

MRSA, Hand Hygiene and Contact Precautions

**Wesley Medical Center
Department of Education**

May 2007

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Stopping the spread of MRSA
is in your hands!

Objectives

Upon completion of this education, staff will gain an increased understanding of:

- ❑ Prevalence of Staphylococcus Aureus infections
- ❑ Differences between MRSA and MSSA
- ❑ Appropriate use of hand hygiene
- ❑ Proper usage of Contact Precautions

What is Staphylococcus Aureus?

Staphylococcus Aureus, commonly called “staph,” are bacteria found in the nose or on the skin of healthy people. Plenty of healthy people carry staph without being infected by it. These bacteria can cause a problem if they get into our bodies, most likely through cuts or wounds.

Do I have Staphylococcus Aureus?

Maybe. Approximately 25 to 30% of us have staph bacteria in our noses. Just because you have the staph bacteria does not mean that you have an active infection. You may be “colonized”. That means you have the bacteria in or on you, but there is no active infection present.

Can a staph infection be serious?

Yes. Staph is one of the most common causes of skin infections in the United States. If the infection is minor, it may not need any special treatment. However, occasionally a staph infection can become quite serious.

What if it is a serious staph infection?

These infections are treated with penicillin or penicillin type antibiotics.

Antibiotics such as Methicillin, Amoxicillin, and Penicillin can be effective in treating staph infections. However, over the past several decades, some of these bacteria have become resistant to these antibiotics.

What does that mean – resistant to antibiotics?

The antibiotics that typically work to decrease this bacteria are not going to be effective. Another type of antibiotic will be needed to stop the infection from increasing.

Do these resistant staph bacteria have a name?

MRSA. That stands for:

Methicillin

Resistant

Staphylococcus

Aureus.

This strain of staph does not respond to the standard Penicillin (Methicillin) antibiotics.

But some strains of staph do respond to Penicillin type antibiotics?

Yes. Some strains of staph are treated with the Penicillin family of antibiotics. The infection is sensitive to the antibiotic and responds to the medication.

What is the name of this infection?

MSSA. That stands for:

Methicillin

Sensitive

Staphylococcus

Aureus

It is potentially easier to treat a
MSSA staph infection than
MRSA staph infection

Sensitive

**Methicillin
Sensitive
Staphylococcus
Aureus**

Resistant

**Methicillin
Resistant
Staphylococcus
Aureus**

I know patients are concerned if they are told they have a Staph infection.

Physicians will determine the type of infection and if the infection will respond to the Penicillin family of antibiotics. Appropriate antibiotic therapy will be started to treat the infection.

I've seen MSSA on some patients lab reports and everyone seems concerned about that.

Again, the physician will evaluate the lab report and decide which type of antibiotic therapy will be most appropriate for treatment of the infection. With MSSA, the infection should respond to a member of the Penicillin antibiotic family.

Can people get MRSA outside the hospital?

Yes. MRSA can be acquired outside of hospitals and healthcare facilities. This is known as “Community Associated – Methicillin Resistant Staphylococcus Aureus” infections or “CA-MRSA”.

What does CA-MRSA look like?

Often times it looks like a pimple or boil and occurs in otherwise healthy people.



What does CA-MRSA look like?

The infection site may be red, swollen, and painful. Some might describe it as looking like a “spider bite”. Pus or drainage might be present.



What else can CA-MRSA cause?

It can also cause an infection in the bloodstream, or the lungs.

MRSA infections can be serious, and some can be life-threatening.

How is MRSA spread?

MRSA is spread by contact. You might get MRSA by touching another person who has MRSA on their skin or touching objects that have the bacteria on them.



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is in your hands!

What are some risk factors for getting MRSA?

- ❑ Crowded living conditions
- ❑ Poor hygiene conditions

These situations put people at risk due to sharing of dirty equipment, towels and other personal hygiene items.

Who gets MRSA?

MRSA is more common among

- ❑ People who have weakened immune systems
- ❑ Patients in hospitals
- ❑ Residents of nursing homes
- ❑ Prisons inmates
- ❑ Military personnel
- ❑ Athletes



Who else is at risk for MRSA?

- ❑ Pediatric populations
- ❑ Elderly populations
- ❑ IV drug users
- ❑ Persons on kidney dialysis
- ❑ Chemotherapy patients
- ❑ ICU patients
- ❑ Persons with HIV / AIDS

Can patients get MRSA in the hospital?

Yes, it is possible to have a patient acquire MRSA. Those are known as Hospital Acquired MRSA (or HA-MRSA).



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How do patients get MRSA in the hospital?

Poor hand hygiene compliance among health care workers place patients at increased risk for serious staph or MRSA infections.

**EVERY PATIENT
EVERY CONTACT
EVERY TIME**

Where do MRSA infections occur?

MRSA can occur in surgical wounds or around invasive devices, such as catheters or implanted feeding tubes.



Where do MRSA infections occur?

MRSA can also occur in ventilated patients as pneumonia or in patients with invasive devices, such as central lines, IV catheters and Foley catheters.



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This seems like a big deal. Is it?

