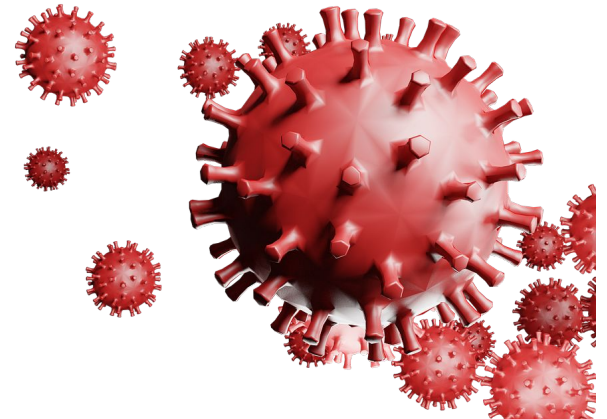# Visualizing the Impact of Vaccines on COVID-19 Outbreaks

Information Visualization CPSC 547

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Motivation

- There are a lot of speculations regarding the efficacy of Covid-19 vaccines
- Using data science and information visualization techniques to create compelling visualisation demonstrating the measured effects are an important tool in education the public
- Have the opportunity to identify a suitable dataset and visualise it in a way which tells the story hidden in the data in a visual manner
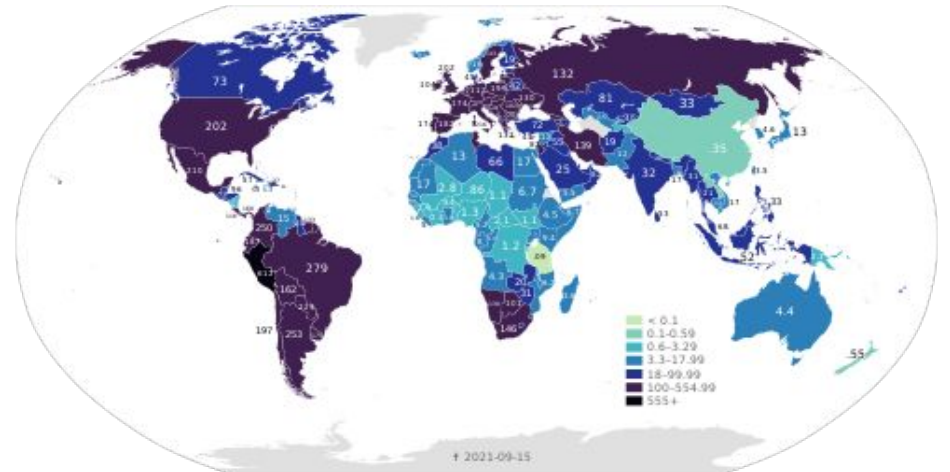
Questions to explore?

- What is the actual efficacy of the vaccines?
  - Is the vaccine more effective for certain nationalities than others?
  - Is the vaccine effective for most common strains of the sars-cov-2 virus?
- Are some vaccines more efficient and effective than others?
- What is the impact of the vaccines on Covid-19 outbreaks?
  - Explore correlation between number of active cases and vaccinated people?
  - Explore correlation between number of people in intensive care and vaccinated people?

Available Datasets

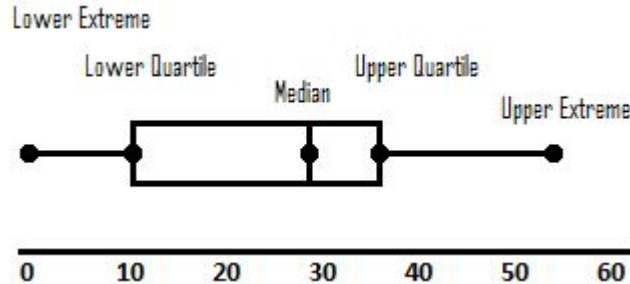There are many datasets available on the Internet

- [Kaggle](#)
- [Our World In Data](#)
- [Google](#)
- [Wikipedia](#)
- Others

Visualization Techniques

Choose one or more of the following to best suit your data:

- Bar charts
- Scatter plots
- Box-and-whiskers plot
- Bubble charts
- Geolocation heatmap
- Any others you find suitable

Different libraries to create all of these are available and as a bonus even make them interactive

Share of people fully vaccinated against COVID-19
Share of people only partly vaccinated against COVID-19

Country	%
United Arab Emirates	93%
Portugal	88%
Spain	81%
Singapore	79%
Uruguay	78%
Chile	78%
Canada	77%
Denmark	77%
China	76%
Ireland	76%
Italy	75%
Finland	74%
France	74%
United Kingdom	71%
Brazil	70%

Belgium
Sep. 15–28

Total cases	28,126
Deaths	104

Coronavirus (COVID-19)