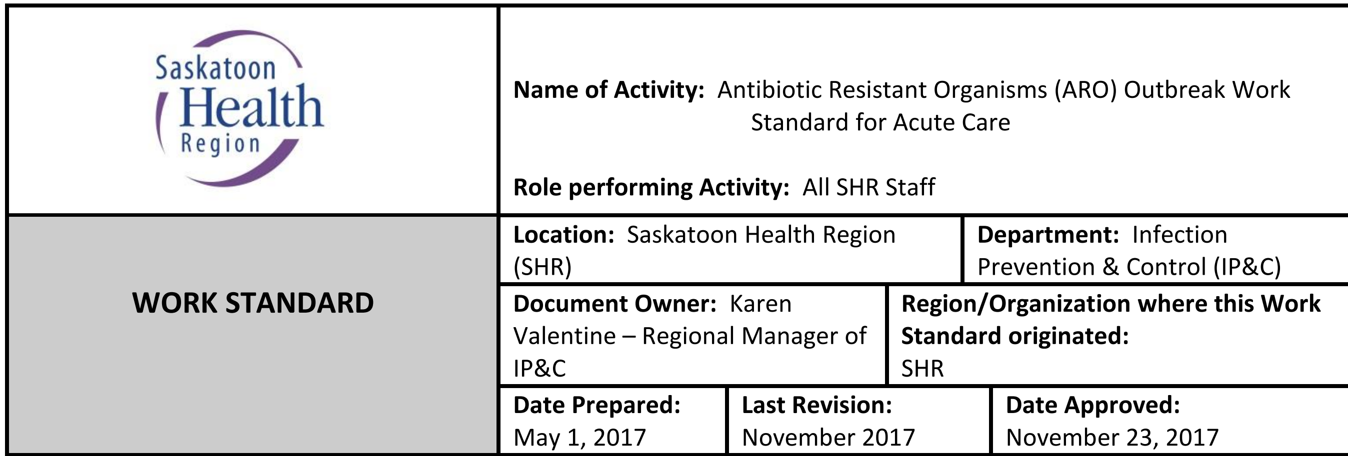
55-30 Work Standard for ARO Outbreaks



Saskatoon Health Region	**Name of Activity:** Antibiotic Resistant Organisms (ARO) Outbreak Work Standard for Acute Care **Role performing Activity:** All SHR Staff		
WORK STANDARD	**Location:** Saskatoon Health Region (SHR)	**Department:** Infection Prevention & Control (IP&C)	
	Document Owner: Karen Valentine – Regional Manager of IP&C	**Region/Organization where this Work Standard originated:** SHR	
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Essential Tasks:	
1.	**Validation of an ARO Outbreak** • The Infection Control Practitioner (ICP) validates that the ARO cases have an epidemiological link and, in consultation with the Infection Control Officer (ICO), and declares an outbreak. • An electronic line list is started by the ICP. The ICP will call Population & Public Health at 306-655-4612 for an outbreak number. The ICP completes the Outbreak Notification Report for Population & Public Health, who will send it to Saskatchewan Ministry of Health.
2.	**ARO Outbreak Phases** • An outbreak is divided into three phases depicted in the cycle below: **Suspect Outbreak / Confirmed Outbreak / Outbreak Over** • Explanations for each phase can be found in Appendix A – Phases of Outbreak Cycle • The 3 phases of outbreak indicate the level of IP&C measures to implement and practice (See Appendix B – Unit Processes During ARO Outbreak Phases) which describes specific practices required during an outbreak, over and above those routine practices during “normal operations”. • Changes to the Phase of Outbreak are determined and communicated by the Infection Prevention and Control (IP&C) department.
3.	**ARO Outbreak Phases** • An outbreak is divided into three phases depicted in the cycle below: **Suspect Outbreak / Confirmed Outbreak / Outbreak Over** • Explanations for each phase can be found in Appendix A – Phases of Outbreak Cycle • The 3 phases of outbreak indicate the level of IP&C measures to implement and practice (See Appendix B – Unit Processes During ARO Outbreak Phases) which describes specific practices required during an outbreak, over and above those routine practices during “normal operations”. • Changes to the Phase of Outbreak are determined and communicated by the Infection Prevention and Control (IP&C) department.
4.	**Communication During Phases of Outbreak** • Communication regarding IP&C measures needing to be in place will be made to appropriate staff depending on the phase of ARO outbreak. • Infection Prevention & Control will notify appropriate staff by telephone as well as with a memo by email. **This memo will contain pertinent information on Infection Control Measures required during the outbreak.** This memo will be updated as needed by IP&C (usually weekly) or as measures are revised if needed.

