There is a lot of scientific evidence that the vaccination gives us excellent protection against the coronavirus. Being vaccinated can save many of us from becoming very sick with the disease.

**General information**

**What is a vaccine?**
A vaccine is used to train your immune system to be able to deal with an infection and fight it off in the future.

**Is there a vaccine for COVID-19?**
Yes. In South Africa, the Johnson and Johnson vaccine was provided to half a million health workers through the Sisonke Early Access programme. A further 31 million doses of this vaccine (covering 31 million people) was ordered with the first batch delivered in the second quarter of 2021. The vaccine was made available under the tradename Janssen COVID-19 Vaccine™, reflecting the partnership between Johnson and Johnson and the Belgium company Janssen. 20 million doses (covering 10 million people) of the Pfizer/BioNTech vaccine (under the tradename Comirnaty™) was made available from May onwards. Both these vaccines protect against COVID-19 caused by both the Beta (B.1.351) and Delta (B.1.617.2) variants currently circulating in South Africa. Both vaccines have been tested for safety and safety is continuously being monitored.

**About the vaccine**

**What is contained in the vaccine?**
All COVID-19 vaccines contain instructions for the spike protein on the coronavirus. The Johnson and Johnson vaccine contains an adenovirus which has been modified so that it cannot cause disease or multiply in humans. The Pfizer/BioNTech vaccine contains a messenger RNA (mRNA) fragment. The vaccines naturally disintegrate within days after they have instructed your immune system to respond to the spike protein on the coronavirus. In addition, the vaccines contain the following non-active ingredients:

**Johnson and Johnson vaccine:**
- Sodium chloride
- Citric acid monohydrate buffer
- Polysorbate 80
- 2 hydroxypropyl-β-cyclodextrin (HBCD)
- Ethanol (absolute)
- Sodium hydroxide
- Water for injection

**Pfizer/BioNTech vaccine:**
- ALC-0315 = (4-hydroxybutyl) azanediyl) bis(hexane-6,1-diyl) bis(2-hexyldecanoate)
- ALC-0159 = 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
- 1,2-Distearoyl-sn-glycero-3-phosphocholine
- cholesterol
- potassium chloride
- potassium dihydrogen phosphate
- sodium chloride
- disodium hydrogen phosphate dihydrate
- sucrose
- water for injections

Neither vaccine contains animal products or eggs. They are suitable for vegans and are halal. The rubber stoppers of the vaccine vials do not contain latex.
How will the vaccine be given?
You will get an injection in your upper arm. The Johnson and Johnson vaccine is a single dose, and the Pfizer/BioNTech vaccine is given as two doses at least 42 days apart. Protection starts around two weeks after the first injection but is best one month after the single Johnson and Johnson vaccine and two weeks after the second Pfizer/BioNTech vaccine. It is important to know which of the vaccines you have received so that you know to return for a second dose if you have received the Pfizer/BioNTech vaccine.

Are COVID-19 vaccines safe?
All COVID-19 vaccines being used have been tested many times to ensure safety and to check for any common side effects. Safety monitoring is being carefully rolled out alongside vaccines globally, and all serious side-effects are reviewed by independent scientists from multiple medicine safety agencies. In the United States, an extremely rare side effect of the Johnson and Johnson vaccine was reported in 8 people of 7 million who received the single dose. The side effect involved clots in unusual veins in the body (brain, abdomen) together with low levels of platelets, a component of the bloodstream that normally helps your blood clot and prevents bleeding. The National Department of Health and the South African Health Products Regulatory Authority (SAHPRA) are monitoring the safety of the vaccines as they are rolled out across the country, and have asked that people who receive the Johnson and Johnson vaccine be aware of the symptoms of this extremely rare side effect.

What are the common side effects of the vaccines?
Common side effects are pain and redness in the upper arm where you are injected, headache, and feeling unwell, tired, and feverish. These side effects start around 6 hours after vaccination, peak at 24 hours and usually resolve within 2-3 days. Side-effects occur more commonly in younger people and people who have had COVID-19 before. You can use paracetamol or an anti-inflammatory if you need to.

