

WH P2 LAB



Our Goals

- To find out the difference and similarities between COVID-19 and other viruses in the past, such as Ebola, SARS, and MERS
- To compare the trend, mortality and spreading ability
- Visualize the results

QUESTIONS

- What is the difference that COVID-19 and viruses spread in certain countries?
- How those viruses affected the origin country and other countries, and we want to compare the data between viruses to see their ability in spreading.
- We are trying to see if the mortality affects the duration of the virus, and see if we can get an estimation of how long COVID-19 will last.
- What is the difference in the trend of the virus in the first 50-day outbreak?

Methods

difference in fixed time

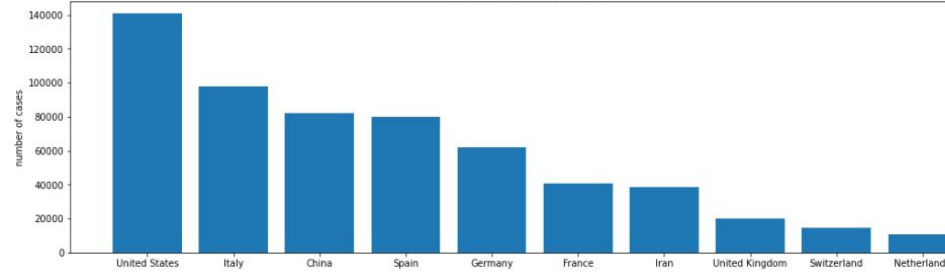
- Growing rate

difference in fixed space

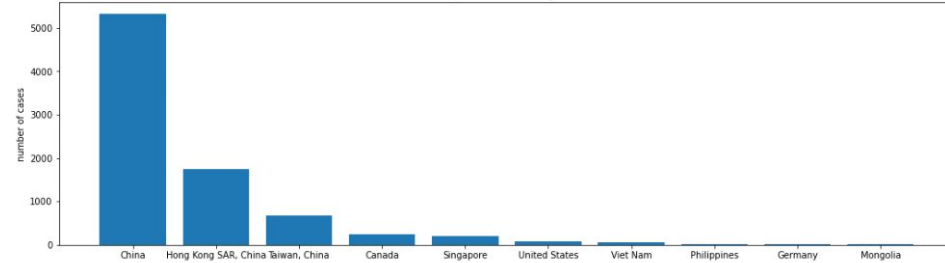
- Spreading condition

Spread of the Viruses

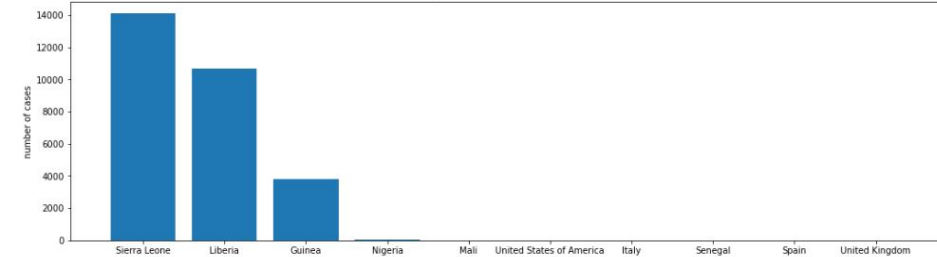
Top 10 covid-19 infected countries



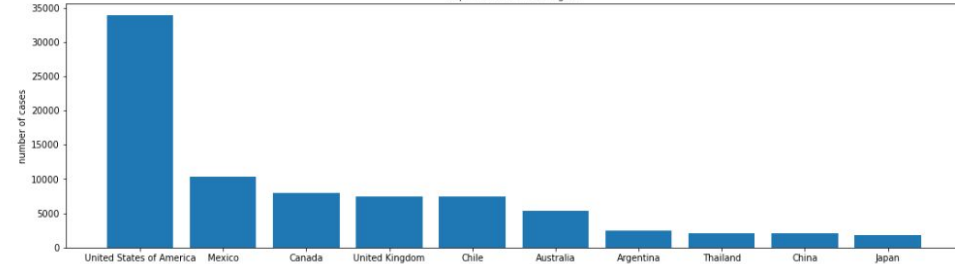
Top sars infected region

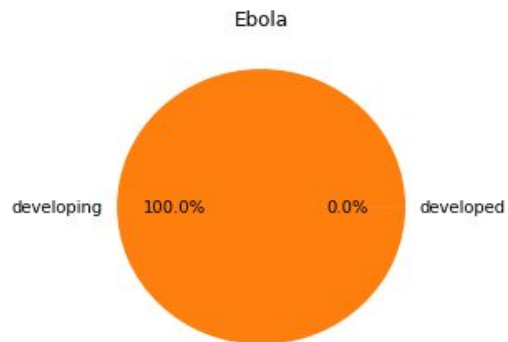
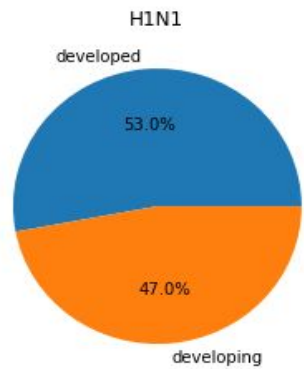
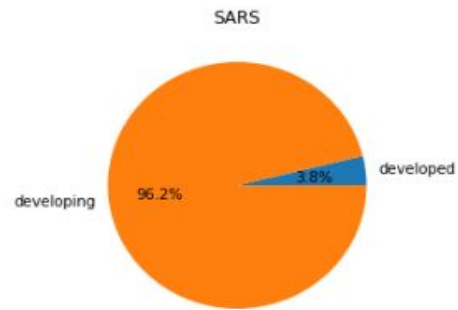
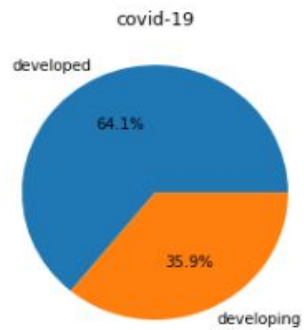


Top 10 ebola infected countries

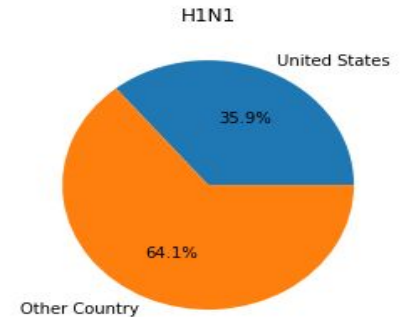
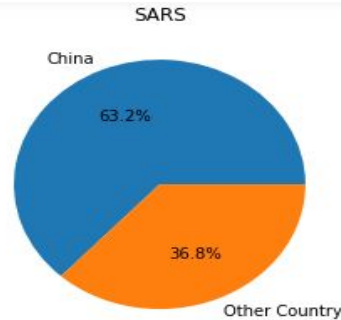
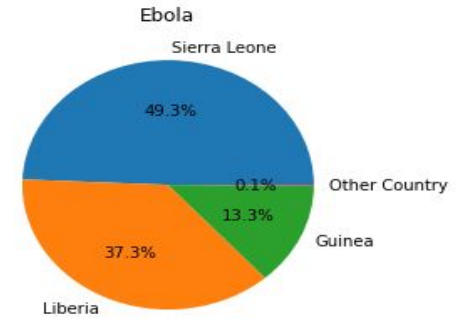
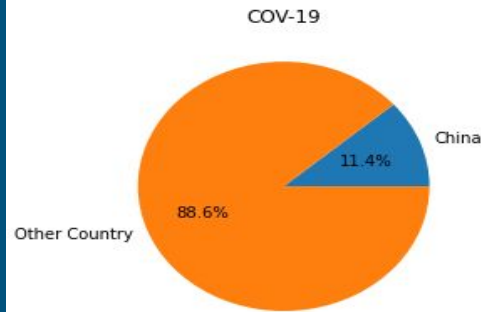


