Chosen data story type: Drill down

When studying vaccination rates for COVID-19, it is important to note that there are not only racial differences between states, but also differences in education level, political leaning, access to necessities, and so on. For this data story type, we decided to drill down on the vaccination rates of a highly Democratic state and a highly Republican state in order to take note of these differences.

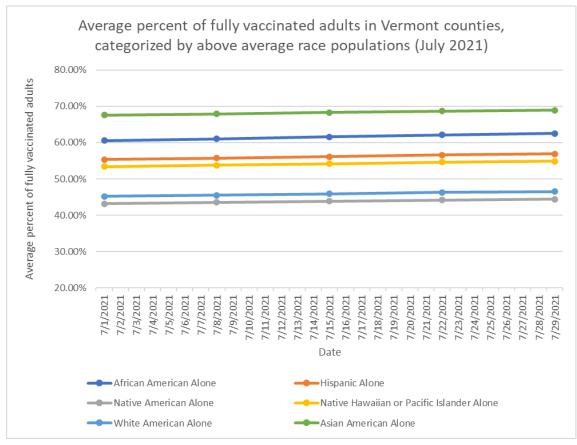
Background Information

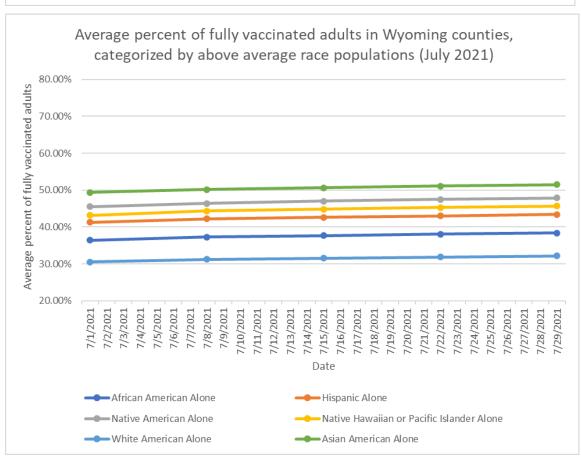
- The COVID-19 vaccine was released publicly in December 2020.
- This dataset uses demographic estimates recorded on July 1, 2021, and contains weekly county vaccination data from July 2021. The dates recorded are the 1st, 8th, 15th, 22nd, and 29th of July.
- The states that we picked, Vermont and Wyoming, were chosen in accordance with WiseVoter's estimate on the percent of each state's population that voted Democrat or Republican.
- Vermont had the highest percent of Democratic voters at 66.1% (WiseVoter, 2023).
- Wyoming had the highest percent of Republican voters at 69.9% (WiseVoter, 2023).

Dataset Information

When making our dataset, we calculated the average race composition of each state, and then used that number to mark each county in the state with TRUE or FALSE based on whether it had an above average percent of each major race. These graphs were made by taking the average fully vaccinated adult population of all counties with an above average population of each race. For consistency, each graph has the same range of values on the vertical axis, and uses the same color labels for each racial group.

Visualizations





Analysis

From these graphs, we can see that Vermont has a significantly higher percent of fully vaccinated adults than Wyoming. There is also a difference in the proportions of fully vaccinated adults of each racial group. While Asian Americans have the highest vaccination rate, Native Americans are the second highest in Wyoming but the lowest in Vermont. Similarly, African Americans are the second most vaccinated population in Vermont, but the second lowest in Wyoming.

Takeaway

From these graphs, we can infer that states with different socio-economic and political status have significant differences in their approach to COVID-19 vaccinations. Taking note of these differences are important, as it allows us to drill down on states that may need more support through vaccination access, or more education on the importance of vaccinations. In our final project, we intend to continue creating visualizations for each state, so we can provide a more thorough and precise analysis of vaccination rates in the United States.

References

WiseVoter. (2023, April 19). Red and blue states 2023.

https://wisevoter.com/state-rankings/red-and-blue-states/