

## Policy & Procedure (P&P)

Policy Title :		
Control of Methicillin Resistant Staphylococcus Aureus		
Department	Index No.	Scope
INFECTION CONTROL	ICD- 21	Doctors /Nursing Staff
Issue Date	Revision NO	Effective Date
10/28/1432	4	15/11/2020
Review Due Date	Related Standard NO.	Page Number#
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### 01. Policy:

- 01.1. All HCW at AQGH dealing with patient care must adhere to these guidelines.

### 02. Definition :

- 02.1. MRSA**-refers to strains of Staphylococcus aureus that are resistant to synthetic penicillin (oxacillin , nofloxacin and mehticillin). It is also resistant to cephalosporins, other betalactam antibiotics and sometime to other antibiotics (erythromycin, clindamycin, aminoglycoside, and quinolones).

### 03. Purpose :

- 03.1. To provide guidelines in order to prevent the spread of MRSA at AQG hospital

### 04. Procedure :

#### 04.1. Management of Patients with Suspected MRSA Infection or Colonization

##### 04.1.1. Screen all patients who are:

- 04.1.1a. Admitted to the intensive care units (ICU).
- 04.1.1b. Transferred from other hospitals or have been treated in another hospital/clinic within the past six months.
- 04.1.1c. Undergoing liver or cardiac, orthopedic (including spine) surgery (pre-operatively).
- 04.1.1d. Hemodialysis patients admitted for their first dialysis treatment and for placement of any type of vascular access (i.eA., V -fistula, permanent catheter, graft or port access device).
- 04.1.1e. Known to be previously MRSA positive
- 04.1.1f. Roommates of positive patients not on isolation precautions.

##### 04.1.2. Sites to screen

- 04.1.2a. Anterior nares.

04.1.2b. Non intact skin areas (e.g., tracheostomy, pressure sores or surgical wounds).

04.1.2c. Neonates and pediatric patients awaiting liver or cardiac surgery should also have both the groin and axilla screened.

#### 04. 1. 3 Specimen collection

04.1.3a. Use the packet with a sterile swab stick with transport medium.

04.1.3b. Clean the site with normal saline to remove debris before swabbing.

04.1.3c. Use the same swab for identical sites: one swab for both axilla and one swab for both inguinal areas.

04.1.3d. Use separate swabs to screen other sites

NB: The accompanying requisition should request “MRSA screen.”

#### 04.1.4. Patient placement upon admission:

04.1.4a. Request a single room for contact isolation from the Admission Office. If a single room is not available then two or more patients receiving MRSA screening may be cohorted after consultation with infection control.

04.1.4b. Observe contact isolation precautions in addition to standard precautions.

- Place a contact isolation sign on the outside of the isolation room door or on the bed if the patient is sharing a room.
- Ensure that all staff understand and comply with the isolation precautions and hand hygiene policy.
- Change all PPE and perform hand hygiene between patients in the same room (barrier precautions).
- Cohort non-critical items such as stethoscopes and pressure cuffs along with each patient
- Store the minimum amount of supplies in the patient room.

04.1.4c. Limit the patient's activities outside of the ward.

04.1.4d. Notify receiving departments/wards (e.g., Radiology, Endoscopy, Clinics, OR) of the patient's isolation status when the patient must be transported for treatment/tests

**04.1.4e. All Patients transferred to the hospital must be kept under contact - transmission based precaution unless proving otherwise.**

#### 04.2. Management of MRSA-Positive Patients

**04.2.1.** Patients determined to be MRSA positive from surveillance screening or clinical specimens upon or after admission.

**04.2.2.** Readmitted patients that were MRSA positive on discharge (flag/alert).

**04.2.3.** Microbiology Laboratory:

04.2.3a. Notify the ward of MRSA-positive patients.

04.2.3b. Notify the Infection Preventionist (IP) of all new positive MRSA cultures.

**04.2.4.** Nursing:

04.2.4a. Request a single room for contact isolation from Admission Office. If a single room is not readily available, two or more MRSA-positive patients can be cohorted after consultation with infection control.

