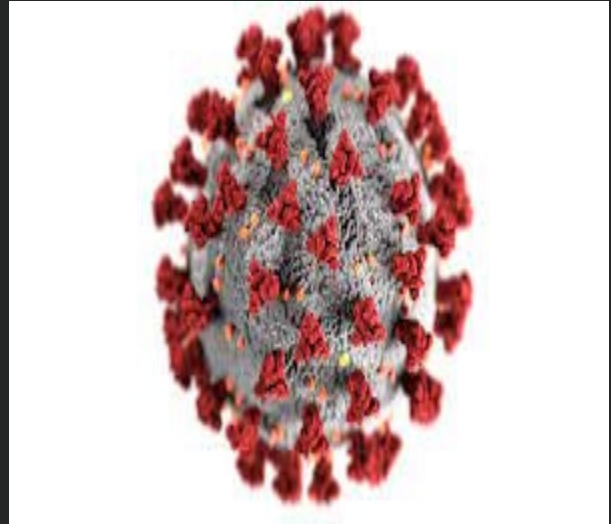**Luddy School of Informatics, Computing, and Engineering**

Covid-19 Analysis

Anitha Ganapathy | Keerthana Reddy Varakala | Saymon Mameza

What is Covid-19

- Virus that was discovered in December 2019 in Wuhan China

- Originates from SARS-CoV-2

  - All a part of the coronavirus family

- Spreads rapidly through little droplets that come from the mouth or nose

Outcome of Covid-19

- 563 million confirmed cases

- 6.3 million confirmed deaths

- Spread to more than 180 countries

Fight Against Covid-19

- According to the Washington Post, 90% of Americans stayed home at the start of the pandemic (April 2020)

- Release and distribution of vaccines throughout 2021 and 2022
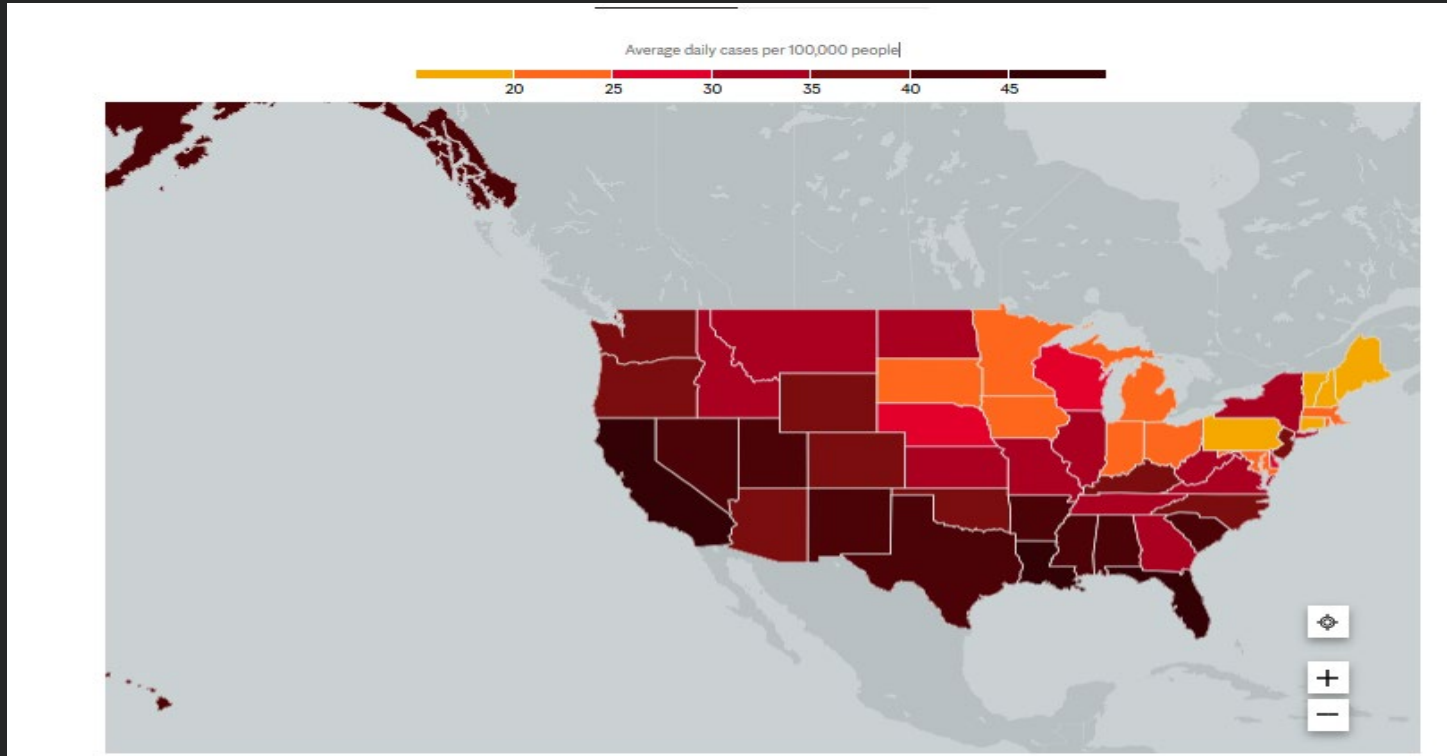
- Social distancing
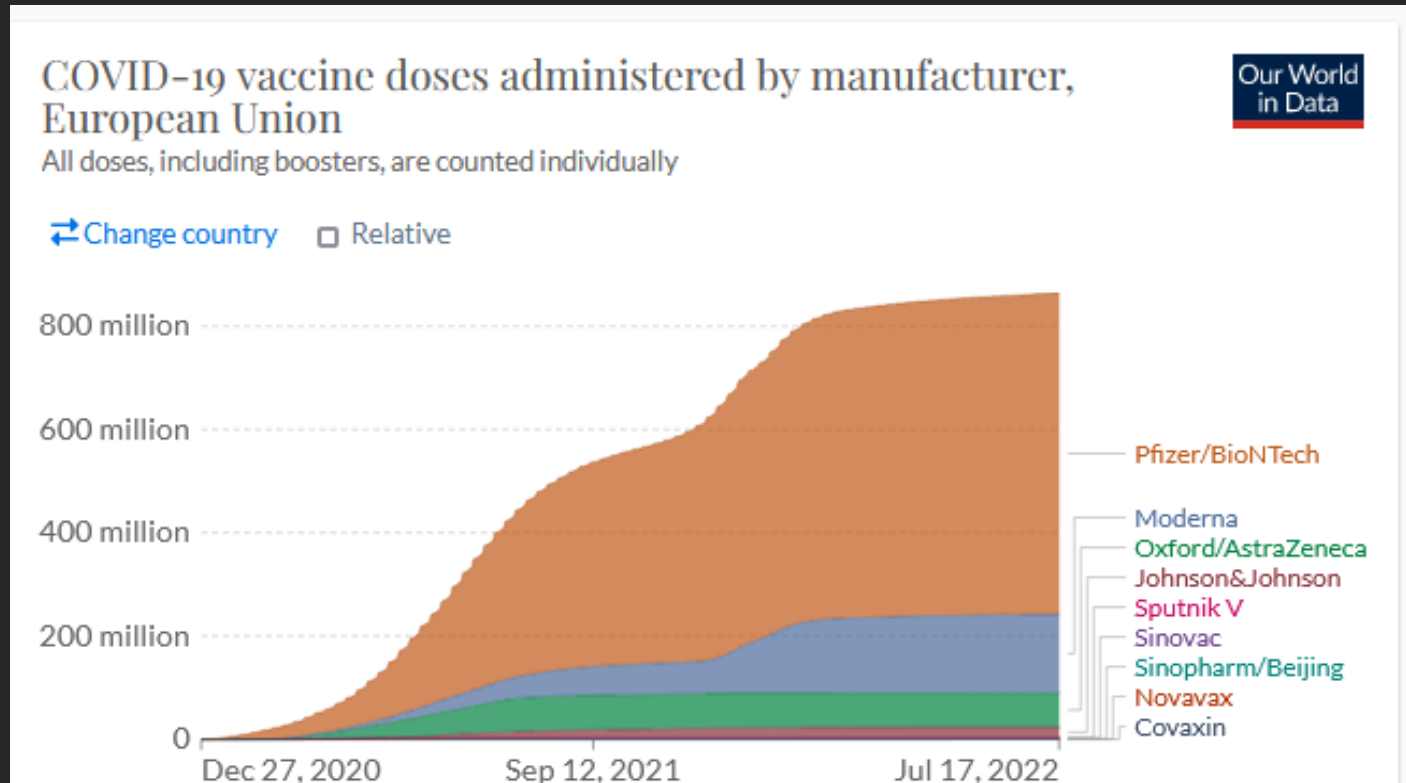
Why Should We Care About Covid-19

