



**Vaccination information** for the literate general public.

Do pass on the information to your family and friends where you live and work.

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See also **your country Covid/vaccination information and/or** <http://www.who.int> or: [nhs.uk/covidvaccine](https://nhs.uk/covidvaccine)

The corona virus is called SARS-CoV-2, and this causes the disease 'Covid-19'.

### **Why is it important to be vaccinated? – to avoid Covid!**

We all have the responsibility to pass on information to others about the benefits of vaccination and stop anti-vaccine myths going around on social media.

Catching Covid can be serious and may lead to long-term Covid complications. While severe Covid is more common in older people who are over-weight, have high blood pressure (BP) or have a chronic disease.

We can have Covid without any symptoms and pass may pass it on to others – some who may be at increased risk of severe illness due to older age or having a chronic disease.



We need to control this pandemic, and encouraging everyone to be vaccinated as soon as possible is key to this.

## Will the vaccine protect us? - yes

The Covid vaccination will reduce the chance of you suffering from Covid disease. No vaccine is completely effective, and about 1 in 5 are still *at risk* of getting a mild illness - though very few will actually get ill. So, a mild illness is possible. But in the trials *even* after the two doses of the AstraZeneca (etc.) vaccines, nobody was ill enough to need care in hospital, and nobody died.

The vaccine has been shown to be effective and no safety concerns were seen in randomised controlled trials of more than 20,000 people, eg for the Johnson and Johnson, and similarly for other vaccines.

## All the Covid vaccines are effective and safe

The effectiveness pattern is similar with the other vaccines eg Russian 'Sputnik' – which is similar to AstraZeneca. They are all safe and very effective. Some eg Pfizer and Moderna trials are a bit higher in their % effectiveness – but this was in part due to testing in trials in the USA/ Europe when there were no new variants (see below). The 'Coronovac' (China Sinovac) says it has an effectiveness of between 60-90% (but has not yet released its full trial data and so is not yet approved by WHO). The lowest effectiveness was in Brazil, where effectiveness was lower at about 50%, likely due to presence of the Brazil new variant virus.

AstraZeneca was originally trialled in the UK and in South Africa and Brazil where there are new variants with good results. A recent trial in the USA has confirmed it to be safe and with 80% effectiveness. Indeed, with 100% protection against death from Covid, and no one was ill enough to go into hospital!

Some vaccines eg Pfizer and Moderna need very low temperature transportation and are expensive. The World Health Organisation (WHO) have approved various vaccines. This because it is safe and effective and can be stored in a regular fridge as with the regular childhood vaccines. UKaid has funded its development and the WHO Covax scheme, which is providing it for many countries.



## How do vaccines work?

The protection after vaccination is due to our body's immune system producing antibodies against the virus, stopping the virus getting into the body's cells. The immune system also includes activated T-white cells that recognise and kill the infected cells. So, together this stops more viruses being produced, and the patient is protected from illness, or even if the patient gets ill, they won't get very ill.

## Will the vaccine protect those you care about? – it helps a lot

There have been reports of people getting Covid after being vaccinated, which is not surprising as the effectiveness is not 100%. But remember that it takes up to 2 weeks after the first dose for the protection to be fully effective. So, some people may still get COVID despite having a vaccination, due to infection before or during this 2-week post vaccination period. Even so, the vaccination should lessen the severity of any infection.

For the few who do get Covid infection despite being vaccinated, the illness will be less severe. The vaccinated are less likely to pass the infection to their friends and family and to the vulnerable people that they care for. The vaccines are less effective against some new variants of Covid (see below).

Covid vaccination reduces the chance of you passing on the virus. But people with the mild or asymptomatic infection are able to pass the virus on.

## Side effects? - are mild as for other vaccines



Like all medicines, vaccines can cause side effects. As with other vaccinations, most of these are mild and short-term, and not everyone gets them. Even if you do have symptoms after the first dose, you still need to have the second dose. Although you should get good protection from the first dose, having the second dose gives you longer lasting protection against the virus.

Regina Daniels, Nollywood Actress after her AstraZeneca Covid vaccine. Later she said *"I took my vaccination 3 days ago and there were no side effects"*.

Common side effects are mild and include feeling tired and/or:

- a painful, heavy feeling and tenderness in the arm with the injection.
- This tends to be worst around 1 to 2 days after the vaccine
- headache, general aches, or mild flu like symptoms.

You are advised to take the normal dose of paracetamol (Adults 2 x 4 in 24 hours) and rest to feel better.

Although feeling feverish is not uncommon for 2 to 3 days, a high temperature is unusual and may indicate another infection.

During a trial of a new medicine or vaccine, if anyone falls seriously ill, it is normal practice to halt and check if anyone gets a serious illness. Usually, it is unrelated to the drug or vaccine (it would have happened anyway). You may have heard of this happening eg some cases of blood clot (thrombosis). But with the AstraZeneca the additional risk is only 1 in a million people vaccinated. Yet the thrombosis is much



more likely if no vaccination and you catch Covid. There have been very few serious side effects found in the UK after 36 million vaccinations given.

