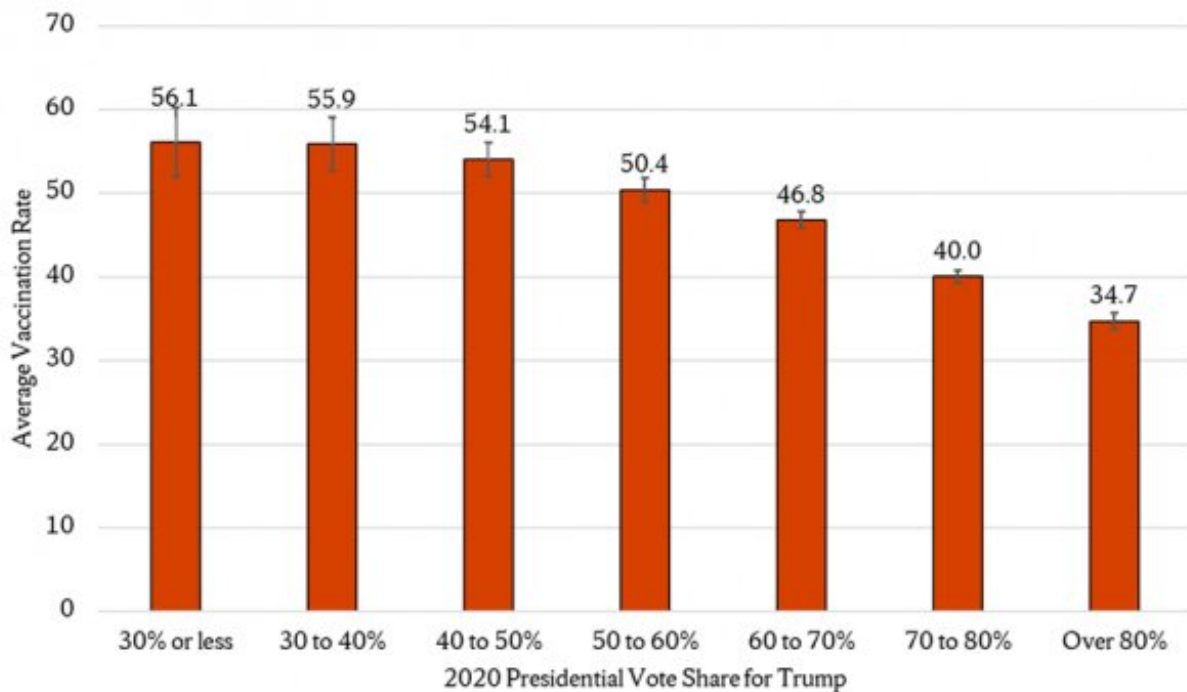


Why COVID-19 vaccination rates are lower in rural areas of the US

October 5 2021, by Lily Datz



Credit: Syracuse University

A combination of higher Trump vote share and lower educational attainment help explain the lower COVID-19 vaccination rates in rural areas of the United States, according to a new study published in the Journal of Rural Health.

The researchers conclude that as the pandemic enters its second winter and vaccination rates vary widely across the U.S., mandates may be the most [effective strategy](#) for increasing vaccination rates and saving lives in [rural areas](#).

"Very few people who haven't gotten vaccinated are going to change their minds at this point; they've dug in their heels, and misinformation is rampant," said researcher Shannon Monnat, an associate professor of sociology at Syracuse University and director of the Lerner Center for Public Health Promotion. "The most effective way to prevent continued spread, reduce hospitalizations and save lives is to mandate vaccines."

According to public health officials, achieving high vaccination coverage is the best way to prevent coronavirus spread, promote economic recovery and save lives. But as of September 2021, only 66.6% of U.S. adults had been fully vaccinated, according to the U.S. Centers for Disease Control and Prevention.

In their published study, "Rural-urban and within-rural differences in COVID-19 vaccination rates," researchers Monnat and Lerner Graduate Fellow Yue Sun compared COVID-19 vaccination rates across the U.S. rural-urban continuum and identified the major contributors to lower rates of vaccination in rural counties.

The study is summarized in the Lerner Center for Public Health Promotion research brief, "[Why are COVID-19 Vaccination Rates Lower in Rural than in Urban areas of the U.S.?](#)"

Here are the researchers' key findings:

- COVID-19 vaccination rates vary substantially across the United States, with some counties nearing 100% vaccination while others have rates under 5%, according to the Centers for Disease

Control and Prevention.

- As of August 11, 2021, 46% of adults in rural counties had been fully vaccinated compared to 60% in urban counties.
- Higher Trump vote share in the 2020 presidential election and lower educational attainment collectively explain lower rural vaccination rates.
- Nationally, Trump vote share is the single largest contributor to county-level variation in COVID-19 vaccination rates; each standard deviation increase in Trump vote share is associated with a 6.25 percentage point decline in the vaccination rate.
- Counties with larger shares of residents who are non-Hispanic Black also have significantly lower vaccination rates, whereas counties with higher median household income and more physicians per capita have significantly higher vaccination rates.
- In rural counties, vaccination rates are lowest in farming and mining-dependent counties and highest in recreation-dependent counties. The differences are explained by a combination of educational attainment, health care infrastructure and Trump vote share, the researchers said.

"The vaccination rate disparity is concerning given that COVID-19 infection and mortality rates are higher in rural areas, and rural hospitals have less capacity to deal with surges in severe cases," Monnat said.

"Right now, unvaccinated people are filling up emergency rooms and putting us all at risk. What happens when there are no beds available for people who have other serious illnesses or injuries?"

"Vaccines are an effective tool we have at our disposal to get us out of this pandemic," Monnat added. "We simply must get [vaccination rates](#) up across the entire country."

More information: Yue Sun et al, Rural-urban and within-rural differences in COVID-19 vaccination rates, *The Journal of Rural Health*

(2021). [DOI: 10.1111/jrh.12625](https://doi.org/10.1111/jrh.12625)

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