- Killed millions and infected hundreds of millions of people

- Higher age bracket has a higher mortality rate

- Major shift in social and political views

- Prepare for the next pandemic
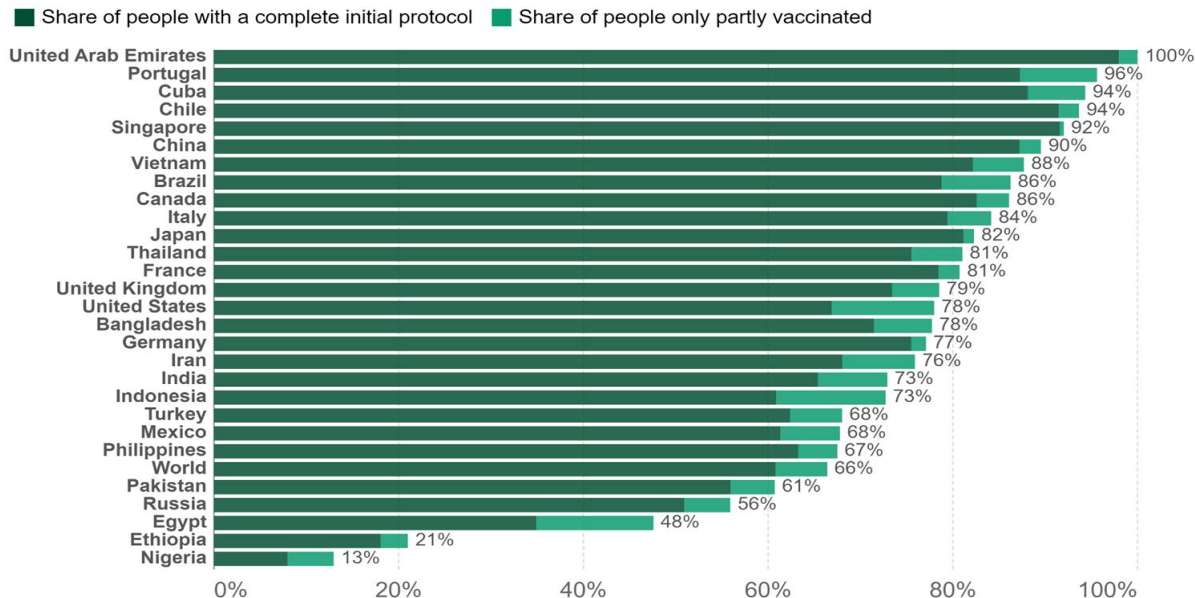
Existing Visualization

Average daily cases per 100,000 people

(Mayoclinic, 2022)

Existing Visualization

COVID-19 vaccine doses administered by manufacturer, European Union

All doses, including boosters, are counted individually

Our World in Data

⇄ Change country   ☐ Relative

Pfizer/BioNTech
Moderna
Oxford/AstraZeneca
Johnson&Johnson
Sputnik V
Sinovac
Sinopharm/Beijing
Novavax
Covaxin

800 million
600 million
400 million
200 million
0

Dec 27, 2020   Sep 12, 2021   Jul 17, 2022

(Our World in Data, 2022)

