



Vaccination for COVID19

What is the role of vaccination? How do vaccines help?

Usually vaccines contain weakened or inactivated parts of a particular virus (antigen) to generate an immune response within the body as it would as a reaction to the actual pathogen.

‘Vaccine efficacy’ is defined to measure whether the vaccine is able to prevent the disease significantly or not, and if so, to what extent. Phase III trial investigates the efficacy of the vaccine usually in comparison to a placebo which may be similar-looking but has no medical effect.

Vaccine has individual benefits in terms of prevention of severe illness, hospitalization, and death. It also has public health benefits in terms of blocking transmission. Once enough people in the community are vaccinated, the risk of transmission after vaccination becomes less of an issue. These vaccines have the potential to provide protective immunity without the risks associated with infection.

Which vaccines are available?

Currently in India two vaccines that have been granted use authorization are Covishield® (AstraZeneca's vaccine manufactured by Serum Institute of India) and Covaxin® (manufactured by Bharat Biotech Limited). Additionally, India will receive Russia's Sputnik V COVID-19 vaccine in May through its local distributor Dr. Reddy's Laboratories.

Who can take these?

Anyone above the age of 18 years can take these. The vaccines are safe for even for those with pre-existing conditions of any kind, including hypertension, diabetes, asthma, pulmonary, liver and kidney disease and chronic infections that are stable and controlled. Person should check with service provider if he/she has a compromised immune system (Cancers or on immunosuppressant) has a history of severe allergies and if the person is pregnant. There is no evidence to suggest that vaccine has any impact on menstrual cycle or that taking it during menstrual cycle makes it less effective

What is the dose schedule?

Two doses of vaccine are to be taken. The gap between two doses of Covishield is 6-8 weeks and between two doses of Covaxin and Sputnik is 4 weeks. It is possible that a booster may be needed after a year but we do not know that as of now.

What are common side effects?

Mild fever, pain at the injection site, some bodyache, headache and tiredness have been reported.

What should be done in those cases?

Paracetamol 500 mg tablet should be taken every 8 hours for 24 hours. This is a safe over the counter medication.

Does one get Covid because of any of the vaccine?

No. None of the vaccines contains live virus. This means that vaccine cannot make you sick with COVID19.

However, it typically takes a few weeks for the body to build immunity (protection against the virus that causes COVID19) after vaccination. That means that it is possible for a person to be infected in the period just before or after vaccination and still get sick. All preventive precautions such as social distancing, mask wearing and hand washing therefore need to be continued before and after vaccination. Ensure that you wear a well fitting mask and maintain social distancing at the vaccination centre also.

Would RTPCR be positive because of vaccination?

No. The nasal swab looks for the actual virus and detects genetic material from the virus itself. So the vaccine cannot make that test show positive. The test could be positive if the person has got the virus in the nose from a contact few days before the vaccine or before the vaccine takes full effect.

Can one get infected after taking vaccination?

Studies have shown that breakthrough infections are very rare. And even when they do occur, symptoms are mild or non-existent. Vaccinated persons have lower viral load than unvaccinated persons and therefore less likely to transmit the virus.

If a person has had COVID19 and recovered, does he/she still need vaccine?

Yes, because experts do not yet know how long the person would be protected. Even if the person has recovered, it is possible, although rare that he/she could be infected again. The Ministry of Health and Family Welfare advises vaccine dose 6-8 weeks after the appearance of symptoms.

Can it be taken during pregnancy?

Yes. Available data suggest that symptomatic pregnant patients with COVID-19 are at increased risk of more severe illness compared with non-pregnant peers. So if the person can get vaccine in consultation with service provider, she should.

What is the cost of these vaccines?

Vaccines are free of cost in government centres. Private facilities would charge for vaccination. Cost will depend on decision taken by the government and the private facility.

References

https://www.mohfw.gov.in/covid_vaccination/vaccination/faqs.html[https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines?adgroupsurvey={adgroupsurvey}&gclid=CjwKCAjwm7mEBhBsEiwA_of-THBDaN-Vu4cocZCo3mXsSsUu6drfVU9DQ_yym_TZq8XUKL9IJKf_pRoCKMEQAvD_BwEhttps://apnews.com/article/how-long-covid-19-vaccine-protection-last-49340b077e271a750ad804128dbb5f53](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines?adgroupsurvey={adgroupsurvey}&gclid=CjwKCAjwm7mEBhBsEiwA_of-THBDaN-Vu4cocZCo3mXsSsUu6drfVU9DQ_yym_TZq8XUKL9IJKf_pRoCKMEQAvD_BwEhttps://apnews.com/article/how-long-covid-19-vaccine-protection-last-49340b077e271a750ad804128dbb5f53)