

COVID vaccines still work against mutant, researchers find

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A health worker prepares to administer a jab of the AstraZeneca COVID-19 vaccine during a vaccination drive for people ages 30 to 39 in Mexico City, Wednesday, July 7, 2021. Credit: AP Photo/Marco Ugarte

New research from France adds to evidence that widely used COVID-19

vaccines still offer strong protection against a coronavirus mutant that is spreading rapidly around the world and now is the most prevalent variant in the U.S.

The [delta](#) variant is surging through populations with low vaccination rates. On Thursday, Dr. Rochelle Walensky, director of the U.S. Centers for Disease Control and Prevention, said that's leading to "two truths"—highly immunized swaths of America are getting back to normal while hospitalizations are rising in other places.

"This rapid rise is troubling," she said: A few weeks ago the delta variant accounted for just over a quarter of new U.S. cases, but it now accounts for just over 50%—and in some places, such as parts of the Midwest, as much as 80%.

Researchers from France's Pasteur Institute reported new evidence Thursday that full vaccination is critical.

In laboratory tests, blood from several dozen people given their first dose of the Pfizer or AstraZeneca vaccines "barely inhibited" the delta variant, the team reported in the journal *Nature*. But weeks after getting their second dose, nearly all had what researchers deemed an immune boost strong enough to neutralize the delta variant—even if it was a little less potent than against earlier versions of the virus.

The French researchers also tested unvaccinated people who had survived a bout of the coronavirus, and found their antibodies were four-fold less potent against the new mutant. But a single vaccine dose dramatically boosted their antibody levels—sparking cross-protection against the delta variant and two other mutants, the study found. That supports public health recommendations that COVID-19 survivors get vaccinated rather than relying on natural immunity.

The lab experiments add to real-world data that the delta variant's mutations aren't evading the vaccines most widely used in Western countries, but underscore that it's crucial to get more of the world immunized before the virus evolves even more.

Researchers in Britain found two doses of the Pfizer [vaccine](#), for example, are 96% protective against hospitalization with the delta variant and 88% effective against symptomatic infection. That finding was echoed last weekend by Canadian researchers, while a report from Israel suggested protection against mild delta infection may have dipped lower, to 64%.

Whether the fully vaccinated still need to wear masks in places where the delta variant is surging is a growing question. In the U.S., the CDC maintains that fully vaccinated people don't need to. Even before the delta variant came along, the vaccines weren't perfect, but the best evidence suggests that if vaccinated people nonetheless get the coronavirus, they'll have much milder cases.

"Let me emphasize, if you were vaccinated, you have a very high degree of protection," Dr. Anthony Fauci, the U.S. government's top infectious disease expert, said Thursday.

In the U.S., case rates have been rising for weeks and the rate of hospitalizations has started to tick up, rising 7% from the previous seven-day average, Walensky told reporters Thursday. However, deaths remain down on average, which some experts believe is at least partly due to high vaccination rates in people 65 and older—who are among the most susceptible to severe disease.

More information: Delphine Planas et al, Reduced sensitivity of SARS-CoV-2 variant Delta to antibody neutralization, *Nature* (2021). [DOI: 10.1038/s41586-021-03777-9](https://doi.org/10.1038/s41586-021-03777-9)

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