Headline: [WATCH] What are breakthrough infections?

**Blurb**: There is a small chance you can get COVID after being vaccinated. But you should still get the jab. We break down the what, why and how of COVID-19 breakthrough infections.

Byline: Aisha Abdool Karim & Yolanda Mdzeke

People who have been vaccinated can still get COVID-19.

This is called a "breakthrough infection".

## Why does this happen?

Getting sick after being fully immunised, doesn't mean the jab isn't working.

To date, no COVID vaccine has shown 100% efficacy.

This means that no jab can offer you complete protection against future infection.

For example, the Pfizer vaccine had 95% efficacy (before the emergence of new variants). This means that people who got the jab in a trial that tested how well it works, were 95% less likely to get severe COVID than those who didn't.

Each brand of COVID vaccine has its own efficacy.

The likelihood of seeing breakthrough infections therefore depends on the individual vaccine's effectiveness.

## What about variants?

Emerging COVID variants can reduce how well vaccines work.

Variants like Beta are particularly concerning. Beta was identified in South Africa in late 2020 and the main form of the virus that was circulating in the country until about mid-2021.

Beta can evade the body's natural defences against the virus and also make vaccines work less well.

But all variants impact how much protection you get from a COVID jab to some degree.

July data from Israel's health ministry found that two doses of the Pfizer vaccine were only 40% effective against symptomatic COVID cases caused by the Delta variant.

Another study from Israel found breakthrough infections in about 10% of 1 497 healthcare workers fully immunised with the Pfizer jab.

Most of these breakthrough infections were caused by the Alpha variant, which was first identified in the UK.

## Is it still worth getting vaccinated?

Yes — it is still worth getting vaccinated.

The chance of getting COVID after being immunised is quite small and the vaccines dramatically reduce your chances of dying or ending up in an ICU with COVID.

The main goal of vaccines is to reduce how many people fall severely ill and need hospitalisation.

Studies from around the world have shown that most breakthrough infections are mild or asymptomatic.

So vaccines are doing their job and the more people immunised, the better.