Centers for Disease Control and Prevention

COVID-19

Key Things to Know About COVID-19 Vaccines

Updated Aug. 19, 2021

NOTICE: FDA authorized the use of Pfizer-BioNTech's COVID-19 Vaccine to be administered as boosters at least six months after completion of the primary Pfizer-BioNTech series in certain populations. The Advisory Committee on Immunization Practices is meeting on Thursday, September 23, from noon to 3pm ET to discuss a recommendation on booster shots.

What You Need to Know

- COVID-19 vaccines are effective at helping protect against severe disease and death from variants of the virus that causes COVID-19 currently circulating, including the Delta variant.
- If you are fully vaccinated you can resume many activities that you did before the pandemic, but you should wear a mask indoors in public if you are in an area of substantial or high transmission to maximize protection from the Delta variant and possibly spreading it to others.
- You may have side effects after vaccination. These are normal and should go away in a few days.
- Learn how to find a COVID-19 vaccine so you can get it as soon as you can.

What We Are Still Learning

- How well the vaccines protect people with weakened immune systems, including people who take medicines that suppress the immune system
- How long COVID-19 vaccines protect people
- How many people have to be vaccinated against COVID-19 before the population can be considered protected (population immunity)
- How effective the vaccines are against new variants of the virus that causes COVID-19

Availability of Vaccines

What we know

Vaccines are widely accessible in the United States. Everyone aged 12 years and older should get a COVID-19 vaccination as soon as possible.

Vaccines are widely accessible in the United States and are available for everyone at no cost. Learn more about how COVID-19 vaccines get to you.

Many doctors' offices, retail pharmacies, hospitals, and clinics offer COVID-19 vaccinations. Parents, check with your child's healthcare provider about whether they offer COVID-19 vaccination.

Effectiveness

What we know

COVID-19 vaccines are effective at protecting you from COVID-19, especially severe illness and death. COVID-19 vaccines reduce the risk of people spreading the virus that causes COVID-19. If you are fully vaccinated, you can resume activities that you did before the pandemic. Learn more about what you can do when you have been fully vaccinated.

Studies show that COVID-19 vaccines are effective at keeping you from getting COVID-19. Getting a COVID-19 vaccine will also help keep you from getting seriously ill even if you do get COVID-19. Learn more about the benefits of getting vaccinated.

COVID-19 vaccines teach our immune systems how to recognize and fight the virus that causes COVID-19. It typically takes 2 weeks after vaccination for the body to build protection (immunity) against the virus that causes COVID-19. That means it is possible a person could still get COVID-19 before or just after vaccination and then get sick because the vaccine did not have enough time to build protection. People are considered fully vaccinated 2 weeks after their second dose of the Pfizer-BioNTech or Moderna COVID-19 vaccines, or 2 weeks after the single-dose Johnson & Johnson's Janssen COVID-19 vaccine.

People with moderately to severely compromised immune systems should receive an additional dose of mRNA COVID-19 vaccine after the initial 2 doses.

What we are still learning

We are still learning how well COVID-19 vaccines protect people with weakened immune systems, including people who take medicines that suppress the immune system. We're also still learning how long COVID-19 vaccines protect people.

If you have a medical condition or are taking medicines that weaken your immune system, you should talk to your healthcare provider. You may need to keep taking all precautions to prevent COVID-19 disease.

Safety

What we know

COVID-19 vaccines are safe and effective. Vaccines cannot give you COVID-19. You may have side effects after vaccination. These are normal and should go away in a few days.

Millions of people in the United States have received COVID-19 vaccines, and these vaccines have undergone the most

intensive safety monitoring in U.S. history. This monitoring includes using both established and new safety monitoring systems to make sure that COVID-19 vaccines are safe. COVID-19 vaccines cannot give you COVID-19. Learn more to bust myths and learn the facts about COVID-19 vaccines.

CDC has developed a new tool, v-safe, to help us quickly find any safety issues with COVID-19 vaccines. V-safe is a smartphone-based, after-vaccination health checker for people who receive COVID-19 vaccines. Learn how the federal government is working to ensure the safety of COVID-19 vaccines.

While COVID-19 vaccines were developed rapidly, all steps have been taken to ensure their safety and effectiveness.

You may have side effects after vaccination, but these are normal

After COVID-19 vaccination, you may have some side effects. These are normal signs that your body is building protection. The side effects from COVID-19 vaccination, such as tiredness, headache, or chills, may affect your ability to do daily activities, but they should go away in a few days. Learn more about what to expect after getting vaccinated.

Population Immunity

What we know

Population immunity, also known as herd immunity or community immunity, means that enough people in a community are protected from getting a disease because they've already had the disease or because they've been vaccinated.

Population immunity makes it hard for a disease to spread from person to person. It even protects those who cannot be vaccinated, like newborns or people who are allergic to a vaccine. The percentage of people who need to have protection to achieve population immunity varies by disease.

What we are still learning

We are still learning how many people have to be vaccinated against COVID-19 before the population can be considered protected.

As we know more, CDC will continue to update our recommendations for both vaccinated and unvaccinated people.

Variants and Vaccines

- FDA-authorized COVID-19 vaccines help protect against Delta and other known variants.
- These vaccines are effective at keeping people from getting COVID-19, getting very sick, and dying.
- To maximize protection from the Delta variant and prevent possibly spreading it to others, you should wear a mask indoors in public if you are in an area of substantial or high transmission even if you are fully vaccinated.
- We don't know how effective the vaccines will be against new variants that may arise.

New Variants

What we know

COVID-19 vaccines are effective against severe disease and death from variants of the virus that causes COVID-19 currently circulating in the United States, including the Delta variant.

Infections happen in only a small proportion of people who are fully vaccinated, even with the Delta variant. When these infections occur among vaccinated people, they tend to be mild.

If you are fully vaccinated and become infected with the Delta variant, you might be able to spread the virus to others.

People with weakened immune systems, including people who take immunosuppressive medications, may not be protected even if fully vaccinated.

For Healthcare and Public Health

Clinical and Professional Resources: Toolkits and resources for healthcare workers and public health professionals.

Related Pages

- When You've Been Fully Vaccinated
- Myths and Facts about COVID-19 Vaccines
- Frequently Asked Questions about COVID-19 Vaccination
- Benefits of Getting a COVID-19 Vaccine

Last Updated Aug. 19, 2021