Existing Visualization

Covid-19 Team Visualizations

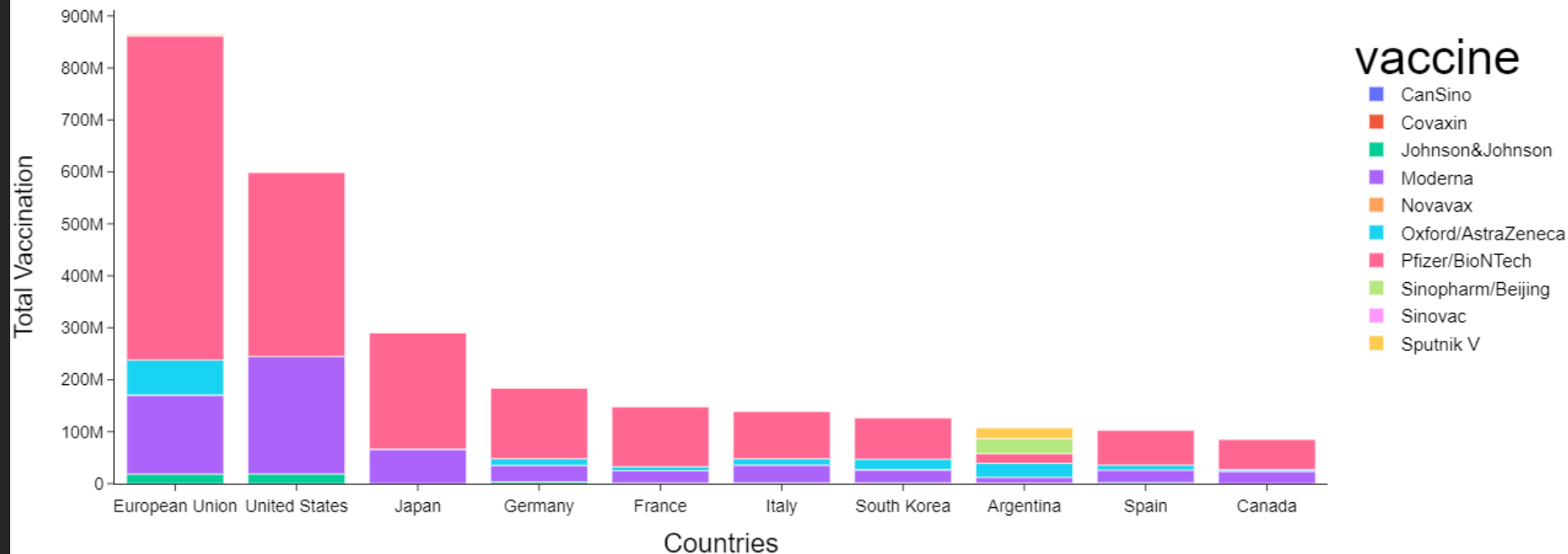Total Quantity of types of vaccines used in USA(total doses)
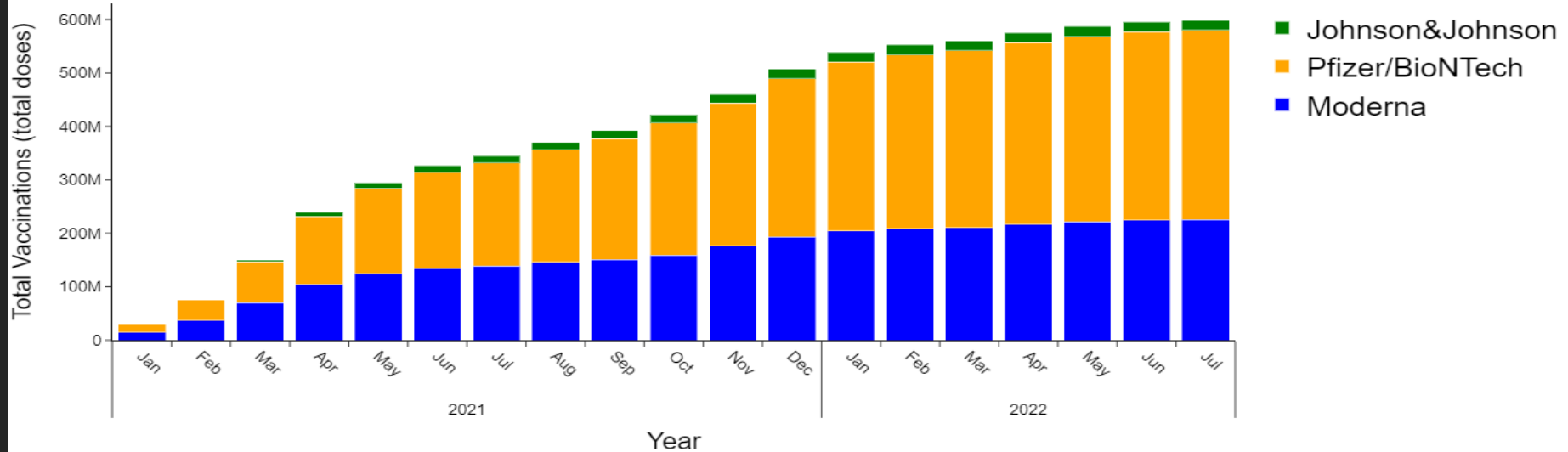
Covid-19 Team Visualizations
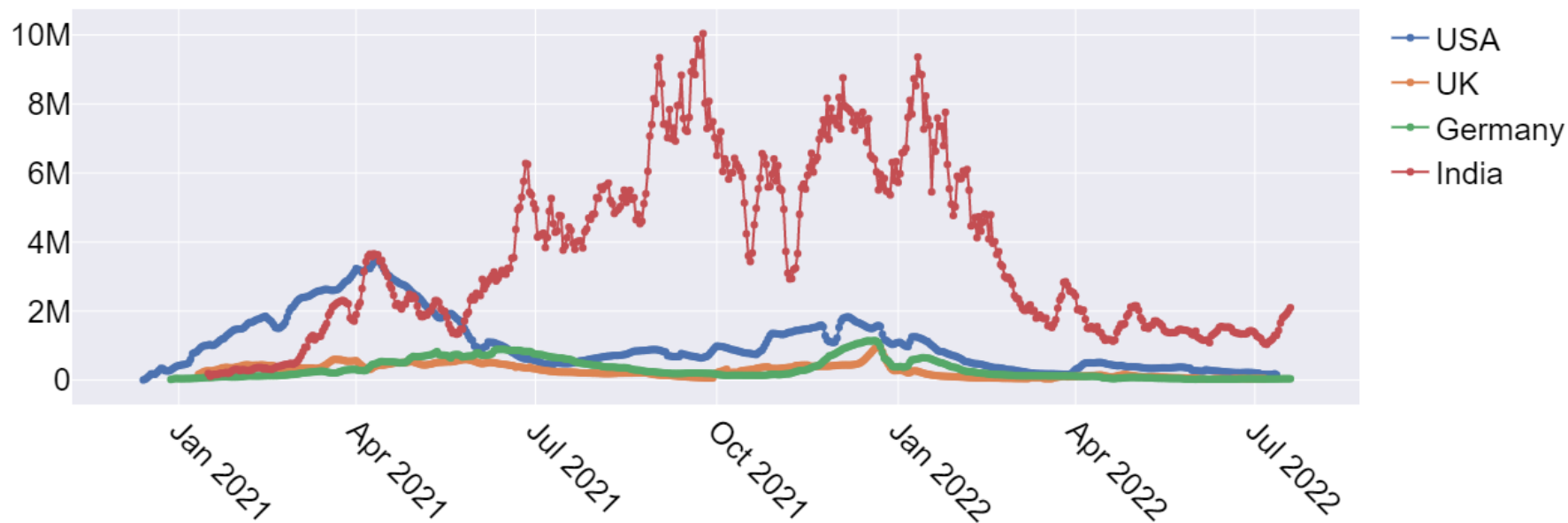

