



MANITOBA RENAL PROGRAM

SUBJECT <ul style="list-style-type: none"> Management of Hemodialysis Patients with Infectious Diseases Protocol 	SECTION 70.20 Hemodialysis Protocols
	CODE 70.20.01
AUTHORIZATION <ul style="list-style-type: none"> Professional Advisory Committee, Manitoba Renal Program Nursing Practice Council, St. Boniface Hospital 	EFFECTIVE DATE September 2008
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PURPOSE:

- To provide guidelines to staff when hemodialysis patients with various infectious diseases are treated in the same dialysis unit.

DEFINITIONS:

AIRBORNE INFECTION ISOLATION ROOM (AIIR) (formerly called negative pressure isolation room):

An AIIR is a single-occupancy patient care room used to isolate persons with suspected or confirmed infectious airborne or airborne/contact disease. Environmental factors are controlled to minimize the transmission of infectious agents usually spread from person-to-person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AIIRs have requirements for controlled ventilation (negative pressure), air pressure, and air filtration. Airborne infection isolation rooms should provide negative pressure in the room (so air flows into the room), an air flow rate of 6-12 air changes/hour, and direct exhaust of air from the room to the outside of the building or recirculation

PRIVATE ROOM:

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

PRIVATE BEDSPACE:

A patient station separated from other areas by closed curtains or privacy screen when a private room is not available.

POLICY:

- Consistent application of Routine Practices in expected for the care of all patients at all times across the continuum of care.¹
- 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.¹
- Additional Precautions (e.g. Contact Precautions, Droplet Precautions, Airborne precautions) are required for patients with suspected or known infections or colonization with microorganisms for which Routine Practices are insufficient to prevent transmission.
- Refer to the Renal Health Centre's Regional Health Authority Infection Prevention and Control Manual/directives to determine which Infectious Diseases require Additional Precautions.
- Patient Education: Upon initiation of precautions, the nurse will explain the protocol and the rationale to the patient and/or family
- Refer to MRP Protocol 70.20.02 *Management of HBsAg Positive Hemodialysis Patients* for considerations regarding HBsAg positive (Hepatitis B) patients receiving Hemodialysis.

7. Dialysis patients requiring Additional Precautions shall be placed in a private room in compliance with the Manitoba/regional/facility Additional Precautions guidelines. The following order of priority is intended to be used as a guideline along with clinical judgement/risk benefit analysis.

Contact Facility IP&C for further direction when there are competing circumstances to mitigate risk of infection

- a. Novel Pathogens [e.g., [Severe Respiratory Illness \(SARI\)](#)]
 - b. Laboratory Confirmed Multi-drug Resistant or Extensive Drug resistant (MDR/XDR) Respiratory tuberculosis
 - Dialysis Units without AIIRs should transfer patients with suspect/known infectious *Mycobacterium tuberculosis* to a unit with an AIIR. If no AIIR is readily available prior to treatment place patient in a single room with the door closed. All those entering the room shall adhere to Airborne Precautions, including Personal Protection Equipment (PPE). The room shall remain unoccupied for one hour following the discharge of the patient to allow time to remove airborne microorganisms. All those accessing the room prior to the full hour shall adhere to PPE for Airborne Precautions.
 - c. Measles
 - Dialysis Units without AIIRs **and** there are no susceptible, immunocompromised patients: if transfer is not feasible; consider using a private room with door closed.
 - d. Laboratory Confirmed Active Respiratory TB (sputum smear positive for AFB or culture positive for MTB) or clinically-confirmed (committed to TB treatment) with priority to most infectious
 - e. TB under investigation
 - f. Varicella
 - Dialysis Units without AIIRs **and** there are no susceptible, immunocompromised patients: if transfer is not feasible; consider using a private room with door closed.
 - g. When an Aerosol Generating Medical Procedure (AGMP) is anticipated and Respiratory TB or other pathogens spread by the airborne route are suspected or confirmed. For additional information see [Respiratory Protection for AGMPs](#) (aerosol generating medical procedures)
 - h. Disseminated zoster
 - i. Extensive localized zoster
 - j. Patients who are HBsAg positive.
 - k. Patients requiring isolation for known Antibiotic Resistant Organisms (ARO).
 - l. Patients transferred/traveling from outside **Canada** who have not been screened according to MRP Policy 70.20.03 *Screening for Hepatitis B, Methicillin Resistant Staphylococcus aureus (MRSA), and Carbapenemase-Producing Enterobacteriaceae (CPE) for Manitoba Renal Program Travelling Patients and Transient Hemodialysis Patients.*
 - m. Patients transferred/traveling from outside **Manitoba** who have not been screened according to MRP Policy 70.20.03 *Screening for Hepatitis B, Methicillin Resistant Staphylococcus aureus (MRSA), and Carbapenemase-Producing Enterobacteriaceae (CPE) for Manitoba Renal Program Travelling Patients and Transient Hemodialysis Patients.*
 - n. Patients with uncontrolled diarrhea/secretions that are not/cannot be contained (including, but not limited to *Clostridium difficile*).
 - o. Patients on Contact Precautions for other infectious diseases not listed above.
 - p. Patients on Droplet Precautions.
8. If a private room is not available use the following management guidelines to create a private bed space:
- a. Consult the site Infection Control Professional or designate for guidance.
 - b. Manage patient bed space as isolation room as per regional policies; segregate patient or cohort with others with the same organism.
 - c. Place Additional Precautions sign in location visible to anyone entering bed space.
 - d. Hand washing sink should be available in bed space or nearby. Additionally, alcohol based hand rub

with a minimum of 60% alcohol must be available at the point of care, at all times.

- e. Keep patient chart outside of bed space to reduce risk of contact with contaminated surfaces.
- f. Clean and disinfect patient care equipment after each patient use, prior to removal from isolation space.
- g. Follow standard dialysis cleaning and disinfection procedures for cleaning after treatment as per in MRP Procedure 30.10.18 *Cleaning and Disinfection of the Fresenius 5008 Hemodialysis System: Internal fluid pathways and External surfaces.*
- h. Follow Regional Policies for cleaning of patient care areas following discharge of patient.

REFERENCES:

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>

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

MHSAL ARO Guidelines 2016: <https://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/aro.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>

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