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New study shows social distancing is working in Kentucky

- State-mandated social distancing measures have prevented over 90 percent of the COVID-19 cases that would have otherwise occurred in Kentucky.
- Shelter-in-place orders and restaurant, bar, and entertainment center closures are effective at slowing the spread of the novel coronavirus, but limits on group events and school closures by themselves do not have measurable effect on infections.

While several recent studies discuss the impacts of social distancing measures, Kentucky has not been the focus of any of them. However, a [new study](#) coauthored by ISFE Faculty Affiliates and University of Kentucky professors Charles Courtemanche and Aaron Yelowitz has attempted to measure the effect of state-mandated social distancing measures on the growth rate of confirmed COVID-19 cases in the state.

Drs Courtemanche, Yelowitz and their coauthors develop a model based on differences in the scope and timing of government-imposed social distancing measures implemented across the Midwest and South to estimate the number of COVID-19 confirmed cases that would have occurred in Kentucky if the state government had not imposed specific restrictions and relied only on voluntary social distancing by individuals and businesses.

According to this new model, confirmed COVID-19 cases in Kentucky would have reached nearly 45,000 by April 25th without any state-imposed social distancing measures, rather than the actual total of fewer than 4,000. In other words, the state's restrictions have prevented more than 90 percent of confirmed cases that would have otherwise occurred. Although the authors do not directly examine deaths, combining the estimated reduction in cases with the COVID-19 case fatality rate in Kentucky suggests that the measures have saved approximately 2,000 lives so far.

The study concludes that shelter-in-place orders like Kentucky's "Healthy at Home" initiative and closures of restaurant dining areas, bars, gyms and other entertainment-related facilities were particularly effective at preventing COVID-19 infections. However, bans on group gatherings and public-school closures that were not accompanied by a shelter-in-place order were not effective, suggesting that individuals substitute for other types of social interaction that continued to spread the virus.

"These results suggest that Kentucky policymakers should be cautious when opening up the economy" said Dr. Charles Courtemanche, ISFE Director and one of the study's coauthors.

Therefore, Courtemanche continues "Returning to partial restrictions without a broader shelter-in-place directive may not be enough to contain the spread of the virus. However, the public health benefits from strong social distancing restrictions need to continue to be weighed against the massive economic losses that disproportionately affect low-wage sectors of the economy."

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