



Introduction

Changes in political regimes during election times, both in the United States and globally, can induce significant mental stress and serious health consequences, including increased suicide and homicide rates. Epidemiological data show a decline in suicide rates around U.S. national elections in the early 20th century and again in the late 1990s and early 2000s, particularly in states supporting a losing candidate.^{1,2} The 2016 election was linked to increased violent crime, with a notable rise in homicide rates in western states, an increase in rapes nationwide, and a decrease in burglary rates nationwide.³ This poster examines the relationship between recent U.S. national elections and changes in homicide and suicide data, shedding light on the connection between societal stressors and public health outcomes.

This study explores the relationship between political contexts, election outcomes, and violent death rates (homicide and suicide) using data from the **CDC Multiple Cause of Death Data Set (2015-2017)**. The CDC data provided information on **location, demographic, cause of death**.

In our study, we aimed to explore the potential impact of the 2016 election on public health and crime, focusing on the CDC mortality dataset. We conducted two-tailed paired t-tests comparing differences in homicide and suicide rates from 2015 to 2017, before and after the 2016 election. Mortality and homicide trends were analyzed at the national and census region level, offering insights into how political events may influence public health and crime patterns.

Methods & Objectives

The US Census Bureau divides the country into 4 regions:

Northeast: CT, ME, MA, NH, NJ, NY, PA, RI, VT

Midwest: IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI

South: AL, AR, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, DC, WV

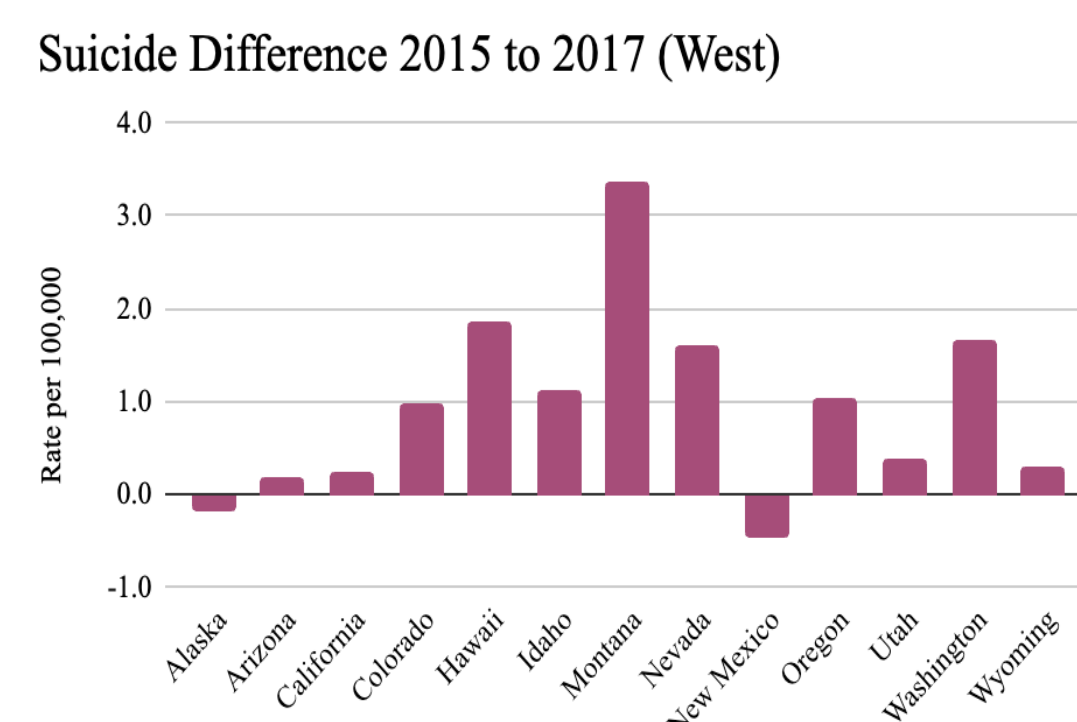
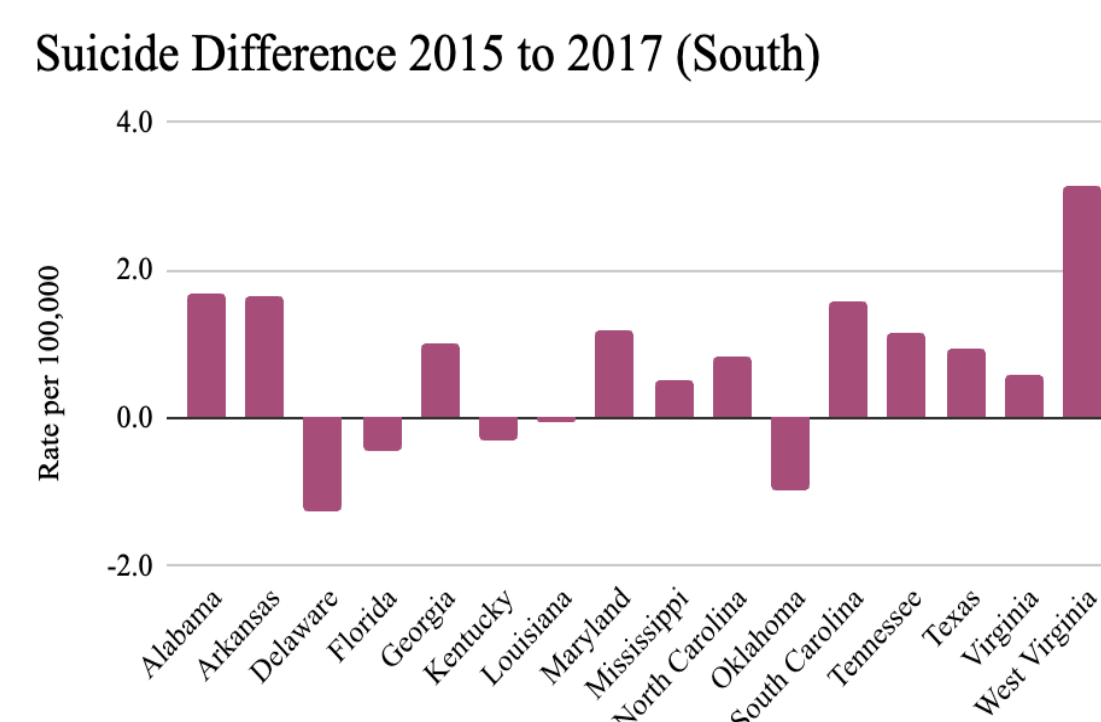
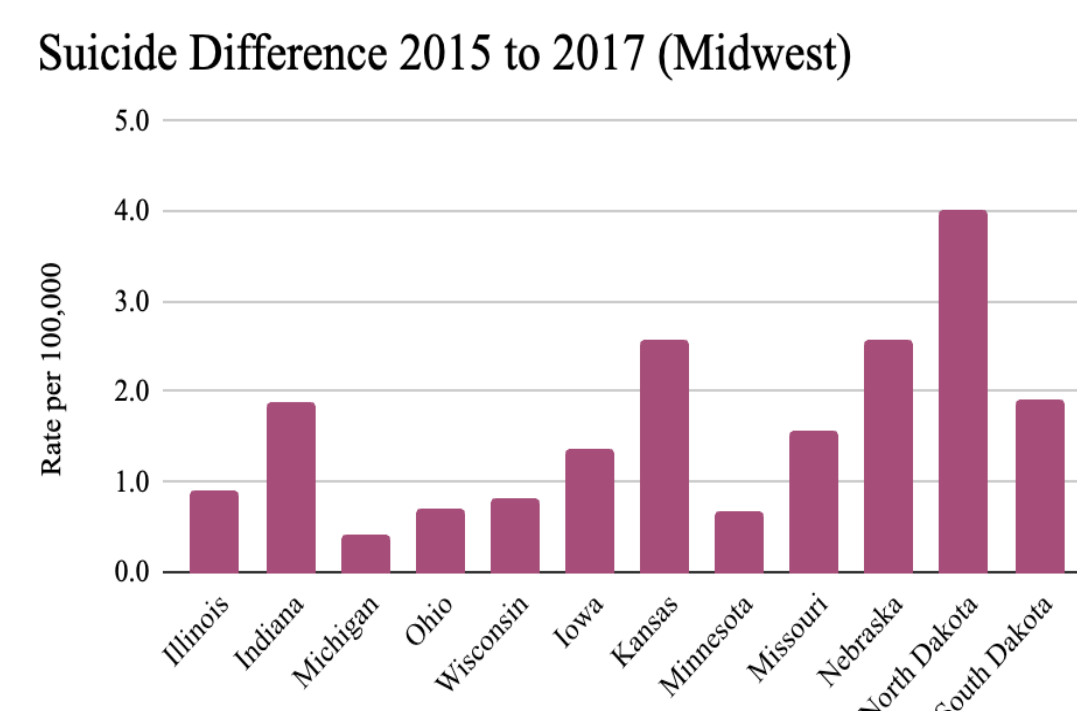
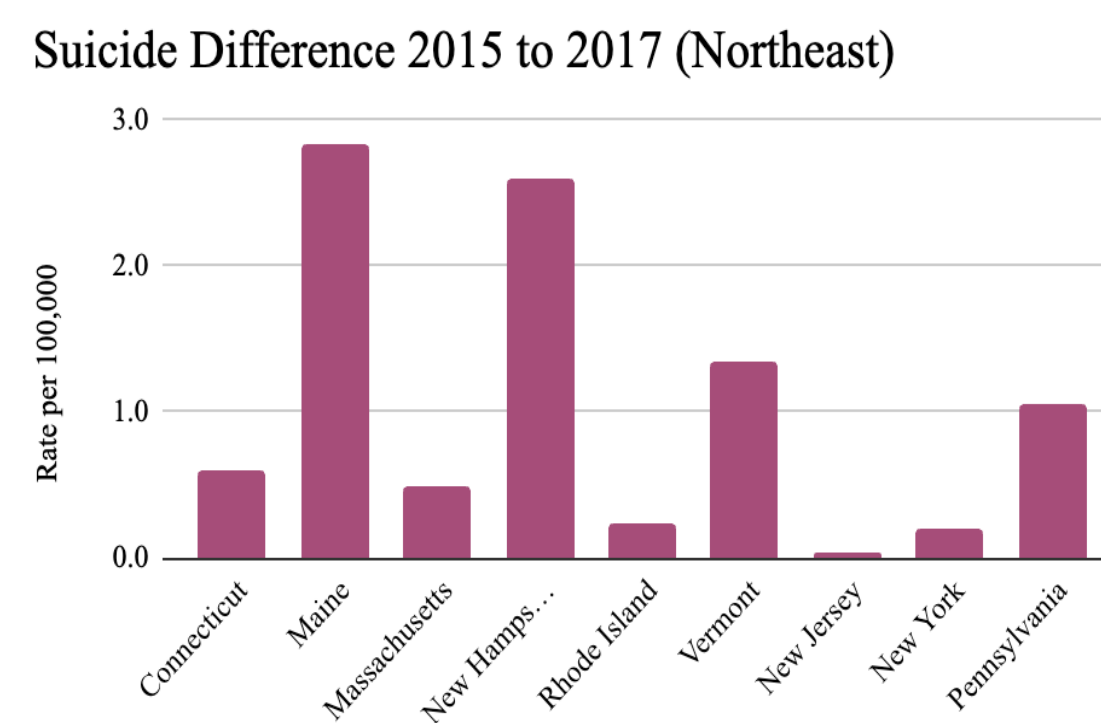
West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

