

COVID-19 Pandemic in the United States

Disparate Impact on Marginalized Communities

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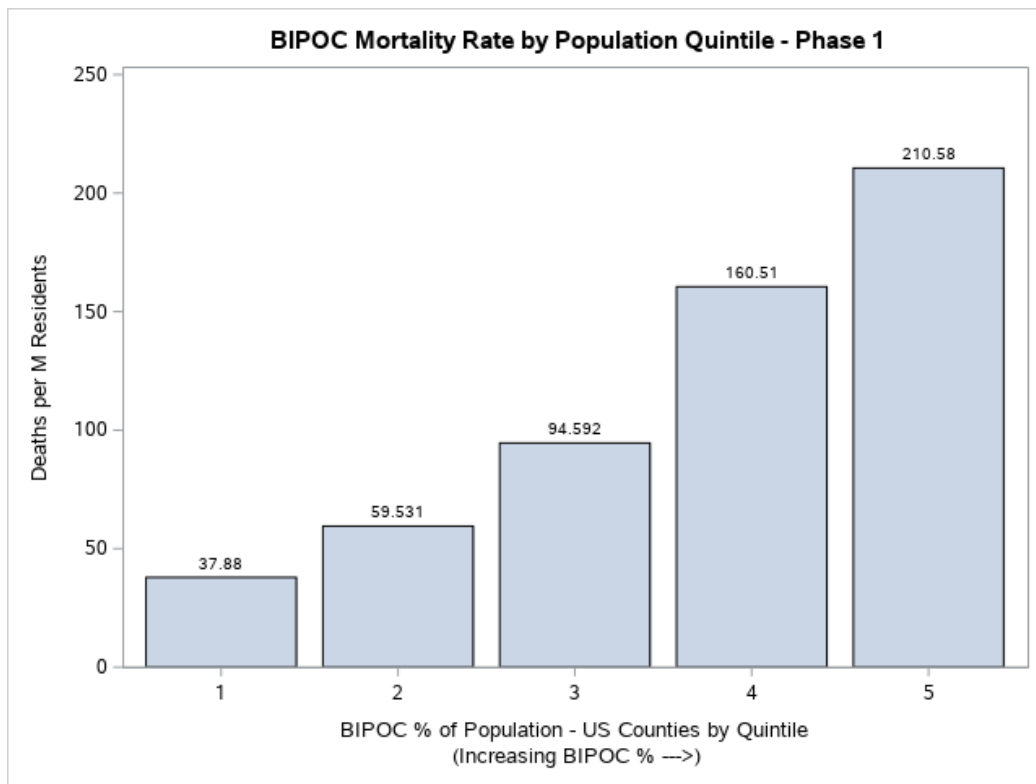
Study Methodology

Methodology Best Practices

- Track deaths rather than cases, which are often missed
- Adjust for population size => use Per Capita metrics
- County-Level data – NYT data based on screen-scraping county health department pages, complete and current
- First Wave shows intrinsic, underlying risks apart from political influences
 - => Key Metric: Cumulative deaths per capita through Week 25 (June 27)

County-Level Time Series Analysis

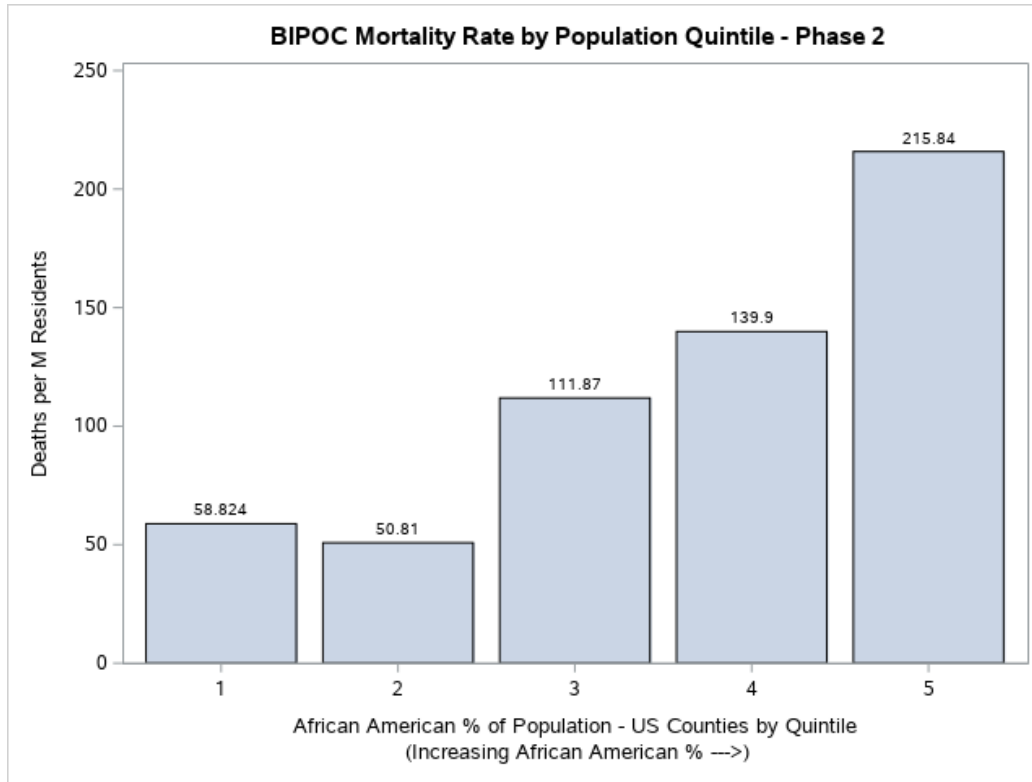
Wave 1: January – June 2020



Dividing all US counties into quintiles from lowest to highest BIPOC % of total population, each quintile has higher COVID mortality

