COVID-19 Data Exploration

Introduction

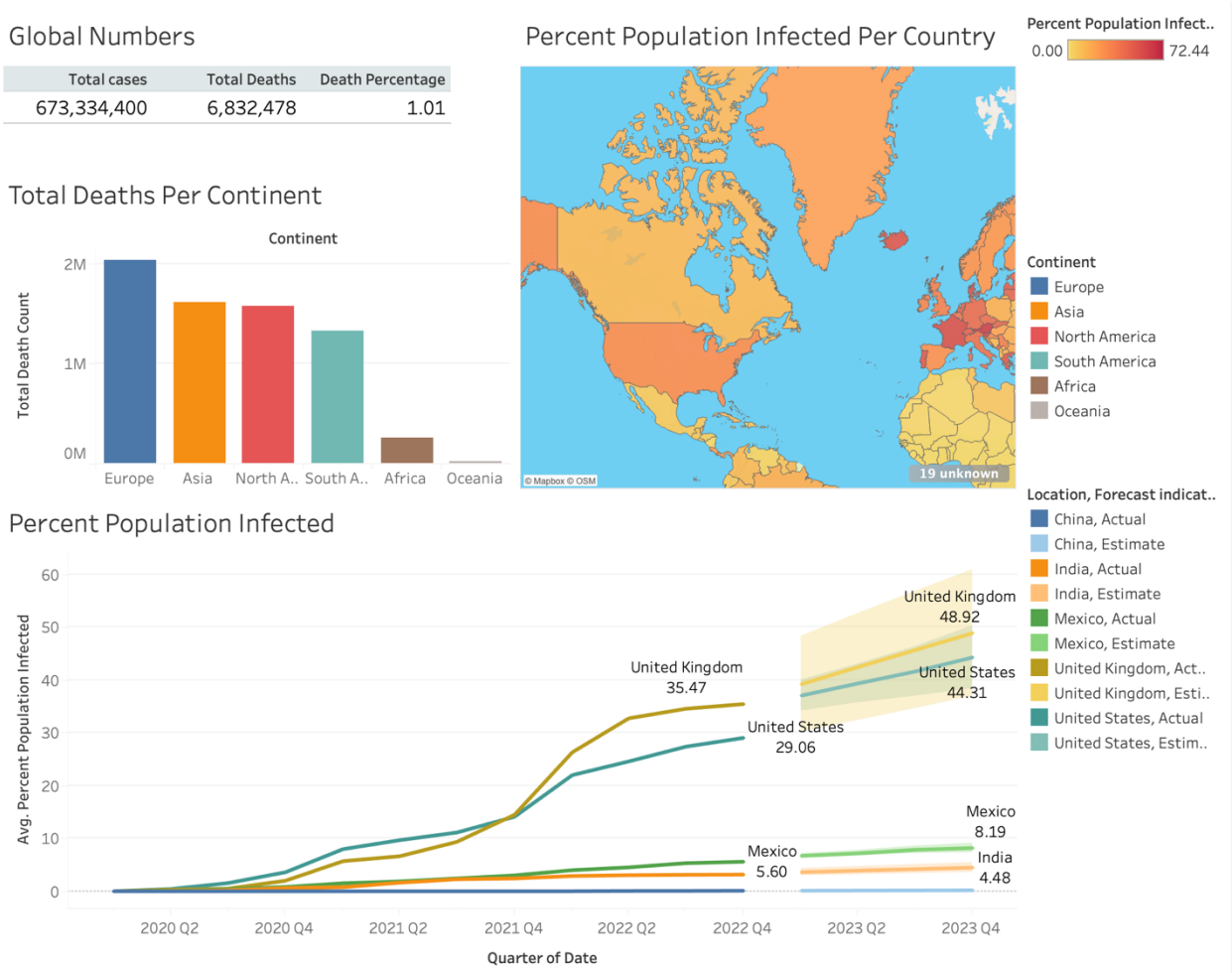
In December 2019, the world was introduced to Coronavirus disease 2019 (COVID-19), a highly contagious illness caused by the SARS-CoV-2 virus. The disease rapidly spread from person to person, resulting in a global pandemic that caused millions of deaths worldwide. It was a dark time in our history, but thanks to the dedication of medical professionals and researchers, we now have several vaccines that can protect us from COVID-19. As a result, the rate of deaths due to COVID-19 has decreased significantly, bringing hope for a brighter future.

In this project, I analyzed the global death toll caused by COVID-19, as well as the number of deaths per continent. I also investigated the percentage of population worldwide that has been infected with the virus, and studied the trajectory of infection rates in the United States, United Kingdom, Mexico, China, and India. To further explore the effectiveness of vaccination, I examined data from Canada and the United States to see whether being fully vaccinated can help prevent death due to COVID-19.

Method

For my project, I utilized a COVID-19 dataset obtained from https://ourworldindata.org/covid-deaths and worked with it using a SQL workspace on BigQuery. To start, I cleaned and separated the dataset into two sections: Covid Deaths and Covid Vaccinations. Then, I executed several SQL queries to obtain the desired information and saved the results in Excel for use in Tableau. It's important to note that since the data on the website is updated daily, the numbers I obtained through my queries may differ from what others get if they run the same SQL queries.

