In the body, vitamin D plays a large role in cell growth, neurological, muscular, bone, and immune functions. Sunlight is our body’s most effective means of synthesizing vitamin D. Low levels of vitamin D are associated with depression, seasonal affective disorder, rickets/osteomalacia, and a cascade of other metabolic issues. Vitamin D deficiency is caused by biocultural variables. In this study, we examined death certificate data from multiple states in 1931, during The Great Depression, using the Mason-Dixon line to categorize these states into North and South. From the selected states, we recorded age, sex, and ancestry of individuals who died by suicides/homicides in 1931. We compared this data with the average UV Index of each state. These data were then compared to determine if there was a potential correlation between UV index and suicide/homicide rate. Preliminary results show there is a significant difference in UV index of northern and southern states.