

COVID-19 vaccine: Your safety and side effects questions answered

How does the Pfizer vaccine work?

The Pfizer vaccine is a messenger RNA (mRNA) vaccine. It contains a small strip of genetic material encased within a lipid (fat) bubble. It does not contain any live virus.

Once inside the cell, the mRNA works with our own cell's machinery to produce the spike protein that is found on the surface of the virus. The immune system, presented with the protein, learns to recognise the virus and creates a new memory. Then, if the body is exposed to the real virus, it can quickly stop illness or, at least, reduce the severity of the illness.

Although mRNA is a piece of genetic material, it is not a piece of our genome. Messenger RNA does not enter the nucleus of the cell and cannot alter our own genetic material.

Following injection with an mRNA vaccine, the mRNA in its protective lipid bubble is taken up locally by cells where the instructions to produce the virus protein is followed. Once our immune system has learned to recognise the protein, the mRNA is broken down, and doesn't remain in our body.

How long does the vaccine last?

Getting a COVID-19 vaccine is an important step you can take to protect yourself from the effects of the virus. As with any vaccine, the Pfizer vaccine may not fully protect everyone who gets it.

The clinical trials performed on the Pfizer vaccine show it's approximately 95% effective against symptomatic COVID-19, around seven days after receiving two doses.

We don't yet know how long you'll be protected, or how much it stops you from catching and passing on the virus. Research has shown that immunity following natural infection remains for at least eight months and it may be even longer.

Is the Pfizer vaccine safe?

All vaccines, including the Pfizer vaccine, made available for public use in New Zealand, are assessed and approved by Medsafe (New Zealand's own medicines safety authority).

They robustly assess all vaccines to ensure they meet international standards and local requirements for quality and safety.

Although this vaccine was approved more quickly than others, that's not because safety was compromised, but because of several factors that enabled its rapid development:

1. International cooperation supported by significant financial backing has helped overcome roadblocks that have traditionally slowed vaccine development. The different stages of development and approval usually happen one after another, taking many years to be completed. For COVID-19 vaccines, many of these stages were overlapped and run in parallel. This reduced the amount of time needed dramatically, but still means every step was completed.
2. Large manufacturing plants have been developed, so vaccines can be produced faster and on a larger scale than what was previously possible.
3. Authorisation bodies like Medsafe have prioritised reviewing the vaccine's data as quickly as possible.

We're moving quickly but without taking any shortcuts or compromising safety.

What are the side effects?

Like all medicines, the vaccine may cause side effects in some people. These are common, are usually mild and don't last long. They won't stop you from having the second dose or going about your daily life.

The most reported reactions are:

- pain at the injection site
- a headache
- feeling tired or fatigued
- muscle aches
- feeling generally unwell
- chills
- fever
- joint pain
- nausea

Side effects may be more common after your second dose of the vaccine.

Serious reactions are very rare.

For more details on side effects, see: health.govt.nz/covid-vaccine-side-effects

What cover is available if I have a reaction (ACC)?

A physical injury resulting from a vaccination, including the COVID-19 vaccine, may be covered if the criteria for treatment injury are met. Under ACC legislation, the injury must be clearly caused by the vaccination and must not be a necessary part or ordinary consequence of the treatment.

See the ACC website: acc.co.nz/covid-19/clients

What are the ingredients of the Pfizer vaccine?

You can find the ingredients of the Pfizer vaccine on our website: health.govt.nz/pfizer

Is the Pfizer vaccine live or does it contain any animal products?

No, the Pfizer vaccine does not contain any live virus, or dead or deactivated virus.

It will not give you COVID-19. It works by triggering your immune system to produce antibodies and blood cells that work against the COVID-19 virus.

The vaccine does not contain any animal products. Find out more: health.govt.nz/pfizer

How many people in NZ have been vaccinated?

Statistics on vaccinations are available on our website: health.govt.nz/covid19vaccinedata



Getting the right information matters.

Be aware of incorrect information on social media and other places.

You can get accurate and trusted information at:

covid19.govt.nz/vaccine

health.govt.nz/covid-vaccine

or call Healthline on **0800 358 5453**.