



# Adult renal unit COVID-19 vaccination preparedness

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## Introduction

Kidney disease is very common, affecting up to one in 7 of the adult population and people with kidney disease affected by COVID-19 are at substantially increased risk of death compared to age-matched patients without kidney disease<sup>1</sup>.

Of these, people with kidney disease those receiving in-centre haemodialysis (ICHD) are at the highest risk from COVID-19. Haemodialysis treatment is provided three times per week at over 200 dialysis units in hospitals and community settings across the UK. Units are managed by nurses, doctors and allied health care professionals and are based in NHS Hospital/Health & Social Care Trusts or Boards or delivered in partnership with private dialysis providers. People receiving ICHD are unable to shield as they must visit busy dialysis units three times per week for life-sustaining treatment.

3% of all people receiving ICHD in the UK have already died from COVID-19<sup>2</sup>.

Once infected with COVID-19, a person receiving ICHD has a 1:5 risk of death within two weeks.

The risk of death of COVID-19 in the general population is < 1:200.

Compared to an 80-year-old in the general population (who are in JCVI group 1<sup>3</sup>):

- ICHD patients aged 60-79 years are at 6 x higher risk of death
- ICHD patients aged 40-59 are at 2.5 x higher risk
- ICHD patients aged 20-39 are at similar risk.

**This means a 30-year-old ICHD patient has the same risk of death if infected with COVID-19 as an 80-year-old in the general population<sup>4</sup>.**

The necessary admission to hospital of ICHD patients with COVID-19 contributes to occupancy of medical and ITU beds, and demand for renal replacement therapy (RRT) provision in the in-patient setting. **Vaccination provides a way of reducing not only patient morbidity and mortality in this group, but also strain on services<sup>5</sup>.**

Currently the majority of ICHD patients are in CEV priority group 4. However, some will fall into priority groups 1 & 2 due to age or being in a care home<sup>3</sup>, and access to vaccination for these people is impaired due to their need to attend regular dialysis sessions. Unlike other CEV patients, people receiving ICHD attend dialysis units thrice weekly, where a vaccine could easily be administered. A recent survey<sup>6</sup> indicates that existing processes for 'flu and hepatitis B vaccination are already in place in many dialysis units, and a similar model could be adopted for COVID- 19 vaccination.

**Prevention of COVID-19 in ICHD patients, by prioritisation for immediate vaccination as 'care home equivalent'<sup>3</sup>, is imperative. This life-saving intervention should be administered on dialysis units to minimise the practical barriers for this group of patients receiving it.**

**We recommend that adult renal units prepare the resources necessary to vaccinate all their ICHD patients at short notice pending vaccine availability.**

## References

1. <https://renal.org/sites/renal.org/files/Statement%20on%20COVID-19%20vaccination%20for%20ICHHD.pdf>
2. <https://renal.org/audit-research/publications-presentations/report/covid-19-surveillance-reports>
3. <https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020>
4. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0241263>
5. <http://britishrenal.org/wp-content/uploads/2021/01/Clinical-efficacy-of-vaccine-in-HD-patients.pdf>
6. <https://renal.org/sites/renal.org/files/Kidney%20Patient%20Safety%20Committee%20Updated%20report%20Hepatitis%20B%20vaccination%20Survey.pdf>

# Checklist & resources for in-centre haemodialysis COVID-19 vaccination

(applicable to adult in-hospital, satellite & private dialysis providers)

We suggest that you set up a task-and-finish team to progress through the checklist below. **Close working with your local vaccination hub is imperative.**

1. Contact your NHS/Health & Social Care Trust/Health board, COVID-19 vaccine lead/ hub vaccination lead/ Gold Command/equivalent to highlight the challenge of appropriately vaccinating people receiving ICHD. You may find the Renal Association “Statement on COVID-19 vaccination for ICHD” helpful<sup>1</sup>.

- Advise on number of vaccines required (shift times, location of patients attending for regular treatment).
- Consider type of vaccine available and adjust local process accordingly.

*NB it is likely that the Oxford-AstraZeneca vaccine will be most practicable.*

2. Consider securing a letter of support from your regional renal network. The renal community is highlighting ICHD challenges; please keep updated with these developments to avoid duplication. An example template is available for your network<sup>7</sup>.

3. Ensure that ICHD patient lists are up to date and update Renal Registry with this information (see appendix 1).

- Consider process for recording vaccine eligibility / exemption / reasons for declining, including previous vaccination. It is reasonable to consider all cautions in the MHRA information to the vaccine which you anticipate using. If no vaccine is given, record reason for this, adhering to National Immunisation and Vaccination System (NIVS) criteria.

