7 Questions (and Answers) About COVID-19 Variants

What is a virus variant?

A virus variant is a different version of a virus. Most viruses mutate or change as they replicate (make copies of themselves), and this leads to variants. Small differences in SARS-CoV-2 variants have been identified and studied since the beginning of the COVID-19 pandemic.

Virus variants can be passed from one person to another. One way to help stop new SARS-CoV-2 variants is to get vaccinated. Being vaccinated helps prevent any versions of the virus from spreading and replicating more.

Should I be worried that new variants seem to be found every day?

No. It is normal for a virus like SARS-CoV-2, which causes COVID-19, to evolve into new variants. Doctors and scientists expect to see new virus variants, because viruses are always changing. For example, seasonal influenza (flu) vaccines are updated from one season to the next to protect against the newest variants of influenza viruses. Just as it's important to get a flu shot, getting a COVID-19 vaccine is still the best protection against infection and illness from SARS-CoV-2.

Why is it important to keep track of SARS-CoV-2 variants?

Scientists follow SARS-CoV-2 variants closely because they may:

- Spread more easily between people
- Be more resistant to COVID-19 tests, treatments, or vaccines
- Make people sicker

Scientists are watching many different SARS-CoV-2 variants, including well-known variants like Delta and Gamma. This research expands as new variants are found.

Do the current vaccines work against variants?

So far, studies suggest that the current vaccines protect you from getting seriously ill from the virus variants that are currently spreading. However, that could change as the viruses change. Scientists keep studying variants to make sure people stay protected.

COVID-19 vaccines are the best option to protect you from serious illness and from spreading the virus to others, whether or not you've already had COVID-19. The more the virus spreads, the more chances it has to change.

What can I do to stay safe from COVID-19 variants?

First, and most important, get a COVID-19 vaccine as soon as you can, even if you've already had COVID-19. This is the best way to avoid illness and keep the virus from spreading.

In addition, follow CDC guidelines to prevent the spread of COVID-19.

How do I know if I have a COVID-19 variant?

If you test positive for SARS-CoV-2, you and your doctor may not be able to find out which specific virus variant you have. No matter what version of the virus you have, if you test positive, it is important to take care of yourself, get medical care, and take precautions to avoid spreading the virus to anyone else.

Do I need a COVID-19 vaccine booster shot to protect me from COVID-19 variants?

We don't know for sure whether a booster shot will be needed to keep you protected from COVID-19. We are still learning:

- How well vaccines protect you against variants

- How well vaccines prevent you from spreading the virus to others

- How long vaccine protection lasts*

In the meantime, however, COVID-19 vaccines remain the best way to stay protected from serious illness, prevent spreading the virus to others, and reduce the likelihood that more variants will appear.

Learn more about COVID-19 prevention and treatment at https://covid19community.nih.gov/.

Sources: CDC; NIH Director's Blog

* Manufacturers are studying how long the protection for their vaccines lasts. For example, both Pfizer/BioNTech and Moderna have reported that protection from these vaccines is still going strong six months after the second dose.

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