

You're much less likely to get long COVID if you've been vaccinated

September 16 2021, by Gail Matthews



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Increasing COVID-19 vaccination rates as quickly as possible is currently a major focus for Australia.

Doing so has clear benefits in reducing new infections and preventing severe disease, hospitalization and death.

One question which is frequently asked is—does COVID vaccination prevent you from getting long COVID?

Here's what the science says so far.

How many people get long COVID?

There has been much international debate as to the definition of long COVID, how common it is, and how long it may last.

Studies examining the frequency of long COVID range from anywhere to [over 80% in hospitalized patients with severe initial illness](#), to [as low as 2–3%](#) in one large app-based study of largely young healthy people in the United Kingdom.

A recent review of 45 studies and almost 10,000 people suggested [almost 75% of them reported at least one persistent symptom](#) at 12 or more weeks after COVID [infection](#).

Post-COVID conditions (aka long COVID) are a range of health problems that you can have four weeks or more after getting COVID-19. Symptoms include fatigue, loss of smell or taste, joint or muscle pain. Find out more <https://t.co/TBP1eaBLCWpic.twitter.com/UZipUi0F7O>

— Va Dept of Health (@VDHgov) [September 9, 2021](#)

Many of these studies are highly dependent on the choice of people studied, and whether they required a definite confirmation by positive swab testing.

The Australian ADAPT study (led by myself and other colleagues from St Vincent's Hospital, Sydney), enrolled people who'd had confirmed positive PCR tests, as well as a mix of hospitalized people and those who didn't go to hospital. It found [around one-third of people](#) had persistent symptoms at an average of two to three months after infection.

The most [common symptoms](#) were persistent fatigue, shortness of breath and chest tightness, although a variety of other symptoms were also reported. These findings are in keeping with most of the evolving research which documents a wide variety of long COVID symptoms.

One review published in August involving 15 studies and more than 47,000 people detailed [up to 55 separate symptoms involving all body systems and organs](#). The five most common were fatigue, shortness of breath, palpitations, brain fog and loss of smell.

The diverse nature of long COVID symptoms makes a clear definition difficult. The World Health Organization is currently attempting to achieve a consensus agreement from its members. Expect to see further tweaks to this definition as it evolves.

Yes, vaccination does reduce the risk of long COVID

Vaccination doesn't prevent all COVID infections. "Breakthrough" infections in fully vaccinated people have been estimated to occur in a small proportion of people.

Breakthrough infections are more likely to have few or no symptoms, and are associated with lower levels of the SARS-CoV-2 virus.

Is this important in preventing long COVID? The answer is probably yes.

Currently our understanding of what causes or predicts long COVID is limited, not least because it's probably a "catch all" definition for several different conditions with underlying causes.

In most studies, there were two main predictors of getting long COVID.

One was the severity of the initial illness, and the second being female sex.

The first of these is very likely to be impacted by vaccination and a [recent study published in *The Lancet* medical journal](#) gives weight to this argument. It looked at symptoms reported after vaccination among users of the COVID Symptom Study app in the UK.

More than 1.2 million users of the app reported at least one [vaccine](#) dose and around 900,000 had two doses. A small proportion, less than 1%, of each of these groups subsequently developed COVID infection and tracked their symptoms.

The study found vaccinated people had a much-reduced risk of being hospitalized or having multiple symptoms in the first week of infection.

Importantly, the likelihood of having a long duration of symptoms (over 28 days) was approximately halved.

People who are fully vaccinated against COVID-19 appear to have a much lower likelihood of developing long COVID than unvaccinated people even when they contract the coronavirus, according to a new study. <https://t.co/YHZlgJFifM>

— STAT (@statnews) [September 2, 2021](#)

This would clearly be expected to translate into a lesser number of people with long COVID at 12 weeks and beyond, although data confirming this is presently lacking.

So, vaccination has benefit in limiting both severe acute COVID infection and long COVID.

A word of caution though—long COVID appears to have a variety of triggers and many people suffering this condition didn't have an initial severe illness. Long COVID also appears to be [more common in females](#) and this association remains unexplained.

If the virus does trigger a long-lasting abnormal immune response in some people, it's too soon to understand whether this can still occur after breakthrough infection post-vaccination.

Further research is urgently needed to understand the reasons for long COVID and direct potential treatments.

In the meantime, the likely effect of vaccination in reducing the risk of long COVID is yet another reason for us to roll up our sleeves.

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