4. Provide staff and patients with information leaflets about COVID-19 vaccination for people with kidney disease<sup>8,9</sup>. Consider carefully people with differing communication and language needs. Issue a patient letter informing them of the plan for vaccination (Appendix 2).
5. Ensure appropriate staff are trained to vaccinate patients on the dialysis unit by undertaking the appropriate training and competencies<sup>10,11</sup>. Refer to local standard operating procedure (SOP).
6. Consider process for each unit including appropriate Patient Group Directive (PGD) or Patient Specific Direction (PSD) or other prescribing methods<sup>12,13</sup>. Note training in use of PGD may be required<sup>14</sup>.
7. Refer to local vaccine hub Standard Operating Procedure (SOP) and work with appropriate colleagues to support practical processes and ensure storage, documentation and safety meet local requirements. Consider impact of 15-minute observation period (staffing, transport etc). Consider that each patient must be registered through NIVS per local SOP.  
  
If required produce a local renal-specific SOP for the vaccination process, see examples in the resource list<sup>15</sup>.
8. Document the consent process; consider needs of patients who do not have capacity<sup>16</sup>. If vaccination declined, document reason (see appendix 1). See local hub SOP.
9. The vaccine can be administered before, during or after haemodialysis session. Administer in the opposite arm to functioning fistula or graft. Apply pressure for at least 2 minutes after vaccination. Observe patient for a minimum of 15 minutes after vaccination, observing in particular for significant haematoma.
10. Arrange second dose where relevant as per local SOP.

## References

1. <https://renal.org/sites/renal.org/files/Statement%20on%20COVID-19%20vaccination%20for%20ICHD.pdf>
2. <https://renal.org/audit-research/publications-presentations/report/covid-19-surveillance-reports>
3. <https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020>
4. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0241263>
5. <http://britishrenal.org/wp-content/uploads/2021/01/Clinical-efficacy-of-vaccine-in-HD-patients.pdf>
6. <https://renal.org/sites/renal.org/files/Kidney%20Patient%20Safety%20Committee%20updated%20report%20Hepatitis%20B%20vaccination%20Survey.pdf>
7. [https://renal.org/sites/renal.org/files/Renal%20ODN%20Weekly%20Testing\\_draft%2030-12-20.docx](https://renal.org/sites/renal.org/files/Renal%20ODN%20Weekly%20Testing_draft%2030-12-20.docx)
8. <https://renal.org/health-professionals/covid-19/covid-19-vaccination>
9. <https://www.gov.uk/government/collections/covid-19-vaccination-programme>
10. <https://www.gov.uk/government/publications/covid-19-vaccinator-training-recommendations/training-recommendations-for-covid-19-vaccinators>
11. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/943646/Core\\_competency\\_assessment\\_tool\\_v3.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943646/Core_competency_assessment_tool_v3.pdf)
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13. <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/12/C0956-PfizerBioNTechCOVID-19PGD-v02.00-updated-5-January-2021.pdf>
14. <https://www.e-lfh.org.uk/programmes/patient-group-directions/>
15. <https://renal.org/health-professionals/covid-19/covid-19-vaccination>
16. <https://www.gov.uk/government/publications/coronavirus-covid-19-looking-after-people-who-lack-mental-capacity/the-mental-capacity-act-2005-mca-and-deprivation-of-liberty-safeguards-dols-during-the-coronavirus-covid-19-pandemic-additional-guidance>

## Appendix 1: UK Renal Registry collection and reporting of COVID-19 vaccination in ESKD patients

The UK Renal Registry requires a report of vaccination of the following types of patient:

- ICHD
- Home haemodialysis (HHD)
- Peritoneal dialysis (PD)
- Renal transplant
- Chronic kidney disease G4 and G5
- Dialysed AKI

Data required:

- NHS number
- Date of birth (DOB)
- Date of vaccination (if the exact day is unknown default it to the 15<sup>th</sup> of the month)
- Type of vaccination
- Date of vaccination decline if the patient declined the vaccination

## Appendix 2

Example letter to patients informing them of plan for vaccination and how to access this.

<https://renal.org/sites/renal.org/files/COVID%20example%20vaccination%20invitation%20letter.docx>

Further resources, such as example SOPs, template letters and instructions for recording vaccination in renal IT systems, will be added to the resources box that accompanies this document on the Renal Association COVID-19 Vaccinations webpage - <https://renal.org/health-professionals/covid-19/covid-19-vaccination>