What are the rare side effects of the vaccines?
These are extremely uncommon and usually affect around 1 to 7 people for every million vaccinations given. Some people experience a severe allergy to the vaccine, sometimes as anaphylaxis. This usually occurs within the first 15 minutes of vaccination and can be managed using medications available at the vaccination sites. Precautions can be taken in people with a severe history of allergy so please discuss this with your usual doctor or vaccination site staff. An extremely rare clotting condition may occur following the Johnson and Johnson vaccine. This usually presents with a severe headache that won’t go away, abdominal pain, leg swelling, or small blood spots around the site of injection around 5 to 20 days post vaccination. The headache should not be confused with the usual headache that follows vaccination in the first 1-3 days. If you develop any of these symptoms, please seek healthcare urgently, and tell the doctor you have been recently vaccinated. Specialists in these rare side effects are on hand to help support your doctor to manage you in the best way possible. Serious side effects like these can be frightening even if extremely rare. It is important to remember that the risk of COVID-19 far outweighs the risk of these side-effects and safety agencies around the world have recommended the Johnson and Johnson and Pfizer vaccines for use.

If I feel sick after vaccination should I consider having a COVID-19 test?
Several common vaccine side effects are similar to COVID-19 symptoms. If you experience a mild fever, aching muscles, headache or fatigue, this is likely due to your body’s reaction to the vaccine. If you develop a cough, sore throat, a change in your sense of taste or smell, or you have a fever over 38°C that lasts several days, you might have COVID-19 and should isolate yourself and have a test. The vaccine does not interfere with the usual COVID-19 tests used for diagnosis such as the polymerase chain reaction (PCR) and rapid antigen tests.
How was the vaccine made so quickly?
The COVID-19 vaccine was made faster than any other vaccine in medical history. Experience with SARS and MERS outbreaks (both caused by coronaviruses), faster manufacturing, funding for multiple trials and regulators moving more quickly than before made the process much faster. The genetic material of the virus that causes COVID-19 was made available to all scientists around the world in January 2020 so that work on a new vaccine started very early.

What to expect

When is it my turn to get the COVID-19 vaccine?
Vaccination started with people most at risk of COVID-19 because of their job, age or health. Vaccination is now open to everyone from 12 years and older.

Why should my child (aged 12 to 17 years) get vaccinated against COVID-19?
The vaccine can help to protect your child and family from getting COVID-19. Science shows that children can get infected with the virus and can spread the virus to other people.

What COVID-19 vaccine will my child receive?
For the moment, a single dose of the Pfizer/BioNTech vaccine will be administered to the age group 12 to 17.

Is this COVID-19 vaccine safe in children?
COVID-19 vaccines have been tested and monitored in this age group like in the adults. They may experience similar side effects like adults but these only last a few days.

Do I need the vaccine if I have already had COVID-19?
Yes, you should still be vaccinated if you have already had COVID-19 or if you have had a positive antibody test. So far, we know that the natural immunity from having COVID-19 may not last or provide protection as good as that following vaccination. The vaccination will boost any response your immune system put in place after a previous COVID-19 infection.
You should wait 30 days after testing positive for COVID-19 or symptoms onset before getting the vaccine. If you were hospitalised with COVID-19, please consult your doctor about when it would be safe for you to get the vaccine.

Can I get the vaccine if I have symptoms of COVID-19 or if I am in quarantine?
If you currently are in quarantine because of exposure to someone with COVID-19, you should wait until you have completed your quarantine period before getting vaccinated. If you have had COVID-19 you should wait 30 days after your symptoms started. If you currently have COVID-19 symptoms that started in the last 14 days, you may be referred for a test and the vaccination may be rescheduled.
Is it safe to get the vaccine if I have an underlying medical condition?

If you are an adult with an underlying medical condition or illness, you have a greater risk of severe illness from COVID-19. Because of this, you should consider getting vaccinated as soon as possible. There are some special considerations for people living with certain conditions, but no underlying medical condition prevents you from getting vaccinated:

- **Allergy:** If you have suffered a severe allergy or anaphylaxis to a vaccination, medication or food in the past you need to talk to your usual doctor before receiving the vaccine. The risk of severe allergic reactions to any of the COVID-19 vaccines is very low, can easily be managed and far outweighs the risk of getting COVID-19.

