





# If we need a booster dose, does that mean that the vaccines aren't working?

No. COVID-19 vaccines are working well to prevent severe illness, hospitalization, and death, even against the widely circulating delta variant. However, public health experts are starting to see reduced protection, especially among certain populations, against mild and moderate disease. With cases of COVID-19 still high across the US and increasing in some parts of the country, the latest CDC recommendations on booster doses help to ensure more people across the US are better protected against COVID-19.

### Can I mix and match my COVID-19 vaccine and booster?

The CDC recommends that people who received the Johnson & Johnson vaccine get a Pfizer or Moderna booster. The CDC advises people who got a Pfizer or Moderna vaccine to get the same booster as their initial vaccine, but allows them to mix and match (i.e., get a different COVID-19 booster than their initial vaccine) depending on preference or availability—with the exception of adolescents age 16-17 who are only eligible to receive the Pfizer vaccine. If you have questions about your eligibility for booster doses or which booster you should get, speak to your health care provider.

## So does this mean people will need a COVID-19 booster every 6 months?

At this point we don't know if additional booster doses, beyond the now recommended or available third dose, will be needed. Booster doses are common for many vaccines. The scientists and medical experts who developed the COVID-19 vaccines will continue to closely watch for signs of waning immunity, how well the vaccines protect against new mutations of the virus, and how that data differ across age groups and risk factors. It is possible that the current booster dose could result in long lasting immunity or alternatively that additional booster doses might be needed in the future, and scientists will be carefully monitoring that issue.

# The emergence of the Omicron variant underscores the importance of vaccination, boosters, and preventive efforts to protect against COVID-19.

#### Why do new COVID-19 variants continue to emerge?

Variants emerge as a result of naturally occurring mutations in viruses. For example, the flu virus changes often, which is why doctors recommend a new flu vaccine each year. Scientists monitor all COVID-19 variants but may classify certain ones, like Omicron and Delta, as "variants of concern." Scientists monitor these variants carefully to learn if they spread more easily, cause more severe cases than other variants, or evade vaccine protection. As long as COVID-19 spreads, mutations and new variants are expected to occur, the best way to prevent the spread of COVID-19, including its variants, is to get vaccinated and boosted. Being vaccinated decreases the likelihood you will get sick, and makes it less likely you will need hospitalization or die if you get infected. Increased vaccination rates around the world will decrease the likelihood that the coronavirus will mutate into other dangerous variants.