

## **COVID-19 Vaccination Advice for PLWHIV**

**COVID-19 vaccines are highly effective at preventing severe disease and death from COVID-19. We recommend all PLWHIV be vaccinated as soon as the vaccine is available to them.**

Frequently Asked Questions – For the Pfizer BioNTech Vaccine (Comirnaty) currently being used here. Other vaccines will be added as they start being used in New Zealand.

### **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 current 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 vaccine is very effective at reducing severe COVID-19 illness and death. This has been seen in the clinical trials and also in Israel where the Pfizer BioNTech vaccine has been widely used. The data on how effective it is at reducing infection and thus transmission risk is still being determined but early data suggests it will be effective at that too.

### **Is the Pfizer-BioNTech vaccine safe and effective for PLWHIV?**

The vaccine has been through rigorous testing to ensure safety and efficacy and is now being used widely overseas without any serious concerns appearing. People with HIV were included in clinical trials though efficacy and safety data specific to this group are not yet available. With some vaccines PLWHIV can produce a weaker response. 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 PLWHIV to other vaccines. Those who are not on treatment would be sensible to start treatment and have the vaccine once their viral load is suppressed.

### **Will the vaccine alter my DNA?**

No. The vaccine contains mRNA. The mRNA does not enter the nucleus of our cells where our DNA (genetic material) is stored.

### **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.

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>

In overseas countries monitoring for side effects is continuing as the vaccines are given. It will be the same in New Zealand. Vaccine recipients and their health care providers will be 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 21 days apart. The minimum recommended interval is 19 days and the maximum is 42 days or 6 weeks. This advice is based on the intervals between doses given in the clinical trials. If given too close the response to the vaccine may be reduced. 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?**

No. It is recommended that the minimum time between having a Pfizer BioNTech vaccine and an influenza vaccine is 14 days. This is not because of any safety concerns but just because people who had the Pfizer BioNTech vaccine in trials did not get any other vaccines at the same time so it is not known if they will affect each other.

**Will I need a later booster dose?**

At this time, we do not know how long the vaccine will protect against COVID-19. Information about this will be gathered over coming months.

**Can pregnant women have the vaccine?**

Pregnant women were not included in the initial clinical trials so the current advice is no, however, pregnant women may choose to be vaccinated if their risk of infection is high. Studies in animals have not shown harmful effects in pregnancy.

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

Yes. There are no concerns in these groups.

**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 nasal swab looks for particles of virus.

**Should I get tested to check if the vaccine worked?**

No. We are not certain of the best way to measure the effectiveness of the vaccines and it is not recommended.