





### **COVID-19 Vaccine Side Effects and Management**

#### What are the differences between the three current COVID-19 vaccines?

- Currently, there are 3 COVID-19 vaccines approved for Emergency Use Authorization (EUA) by the FDA, the Moderna, Pfizer-BioNTech, and the Janssen (Johnson & Johnson) COVID-19 vaccines. The Moderna and Pfizer-BioNTech COVID-19 vaccines use mRNA technology. Essentially the Moderna and Pfizer-BioNTech COVID-19 vaccines work by showing a picture of the virus to your body's immune system and your immune system takes a screen shot of the virus. The body is then able to recognize the virus if it comes into contact with it allowing it to fight the virus. The Janssen (Johnson & Johnson) vaccine uses Viral Vector technology in which it gives the body a recipe to create a harmless piece of the COVID virus and the immune system attacks it because it does not belong in the body.
- Both the Moderna and Pfizer-BioNTech COVID-19 vaccines require 2 doses, and the time interval between the first and second dose for Moderna is 28 days while the Pfizer-BioNTech COVID-19 vaccine is 21 days. The Janssen (Johnson & Johnson) COVID-19 vaccine requires only one dose, so there is not a time interval between doses. It is important to know that you are not fully covered until 14 days after your SECOND dose for Moderna and Pfizer-BioNTech COVID-19 vaccines and 14 days after receiving the Janssen (Johnson & Johnson) COVID-19 vaccine.
- Overall, both the mRNA and Viral Vector technologies help the immune system remember what the virus looks like and know how to attack it if it should show up in the body. Of note, none of the current EUA COVID-19 vaccines use a live virus.

### Why should I stay hydrated before getting my vaccine?

- It is important to drink plenty of water 1-2 days before getting your vaccine. Staying hydrated helps oxygenate your cells allowing them to work at full capacity which in return boosts your body's immune system according to <a href="Timesnownews.com">Timesnownews.com</a>. Hydration also plays a particularly important role in regulating your body temperature, this will help reduce the severity of a fever if you should develop a fever after a COVID-19 vaccine according to the CDC. Additionally, hydration will help reduce the severity of the side effects.

# What are the common side effects after getting any of the current COVID-19 vaccines?

- According to the CDC common side effects after receiving the Moderna, Pfizer-BioNTech, and the Janssen (Johnson & Johnson) COVID-19 vaccines include injection site reactions such as redness, swelling, and pain as well as whole body reactions such as headache, low grade fever, tiredness, and body aches. These effects can appear as soon as 6-8 hours after the injection and as late as 7-8 days after the injection. These side effects typically last about 24-48 hours.

#### What should I do if I have side effects after a COVID-19 vaccine?

- According to the CDC the side effects of the Moderna, Pfizer-BioNTech and the Janssen (Johnson & Johnson) COVID-19 vaccines typically are mild to moderate; however, in some cases the side effects have been reported to be more severe. If the side effects are affecting your daily routine, it is okay to take whatever over the counter medication you would normally take for fever or pain relief. It is recommended that you do not take these medications in anticipation of the side effects as you may not experience any side effects and may end up taking medications for no reason. If you have any questions about what you should take, give our pharmacy staff a call at (804)-288-8361 and our Pharmacists will be happy to assist you!

#### What is the "COVID Arm"?

- The first thing to know about the "COVID Arm" is that it is NOT COVID, this is a known delayed allergic reaction that patients are experiencing after receiving the Moderna COVID-19 vaccine. According to <u>USA Today</u>, Dr. Ester Freeman, director of global health dermatology at Massachusetts General Hospital says "having a big red

splotch on your arm for a couple of days may not be fun but the reality is there's no need to panic and no reason not to get your second shot." The delayed reaction is considered harmless and a part of the expected immune response needed for the body to be prepared to fight the COVID-19 virus. Additionally, it should not deter any patient from receiving the Moderna COVID-19 vaccine. The reaction is an itchy sometimes painful rash around the injection site on the arm. The reaction typically occurs up to 5-9



days after getting the first dose of the Moderna vaccine and is not seen after the second dose. A topical cream such as over the counter hydrocortisone can help with the itching. Additionally, you may take any over the counter pain reliever that you normally take if the pain in the arm is too unbearable. The reaction typically resolves itself and goes away 5-7 days later. If you have any questions about what you should take, give our pharmacy staff a call at (804)-288-8361 and our Bremo Pharmacists will be happy to assist you!

## What if I cannot get the second Moderna or Pfizer-BioNTech vaccines within the recommended time intervals?

- If you happen to not be able to get the second dose until after the recommended intervals of either the Moderna or Pfizer-BioNTech vaccines, THAT IS OKAY, get it as soon as you can and you will still be protected after 14 days following the second dose. However, YOU NEED to have both doses for you to be fully protected. The second vaccine is considered the booster dose in which it gives your body's immune system a little extra boost. As our pharmacists like to say, "It's your body's last training before the battle."

We are excited to announce that the Richmond Henrico Health Department is moving into Phase 2. This means any person who is age 16 years or older is now eligible to get vaccinated with the COVID-19 vaccine. Here at Bremo Pharmacy, we are able to vaccinate people who are age 18 or older with the Moderna vaccine. Now that we are in phase 2, those who need to set up an appointment to be vaccinated can sign up directly on our website: <a href="https://bremorx.com/covid-19-vaccine-information/">https://bremorx.com/covid-19-vaccine-information/</a>

#### References

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