

# Feelings of invincibility to COVID-19 linked with beliefs that could hinder herd immunity

October 27 2021

---



COVID-19 vaccine. Credit: Hakan Nural, Unsplash, CC0  
([creativecommons.org/publicdomain/zero/1.0/](https://creativecommons.org/publicdomain/zero/1.0/))

A 51-country survey has found that people who do not believe that infection with COVID-19 could seriously threaten their health are both

less likely to believe in the importance of preventing spread of the disease and less willing to get vaccinated. James M. Leonhardt of the University of Nevada, Reno, and colleagues present these findings in the open-access journal *PLOS ONE* on October 27, 2021.

To suppress the spread of COVID-19, it may be critical for individuals to feel concern about taking action to prevent transmission within their community. However, as suggested by prior research, such concerns and actions may be impacted by a number of both individual and [cultural factors](#). Leonhardt and colleagues hypothesized that one factor influencing pandemic concerns could be people's perceived invincibility to COVID-19.

To test this idea, the researchers analyzed the responses of over 200,000 people across 51 countries from an ongoing survey administered by the Massachusetts Institute of Technology and Facebook's Data for Good using targeted social media ads during the pandemic. The survey included a question about how serious it would be to get infected with COVID-19, as well as questions about willingness to get vaccinated and taking action to reduce spread in one's community. The researchers also accounted for participants' overall health, age, sex, and level of education.

Statistical analysis of the survey results found that people who reported feeling more invincible to COVID-19 were less willing to get vaccinated and less likely to believe in the importance of individual actions to reduce transmission.

The analysis also showed that the magnitude of this link differed among countries. Individuals with high perceived invincibility living in countries with a greater emphasis on individual freedoms and autonomy—such as the U.S., U.K., and Canada—were less willing to get vaccinated and less willing to take action than individuals with high

perceived invincibility living in cultures with greater emphasis on collective action.

The authors say their findings highlight the importance of considering both individual and cultural factors when addressing pandemics. They suggest that suppression efforts employ messaging that emphasizes the importance of [collective action](#)—particularly in individualistic cultures. Meanwhile, future research could further explore the impact of cultural factors on health beliefs and behaviors.

The authors add: "While feeling invincible may be beneficial in overcoming [economic hardships](#) or during periods of war, the results of our study suggest that it threatens the likelihood that people get vaccinated against COVID-19, and this is especially the case in individualistic countries, such as the U.S., where people tend to focus on their own health rather than the collective [health](#) of their community."

**More information:** Leonhardt JM, Ridinger G, Rong Y, Talaei-Khoe A (2021) Invincibility threatens vaccination intentions during a pandemic. *PLoS ONE* 16(10): e0258432.  
[doi.org/10.1371/journal.pone.0258432](https://doi.org/10.1371/journal.pone.0258432)

Provided by Public Library of Science

Citation: Feelings of invincibility to COVID-19 linked with beliefs that could hinder herd immunity (2021, October 27) retrieved 19 November 2023 from <https://medicalxpress.com/news/2021-10-invincibility-covid-linked-beliefs-hinder.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--