

Data visualization for Numbers of COVID-19 Pandemic in US with Dashboards in Tableau

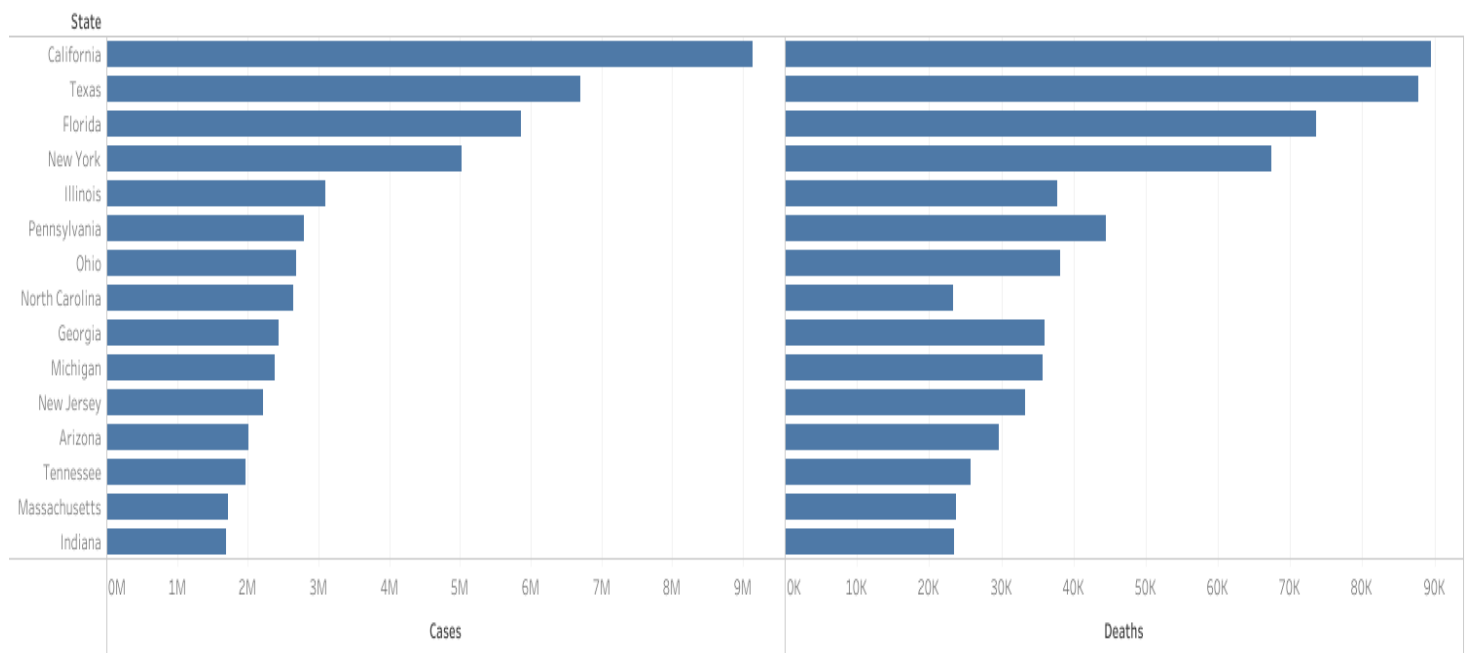
Introduction:

This project consists of building data dashboards for visual representation using Tableau, this data comes from a Kaggle dataset, its track the number of covid-19 Numbers in US.

The goal of the dashboards is to visualize which state has the highest numbers of cases and deaths and find the state with the lowest number of cases and deaths reported and to find the death rate in each state.

What are the 15 states with the most cases and deaths recorded?

The 15 states with the most reported cases and deaths



we can see that California is the most affected state from covid_19 followed by Texas and Florida.