Kunle Afolayan the famous Nollywood filmmaker damns conspiracy theorists, takes AstraZeneca Covid vaccine.

## Anti-vaccination myths

So many myths about Covid and vaccination are passed around conspiracy theories, rumours – spread across the world quickly via social media. They are not based on science. They may sound OK, but they are not from a trusted source and are not true. See WHO Covid-19 myth-busters.

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>.

For all the Covid vaccines the side effects are mild and last less than a week – the same as for other familiar vaccines you use. They are all very effective. Vaccine myths and hesitancy delays vaccination; people may get severe prolonged illness and deaths as a result.

### **Those who cannot have the vaccine – if they have a severe allergy**

The vaccines do not contain living virus, and so are safe for people with disorders of the immune system. These people may not respond so well to the vaccine. The vaccine is safe and effective for people with HIV, especially if they are taking the ART tablets properly every day.



A very small number of people who are at risk of Covid cannot have the vaccine – this includes people who have severe allergies.

### **Pregnant women or women who think they may be pregnant– delay taking the vaccination until when the baby is born**

Like all new medicines, the vaccines have not yet been tested in pregnant women. So, women should wait until their pregnancy is completed before they are vaccinated – but also take care to reduce your risk of Covid.

Most women who catch COVID-19 during pregnancy do not suffer a more serious outcome than non-pregnant women and will go on to deliver a healthy baby.

If a woman finds out that she is pregnant after she has had the vaccine, advise her not to worry. The vaccines do not contain organisms that multiply in the body, so they cannot cause Covid infection in the unborn baby.

Women can breast feed after having a vaccination.

## **Can you catch Covid from the vaccine? - No**

You cannot catch Covid from the vaccine. But it takes 2 weeks after the first vaccination to be fully protected. So, if you catch Covid from someone (and while incubating but not yet ill) then the symptoms may appear after being vaccinated. But it isn't due to the vaccination.

## **Get the second dose**

Plan to attend the second vaccination appointment. Put an alert in your phone and/or a written record of your next appointment, which should be within 3 to 12 weeks after the first dose. It is important to have both doses of the same vaccine to give the best protection.

**Make a record safe and do go to the appointment for your second dose.**



## **What to do if you are not well for your next appointment? – wait a little**

If you or your patient is unwell, it is better to wait until recovered to have your vaccine, but you should try to have it as soon as possible. You should not attend a vaccine appointment if you are self-isolating, waiting for a Covid test or unsure if you are fit and well.

## **New variants of concern and future 'booster' vaccinations**

Viruses multiply in huge numbers during an epidemic. Sometimes the virus mutates. A few new virus variants are better able to transmit, as in the UK variant.

Rarely a new variant arises that transmits more or affect younger adults and more often leads to severe illness - the South Africa and Brazil new variants are like this and are spreading around Africa and the world. The vaccines are less effective against the South African variant.

But vaccines are being modified to be more effective with these variants of concern, and trials are on-going. People may need boosters with these modified vaccines.

So do counsel people, even after vaccination, to continue social distancing (1 meter apart), use masks, meet outside or in well ventilated places, and wash their hands with soap or use hand sanitizers often.

## After vaccination, you are advised to follow the infection control advice

The vaccine cannot give you Covid infection, and 2 doses will reduce your chance of becoming seriously ill. No vaccine is completely effective, and it will take a few weeks for your body to build up protection.

New variants may spread, so continue to follow the infection control guidance.

Pass on the good news to your family, friends and community about the vaccine - but also to continue to:

- practise social distancing
- wear a face mask
- wash your hands carefully and frequently



## Help promote the vaccination to help stop Covid

Covid-19 will continue to affect our lives and economy until so many people have been infected or vaccinated that transmission drops, this is called 'Herd immunity'. The immunity from vaccination is better protection than that from the immunity after being infected/ill with Covid-19.

The vaccines are effective and safe, encourage people to be vaccinated.

New variants will continue to be a problem, but vaccines are being modified and tested in trials against these – and booster doses may be needed in the future.

Spread the word. The more we encourage vaccination – as well as social distancing. Then we'll be closer to Uhuru, freedom – the epidemic controlled and life and work can get back to how it was before.



It is injected into the muscle of the upper arm – just like many childhood vaccines.

Vaccines against Covid are lifesavers.

See also your country ministry of health/Covid website and [www.who.int](http://www.who.int)

Written by Clinical Professor John Walley of the University of Leeds, Nuffield Centre for health, UK, with support from the [RUHF](http://RUHF). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

Sources: medical journals, UK NHS and Public Health England and [www.who.int](http://www.who.int) Covid-19 sites. The information is correct as of April 2021, but new information becomes available all the time. This is open source, and may freely adapt it to your country context.