County-Level Time Series Analysis

Wave 2: July – Mid-September 2020



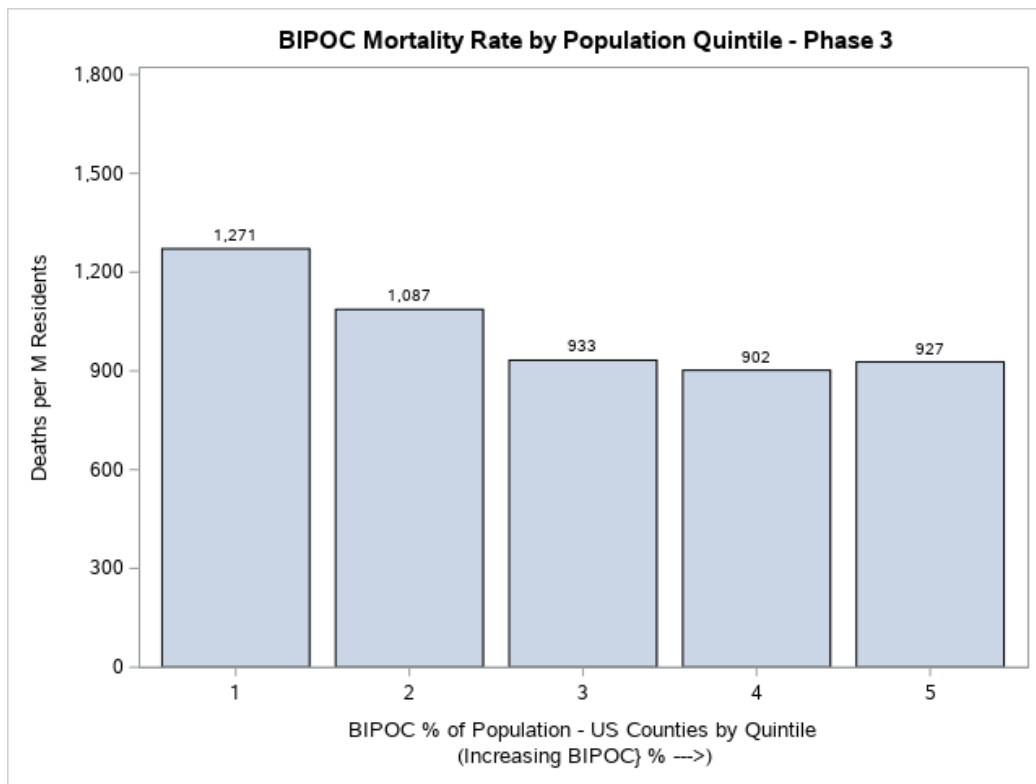
Summer Wave

Still high BIPOC
mortality rate

Increasing mortality
in counties with the
least BIPOC %

County-Level Time Series Analysis

Wave 3: Late September - Present



Fall Wave

Long Predicted by
Epidemiologists

Little differentiation
in mortality by
BIPOC %

Statistical Results: Odds Ratios

Odds Ratios of highest % prevalence (60%+) vs. lowest (<5%)

BIPOC	10.1
Prison Populations*	5.5
Indigenous	3.3
Poverty	2.9
Population Density	1.9

* Prison population compared to overall US population. Reported by Saloner et al, COVID-19 Cases and Deaths in Federal and State Prisons, JAMA, August 11, 2020

Conclusions

- Disparate impacts on marginalized populations are seen in COVID-19 per capita deaths rates
- Mortality rates increase with BIPOC and Indigenous %
- Intrinsic risk in BIPOC populations: Odds Ratio = 10.1
- Higher death rates are also linked to higher poverty but not as strongly as higher percent of racial groups
- Further investigation needed, especially for smaller populations and long-term effects

References

Center on Budget and Policy Priorities, *Tracking the COVID-19 Recession's Effects on Food, Housing, and Employment Hardships*

<https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-recessions-effects-on-food-housing-and>

New York Times, Corona Virus County Data, New York Times, 2021

New York Times COVID-19 Data, accessed 3/6/2021: <https://github.com/nytimes/covid-19-data>

US Census Bureau Demographic Data

<https://www.census.gov/programs-surveys/ces/data/restricted-use-data/demographic-data.html>

US Center for Disease Control and Prevention (CDC), *Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity*, 2021

<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html#footnote03>

US Bureau of Labor Statistics Data <https://www.bls.gov/data/>

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