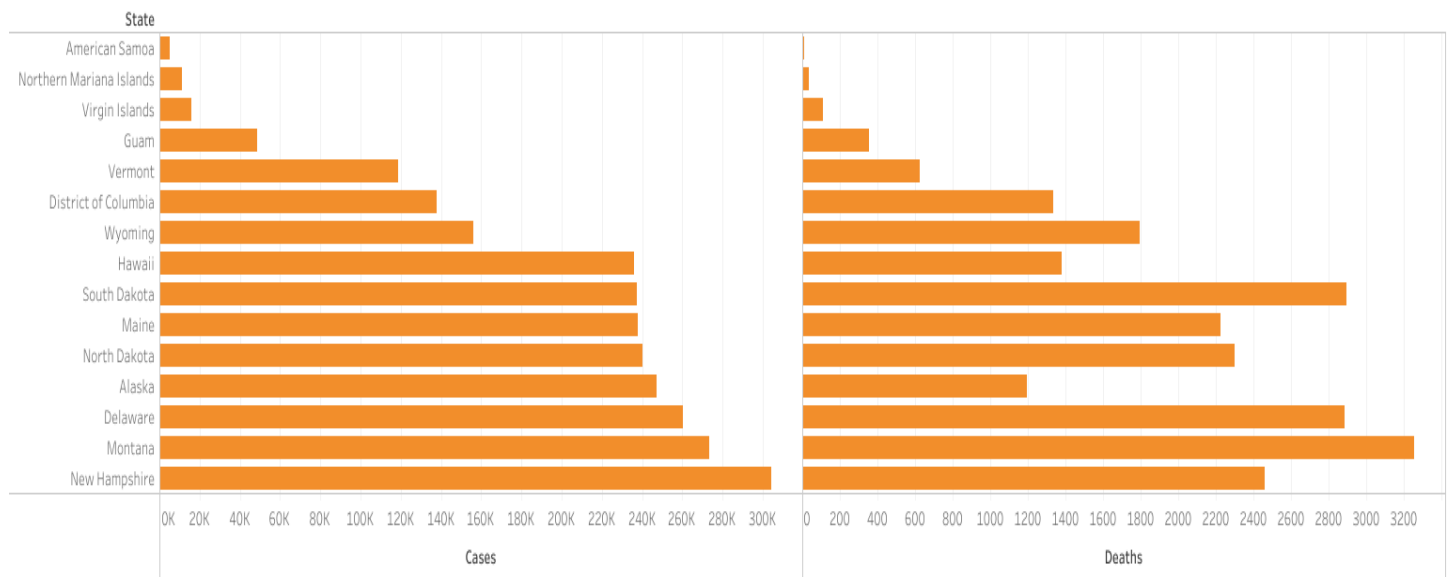
A horizontal bar charts are best used when there is a long label for the categories are easier to display and read, many categories become easier to display and Labels for many bars become easier to display without collision

Tableau:

https://public.tableau.com/views/The15stateswiththemostreportedcasesanddeaths/Sheet1?:language=en-US&:display_count=n&:origin=viz_share_link

What are the 15 states with the lowest cases and deaths recorded?

The 15 states with the lowest reported cases and deaths



we can see that American Samoa has the lowest cases and deaths recorded so far followed by Northern Mariana Islands and Virgin Islands.

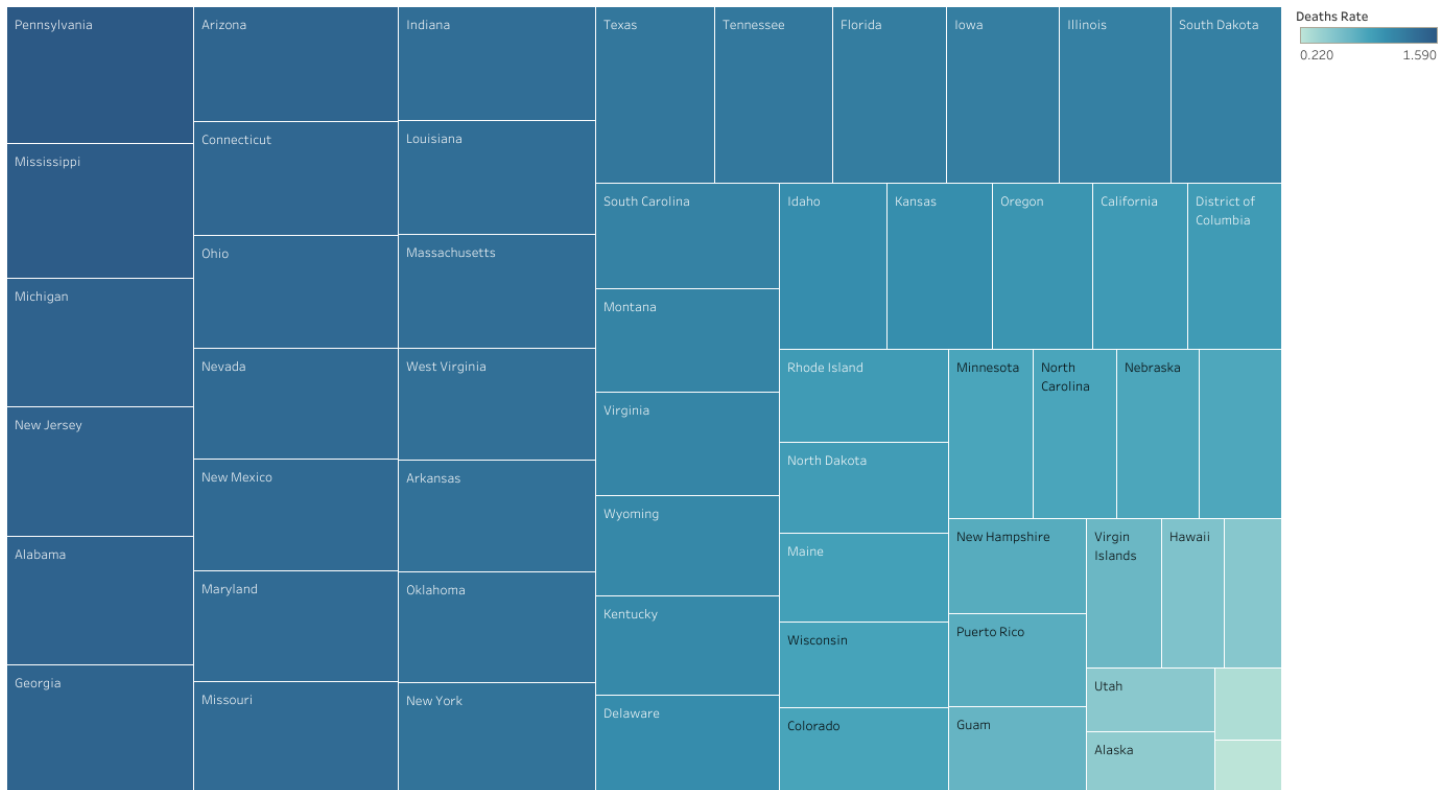
A horizontal bar chart is best used when there is a long label for the categories as they are easier to display and read, many categories become easier to display and labels for many bars become easier to display without collision.

