

## Guideline for Control of Methicillin-Resistant *Staphylococcus aureus* (MRSA) In Long Term Care Facilities

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### Introduction and Background

The term “methicillin-resistant *Staphylococcus aureus*” (MRSA) refers to those strains of *Staphylococcus aureus* bacteria that have acquired resistance to the antibiotics methicillin, oxacillin, nafcillin, cephalosporins, imipenem, and/or other beta-lactam antibiotics. The incidence of MRSA has increased in health care facilities in the United States since the mid-1970s.<sup>1-6</sup> Approaches to the control of MRSA vary widely, primarily because studies establishing the efficacy of specific infection control measures are lacking.

This guideline recommends the most widely used approaches to the control of MRSA in long term care facilities, including nursing homes, chronic care and rehabilitation hospitals, extended care facilities, assisted living facilities, etc. These approaches include:

- Recognition of infected or colonized residents;
- Appropriate infection control measures;
- Communications between acute care and long term care facilities; and
- Personnel policies related to MRSA.

Once MRSA has become firmly established in a facility, it is rarely eliminated.<sup>2</sup> A variety of control measures have been reported, and many of these reports cite beneficial results. It should be emphasized, however, that the efficacy of most measures used for surveillance, prevention, and control of MRSA has not been established in controlled studies. As a result, recommendations in this guideline are based on general infection control principles and on review of published articles dealing with the epidemiology and control of MRSA in hospitals and long term care facilities.<sup>3</sup> See Attachment 1 for definition of terms associated with MRSA.

### Virulence of MRSA

- MRSA is not a “super bug.” While *Staphylococcus aureus* itself is a virulent (disease causing) pathogen, methicillin resistant strains are NOT more virulent than methicillin sensitive strains.<sup>4</sup> Many health care workers (HCWs) incorrectly assume that MRSA strains are more virulent because of the special isolation precautions implemented. MRSA is of special concern because it is often multi-drug resistant, thus limiting treatment options.<sup>7</sup>

### Identifying MRSA

- MRSA is identified by a bacterial culture and antibiotic sensitivity of the suspected site of infection or colonization (e.g., blood, sputum, urine, wound, exudate, pressure ulcer

material). Two criteria are necessary for the organism to be identified as MRSA. First, the organism is identified as *Staphylococcus aureus* or coagulase-positive *Staphylococcus* species. Second, the antibiotic sensitivity test will show that the organism is resistant to oxacillin, methicillin, nafcillin, cephalosporins, imipenem, and/or other beta-lactam antibiotics.

### Colonization and Infection

- Colonization is the presence, growth, and multiplication of the organism in one or more body sites without observable clinical symptoms or immune reaction. A ‘carrier’ refers to an individual who is colonized with MRSA. MRSA colonization can occur on the skin surface, wound or pressure ulcer surface, in the sputum, or in the urine. One of the most common sites of colonization in both HCWs and residents is the anterior nares. While personnel may become colonized with MRSA, **they rarely develop infections with the organism.**<sup>4</sup>
- MRSA infection is a condition whereby the bacteria has invaded a body site, is multiplying in tissue, and is causing clinical manifestations of disease, such as fever, suppurative wound, pneumonia or other respiratory illness or symptoms, or other signs of inflammation (warmth, redness, swelling). Infection is confirmed by positive cultures from sites such as blood, urine, sputum, or wound.

### Reservoirs of MRSA

- Colonized and infected residents serve as the major reservoir of MRSA in long term care facilities.<sup>3-4</sup> Contaminated environmental surfaces have not been shown to play a significant role during outbreaks in long term care facilities. Asymptomatic colonization of residents’ noses with MRSA is common in long term care facilities. Point prevalence studies have found that 23% - 35% of residents in Veterans’ Affairs affiliated units may become colonized over a period of one to two years.<sup>8-9</sup> In the few prevalence surveys performed in freestanding long term care facilities located in areas where MRSA is common, 9% - 12% of residents were colonized.<sup>10-12</sup> MRSA colonization may disappear with treatment and reappear weeks or months later.

