

SCREENING FOR ANTIBIOTIC RESISTANT ORGANISMS (AROS) IN ACUTE CARE AND LONG TERM CARE	Infection Prevention and Control IPC – 050
Issuing Authority (sign & date)	Debbie Molloy, Interim Vice President Signed by Debbie Molloy Dated January 5, 2016
Office of Administrative Responsibility	Infection Prevention and Control
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Level	Two (II)
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Overview

Admission of patients colonized or infected with an antibiotic resistant organism (AROs) presents a significant risk for transmission to other patients. Current best practice recommend admission screening for the following AROs:

- Methicillin resistant *Staphylococcus aureus* (MRSA)
- Vancomycin resistant *enterococcus* (VRE)
- Carbapenem-resistant enterobacteriaceae (CRE)

POLICY

The admission screening process is to be initiated at the entry point in the health care system and completed within 48 hours of admission.

The responsibility for admission screening depends on the clinical areas (nurse or designate).

Scope

Applies to nursing staff employed in Acute Care and Long term Care within Eastern Health.

Purpose

To reduce the risk of transmission of AROs.

Procedure

Screening for AROs on admission to all Eastern Health Acute Care facilities will be conducted based on the following:

- 1. Direct hospital transfers from any hospital outside of Newfoundland and Labrador, but within Canada**
 - Place patient in a private room on Contact Precautions; if a private room is unavailable contact the Infection Control Practitioner (ICP) for your area to assist with room placement.
 - Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
 - Screen for VRE – rectal swab x 1 (swab must have feces on it)
- 2. Patients who have had an inpatient hospitalized greater than 24 hours in any hospital outside of Newfoundland and Labrador in the past 12 months, but within Canada**
 - Can place in a semi-private room or ward
 - Contact Precautions must be implemented at the bedside with signage clearly visible above the bed space
 - Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
 - Screen for VRE – rectal swab x 1 (swab must have feces on it)
- 3. CRE Screening is to be done for the following:**
 - a. Direct hospital to hospital transfers to an Eastern Health facility from a facility OUTSIDE of Canada**
 - b. Any Patient who has been hospitalized OUTSIDE of Canada in the past 12 months**
 - Private room is required; if a private room is unavailable contact the Infection Control Practitioner (ICP) for your area to assist with room placement.
 - Must have a dedicated commode or washroom
 - Contact Precautions must be implemented with signage clearly visible
 - CRE screening is done with a rectal swab (swab must have feces on it)

Additionally you must:

- Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
- Screen for VRE – rectal swab x 1 (swab must have feces on it)

4. All patients who have previously tested positive for an ARO (MRSA, VRE, CRE)

Consult with Infection prevention and Control (IPAC) for direction

Management of acute care patients while awaiting the results of ARO Screening Tests:

1. Management of patients while awaiting results of ARO screening tests

- Maintain strict Contact Precautions at the bedside. Patient must have dedicated commode or washroom.
- Contact Precaution signage must be placed at the bed space

2. Release of Contact Precautions or Private Room Placement

- If the results of the ARO screening test are **NEGATIVE**, Contact Precautions can be discontinued immediately. If patient had been placed in a private room for the purposes of Contact Precautions while awaiting the ARO screening test results, they may be placed in a ward or semi-private room.
- If the ARO screening results are **POSITIVE**, patient must be moved to a private room (if not already in one), and Contact Precautions must be strictly adhered to. If no private room is available, consult with the Infection Control Practitioner (ICP) about placement.

Screening for AROs on Admission to all Eastern Health Long-term Care facilities:

1. Direct hospital transfers to an Eastern Health LTC facility from any hospital outside of Newfoundland and Labrador, but within Canada

- Contact IPAC
- Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
- Screen for VRE – rectal swab x 1 (swab must have feces on it)

2. Patients who have had an inpatient hospitalized greater than 24 hours in any hospital outside of Newfoundland and Labrador in the past 12 months, but within Canada

- Contact IPAC

- Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
 - Screen for VRE – rectal swab x 1 (swab must have feces on it)
- 3. CRE Screening is to be done for the following:**
- a. **Direct hospital to hospital transfers to an Eastern Health facility (including LTC) from a facility OUTSIDE of Canada**
 - b. **Any Patient who has been hospitalized OUTSIDE of Canada in the past 12 months**
 - Contact IPAC
 - Must back a dedicated commode or washroom
 - Contact Precautions must be implemented with signage clearly visible
 - CRE screening is done with a rectal swab (swab must have feces on it)

Additionally you must:

- Screen for MRSA – swab x 1 from each site:
 - nares
 - open areas / draining wounds (if applicable)
 - exit site of central lines (if applicable)
- Screen for VRE – rectal swab x 1 (swab must have feces on it)

Supporting Documents *(References, Industry Best Practice, Legislation, etc.)*

- Annex A: Screening, Testing and Surveillance for Antibiotic-Resistant Organisms (AROs) from the Provincial Infectious Diseases Advisory Committee (PIDAC) Revised: February 2013. Ontario, Canada
- Safer Health Care Now, ARO bundle, 2009

Linkages

- Cohorting of Patients with AROs in Eastern Health Facilities Policy: IPC-114
- Routine Practices Policy: IPC-200
- Contact Precautions Policy: IPC-120
- Personal Protective Equipment (PPE) – Donning and Removal of PPE Policy: IPC-190

Key Words

Screening, Antibiotic resistant organisms, Methicillin resistant *Staphylococcus aureus* (MRSA), Vancomycin resistant enterococcus (VRE), Carbapenem-resistant enterobacteriaceae (CRE), carbapenemase producing enterobacteriaceae (CPE), carbapenem resistant gram negative bacteria (CRGNB), Multi-drug resistant organisms(MDROs), superbugs, cohorting,

isolation, Personal protective equipment (PPE)

Definitions & Acronyms

Antibiotic-Resistant Organism (ARO)	A microorganism that has developed resistance to the action of several antimicrobial agents and that is of special clinical or epidemiological significance.
Carbapenem-resistant enterobacteriaceae (CRE)	CRE are gram negative bacilli species such as <i>Pseudomonas aeruginosa</i> , <i>acinetobacter species</i> , and species belonging to the enterobacteriaceae family i.e. <i>Escherichia coli</i> , <i>Klebsiella pneumonia</i> and <i>Enterobacter cloacae</i> that demonstrate a resistance to the carbapenem class of antibiotics.
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	MRSA is a strain of <i>Staphylococcus aureus</i> that has a minimal inhibitory concentration (MIC) to oxacillin of > 4 mcg/ml and contains the <i>mecA</i> gene coding for penicillin-binding protein 2a (PBP2a). MRSA is resistant to all of the beta-lactam classes of antibiotics, such as penicillins, penicillinase-resistant penicillins (e.g. cloxacillin) and cephalosporins.
Vancomycin-resistant Enterococci (VRE)	VRE are strains of <i>Enterococcus faecium</i> or <i>Enterococcus faecalis</i> that have minimal inhibitory concentration (MIC) to vancomycin of > 32 mcg/ml. They usually contain the resistance genes <i>vanA</i> or <i>vanB</i> .

Policy History

This policy replaces the following policies:

Legacy Board	Policy #	Policy Name	Date Revised
	IPC-060	Admission and Screening for Antibiotic Resistant Organisms (AROs) in Acute Care	September 2013