

FAQ on Covid Vaccine:

When should I get vaccinated after I have tested positive?

Various schools of thoughts: The US' Centres for Disease Control and Prevention (CDC) recommends that a person should get vaccinated immediately after recovery, while the World Health Organization (WHO) states that a person should wait six months as natural antibodies seem to likely persist in the human body until then. In India, most doctors recommend arbitrary gaps between recovery and vaccination, typically between one and three months. WHO's guidance of waiting up to six months is based on evidence that infection provides reasonable protection

What happens if I take the vaccine when I'm positive?

When we get infected, the first antibody a person's body makes is the IgM antibody. Production of these antibodies start a week into the infection, peaks at three weeks, and declines very quickly afterward. About three weeks after infection, the IgG antibodies start to get produced. These are the more crucial antibodies to look out for long term protection with most infections and vaccines, and they climb in quantity from four to eight weeks after infection. Subsequently, they decline slowly. The blocking of viral infection requires neutralizing antibodies, and the bulk of neutralizing antibodies are IgG. They are made in response to the first infection or vaccination, but for some vaccines such as the mRNA vaccines, there is little neutralization after the first dose but the second dose provides a large rise in this antibody response. We do not currently have any evidence to say whether it is better or worse to get vaccinated when infected. However, vaccination after recovery acts like a booster shot, with previously infected people making a very strong response with the first dose of vaccine.

What if I catch Covid in between two vaccine doses?

For a majority of people, the disease is likely to be mild or moderate, depending on how many days after vaccination exposure occurred. If exposure and disease occurs within one to three weeks of receiving the first dose, the vaccine is unlikely to have a major effect and is not expected to modify the course of the infection. However, if a person tests positive after three weeks from their first dose, they are highly likely to only get a mild disease.

What happens if I delay the second dose? Will I need to repeat the first dose?

There are differences in timings for second doses to achieve a high level of antibodies in the system. For the AstraZeneca-Oxford vaccine Covishield, it is 12 weeks, although the Indian

recommendation is for 6-8 weeks, while for the indigenous Covaxin, a gap of four weeks is recommended, since no other interval has been tested. But missing the second dose is no cause for worry. It simply postpones the boosting of the antibodies and does not result in any loss of protection in the short term. Missing the time period allocated does not require a repetition of the first dose. However, in case gap of more than a year, both doses will be required.

Can I take the vaccine if I have allergies? Are there any conditions that require not taking the vaccine?

The only people who should not take the vaccine are those who have already taken the vaccine and had a severe allergic reaction to it. The vaccine is safe for people with all kinds of food allergies, as well as drug allergies, including allergies to antibiotics such as penicillin. Immunocompromised patients and those undergoing chemotherapy should take the vaccines without safety concerns. However, as they are immunosuppressed, they might not make as good an immune response as others.

Do antibody tests work after vaccination?

Both IgM and IgG antibodies which are produced by the body after vaccination or infection can be either binding or neutralizing antibodies. Binding antibodies simply attach on the surface of virus and flag them so that immune cells of the body such as macrophages can identify and destroy viruses. They simply act as markers and may not interfere with the infectivity of the virus. Neutralizing antibodies can affect the ability of the virus to infect host cells by preventing the virus from undergoing structural changes required to gain entry. Hence subset of IgM and IgG which acts as neutralizing antibody can only provide actual protection from virus. Antibody test provide the level of IgM and IgG antibodies but do not provide the level of subsets which act as neutralizing antibody and hence this test is not much informative and useful.

Is it safe for me to get a COVID-19 vaccine if I would like to have a baby one day?

Yes. If you are trying to become pregnant now or want to get pregnant in the future, you may get a COVID-19 vaccine when one is available to you. There is currently no evidence that COVID-19 vaccination causes any problems with pregnancy, including the development of the placenta. In addition, there is no evidence that fertility problems are a side effect of any vaccine, including COVID-19 vaccines.

Will a COVID-19 vaccine alter my DNA?

No. COVID-19 vaccines do not change or interact with your DNA in any way. There are currently three types of COVID-19 vaccines: messenger RNA (mRNA) vaccines, Protein subset vaccine and a viral vector vaccine. In mRNA and viral vector vaccine genetic material of covid 19 virus is pushed inside our immune cells to start building protection against the

virus that causes COVID-19. However, the material never enters the nucleus of the cell, which is where our DNA is kept. This means the genetic material in the vaccines cannot affect or interact with our DNA in any way. In protein subset vaccine, live attenuated virus is pushed inside the cells of immune system. It also does not enter the nucleus of the cells and hence not able to impact on the DNA structure.

After getting a COVID-19 vaccine, will I test positive for COVID-19 on a viral test?

Three types of testes are carried out in the process to diagnose Covid 19: RT PCR, Rapid Antigen Test and Antibody test. RT PCR and Rapid Antigen Test will never be positive after vaccination. If body develops an immune response to vaccination, which is the goal, you antibody tests will be positive but that will not be correlated as Covid-19 positive.

Can a COVID-19 vaccine make me sick with COVID-19?

No. COVID-19 vaccines teach our immune systems how to recognize and fight the virus that causes COVID-19. Sometimes this process can cause symptoms, such as fever. These symptoms are normal and are signs that the body is building protection against the virus that causes COVID-19. It typically takes a few weeks for the body to build immunity after vaccination. That means it's possible a person could be infected with the virus that causes COVID-19 just before or just after vaccination and still get sick. This is because the vaccine has not had enough time to provide protection.

The Bottom Line

Getting vaccinated is one of many steps you can take to protect yourself and others from COVID-19. Protection from COVID-19 is critically important because for some people, COVID-19 can cause severe illness or death. Stopping a pandemic requires using all the tools available. Vaccines work with your immune system so your body will be ready to fight the virus if you are exposed. After you are fully vaccinated against Covid-19, you may be able to start doing some things that you had stopped doing because of the pandemic. After you've been fully vaccinated against COVID-19, you should keep taking precautions in public places or when you are with unvaccinated people from more than one household.