COVID-19 vaccination for adult patients with kidney disease: a position statement from the UK renal community

People with kidney disease have been severely affected by COVID-19 with high rates of severe infection, critical illness and death. The renal community welcomes the imminent arrival of effective COVID-19 vaccines.

Although some vaccines still need to be approved by MHRA, their development offers potential lifesaving protection to many clinically extremely vulnerable patients.

The joint renal societies (British Renal Society, British Transplantation Society, Renal Association) and charity partners at the National Kidney Federation and Kidney Care UK are committed to a co-ordinated approach to the vaccination of high-risk kidney patients against COVID-19.

This increased vulnerability has been recognised by the Department of Health through the inclusion of four separate subgroups of people with kidney disease in the clinically extremely vulnerable group.

These groups are:

1. **People receiving dialysis for end stage renal failure:** UK Renal Registry data have shown that, by 11 November, 662 patients receiving in centre haemodialysis had died from COVID-19; almost 3% of all in centre haemodialysis patients. For in-centre haemodialysis patients infected with COVID-19 during the first wave, the 14 day mortality rate was 20%. The significantly increased risk has been acknowledged in tools such as the ALAMA age score and the Q - COVID risk calculator.

   Over 20,000 patients depend on dialysis three times a week for life-saving treatment. They are unable to shield completely and remain vulnerable as the second wave of COVID-19 affects the UK. They share clinical treatment facilities three times per week and despite considerable efforts to minimise infection, they remain at risk of inadvertent transmission between patients and to and from staff.

2. **People who have received kidney transplants:** The COVID-19 pandemic has had a significant impact on people who have kidney transplants or are awaiting a kidney transplant.

   As of 25 November 2020, NHS Blood and Transplant have recorded 1,271 positive COVID-19 tests in people with a functioning kidney transplant (3.2% of all UK kidney transplant recipients). Of the people with functioning kidney transplants that tested positive for COVID-19, 208 (16%) have died from their illness. Shielding among transplant recipients during the first wave of the pandemic means the risk of COVID-19 to a patient with a kidney transplant who is infected has been under-estimated.

   COVID-19 has also impacted on the ability of transplant centres to perform new kidney transplants; most kidney transplant centres temporarily suspended new transplants from March 2020. Deceased donor transplantation has resumed to nearly normal levels of activity.
but living donation has halved after a complete pause in the programme at the start of the pandemic.

Although initial clinical trials of COVID-19 vaccines did not include immunosuppressed patients, we would expect the vaccines to offer protection against COVID-19 infection in these extremely vulnerable patients. An effective COVID-19 vaccine should reduce staff and patient infection resulting in lower rates of serious illness and death. Resources can then be re-focused towards maintaining transplant programs and delivering care to people with transplants resulting in saved lives, substantial morbidity benefit and improved healthcare value.

3. **People with stage 5 CKD not receiving renal replacement therapy**: Patients not yet receiving renal replacement therapy but who have an eGFR less than 15 ml/min (CKD stage 5) are also more likely to die from COVID-19 if infected. Early vaccination can reduce this risk. In addition, early vaccination of this CEV group together with those already receiving dialysis would also allow safe and timely transplantation of those able to receive this therapy.

4. **People with autoimmune kidney disease who have received treatment with immunosuppression**: Whilst data on this group are less clear, there is an indication from case reports that patients on high dose immunosuppression are at increased risk of adverse outcomes if they develop COVID-19.

The proposed prioritisation lists for COVID-19 vaccination have emphasised the importance of age in the population based vaccination strategy. Whilst there is overwhelming data to support this approach, the renal community would like to highlight the additional need to prioritise vaccination for younger people with kidney disease who fall into high risk groups.

**The kidney community propose the following approach to vaccination:**

1. The prioritisation of patients receiving in-centre haemodialysis (ICHD) to ‘care home equivalent’ status. This would ensure that people with kidney disease at the highest risk of adverse outcomes are rapidly vaccinated. As they attend fixed appointments in a dialysis unit the logistics of delivery in this environment are achievable. This is particularly important as they have variable access to primary care and community hubs and would otherwise risk delayed or missed vaccination.

   Many renal services already have expertise to deliver vaccination in their renal dialysis units. An implementation toolkit will be developed by the renal professional societies and the renal Clinical Reference Group (CRG) to support COVID-19 vaccination.

2. **Ensuring that all people with kidney disease under our care who are not receiving ICHD but who are also at high-risk are recorded on the clinically extremely vulnerable lists.** It is anticipated that vaccination will occur rapidly, and these priority groups will be vaccinated early in 2021. There will be a focus on clear communication with patients and their carers to
ensure that all who are eligible for vaccination have timely access to information and clear guidance on how to receive the vaccination.

3. Continue to maximise flu vaccination coverage for people with kidney disease highlighting the need to separate flu and COVID-19 vaccinations by at least one week.

The kidney community recommends:

- a priority focus on vaccination of patients receiving ICHD followed by all other renal patients who classify as CEV. Those on home dialysis, renal transplant recipients and CKD 5 are the next priority groups

- all patient-facing staff working in kidney care should receive priority access to COVID-19 vaccination (including those who work in commercially run dialysis units and are therefore not directly employed by the NHS)

- accurate and timely patient education, reassurance and information, including translated material or video information for those where English is not their first language is available to patients and their families or carers about the benefits of vaccination

- systems are urgently put in place to vaccinate patients in renal units, including a log recording administration and subsequent COVID-19 antibody testing to assess response

- joint working with laboratory scientists and methodologists is supported to quantify the efficacy of COVID-19 vaccination and establish a programme to identify the optimum vaccination strategy for people with kidney disease

- continued collaboration with scientific partners and industry is maintained to develop alternative therapies for COVID-19 for any renal patients who do not respond to the initial vaccination programme.

Resources

www.renal.org/health-professionals/covid-19
www.kidneycareuk.org/coronavirus