### Transmission of MRSA

- The main mode of transmission of MRSA is person to person via **hands**, usually of HCWs.<sup>13</sup> Colonization of hands of personnel may be either transient, such as a single day, or of longer duration, such as several weeks. Colonization of the HCW may occur if proper handwashing and barriers (such as gowns and gloves) are not used appropriately.
- MRSA may be aerosolized in the droplet nuclei from a coughing resident or from a ventilator exhaust port of an intubated resident who has MRSA in his or her sputum. The organism may also be aerosolized during the irrigation of a wound containing MRSA. **However, the role of aerosolization in the transmission of MRSA is not known.**<sup>14</sup> Although MRSA has been isolated from environmental surfaces, transmission to residents is thought to be minimal, except in burn units.<sup>3-4</sup>

## **Risk Factors for MRSA**

The following factors have been identified as increasing the risk that a resident will have an MRSA infection:

- Prior prolonged hospitalization
- Preceding antimicrobial therapy
- Close proximity to a resident colonized or infected with MRSA
- Presence of open wounds and/or pressure ulcers
- Presence of invasive devices, such as gastrostomy tubes, tracheostomy tubes, intravascular lines, indwelling urinary catheters, etc.

## **Procedures for Obtaining Cultures to Identify MRSA**

### **• Surface cultures of broken skin or weeping lesions**

If a culture is needed from broken skin, a pressure ulcer, etc., gently wipe area with a sterile gauze pad moistened with saline. The site should then be swabbed with the culture swab, using a rolling motion. If a Gram stain is indicated, an additional swab should be taken from the site for the Gram stain. If the site is suppurative (pus producing) or shows tissue destruction, culture the area most heavily involved. Indicate the anatomical location of the site that was cultured on the culture requisition form. Gloves must be worn while obtaining cultures. Gloves should then be removed, placed in the appropriate waste disposal unit, and hands should be thoroughly washed with soap and water.

### **• Cultures of residents with confirmed or suspected deep tissue infections, urinary tract infections, and respiratory infections**

Follow facility protocols for obtaining sterile specimens for culture from these sites.

### **• Routine nares cultures of asymptomatic residents or HCWs are not indicated. DO NOT culture nares when obtaining cultures for MRSA at other body sites unless the resident or HCW is epidemiologically implicated in an MRSA outbreak.** For questions as to whether or not a resident or HCW might be linked to an outbreak and thus warrant nares cultures for MRSA, contact the Maryland Department of Health and Mental Hygiene (DHMH) Division of Infection Control (410-767-6704), or the Division of Outbreak Investigation (410-767-6677).

#### **• Nares (Nostrils)**

If a culture of the nares is warranted, the culture should be taken with a sterile swab moistened with sterile saline or culture tube transport medium. The swab should be placed gently in one nostril and allowed to remain 2 –3 seconds. The same swab can be used for each nostril. The culture swab is then placed in the transport medium and labeled appropriately. The laboratory should be instructed to screen only for MRSA.<sup>1</sup>

## **Surveillance**

- The long term care facility should maintain a line listing of the names and other appropriate information of residents and admissions that are found to be colonized or infected with MRSA.<sup>4</sup> (See Attachment 2)

- Do not include on the line listing residents who are colonized with MRSA in the nares **ONLY**. These colonized patients should be tracked separately.
- Facilities should regularly monitor and record endemic MRSA case rates using incidence or incidence density ratio (e.g., percent cases or cases per 1,000 resident-days).

### **Definition an outbreak**

- An outbreak of MRSA in the facility represents an increase in the incidence of MRSA cases in the facility above the baseline level, or a clustering of new MRSA cases that are epidemiologically linked.<sup>1</sup> For the purposes of this guideline, an outbreak consists of either: 1) an increase in the average monthly incidence of MRSA of 25% above the baseline, or 2) three or more new MRSA cases within a two month period on any ward or unit.
- If an outbreak has been identified, notify the local health department. Management of the outbreak should be conducted in consultation with the local health department and DHMH.

