Relationship between Health Insurance and COVID-19 Rates and Deaths

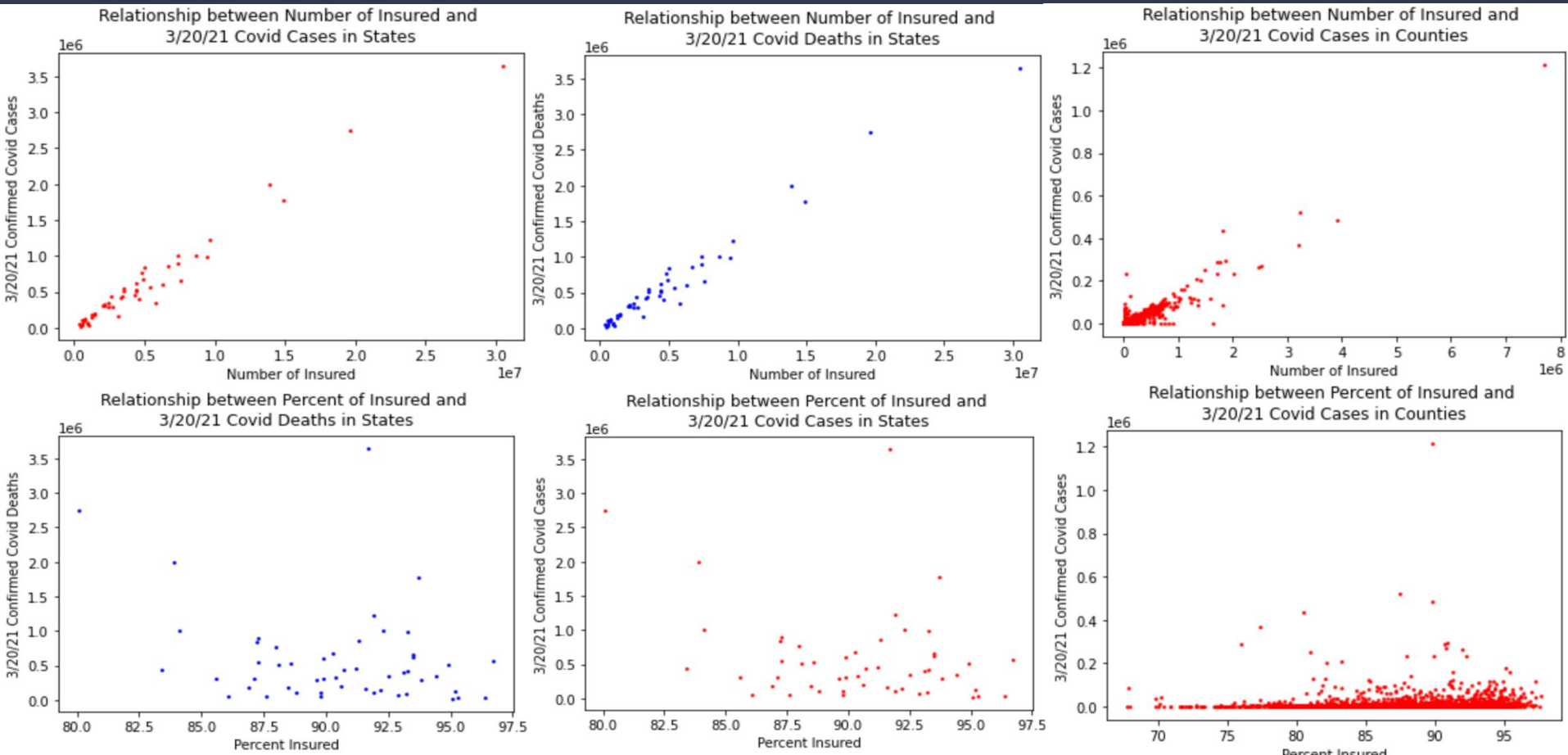Linsy Wang, Sooyoun Lee, Dana Zheng

Social Determinants of Health

Motivation and Goal

❖ We want to better understand how social determinants of health influence the spread and severity of disease outbreaks such as COVID-19.

❖ The main goal of our project is to determine the relationship between health insurance coverage and confirmed cases/death rates of COVID-19 in the US.

❖ We will primarily focus on health insurance coverage because it reflects multiple social determinants at once (income, marriage, employment).

