

Impact of Geography on Opioid Overdose Mortality Trends by Racial Groups

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Background and Objective

Background

- The opioid epidemic is a critical public health crisis with consequences affecting communities worldwide, with limited data available.

Objective:

- To investigate the relationship between distance traveled and racial group, as well as urbanicity and overdose intent.

Dataset and Methods

Study Design: Observational, cross-sectional study

Inclusion Criteria: *International Classification of Diseases, 10th Edition (ICD-10)* codes: X40-X44 (accidental), X60-64 (intentional self-harm), X85 (assault), Y10-Y14 (undetermined intent)

Dataset: National Vital Statistics System (NVSS) Mortality Data, 2016-2020. Decedent data was identified by race, cause of death, and various other factors.

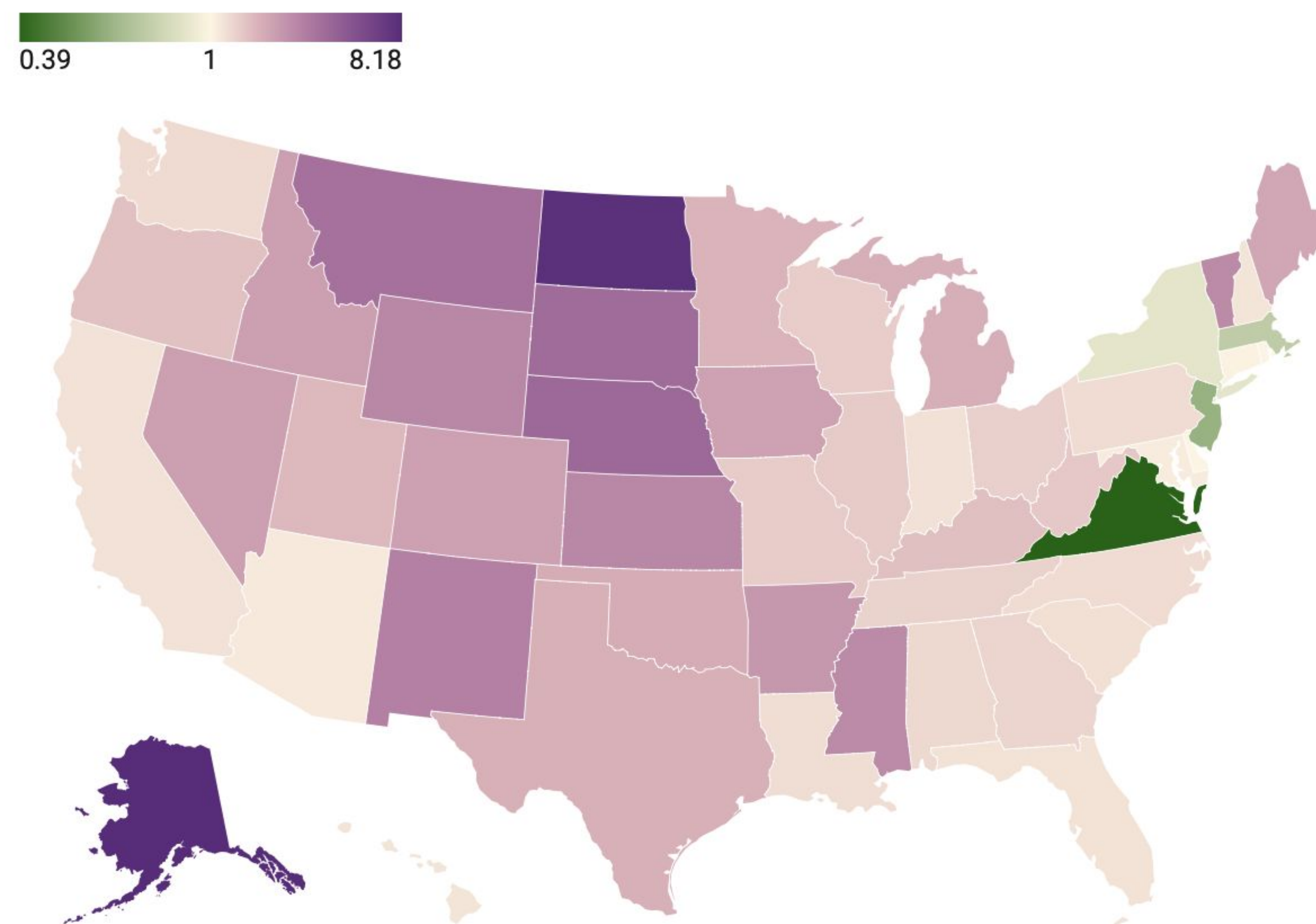
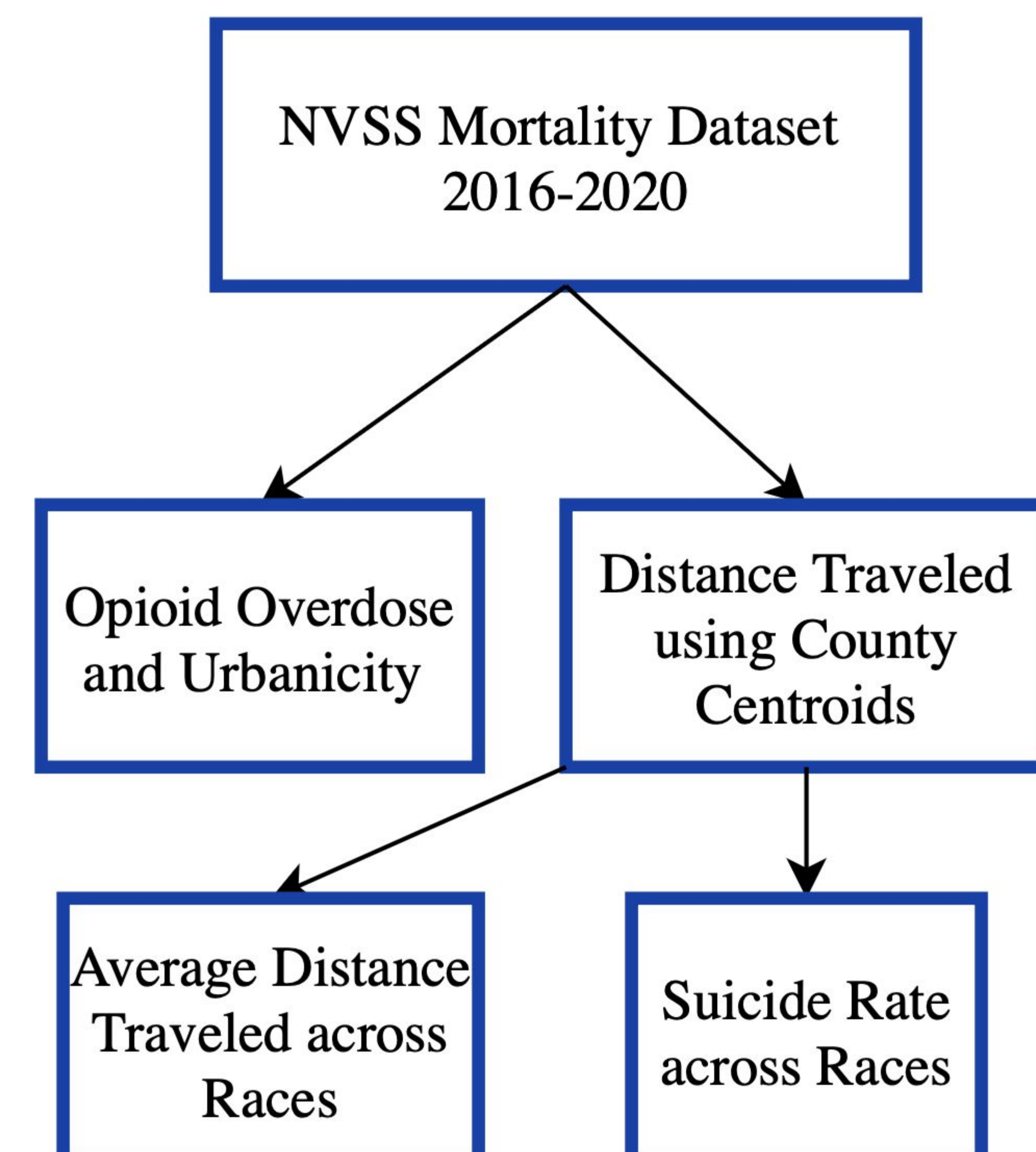


