Study: Most people infected with omicron didn't know it

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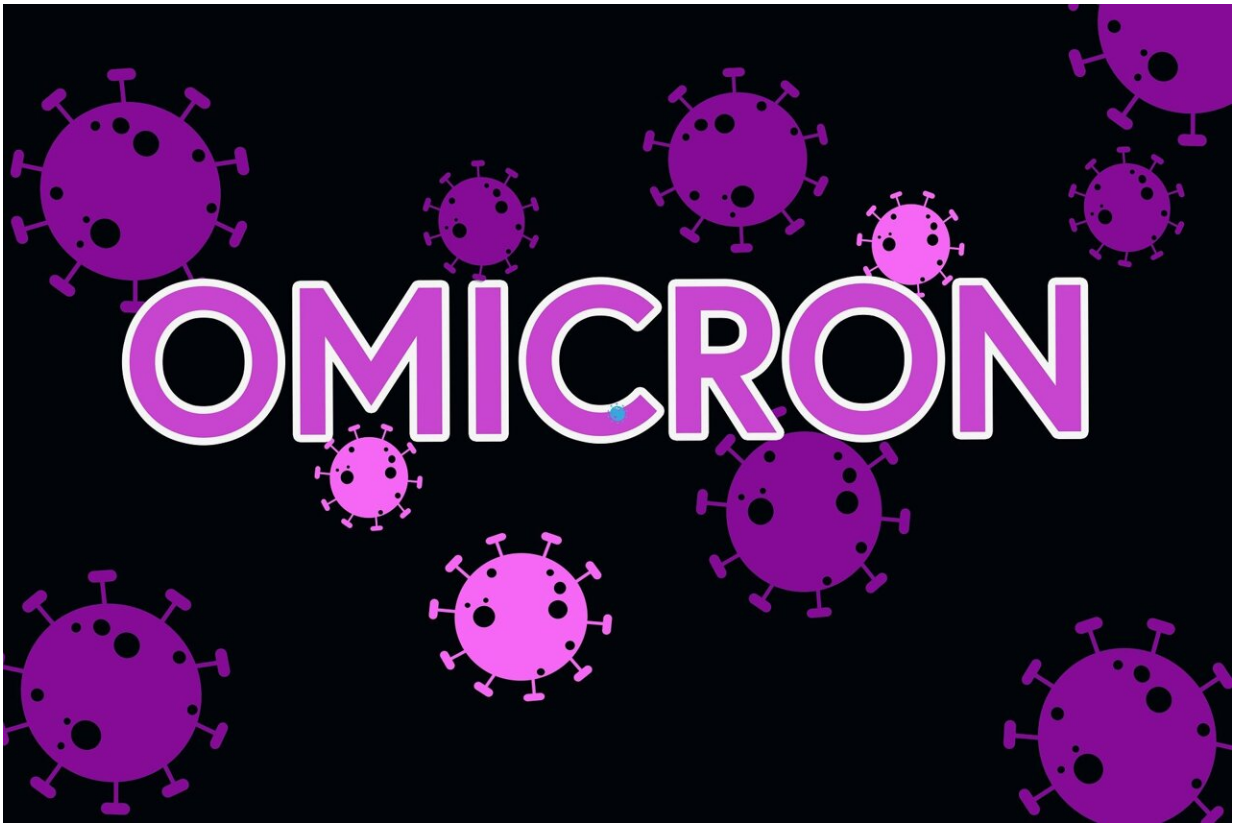

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The majority of people who were likely infected with the omicron variant of SARS-CoV-2, the virus that causes COVID-19, didn't know they had the virus, according to a new study from Cedars-Sinai

investigators. The findings are published in *JAMA Network Open*.

"More than one in every two people who were infected with omicron didn't know they had it," said Susan Cheng, MD, MPH, director of the Institute for Research on Healthy Aging in the Department of Cardiology at the Smidt Heart Institute at Cedars-Sinai and corresponding author of the study. "Awareness will be key for allowing us to move beyond this pandemic."

Prior studies have estimated that at least 25% and possibly as many as 80% of people infected with SARS-CoV-2 may not experience symptoms. Compared to other SARS-CoV-2 variants, the omicron variant is associated with generally less severe symptoms that may include fatigue, cough, headache, sore throat or a runny nose.

"Our study findings add to evidence that undiagnosed infections can increase transmission of the virus," said Sandy Y. Joung, MHDS, an investigator at Cedars-Sinai and first author of the study. "A low level of infection awareness has likely contributed to the fast spread of omicron."

As part of research into the effects of COVID-19 and the impact of vaccines, the investigators began collecting blood samples from healthcare workers more than two years ago. In the fall of 2021, just before the start of the omicron variant surge, the investigators were able to expand enrollment to include patients, thanks to study infrastructure and biospecimen processing support provided by Sapient Bioanalytics.

Of the healthcare workers and patients who have participated in the research, investigators identified 2,479 people who had contributed blood samples just prior to or after the start of the omicron surge. The investigators identified 210 people who likely were infected with the omicron variant based on newly positive levels of antibodies to SARS-CoV-2 in their blood.

Next, the investigators invited study participants to provide health status updates through surveys and interviews. Only 44% of study participants with newly positive SARS-CoV-2 antibodies had awareness of being infected with the virus. The majority (56%) were unaware of any recent COVID-19 infection. Of the study participants who were unaware, only 10% reported having any recent symptoms that they attributed to a common cold or other type of infection.

More studies involving larger numbers of people from diverse ethnicities and communities are needed to learn what specific factors are associated with a lack of infection awareness, according to the investigators.

"We hope people will read these findings and think, 'I was just at a gathering where someone tested positive,' or, 'I just started to feel a little under the weather. Maybe I should get a quick test.' The better we understand our own risks, the better we will be at protecting the health of the public as well as ourselves," said Cheng, the Erika J. Glazer Chair in Women's Cardiovascular Health and Population Science at Cedars-Sinai.

Cheng and colleagues are also studying patterns and predictors of reinfections and their potential to offer long-lasting immunity to SARS-CoV-2. In addition to raising awareness, this information could help people manage their individual risk.

More information: Sandy Y. Joung et al, Awareness of SARS-CoV-2 Omicron Variant Infection Among Adults With Recent COVID-19 Seropositivity, *JAMA Network Open* (2022). DOI: 10.1001/jamanetworkopen.2022.27241

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