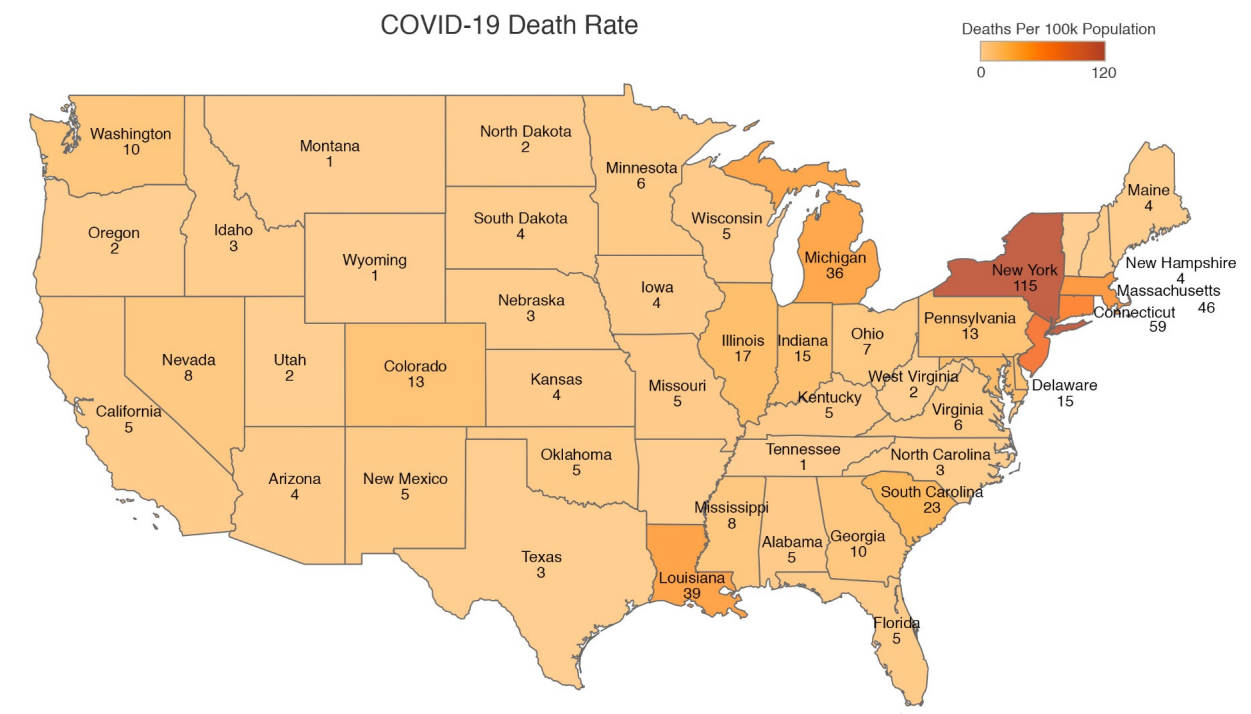
