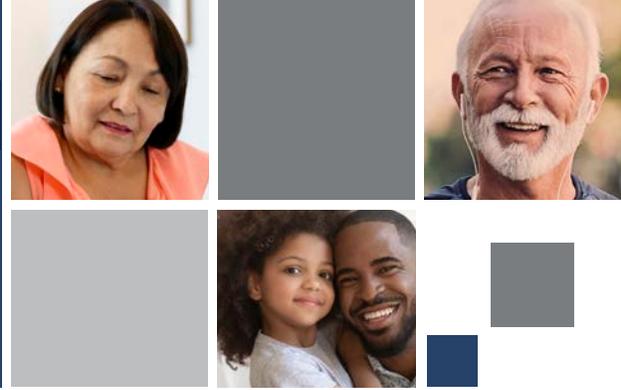


6 Questions (and Answers) About Viral Vector Vaccines



What is a viral vector? Which COVID-19 vaccines use a “viral vector” approach?

The Johnson & Johnson COVID-19 vaccine uses a viral vector, which is when another, harmless virus is used as a vehicle to carry genetic information about the virus that causes COVID-19 to your body’s cells.

Will a COVID-19 viral vector vaccine give me COVID-19?

No. None of the COVID-19 vaccines can make you sick with the disease. None of the vaccines contain live SARS-CoV-2, the virus that causes COVID-19. These vaccines protect you by prompting your immune system to produce virus-fighting antibodies.

How do viral vector vaccines for COVID-19 work?

[COVID-19 viral vector vaccines](#) use a harmless, modified version of a different virus as a vehicle, or vector, to carry genetic information about the SARS-CoV-2 virus to your body’s cells. That genetic information tells your cells how to make a specific SARS-protein from the virus.

In the case of the Janssen Biotech, Inc. (Johnson & Johnson) COVID-19 vaccine, the vector virus is one called an adenovirus, known for causing the common cold. But the adenovirus is altered in a lab to remove its genetic material so it can’t multiply in your cells and cause infection.

After you get vaccinated with a viral vector vaccine, white blood cells in your immune system see the SARS-CoV-2 protein that has been made by your body’s own cells. As a result, those white blood cells start making antibodies that target that protein. These antibodies then stand ready to seek and destroy the whole virus if you are exposed to it.

Will a viral vector vaccine make me sick with the virus that is used as the vehicle to carry the SARS-CoV-2 information to my cells?

No. The adenovirus that is used has its genetic material removed in a lab so it can’t multiply in your cells and cause infection.

Facts about COVID-19 viral vector vaccines

They cannot give you COVID-19.

- Viral vector vaccines can’t infect you with either COVID-19 or the virus used as the vaccine vector.

They do not affect or interact with your DNA in any way.

- The genetic material delivered by the viral vector does not integrate into your DNA.

[Learn more about viral vector vaccines from CDC.](#)

How do I know this vaccine is safe?

Safety is the top priority in vaccine development, from beginning to end.

The COVID-19 viral vector vaccines, like all vaccines, are tested for safety and efficacy before the U.S. Food and Drug Administration (FDA) authorizes them for use. Clinical trial leaders track, monitor, and report side effects throughout vaccine testing. Vaccines like this have been studied carefully and approved to prevent other diseases, including the Ebola virus.

After a vaccine is approved, as more people use it, the FDA continues to monitor it for

potential side effects to make sure it is as safe and effective as possible.

What are the side effects of this vaccine?

Side effects from this vaccine, as with others, are usually mild and don't last long. Common side effects include discomfort where the injection is given, tiredness, headaches, and muscle or joint aches that may last for a few days. This is a natural part of the process and is a sign that the vaccine is working.

Learn more about vaccines at <https://covid19community.nih.gov/resources/learning-about-vaccines>.