

Information about when people with COVID-19 are likely to be infectious, and their immunity afterwards.

When someone is likely to be infectious

People are considered likely to be infectious with COVID-19 from 48 hours before the onset of symptoms. To prevent the spread of the virus people who have tested positive are required to isolate for a full 7 days.

How infectious someone is may depend on a range of factors, such as how sick they are and how their immune system responds to the virus.

Sometimes people may have the virus without any symptoms (known as asymptomatic cases); these people may still be infectious.

People who continue to test positive for COVID-19 after they have recovered are unlikely to be infectious beyond 24 hours after their symptoms have ended.

Immunity and antibodies

Once a person is infected with SARS-CoV-2 (the virus that causes COVID-19), their immune system kicks in and produces an immune response to the virus. Antibodies are produced by the immune system to fight the virus. Antibodies can remember what the virus looks like, which means that they can quickly spot and target the virus if it is encountered again. The immune system then destroys the targeted virus.

What we know so far about antibodies in people who have had COVID-19:

- Antibodies produced in response to SARS-CoV-2 infection are most reliably detected two weeks or longer after symptoms begin.
- Not everyone who gets infected produces antibodies.
- Antibodies can last for several months in previously infected people, but it is still unknown how long immunity lasts, however it will decrease over time.

Reinfection with COVID-19

The latest evidence shows that getting reinfected with COVID-19 can occur within a relatively short period of time. Reinfection is more likely with new variants spreading among the community that are able to evade existing immunity.

If a person develops new symptoms consistent with COVID-19, and it is 29 days or more since a previous infection, they may have a reinfection with COVID-19 and they should take a rapid antigen test (RAT).

Reinfection with COVID-19 is dependent on: 1; vaccination status, 2; time since last infection 3; ability of new variant to evade natural and vaccine immunity 4; infectious dose. We are monitoring international and national data and updating our reinfection guidance as new evidence becomes available.

Staying up to date with vaccinations

By far the best thing we can do to protect ourselves and our families is to be up-to-date with ALL of our vaccinations.

This includes getting a COVID-19 booster – and also a second booster if you're eligible – which provides further significant protection against infection from Omicron, compared to the primary course alone.

Having COVID-19 does not provide the same level of immunity as getting vaccinated. We also know that your protection from the primary course of the vaccine decreases over time.

To keep your immunity levels high, stay up-to-date with your vaccinations – including boosters. This will lower your chances of getting very sick from COVID-19 and ending up in hospital.

Health authorities in New Zealand are continuing to monitor developments in the COVID-19 vaccine space, including potential new versions of vaccines, and are continuing to work closely with vaccine suppliers to ensure New Zealanders have timely access to COVID-19 vaccines.