

# TOP QUESTIONS ABOUT COVID-19 VACCINES

Answers to the most commonly asked questions to help you make an informed decision on whether you should get vaccinated



## ARE THE VACCINES SAFE AND HOW WERE THEY DEVELOPED SO FAST?

- Expert minds and resources from all around the globe worked together.
- As a top priority globally, lots of funding and resources were secured for scientists around the world, which meant more could get done efficiently.
- Vaccine developers across the world leveraged existing technologies and research, such as that done on SARS in 2003.
- Testing and production phases were done in parallel to fast-track vaccine development to enhance vaccine access as quickly as possible.
- High rates of infection and thousands of eager participants sped up clinical trials.
- Despite the speed, all the COVID-19 vaccines currently authorised for use have passed every test and all the clinical phases required before distribution.
- The vaccines were granted emergency-use authorisation because of the global pandemic.
- The vaccines available in South Africa were reviewed and approved by the South African Health Products Regulatory Authority (SAHPRA).
- All currently available COVID-19 vaccines have been shown to be safe and effective at protecting against severe COVID-19 illness and death.
- None of the COVID-19 vaccines can give you the COVID-19 disease. Rather, vaccinations save lives and livelihoods, and relieve the burden on our healthcare systems and economies.



## ARE THE VACCINES EFFECTIVE, EVEN AGAINST THE DELTA VARIANT?

- Both the Pfizer and J&J vaccines have been shown to be very effective against the Delta variant of COVID-19. They have a:
  - 67% – 88% efficacy rate against symptomatic infection.
  - 85% – 96% efficacy rate against severe illness, hospitalisation and death.
- You can expect breakthrough cases even if you're vaccinated, – but these cases are rare and mostly mild.
- Vaccines have been shown to help avoid long COVID-19, and in some cases ease symptoms.



## WHAT SIDE EFFECTS CAN I EXPECT AFTER GETTING VACCINATED?

- Some people don't experience any side effects.
- Common side effects that you may experience include: pain around the injection site, fever, chills, headache, body ache, fever, diarrhoea and fatigue.
- Such symptoms are proof that your body is mounting an immune response, which is exactly what it's meant to do. The vaccines still work even in those people who may not experience any side effects.
- Side effects generally resolve and completely disappear within two to five days of being vaccinated.
- Severe side effects are highly unlikely, and may affect two to 10 people in a million.
- A healthcare provider familiar with your medical history will know what to watch out for and can treat conditions such as allergic reactions or even clotting. So even if you get one of these rare side effects, they are treatable.
- It's important to weigh potential vaccine risks against the far greater risks of contracting COVID-19.



## COULD THE VACCINE AFFECT FERTILITY, OR PREGNANT OR BREASTFEEDING WOMEN?

- There is currently no clinical data or credible scientific theory supporting the claim that COVID-19 vaccines cause infertility in men or in women.
- Pregnant and recently pregnant people are more likely to get severely ill with the COVID-19 disease compared with non-pregnant people. This is why experts recommend that pregnant and breastfeeding women be vaccinated.
- While pregnant women were not included in initial vaccine trials, thousands of pregnant women around the globe have since received COVID-19 vaccines.
- Growing evidence suggests that vaccination for pregnant and breastfeeding women is safe and effective.
- The data shows that the benefits of receiving a COVID-19 vaccine outweigh any known or potential risks of vaccination during pregnancy.



## CAN THE VACCINE CHANGE MY DNA?

- Some vaccines, such as the Pfizer-BioNTech vaccine, use messenger RNA (mRNA) technology to direct the cells in your body to produce spike proteins, like those found on the COVID-19 virus, to train your body to defend itself.
- Once the mRNA has triggered the production of spike proteins, it disintegrates. It does not integrate with your own DNA, because it only enters the outer cytoplasm, and does not have the 'door code' (nuclear access signal) to enter the nucleus of your cells.
- It is therefore impossible for mRNA in a COVID-19 vaccine to change your DNA, because it never enters the nucleus.
- Like all other proteins, the spike proteins produced by the vaccine to prompt your body to mount an immune response are broken down into amino acids and disposed of – they don't stay floating around your body.
- This is the first time the biotechnology has been approved by the FDA – but not because previous mRNA vaccines (for cancer, allergies and SARS) have been unsafe. Rather, they've not been effective as the COVID-19 mRNA vaccines, because mRNA breaks down very quickly.
- For COVID-19, scientists found that fat bubbles were very successful at transporting mRNA, which is what has enabled the success in developing effective COVID-19 vaccines.



## DO I STILL NEED TO BE VACCINATED IF I HAVE ALREADY HAD COVID-19?

- Though natural immunity can be quite robust, people still need to be fully vaccinated because:
  - Even if you've recovered from COVID-19, vaccines further strengthen your immune response, offering better quality protection.
  - Vaccines protect more predictably against different COVID-19 variants than natural immunity. If you are reinfected or get another variant, you may experience less severe and shorter-lasting symptoms if you're vaccinated.
  - Natural immunity has been shown to wane over time, reported to last around three to six months in some studies.
- Experts like virologists, immunologists and vaccinologists recommend vaccination, even if you've had a previous COVID-19 infection.
- You should wait 30 days after recovering from the virus to get vaccinated.

All responses based on currently available clinical data. The content covered is an overview of key concepts and is not exhaustive in nature. We encourage further reading from other credible sources where necessary. Visit Discovery's COVID-19 hub on [www.discovery.co.za](http://www.discovery.co.za) for more information and evidence-based additional sources.