

Methodology for the Poor People's Pandemic Report

This project aims to explore the disproportionate effects of COVID-19 on poor communities in the US by connecting data about COVID-19 deaths at the county level to other demographic characteristics. In doing so, it offers an initial analysis of the deadly community-level consequences of poverty, economic insecurity, and systemic racism. Although data gaps obscure a more detailed analysis of people directly, combined with other research, these results highlight the characteristics of some of the communities that were most impacted by the pandemic.

Data Sources

To complete this analysis, data from 2019 Novel Coronavirus Visual Dashboard operated by the Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE). Data on the visual dashboards is updated daily.

For demographic data, 2019 ACS 5-year estimates were used wherever possible. Data on vaccination rates was taken from the CDC on March 2, 2022. Data on police violence was taken from Mapping Police Violence. Full source information can be found in the project [GitHub](#).

The data used includes both US states and territories.

Analysis

Data that did not include specific geographic location data have been excluded. For longitudinal analysis of death rate data, 7-day averages were taken, and smoothing was applied in cases where county data showed large spikes after weekends or for other reasons. These results are similar to those reported elsewhere.

Population data was used from JHU to calculate death and case rates as well as to divide counties into deciles. These deciles were created by sorting the counties by median income or percentage of people living below 200% of the poverty line, then grouping them into 10 groups with roughly equal population. Population estimates from JHU do not match exactly Census estimates, JHU estimates exceed 2019 5-year Census estimates by approximately 11 million people. To account for this difference, and to ensure death rates matched published rates, percentage estimates were used from JHU and to Census population totals if needed. This may create some slight variation in percentages when comparing published estimates to Census estimates.

Poverty was defined in this analysis as people living at 200% or less of the official poverty measure (OPM) in 2019 . This helps account for limitations in the way the poverty line is

measures but may still underestimate the number of poor and low-income people in the US (Barnes, 2019).

To determine the phases of the pandemic, this analysis relied on research first conducted by Pew Research Center (Jones, 2022). The phases named in this report were developed by this research and applied here to investigate differences in death rates across counties.

Limitations

This report was conducted at the county-level, analyzing county-level characteristics. The data cannot describe the impacts of COVID-19 on poor or low-income individuals. Demographic characteristics are based on the 2019 5-year estimates, while death rates cover 2020-2022, so descriptions of counties are based on pre-pandemic conditions. The pandemic impacted individuals and communities across many intersecting identities including ability, gender, age and more. These intersections are not fully explored here and are important avenues of future research. Finally, this research cannot describe the causal factors behind the patterns illustrated, but only the descriptive differences and their statistical significance.

Citations

Barnes, Shailly Gupta. (2019, June 26). *Explaining the 140 Million: Breaking Down the Numbers Behind the Moral Budget*. Kairos Center for Religions, Rights, & Social Justice. Retrieved from <https://kairoscenter.org/explaining-the-140-million/>.

Jones, Bradley. (2022, March 3). The Changing Political Geography of COVID-19 Over the Last Two Years. Pew Research Center. Retrieved from: <https://www.pewresearch.org/politics/2022/03/03/the-changing-political-geography-of-covid-19-over-the-last-two-years/>