- **Long COVID-19:** Vaccination will add extra protection to the natural immunity that you may already have. Only if you are seriously debilitated, still under active investigation, or have become worse more recently, should you consider delaying vaccination. This is to avoid confusing a reaction to the vaccine with any change in your condition.

- **Bleeding disorders:** As with any injection, there is a small risk of bleeding at the injection site. Speak to your healthcare worker about your condition so that s/he can take precautions such as applying prolonged pressure after the injection.

- **Anticoagulant medications (like warfarin):** As with any injection, there is a small risk of bleeding at the injection site. As long as you are up to date with your scheduled international normalised ratio (INR) testing and your latest INR was below the upper threshold of your therapeutic range, you can receive the vaccination safely. The rare clotting condition described following the Johnson and Johnson vaccine is brought about through different pathways to usual clotting problems. People with usual clotting problems are at increased risk of developing clots during an infection with COVID-19 and are urged to take up vaccination. If you have any concerns speak to your usual healthcare provider or vaccination site staff.

- **Immunosuppressive disorders (like HIV, cancer or being on immunosuppressant therapy):** Immunosuppressive disorders including HIV, irrespective of CD4 count, do not prevent you from receiving the vaccine. Just like everyone who gets the vaccine, you have to continue to follow the general COVID-19 protection measures after vaccination.

Can I have the vaccine if I am pregnant or breastfeeding?

Yes. COVID-19 vaccine studies in pregnant women have not shown any harmful effects on the developing baby or on pregnancy. Over 148,000 pregnant women in the United States have been vaccinated without any safety concerns. COVID-19 is more dangerous in pregnant women, especially towards the end of pregnancy. Pregnant women who are older or are living with hypertension, diabetes, obesity, TB or untreated HIV are especially at risk.

We encourage pregnant and breastfeeding women to discuss with their healthcare provider and get vaccinated as soon as able.

I tested my antibodies after my vaccination and the test came back showing I had none. Does this mean my vaccine did not work?

There is no reason to be alarmed. Commercially available antibody tests are not designed to test vaccine-specific antibody responses. These test for the n-protein (nucleocapsid), and not the spike protein. For this reason, we advise against antibody testing after vaccination. A negative antibody test does not mean you are not protected. You do not need to re-vaccinated.
What can I do now to help protect myself from getting COVID-19 until I am able to get vaccinated?
Continue wearing your mask, practising social distancing, opening windows and doors and sanitising/washing your hands regularly, before and even after being vaccinated. While latest evidence suggests that vaccination has the potential to reduce transmission, it is still important to stay safe and follow these good hygiene rules.

What is a COVID-19 vaccine booster shot? Who is eligible to receive it?
There is some new evidence that vaccine-induced immunity may decrease over time. A COVID-19 vaccine booster shot is a dose of the vaccine that may be given after the completion of a full vaccination schedule (two doses of the Pfizer/BioNTech vaccine or single dose of the Johnson and Johnson vaccine) to boost the immune response. Currently, only healthcare workers who participated in the Sisonke Early Access programme are eligible for a COVID-19 vaccine booster shot as part of the Sisonke 2 study.
Certain groups may also require an additional dose as part of the primary schedule of a COVID-19 vaccine to enhance immune protection. Individuals with compromised immunity such as those on long-term oral steroids therapy for autoimmune conditions, those with haematological or immune malignancies, those with solid organ or bone marrow transplant, renal dialysis and primary immunological disorders may be eligible. Further details will be announced in due course.

How to beat your fears

Will the vaccine change my DNA?
No, the vaccine will not work on your DNA. Evidence shows that some vaccines are made using RNA technology, but the technology used affects how the vaccine is made, not what it does to your body.

Is there a microchip in the vaccine?
There is no proof that microchips or trackers are in any of the vaccines. Getting vaccinated does not mean that you will be tracked or that any of your personal information will be stolen.

I’m not sure if I should get vaccinated. Do I really need to?
Uncertainty and doubts about the vaccine will impact all of us. If too few of us choose to get vaccinated, more people get sick. If more of us get vaccinated, fewer people get sick. You can do research by following trustworthy sources or the official Western Cape Government Facebook page for reasons for and information about the vaccine.

Remember: Whether you are a health care worker or a member of the general public, it is your decision to get vaccinated or not. Your choice will be respected.