OBJECTIVES

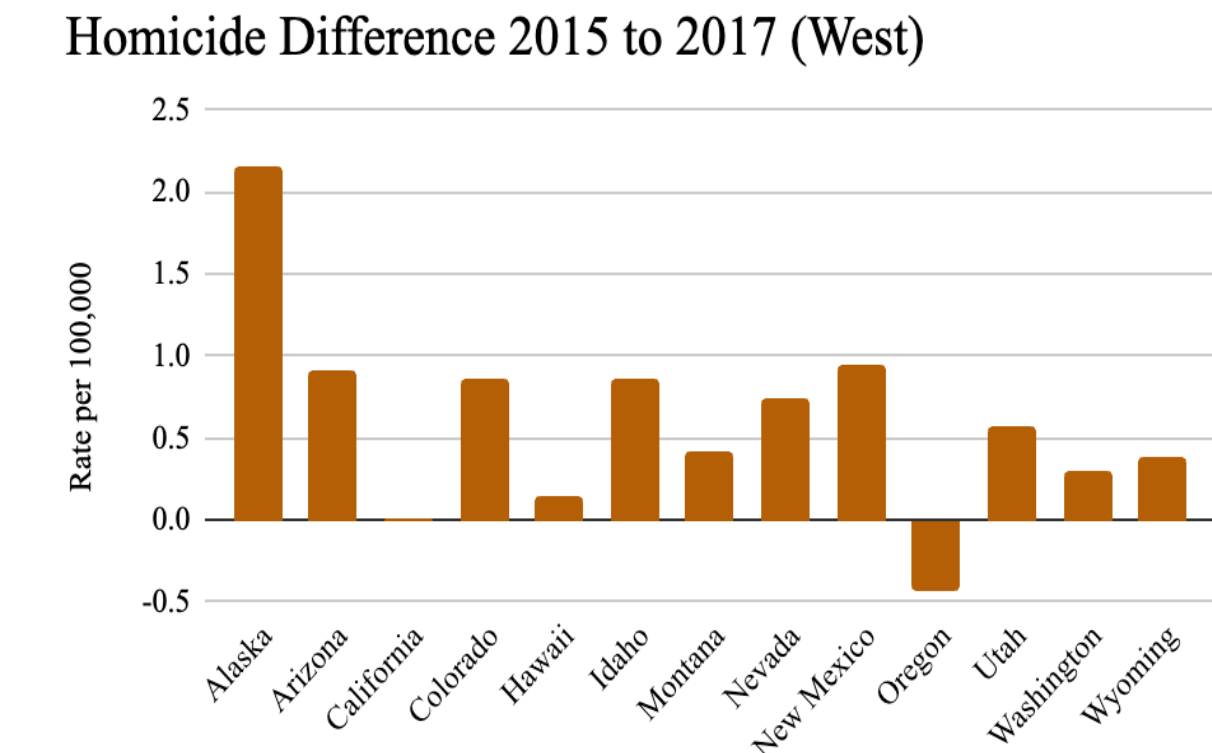
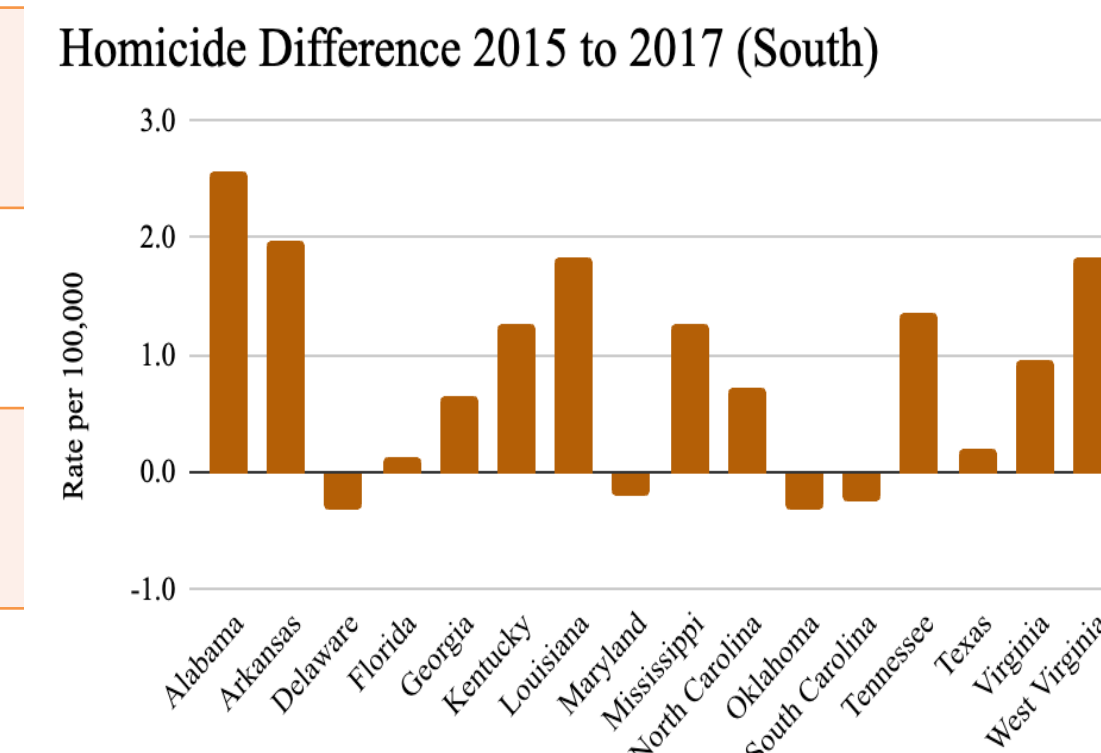
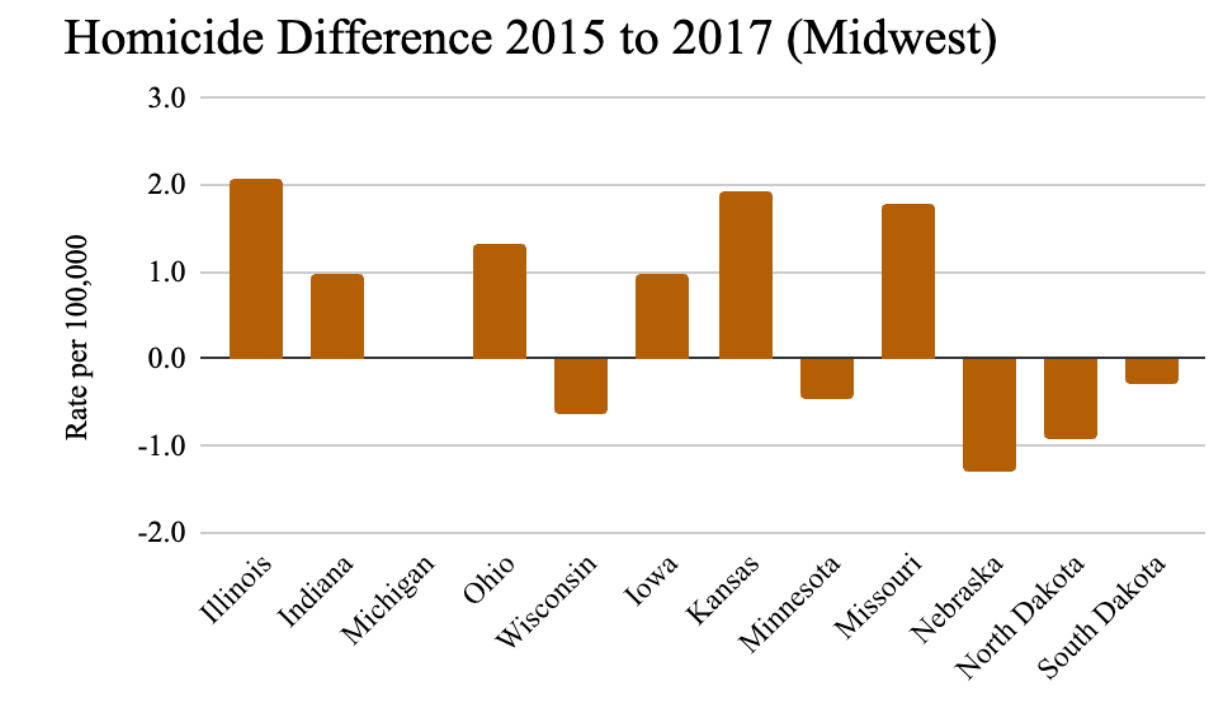
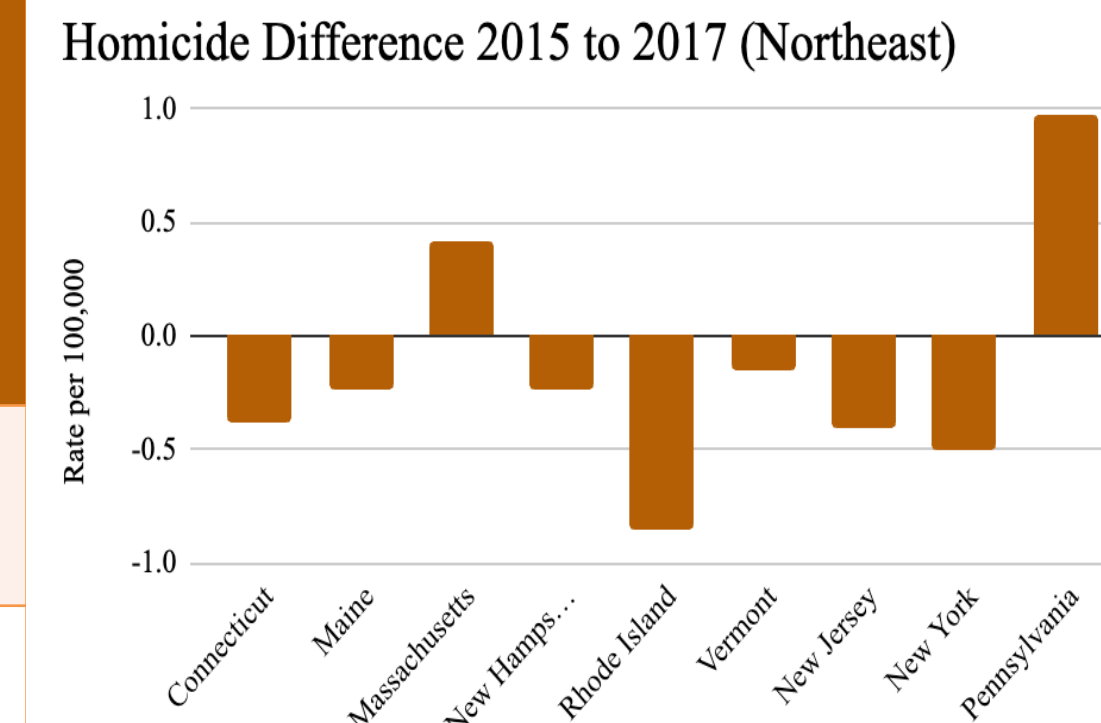
- **Political Contexts and Violent Deaths:** Explore how election outcomes correlate with homicide and suicide rates.
- **Regional Trends:** Assess changes in mortality and crime by region.
- **Public Health Implications:** Inform policies by highlighting the link between political events and public health.

