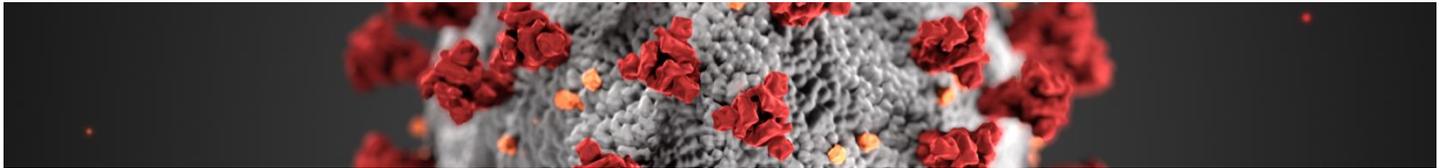


Addressing concerns about the COVID-19 vaccine

Deciding whether to get the COVID-19 vaccine is not always a straightforward matter. Individuals who have complex health care needs, or those who live with people who have complex health care needs, may have questions about getting the COVID-19 vaccine. Here are some things to consider and discuss with your doctor.



Allergies

The CDC recommends that individuals who have an allergy or past negative reaction to any vaccine ingredient, however minor, against getting the COVID vaccine. Patients who are allergic to an ingredient are at risk of anaphylaxis, which could be life-threatening. Unlike many vaccines, none of the current COVID vaccines contain eggs. The ingredients of approved vaccines are as follows:

Pfizer-BioNTech: mRNA, lipids ((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), potassium chloride, monobasic potassium phosphate, sodium chloride, dibasic sodium phosphate dihydrate and sucrose.

Moderna: mRNA, lipids (SM-102, polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG], cholesterol, and 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]), tromethamine, tromethamine hydrochloride, acetic acid, sodium acetate and sucrose.

Janssen/Johnson & Johnson: recombinant, replication-incompetent adenovirus type 26 expressing the SARS-CoV-2 spike protein, citric acid monohydrate, trisodium citrate dihydrate, ethanol, 2-hydroxypropyl- β -cyclodextrin (HBCD), polysorbate-80, sodium chloride.

Weakened Immune Systems

People who have weakened immune systems are likely to be more susceptible to COVID-19 and at greater risk for having severe cases of COVID-19. Individuals with weakened immune systems are eligible for the COVID-19 vaccine, but there is limited information on its efficacy and safety on the immuno-compromised. Consultation with a physician is recommended before taking the COVID vaccine.

Autoimmune Disorders

People with an autoimmune disorder are eligible for the COVID vaccine. However, there is little data on the health risks of any COVID vaccine on individuals with autoimmune disorders. Several medications used to treat autoimmune disorders have been known to have mild to severe interactions with the mRNA vaccines, so consult a physician before getting the vaccine. A list of the medications that are known to have interactions with the COVID vaccine are listed below.

Interactions with Medications and other Vaccines

Several medications have been known to have negative interactions with the COVID-19 mRNA (Moderna and Pfizer) vaccines. They are Efalizumab (commercially known as Raptiva,) Fingolimod (commercially known as Gilenya,) Siponimod (commercially known as Mayzent,) and Satralizumab (commercially known as Enspryng.) These medications are used for autoimmune disorders, multiple sclerosis, and neuromyelitis optica spectrum disorder. Interactions with Janseen/Johnson & Johnson are not yet known. It is likely that other medications, including steroids and anti-inflammatories, may lessen the effectiveness of the COVID vaccine.

The Hepatitis B Vaccine (commercially known as Fendrix) is known to have interactions with the mRNA vaccines. It is not recommended to take any other vaccines, such as a flu shot, within two weeks of the COVID vaccines. The three available COVID vaccines are not interchangeable and should not be mixed.

Side Effects

For individuals not allergic to any of the ingredients of the vaccine they were administered, serious side effects were rare. For the Pfizer, Moderna, and Johnson & Johnson vaccines, the most common side-effects were pain at the injections site, headaches, and fatigue. For two-dose vaccinations, these side effects were more acute after the second dose.

There is a risk of a rare, but potentially serious side effect in the Johnson & Johnson vaccine, which causes a blood clot in the brain, called thrombosis. The CDC has reported that all 15 cases (of the over 8 million doses given) occurred in women between the ages of 18 and 59, occurring six to fifteen days after vaccination.

Age and Weight Complications

Recommendations for the COVID vaccine are done by age, not weight. The Jensen/Johnson & Johnson vaccine and Moderna vaccine are available to individuals 18 and older, while the Pfizer vaccine is available to individuals 16 and older. Trials on younger people are underway for both the Pfizer and Moderna. These initial trials are testing children as young as five-years-old, with the intent of eventually making a vaccine suitable for infants as young as six-months-old. These vaccinations use decreased doses of the available vaccine, and there is hope that school age children will be able to get the vaccination by the start of the next school year.

The Pfizer vaccine has been studied for its relationship to BMI (body mass index) and effectiveness. There did not appear to be any notable difference between individuals who are underweight, overweight, or who had normal BMI in the vaccines' efficacy. Concerns have been raised about the effectiveness of the COVID vaccine in morbidly obese individuals, but no firm data has been found.

Questions to Ask Your Doctor

When consulting a physician about the COVID vaccine, ask specific questions and give details on your concerns. Here are some questions you might ask:

- I am concerned about possible interactions with other medications – is it possible to get the opinion of an allergist-immunologist for my particular situation?
- I am not allergic to any of the ingredients of the vaccine, but I am still worried about anaphylaxis. Will I be able to be monitored right after receiving the vaccine to ensure my safety?
- My immune system is compromised, is there a way to determine whether or not it would be safe for me to get the vaccine?
- My schedule is hectic, so what happens if I cannot get my second dose at the recommended time?
- Is there anything I can do or medication I can take that will lessen the side effects from the shots?
- How long after my last dose of the vaccine will it take for me to be immune to COVID?

