



MANITOBA RENAL PROGRAM

SUBJECT <ul style="list-style-type: none"> Management of Patients Positive for HBsAg on Hemodialysis 	SECTION 70.20 Protocols
	CODE 70.20.02
AUTHORIZATION <ul style="list-style-type: none"> Professional Advisory Committee, Manitoba Renal Program Nursing Practice Council, St. Boniface Hospital 	EFFECTIVE DATE May 2013
	REVISION DATE June 2015 April 2018

PURPOSE:

- To provide guidelines to staff when delivering care to patients that are HBsAg Positive and on Hemodialysis in order to prevent transmission of disease to other patients and health care providers.

DEFINITIONS:

PRIVATE ROOM: A room separated from other areas by walls, with its own entrance or doorway that can be closed.

HBsAg+ patients: Patients whose blood tests have been shown to carry the Hepatitis B Virus.

HBV susceptible patients: Patients whose blood tests have shown that they do not have an adequate level of antibodies in order to protect against Hepatitis B infection (i.e. HbsAb negative) including patients currently undergoing vaccination, nonresponders to previous Hepatitis B vaccination, and patients who have not been screened for Hepatitis B Ag/Ab).

HBV immune patients: Patients whose bloodwork shows that they have an adequate level of Hepatitis B antibodies. (i.e. HbsAb positive).

POLICY:

Infection Prevention and Control precautions for hemodialysis patients who are HBsAg positive (HBsAg+):

- Most Regional Health Authorities, including the WRHA (Winnipeg Regional Health Authority), Infection Control and Prevention Manuals recommend the use of Routine Practices to prevent against the transmission of all blood borne pathogens, including Hepatitis B. It is recommended that Additional Precautions (i.e. Contact Precautions) be used in the care of Hepatitis B positive patients for hemodialysis units because of the increased potential for contamination with blood and pathogenic microorganisms.
- A point of care risk assessment (PCRA) should be performed by all health care workers (HCW) to determine the appropriate control measures required to provide safe patient care and to protect the HCW from exposure to microorganisms.
- Refer to MRP protocol 70.20.01 *Management of Hemodialysis Patients with Infectious Diseases Protocol* for further considerations regarding isolation precautions for hemodialysis patients.

4. Upon initiation of precautions, the nurse will explain the protocol and the rationale to the patient and/or family.
5. HBsAg positive patients will be managed in a private room.
6. When it is not possible to manage HBsAg positive patients in private rooms, alternate arrangements will be made in consultation with the site Infection Control Practitioner/designate. Refer to 70.20.01 *Management of Hemodialysis Patients with Infectious Diseases Protocol* to determine order of priority for private room.
7. Hemodialysis treatments for HBsAg positive patients will be performed with dedicated equipment, instruments, supplies, and medications. Patients must receive hemodialysis with a machine dedicated to HBsAg+ patients. Machines should be clearly designated to be used exclusively for patient that are HBsAg positive.
8. HBsAg positive patients should be separated during treatment from HBV susceptible (HbsAb negative) patients in an area geographically removed from the main stream of activity.
9. Staff members should not care for HBsAg positive and HBV susceptible patients during the same shift. When staff members are assigned to care for both HBsAg positive and HBV immune patients on the same shift, there must be current (i.e. within the past 12 months) serology to confirm the patient's HBV immunity prior to assigning the two groups together. (Refer to MRP Protocol 70.10.02, *Adult Patient Screening and Vaccination Protocol for Hepatitis B and Hepatitis C* which dictates that antibody levels for Hepatitis B must be checked yearly following an initial report stating that the patient is HBV immune.)
10. At the completion of every hemodialysis treatment for a patient that is HBsAg positive or Hepatitis B status unknown:
 - a. The delivery system (internal pathways and external surfaces) shall undergo cleaning and disinfection as outlined in MRP Procedure 30.10.18 *Cleaning and Disinfection of the Fresenius 5008 Hemodialysis System: Internal fluid pathways and External surfaces*.
 - i. If equipment requires servicing by a dialysis technologist, the delivery system must be disinfected as outlined above and the technologist shall be informed the equipment was used by a patient who is HBsAg+.
 - b. External Surfaces: Give special attention to cleaning control panels on the dialysis machines and other surfaces that are frequently touched and potentially contaminated with patients' blood.
 - i. The bed/chair, table, and television remote controls must be included in the cleaning and disinfection.
 - ii. Reusable equipment and supplies are cleaned and disinfected before use on another patient.
 - iii. Unused medications or supplies taken to the patient's station should not be returned to a common clean area or used on other patients. They should be discarded.
11. Following initiation of cleaning cycle and cleaning of external surfaces, a clean sheet may be used to cover the delivery system.
12. Follow Regional Policies for cleaning of patient care areas post discharge.

REFERENCES:

Association for Professionals in Infection Control and Epidemiology (APIC) 2010. *Guide to the Elimination of Infections in Hemodialysis* http://www.apic.org/Resource_/EliminationGuideForm/7966d850-0c5a-48ae-9090-a1da00bcf988/File/APIC-Hemodialysis.pdf

CDC MMWR April 27, 2001 / 50(RR05); 1-43 Recommendations for Preventing Transmission of Infections Among Chronic Hemodialysis Patients. <http://www.cdc.gov/mmwr/PDF/rr/rr5005.pdf>

Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care;
April 2012 Manitoba Government. <https://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>

Winnipeg Health Region Authority Contact Precautions Protocol (revised November 2016) retrieved 02/Feb/2018
from http://www.wrha.mb.ca/extranet/ipc/files/manuals/acutecare/Contact_Precautions.pdf

RESOURCES:

Dialysis Infection Prevention and Control Working Group