

# 7 Things You Need to Know About COVID-19 Vaccines

Updated Dec. 21, 2020 | This information is approved by Medical Staff Serving on the Pandemic Incident Command team at Upland Hills Health in Dodgeville WI: Dr. Charlie Pearce, Dr. Sarah Fox and Dr. Rachel Hartline

**Vaccines to prevent the coronavirus disease 2019 (COVID-19) are perhaps the best hope for ending the pandemic.** As the U.S. Food and Drug Administration (FDA) begins authorizing emergency use of COVID-19 vaccines, you will likely have questions. This article will review safety of the COVID-19 vaccines, how they work and the possible side effects of vaccines.

## 1) The Pfizer vaccine and the Moderna vaccine have been approved by the FDA for emergency use. Other vaccines may follow. [\[cdc.gov\]](https://www.cdc.gov)

Large-scale clinical trials are in progress for additional COVID-19 vaccines in the United States. They are: [\[cdc.gov\]](https://www.cdc.gov)

- AstraZeneca's COVID-19 vaccine
- Janssen's COVID-19 vaccine

## 2) Data shows the two vaccines are over 94% effective

**Pfizer/BioNTech vaccine.** Authorized by the FDA for emergency use. Data has shown that this vaccine starts working soon after the first dose and has an efficacy rate of 95% seven days after the second dose. This means that about 95% of people who get the vaccine are protected from becoming seriously ill with the virus. This vaccine requires two injections given 21 days apart.

**Moderna vaccine.** Waiting approval. Moderna has applied for FDA emergency use authorization of its COVID-19 vaccine. Data has shown that the vaccine has an efficacy rate of 94.1%. This vaccine requires two injections given 28 days apart. [\[mayoclinic.org\]](https://www.mayoclinic.org)

## 3) Vaccines help your body build immunity without actually getting the disease.

Both the Pfizer/BioNTech and the Moderna COVID-19 vaccines use messenger RNA (mRNA). Coronaviruses have a spike-like structure on their surface called an S protein. COVID-19 mRNA vaccines give cells instructions for how to make a harmless piece of an S protein. After vaccination, cells begin making the protein pieces and displaying them on cell surfaces. Your immune system will recognize that the protein doesn't belong there and begin building an immune response and making antibodies. [\[mayoclinic.org\]](https://www.mayoclinic.org)

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#### **4) COVID-19 vaccines will not give you COVID-19**

The vaccines do not use a live virus that causes COVID-19. The goal for the vaccine is to teach our immune system to recognize and fight the virus that causes COVID-19. Sometimes this process can cause symptoms, such as fever. These symptoms are normal and are a sign that your body is building immunity. [\[mayoclinic.org\]](https://www.mayoclinic.org)

#### **5) A COVID-19 vaccine may cause mild side effects**

Most people do not have serious problems after being vaccinated. These side effects are a sign that your immune system is doing exactly what it should do. It is building up protection to the disease. These side effects usually go away on their own within a week. [\[cdc.gov\]](https://www.cdc.gov)

Side effects may include: Pain, redness or swelling where the shot was given, Fever, Fatigue, Headache, Muscle pain, Chills, Joint pain [\[mayoclinic.org\]](https://www.mayoclinic.org)

Most reactions happen with the first few days after vaccination and last no more than three days. If you experience side effects after getting a COVID-19 vaccine, it doesn't mean that you have COVID-19. If you develop a fever after receiving the vaccine, stay home. Take time to rest and recover. It is not necessary to get a COVID-19 test or quarantine. [\[mayoclinic.org\]](https://www.mayoclinic.org)

#### **6) Serious side effects are less likely**

Signs of an allergic reaction include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. If you have any of these signs, seek care immediately.

If you have a reaction that prevents you from being able to eat, sleep or work, contact your doctor. Also, contact your doctor if you have a reaction that lasts longer than three days. [\[mayoclinic.org\]](https://www.mayoclinic.org)

#### **7) The safety of the COVID-19 vaccines is a top priority.**

The FDA must review the results of clinical trials before approving COVID-19 vaccines for use. The data must show that the vaccines are safe and effective before the FDA can give emergency use authorization. [\[mayoclinic.org\]](https://www.mayoclinic.org)

The federal government launched Operation Warp Speed at the beginning of the pandemic to make a COVID-19 vaccine available as soon as possible. Safety is top priority. The Food and Drug Administration (FDA) only authorizes a vaccine when the expected benefits outweigh the potential risks.

The COVID-19 vaccines were tested in large clinical trials to make sure they meet safety standards. Many people were recruited to participate in these trials to see how the vaccines protect people of different ages, races, ethnicities and different medical conditions. [\[cdc.gov\]](https://www.cdc.gov)