

Can survivors get reinfected with coronavirus?

May 4 2020, by Amy Norton, Healthday Reporter



(HealthDay)—People all over the globe who've recovered from the new

coronavirus want to know the same thing: Am I immune, at least for a while? A new study of common coronaviruses is not exactly reassuring.

Researchers found it was "not uncommon" for people with run-of-the-mill coronaviruses (not the one that causes COVID-19) to have a repeat infection within a year. Of 86 New York City residents infected with those coronaviruses, 12 tested positive for the same bug again.

A big caveat is, the study looked only at the four coronaviruses that are endemic in humans—the kind that cause nothing worse than cold symptoms.

"They're kind of wimpy," said researcher Jeffrey Shaman, a professor of environmental health sciences at Columbia University Mailman School of Public Health. "People rarely have to go to the doctor for these infections."

So it's hard to know, Shaman said, whether our experiences with endemic coronaviruses will translate to SARS-CoV-2—the coronavirus that causes COVID-19.

"It's not the same as these endemic viruses," Shaman said. "But obviously, we can't look at repeat infections with [SARS-CoV-2], because it's new."

In lieu of that, he said, analyzing the patterns of regular coronaviruses—how often reinfections occur, and in what time frame—may at least give a sense of what could happen with the new virus.

For the study, Shaman and colleague Marta Galanti looked at data on 191 healthy adults and children living in New York City. Between fall 2016 and spring 2018, the participants regularly gave nasal swab samples

and reported on any respiratory symptoms they were having.

Overall, 86 tested positive for a coronavirus infection at some point. Of those people, 12—or about 14%—tested positive for the same virus within a year.

And there was no evidence that people's symptoms were any different—either milder or worse—the second time around.

The findings have not, however, been published in a [scientific journal](#) yet. According to Shaman, they are undergoing [peer review](#)—the process by which journals decide whether a study is strong enough for publication.

For now, they leave some open questions. It's not clear, for example, that those 12 repeat positives were all actually repeat infections, Shaman said. That's particularly true in cases where the "new" positive result came within weeks of the first, he noted. There, the test may simply have detected the original virus again.

A similar issue is playing out right now with COVID-19, said Dr. Bruce Y. Lee, professor of health policy management at City University of New York Graduate School of Public Health.

There have been some reports of people who'd recovered from the disease testing positive for the virus again.

But, Lee said, those cases seem to reflect issues with the tests—including detection of "dead fragments" of the virus, rather than a new infection.

However, in the current study, many of the repeat positives happened months after the first [infection](#), Shaman said—as far out as 48 weeks. It's more likely those would be repeat infections.

Shaman said genetic analyses are being carried out to help confirm which cases are true reinfections.

The study also raises the question of who, exactly, is prone to reinfection—at least with common coronaviruses. Nine of the 12 repeat positives were in children between the ages of 1 and 9 years. It's not clear why, but Shaman speculated that their immature immune systems could have something to do with it.

Beyond that, all of the study participants lived in densely populated New York City, and some were health care workers. Shaman said the rate and speed of reinfections in the group might not be seen elsewhere.

Lee, who was not involved in the study, agreed it's hard to know what kind of relevance these findings have to the current pandemic. "The challenge with this new coronavirus is that it behaves differently," he said.

The closest comparison that could be made, Lee said, is with SARS-CoV—the virus that caused the multi-country SARS outbreak in 2003. Studies have found that people who recovered from SARS maintained antibodies to it for an average of two years.

But, Shaman said, the mere presence of antibodies does not equal immunity: They need to be effective antibodies, in sufficient numbers.

Those questions are important not only to individuals, but to public policy. Some governments have proposed giving "immunity passports" to people who test positive for antibodies to SARS-CoV-2—allowing them to return to work or to travel, under the assumption they won't get infected again.

But the World Health Organization has cautioned against the notion,

saying there is no evidence that having antibodies to the new [coronavirus](#) guarantees protection from reinfection.

Lee underscored that point. "It's helpful to be tested for antibodies," he said. "If you have them, you might have immunity. But that cannot be assumed."

More information: The U.S. Centers for Disease Control and Prevention has more on [coronavirus antibody testing](#).

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Citation: Can survivors get reinfected with coronavirus? (2020, May 4) retrieved 25 April 2024 from <https://medicalxpress.com/news/2020-05-survivors-reinfected-coronavirus.html>

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