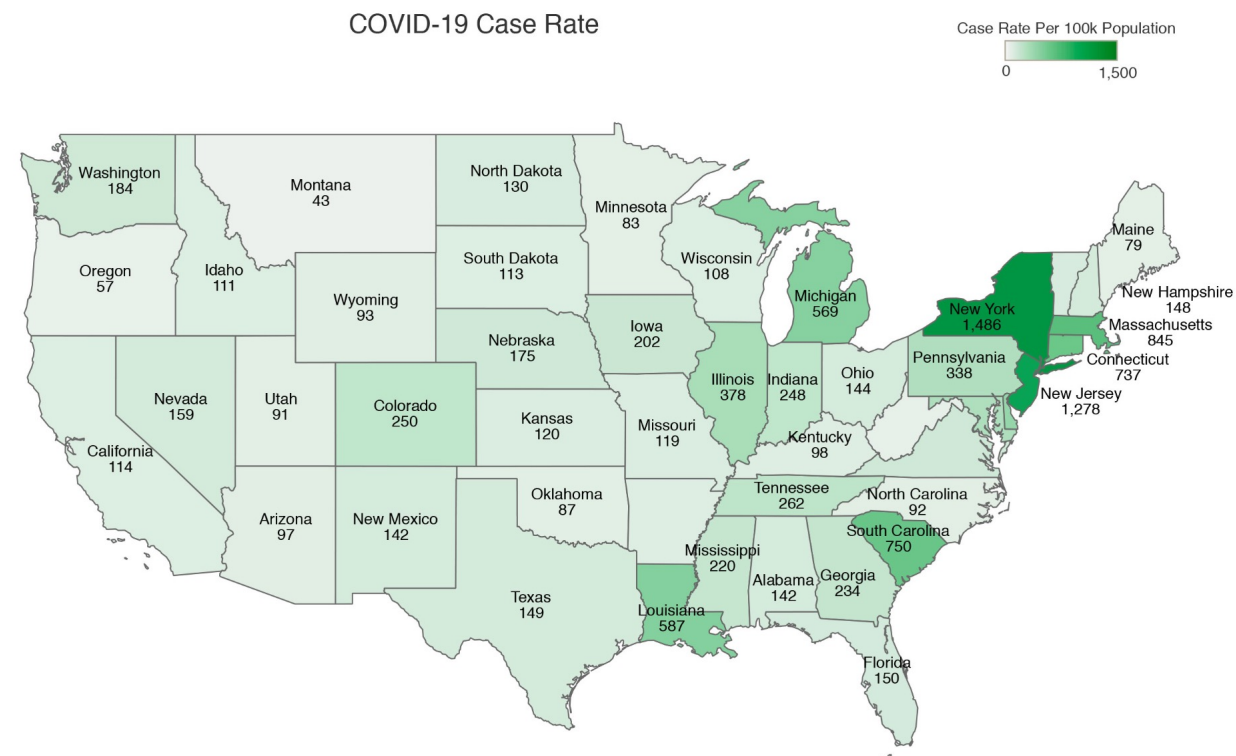


