Like a virus, misinformation can spread within a population. It has its super-spreaders, just like the coronavirus. It can mutate in ways that make it more contagious. And it can be weaponized.

Research into networks of coronavirus-related communication has revealed how both true and false information spread through social media . Misinformation can spread like wildfire. Too often, antidotes to misinformation spread more slowly and only within subpopulations.

The conservative network of distorted science.

Consider how news of a flawed study spread. A well-known study by researchers associated with Stanford University found extremely large numbers of minor, undetected cases of coronavirus in Santa Clara County, CA. The study suggested that the virus might be much less dangerous than previously thought and that herd immunity might be achieved much sooner. There's been very interesting [research](#) about how news of the study spread through social media.

Scientists almost immediately began critiquing the study, which had some serious methodological problems. One big problem was that it used a test for coronavirus that had not been approved by the FDA and had a lot of false positives. Basically, if you gave the test to a population of people who'd never had the coronavirus, you'd get about the same number of positive cases that the researchers found, but just through test error. You would also find that none of those people had died of the coronavirus (since they actually didn't have it), so you could calculate a Case Fatality Rate of zero.

This and other critiques came out of conversations among a dispersed group of researchers, with discussions taking place within small groups surrounding some key researchers. But none of the researchers had that big a following, so the critiques didn't spread much into the outside population on social media.

Compare that with what happened in right-wing social media. The study was picked up by Alex Berenson, a right-wing provocateur. It then spread quickly to some super-spreaders like Ann Coulter. By connecting through those people, who are the hubs for huge numbers of followers, the study was then picked up by conservative media outlets. All that happened in the space of a weekend.

Thus, the shape of the scientific network and the right-wing network were much different. The scientific network consisted of multiple relatively small communities sharing

information. The right-wing network consisted largely of high-profile news sources (or "fake
-news spreaders"), which I have called superspreaders.

Since we're talking about networks, I should mention that a complaint has been filed
[alleging](#) that the Stanford study was funded by the founder of JetBlue, an anti-lockdown
advocate. That wouldn't necessarily matter if the study were well-conducted. But it does
seem to illustrate a conflict of interest.

The Anti-Lockdown Network

The "news" that the coronavirus was pretty harmless got transmitted to anti-lockdown
groups. When [interviewed](#), protestors have said that "the outbreak is milder and less
dangerous than public officials made it out to be, and that hospitals were inflating death
tolls to get money."

Those groups are part of a different set of networks. As the [NY Times](#) reported, "[a]n
informal coalition of influential conservative leaders and groups, some with close
connections to the White House, has been quietly working to nurture protests and apply
political and legal pressure to overturn state and local orders intended to stop the spread of
the coronavirus." This network benefits from a strong hub rather than relying on grassroots
networks to propel the movement:

> Nonprofit groups including FreedomWorks and Tea Party Patriots have used
> their social media accounts and text and email lists to spread the word about
> protests across the country.
>
> Most of FreedomWorks's 40 employees are working remotely on the effort,
> helping to connect local protesters and set up websites for them. . . . It is sharing
> the data with advisers on the President's economic task force and other
> conservative allies on Capitol Hill.

One of the key participants is an individual whom President Trump had nominated for the
Federal Reserve Board:

> Mr. Moore had been coordinating with FreedomWorks, the Tea Party Patriots
> and the American Legislative Exchange Council in a coalition called "Save Our

Country," which was formed to push for a quicker easing of restrictions.

At the same time, Mr. Moore was communicating with a group of local activists in Wisconsin involved in organizing a protest at the State Capitol….

Moore also said that he had "one big donor in Wisconsin" who had pledged financial support for the protesters. Although this isn't exactly a centrally organized effort, it seems to teeter on the edge between being a network and jelling into a collective enterprise.

The Vaxxer Network of False Science

The anti-lockdown protesters are also tied in with the anti-vaxxer network. Just this morning, the *Washington Post* reported that "the two movements are also drawing on a common online organizing infrastructure, increasingly merging in the fluid corners of Facebook."

Research into their social media use indicates that the anti-vaxxers have done well at penetrating into the broader community through numerous channels, while also benefitting from having diverse narratives. The public health community's network, on the other hand, comes from fewer sources, has less penetration, and provides an entirely accurate but monotonous message. In part this may be because there are by definition more ways to lie than to tell the truth.

The anti-vaxxers have made headway in shifting public opinion. A YahooNews YouGov poll found that only about half of the public were sure they would get vaccinated for coronavirus if a vaccine became available, while 19% said they definitely won't. Maybe the actual numbers are lower, but that's pretty shocking.

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It seems like the pro-science, pro-public health side of this contest needs to do much better. Too many of us suffer the illusion that all you need to do is make the truth available and the public will be persuaded.

The truth may set you free, but first it has to go viral on social media.