### **Infection Control Measures (See Attachment 3)<sup>15</sup>**

- **Standard Precautions**

These precautions must be used for **ALL** residents, regardless of diagnosis or presumed infection status, when contact is anticipated with blood; all body fluids, secretions, excretions, including feces and urine but excluding sweat; nonintact skin; and mucous membranes. Standard precautions consist of the following components:

1. Routine **handwashing**, using soap, running water, and friction must be strictly adhered to. In certain circumstances, hands may be cleansed with an alcohol-based waterless hand cleaner (containing at least 60% alcohol) between washing with soap and water.
2. Single use, disposable **gloves** must be used when touching blood and all body fluids, nonintact skin, and mucous membranes. Those employees who are sensitive to latex may use latex-free gloves. The gloves may be sterile or non-sterile, depending upon the task to be performed.
3. **Masks, eye protection, or face shields** must be worn when it is anticipated that splashing with body fluids might occur, such as during suctioning of the respiratory tract or irrigation of a large wound.
4. **Gowns** must be worn when soiling of the health care worker's clothes is possible during care, such as giving a resident a bath.
5. Routine cleaning of **resident care equipment** must be performed according to facility protocol.
6. Routine cleaning of **environmental surfaces** must be performed according to facility protocol.
7. **Linen** must not be separated on the nursing unit. ALL linen, regardless of the diagnosis of the resident, should be collected and bagged at the bedside. If linen is wet, or saturated with urine or feces, it should be collected in a plastic or fluid impervious bag. **The concept of "isolation linen," in which linen is collected and handled separately according to the diagnosis of the resident, is no longer**

**practiced. All linen is treated in the same manner, i.e., as if it were potentially infectious.**

8. Safe disposal of **sharps**, including needles, must be accomplished according to facility protocol, the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen Standard, and State and local regulations.

- **Contact Precautions**

Contact precautions must be used when a resident is colonized or infected with MRSA **IN ANY SITE OTHER THAN THE NARES**. Nasal colonization of a resident with MRSA does not warrant precautions other than standard precautions **unless** that resident is considered to be epidemiologically linked, either as a source or as a spread case, to an outbreak of MRSA in the facility. Contact precautions consist of the following components:

1. **Room Placement and Activities**

- A resident who is colonized or infected with MRSA at any body site other than the nares should be placed according to the following scheme:<sup>15</sup>
  - **Most Desirable:** A private room or cohorting with another resident who is colonized/infected with MRSA.
  - **Less Desirable:** A room with another resident who has intact skin and no “tubes” (invasive feeding tubes, tracheotomy tubes, any type of intravascular line, any type of indwelling urinary drainage tube, or any other tube or device that breaks the skin or enters into a normal body orifice).
    - A resident with MRSA should not be placed with another resident who has another antibiotic resistant organism, e.g., vancomycin-resistant enterococcus (VRE).
- A resident may attend activities as long as any colonized or infected body site, other than the nares, can be securely covered, and the resident observes acceptable hygiene and washes his/her hands.
- A resident who is unable to control secretions should not attend group activities.
- A resident with nasal colonization of MRSA does not need to wear a mask outside of the room and may attend all activities. If the resident has a "cold" with significant nasal discharge, they do not need a mask if they can control their secretions and cover their nose and mouth when coughing and sneezing. **IF IT IS ALREADY KNOWN THAT A RESIDENT HAS MRSA ONLY IN THE NOSE, IT IS PREFERABLE TO FOLLOW THE ABOVE PLACEMENT GUIDELINES WHEN POSSIBLE, EVEN THOUGH THE RESIDENT DOES NOT NEED TO BE PLACED ON CONTACT PRECAUTIONS.** Special emphasis should be placed on handwashing for these residents. If the resident’s cognition is less than normal, the nursing personnel caring for them should be responsible for ensuring that the resident washes his/her hands regularly and especially after coughing and sneezing.
- A resident who is colonized with MRSA in the sputum does not need to wear a mask outside of the room if he/she can cover his/her mouth and nose with a tissue when coughing. If they have a chronic, uncontrollable cough, they should wear a

mask when outside of the room.<sup>16</sup> If they have a tracheostomy tube, the tube can be covered with a “trach collar.” Again, special emphasis on handwashing should be maintained on these residents. Placement of these residents should follow the guidelines previously stated.

