



Australian and New Zealand Society of Nephrology (ANZSN), Renal Society of Australasia (RSA) and Kidney Health New Zealand (KHNZ) Joint Position Statement:

Priorities for COVID-19 vaccination in adults and children with kidney failure and their healthcare workers in Aotearoa/New Zealand

Executive Summary:

We recommend that adults and children who are treated with long-term haemodialysis treatment at a hospital or self-care facility, their household and whānau contacts and patient-facing dialysis healthcare workers are prioritised in group 1 of the implementation of vaccinations against SARS-CoV-2 in Aotearoa/New Zealand.

We recommend that all other dialysis patients and all kidney transplant recipients be included as priority groups in group 2 when vaccination is extended to the wider population.

This recommendation is because long-term haemodialysis patients cannot physically isolate during community transmission, are at very high risk of mortality from COVID-19, are predominantly Māori and Pasifika with diabetes leading to inequitable burden from COVID-19 and are treated by a highly specialised workforce who provide life-preserving care.

Background:

Local and international data show an increased risk of exposure to SARS-CoV-2 and adverse consequences of COVID-19 in patients treated with haemodialysis and their patient-facing health care workers (HCW).

The **risk** of exposure and adverse **consequences** of SARS-CoV-2 infection are particularly high for patients undergoing regular dialysis.

In Aotearoa/New Zealand, one of the two dialysis patients who developed COVID-19 died from their infection. In the UK, nearly 15% of patients receiving maintenance haemodialysis were infected, with a mortality rate of 20%.

Studies modelling SARS-CoV-2 for Māori in Aotearoa/New Zealand have shown that Māori are at greater risk of SARS-CoV-2 infection and poorer outcomes related to this. Evidence from the United States demonstrates that in the general population Pasifika patients were at higher risk of contracting SARS-CoV-2 infection and had an increased risk of hospitalisation for severe COVID-19. Māori and Pasifika have substantially higher rates of kidney disease and dialysis care than other population groups and therefore the risks related to infection for these groups is amplified

Unlike some other at-risk groups, haemodialysis patients are unable to self-isolate due to their need to attend for dialysis three times weekly for several hours in dialysis units without isolation facilities, and with high interaction with others in an indoor environment. Most dialysis units and DHBs in Aotearoa/New Zealand do not have purpose-built isolation facilities to treat SARS-CoV-2 positive cases who require dialysis. This places dialysis patients and health workers at unavoidable risk of patient to patient transmission and healthcare worker to patient transmission.

Rates of infection for healthcare workers providing care for patients on haemodialysis in the UK were similar (10-15%) to patient infection rates. Infection in HCWs poses a significant risk of transmission to a vulnerable patient group as well as a risk to service viability for a life-preserving treatment.

Rationale for Vaccination

Approved COVID-19 vaccines have shown efficacy in reducing symptomatic or severe COVID-19 infection. Although evidence of efficacy of COVID-19 vaccination in vulnerable patient groups with kidney disease is not available, the rationale for vaccination of this group is:

- to reduce the risk of severe disease-causing infection and consequent hospitalisation and death; and
- transmission to other patients and staff.

The rationale for kidney healthcare worker vaccination is to prevent the risk of transmission to a vulnerable patient group, although it is acknowledged that there are only preliminary data emerging from the UK to support this.

In addition, particular groups of renal healthcare workers have specialised competencies essential for the provision of life-sustaining treatment.

Prioritised vaccination of these healthcare workers will help to maintain viability of dialysis services in Aotearoa/New Zealand to 1500 patients by minimising staff illness or quarantine because of COVID-19 infection or exposure.

Recommendations

The ANZSN, RSA and KHNZ are supportive of the equitable distribution of the vaccine to Māori and Pasifika peoples and other disadvantaged groups.

Group 1

1. Adults and children receiving maintenance hospital and health facility-based haemodialysis and their household contacts/whānau.
2. Patient-facing renal healthcare workers who provide care for the above patient groups.

Group 2

1. Patients receiving home based dialysis (haemodialysis or CAPD) or are living with a kidney transplant
2. Patient-facing renal HCWs who provide care for the above patients

Logistics of vaccination to prioritised kidney disease populations

Kidney care services in Aotearoa/New Zealand have a very close therapeutic relationship with haemodialysis patients and are well placed to identify patients, administer vaccination programmes and capture data. It is acknowledged that implementation of vaccinations will depend on vaccine availability and local logistics, as well as accessibility to the above priority groups.

Important notice

This position statement has been developed by the Australian and New Zealand Society of Nephrology (ANZSN) to support the development of Aotearoa New Zealand Government COVID-19 vaccination strategy.

The COVID-19 pandemic and associated vaccination development is rapidly evolving, and information about SARS-CoV-2 and COVID-19 disease aetiology, treatment or prevention, including vaccine development and use, are emerging areas. The information and advice provided in this statement is to be considered in this context.

The ANZSN, RSA and KHNZ have each made reasonable efforts to ensure that the information and advice in this statement is as accurate and up-to-date as possible, however none of the organisations, jointly or severally, guarantees or warrants, in any way, the accuracy, completeness, currency or source of any material in this statement.

The ANZSN reserves the right to change or add to this statement at any time in response to further advances in knowledge and practice concerning SARS-CoV-2 or COVID-19 disease, its aetiology, treatment or prevention, including the development and use of vaccines. The ANZSN also declares that Astra Zeneca is a regular sponsor of their activities.