa State University ↗ (Model: ISU)
    - IQVIA Analytics Center of Excellence ↗ (Model: IQVIA)
    - Johns Hopkins University, Applied Physics Lab ↗ (model: JHU-APL)
    - Karlen Working Group ↗ (Model: Karlen)
    - LockNQuay ↗ (Model: LNQ)
    - Los Alamos National Laboratory ↗ (Model: LANL)
    - Massachusetts Institute of Technology, COVID-19 Policy Alliance ↗ (Model: MIT-CovAlliance)

- Massachusetts Institute of Technology, Operations Research Center ↗ (Model: MIT-ORC)
- Oliver Wyman ↗ (Model: Oliver Wyman)
- Pandemic Central ↗ (Model: PandemicCentral)
- Qi-Jun Hong ↗ (Model: QJHong)
- Robert Walraven ↗ (Model: ESG)
- Texas Tech University ↗ (Model: TTU)
- US Army Engineer Research and Development Center TXT ↗ (Model: ERDC)
- University of Geneva/Swiss Data Science Center (one-week ahead forecasts only) ↗ (Model: Geneva)
- University of Georgia Center for the Ecology of Infectious Diseases Forecasting Working Group ↗ (Model: UGA-CEID)
- University of Massachusetts, Amherst ↗ (Model: UMass)
- University of Michigan ↗ (Model: UM)
- University of Southern California ↗ (Model: USC)

- The University of Virginia ↗ (Model: UVA) model makes both assumptions, combining different models.

[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.

Additional Resources

Previous COVID-19 Forecasts: Cases

FAQ: COVID-19 Data and Surveillance

CDC COVID Data Tracker

COVID-19 Mathematical Modeling