

COVID-19 Vaccination Advice for People Living with HIV

Pfizer BioNTech COVID-19 vaccine is highly effective at preventing severe disease and death from COVID-19. We recommend all people living with HIV be vaccinated. Those who were vaccinated when their CD4 count was less than 200 can have a third dose at least 8 weeks after their second dose.

Will the vaccine multiply in my body?

No, the Pfizer BioNTech vaccine is a synthetic mRNA vaccine which contains small amounts of RNA inside a lipid bubble. It is safe for people with suppressed immune systems.

How does the vaccine work?

All the COVID vaccines stimulate our bodies to make antibodies against the spike protein found on the surface of the SARS-CoV virus. The spike protein allows the virus to attach to cells in our respiratory tract and then infect the cells. With antibodies covering spikes the virus cannot attach. The Pfizer BioNTech vaccine contains mRNA which provides the instruction code for manufacturing spike protein to our cells. After a few days the mRNA degrades.

How effective is the vaccines?

The Pfizer vaccine is very effective at reducing severe COVID-19 illness and death. This has been seen in the clinical trials and also in multiple countries. Recent UK data show 75 to 85% effectiveness against infections, 80-90% effectiveness against symptoms and 95-99 % effectiveness at preventing hospitalisation. During our Auckland delta outbreak as of 26 October only 7.5 % of cases and 2.5% of the hospitalised people had received 2 doses.

See <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-data-and-statistics/covid-19-case-demographics#vaccinations-details>

Is the Pfizer-BioNTech vaccine safe and effective for People Living with HIV?

The vaccine has been through rigorous testing to ensure safety and efficacy and has now been given to many millions of people with ongoing monitoring. People with HIV were included in clinical trials though efficacy and safety data specific to this group are not yet available. With some vaccines people living with HIV can produce a weaker response however data from small series of people living with HIV on treatment shows antibody responses and cellular responses similar to those observed in HIV negative people. Those with a suppressed viral load and CD4 cells > 350 cells/ ml can reasonably expect to have an appropriate response to the vaccine based on what we know about the responses of people living with HIV to other vaccines.

What side effects may be expected?

The overwhelming majority of side effects are injection-site reactions (sore arm for example) and general symptoms such as 'flu-like' illness, headache, chills, tiredness, nausea, fever, dizziness, weakness or aching muscles. Generally, these happen shortly after the vaccination and are not associated with more serious or lasting illness. These types of reactions reflect the normal immune response triggered by the body to the vaccines. They are more likely after the second dose and tend to resolve within a day or two. Paracetamol should not be taken before having the vaccine but can be used after it if required. A small number of people develop swollen lymph nodes under the vaccinated arm.

In addition, as with any vaccine there is a risk of allergic reactions shortly after the vaccinations. Because of this people should wait at a vaccination centre as instructed after having their vaccine. Those with previous allergic reactions or anaphylaxis should tell their vaccinator before going ahead.

For more information about what to expect after the vaccination see:

<https://covid19.govt.nz/assets/resources/Vaccine-resources/COVID-19-vaccine-after-your-immunisation-v2.pdf>

Inflammation of the heart (myocarditis) can occur after the vaccine and is more likely in males younger than 30 and after the second dose. It is generally mild. In Israel the risk of myocarditis has been 3 additional cases per 100,000 doses of vaccine given compared with 11 cases of myocarditis per 100,000 people with COVID infection.

Vaccine recipients and their health care providers are encouraged to report possible side effects.

Will the vaccines interfere with HIV medications?

No. HIV medications do not alter the effectiveness of the COVID-19 vaccines and the vaccines do not affect how well HIV medications work either.

Am I protected after one dose of the vaccine?

Two doses are recommended and they should be given at least 21 days apart. There is some protection provided by the first dose but full protection does not develop until two weeks after the second dose.

Can I have my influenza vaccine at the same time as my COVID-19 one?

Yes. Any regular vaccine can be given at the same time apart from the shingles vaccine (zostvax).

Will I need a third dose?

People living with HIV who had their first 2 doses with a CD4 count below 200 should have a third dose at least 8 weeks after their second dose. They will need to sign a consent form with a doctor and get a prescription for it.

Can pregnant people have the vaccine?

Pregnant people were not included in the initial clinical trials; however, pregnant people are encouraged to have the vaccine. They have an increased risk of severe illness if infected with COVID while pregnant and their baby is more likely to be born early. The Pfizer vaccine has now been given to many thousands of pregnant people with no safety concerns appearing.

Can people who are planning to become pregnant or are breast feeding have the vaccine?

Yes. There are no concerns in these groups. The vaccine does not affect fertility. The vaccine does not enter milk but antibodies against the virus do.

Will the vaccine make me test positive on COVID-19 tests?

No. The vaccine makes a person produce antibodies against the virus spike protein but the tests look for particles of virus.

Should I get tested to check if the vaccine worked?

No. It is not necessary nor recommended.

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