COVID 19: Distancing & Proliferation

Without a doubt the biggest storyline of 2020 has been the COVID-19 pandemic sweeping the globe. As countries have tried to react to protect their citizens, the most common form of combating this new highly infectious disease has been to implement some sort of quarantine.

In the United States, despite case rates that surpass any other nation and a mounting death toll, quarantine has been controversial. Some Americans see it as against what they view as their fundamental rights.



While these protests have undertones of being more about an unwillingness to give up the conveniences afforded to us by contemporary capitalism than any principals surrounding exercising ones rights and freedoms and an America, the question being asked should be answered...

Is the Quarantine worth it?

COVID 19: Distancing & Proliferation

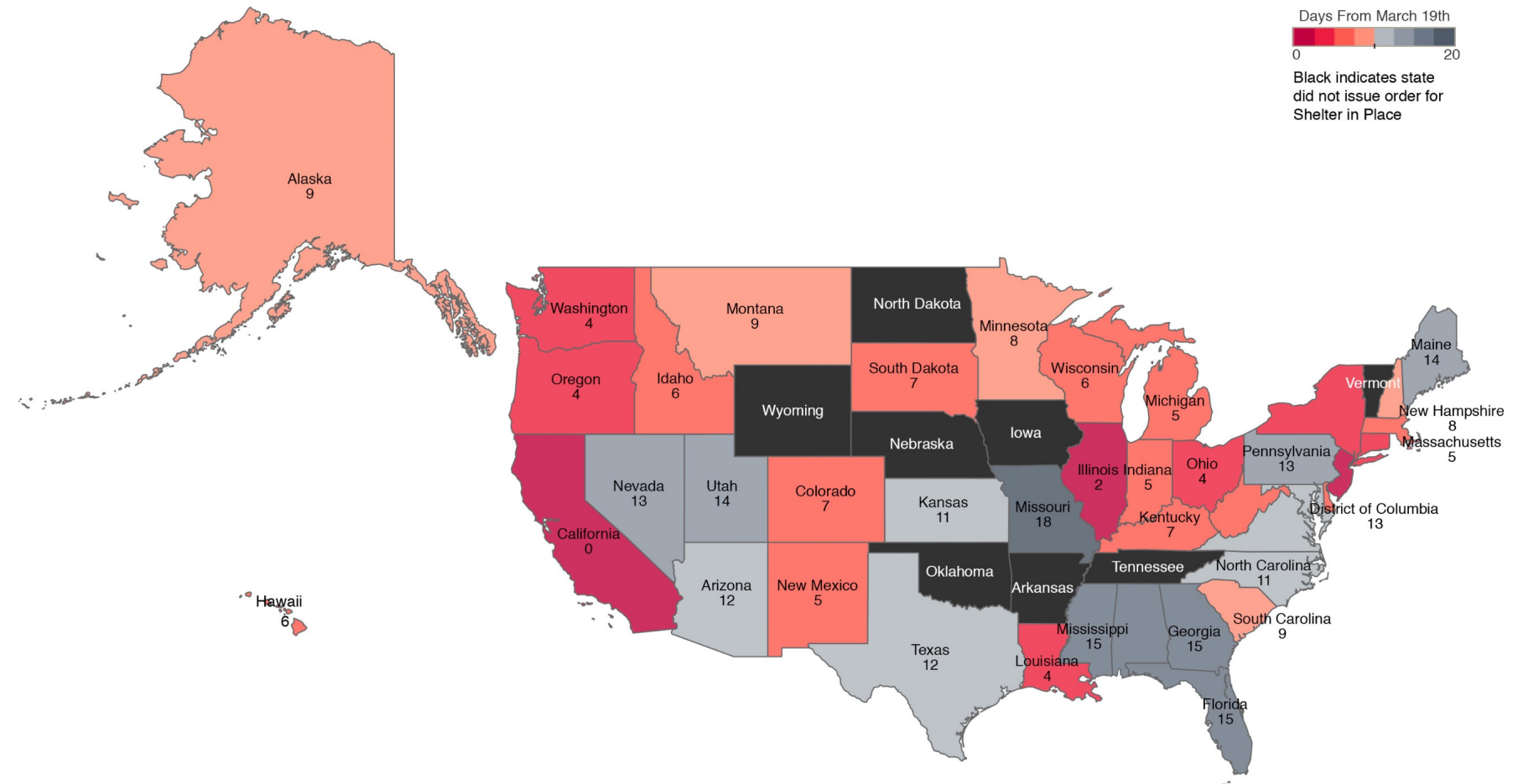
Shelter in Place

As the coronavirus spread across the world the United States lacked any real response from the federal government outside of constantly changing guidelines from the CDC and often contradicting statements from the President.