- A resident who is infected (not colonized) with MRSA in the respiratory tract, such as pneumonia or bronchitis, should wear a mask when leaving the room.
2. **Gloves**  
Nonsterile exam gloves (latex or latex-free) must be worn when physical contact with the resident is anticipated and discarded when soiled, before touching a clean surface and before leaving the room.
  3. **Handwashing**  
Hands must be washed with an antimicrobial soap or alcohol-based waterless hand cleanser after removing gloves and before leaving the room. Care should be taken not to touch environmental surfaces in the room before leaving, unless a disposable paper towel is used to touch the surfaces.
  4. **Gowns**  
Gowns must be worn if physical contact with the resident will occur, and changed between residents. Dispose of according to facility protocol.
  5. **Masks**  
HCWs must wear a mask when the possibility of splashing in the worker’s face is present, such as when suctioning respiratory secretions or irrigation of large wounds. Residents who are infected (not colonized) with MRSA in the respiratory tract, e.g. pneumonia or bronchitis, should wear a mask when leaving the room. Those residents who are colonized with MRSA in their sputum and who have a chronic, uncontrollable cough should wear a mask when leaving the room.
  6. **Equipment**  
Where possible, dedicate the use of personal, noncritical medical equipment, such as thermometers and blood pressure apparatus, to the resident with MRSA.
  7. **Cleaning**  
The resident’s room must be cleaned per protocol with the facility’s hospital disinfectant-detergent. No special cleaning methods are necessary.

## **Decolonization**

- Because colonized or infected residents represent the major reservoir of MRSA, eradicating the organism from all such residents should theoretically reduce the reservoir of MRSA in the facility. Decolonization generally involves the use of topical and/or systemic antibiotic treatment to eliminating MRSA carriage in an individual. While this approach has been used in a number of hospitals and long term care facilities, it has resulted in emergence of antibiotic resistance in some cases.<sup>3</sup>
- Eradication of MRSA colonization may be desired by the physician and the resident in situations where isolation may interfere with the resident’s well being. Eradication may also be used during MRSA outbreaks to help control the spread of the organism. Since the use of single antimicrobial agents to eradicate MRSA may be unsuccessful and may result in the

emergence of resistance, MRSA eradication should only be attempted in consultation with an infectious disease physician.

### **Termination of Precautions**

- A resident may be considered free of MRSA after two cultures of the colonized or infected body site is negative (except for nares). The first culture should be taken 72 hours or more after antibiotic treatment has been discontinued. The second culture should be taken one week after the first. If the first or second of these cultures remains positive for MRSA, cultures should continue to be taken one week apart until two consecutive negative cultures have been documented.
  - If a sputum specimen cannot be obtained from a resident who has been colonized/infected with MRSA in the sputum, the resident's throat may be cultured as a surrogate for sputum.
  - If a wound site is healed, the healed site itself may be cultured with a moist swab, according to procedures stated elsewhere in this guideline.
- When two consecutive negative cultures have been obtained, contact precautions may be discontinued and standard precautions should be followed for the resident.
- Using cultures of a resident's nares as criteria for discontinuing contact precautions is **not** necessary and should not be done. Negative nares culture from a resident does not necessarily provide adequate evidence that the MRSA has been eradicated from that resident.<sup>3</sup> Prevalence surveys have shown that residents may be colonized with MRSA in the absence of infection and without the knowledge of the health care staff.<sup>10-14</sup> Therefore, a resident's nares should **ONLY** be cultured if the resident is implicated in a MRSA outbreak situation and **NOT** as a condition for termination of contact precautions.

