

# With nearly 800,000 U.S. covid deaths, what's keeping people from getting vaccinated? Their own social circles.

When friends and family aren't vaccinated, people are more reluctant to get the shot.

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Today at 7:45 a.m. EST



By Monday, almost two years after the “[novel coronavirus](#)” first made headlines, about [800,000](#) deaths from covid-19 had been reported in the United States. In recent months, covid-related deaths have been concentrated largely among the [unvaccinated](#).

[Public health officials](#) continue to stress the urgency of containing the pandemic through mass vaccination efforts and encourage [booster shots](#) to fight existing and new variants. Yet vaccinating the unvaccinated remains a huge challenge in the United States. Why do so many people hesitate to get vaccinated?

Existing research describes how people make [health decisions](#) and discuss [political issues](#) among their closest associates. Our research looked specifically at covid-19 vaccinations: Do the vaccination status and attitudes in an individual's core social network — the group of friends, family and associates with whom they frequently have discussions — inhibit or motivate vaccination?

Here's what we discovered: Yes, individuals tend to operate within networks that are polarized by vaccination status. Unvaccinated individuals talk to unvaccinated folks, and vaccinated individuals are chatting with vaccinated friends and families. Furthermore, attitudes about coronavirus vaccines produce social pressure within these groups that may influence personal decisions to receive the vaccine. The vaccination status of an individual's closest confidants is a great predictor of whether they decide to get vaccinated against covid-19.

## **How we did our research**

In July and August this year, we surveyed a nationally representative sample of 2,560 adult Americans online through the [Lucid](#) sampling platform.

We asked respondents to answer questions about themselves and the three individuals, or discussants, with whom they most frequently discuss coronavirus vaccines. These questions asked about the respondent's vaccination status, as well as the vaccination status and attitudes of their social network — was there high vaccine resistance or high vaccine support? These questions allowed us to take a closer look at the diversity of vaccination status and attitudes respondents face in their social networks.

## **What do these discussions look like?**

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First, vaccinated and unvaccinated respondents are more likely to discuss coronavirus vaccines with people who share their vaccination status. We found that 58 percent of vaccinated respondents reported their circle included three others who were vaccinated, while 42 percent of unvaccinated respondents reported none of their three discussants were vaccinated. Far fewer participants reported discussants with a vaccination status different from their own.

Second, vaccinated and unvaccinated respondents tend to discuss coronavirus vaccines with others who reinforce their decision to receive or forgo vaccination. Questions about the average attitudes toward coronavirus vaccines revealed that 81 percent of vaccinated respondents' social networks support or show high support for vaccines. For unvaccinated respondents, at least 63 percent of their social networks were hesitant or resisted getting vaccinated, with 27 percent highly resistant to coronavirus vaccines.

Overall, 57 percent of vaccinated respondents reported a social network that was highly supportive of vaccines, compared with only 16 percent of unvaccinated respondents. And 3 percent of vaccinated respondents reported the people in their social network were highly resistant toward vaccination, compared to 27 percent of unvaccinated respondents.

A third finding was that unvaccinated social networks tend to think along similar lines in their resistance to coronavirus vaccines, with support rising as more discussants receive a vaccine. We asked respondents to gauge how those in their social circle felt about getting a coronavirus vaccine, from a scale of zero (those with no intention of getting vaccinated) to three (those who embraced vaccines).

About 49 percent of respondents with no vaccinated discussants in their circle reported highly resistant vaccine attitudes, compared with 0 percent of respondents with all vaccinated discussants. Concurrently, 81 percent of respondents with all vaccinated discussants reported highly supportive vaccine attitudes, compared with only 5 percent of respondents with no vaccinated discussants. Supportive attitudes toward coronavirus vaccines increase as the number of vaccinated friends and colleagues increases.

These insights provide important clues as to why those who are unvaccinated remain hesitant: It's likely they face reinforcing social pressure from their closest associates. Of course, we can't say for certain that social networks prompt individuals to receive or refuse vaccination, but these results do suggest a remarkably strong association between vaccination status and what people hear from their closest friends. More rigorous testing is needed to pin down the precise mechanisms involved, but our results suggest that social bubbles may play an important role in ongoing resistance to vaccination.

### **Are there ways to boost vaccination rates?**

It's likely that covid-19 outbreaks will continue to be concentrated among unvaccinated individuals and spread quickly through their unvaccinated social networks. Because the delta and omicron variants appear more transmissible than the initial strain, counties with large numbers of unvaccinated individuals may see significant and rapid increases in caseloads and hospitalizations after outbreaks among the unvaccinated.

But we also expect to see slow vaccination uptake among those 18 and older who remain unvaccinated, given that people in unvaccinated social networks are largely insulated from vaccinated circles and the social pressure to receive a coronavirus vaccine.

Could this change as more people get vaccinated? Having a single vaccinated individual in one's close social network is related to at least more supportive vaccine discussions, we noted. Thus, policymakers and health-care officials may want to think about allocating resources to target unvaccinated clusters, to help persuade more people to get the vaccine.

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