

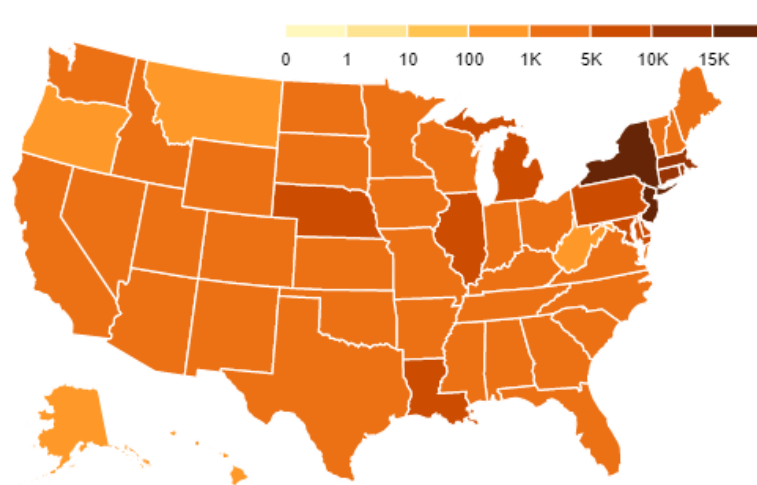
# Covid-19 analysis: Which state's health care is out of control?

## Introduction

COVID - 19 is an ongoing pandemic affecting the lives of millions of people worldwide. America has been touted to have one of the best healthcare in the world, but sadly, it is the country with the maximum number of cases in the world. In our dashboard, we analyse data from hospitals across all states to visualize if the American healthcare system can handle the pandemic.

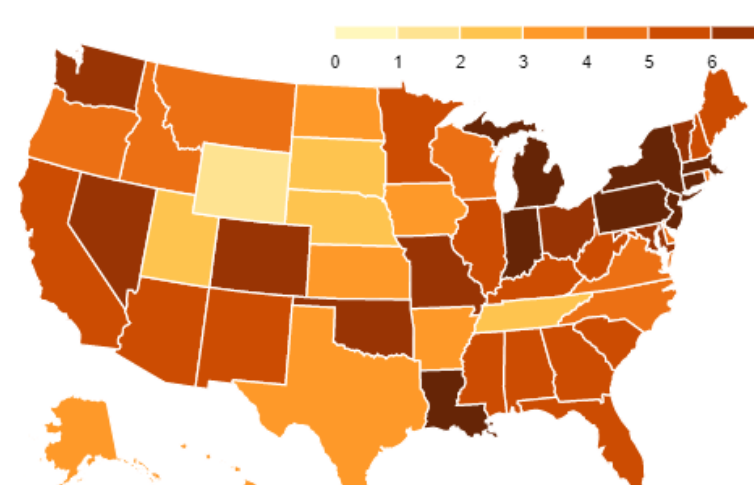
## Visualizations included

Cases/Million Heat Map



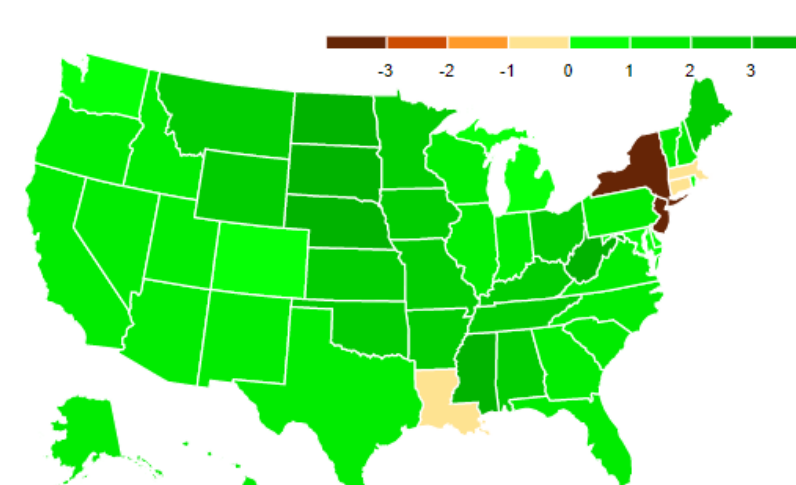
We observe that states with higher cases doesn't necessarily mean higher alert, it's the cases/population that counts and it doesn't change for some states, such as California and Arizona

