



Coronavirus Disease 2019 (COVID-19)



COVID-19 Forecasting: Background Information

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Why COVID-19 Forecasting Is Important


CDC is responding to a **pandemic** of coronavirus disease 2019 (COVID-19) caused by a new **coronavirus**, SARS-CoV-2, that is **spreading** from person to person. The federal government is working closely with state, tribal, local, and territorial health departments, and other public health partners, to **respond** to this situation. Forecasts of deaths, hospitalizations, and cases will help inform public health decision making by projecting the likely impact of the COVID-19 pandemic in coming weeks.

Bringing Together Forecasts for COVID-19 Deaths, Hospitalizations, and Cases in the United States

CDC works with partners to bring together weekly forecasts based on statistical or mathematical models that aim to predict:

- National and state numbers of new and total COVID-19 deaths per week for the next 4 weeks.
- National and state numbers of new COVID-19 hospitalizations per day for the next 4 weeks.
- National, state, and county numbers of new COVID-19 cases per week for the next 4 weeks.

Forecasting teams predict numbers of deaths, hospitalizations, and cases using different types of data (e.g., COVID-19 data, demographic data, mobility data), methods, and estimates of the impacts of interventions (e.g., social distancing, use of face coverings). These forecasts are developed independently and shared publicly. It is important to bring these forecasts together to help understand how they compare with each other and how much uncertainty there is about what may happen in the near future.

An “ensemble” forecast combines each of the independently developed forecasts into one aggregate forecast to improve prediction over the next 4 weeks. This article, [Ensemble Forecasts of Coronavirus Disease 2019 \(COVID-19\) in the U.S.](#)  describes the “ensemble” forecast methodology and its usefulness as a real-time tool to help guide policy and planning.

Weekly forecasts submitted to CDC are posted on these websites:

- [COVID-19 Forecasts: Deaths](#)
- [COVID-19 Forecasts: Hospitalizations](#)
- [COVID-19 Forecasts: Cases](#)

Previous forecasts are available at:

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



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.

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