Top 15 vaccinated states in USA
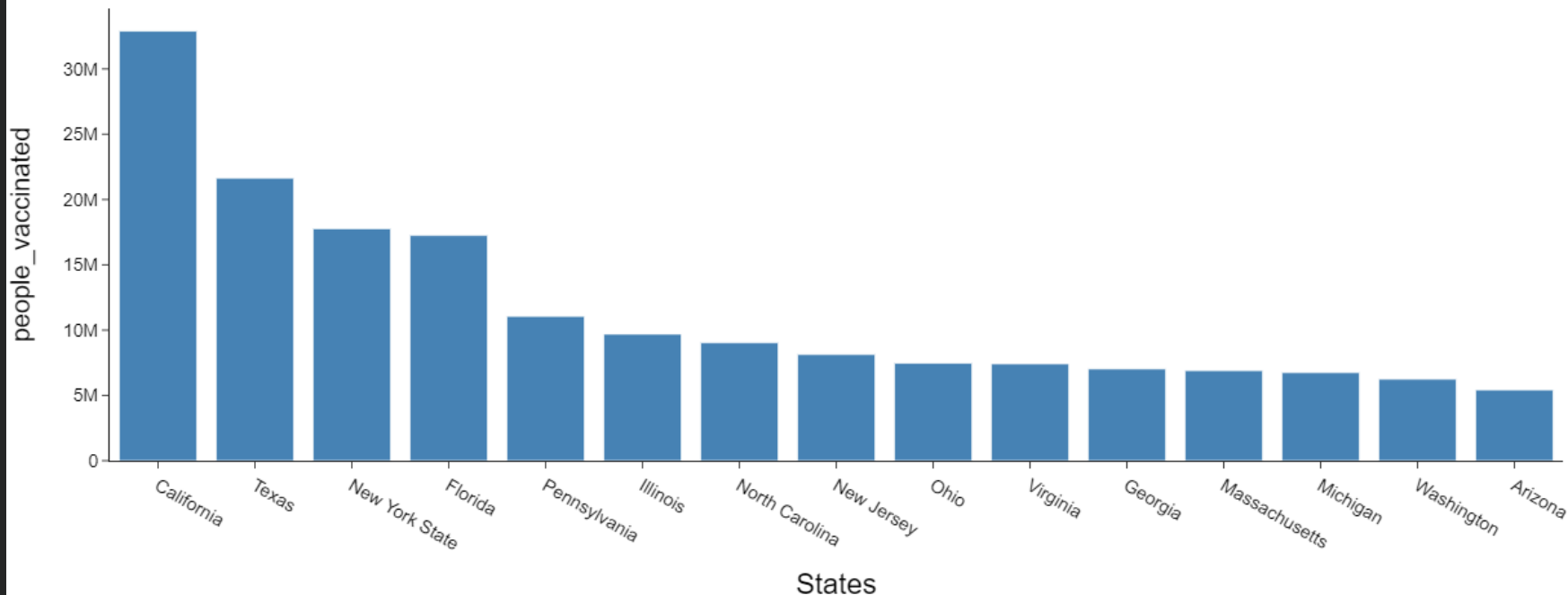
Covid-19 Team Visualizations
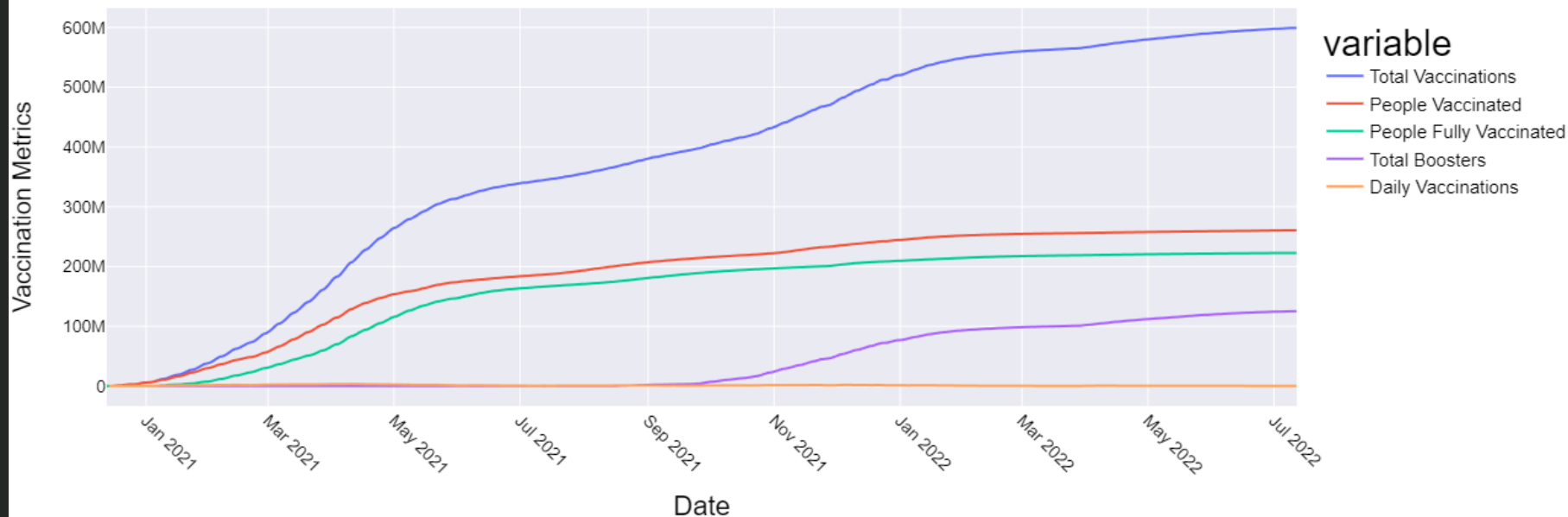

