

Lifting COVID restrictions in the U.S. will diminish impact of lockdowns on cases: study

March 5 2021, by Dr Sabine L. Van Elsland, Stephen Johns



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Lifting measures to control COVID-19 in the US will likely reduce the impact of previous lockdowns on the number of infections in the long term.

In a new study published in *PNAS*, researchers found that people's behavior change in mobility was short-lived when restrictions were

lifted.

The researchers, from Imperial's COVID-19 Response Team and Imperial College Business School, found that lifting non-pharmaceutical interventions (NPIs), such as social distancing, leads to an increase in case numbers in US counties and reduced the percentage of people staying at home.

The researchers say that NPIs can help mitigate the disproportionate burden of COVID-19 on marginalized populations, with stronger effects observed in counties with a high proportion of people from non-White backgrounds.

Implementing and lifting of NPIs by target populations however does very little and only stronger measures targeting the general populations have a significant impact, the researchers explain.

Lifting NPIs diminishes health gains

The team find that implementing NPIs lead to a significant reduction in cases and the percentage of people staying home increased significantly over time.

Lifting measures however leads to an increase in case numbers and reduced the percentage of people staying at home. They conclude that lifting NPIs diminishes the gains accrued by previously implemented policies.

The researchers estimated mobility by looking at the percentage of mobile phone devices that stayed within certain areas of US counties.

Targeted interventions

The impacts on case numbers and devices staying home, both implementing and lifting of measures, are stronger for counties with non-white populations as well as counties with median household income above the average.

The researchers explain that implementing and lifting of NPIs by target populations however does very little and only stronger measures targeting the general populations have a significant impact.

The team found that stronger measures such as full lockdowns involving closures of businesses, had the biggest impact whereas partial restrictions that targeted sectors such as nursing homes, nurseries and schools had a lower impact.

Dr. Marisa Miraldo, Associate Professor in Health Economics at Imperial College Business School, said: "Several countries globally are still struggling to keep COVID cases at levels care providers can cope with. Focusing in data from the US, our research shows that NPIs have been essential in enabling that.

"We show, however, that only 'stronger' measures involving general [population](#) lockdown and businesses closures have a significant impact on infection control while closing nursing homes, day care and schools doesn't show a significant impact.

"Importantly our research shows that, NPIs can help mitigate the disproportionate burden of COVID-19 on marginalized populations, with stronger effects observed in geographical areas with high proportion of people from non-White backgrounds."

More information: Surya Singh et al. Impacts of introducing and lifting nonpharmaceutical interventions on COVID-19 daily growth rate and compliance in the United States, *Proceedings of the National*

Academy of Sciences (2021). [DOI: 10.1073/pnas.2021359118](https://doi.org/10.1073/pnas.2021359118)

Provided by Imperial College London

Citation: Lifting COVID restrictions in the U.S. will diminish impact of lockdowns on cases: study (2021, March 5) retrieved 27 April 2024 from <https://medicalxpress.com/news/2021-03-covid-restrictions-diminish-impact-lockdowns.html>

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