Suspect Outbreak:

- Unit Manager, Environmental Services Manager/Supervisors and IP&C Manager will be notified in person/by phone of suspect outbreak and the increased IP&C measures that are required. **Memo:** Declaring "Suspect Outbreak" will be distributed to the Unit Manager, Environmental Services Manager/Supervisors and IP&C Manager, as well as to Directors of the unit, Environmental Services and IP&C.

Confirmed Outbreak:

An ARO Outbreak Team will be assembled to meet regarding the confirmed ARO outbreak and increased IP&C measures that are required.

- Outbreak Team Members: In conjunction with the Unit Manager and the ICO, the ICP arranges an ARO outbreak huddle, which will include representatives from the following departments providing services to the unit, including but not limited to:
    - IP&C Manager,
    - ICO,
    - Unit ICP,
    - Site Leader,
    - Unit Manager,
    - Unit Educator,
    - Unit Coordinator,
    - Environmental Services Manager,
    - Environmental Services Supervisors,
    - ACAS Manager,
    - Practitioner Affairs Representative,
    - Pharmacy,
    - Laboratory Manager,
    - Phlebotomy Manager,
    - Diagnostic Imaging Manager,
    - Food & Nutrition Services Manager,
    - Nursing Student Liaison,
    - Cancer Centre Liaison,
    - Occupational Health & Safety,
    - Interprofessional Practice, etc.

Purpose of Outbreak Team:

- Facilitate clear communication to staff, physicians, students, clients, volunteers and visitors.
- Delegate responsibilities appropriately based on the specific ARO outbreak measures discussed.
- Obtain or plan for obtaining anticipated resources - staff, supplies, medications, etc.
- Determine in-service/education requirements and how to address them.
- Make major decisions such as unit closure, visitor/student restrictions, procedure cancellations, initiation of the Emergency Preparedness Plan, etc.
- Determine frequency of subsequent ARO outbreak huddles to deal with outlining issues that come up on a day to day basis.

Memo: Declaring "Confirmed Outbreak" will be distributed to "All SHR E-mail Users" and posted on the IP&C InfoNet Outbreak Management page, outlining increased IP&C measures required by all departments. This memo will be emailed and posted **no later than 1400h**, to ensure departments have adequate time to implement their department specific ARO outbreak protocols.

- **Regular huddles will be scheduled by the ICP and the unit manager.**

Outbreak Over:

Memo: Declaring "Outbreak Over" will be distributed to "All SHR E-mail Users" and posted on the IP&C InfoNet Outbreak Management page. This memo will be emailed and posted **no later than 1400h**, to ensure departments have adequate time to return their department to normal practices.