Top 10 countries with most used vaccinations

Covid-19 Team Visualizations
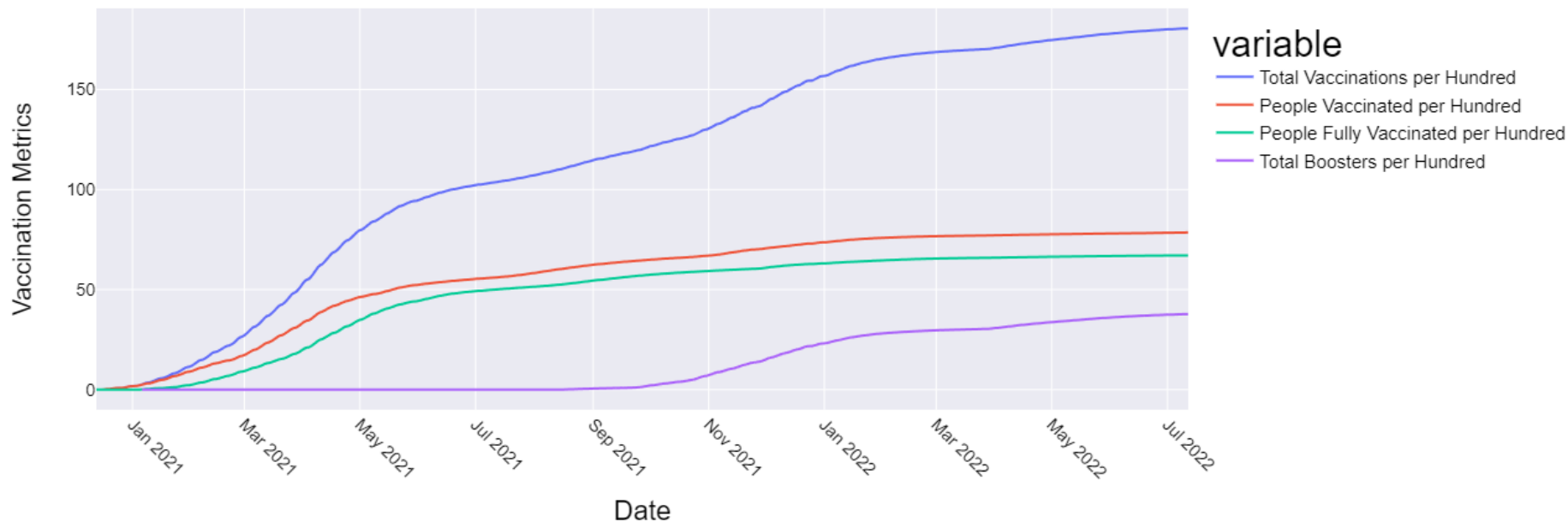

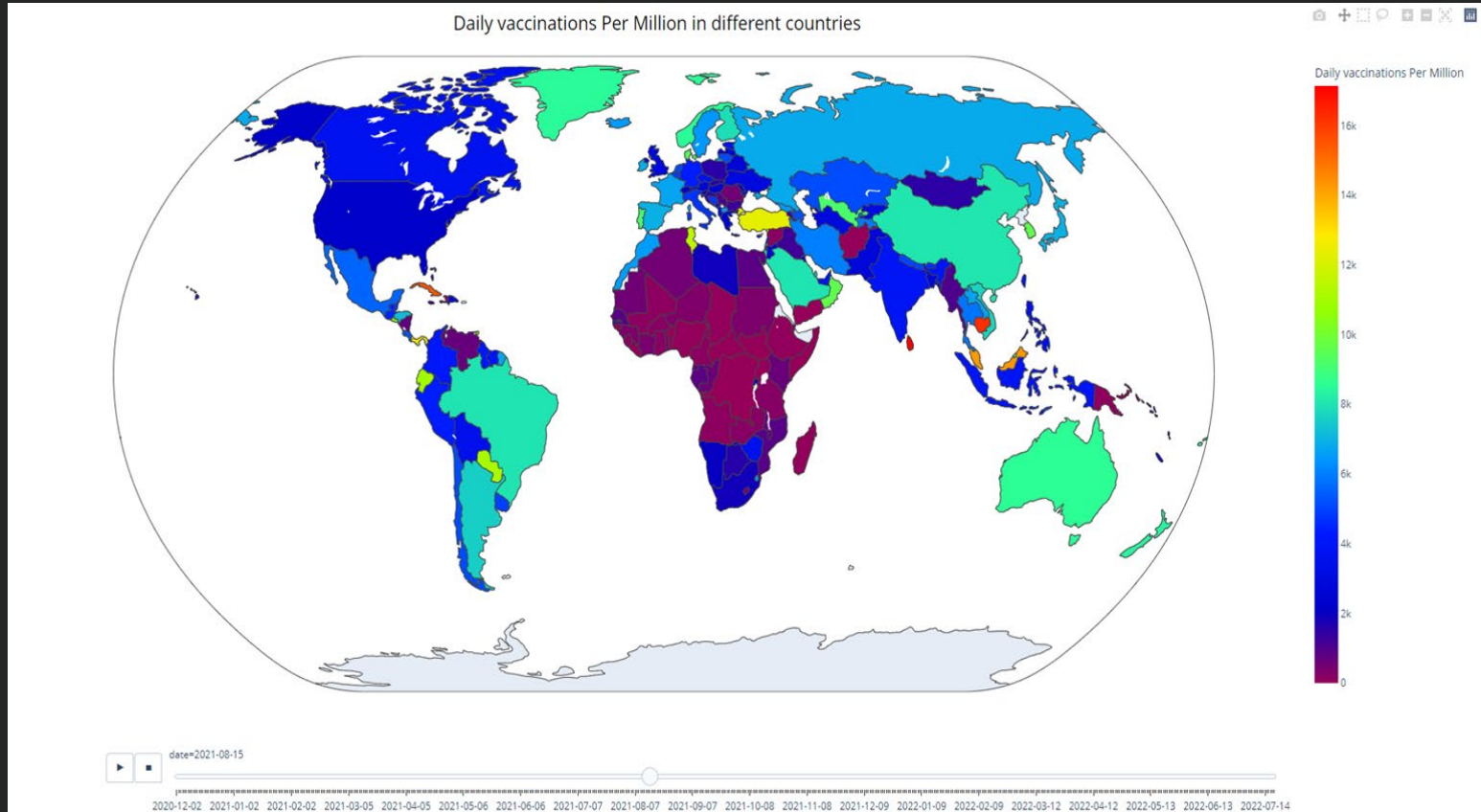Comparison of Daily Vaccinations