Death/Cases Heat Map



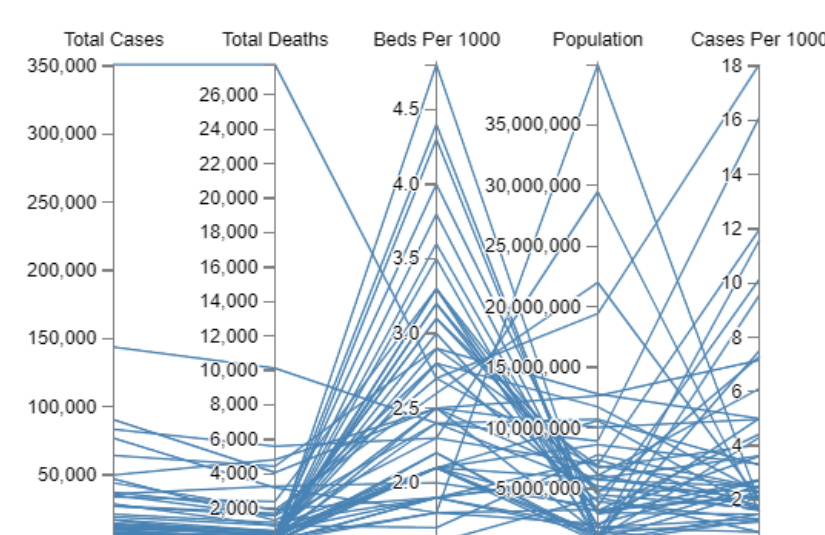
This map computes the death % of people with COVID-19. This in correlation with the hospital choropleth explains a correlation between hospital occupancy and death rate.

Hospital capacity vs COVID Heat Map



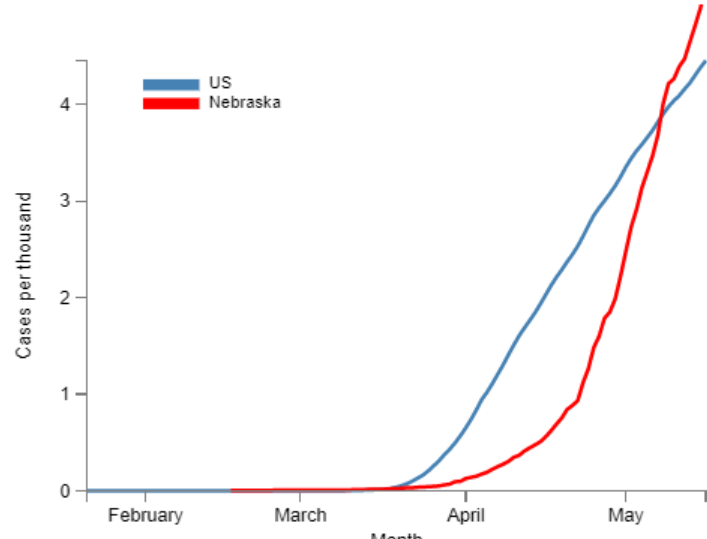
This shows how well can the hospitals handle current cases, given their bed capacity. A state is shown green in color if the number of cases < number of beds.

Parallel Coordinates



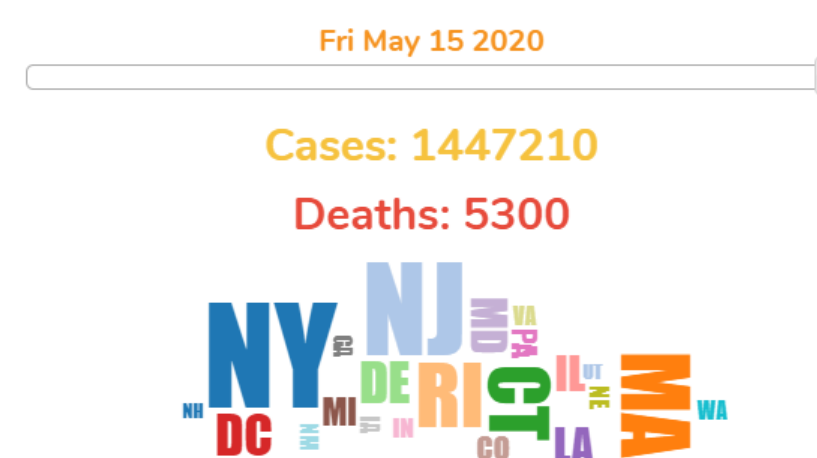
A parallel coordinate chart will help us to better compare multiple critical components for each state. Various attributes such as beds per 1000, population and cases per 1000 have been considered.

Time Series



This time series plot will reveal the growth of cases per 1000 when compared to the national average and can help us track the trend of cases in each state.

Observations



This card has a date filter for the entire dashboard, as well as count for the current cases and deaths, and all the high risk states in a wordcloud, which could put it's residents at risk

## Conclusion

We identified which states are actually at a higher risk by depicting the heatmap of cases/million for each state, and also by using the Death/Cases heat map and Hospital capacity vs COVID Heat Map, we were able to find out which states are able to handle the pandemic well and also explain why is there a higher mortality rate in some states. Also, the parallel coordinate chart helps us to compare the states with respect of multiple attributes such as beds per thousand a, population and cases per thousand, which gives us an insight on which states have done a better job. The time series graph helps us to visualize the line plots for each state and compare it with the national average to visualize what states are flattening the curve and what states have worsened their situation over time.