❖ Our findings will demonstrate how population health is affected by social determinants of health.
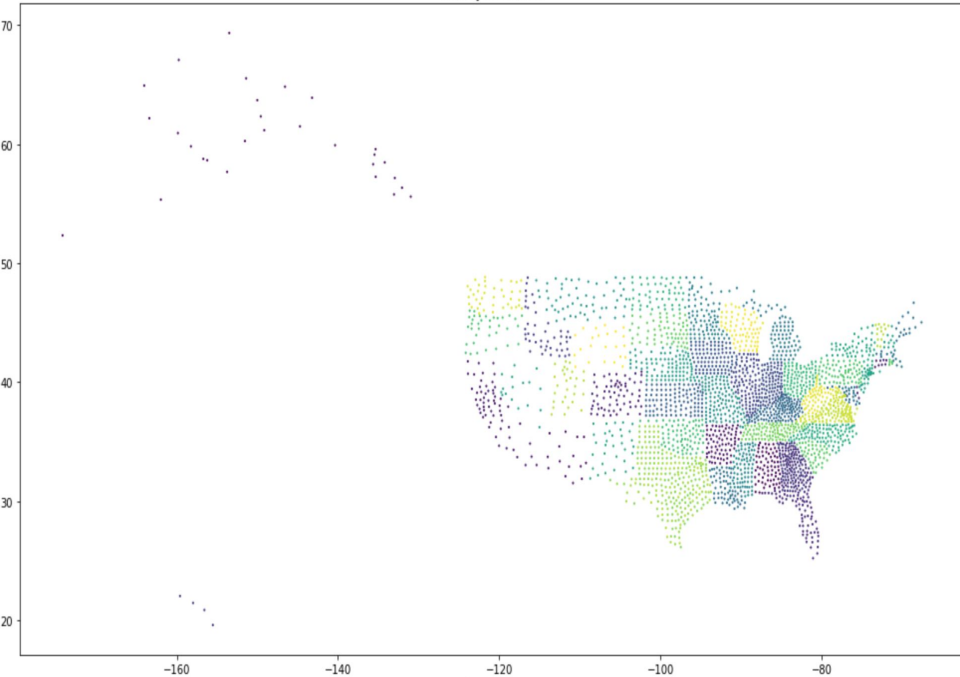
Data used

- Confirmed Cases from 1/22/20 to 3/20/21
- Confirmed Deaths from 1/22/20 to 3/20/21
- Number/percentage of insured/not insured
- Latitudes and Longitudes
- US States/Counties
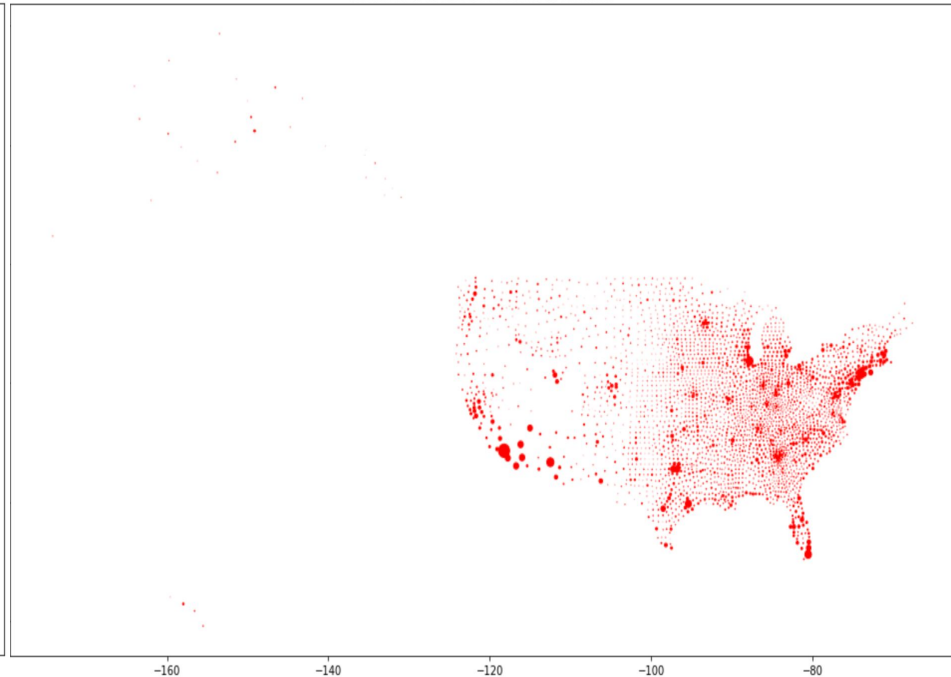- Manually parsed (pandas)

Current State Progress

Covid Data

Next Steps

❖ Model of health insurance rate vs COVID rates are showing a correlation but it is difficult to identify specific causes and relationships

❖ Analyze the current graph and try to look for other factors that could be influencing the correlation

❖ Determine various subsets to look for additional correlations
  ➢ Population density, climate differences, incomes, lockdown terms, etc

❖ Research on additional factors that could have a cause & effect relationship in the dataset