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"Louisiana COVID-19 Risk Factor Analysis"

Novel coronavirus, commonly known as COVID-19, has become one of the largest public health crises of the century. In a mere seven months, the deadly virus has traveled across the globe, infected over eleven million people, taken over half a million lives, and caused over $3.5 trillion in economic impact. Of the afflicted countries, the United States is home to almost a third of the world's cases, with over three million infected in the U.S. as of July 2020. With such a high death toll and large economic impact, it has become increasingly imperative to identify high risk populations in order to slow the spread of disease.

The Center for Disease Control has identified gender, race, poverty, age, kidney and liver cancer, obesity, diabetes, and select heart conditions to be risk factors for expereincing severe illness from coronavirus. While these factors provide risk assessment for the general populace, this study works to analyze risk factors correlated with a higher COVID-19 death rate within Louisiana populations specifically.

The COVID-19 death rate used in this study was defined as the rate of death from COVID-19 per 100,000 people. The data for the COVID-19 death rates for each of the 64 parishes in Louisiana on each day in June was compiled from the New York Times database. These values were then average to calculate the average COVID-19 death rate in June for each parish. Race, gender, education, age, poverty, and hypertension data were compiled from the U.S. Census Bureau database while smoking, obesity, kidney cancer, liver cancer, and diabetes data were compiled from the Louisiana Department of Health database. T-tests were used to test for significant correlations between the prospective risk factor and the COVID-19 death rate.

Our findings of identifying high risk groups for coronavirus in Louisiana will provide more valuable and accurate information for health policy makers, healthcare professionals, and the general populace. Custom interventions can then be designed for the high risk groups as a method of slowing the spread of disease.