

PKD Foundation's answers to the PKD community's questions about the COVID-19 Vaccines

Are the vaccines recommended for PKD patients in general?

Yes. The FDA has authorized the Pfizer vaccine for the prevention of COVID-19 for individuals 5 years of age and older, and the Moderna and Janssen vaccines for individuals 18 years of age or older, including persons with underlying medical conditions. Furthermore, the FDA noted that clinical trial results for all three studies showed that the vaccines are expected to be safe in those individuals at increased risk for severe COVID-19, such as those with chronic kidney disease. Check with your doctor to see if the COVID-19 vaccine is safe for you.

The exception to this is anyone who has a "contraindication," or medical reason to not receive the vaccine. So far, the only contraindication identified is having had a prior severe allergic reaction to any component or ingredient of the vaccines. These include:

Pfizer ingredients

- mRNA
- lipids
 - ((4-hydroxybutyl)azanediyl) bis(hexane-6,1-diyl)bis(2-hexyldecanoate)
 - 2 [(polyethylene glycol)-2000]-N,Nditetradecylacetamide
 - 1,2-Distearoyl-sn-glycero-3phosphocholine
 - cholesterol
- potassium chloride
- monobasic potassium phosphate
- sodium chloride
- dibasic sodium phosphate dihydrate
- sucrose

Moderna ingredients

- mRNA
- lipids
 - SM-102
 - 1,2-dimyristoyl-rac-glycero-3methoxypolyethylene glycol-2000 [PEG2000-DMG]
 - cholesterol
 - 1--,2-distearoyl-sn-glycero-3phosphocholine [DSPC]
- tromethamine
- tromethamine hydrochloride
- acetic acid
- sodium acetate
- sucrose

Janssen ingredients

- virus particles
- citric acid monohydrate
- trisodium citrate dihydrate
- ethanol
- 2-hydroxypropyl-ß-cyclodextrin
- polysorbate-80
- sodium chloride

Are the vaccines safe for transplant patients who are on immunosuppressive drugs?

Some patients whose immune systems are weakened or compromised may have a decreased response to the vaccine based on a person's decreased adaptive immune cells. On August 13, 2021 the FDA authorized a third dose of COVID-19 vaccine for people with certain immunocompromising conditions, including solid organ transplant recipients. If you have received a kidney transplant, talk to your transplant team about whether or not you should receive an additional dose of vaccine. Learn more about CDC guidance here. Importantly, these vaccines do not contain SARS-CoV-2 (the live virus) and will not give you COVID-19.

How do the vaccines work and what is the difference between them?

The purpose of all COVID-19 vaccines is to introduce a component of the SARS-CoV-2 virus into your body so your immune system can generate an immune response and be prepared to prevent COVID-19. For all three vaccines, the component of the virus is a portion of what's called the "spike" protein. For mRNA vaccines, like the Pfizer or Moderna vaccines, the mRNA provides the instructions to your body to produce the spike protein. With viral vector vaccines, like the Janssen vaccine, another inactivated virus is used to deliver the instructions to produce the spike protein. While Pfizer and Moderna require two doses of the vaccine (21 and 28 days apart respectively), Janssen needs only one dose.

Were any transplant patients (immunosuppressed) participants in the vaccine studies?

Individuals receiving immunosuppressive medications were excluded from all three vaccine trials, but Johns Hopkins is conducting a study to monitor antibodies in post-transplant patients who receive the vaccine (transplantvaccine.org) and have found it to be safe. This is especially promising for PKD patients since over half of the patients studies were kidney transplant recipients. Read more here.

How do I get the vaccine?

There are several ways to look for vaccination providers near you. Search vaccines.gov, text your ZIP code to 438829, call 1-800-232-0233, check your local pharmacy's website, or contact your state health department. Importantly, vaccine doses purchased with US taxpayer dollars are provided to people at no cost.

Can children get the vaccines?

Yes! The Pfizer-BioNTech vaccine has been authorized by the FDA for use in individuals as young as 5 years old. Read more here. Additionally, the federal government is providing the vaccine free of charge to all people living in the United States, regardless of immigration or health insurance status.

What are the side effects of the vaccines?

The most frequent side effects of all three vaccines are reactions at the site of injection, including pain (the most common), rednesss and swelling. Individuals receiving the vaccine also experienced general side effects, including fever, chills, tiredness, and headaches. With the Pfizer and Moderna vaccines, side effects are more common after the second dose. Find more information from the CDC here .

Should people nearing kidney failure get the vaccine?

Chronic kidney disease, regardless of stage, is considered a high-risk medical condition. People with this diagnosis will have priority access to getting the vaccine before healthy individuals of the same age. Please talk to your doctor about whether the COVID-19 vaccine is right for you.

When is it safe to be in public after the vaccine?

For the Pfizer and Moderna vaccines, maximum protection (~95% effective) from COVID-19 was observed 14 days after individuals received the second dose. For the Janssen vaccine, maximum protection (~66% effective in preventing moderate disease; ~85% effective in preventing severe/critical disease) was observed 28 days after the single dose. Per the CDC, if you are fully vaccinated, you can resume activities that you did prior to the pandemic, and can discontinue wearing a mask or social distancing except where required (such as on public transportation). More information here.

More information from the CDC here.

Read our blog featuring our conversation with a PKD transplant nephrologist!