



WHAT WILL IT TAKE TO BE FULLY VACCINATED IN 2022?

WHITE PAPER

VACCINES AND COVID-19 ONE YEAR TOGETHER

One year ago, Pfizer, Moderna, and Johnson & Johnson Janssen released their vaccines to prevent infection and protect Americans against the deadly COVID-19 virus. One year later, **61% of Americans are now fully vaccinated**. However, the Delta and Omicron variants of the virus have raised concerns among fully vaccinated individuals and health providers.

Only time will tell how effective vaccines will be against the new Omicron variant, which was just recently discovered in South Africa in November 2021. Studies released by the National Institute of Health show promising evidence of boosters providing additional protection against the new, highly contagious Omicron variant.



The Moderna logo, featuring the word 'moderna' in a red lowercase sans-serif font, with a blue dashed line underneath.

The Johnson & Johnson logo, featuring the words 'Johnson & Johnson' in a white cursive script font on a red background.



"With early data showing Omicron to be significantly more transmissible than previous variants, and antibody levels from vaccinations falling over time, I anticipate there will be a big push to have the population receive booster shots, to the effect that receiving a booster may be the new requirement to be considered fully vaccinated."

Dr. Scott E. Cherry, DO, MPH, FACOEM
Chief Medical Officer, Axiom Medical



THE EFFECTIVENESS OF VACCINES AND BOOSTERS

Fully immunized individuals are, currently, those that have received two doses of the Pfizer or the Moderna vaccines or one dose of the Johnson & Johnson vaccine. Although fully immunized individuals have a significantly lower chance of hospitalization and death, the new Omicron and Delta variants have proven to be the cause of many breakthrough infections in fully vaccinated individuals.

Due to the prevalence of breakthrough infections, the CDC now recommends boosters to be utilized to increase protection against COVID-19 for those over 18 years old. Recent studies show waning immunity six to eight months after receiving a vaccine, especially in people 65 and older and healthcare workers.



The CDC's recommended timeline to receive a booster is currently:

- » **Six months** after receiving the Moderna or Pfizer series
- » **Two months** after receiving the Johnson & Johnson vaccine

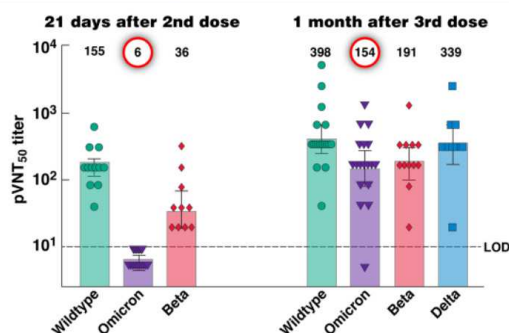
WILL AN ADDITIONAL BOOSTER DOSE PROVIDE IMMUNITY AGAINST THE NEW VARIANTS?

The two most prevalent coronavirus strains are currently Delta and Omicron variants, with Omicron presently dominant in the United States. According to the CDC, this new variant is highly contagious, can spread to those vaccinated, and cause more severe illness in unvaccinated individuals.

Data by Pfizer shows boosters have been able to increase the amount of Delta variant antibodies in all age populations. The same can be said about the Omicron variant, as recent data reflects increased antibodies against this variant with the booster. These antibodies provide more immunity and lessen the severity of symptoms and hospitalizations.

WHAT WILL IT TAKE TO BE FULLY VACCINATED IN 2022?

Pfizer/BioNTech COVID-19 Vaccine: Booster Dose Increased Antibody Titer Against Omicron 25-Fold



Source: [White House](#)

Pfizer/BioNTech COVID-19 Vaccine study reports that efficacy of the vaccine and antibody levels increased 25-fold, significantly, against the Omicron variant, after the third booster dose. Although one dose (Janssen) or even two-dose vaccines (Pfizer and Moderna) were enough to be considered fully vaccinated in 2020, new emerging variants now pose threat to "fully vaccinated" individuals.

According to the recent coronavirus briefing by US White House Chief Medical Advisor, Dr. Fauci on 12/15/2021, an additional booster dose or the third dose increases protection against symptomatic disease up to 75%.

Health experts currently reviewing the data are expected to advise of any vaccination criteria modifications in 2022.