### **Communication**

- Long term care facilities may **NOT** arbitrarily refuse to accept a resident with MRSA colonization or infection, as long as the facility is able to place the resident according to the room placement scheme mentioned previously. Code of Maryland Regulations (COMAR) 10.07.02., July 1998, "Comprehensive Care Facilities and Extended Care Facilities", Section .08, G. (1) "Admission and Discharge," states: "A facility may not deny admission to, or involuntarily discharge, an individual solely because the individual has a communicable disease."
- Long term care facilities should have some system in place for alerting HCWs and visitors that a resident is on contact precautions, such as labeling the chart or the door of the room, without compromising that resident's privacy.
- **Long term care facilities should inform hospitals or other nursing facilities if they transfer a resident who is known to be colonized or infected with MRSA.**
- Hospitals and other nursing facilities that transfer a resident known to be colonized or infected with MRSA to a long term care facility should inform that facility that the resident

has MRSA. The transferring facility should also note, if it can be determined, that the resident was infected or colonized with MRSA during the hospitalization.

- An MRSA patient in an hospital or other nursing facility who transfers to a long term care facility does NOT need to have two negative MRSA cultures before transfer can occur. Negative cultures serve as criteria for discontinuing contact precautions only.

### **Training and Education**

- Certified nursing assistants (CNAs) and other HCWs in the facility should receive basic instruction in performing infection control procedures. Each facility must also periodically present continuing education on handwashing, standard and transmission-based precautions, and the OSHA Bloodborne Pathogen Standard.
- When a resident acquires MRSA, appropriate infection control procedures should be reviewed with all HCWs who will have contact with the resident.

### **Employee Health**

- Surveillance cultures of HCWs for MRSA carriage is not recommended as a general control measure. Such cultures should be done only if employees are epidemiologically implicated as the source of an outbreak, as directed by DHMH personnel.<sup>4</sup>
- Personnel who have staphylococcal infection should be treated with antibiotics. Personnel with skin lesions or dermatitis should be removed from direct resident care until the lesions are healed. Personnel with respiratory infections and cough should not be assigned to direct resident care.

## References

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## Attachment 1: Definition of Terms

- **Carrier:** An individual who has been found to be colonized (culture growing MRSA) at one or more body sites but who has no signs or symptoms of infection.
- **Cohort:** A cohort consists of two or more residents sharing the same room in a facility and/or physically separated from other residents by their location.
- **Cohort staffing:** The practice of assigning specified personnel to care only for residents known to be colonized or infected with MRSA. Such personnel should not participate in the care of residents whose cultures do not grow (or who have not had cultures obtained for) MRSA.
- **Contact isolation:** A method of isolation recommended by the Centers for Disease Control and Prevention that requires barrier precautions such as gloves and gowns for direct contact with substances and residents known to contain MRSA or another pathogen. This method includes handwashing after removal of barrier precautions.
- **Decolonization:** Topical and/or systemic antibiotic treatment administered for the purpose of eliminating MRSA carriage in an individual.
- **Endemic:** A baseline rate or an ongoing frequency at which MRSA infection or colonization occurs in a facility.
- **Incidence:** The number of cases of MRSA colonization or infection identified in a specific population during a given time period.
- **Infection:** The condition of a resident when MRSA has entered a body site, is multiplying in tissue, is causing the clinical manifestations of disease, such as fever, suppurative wound, or pneumonia, and is documented by positive cultures, such as from blood, sputum, wound, or urine cultures.
- **Outbreak:** An increase in the incidence of MRSA cases in the facility above the baseline level, or a clustering of new MRSA cases that are epidemiologically linked. For the purposes of this guideline, an outbreak consists of either: 1) an increase in the average monthly incidence of MRSA of 25% above the baseline, or 2) three or more new MRSA cases within a two month period on any ward or unit.
- **Standard Precautions:** A system of precautions to be applied to all residents, regardless of the known or perceived diagnosis. These precautions synthesize the elements of universal blood and body fluid precautions and body substance isolation. They are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infections in facilities. See Attachment 3 for the elements of these precautions.