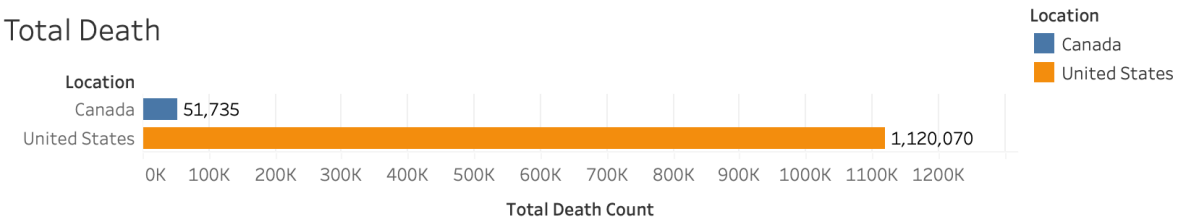
Result

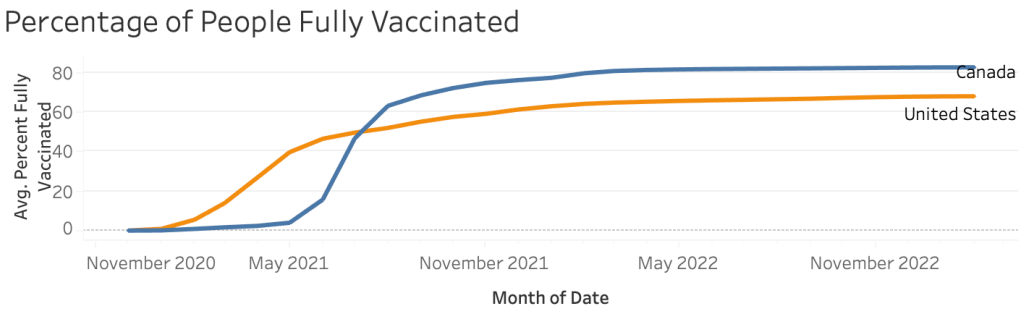


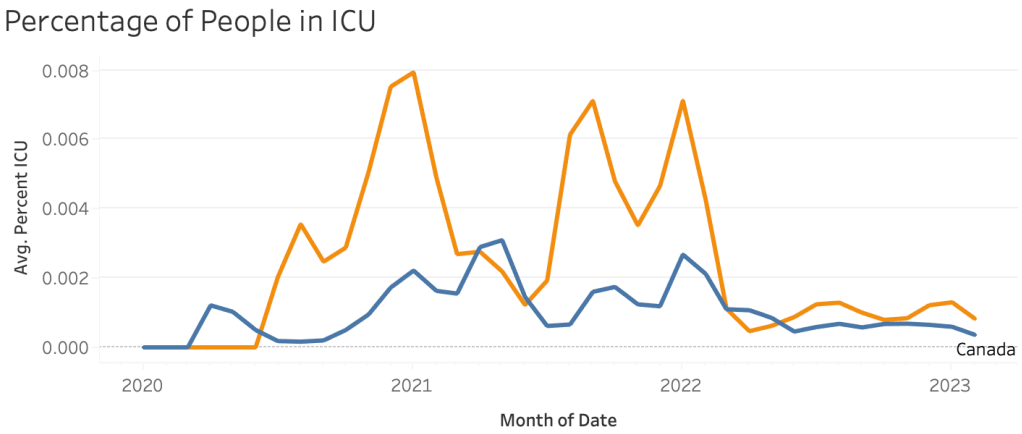
COVID-19 has had a significant impact on the world, with a death percentage of 1.01% worldwide. Although this may seem like a small number, it translates to around 6.8 million deaths, which is a significant loss of life. It's important to note that this virus is highly contagious and can cause severe illness, which is why it's essential to take it seriously and take necessary precautions.

Europe has been hit hard by COVID-19, with the highest number of reported deaths compared to other continents like Asia, North America, South America, Africa, and Oceania. When we look at a map of how each country was affected by COVID-19, we can see that the population in Europe has a higher infection rate than in North America.

One country that stands out in terms of infection rates is the United Kingdom, which has a higher percentage of the population infected with COVID-19 than the United States, Mexico, India, and China. It's important to note that these statistics change over time, and it's important to stay up-to-date with the latest developments and guidelines from health organizations.







The population of Canada is approximately one-tenth of the population of the United States. Despite this significant population difference, the United States has experienced around 21 times more COVID-19 deaths than Canada, as shown in the graph above. Additionally, a higher percentage of the United States population has been admitted to the ICU due to COVID-19 compared to Canada. This trend could be linked to the lower percentage of the United States population that has been fully vaccinated against COVID-19.

Conclusion

COVID-19 is a highly contagious virus that has had a significant impact on the world population. Overall, the project provides valuable insights into the impact of COVID-19 on a global scale, including its effect on mortality rates and infection rates in different regions. By examining data from Canada and the United States, the project also sheds light on the effectiveness of vaccines in preventing COVID-19 infections and death.

References

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COVID-19 - https://en.wikipedia.org/wiki/COVID-19
Alex The Analyst