Figure 1: Urban Opioid Overdose Deaths relative to state-by-state urbanicity

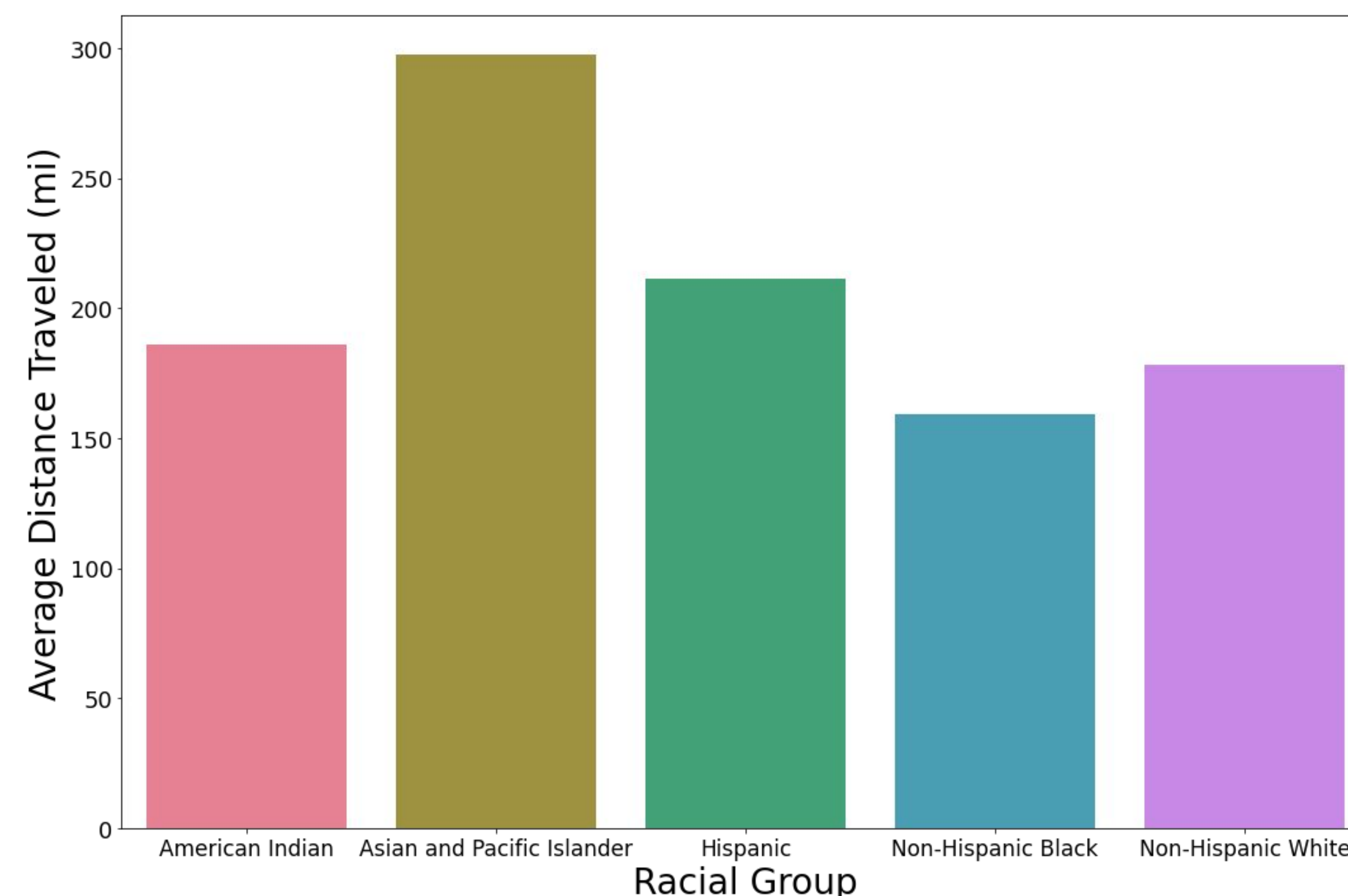


Figure 2: Average Distance Traveled outside County of Residence for Opioid Overdose Death. Findings consistent across entire five year period, 2016-2020.

