

Impact of State Mandates on Reduction of COVID-19 Cases Counts and Mortality in the United States Southwestern Region

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Since the novel coronavirus disease (COVID-19) was declared a world pandemic by the World Health Organization in March 2020, countries across the globe have imposed countermeasures to prevent the rapid spread of this deadly pneumonia. These countermeasures vary across the United States, which currently leads the world with the most confirmed COVID-19 cases and deaths, seeing several economic crashes as well as high rates of unemployment claims as a result. State countermeasures, publicly better known as “state mandates,” include banning massive gatherings of people and restricting business operations, the latter of which has sparked protests demanding states reopen in some areas. In the southwest region specifically, the states Texas, Arizona, and Colorado recently saw surges in COVID-19 cases, but the state of New Mexico did not. Using time series data from the Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE) and Johns Hopkins University Applied Physics Lab (JHU APL), as well as social distancing policy data by the University of Washington, this study will utilize statistical analyses to examine the relationship between COVID-19 cases and deaths versus state mandates. We expect that the findings from this study will provide insights into understanding the effectiveness of different types of state mandates.