Tableau:

https://public.tableau.com/views/The15stateswiththelowestreportedcasesanddeaths/Sheet2?:language=en-US&:display_count=n&:origin=viz_share_link

What is the Deaths rate from COVID-19 in each State in the US?

The death rate for all states



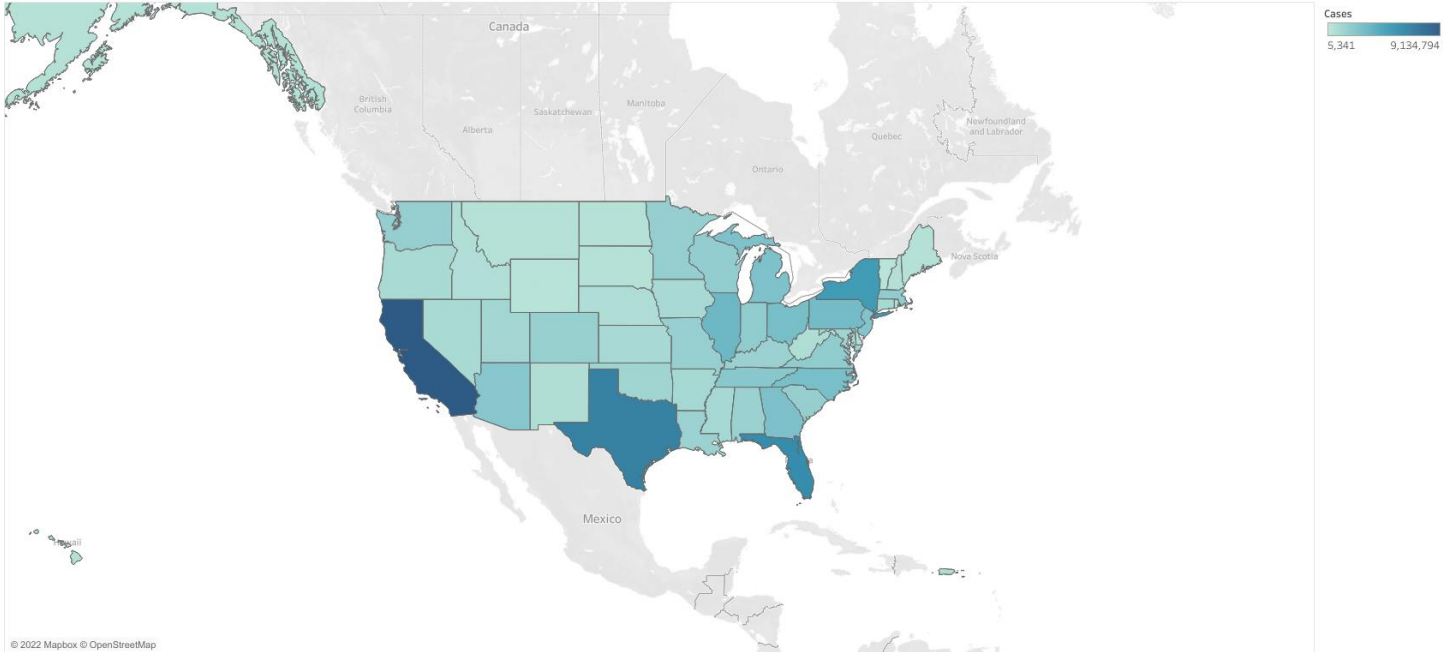
Although California has the highest cases and deaths recorded it has not the highest death rate not even among the highest 10 states, surprisingly Pennsylvania has the highest deaths rate so we can say that Pennsylvania is the most affected state by Covid-19

A Heat map is a method of graphically representing numerical data where the value of each data point is indicated using colors. The most used color scheme used in heatmap visualization is the warm-to-cool color scheme, with the warm colors representing high-value data points and the cool colors representing low-value data points.