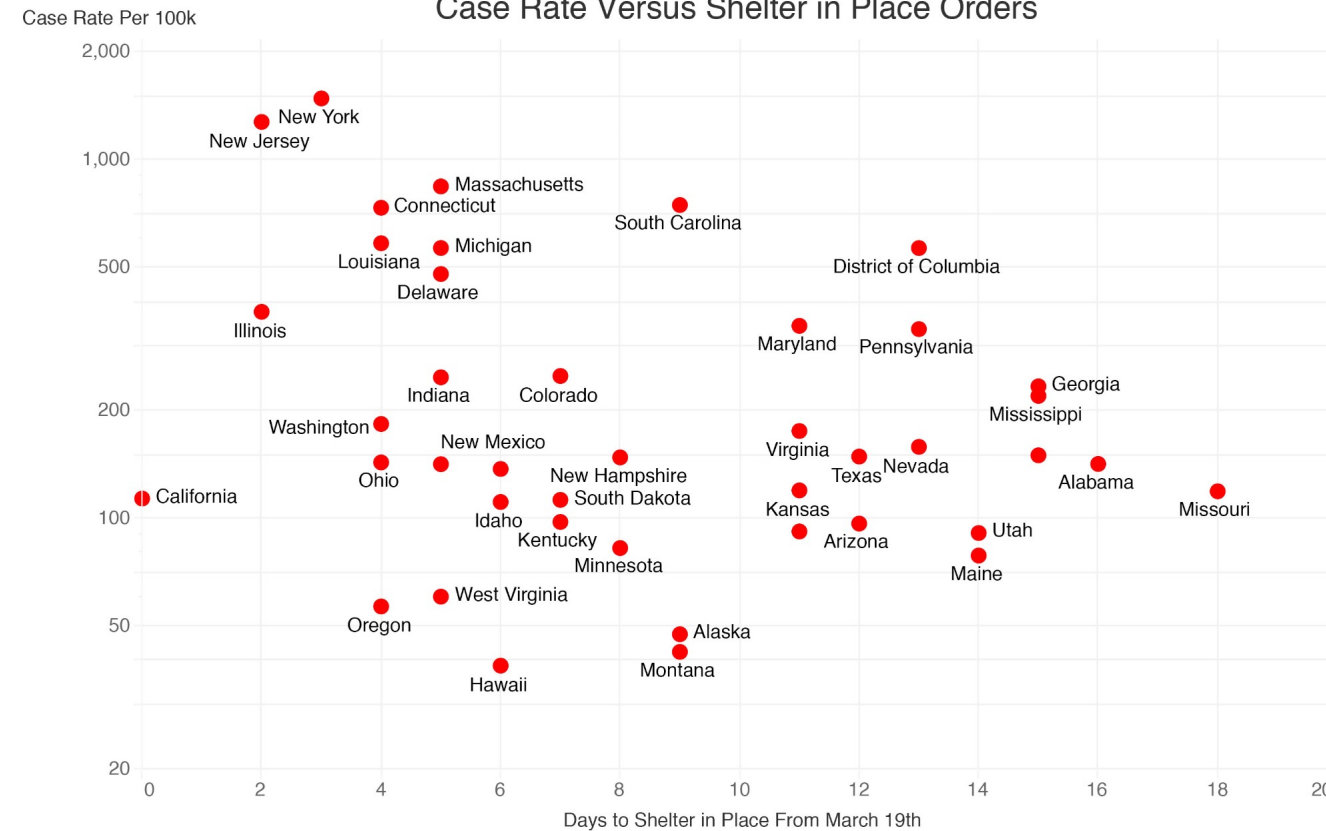
States were left to set their own guidelines and with case numbers growing, and on March 19th 2020 California became the first state to issue Shelter In Place orders. Other states soon followed.

Several states opted to not issue Shelter In Place orders, either leaving it to the local municipalities or counties to decide or just decided to see what happened.

Days from March 19th to Shelter In Place



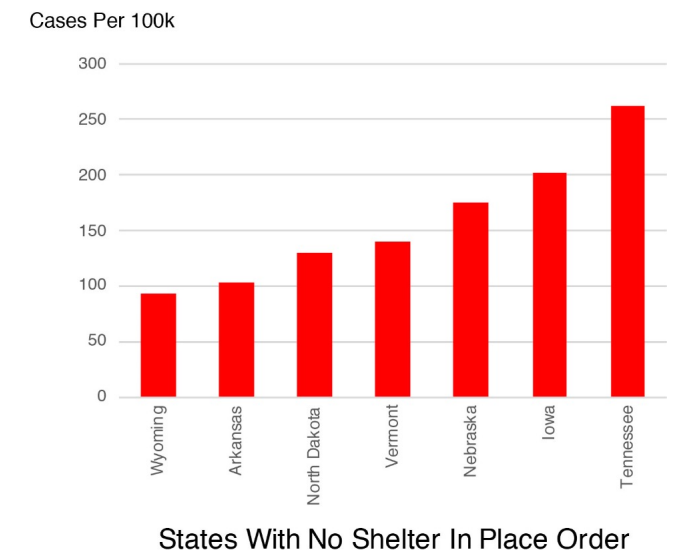
Case Rate Versus Shelter in Place Orders



Did Shelter In Place Affect Case Rate?

Looking at the information on the left, it would not initially appear so. Even when you factor in the figure on the right showing the States with no orders, there does not seem to be correlation with case rates. Other factors such as population density are likely at play then.

If this is the case, why the focus on Shelter in Place?



