COVID-19, also called coronavirus, is making people sick around the world. In addition to wearing masks, keeping 6 feet apart and washing our hands, vaccines are important tools to help slow the spread of COVID-19. Vaccines help your body fight off the virus and keep you from getting sick. The more people who get vaccinated, the faster we can end the COVID-19 pandemic.

Here are some things to know about COVID-19 vaccines:

1. **COVID-19 vaccines teach your body how to fight off the virus that makes you sick.**

   COVID-19 vaccines will not give you the disease. Vaccines make your body think you have the disease without actually getting it. The immune system, the part of your body that fights sickness, responds to the vaccine by creating antibodies. Antibodies are disease-specific proteins that fight off the virus when they see it. None of the vaccines available affect or interact with a person’s DNA.

2. **Studies show they are safe and effective.**

   More than 117,000 people were in clinical trials for the three available vaccines – more than 43,000 in the Pfizer-BioNTech clinical trial, more than 30,000 in the Moderna clinical trial and more than 44,000 in the Johnson & Johnson clinical trial. Many different people, including older adults and people who are Black, Indigenous and people of color, were included in the clinical trials. All three vaccines are safe and similarly effective at preventing hospitalization and death. This is the standard commonly used to assess other vaccines like the flu shot.

   The vaccines went through clinical trials, were approved for emergency use by the U.S. Food and Drug Administration and have been recommended by medical and public health experts nationally and here in Vermont. Sometimes, when a vaccine is urgently needed, like COVID-19 vaccines, researchers combine steps to speed up the approval process. This doesn’t mean that they skip any important steps, but it does help the process move more quickly.

   The ingredients in the COVID-19 vaccines are similar to what is found in other vaccines. They contain protein, fats, salts and polysorbate. The mRNA vaccines (Pfizer-BioNTech and Moderna) also have sugars and polyethylene glycol. They do not have any fetal tissue, pork products, eggs, gelatin, latex, or preservatives in them.

3. **The vaccines were developed after decades of research.**

   While the specific coronavirus that causes COVID-19 is relatively new, scientists have been studying vaccines for other coronaviruses for decades. Research on coronavirus vaccines began in 2003 during the Severe Acute Respiratory Syndrome (SARS) epidemic and continued in 2012 during the Middle East Respiratory Syndrome (MERS) epidemic. When COVID-19 was identified, the global focus on getting rid of this new coronavirus, combined with large amounts of funding, helped speed up the research process to create a safe and effective vaccine.
4. The COVID-19 vaccine is one or two shots depending on the type of vaccine.

The Pfizer-BioNTech vaccine is two doses given about 21 days apart. The Moderna vaccine is two doses given about 28 days apart. The Johnson & Johnson vaccine is one dose. All three take about 14 days before your body can effectively fight the virus that causes COVID-19.

5. Side effects mean the vaccine is working.

Some participants in clinical trials for the vaccines showed a strong immune response which often leads to some side effects. For the two dose vaccines, the second dose may lead to a stronger immune response than the first dose, which can mean more side effects. This is normal and is how your body learns to fight COVID-19. The four most common side effects were pain at the injection site, fatigue, headache and muscle pain. They should go away in a few days. Some people have had an allergic reaction to the vaccine, but this is rare.

6. Most people with medical conditions should still get a vaccine.

In clinical studies, COVID-19 vaccines were just as effective for people with and without medical conditions. In fact, people with some conditions are more likely to get very sick if they get COVID-19, so getting vaccinated could be even more important. If you are unsure if you should get the vaccine, talk to your health care provider about any conditions you have. If you don’t have a health care provider, call 2-1-1 to be connected to a clinic near you.

7. You need to keep taking steps to prevent COVID-19 after getting vaccinated.

It takes time for the vaccine to teach your body to fight COVID-19, so you may not be protected by the vaccine until a few weeks after you get all of the doses for the type of vaccine you receive. We don’t yet know if you can unknowingly spread the virus after you get vaccinated. Until enough people are vaccinated and we know more, we need to follow safety guidelines like wearing masks, keeping 6 feet apart and washing our hands, especially around people who haven’t been vaccinated or people who are at a greater risk of getting very sick from COVID-19.

8. You can find out if you are eligible for the vaccine now, and where to get it when you are eligible.

The Health Department website has information about who is eligible now for a COVID-19 vaccine, and who will be eligible next. When you are eligible, you will be able to make a vaccine appointment. We will share new information on our website, on social media, and in the news.

9. COVID-19 vaccines are free.

COVID-19 vaccines are provided to Vermonters at no cost, even if you don’t have health insurance. The provider that gives you your vaccine may charge an administrative fee to your insurance, but you are guaranteed a COVID-19 vaccine without paying a fee.

Learn more at healthvermont.gov/COVID19vaccine