



**CARRIE'S  
COVID Q&A**  
Source: [health.harvard.edu](https://health.harvard.edu)



### Question: What is herd immunity?

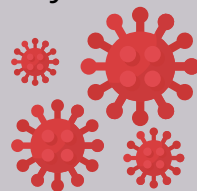
**Answer:** Herd immunity means that enough people have become protected against a disease that it is very unlikely the disease will spread. When this happens, the entire community is protected, even those who are not immune.

Vaccination or natural infection by COVID-19 are two ways individuals become protected against future infection. However, scientists are still unsure how long those protections last. Experts have estimated that between 60% and 70% of people need to be immune in order to reach herd immunity against COVID-19 and that the best way to gain herd immunity is through vaccination.

## WHAT TO KNOW ABOUT THE COVID-19 VARIANTS

### WHAT IS A VARIANT?

- Viruses constantly change through mutation, and all viruses evolve over time. When a virus replicates or makes copies of itself it can change. A virus with one or more *new* mutations is referred to as a variant of the original virus. When a virus is widely circulating in a population and causes many infections, it is more likely that the virus will mutate. The more opportunities a virus has to spread, the more it replicates and the more likely it will undergo changes.



### WHY IS THIS IMPORTANT?

- It is important to understand what a variant is because changes in the virus's genetic material can affect a virus's properties, like transmission. Viral mutations can affect if the virus will spread *more* or *less* easily; severity is also affected and can change if the disease is *more* or *less* severe. Knowing about variants is also important when it comes to the COVID-19 vaccines. Changes or mutations in the virus should *not* make the vaccines completely ineffective, because the current COVID-19 vaccines are expected to provide some protection against new virus variants. The current vaccines obtained a broad immune response involving a range of antibodies and cells.

## WHAT ARE THE DIFFERENT COVID-19 VARIANTS?

- Multiple variants of the virus that causes COVID-19 have been documented in the U.S. and globally during the pandemic. The virus that causes COVID-19 is a type of coronavirus, a large family of viruses. Currently, there are five variants of concern in the U.S.
- These variants are: The **B.1.1.7** variant that was initially detected in the U.K. and came to the U.S. in December of 2020. The next variant is the **B.1.351** variant and it was first detected in South Africa and came to the U.S. in January of 2021. **P.1** was first detected in the U.S. in January of 2021. This variant was initially identified in travelers from Brazil who were tested in an airport in Japan. There are two variants that were first identified in California in February of 2021. They are **B.1.427** & **B.1.429**. These were classified as variants of concern in March 2021, because they seem to spread more easily and quickly than other variants.

Source: The World Health Organization

### Johnson & Johnson vaccine distribution paused by the FDA this week. What does that mean for you?



Six women in the U.S. experienced blood clotting issues and one woman has died after receiving the Johnson & Johnson COVID-19 vaccine. The FDA has recommended a pause in its distribution until the issue can be more fully reviewed.

So what does that mean for you?

#### Safety

If you or a loved one has received the J&J vaccine within the past two weeks, you should:

- Monitor yourself for symptoms and call your doctor to report any unusual symptoms or pain such as leg pain, abdominal pain or severe headache.
- Don't panic. Blood clotting events are extremely rare with around one in one million people experiencing blood-clotting. By comparison, a person contracting COVID-19 is much more likely to die from the virus.

#### Supply

- There are still enough vaccines available to vaccinate every citizen
- If you are scheduled for a J&J vaccine in the coming days, your supplying healthcare organization or pharmacy will reach out to you with more details on how to re-schedule.

#### Indian Health Services

- IHS has safety monitoring systems in place and no cases of the blood clot issue have been identified.

Sources: IHS, CBS News & CNN

## Today's Little Chuckle

Two men went hunting.

One man asked the other, "Did you ever hunt bear?"

The other one said, "No, but one time I went fishing in my shorts."