04.2.4b. MRSA-positive patients who are in multi-bed rooms can be managed temporarily while

waiting to be transferred to a single room or an appropriate cohort.

- Place a sign on the cubicle or curtains of the patient's bed.
- Ensure easy access to PPE and alcohol-based hand rub.
- Practice strict standard precautions between interactions with patients in the room.
- Transfer to a single room or cohort with another patient with the same organism as soon as possible.

04.2.4c. Observe contact isolation precautions in addition to standard precautions with all patient care activities.

- Place a contact isolation sign on the outside of the isolation room door
- Ensure that staff understand and comply with the isolation precautions and hand hygiene protocol.
- Cohort non-critical items such as stethoscopes and pressure cuffs along with the patient
- Store the minimum amount of supplies in the patient's room.
- Use an isolation cart for extra supplies (kept outside the room).

04.2.4d. Rescreening of MRSA-positive patients must occur in consultation with the IP.

04.2.4e. Screen exposed patients who shared a room with a known MRSA-positive patient for more than 48 hours .

04.2.4f. Limit the patient's activities outside of the ward.

04.2.4g. Notify receiving departments/wards (e.g., Radiology, Endoscopy, Clinics, OR) of the patient's isolation status when the patient must be transported for treatment/tests.

- **All patients for transfer outbound known to have MRSA must be reported upon requesting the transfer with the supporting document.**

04.2.4h. Maintain contact isolation during decolonization process.

04.2.4i. Ensure concurrent and terminal cleaning of the isolation room and equipment as per housekeeping procedure.

04.2.4j. Handle/discard contaminated items as per standard precautions.

04.2.4k. Cohorting nursing staff providing direct patient care is recommended.

#### 04.2.5. Medical:

04.2.5.a. Restrict antibiotic use (especially broad-spectrum antibiotics) and invasive devices when possible.

04.2.5b. Discharge the patient when his/her medical condition allows

04.2.5c. Seek the advice of Infectious Diseases Consultants or IP regarding possible decolonization.

#### 04.3. Discontinuation of Contact Isolation

04.3.1. Discontinuation of isolation precautions for a MRSA-positive patient must occur in consultation with the IP and MRP.

04.3.2. Criteria for discontinuing isolation:

04.3.2a. Antibiotic therapy is completed at least three days prior to rescreening.

04.3.2b. Vancomycin levels should be zero prior to rescreening

04.3.2c. Three consecutive negative culture from all previously positive sites. If the first set of sample

which was taken 3 days off antibiotics is negative, repeat cultures 48 hours later.

04.3.2d. The patient should not be receiving antibiotic therapy at any time during the screening process.

#### 04.4. Rescreening MRSA-positive Patients for the Purpose of Discontinuing Contact Isolation

##### 04.4.1. Sites to screen are:

04.4.1a. Anterior nares

04.4.1b. Previously positive sites

04.4.1c. Any indwelling catheter sites

04.4.1d. Non intact skin areas (e.g., tracheostomy, pressure sores or surgical wounds).

##### 04.4.2. Specimen Collection:

- Use the same swab for identical sites (e.g., axilla and groin).
  - Use separate swabs to screen other sites.
- NB: The accompanying requisition should request “MRSA screen.

#### 04.5. Screening of Healthcare Workers (HCWs) and the Environment

04.5.1. Do not screen HCWs or the environment because it is not normally indicated and incurs unnecessary costs.

04.5.2. IP&C may initiate such measures when indicated.

#### 04.6. Outbreak Management

04.6.1. Management of outbreaks will be coordinated by the IP and will require the cooperation of medical, nursing, laboratory and other departments.

#### 04.7. Cleaning of the Patient’s Room

04.7.1. Regular cleaning as per housekeeping protocol.

04.7.2. Terminal cleaning upon patient discharge.

04.7.3. The room can be used as soon as all cleaned surfaces are dry

#### 04.8. Linen

04.8.1. Keep a linen hamper in the isolation area.

#### 04.9. Ambulation

##### 04.9.1. Patients with infected body fluids:

04.9.1a. If they are able to contain their body fluids (secretions, urine, stool), patients may walk in the corridors but cannot enter the visitor/patient area.