Covid-19 Team Visualizations
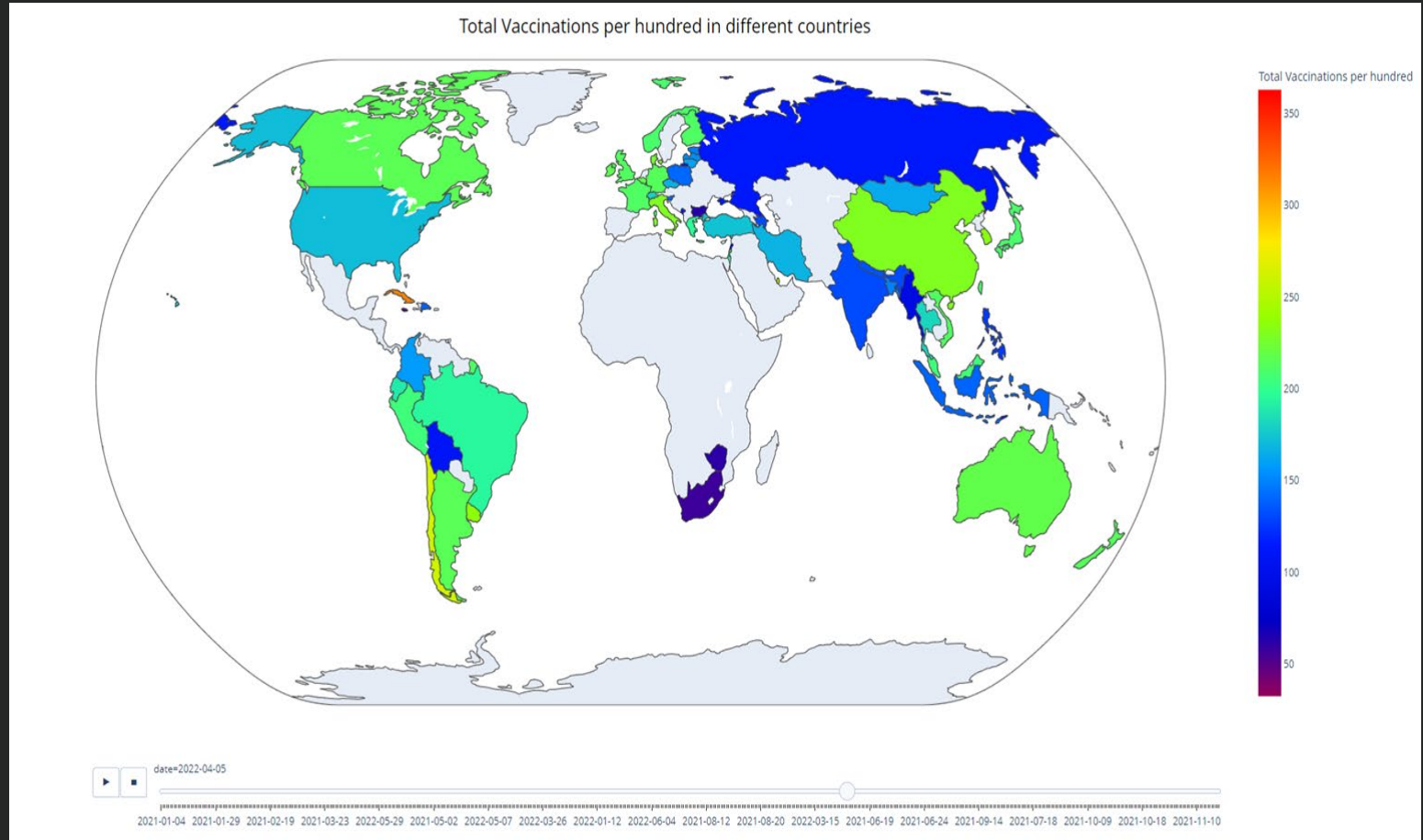
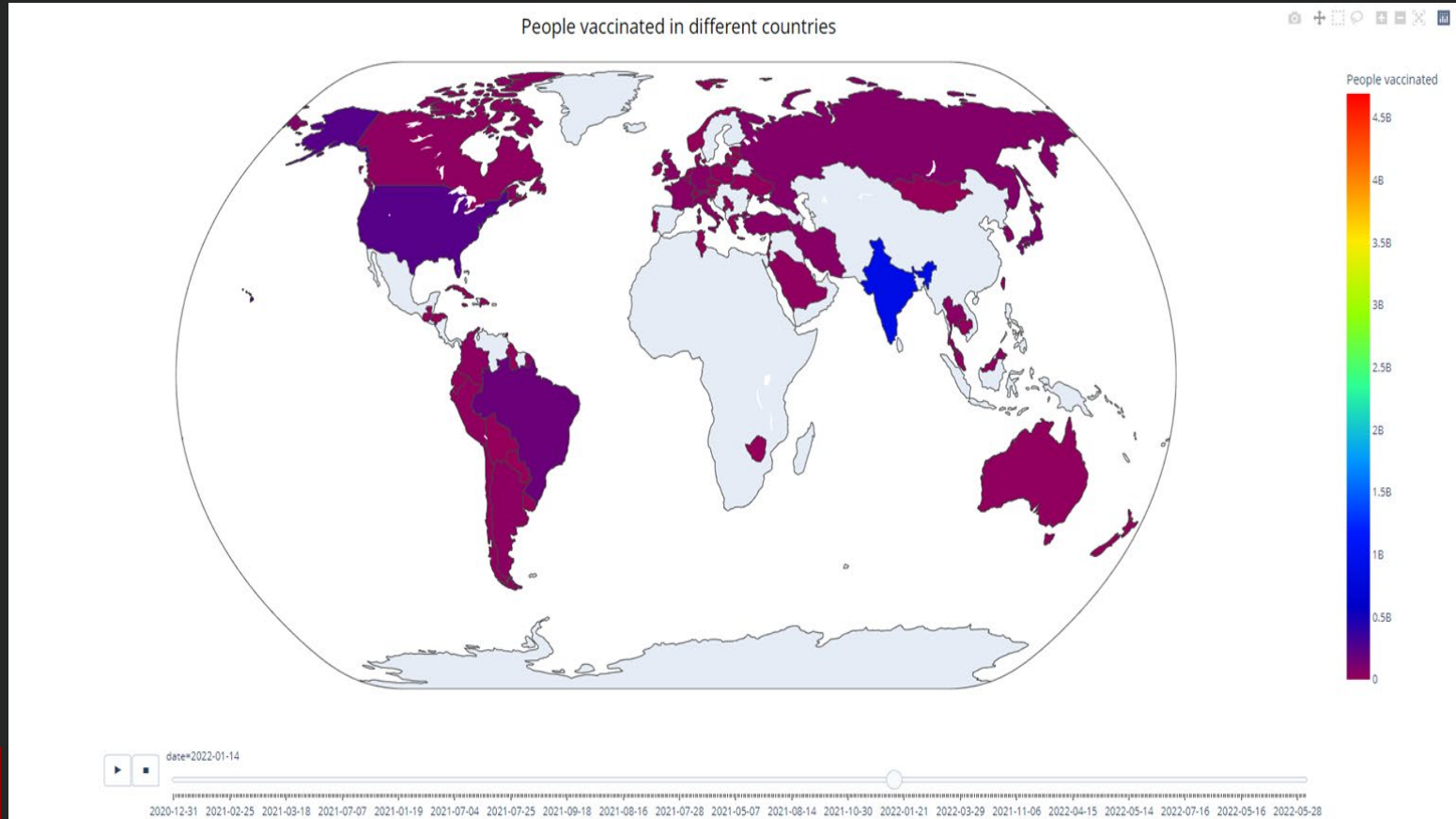# Covid-19 Team Visualizations

