



# COVID-19 Vaccine

## Frequently Asked Questions

### General Vaccine Information

#### How do the COVID-19 vaccines work?

The two current vaccines, Pfizer and Moderna, use messenger [RNA or mRNA](#), to trigger the immune system to produce protective antibodies against the coronavirus. These are the first vaccines to use mRNA. It is important to note that neither of these vaccines uses the coronavirus, itself, and neither can cause COVID-19.

#### How do vaccines protect our community?

If 75 to 95 percent of the population is vaccinated, vaccines will not only protect people who get the vaccine, they'll protect people who have not been vaccinated by reducing the rate of person-to-person transmission (community protection). Vaccination has led to community protection from other illnesses, including whooping cough (pertussis).

#### Will I need to get a COVID-19 vaccine every year?

At this time, we do not know. Studies on the long-term effectiveness of the vaccines will continue and more information will be released as it becomes available.

#### How is the vaccine administered?

The two vaccines approved by the U.S. Food and Drug Administration require two doses, either 21 or 28 days apart. It is important to get both doses to ensure the highest level of efficacy.

#### Will I need to continue to wear a mask and distance after I receive 2 doses of the vaccine?

Yes. According to the CDC, while experts learn more about the protection that COVID-19 vaccines provide under real-life conditions, it will be important for everyone to continue using all the tools available to us to help stop this pandemic, like covering your mouth and nose with a mask, washing hands often, and staying at least 6 feet away from others. This will offer the best protection from getting and spreading COVID-19 until experts understand more about the protection that COVID-19 vaccines provide.

#### How much will the vaccine cost?

According to the CDC, the federal government purchased hundreds of millions of vaccine doses with taxpayer money, so the vaccine, itself, will be given to Americans at no cost. Vaccine providers will be able to charge a fee to administer the shot, but this fee should be covered by public or private insurance, or by a government relief fund for the uninsured.

#### What ingredients are in the Pfizer vaccine?

The Pfizer/BioNTech vaccine contains:

- messenger ribonucleic acid (mRNA) – the main, active ingredient that elicits an immune response and the production of antibodies
- Lipids (including ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 2 [(polyethylene glycol)-2000]-N,N-ditetradecylacetamide, 1,2-Distearoyl-sn-glycero-3- phosphocholine, and cholesterol) – an outside coating or shell of fat that protects the mRNA from destruction as it is being stored, administered and delivered to cells

- Potassium chloride; monobasic potassium phosphate; sodium chloride (salt); dibasic sodium phosphate dehydrate – salts that are used to maintain proper levels of acidity (pH)
- Sucrose – a sugar that stabilizes the suspension

### **What ingredients are in the Moderna vaccine?**

The Moderna COVID-19 vaccine contains:

- messenger ribonucleic acid (mRNA)- the main, active ingredient that elicits an immune response and the production of antibodies
- lipids (SM-102, polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG], cholesterol, and 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC])- an outside coating or shell of fat that protects the mRNA from destruction as it is being stored, administered and delivered to cells
- tromethamine, tromethamine hydrochloride, acetic acid, sodium acetate- used to maintain proper pH
- Sucrose – a sugar that stabilizes the suspension

### **How are the Moderna and Pfizer/BioNTech vaccines different?**

The Moderna and Pfizer vaccines use the same technology but contain slightly different mRNAs and different ingredients used to protect the mRNA, maintain the pH and stabilize the solution. They are essentially equally effective and have similar side effects.

## **Effectiveness and Safety**

### **Are the COVID-19 vaccines safe?**

We are confident that the vaccines currently approved for use in the U.S. are highly safe and effective. Both were developed in the U.S. and have undergone U.S. Food and Drug Administration (FDA) scrutiny, the most rigorous vaccine approval process on the planet.

Like other medications, the COVID-19 vaccines can have some side effects, but all symptoms experienced by trial participants were mild or moderate and were attributable to a normal, healthy immune response. The most commonly reported side effects of the vaccine were fatigue, muscle or joint pain, and headache—all among less than 10 percent of trial participants. None were severe nor required hospitalization.

The COVID-19 vaccines DO NOT use the live virus that causes COVID-19, so you cannot get COVID-19 from the vaccine.

### **Are the COVID-19 vaccines effective?**

Both the Pfizer and Moderna vaccines are over 94 percent effective, a calculation based on observed infection rates among unvaccinated (placebo) adult participants compared to vaccinated participants in each clinical trial. Efficacy was consistent across age (16+), gender, race and ethnicity demographics. The vaccines have not yet been widely tested in children and adolescents under 16.

### **Can children and pregnant women be vaccinated?**

COVID-19 vaccine trials for children are just beginning. Pfizer expanded its vaccine testing to children ages 12 and older in late October; however, Moderna has not yet set a date when it will begin testing its product in children. It remains unclear when a vaccine will be approved for children under 16 but the goal is to have one ready before the 2021 school year.

Pregnant women, on the other hand, were not included in any of the early clinical trials. Clinical trials continue to expand, and we will update this website as information becomes available.

## Vaccine Eligibility

### When will a vaccine be available to the general public?

Initially, quantities of the vaccines will be limited. For that reason, the U.S. Centers for Disease Control and Prevention (CDC) has established, and the [Michigan Department of Health and Human Services plan](#) calls for, a tiered system prioritizing who will get the vaccines and in what order.

At first, vaccine distribution will be limited and prioritized to frontline healthcare workers, first responders and residents and workers in long-term care facilities. Once these groups are vaccinated, people age 75 and older and essential workers will be prioritized, including educators and childcare providers who have direct contact with children, workers in 16 sectors of Critical Infrastructure Protection Program, and workers in homeless shelters, correctional facilities and congregate child care and protective services institutions. The next group to receive vaccines will be high risk populations such as those with [high-risk pre-existing medical conditions](#) and people who are 65 to 74 years old.

In 2021, the vaccine supply is expected to increase substantially. Current models suggest that anyone 16 years and older who is not within the initial priority groups should qualify for the vaccine by mid-2021.

For more detailed information, go to our [Vaccine Distribution](#) page or see the [State's plan](#).

Visit the [Centers of Disease Control and Prevention's website](#) or the [Michigan Department of Health and Human Services website](#) to get more of your questions answered or [contact us](#).

