

333. Social Determinants of Health: Case Study of 10 U.S. States

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The Behavioral Risk Factor Surveillance System (BRFSS) is an annual survey conducted by the Centers for Disease Control and Prevention (CDC). This survey is given to all fifty states, as well as other U.S. territories such as Guam and Puerto Rico. We used the survey to conduct a social determinant model using a multiple logistic regression test and a principal component analysis model. By using these two statistical methods, it was determined how the variables impact one's safety and general health which can be used to create recommendations for better public health outcomes in 10 U.S. states: Iowa, Massachusetts, Minnesota, Mississippi, New Hampshire, Pennsylvania, Utah, West Virginia, Wisconsin, and Wyoming. For the multiple logistic regression model, we used general health as the dependent variable with general health being defined as excellent, very good, and good as a positive outcome. Through the principal component analysis, 98.5% of the variation was explained by looking at one's notion of safety relative to access to food.