USA Vaccination Metrics / hundred

Covid-19 Team Visualizations

Covid-19 Team Visualizations

Covid-19 Team Visualizations

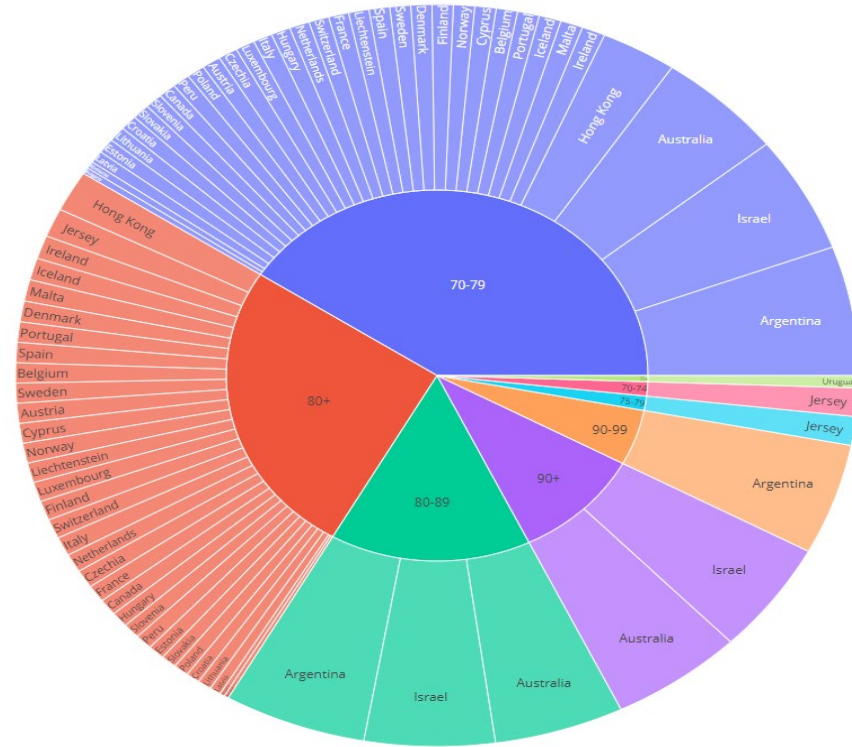People vaccinated in different countries

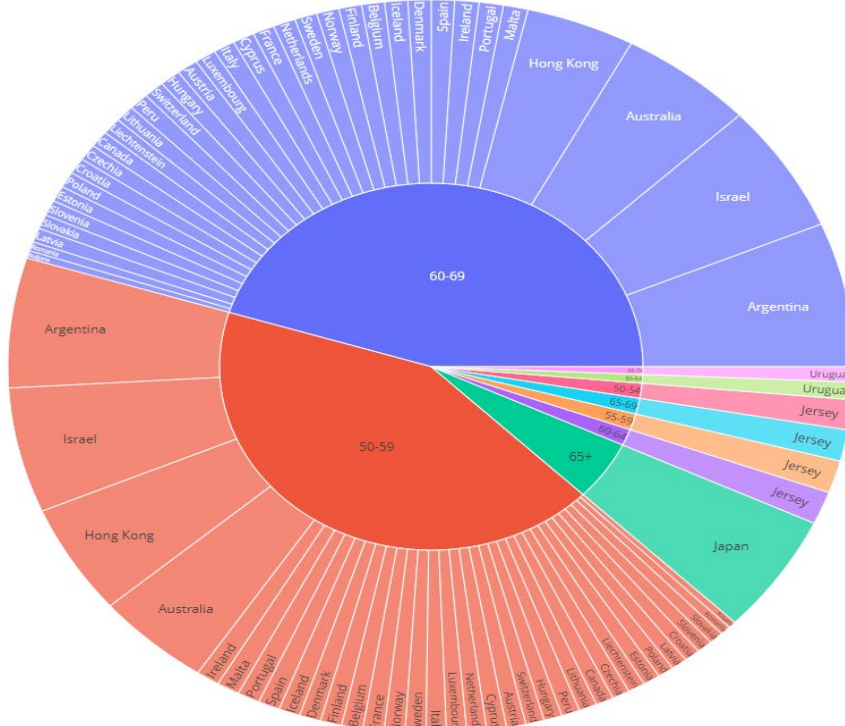# Covid-19 Team Visualizations
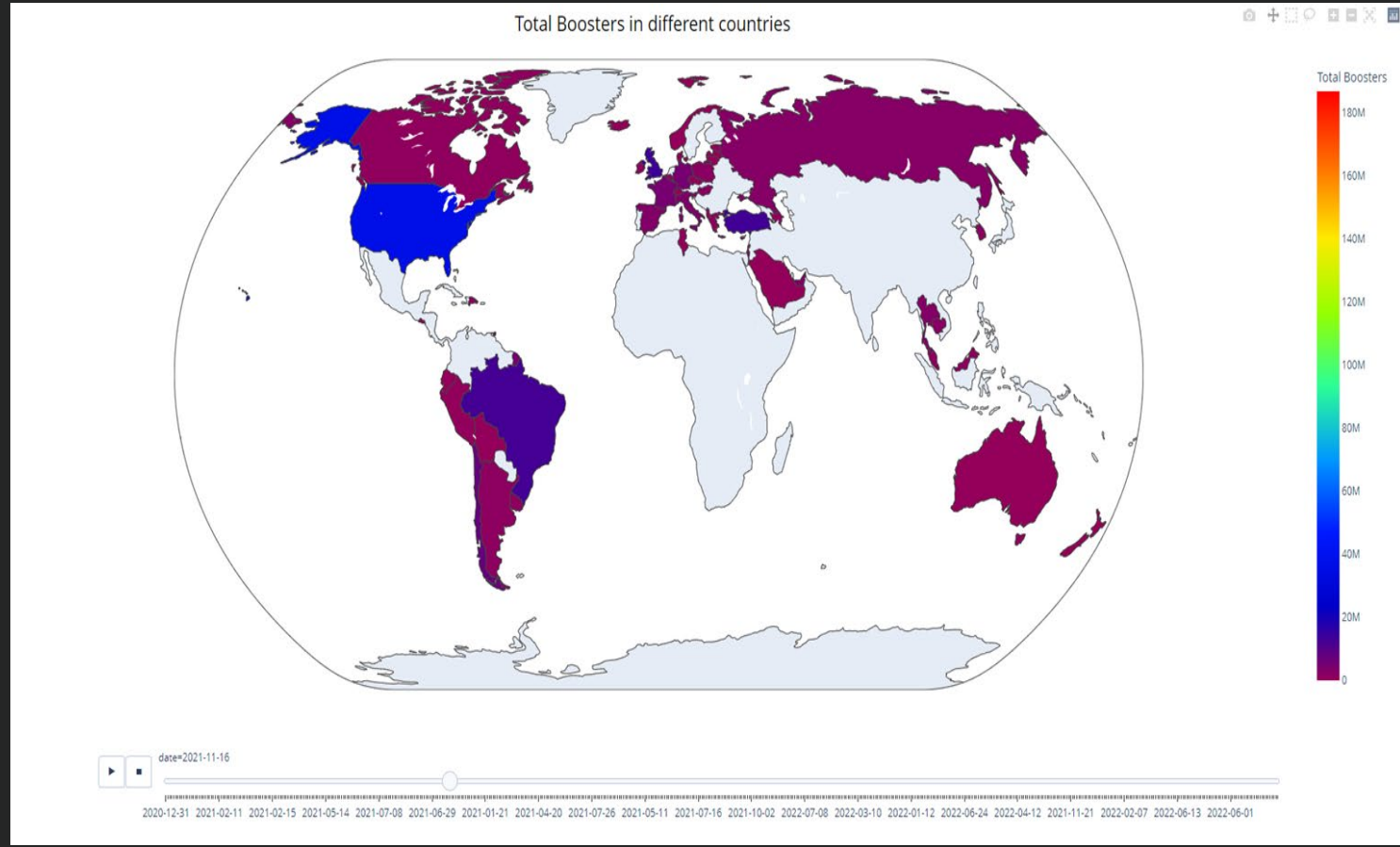
Covid-19 Team Visualizations

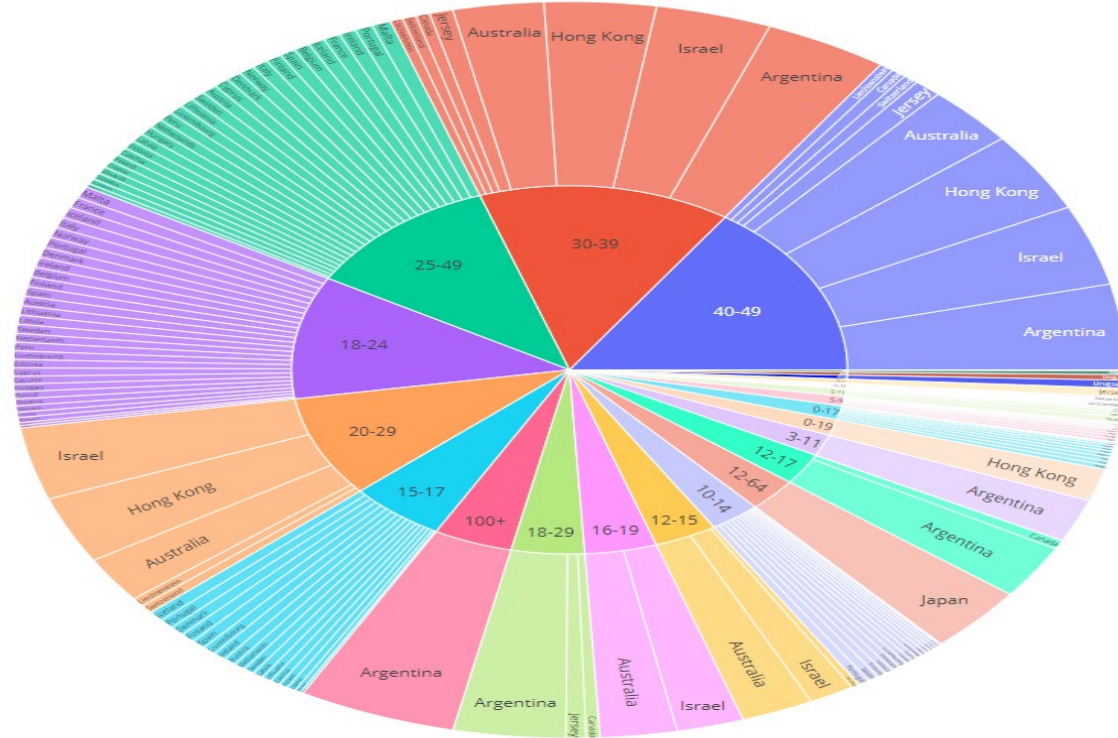Vaccinations per hundred of people with Age greater than 70

