



National Renal Advisory Board recommendations for infection control in New Zealand haemodialysis units for the blood born viruses: Hepatitis B, C and Human Immunodeficiency Virus (HIV).

The three blood born viruses, Hepatitis B, C and HIV, are at risk of transmission between patients and staff in haemodialysis units. Internationally there have been recognized outbreaks within units but none in New Zealand to date largely due to good practices by staff in the units. These viruses can lead to chronic infection with long term consequences if left untreated, however today there are very effective therapies available to control or cure these viruses. Transmission of these viruses can occur from blood to blood exposure with contaminated blood products, shared IV needles and other medical equipment and sexual contact. Staff exposure can be through needle stick injury, mucous membrane contact/splashing and through unprotected cuts and abrasions.

A survey of New Zealand haemodialysis units has shown there is a significant variation in practices for screening dialysis patients, vaccination, isolation of patients and isolation and cleaning of dialysis machines and equipment.

The NRAB suggests that units note the various guidelines listed below and ensure that individual dialysis units have appropriate protocols in place to protect staff and patients from these blood born viruses. It is noted that the different haemodialysis machines require different solutions and processes for disinfecting and cleaning according to manufacturer's instructions.

It is suggested that units have policies for:

1. Viral blood test screening noting that new patients or patients who refuse testing should be treated as infectious until results are known
2. Vaccination where available and treatment pathways for patients with positive tests
3. Standard infection control precautions for all patient contacts (http://www.who.int/csr/resources/publications/4EPR_AM2.pdf)
4. Waste disposal and recycling



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5. Cleaning procedures of dialysis machines, chairs and tables and other shared chattels after every haemodialysis treatment
6. Cleaning procedures of other shared equipment or processes for single patient use equipment
7. Cleaning procedures of centralised central water processing units (CWP) and the water circuits along with individual reverse osmosis units
8. Procedures for managing a breach in the above recommendations

Available guidelines:

WHO standard infection control precautions

http://www.who.int/csr/resources/publications/4EPR_AM2.pdf

KHA-CARI Guidelines: Prevention of blood-borne virus transmission in haemodialysis units – draft. http://www.cari.org.au/current_projects.html



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draft_30_05_2017_cl

UK renal association. Clinical Practice Guideline Management of Blood Borne Viruses within the Haemodialysis Unit. <https://renal.org/wp-content/uploads/2017/07/BBV-Draft-Guideline-July-2018-online-version.pdf>

BCRenal. Cleaning and disinfecting hemodialysis machines and stations. <http://www.bcrenalagency.ca/resource-gallery/Documents/Cleaning%20and%20Disinfecting%20Hemodialysis%20Machines%20and%20Stations.pdf>

CDC Guideline for disinfection and sterilization in healthcare facilities 2008. <https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines.pdf>

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