



# REPRIEVE



# MASSACHUSETTS GENERAL HOSPITAL

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## Asymptomatic SARS-CoV-2 Infection is Common among ART-treated People with HIV

Edgar T. Overton, Isabelle R. Weir, Markella V. Zanni and colleagues

[Published in the Journal of Acquired Immune Deficiency Syndrome, 2022](#)

The COVID-19 pandemic has significantly affected everyone. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19 disease, is highly contagious. However, a significant proportion of people who are infected with SARS-CoV-2 remain asymptomatic (without symptoms). Even persons without symptoms can transmit the virus to others. In fact, it is believed that asymptomatic persons infected with SARS-CoV-2 likely contribute to up to 50% of all new infections. In this analysis, we performed COVID-19 antibody testing (a test to measure whether a person has been exposed to SARS-CoV-2) in a group of REPRIEVE participants to identify persons who had evidence of past infection with the SARS-CoV-2 virus. We then looked at whether these individuals had reported symptoms associated with COVID-19 disease (for example, fever and cough) to estimate the proportion of REPRIEVE participants who had asymptomatic SARS-CoV-2 infection, or infection without any symptoms. We also aimed to identify factors associated with asymptomatic and symptomatic SARS-CoV-2 infection.

### ➤ The participants

- 2464 REPRIEVE participants
- Average age: 53 years
- 35% female
- 47% Black or African American
- Average CD4 cell count: 649 cells/mm<sup>3</sup>
- 97% with HIV viral load less than 400 cp/mL

### ➤ Overall findings

- SARS-CoV-2 infection was identified in 13% of participants.
- 60% of participants with SARS-CoV-2 infection were asymptomatic.

### ➤ Factors associated with greater likelihood of having asymptomatic SARS-CoV-2 infection included:

- Black or African American race
- Older age
- Higher heart disease risk score

### ➤ Factors associated with greater likelihood of having symptomatic SARS-CoV-2 infection included:

- Obesity

REPRIEVE Trial Website: [reprivetrial.org](https://reprivetrial.org)

*The findings shared in this summary are from the REPRIEVE population at a specific point in time. These findings are descriptive and not intended to change clinical care. If you have questions about what you've read, please talk to members of the REPRIEVE study team at your local site or a health care provider*



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- Metabolic syndrome
- Reduced HDL-cholesterol (“good” cholesterol)

**In summary:** A significant percentage of people with SARS-CoV-2 infection (60%) in this global cohort were asymptomatic. Obesity and metabolic syndrome, but not HIV disease parameters (like CD4 count and HIV viral load), were associated with symptomatic SARS CoV-2 infection. These data serve as a reminder of the importance of strategies to contain the spread of SARS CoV2, including appropriate testing and widespread uptake of COVID-19 vaccines.

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