

# COVID-19 vaccine booster for Summer 2023-24

People continue to be hospitalised with COVID-19. Although those at highest risk of disease are likely to have had an additional booster dose since April 2023, for many it has now been over 6 months and immunity has waned.

This factsheet provides guidance on who is most likely to benefit from a further dose of COVID-19 vaccine over Summer 2023-24, as the number of cases increase and we attend seasonal gatherings and events.

## Who may benefit from a booster dose over Summer 2023/24

The table below highlights those who could benefit from having a further COVID-19 vaccine booster dose (Comirnaty mRNA-CV 15/15 mcg or Nuvaxovid rCV) in Summer 2023-24, based on their risk of severe disease or long-term consequences if infected with SARS-CoV-2. The following groups are recommended to have a booster dose irrespective of the number of previous vaccine doses they have had, so long as they have completed the primary two doses and it has been more than six months since their last booster or COVID-19 infection.

Group	Highest priority
Anyone aged 65 years or over	Those at higher risk from severe COVID-19, particularly those with chronic and multiple morbidities Older people who are at increased risk of frailty <sup>a</sup> if become even mildly unwell
People aged 50 years and older of Māori and Pacific ethnicity	Those at higher risk from severe COVID-19 <sup>c</sup> , particularly those with chronic and multiple morbidities
Individuals aged from 12 years <sup>d</sup> with a medical condition that increases the risk for severe COVID-19	Those who have a medical condition that makes them severely immunocompromised (ie, those who are eligible for a third primary dose <sup>b</sup> )
Residents of aged-care facilities	Those with multiple comorbidities or complex health needs
Pregnant women/people who have not received any booster doses previously, or have no history of COVID-19 infection	Those with comorbidities and high-risk pregnancies that increase their risk of severe COVID-19 outcomes
People who were recommended <sup>c</sup> to have a booster in April 2023, but have not yet done so	Those aged from 16 years eligible for influenza vaccine, including those who are pregnant

- At risk of deterioration of their independence and worsening health outcomes if they become even mildly unwell
- See Immunisation Handbook, available at <https://tinyurl.com/IHB-COVID-19> (see section 5.5.8)
- See Immunisation Handbook, available at <https://tinyurl.com/IHB-COVID-19> (see Table 5.5 in section 5.5.10)
- A prescription is required for those aged 12-15 years

**Note:** The eligibility criteria have not changed. As a reminder, additional COVID-19 boosters continue to be available (regardless of the number of previous doses received) for:

- everyone aged 30 and over
- all pregnant people, and aged 16 or over, and
- everyone aged 12 to 29 who is at higher risk of severe illness from COVID-19 (a prescription is required for those aged 12-15 at higher risk).

(For details of priority groups see <https://tinyurl.com/IHB-COVID-19>, section 5.5.10 and Table 5.5).

## **Minimum spacing of COVID-19 vaccinations**

The minimum dose interval between additional booster doses remains 6 months after COVID-19 infection or a previous COVID-19 vaccine dose. Clinical discretion for those who are severely immunocompromised can be applied to spacing rules: For Comirnaty mRNA-CV, a minimum of 5 months between primary and booster, 4 months between booster doses, and from 3 months after illness. The gap between Nuvaxovid (rCV) is 6 months. Vaccine given outside this spacing will require a prescription.

## **Immunity against SARS-CoV-2**

Most people in Aotearoa aged from 12 years received at least two doses of a COVID-19 vaccine since 2021. With SARS-CoV-2 virus circulating widely, many people have also had COVID-19 infections. This 'hybrid' immunity is known to be robust and reasonably long-lasting. However, immunity against being infected with the virus declines more rapidly than against severe disease.

The immune function of some people, particularly older age groups, is not as robust as it is in younger healthy people. This means that any protection they gain from the vaccine is shorter-lived, increasing the risk of severe COVID-19. Booster doses help to bolster this immunity and have been shown to be highly protective, at least for several months, against COVID-19-related hospitalisation and death.

## **COVID-19 in New Zealand**

People continue to be hospitalised with COVID-19. COVID-19 has not yet become a seasonal infection, like other respiratory viruses, and the risk continues all year. Protection wanes over time after both infection and vaccination, but vaccination continues to protect against severe COVID-19 infection for at least 7 months. Increasing numbers of COVID-19 infections and hospitalisations are being seen in Aotearoa New Zealand currently, particularly for Māori and Pacific peoples and older adults.

Age is an important factor for COVID-19-associated deaths, particularly in oldest age groups. In 2022, the risk of death at a younger age from COVID-19 increased for those with at least one co-morbidity, were socioeconomically deprived and/or of Māori and Pacific ethnicity. Vaccination is protective against severe disease and death in all age groups.

## **Vaccine effectiveness**

Although protection against reinfection with omicron variants wanes within months of booster doses, protection remains high and is sustained against severe disease. It is not yet certain how long the protection from COVID-19 vaccines and infection lasts. For most, it appears that protection against severe disease extends beyond 6 months as immune memory develops.

A dose of bivalent COVID-19 vaccine reduces hospitalisation rates in previously well-vaccinated adults aged 65 years and over for at least 4 months. Hybrid immunity, from vaccination and infection, provides more sustained protection than vaccination alone.

## **Vaccine safety**

Responses to booster doses of Comirnaty mRNA-CV (15/15 mcg) are consistent with those seen after booster doses with Comirnaty mRNA-CV (30 mcg) in all ages from 12 years. No new safety concerns have been reported.

## **Conclusions**

Many people have not had a booster dose for almost a year, and even those who were recommended to have boosters in April 2023 will have not had a dose for over 6 months. Most people are adequately protected against severe outcomes of COVID-19 after receiving one or two booster doses and may have also had COVID-19 infection. For most people, the protection provided by the current vaccinations is long lasting enough to protect against severe COVID-19 illness. This includes children and healthy adults aged under 50 years.

Some individuals, such as adults aged 65 years or older, people of Māori and Pacific ethnicity aged from 50 years, and other younger people with multiple comorbidities, significant immunocompromise, or are pregnant, are likely to require additional booster doses to maintain their protection over the summer months.