What exactly is a COVID-19 variant, anyway? The virus still spreading from person to person. Every time the virus responsible for this pandemic makes copies of itself, it might mutate and change. It does not change every time. When it changes in an important way, it is called a variant of that virus. Not all variants are dangerous.

Wait! You’re saying that the virus is making copies of itself in my body? Yes, that is how all viruses work. When they get inside our bodies, they go straight inside our cells and make millions of copies of themselves. Viruses want to survive and they need to be inside someone or something that is alive to do that. If our body’s immune system can’t fight off a virus well enough, it makes us sick.

Back to those variants. Should I be worried? Most variants are minor, but sometimes the virus changes in ways that are dangerous. Those are variants that the CDC calls variants of concern. We worry most about variants that make vaccines work less, increase spread, or create more illness.

Concern? What do you mean by Variants of Concern? We worry about changes in the virus when it changes in ways that make it worse than the main virus. The most worrisome changes help the virus to:
- Spread more easily
- Make people sicker
- Become resistant to treatment or vaccines

What are the COVID virus Variants of Concern in the US right now? There are three main virus variants of concern in the US right now:
- United Kingdom (UK): B.1.1.7
- Japan/Brazil: P.1
- South Africa: B.1.351

Why should I care about these variants? All three variants are now spreading in Maryland. Let’s review how they are different from the virus that has been most widespread in the US over the past year:

United Kingdom (B.1.1.7):
- Spreads more easily
- Causes more death
- Spreading fast across the US

Japan/Brazil (P.1):
- Spreads twice as easily
- Affects younger people
- Vaccines may not work as well
- More likely to reinfect people

South Africa (B.1.351):
- Spreads more easily
- Vaccines may not work as well

Will there be more variants? Yes. Experts are studying new variants of the virus behind the COVID-19 pandemic (e.g., NY, CA, Brazil). The virus is changing and creating new variants all the time.
Do the vaccines work against these new variants?
Yes and no. All three vaccines work well against the
version of COVID-19 that has been spreading around
the US for the past year. They also work well against the
B.1.1.7 variant.
Unfortunately, none of the vaccines work very well
against the variant that was first identified in South
Africa. The Moderna and Pfizer-BioNTech vaccines were
created before the B.1351 variant from South Africa
existed. It looks like their vaccines don’t work as well
against that variant. Moderna and Pfizer are working
on booster shots for the vaccine that can help our
bodies fight against the B.1351 or other variant if we are
exposed to it.

Johnson and Johnson’s (J&J) vaccine offers some
protection against the variant from South Africa, but its
use was paused by the Food and Drug Administration
on April 13, 2021. They are investigating safety concerns
with the J&J vaccine.

If the vaccine won’t work, why should I bother getting
vaccinated?
All vaccines authorized for use in the US help to reduce
severe illness from COVID-19. The vaccines work really
well against the UK and US strains of COVID. This means
fewer hospitalizations and deaths. You can protect
yourself and others by getting vaccinated. Use of the J&J
vaccine has been paused because of safety concerns.
Check with your healthcare provider to discuss which of
the Pfizer and Moderna mRNA vaccines is best for you.

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