

For earlier variants, severe COVID-19 less likely at reinfection

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(HealthDay)—Compared with primary infection with severe acute

respiratory syndrome coronavirus 2 (SARS-CoV-2), reinfections have 90 percent lower odds of severe, critical, or fatal disease based on data for the variants circulating during the study period, according to a letter to the editor published online Nov. 24 in the *New England Journal of Medicine*.

Noting that Qatar had two back-to-back waves of SARS-CoV-2 infections from January through May 2021, Laith J. Abu-Raddad, Ph.D., from Weill Cornell Medicine-Qatar in Doha, and colleagues examined the risk for severe [disease](#), critical disease, and fatal disease caused by reinfections compared with primary infections in a national cohort of 353,326 persons with [polymerase chain reaction](#)-confirmed [infection](#).

The researchers identified 1,304 reinfections, 31.7, 4.4, and 16.3 percent of which were caused by the beta and alpha variants and wild-type virus, respectively; 47.6 percent were of unknown status. The median time between first infection and [reinfection](#) was 277 days for reinfected persons. The odds of severe disease were 0.12-fold for reinfection versus primary infection. No cases of critical disease occurred at reinfection compared with 28 cases at primary infection (odds ratio, 0.00; 95 percent confidence interval, 0.00 to 0.64). No cases of death from COVID-19 occurred at reinfection compared with seven cases at primary infection (odds ratio, 0.00; 95 percent confidence interval, 0.00 to 2.57). For the composite outcome of severe, critical, or fatal disease, the odds at reinfection were 0.10 times that at primary infection.

"It needs to be determined whether such protection against severe disease at reinfection lasts for a longer period, analogous to the immunity that develops against other seasonal 'common-cold' coronaviruses," the authors write.

More information: [Abstract/Full Text](#)

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