Tableau: https://public.tableau.com/views/Thedeathrateforallstates/Sheet3?:language=en-US&:display_count=n&:origin=viz_share_link

A map will be a good idea to visual all the recorded cases, deaths, and deaths rate for each state!

Map for cases, deaths, and death rate in all States



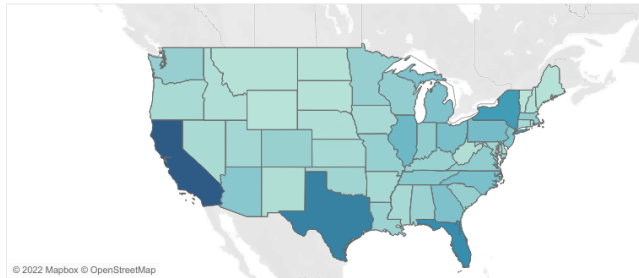
we can see that after California and Texas that all Eastern states are more affected by Covid than the rest of the other states

A map chart is used to show items **on** a background that is often, but not always, geographical. Map charts in Spotfire can contain different type of information in one or more different layers. Maps can contain interactive shapes or display markers of different types on an image or map background

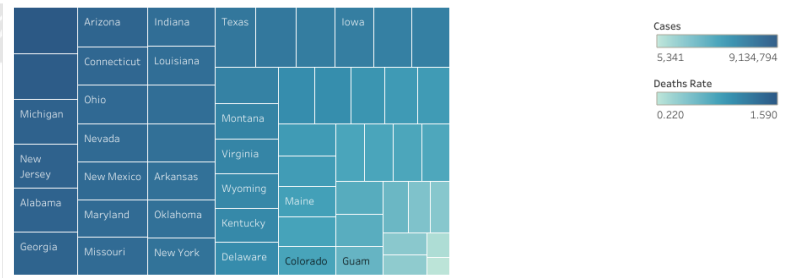
Tableau: https://public.tableau.com/shared/Y6BR662JK?:display_count=n&:origin=viz_share_link

Dashboard!

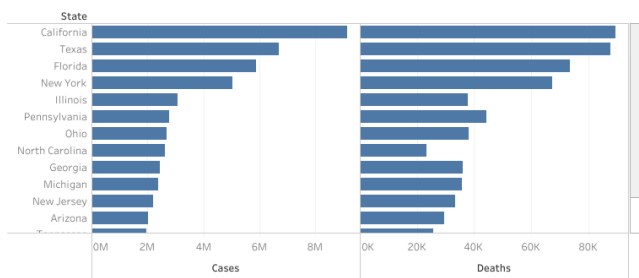
Map for cases, deaths, and death rate in all States



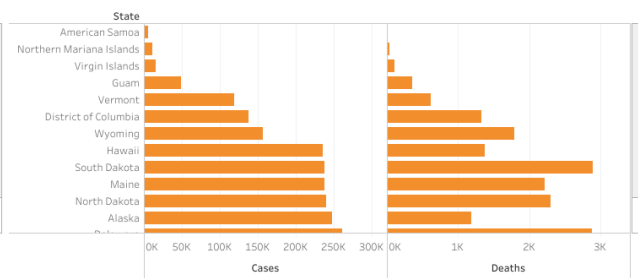
The death rate for all states



The 15 states with the most reported cases and deaths



The 15 states with the lowest reported cases and deaths



Finally, a Dashboard is added to show relationships between each research question and the similarities between their results.

Tableau: https://public.tableau.com/shared/HSGY38JTR?:display_count=n&:origin=viz_share_link

Summary

From this analyzation we found:

- 1- The first case of covid-19 and the first death recorded in US where both in Washington.
- 2- Although the US has reported more than 80 million cases it's has a low death rate of 1.23%
- 3- Although California so far has the highest cases and deaths recorded it doesn't have the highest death rate.
- 4- Pennsylvania has the highest death rate so we can say that it is the most affected state by covid
- 5- Eastern states are more affected by covid than the other states.

From this analysis, the decision-maker in the US must focus the vaccination process on the states with the highest death rate like Pennsylvania, Mississippi, Michigan, and New Jersey.

And now that the epidemic is far from over, precautionary measures must continue, and their intensity must be according to the waves of the epidemic.

Finally, we must keep an eye on the new mutations of the virus and make sure that the vaccine is able to neutralize it.