**Attachment 2. MRSA Surveillance Line list, Guideline for the Control of Methicillin Resistant *Staphylococcus aureus* (MRSA) in Long-term Care Facilities, Maryland Department of Health and Mental Hygiene, Epidemiology and Disease Control Program, January, 2001.**

| Name, age, & sex    | Room No. | Unit or Ward | Date first admitted to this facility | Recent Hospitalizations <sup>1</sup> |               | Date of first MRSA positive culture | Site of colonization or site of infection and onset date <sup>2</sup> | Has patient been cleared of MRSA? (yes/no) <sup>3</sup> | If cleared, Date of two consecutive negative cultures (mm/dd/yy) |
|---------------------|----------|--------------|--------------------------------------|--------------------------------------|---------------|-------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|
|                     |          |              |                                      | Admit Date                           | Dischrg. Date |                                     |                                                                       |                                                         |                                                                  |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |
| Age: _____ Sex: M F |          |              |                                      |                                      |               |                                     |                                                                       |                                                         | 1. ___/___/___<br>2. ___/___/___                                 |

1. List all admissions and discharge dates within 30 days prior to onset of infection or date of first MRSA positive culture if onset date unknown.
2. List all sites of MRSA infection (e.g., wound, sputum, catheter line) **and** list the earliest onset date known. If the presence of MRSA is believed to be a colonization, list colonization site only (no onset date required). A resident who **only** has a positive culture for colonization of the nares (no infection or colonization at any other site) should **not** be placed on the line list.
3. A patient is considered clear of MRSA when two negative cultures are taken from the previously infected site. The first culture should be collected at least 72 hours after antibiotics have been discontinued and the second culture should be taken one week after the first date of culture collection. If either culture is positive, cultures should be collected at one week intervals until 2 consecutive cultures are negative.

**Summary of the Guidelines for Isolation Precautions in Hospitals: HICPAC Recommendations for Isolation Precautions in Hospitals**  
(Reference 15: *Infection Control and Hospital Epidemiology* 1996;17(1):53-80)

### Standard Precautions

**Standard Precautions** are designed to incorporate the protection against blood-borne pathogens achieved by **Universal Precautions** and the protection against other pathogens achieved by **Body Substance Isolation**. Standard Precautions are to be used on **ALL** patients, regardless of their diagnosis or presumed infectious status, when coming into contact (or risk of contact) with any of the following: (1) **blood**, (2) **all body fluids, secretions and excretions except sweat**, (3) **non-intact skin**, or (4) **mucous membranes**.

Standard Precautions consist of the following nine components:

- (1) Routine hand washing
- (2) Consistent and correct glove use (i.e., glove changing with hand washing between patients)
- (3) Appropriate use of masks, eye protection, and face shields
- (4) Appropriate use of gowns (when necessary)
- (5) Routine cleaning or disposal of patient care equipment
- (6) Regular cleaning of all environmental surfaces
- (7) Appropriate handling of contaminated linen
- (8) Strict adherence to occupational safety requirements
- (9) Effective management of patients with poor hygienic practices



### Transmission-based Precautions Summary

Transmission-based precautions consist of **additional** measures designed to be used with Standard Precautions to further reduce the risk of disease transmission. Transmission-based precautions are divided into the three categories listed below. Specific use of a category of transmission-based precautions is based upon the disease(s) of the patient. Example diseases are listed below each category; **for a complete list of diseases, refer to *Infection Control and Hospital Epidemiology* 1996;17(1):53-80, Appendix A.**



#### Airborne Precautions

- (1) Place patient in private room or cohort.
- (2) Use respiratory protection when appropriate.
- (3) Limit patient transport within the facility.
- (4) Use additional precautions with tuberculosis.\*

Example Disease:

TB-pulmonary or laryngeal  
Measles  
Chickenpox



#### Droplet Precautions

- (1) Place patient in a private room or cohort; when not possible, maximize distance between patients.
- (2) Wear mask when working closely with the patient.
- (3) Limit patient transport within the facility.