04.9.1b. If unable to contain their body fluids, patients must be encouraged to stay in their rooms and be reassessed frequently.

#### 04.10. Sitters/Visitors

04.10.1. Provide information about MRSA as required.

04.10.2. Hand hygiene must be emphasized after patient contact

04.10.3. Sitters and visitors must be instructed to wear appropriate PPE if assisting with direct patient care.

04.11. Decolonization Protocol (refer to [Form 1 ICD 21](#) )MRSA Decolonization Procedure)

04.11.1. Treat nares topically for periods not exceeding seven days with Bactroban (Mupirocin) cream (only if the organism is Mupirocin-sensitive); restrict use, as resistance to this agent is well documented

04.11.2. IP will assess patients on an individual basis to determine the need for decolonization with chlorhexidine wash (suppressive therapy) to reduce/inhibit MRSA skin colonization.

04.11.3. Apply this protocol to patients awaiting liver transplants or cardiac, or orthopedic surgery, or hemodialysis patients requiring AV/fistula creation.

## 05. Responsibilities :

- 05.1. IC Department
- 05.2. Doctors/Nurses
- 05.3. Microbiology
- 05.4. Housekeeping

## 06. Equipment & Forms

- 06.1. MRSA Decolonization Procedure
- 06.2. MRSA Decolonization Record

## 07. Attachment :

- 07.1. N/A

## 08. Reference

GCC INFECTION PREVENTION AND CONTROL MANUAL 3<sup>RD</sup> EDITION 2018



## Form 1 – ICD 21: MRSA Decolonization Procedure

Assessment for decolonization will be performed by the Infection Preventionist (IP) in consultation with the attending physician and an Infectious Disease Consultant

Maintain Contact Isolation during decolonization treatment.

SUPPLIES: Chlorhexidine gluconate (CHG) 4%  
Mupirocin/Bactroban, per MD order  
Clean linens for the bed and patient  
Personal protective equipment (PPE)

1. Spread full-strength Chlorhexidine gluconate 4% solution from neck to toes, ensuring coverage of underarms, groin, and between fingers and toes.

- Rinse with warm water and dry your skin from neck to toes with a clean towel.
- Change the bed linens and the patient's clothing completely after each bath/shower.
- Repeat this process twice a day.
- Shampoo hair with the Chlorhexidine solution for 3 days

2. Apply Mupirocin/Bactroban ointment to anterior nares (inside nose) after Chlorhexidine treatment, when the patient is dry and dressed as ordered by the MD

NB: Mupirocin should not be applied to open wounds

3. These treatments must be given for 7 consecutive days.

4. Take a complete set of cultures from nares and previously positive sites 72 hrs after decolonization

- If first set of samples is negative repeat cultures 48 hrs later
5. Three negative cultures are required before the patient is cleared of MRSA and can be taken out of isolation.

NB: These results will be assessed by the IP.

### NOTES:

- The patient must not be on antibiotics at the time of screening.
- If any swab is positive, stop the screening process until further assessment.
- Please complete all documentation on this form.

## MRSA Decolonization Record

START TIME : \_\_\_\_\_

TREATMENT TIME	CHLORHEXEDINE 4% WASH & SHAMPOO	MUPIROCIN / BACTROBAN OINTMENT	INITIALS
DAY 1 AM			
PM			
DAY 2 AM			
PM			
DAY 3 AM			
PM			
DAY 4 AM			
PM			
DAY 5 AM			
PM			
DAY 6 AM			
PM			
DAY 7 AM			
PM			

SCREENING 1: \_\_\_\_\_ DATE DUE: \_\_\_\_\_ DONE \_\_\_\_\_  
DAY 11

SCREENING 2: \_\_\_\_\_ DATE DUE: \_\_\_\_\_ DONE \_\_\_\_\_  
DAY 14

SCREENING 3: \_\_\_\_\_ DATE DUE: \_\_\_\_\_ DONE \_\_\_\_\_  
DAY 17

COMMENTS:

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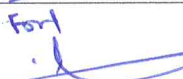





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### Preparation, Reviewing & Approval Box

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