

# More proof that COVID vaccines guard against severe disease

November 5 2021

---



(HealthDay) — The risk of serious illness or death is lower among

vaccinated people who get breakthrough COVID-19 infections than among unvaccinated people who get infected, two new studies confirm.

An ongoing study of 780,000 U.S. veterans found that all three vaccines available in the United States provide strong protection against severe disease and death, despite a significant decline in their effectiveness against mild and asymptomatic [infection](#), *CNN* reported.

"Although [breakthrough infection](#) increased risk of death, vaccination remained protective against death in persons who became infected during the Delta surge," the researchers wrote in the study published Nov. 4 in the journal *Science*.

"Our analysis by [vaccine](#) type, including the Pfizer-BioNTech, Moderna and [Johnson & Johnson's] Janssen vaccines, suggests declining vaccine effectiveness against infection over time, particularly for the Janssen vaccine," the researchers said. "Yet, despite increasing risk of infection due to the Delta variant, vaccine effectiveness against death remained high, and compared to unvaccinated Veterans, those fully vaccinated had a much lower risk of death after infection."

The second study found that [unvaccinated people](#) with infections were much more likely to end up in the hospital on a ventilator or to die than people who had breakthrough infections after being fully vaccinated with the Pfizer or Moderna vaccines.

Researchers analyzed data on more than 4,500 patients admitted to 21 U.S. hospitals with [respiratory diseases](#) between March and July and found that unvaccinated patients accounted for 84.2% of COVID-19 hospitalizations, 91% of COVID-19 deaths and nearly 94% of those who either needed a ventilator or who died, *CNN* reported.

The study was published Nov. 4 in the *Journal of the American Medical*

*Association.*

"We are very confident now that the vaccine is still helping you, even if you get COVID," study team leader Dr. Wesley Self, an associate professor at Vanderbilt University, told *CNN*. "Even those who get sick don't get as sick as they would if they were unvaccinated."

**More information:** Visit the U.S. Centers for Disease Control and Prevention for more on [COVID vaccines](#).

Barbara A. Cohn et al, SARS-CoV-2 vaccine protection and deaths among US veterans during 2021, *Science* (2021). [DOI: 10.1126/science.abm0620](#)

Mark W. Tenforde et al, Association Between mRNA Vaccination and COVID-19 Hospitalization and Disease Severity, *JAMA* (2021). [DOI: 10.1001/jama.2021.19499](#)

Copyright © 2021 [HealthDay](#). All rights reserved.

Citation: More proof that COVID vaccines guard against severe disease (2021, November 5) retrieved 31 March 2023 from <https://medicalxpress.com/news/2021-11-proof-covid-vaccines-severe-disease.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.