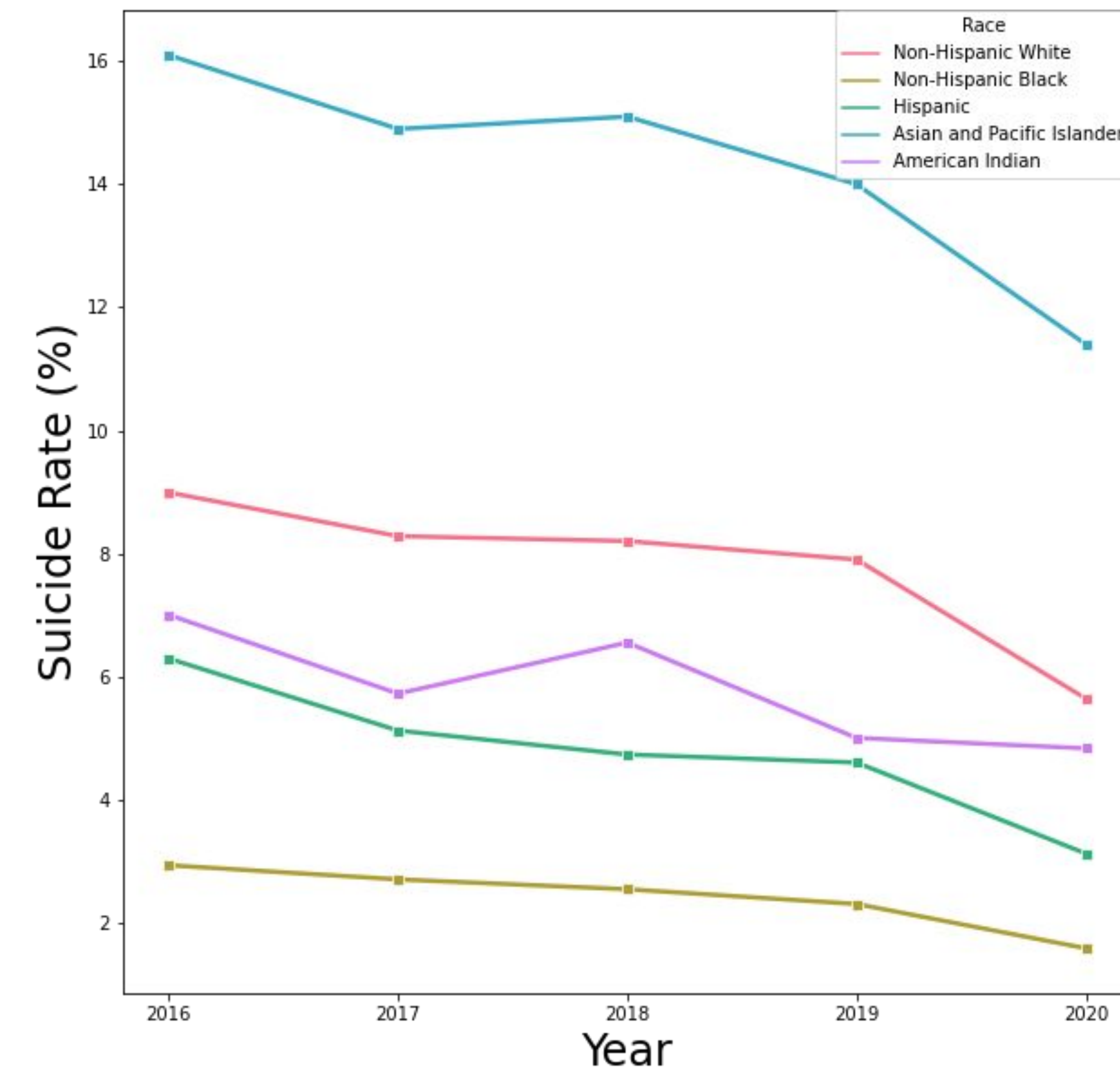


Figure 3: Percentage of Deaths due to Suicide across Racial Groups

Discussion and Future Work

Discussion

- Targeted outreach and intervention required to address overdose as a means of suicide faced by Asian and Pacific Islanders.
- Varied access to harm reduction tools highlights the necessity for tailored outreach campaigns and equitable distribution of life saving resources especially in urban areas

Future Work

- Investigate the co-use of opioids with other substances to gain a comprehensive understanding of polydrug interactions that may contribute to overdose risk.