Top h1n1 infected region





Origin of the virus



Durations and Mortality

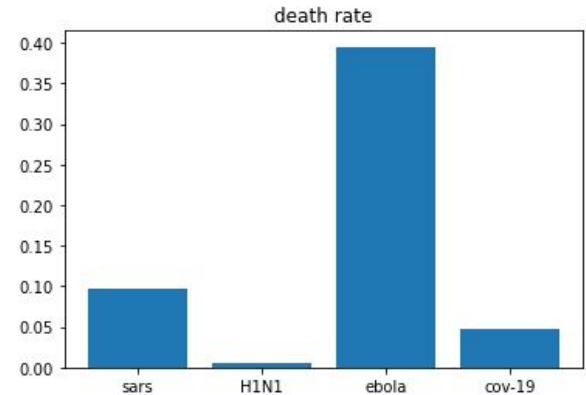
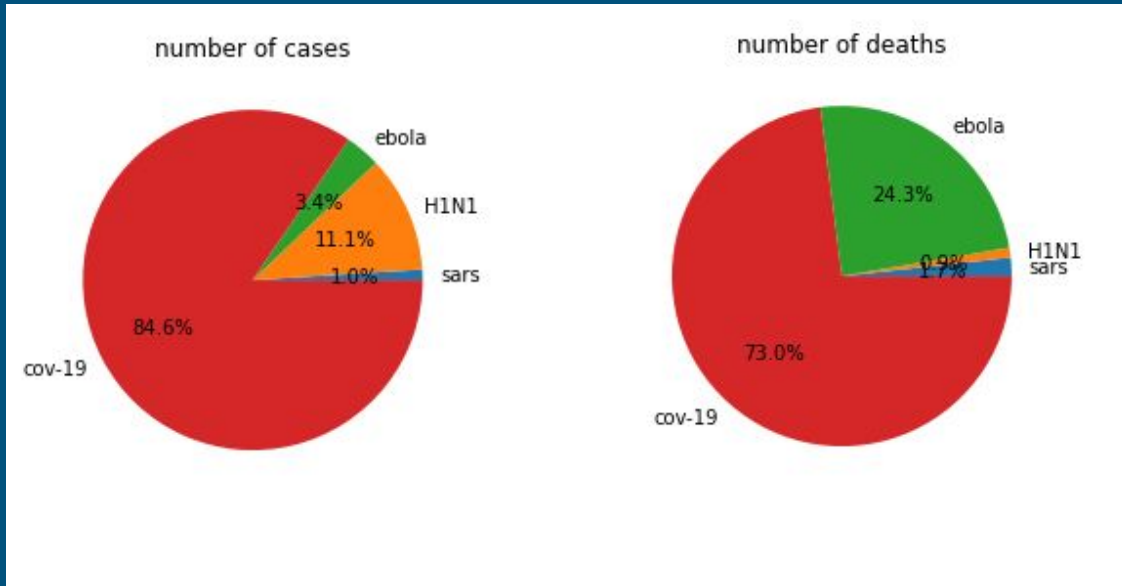
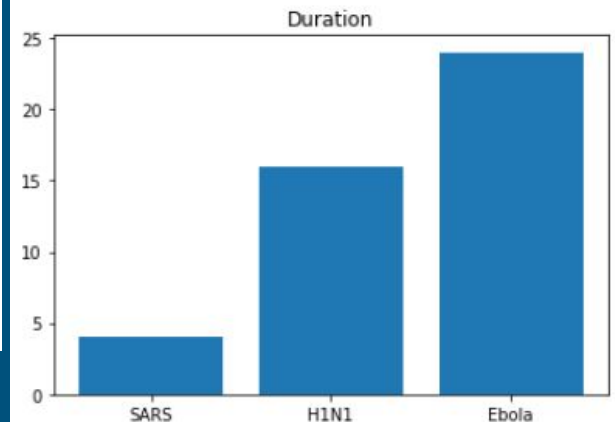


Figure 3-2 death rates of the diseases



First 50-day trends

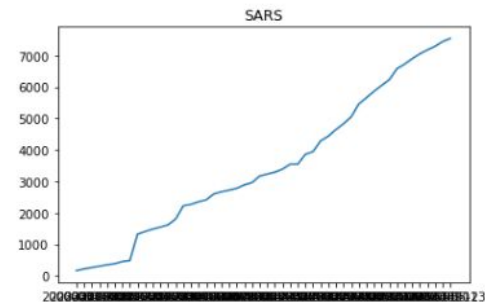
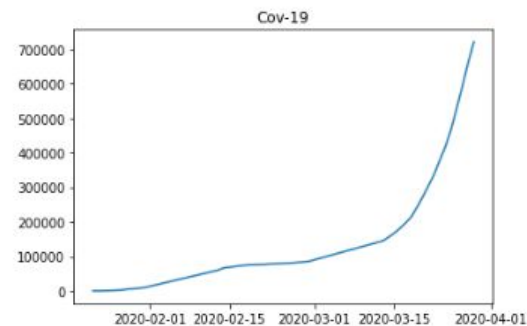


Figure 4-1 SARS confirmed cases in first 50 days

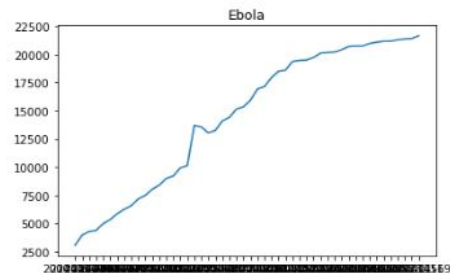
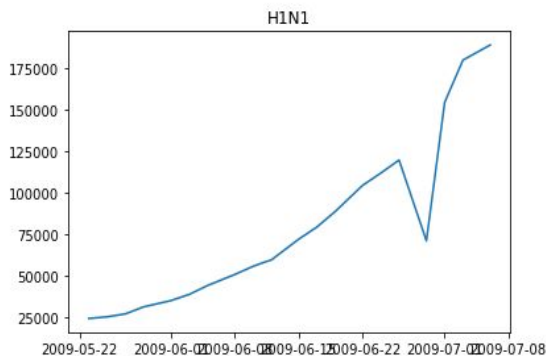


Figure 4-2 Ebola confirmed cases in first 50 days

Challenges

- Lack of data
- Useless data
- Corrupted data
- Incompatible data format
- Unable to predict the duration of this epidemic

Conclusion

- Low mortality rate
- Highly infectious
- The most severe epidemic of the 21st century

Thank You