5.	**Manager Of Nursing (MON) Role** • Play a lead role during an ARO outbreak. • Support their staff to adhere to outbreak protocols, implementation of IP&C measures, visitor restrictions, etc. • Ensure every shift in-charge person is aware of outbreak measures and their responsibilities. • The outbreak unit MON should inform the MON on-call for the site, of the unit situation, limitations, etc. • A tool has been developed for each phase of outbreak to help guide the unit manager and other managers to lead their department on the ARO outbreak unit. See Appendix D –ARO Outbreak Checklist. The outbreak unit MON will look for gaps in IP&C practices and in your environment.
6.	**ARO Outbreak Screening Protocol** Client screening may be extended as determined by the ICO (i.e., to other units/pods that are associated with the unit). 1. Screening for **ALL** Unit Clients During Phases of Outbreak: **Suspect Outbreak:** A. Admission – Outbreak ARO swab must be completed within 24 hours of admission. B. Discharge – Outbreak ARO swab must be collected before discharged. C. Transfer – Outbreak ARO swab is taken before transfer to another unit or healthcare facility. **No precautions required for transferred client at this suspect phase of the outbreak.** D. Prevalence screening for 2 weeks. **Confirmed Outbreak (see continued transmission):** A. Admission – Outbreak ARO swab must be completed within 24 hours of admission. B. Discharge – Outbreak ARO swab must be collected before discharged. C. Transfer – Outbreak ARO swab is taken before transfer to another unit or healthcare facility. **Contact Precautions are required on the receiving unit/healthcare facility until the ARO screen collected on Day 7 is negative.** See Appendix E – Outbreak Transfer Communication Tool Template. D. Prevalence screening continues once a week for the duration of the outbreak. **Outbreak Over:** A. Continue A/D/T screening for at least 2 more weeks. **No additional precautions required for transferred clients. The receiving unit/healthcare facility still needs to collect an ARO screen 7 days after transfer from the "Outbreak Over" unit.** 2. Screening **Contacts** of a New "Positive" Client During **ALL Phases** of Outbreak: • The ICP will fill out the ARO Surveillance Orders Medical Directive with the required dates and types of swabs needed. See IP&C Policy 60-30 Screening for AROs – Medical Directives, • Any contacts of a new ARO positive client will be placed on Contact precautions until client is cleared with one swab at least 7 days from last contact with the unknown new ARO. • Contacts will have an alert placed on in the Laboratory Information System (LIS) as an Epidemiologic Significant Occurrence (ESO), indicating the need for screening cultures. • If a contact is discharged before the required screening swabs are performed, an ESO that prints on the new admission will remind the staff to collect a screening swab at the time of readmission.

	• See handout in Contacts of an Antibiotic Resistant Organism on Contact Precautions – Client, Family & Visitor Information for client/family information related to contacts on ARO Outbreak units. 3. Environmental Screening • If indicated, the ICO designates appropriate environmental cultures to be performed.
7.	**Laboratory Samples** • The ICP clearly outlines the body sites to be screened as sites vary by organism. See IP&C Policy 60-30 Appendix C - Specimen Collection Guide. • When the staff send specimens write on the requisition: **"Outbreak-Stat – Outbreak #"** • ICP, on the advice of the ICO or designate and in collaboration with the microbiology lab, will determine the day of the week to perform weekly prevalence screens.
8.	**Control Measures** Control measures vary with the type of ARO, the phase of the outbreak or extent of the outbreak. Additional IP&C measures to stop transmission include but are not limited to: **a) Client Placement** • Follow protocol from IP&C Policy Manual section 30 Additional Precautions. • Every effort should be made to place positive ARO's in private rooms. See the Additional Precautions and Client Placement Guide for assistance. • If a private room cannot be assigned follow the Client Washroom Assignment Decision Tool to determine which client uses the bathroom and which client(s) use a commode to mitigate transmission from bathroom sharing. • Attempt to cohort clients with the same ARO if private rooms are not available. **b) Hand Hygiene** • Improving hand hygiene (HH) will decrease transmission. • Ensure HH audits are completed at least **once** per week. Blind HH audits provide more accurate HH compliance results. If there is a HH auditor from another unit or return to work program, coordinate to have that person do blind HH audits. • Become familiar with the "4 Moments of Hand Hygiene", appropriate steps of proper HH and the correct amount of time needed to perform proper HH. This makes it possible to give respectful in the moment correction to anyone seen not performing HH correctly. See IP&C Policy 20-20 Hand Hygiene. • Implement an action plan using ideas to increase HH compliance for staff, clients and visitors. • Audit the placement of ABHR to ensure it is at point of care around the unit to support HH efforts. **c) Personal Protective Equipment (PPE)** • The dedicated PPE station such as a supply cart needs to be properly stocked and must be located outside the room. Supplies should include: Outside the room: o Alcohol-based hand rub (ABHR) o Gloves (3 sizes) o Clean gowns

