

LAURYN ANTOLOCK, Dept of Exercise Science, West Virginia Wesleyan College, Buckhannon, WV, 26201, and KRISTY HENSON, Dept of Forensic Science, Fairmont State University, Fairmont, WV, 26554, and CAM'RON ALLEN, Dept of Criminal Justice, Fairmont State University, Fairmont, WV, 26554. Relation of Vitamin D and UV data with homicide/suicide rates in states north/south of the Mason-Dixon Line.

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.