Results

Suicides	2015	2017	p-value on difference
All states	16.00	17.03	0.00000015
<i>Regions:</i>			
Northeast	12.81	13.85	0.01621
Midwest	14.79	16.41	0.00023
South	15.15	15.86	0.02419
West	20.33	21.26	0.00683



Homicides	2015	2017	p-value on difference
All states	5.16	5.67	0.00026
<i>Regions:</i>			
Northeast	2.93	2.78	0.41486
Midwest	4.75	5.21	0.21368
South	7.45	8.30	0.00220
West	4.26	4.86	0.00413



Conclusions

Our analysis demonstrates a nationwide increase in suicide rates following the 2016 U.S. presidential election, with statistically significant increases observed across all census regions (Northeastern, Western, Southern, and Midwestern). These results diverge from earlier studies^{1,2}, which reported decreases in suicide rates in states where the losing candidate was favored. Additionally, a rise in homicide rates was noted in Western and Southern states ($p < .05$), consistent with findings by Shaughnessy et al. using the 2016 FBI dataset. Future research should investigate the trends in suicide and homicide rates during the 2020 election, with particular attention to the potential compounding effects of social isolation and psychological stress stemming from the COVID-19 pandemic.

References & Acknowledgements

1. Boor, M. (1981). Effects of United States presidential elections on suicide and other cases of death. *American Sociological Review*, 616-618.
2. Classen, T. J., & Dunn, R. A. (2010). The politics of hope and despair: The effect of presidential election outcomes on suicide rates. *Social Science Quarterly*, 91(3), 593-612.
3. Shaughnessy, G., Beadle, K. D., O'Dell, S. F., Smith, R. N., & Sommers, P. M. (2021). Do Crime Rates Spike After a Democrat Is Elected President?. *Journal of Student Research*, 10(4). <https://doi.org/10.47611/jsr.v10i4.1368>