



## Information for Patients and Families



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# Methicillin Resistant Staphylococcal Aureus (MRSA)

*Staphylococcus aureus* (staf-i-lo-coc-cus aw-ree-us) or staph is a germ that often lives in the noses and on the skin of healthy people. It spreads from person to person on contaminated hands, skin, and objects. Most infections caused by staph are skin infections. Staph can also cause more serious infections in the blood, joints, surgical wounds, and pneumonia.

### What is MRSA?

MRSA stands for *methicillin-resistant staphylococcus aureus*. It is also known as *methicillin-resistant staph*. MRSA is a strain of staph that is resistant to most antibiotics commonly used to treat staph, including methicillin. MRSA is widespread, all over the world. You can acquire it in the community as well as in healthcare settings.

### Who gets MRSA?

Specific groups of people at risk include:

- Persons whose defenses against infection have been lowered or damaged.
- Those persons whose immune systems have been weakened by chronic or severe illness or disability.
- Those who have been treated with many antibiotics or who have received certain antibiotics over a long time. This results in changes in the organisms in and on that person.
- Persons who have had surgery.
- Those who have been hospitalized for extended periods, or have had a long stay in an intensive care or burn unit.
- Persons who have been hospitalized many times in the last several years.

### What factors affect the spread of MRSA infections in healthy people in the community?

- Close skin-to skin contact.
- Openings in the skin such as cuts or abrasions.
- Items and surfaces contaminated with MRSA.
- Crowded living conditions
- Poor hygiene.

### Where is it found?

- MRSA is frequently found in the nares (nose), but it can also be present in the respiratory tract (lungs, etc.), surgical wounds, body fluids, or on the skin. MRSA can also be found on surfaces in the environment around the person who has MRSA (such as table tops).

- Persons may be “colonized” with MRSA. That means that the organism is present in or on the person. (They have a positive culture showing they carry the germ.) When someone is “colonized” they do not show any signs or symptoms of infection. This is sometimes called a “carrier” state.
- Persons may be “infected” when they have a positive culture AND show the signs and symptoms of infection: fever, chills, redness, local heat, pain, etc.

**How is it treated?**

MRSA infection is usually treated with the antibiotic vancomycin, although other antibiotics are also available for use. Sometimes, if the patient is simply colonized but not infected, no treatment with drugs is needed.

**How is it spread to others?**

MRSA can be found in and on the person who is colonized or infected with it. It is also found on surfaces in that person’s environment. If coughed, sneezed, or sprayed into the air, MRSA will drop out of the air onto a surface in the room, where it can survive for hours. **MRSA does not remain in the air.**

**How can the spread of MRSA be prevented in the hospital?**

Health care workers (doctors, nurses, etc.) need to take precautions when interacting with a patient who is colonized or infected with MRSA. They also need to be sure to take precautions when interacting with things in the room around the patient. These precautions are to prevent health care workers from picking up and carrying MRSA out of the room to someone else who could become infected. These precautions include:

- Wearing gloves when entering the room. The gloves are removed and discarded immediately upon leaving the room and the hands are washed. If the patient undergoes a procedure outside the room (in another hospital department), the staff of that department should also wear gloves when touching the patient.
- Wearing a gown when entering the room. The gown is removed and discarded immediately upon leaving the patient’s room.
- Wearing a mask and face protection if the care provider will come in contact with the patient while performing a procedure that may result in coughing, sneezing, or spraying of body fluids or secretions.
- Cleaning of the environment, equipment and instruments used in the patient room and immediate area with disinfectant.
- **Thorough washing of the hands or use of hand sanitizers by everyone leaving the room, whether or not gloves were worn.**

Visitors need to take the following precautions:

- **Hands must be disinfected with hand sanitizer or be thoroughly washed before entering and before leaving the patient room.**
- Gowns and gloves must be worn if the visitor will have contact with the patient’s body fluids.

The patient should:

- Wash hands with antiseptic soap before leaving the room, if possible.

### **What precautions should be taken at home?**

MRSA can be spread in a household through contaminated surfaces or through direct physical contact. In most cases, this is not a concern unless a family member has a serious medical condition. If a friend or family member's hands come into contact the MRSA patient's body fluids or open wound, the hands should be thoroughly washed with soap and water immediately. If there are family members with chronic illness or lowered immune defenses, contact your health care provider to determine what precautions you need to take.

Listed below are some ways to limit spread:

- If present, keep draining wounds draining covered with clean, dry, bandages.
- Clean your hands regularly with soap and warm water. You can also use an alcohol-based hand gel or foam if your hands do not look soiled or soap and water are not available. This is especially important to do after changing a bandage or touching an infected wound.
- Be sure to take regular baths.
- Do not share items that may become contaminated with drainage from wound, such as towels, clothing, bedding, bar soap, razors, and athletic equipment that touches the skin.
- Do not share personal items. Avoid sharing personal items such as towels, washcloths, razors, clothing, or uniforms that may have had contact with the infected wound or bandage. Wash soiled sheets, towels, and clothes with hot water and laundry detergent. Dry clothes in a hot dryer, rather than air-drying. This also helps kill bacteria in clothes.
- If you have a wound that you cannot keep covered, do not participate in activities where you have skin to skin contact with other persons (such as athletic activities) until your wound heals.
- Clean equipment and other surfaces that people touch with their bare skin. Use an over the counter detergent or disinfectant that specifies *Staphylococcus aureus* on the product label and will not hurt the type of surface being cleaned.