



**NEPHROLOGY PROGRAM  
DEPARTMENT POLICIES AND PROCEDURES**

**Hemodialysis - Section 03 - Patient Assessment & Management - Neph 3-13  
Management of Antibiotic Resistant Organisms (ARO) in the Hemodialysis Unit  
No.: 01361 (TOH Standardized Policy Number)**

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<b>ISSUED BY:</b> Hemodialysis Clinical Practice / Infection Control	<b>DATE OF APPROVAL:</b> 2014/06
<b>APPROVED BY:</b> Program Clinical Director / Division Head	<b>LAST REVIEW/REVISION DATE:</b> 2017/03
<b>CATEGORY:</b> Patient Assessment and Management	<b>IMPLEMENTATION DATE:</b> 2014/06

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**PURPOSE:**

- To provide guidelines regarding management of Antibiotic-Resistant Organisms (ARO) positive patients in the Hemodialysis Units at The Ottawa Hospital and its Satellites

**BACKGROUND:**

- Risk factors associated with acquiring ARO include chronic underlying diseases; prolonged hospitalization; broad-spectrum antibiotic therapy and the presence of invasive devices
- These guidelines do not replace, but supplement Infection Prevention and Control (IPAC) policies as listed below

**DEFINITION(S):**

- Antibiotic-Resistant Organisms: A microorganism that has developed resistance to the action of several antimicrobial agents and that is of a special clinical or epidemiological significance (i.e. Methicillin-Resistant Staphylococcus Aureus (MRSA), Extended-Spectrum Beta-Lactamase (ESBL), Carbapenemase Producing Enterobacteriaceae (CPE), etc)

## ALERTS:

- Do not screen known MRSA positive patients unless directed by IPAC
- Removal of precautions may be considered for MRSA on an individual basis in consultation with IPAC
- Inform IPAC of Hemodialysis patients newly identified or new to program with an ARO
- Patients returning from travel outside of Canada that were hospitalized or received hemodialysis treatment(s) during their visit will require contact precautions on their return until all ARO screening results are back and negative. In addition to MRSA screening also send rectal swab (and if any wounds) for ESBL and rectal swab (and if any wounds) for CPE. Clearly indicate on each requisition that patient travelled outside of Canada

## PROCEDURE:

### 1. SCREENING POLICY

#### MRSA

- Obtain screening cultures for MRSA:
  - At the first outpatient Hemodialysis treatment
  - At their first return Hemodialysis treatment, following dialysis in a center that is not part of The Ottawa Hospital (TOH)
  - At their first outpatient Hemodialysis treatment if they have been hospitalized for >24 hours (includes hospitalization at TOH)
- All patients meeting the above criteria will require Microbiology Culturing for MRSA. Obtain a swab from:
  - Anterior nares
  - Draining wound/open lesions (maximum 2 largest sites)
  - Any insertion sites (permcath, jugular, femoral, translumbar lines)
  - Rectum (or stoma)

**Note:** Refer to [IPAC Policy #00001](#) - Admission Screening for MRSA (Appendix A Procedure to obtain MRSA Screening Swabs)

#### Vancomycin-resistant *Enterococcus* (VRE)

- No routine screening is done for VRE
- Rectal (or stoma) swab is done for VRE only if requested by the transferring facility and requisition must clearly indicate **“Dialysis Patient Travelling-VRE Screening required”**

#### Other AROs

- ARO screening other than MRSA only as directed by IPAC

## 2. MANAGEMENT OF PATIENTS WITH AROs

### A. Care of patient with methicillin-resistant staphylococcus aureus (MRSA)

- All patients who are colonized or infected with MRSA should be managed on Contact Precautions, refer to [IPAC Policy #00007](#) - Contact Precautions
- Patient Placement:
  - Private room when available
  - If private room not available then preference is to isolate at end of bay with screen/curtain (screen/curtain is not to impede visibility of the patient)