Example Diseases:

*H. influenza* meningitis  
*N. meningitidis* meningitis  
*S. pneumoniae* pneumonia  
Diphtheria  
Pertussis  
Influenza



#### Contact Precautions

- (1) Place patient in a private room or cohort; when not possible, consult the infection control practitioner (ICP).
- (2) Wear gloves upon entrance to room and at all times.
- (3) Wash hands with antimicrobial soap upon leaving the room taking care not to touch environmental surfaces.
- (4) Wear a gown when entering the room if contamination is at all possible.
- (5) Limit patient transport within the facility.
- (6) Dedicate the use of personal, non-critical medical equipment to a single patient.
- (7) Use additional precautions for preventing the spread of vancomycin resistance.\*\*

Example Diseases:

MRSA/VRE infection or colonization\*\*  
*C. difficile* with diarrhea  
Shigellosis if diapered or incontinent  
Scabies

\*CDC. Guidelines for preventing the spread of tuberculosis in health care facilities. *MMWR*. 1994;43(RR-13):1-132.

\*\*HICPAC. Recommendations for preventing the spread of vancomycin resistance. *AJIC*. 1995;16:105-113.

**MARYLAND DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
EPIDEMIOLOGY AND DISEASE  
CONTROL PROGRAM**

**GUIDELINES FOR CONTROL OF METHICILLIN RESISTANT  
STAPHYLOCOCCUS AUREUS IN LONG TERM CARE  
FACILITIES, JANUARY, 2001**

|                                   |
|-----------------------------------|
| <b>FREQUENTLY ASKED QUESTIONS</b> |
|-----------------------------------|

- 1. We have always screened new admissions to our facility for MRSA colonization in their nares. Should we continue this?**

Routine nares cultures for MRSA of residents are not indicated unless the resident is epidemiologically implicated in an MRSA outbreak. (Page 3, "Procedures for Obtaining Cultures to Identify MRSA")

- 2. What drug(s) should we use to treat (decolonize) a resident with MRSA in their nares?**

Decolonization of MRSA from residents should only be done in consultation with an infectious disease physician and only in an outbreak situation to decrease the possibility of promoting further antimicrobial resistance. (Page 6, "Decolonization")

- 3. Do we still need to place a resident with MRSA colonization in the nares on contact precautions?**

A resident who is known to have MRSA in the nares ONLY does not need to be placed on contact precautions. However, this individual should, if possible, be placed with another resident with MRSA colonization or infection or with a resident with no tubes or wounds. (Page 5, "Room Placement and Activities")

## **Guideline for Control of MRSA: Frequently Asked Questions (continued)**

- 4. When discontinuing contact precautions, we have always obtained two negative nares cultures along with two negative site cultures. Do we still need to do this?**

It is no longer necessary to obtain negative nares cultures in order to discontinue contact precautions on a resident. Two negative cultures of the infected body site, obtained no less than one week apart, are sufficient. (Page 7, “Termination of Precautions”)

- 5. Do these residents have to stay in their rooms?**

Even if they are on contact precautions, those residents who are colonized or infected with MRSA may, if they feel like it, go anywhere in the facility and attend activities as long as the infected site is covered, and the resident observes meticulous handwashing. An alcohol-based waterless hand cleaner may be given to the resident to facilitate handwashing. (Page 5, “Room Placement and Activities”)

- 6. Which residents should be included on the MRSA line listing?**

Include any resident who is colonized or infected with MRSA at any site OTHER THAN the nares. A resident who is known to have MRSA in the nares only does not need to be included on the line listing, but should be tracked separately (Page 3, “Surveillance”)

- 7. Under what circumstances should we culture our healthcare workers for MRSA in the nares?**

Nares cultures for MRSA from healthcare workers should not be done unless there is an outbreak situation and the culturing has been recommended by DHMH Division of Outbreak Investigation, Local Health Department Communicable Disease Staff, or Infection Control staff. (Page 8, “Employee Health”)