  - Mask with attached visor as required
  - Hospital grade disinfectant

  Inside the room:
  - Waste basket
  - Dirty hamper
  - ABHR
- The dedicated PPE supply station must not become cluttered with other items and must not be used for storing additional items.
- Use PPE appropriately. **Remember: New PPE must be used for each client.**
- Perform PPE audits on the unit to assess staff use of PPE. See Appendix I – PPE Audit Tool Template. Correction of inappropriate PPE practices should be respectful and in the moment. Communication of these results should be shared with any manager who has staff who did not use PPE properly to allow for increased education within their department.
- **HH must be performed at the appropriate moments when donning and doffing PPE.**
- See IP&C Policy 20-150 Personal Protective Equipment (PPE) - Donning and Doffing.
- PPE for dedicated unit staff vs. unit support services. See Appendix F –Multi-Unit Staff Protocol for Entering an ARO Outbreak Unit:

PPE for Clients ON Additional Precautions

Staff	**PPE Use**	**Instructions**
Dedicated unit staff (RNs, LPNs, CCAs, Unit Assists, etc.)	Yes	• Must wear PPE when contacting the client or the client environment. • Gown and gloves are required for the care of every client on additional precautions.
Unit support services (physicians, residents, therapies, dieticians, pharmacy, food and nutrition, housekeeping, etc.)	Yes	• **Must wear new PPE for every client** • Visit clients on additional precautions last

Clients on additional precautions should remain in their room, unless medically necessary tests are required.

PPE for Clients NOT on Additional Precautions

Staff	**PPE Use**	**Instructions**
Dedicated unit staff (RNs, LPNs, CCAs, Unit Assists, etc.)	No	• Use routine practices (do not have to gown, glove unless situation deems it necessary).
Unit support services (physicians, residents, therapies, dieticians, pharmacy, housekeeping, etc.)	Yes	• **Must wear new PPE for every client.**
Note: Food & Nutrition staff is not required to wear PPE in non-precaution rooms when delivering trays or snacks when ARO outbreak standard work is followed as agreed upon with IP&C.		

d) Client Care Equipment

- The unit should ensure that a routine cleaning schedule is in place and is followed for cleaning shared equipment. Extra support staff may be necessary for this during outbreak. See Appendix C – Unit Cleaning Guidelines Checklist Example.
- Environmental Services and unit staff are to determine if there are any items on the unit

that neither group is cleaning and may be missed by both groups.

- Dedicate equipment, as much as possible, to individual clients that are positive.
- If equipment must be shared it must be thoroughly cleaned and disinfected between clients with an approved hospital grade disinfectant according to manufacturer's recommendations ensuring that the appropriate wet contact time is achieved.
- More equipment may need to be purchased in order to have enough to adequately assign equipment on the unit.
- Some equipment such as blood pressure cuffs can be kept at the bedside and be used on a single client for their entire stay. The item should be cleaned routinely during their stay and should be on the routine cleaning schedule to ensure it is not becoming heavily contaminated. At discharge it is thoroughly cleaned and disinfected before being assigned to the next client.
- Commodes are a common vector for spreading infectious organisms. Dedicating a commode to a single client as much as is possible is important. If it must be shared, ensure to clean and disinfect all surfaces including the underneath surfaces as well as the top surfaces between every use. See Appendix G – Cleaning/Disinfecting Commodes Work Standard. The dedicated commode can be kept at the bedside as long as it is cleaned after every use and there is sufficient space.

e) Environmental Cleaning

Suspect and Confirmed Outbreak:

- Environmental Services will implement twice daily cleaning of the unit (high touch surfaces, including bathrooms) with appropriate hospital grade disinfectants (i.e., Oxivir TB, etc.). Bleach will be used to clean/disinfect toilet bowls for all outbreaks.
- A "Terminal Clean" includes changing curtains and washing the walls, and is implemented on all rooms upon discharge or transfer regardless of ARO status.
- Environmental Services, when dedicated to the unit, will wear clean PPE and change it between **EVERY** client space. If Environmental Services cannot be dedicated to the unit, staff will use the unit dedicated cleaning cart and will also wear clean PPE on entry to the unit and doff PPE upon exiting the unit (in addition to between every client space).
- If a client test is positive in a multi-bed room – a terminal clean is done on the entire room. The terminal clean involves changing all the curtains in the room, as well as washing all the walls and the bathroom.

