

# Modeling COVID-19 in the US

## Problem statement

COVID-19 is one of the deadliest pandemics in history, has shaped the country and the larger society in 2020, and may continue to shape the way the world interacts in the future. Schools and businesses have closed or gone virtual, the 2020 election is in doubt, and racial injustice has come to the forefront; all of which are in some way affected by the pandemic. Currently, hot spots are popping up all over the country while other hot spots early in the pandemic have cooled off. Being able to project the future of the pandemic and investigate effective policies and practices can help save lives and kickstart the economy.

**Project goals:** The primary goals of this project are to (1) build a model to predict the daily number of COVID-19 cases in each county based on the information in that county up to that date (predict tomorrow's number of cases from today's information) and (2) evaluate the effectiveness of various COVID-related policies on the spread of the disease; what truly has helped and can help prevent the spread of COVID-19 in the US?

For a collection of COVID-19 related prediction models, see [fivethirtyeight](#).

## Data Resources

1. **COVID Data**  
[John's Hopkins Data Repository on Git](#).
2. **Policy Data**  
[kff.org](#).
3. **Other Useful Data**  
[County-level health data](#).  
[US Census Bureau](#).  
[Social Distancing Scorecard](#).

## High-level project goals

1. Obtain publicly available county-level data from various public sources (demographics, health indicators, etc.) and combine with COVID-19 case counts at the county-level and state-wide policy data.
2. Build predictive models for the rate of COVID cases at the county level in the US
3. Evaluate the effectiveness of governmental policies on controlling the disease based on your predictive models

## References

1. [Johns Hopkins COVID-19 Dashboard](#)
2. [538's Summary of COVID-19 Models](#)
3. [CDC's COVID-19 Tracker](#)