

COVID-19 Vaccination Rate by Age, Race/Ethnicity, Income, and Politics

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Project Description:

Although the US started vaccination last December, only 66% of the total population have received at least one dose of covid-19 vaccine. Reaching a high vaccination rate is the key to eliminate the virus from the country. This project focuses on the current topic of COVID-19 vaccinations. In this project, we were planning to get greater insight into the vaccination status of the US counties about who is receiving the vaccine and racial, economical, demographic, and political disparities in the vaccination.

For data, we plan to use a vaccine dataset from Center of Disease Control(CDC), Kaggle and from other different sources. Demographics and other parameters like income, poverty, population, unemployment rate, we plan to get from Census API. We will get 2020 election data from MIT data source to see the gap in vaccination rates between counties that voted for Biden to Trump.

The data transformation process will be performed using Jupyter Notebook, and then be loaded into a PostgreSQL database by using sqlalchemy for preparing the data for further analysis. Hence from this project, we will try to get a relationship between income, race, demographic, and politics of US counties to covid-19 vaccination from three different data sources.