f) Traffic Flow

Client Flow:

- Limit transfers to or from outbreak units to other units unless medically necessary.
- To limit spread of the organism, no social visiting by clients on other units. Socializing should take place in areas away from the units.
- Limit transfers within the unit.
- Attempt to cohort clients with the same ARO if possible.
- Transport for tests and procedures:
  - Inpatient wards – please remind receiving unit staff that **all clients leaving your unit need to be treated with additional precautions** because they are coming from an outbreak unit where transmission risk is high.
  - Receiving department – please remember to ask if a client is coming from an outbreak unit so they can be put on additional precautions in the OR and Recovery Room/other departments where tests are being done.

Nursing Unit Staff:

- Movement of nursing unit staff from an outbreak unit to a non-outbreak unit is in contravention of IP&C best practice guidelines for outbreak. If it is determined that it is

medically necessary for a nurse with specialized skills to be transferred back to a non-outbreak unit for client safety, have a conversation with IP&C to understand the totality of risks so the decision is made with full knowledge and ownership of the risks. If it is determined to be necessary to move the staff to another unit they must change into a clean uniform before entering another unit.

- Staff may leave the outbreak units for breaks as usual after removing all PPE and performing HH but should not go to a non-outbreak unit for those breaks.

Unit Support Services:

- Multi-disciplinary professionals and support staff (i.e., physicians, residents, therapies, dieticians, pharmacy, etc.) continue to provide essential services.
- These departments should visit outbreak units last if possible, perform HH on entry and exit of the unit, clean/disinfect their personal equipment (i.e., cell phones, stethoscopes, etc.) and implement their department specific outbreak protocol. Consult IP&C if there are questions. See Appendix F – Multi-unit Staff Protocol for Entering an ARO Outbreak Unit.

Shared Spaces:

- Unit kitchens are closed to client and visitor access (only staff can access kitchen areas for clients).
- Other shared spaces/common rooms on the unit may be closed for the duration of the outbreak (i.e., playroom, family room, etc.).

g) Bio-load Reduction

- Ensure ALL clients have DAILY baths as well as changes of bedding.
- Clients who are positive with MRSA should use individual bottles of Chlorhexidine gluconate (CHG) antimicrobial soap for bathing and client HH. The CHG helps to decrease the biological matter available on the skin to be shed into the environment. If there is less in the environment, there is less chance of transmission.
- VRE and ESBL are organisms that live in the bowel (not on the skin like MRSA) it is less useful to use CHG soap for these ARO's. A risk assessment should be performed to decide whether to use CHG on these other ARO's.

h) Disposal of Body Fluids

- Ensure that all fluids (i.e., blood, urine, feces, and other fluids such as: water jugs/cups, IV bags, wash basins and any other liquids, etc.) are being disposed of in the dirty service room.
- Whenever possible use bed pan/commode liners (i.e., Zorbie, Hygie) in the containers or disposable containers with absorbing beads and dispose of body fluids.
- Some units have washer/disinfector (i.e., Meiko, Arjo) machines. This is safer than other manual emptying methods.
- Wipe the area around the hopper or washer/disinfector with a bleach wipe to decontaminate the area after dumping.

i) Client, Family and Visitors

Client:

- Provide the client with the Client and Family Hand Hygiene pamphlet.
- Provide opportunities for the client to perform HH or assist the client with their HH.

Visitors:

- Instruct visitors about HH using soap and water **OR** alcohol-based hand rub:
  - before entering the unit and again when entering the client room,
  - when leaving the client room and again upon leaving the unit, and

	o after direct contact with the client or the client room. • Provide visitors with the Instructions for Visitors: During an Outbreak handout. o Visitors should only visit their family member and no other clients. o IP&C recommends a limit of 2 visitors per client at any given time so that visitors do not overflow into other client bed spaces. o Avoid visiting if ill. o Avoid bringing children into the hospital. o Do not put their belongings on the client bed. **You may also provide the client or visitor with an ARO fact sheet from section 70 of the IP&C Policy and Procedure Manual. They can be found at these links: MRSA, VRE, and ESBL.**