Because of the increasing rates of MRSA, HCA and Wesley Medical Center are joining other facilities in eliminating the spread of MRSA and health care acquired infections.



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is in your hands!

Why is eliminating MRSA important to Wesley & HCA?

We want to be known as the cleanest and safest healthcare facilities in the world.



Why is eliminating MRSA important to Wesley & HCA?

It's what you expect for your family.

It's what we owe our patients,
physicians, and our staff.

**EVERY PATIENT
EVERY CONTACT
EVERY TIME**

What is it going to take to make this effort a success?

Everyone has to be involved – this is a **TEAM EFFORT!!!**

From the members of Wesley's Senior Management team to all employees – **THIS IS IMPORTANT!!!!!!**



Stopping the spread of MRSA
is in your hands!

What is it going to take to make
this effort a success?

We expect 100% compliance with hand
hygiene before and after every
contact with a patient.

**EVERY PATIENT
EVERY CONTACT
EVERY TIME**

What must I do to help prevent the spread of MRSA?

Everyone must continue to use **Standard Precautions with all patients.** That means using gloves, gowns, masks when there is potential exposure to patient blood or body secretions.

How can we stop the spread of MRSA?

It is simple. Using good hand hygiene is an important first step in stopping MRSA.



Stopping the spread of MRSA
is in your hands!

How can we stop the spread of MRSA?

Use soap and water if your hands are visibly dirty or after using the restroom.

Scrub hands briskly for at least 15 seconds. Slowly sing the familiar "ABC's song" while washing your hands - that takes approximately 15 seconds!

How can we stop the spread of MRSA?

Alcare Plus or Avagard can be used before and after patient contact if your hands are not visibly dirty.



EVEN IF YOU HAVE WORN GLOVES!!

How can we stop the spread of MRSA?

Shared patient equipment and hospital surfaces should be properly disinfected between each patient contact.

Stethoscopes

BP cuffs and machines

Thermometers

Glucometers

Slide boards

Bedside tables

Bed rails

Patient phones

Spectralink phones

Stinger carts

Use only approved hospital cleaning supplies.

Sanicloths

Sanimaster III or IV

How can we stop the spread of MRSA?

Keep personal items personal. Do not allow patients to share towels, sheets, razors, or other personal items.

Educate the patients to NOT share these items at home, as well.

How can we stop the spread of MRSA?

Draining wounds need to remain covered at all times. Use sterile dry dressings and contain any drainage within the dressing.

What else should we do?

Those patients in high risk groups for MRSA will be screened / tested for it:

- ❑ All ICU admissions
- ❑ Patients admitted from other facilities
 - ❑ Nursing homes
 - ❑ Other hospitals
 - ❑ Prisons
 - ❑ Group homes
 - ❑ Dialysis patients

What else should we do?

Certain surgical patients will be screened / tested for MRSA:

- CABG
- Spine
- Knees
- Hips

What else should we do?

Patients testing positive for MRSA will be placed in Contact Precautions.

What else should we do?

To become more familiar with the Contact Precautions Policy, please [click here](#) to view the policy.

You may also find the Contact Precautions Policy on the WMC Intranet / Infection Control Policies & Procedures / Contact Precautions / Policy V4.

Are there special considerations for those having elective surgery?

Yes. A special surgical scrub may be prescribed for them.

Antibiotics before surgery may be ordered by the physician.

HOW AM I TO REMEMBER ALL OF THIS????????

HCA as created a quick method / acronym to help all of us remember. It's called the A,B,C,D,Es of MRSA.

REDUCING THE RISK OF MRSA IS THIS SIMPLE.
(And can help prevent other infectious disease.)

A **ACTIVE SURVEILLANCE**
Culture high-risk patients and, if positive, place them on contact precautions so that MRSA does not spread.

B **BARRIER PRECAUTIONS**
Gowns, gloves, and masks are available for patient, staff, and visitor transmission prevention. Please use them consistently.

C **COMPULSIVE HAND WASHING**
The easiest and most effective way to stop MRSA and other healthcare-associated infections from spreading.

D **DISINFECTION OF ENVIRONMENTS**
Thorough cleaning and appropriate use of products are absolutely necessary to reduce the transmission of MRSA.

WASH YOUR HANDS

Stopping MRSA is in your hands.

HCA

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A,B,C,D,Es of MRSA

A = Active Screening

- ❑ ICU admissions and transfers will be screened for MRSA
- ❑ Screening of high risk patients will include certain identified admissions and surgeries
- ❑ Those with a previous history of MRSA will be admitted to a private room, with Contact Precautions started upon admission

A,B,C,D,Es of MRSA

B = Barrier Precautions

- ❑ Care for MRSA positive patients using Standard Precautions and Contact Precautions
- ❑ Use gloves every time you walk into the patient's room

A,B,C,D,Es of MRSA

B = Barrier Precautions

- Use gowns and gloves if you will have any direct contact with the patient or the environment (bed, linen, equipment, etc)
- Disposable gowns will be discarded after each use