Covid-19 Team Visualizations

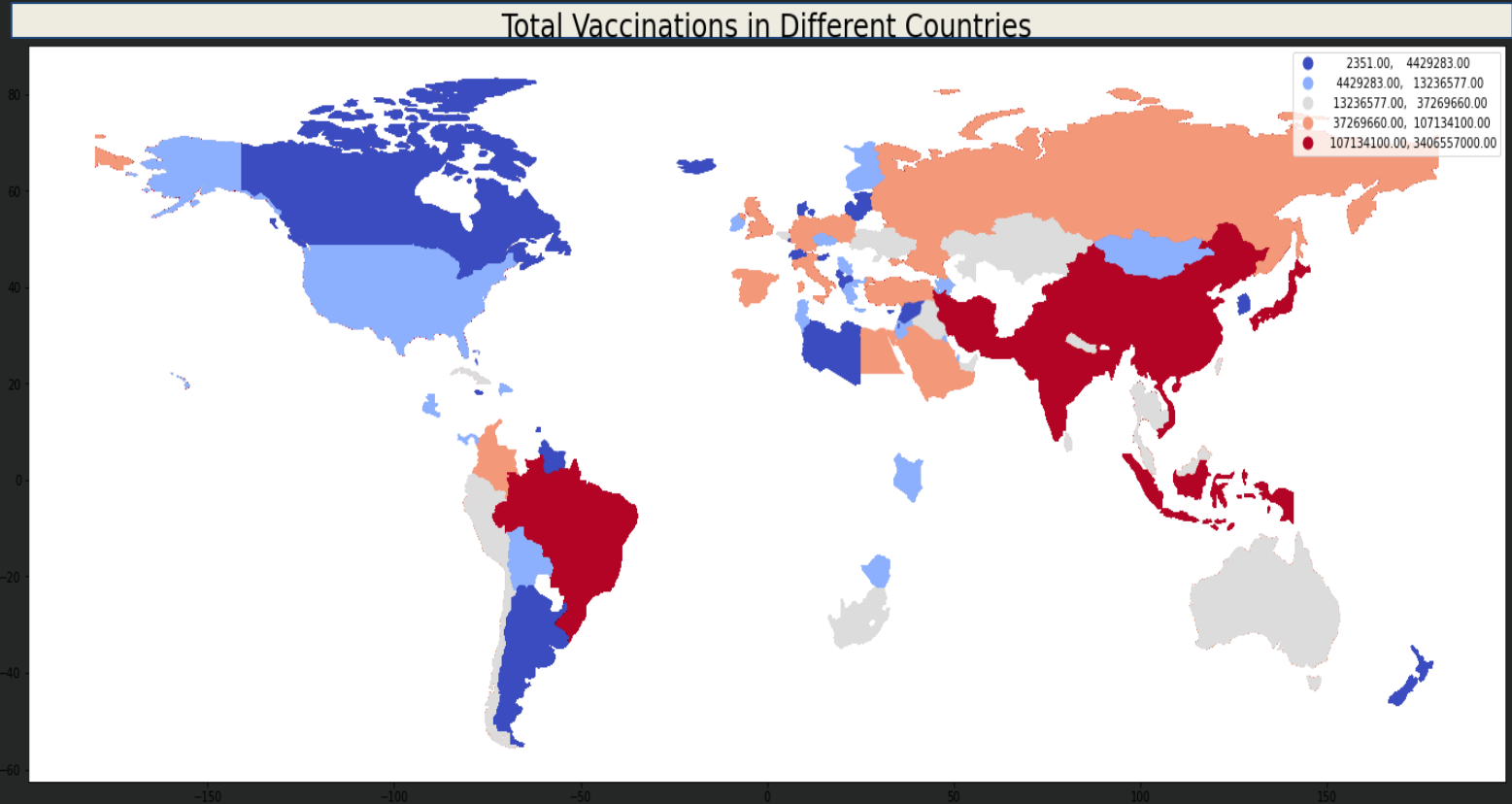Vaccinations per hundred of people with Age greater than 50 and less than 70

Covid-19 Team Visualizations

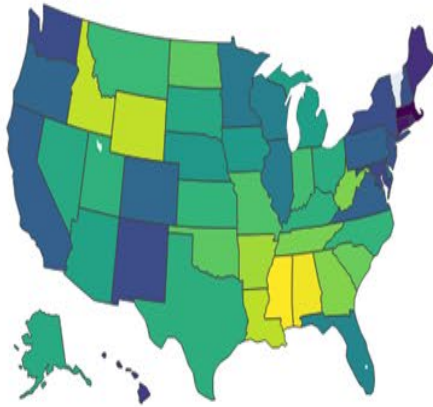Vaccinations per hundred of people with Age less than 50

Covid-19 Team Visualizations
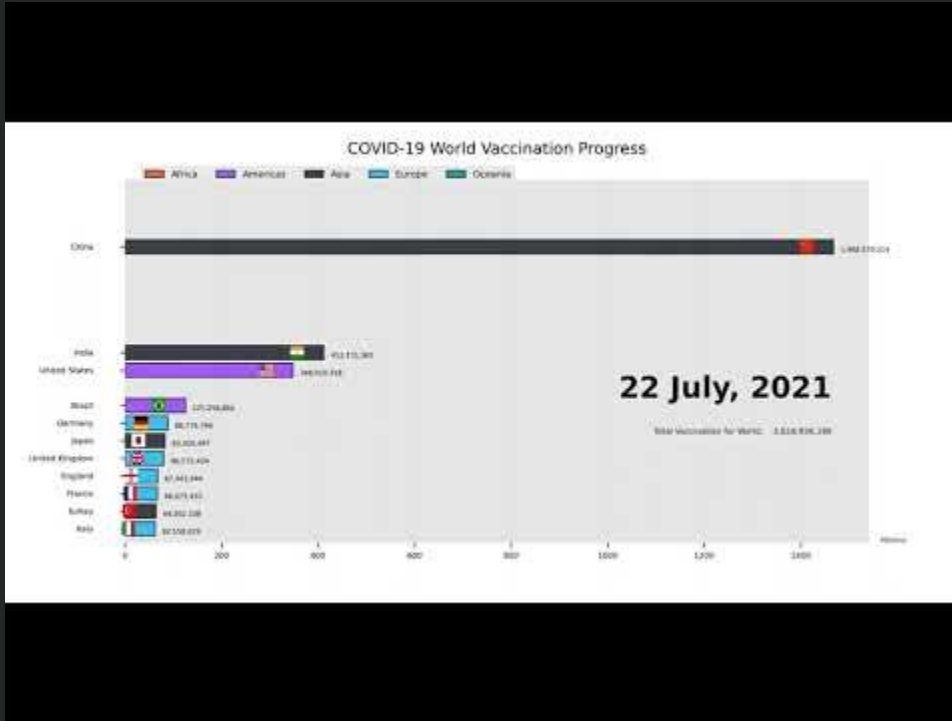
Covid-19 Team Visualizations

Covid-19 Team Visualizations

Future Work and Conclusion

- Pull in more data to see the effects of Covid-19 (I.e mental health)

- Run analysis on vaccination rate against Covid-19 cases