

# Moderna vaccine may shield more against breakthrough infections than Pfizer: study

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People fully vaccinated with the Moderna COVID-19 vaccine appear to

have a lower risk of a "breakthrough" infection caused by the Delta variant than those who received the Pfizer vaccine, a new, preliminary report suggests.

The researchers emphasized that both vaccines still "strongly protect" against severe illness, but the difference appears to be in the degree of protection they offer against infection, *CNBC* reported.

The infection risk was 60% lower among Moderna recipients than among Pfizer recipients, according to an analysis of July data from Florida, where the Delta variant has driven COVID-19 cases to new highs, *CNBC* reported.

The Mayo Clinic researchers also found that in Minnesota last month, the Moderna [vaccine](#) was 76% effective at preventing a breakthrough infection, while the Pfizer vaccine was only 42% effective.

"Comparing rates of infection between matched individuals fully vaccinated with mRNA-1273 [Moderna] versus BNT162b2 [Pfizer] across Mayo Clinic Health System sites in multiple states (Minnesota, Wisconsin, Arizona, Florida and Iowa), mRNA-1273 conferred a twofold risk reduction against breakthrough infection compared to BNT162b2," the authors wrote.

The new data was published in an abstract of their [pre-print study](#) that's awaiting a full peer review, so the findings should be considered preliminary.

However, Dr. Amesh Adalja, senior scholar at Johns Hopkins Center for Health Security, in Baltimore, stressed that "when it comes to vaccines, the most important thing, and to me the only thing that matters, is that they protect against severe disease, hospitalization and death. That's what the vaccines were designed to do—not to be some magic force field that

stops every breakthrough infection."

Adalja said, "By that standard, the vaccines are performing tremendously. I think it's important to remember that the Moderna vaccine is a higher dosage than the Pfizer vaccine, and that may be accounting for this discrepancy in this study, which has not gone through peer review. However, in the end, if both vaccines prevent what matters, I don't think it matters much."

Still, the Biden administration is taking the data as a "wakeup call," [Axios](#) reported.

Pfizer told the [news website](#) that it and partner BioNTech "expect to be able to develop and produce a tailor-made vaccine against that [Delta] variant in approximately 100 days after a decision to do so, subject to regulatory approval," *CNBC* reported.

In a follow-up statement, the company emphasized the effectiveness of its COVID-19 vaccine and said it was also developing a booster dose.

"Pfizer and BioNTech have put into place a robust booster research program to ensure that our vaccine continues to offer the highest degree of protection possible," Pfizer said. "Initial data of a third dose of the current vaccine demonstrates that a booster dose given at least 6 months after the second dose elicits high neutralization titers against the wild type, Beta, and Delta variants."

Last week, Moderna warned that breakthrough infections were on the rise and said people who'd received its vaccine would likely require a booster shot before winter, *CNBC* reported.

Despite the new data, the U.S. Centers for Disease Control and Prevention has said the risk of [infection](#) is 8 times higher in the

unvaccinated than the vaccinated, and the risk of hospitalization or death is 25 times higher, *CNBC* reported.

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

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