A,B,C,D,Es of MRSA

B = Barrier Precautions

- MRSA has been cultured from scrubs. Wearing a gown will protect **you**, your **patient** and your **family** from being colonized from MRSA

A,B,C,D,Es of MRSA

B = Barrier Precautions

- ❑ Use dedicated equipment as appropriate
- ❑ Masks should be worn when:
 - ❑ Performing splash-generating procedures (wound irrigation, suctioning, intubation, etc)
 - ❑ Caring for patients with open trachs or known MRSA coughing patients

A,B,C,D,Es of MRSA

C= Compulsive Hand Hygiene

- Wash hands with soap and water
- OR -
- Use approved hand sanitizer

**EVERY PATIENT
EVERY CONTACT
EVERY TIME**

A,B,C,D,Es of MRSA

D= Disinfect Equipment and Environment

- Use appropriate cleaning agents
 - Sanicloths
 - Sanimaster III or IV
- Disinfect equipment thoroughly between patient use if equipment is shared (thermometer, stethoscope etc)



A,B,C,D,Es of MRSA

E= Executive Championship

- ❑ Hugh Tappan, Chief Executive Officer
- ❑ Sue Ebertowski, Chief Nursing Officer
- ❑ Francie Ekengren, MD, Chief Medical Officer
- ❑ Valerie Creswell, MD, Infection Control Chair

**Dedicated to making
this WMCs reality**

A,B,C,D,Es of MRSA

E= Executive Championship

- All members of the Senior Management Team are making this their priority
- All staff of WMC are to make this their priority, too

**Dedicated to making
this WMCs reality**

Highlights of the WMC Contact Precautions Policy

- Patients shall be in a private room or cohorted (share a room) with a patient that has the same organism
- Educate the patient and family regarding Contact Precautions
- Visitors must use Alcare Plus or wash hands before leaving the patient's room

Highlights of the WMC Contact Precautions Policy

- Clean non-sterile gloves are to be worn upon **entering** the patient's room
- While providing care, change gloves after contact with infective material that might have high concentrations of microorganisms

Highlights of the WMC Contact Precautions Policy

- ❑ Remove gloves before leaving patient's environment and perform hand hygiene (soap/water or hand sanitizers)
- ❑ Wear a gown if you anticipate your clothing coming in contact with the patient, environmental surfaces or items in the patient's room

Highlights of the WMC Contact Precautions Policy

- ❑ Remove gown before leaving the patient's environment
- ❑ Take care to keep clothing from contacting potentially contaminated surfaces

Monitoring Will Occur

Monitoring the use of personal protective equipment and hand hygiene will occur and be enforced.

This includes gloves, gown and mask usage as appropriate.

Highlights of the WMC Contact Precautions Policy

- Use dedicated equipment as much as possible to minimize the risk of cross-contamination
- Impervious bags shall be used for dressings, soiled linens, used articles/instruments and trash
- Impervious biohazard bags or approved biohazard containers shall be used to transport specimens to lab

MRSA Patients Outside of Their Rooms...

Patients may ambulate outside their room if they:

- ❑ Have a clean gown
- ❑ Have performed hand hygiene
- ❑ Are not coughing
- ❑ If the patient is coughing, they must wear a surgical mask while outside their room

MRSA Patients Outside of Their Rooms...

Patients may ambulate outside their room if they:

- ❑ Are continent of bowel and bladder
- ❑ Draining wounds that have drainage contained by a clean, dry and intact dressing

When transporting a patient with MRSA.....

- ❑ Maintain Contact Precautions during transport
- ❑ Transport should be for essential purposes only
- ❑ A sheet or other barrier is to be placed over the gurney or wheelchair before transporting the patient
- ❑ Have patient wear clean gown or cover with a clean sheet

When transporting a patient with MRSA.....

- ❑ The person transporting the patient should wear gown & gloves to assist the patient into/out of the wheelchair or gurney while in the patient's room
- ❑ The Personal Protective Equipment (PPE) should then be removed prior to leaving the patient room and hands washed / sanitized

When transporting a patient with MRSA.....

- When the transportation is complete, thoroughly clean all surfaces of the wheelchair / gurney with an approved disinfectant
- The transferring unit will communicate the status of the patient, including the organism of concern, to the receiving unit as part of the hand-off

When transporting a patient with MRSA.....

- ❑ Gloves may be necessary if direct patient care might occur during transport (i.e. intubated patient)
- ❑ A second member of the transport team **should not** be gloved so as to be available to open doors and use elevator buttons
- ❑ When using the barrier sheet over the patient, gowns are not needed for staff

Wow!!! MRSA prevention is a BIG DEAL!!!

Yes, it is and it will take all of us doing our part to stop the spread of MRSA.



Stopping the spread of MRSA
is in your hands!

References

- Atlas HCA Intranet site
 - MRSA (key word)
- Lois Rahal, RN, BSN, CIC
WMC Infection Control Nurse
- Brandy Jackson, RN, BSN
WMC Infection Control Nurse
- Wesley Infection Control Policies
 - MRSA Isolation & MRSA Screens
 - Section IV Policy 17
 - Contact Precautions
 - Section V Policy 4