### B. Care of patient with extended-spectrum beta-lactamase (ESBL)

- Routine precautions are used with patients colonized or infected with ESBL unless patient incontinent or has uncontained drainage then Contact Precautions are required
- If patient is admitted to TOH then Contact Precautions are followed while in the Hemodialysis unit
- Patient Placement:
  - Private room when available
  - If private room not available then preference is to isolate at end of bay with screen/curtain (screen/curtain is not to impede visibility of the patient)

### C. Care of patient with carbapenemase producing enterobacteriaceae (CPE) formerly referred to as carbapenem resistant enterobacteriaceae (CRE)

- All patients who are colonized or infected with CPE (this includes *Klebsiella pneumoniae* Carbapenemase (KPC) and New Delhi metallo-beta-Lactamase (NDM-1) should be managed on Contact Precautions
- Patient Placement:
  - Private room always

### D. Care of patient with multi-drug resistant organism (MDRO)

- All patients who are colonized or infected with MDRO should be managed on Contact Precautions unless otherwise directed by IPAC
- Patient Placement:
  - Private room (if private room not available contact IPAC)

## 3. ROLES AND RESPONSIBILITIES:

- All patients must perform hand hygiene on entrance to and prior to leaving the Hemodialysis unit
- Patients may wait in the common waiting room
- Remove all non-essential items from the room/bay area
- If the patient touches common patient care items before entering their private room, (i.e. the scale, thermometer) that item must be disinfected with a hospital-grade disinfectant wipe

#### 4. ROOM DISINFECTION:

- Discharge clean by housekeeping is required for all patients on contact precautions with the following exception:
  - Patients on contact precautions for MRSA or ESBL can have a modified clean by housekeeping (**see Appendix A**) of the room/bay space following discharge. Discharge clean is required if floor or walls are visibly soiled

#### DOCUMENTATION:

1. For the Hemodialysis record Select the NephroCare Hemodialysis Complication from the list “Precaution-Contact” to indicate that precautions were in place throughout the treatment

#### RELATED POLICIES / LEGISLATION:

1. Infection Prevention and Control Policies and Procedures - Disease Specific Policies - [Policy # 00001 Admission Screening for MRSA](#)
2. Infection Prevention and Control Policies - Infection Prevention and Control Precautions - [Policy # 00007 Contact Precautions](#)
3. Infection Prevention and Control Manual - Disease Specific Policies - [Policy # 00017 Management of Antibiotic Resistant Organisms \(ARO\) in the Ambulatory Care](#)
4. Infection Prevention and Control – Disease Specific Policies - [Policy # 00018 Management of Methicillin Resistant Staphylococcus Aureus \(MRSA\) Positive Patients in an the Inpatient Setting](#)
5. Infection Prevention and Control Manual – Infection Prevention and Control Precautions - [Policy # 00021 Multi-Drug Resistant Organism \(MDRO\) Positive Patients in the Inpatient Setting](#)

#### REFERENCES:

1. Center for Disease Control and Prevention. Recommendations for Preventing Transmission of Infection among Chronic Hemodialysis Patients. MMWR, 50: 1-43, April 27, 2001
2. Provincial Infectious Diseases Advisory Committee (PIDAC): Routine Practice and Additional Precautions in all Health Care Settings, Ministry of Health and Long Term Care, November 2012

#### COMMENTS / SIGNIFICANT REVISIONS:

1. **Appendix A** Hemodialysis Modified Cleaning Process

## APPENDIX A:

### HEMODIALYSIS MODIFIED CLEANING PROCESS

#### HEMODIALYSIS MODIFIED CLEANING PROCESS

##### **Modified Cleaning Process only to be used for patients on contact precautions for MRSA and ESBL**

Notify housekeeping if patient on contact precautions for something other than MRSA and ESBL, i.e. other AROs, diarrhea, *C. difficile*, gastroenteritis, etc then discharge clean is done

- i. Housekeeping will clean high touch surfaces (including light switches, remote control, call bell, etc)
- ii. Floors and walls will not need to be cleaned unless visibly soiled
- iii. Sharps containers do not need to be changed unless 2/3 full
- iv. Clean portable screen if used
- v. Clean chair/stretchers/bed
- vi. Clean counter/sink
- vii. Empty garbage container
- viii. Empty linen hamper
- ix. If curtain utilized it would need to be changed