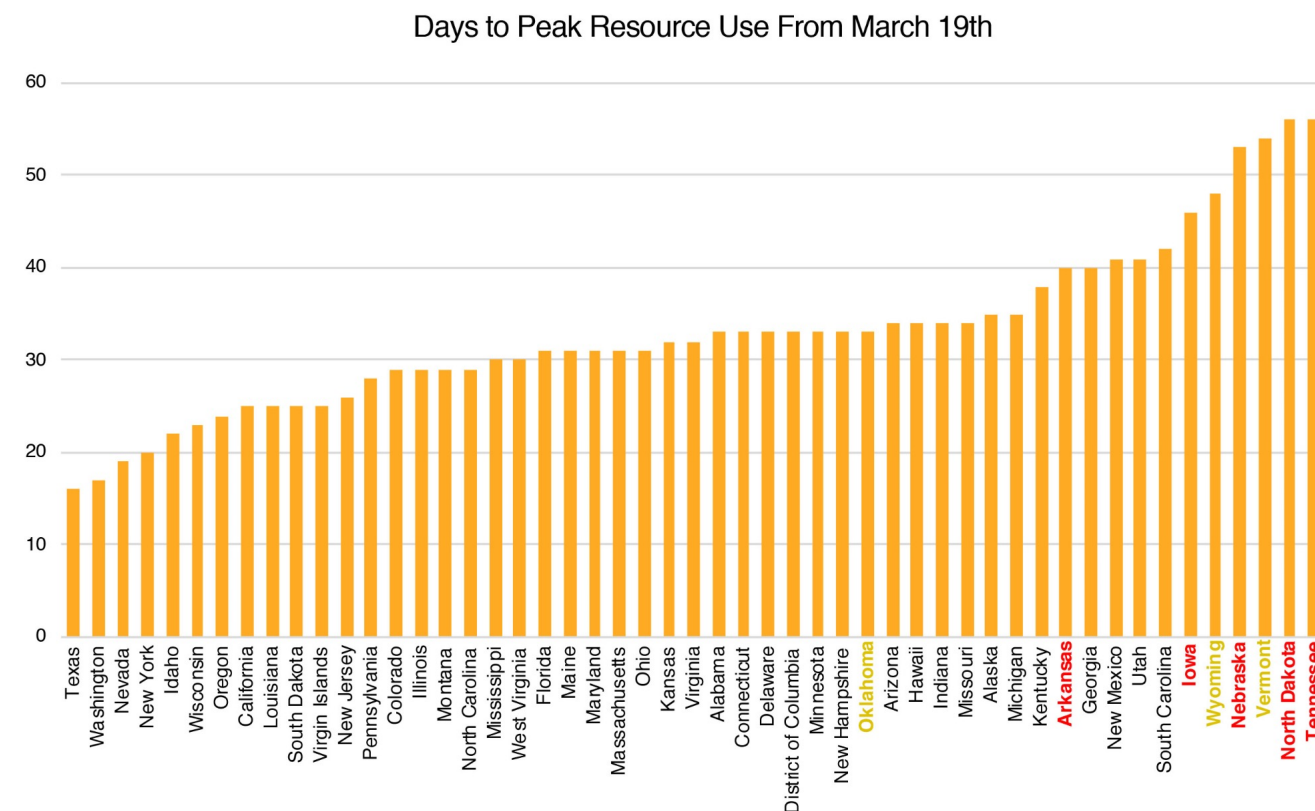
States With No Shelter In Place Order

COVID 19: Distancing & Proliferation

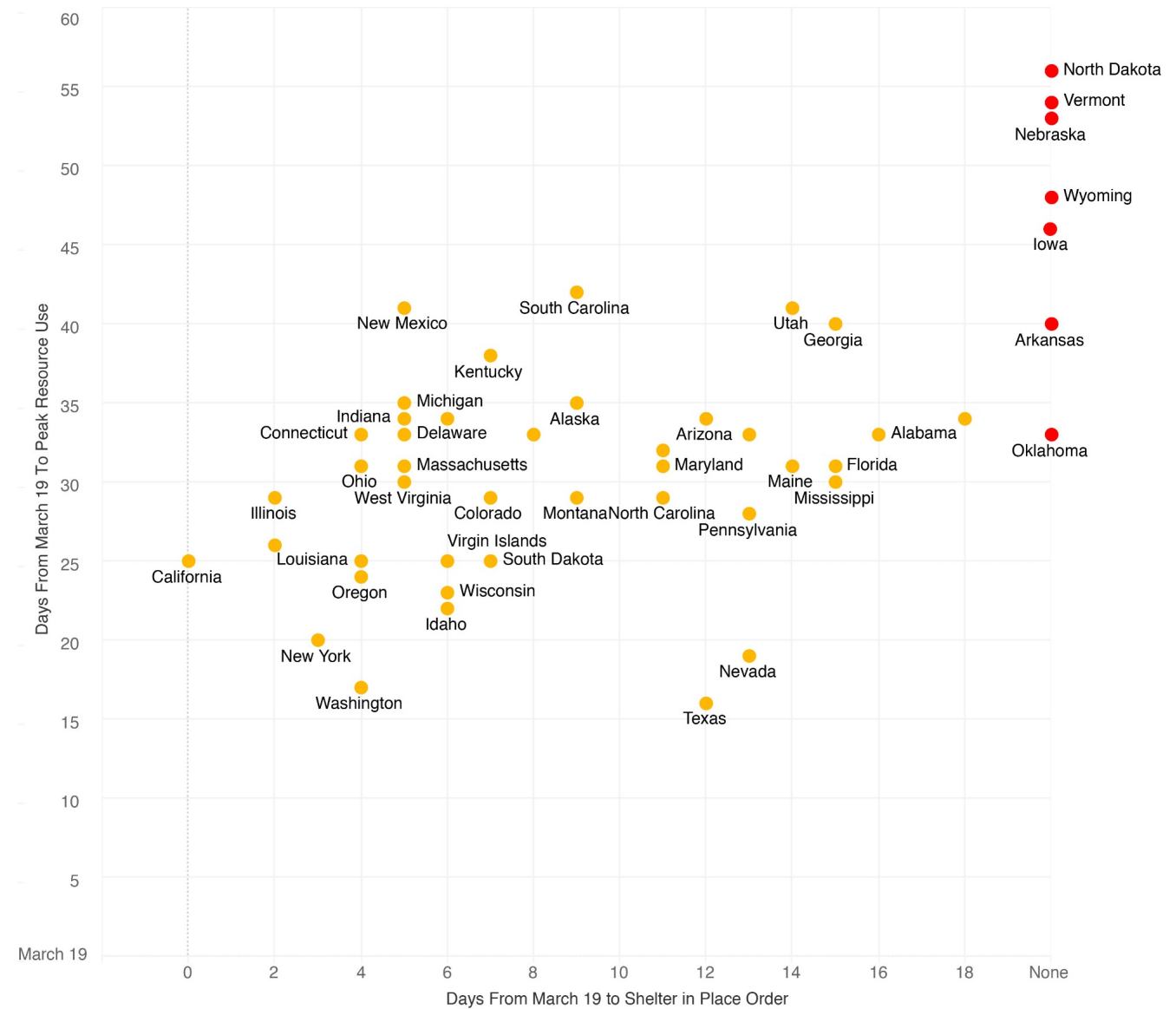
Shelter in Place Reduces the Time to Peak Resource Use

While differences between states that have Shelter in Place orders and those without may not be apparent through number of cases, the effectiveness of the orders becomes apparent when looking at the length of time to Peak Resource Use, which is indicative of strain on the hospital system.

Using the first Shelter in Place order's date of March 19th as a day zero, you can look the length of time till states hit Peak Resources. Those states with no Shelter in Place orders represent the six lengthiest time periods. It is safe to assume these states are dragging out proliferation of the virus and strain on the medical system longer than necessary.



Peak Resources vs Shelter in Place Order



Tym Lang | DES 523.01 | Trogu | SFSU | Project 4 | Spring 2020

Data Collected From:

"IHME: COVID-19 Projections." Institute for Health Metrics and Evaluation, covid19.healthdata.org/.