What is MRSA?

MRSA stands for methicillin-resistant *Staphylococcus aureus*. It is also known as "staph", and may be abbreviated as *S. aureus*. Staphylococcus bacteria are common, and can cause many different types of infections. MRSA can be treated, but not by using common antibiotics such as penicillin.

How does MRSA affect people?

People can have MRSA without showing any signs of illness. This is called **colonization**. MRSA colonization can be found in the nose or on the skin.

If a person has an MRSA **infection**, signs of illness are present such as fever, redness, swelling, drainage, or pain. MRSA infections fall into two categories.

- Healthcare-associated MRSA infections occur more frequently among persons currently or recently in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have had recent antibiotic treatment and may have weakened immune systems. They are usually invasive infections such as pneumonia, bloodstream infections and urinary tract infections.
- **Community-associated MRSA** infections occur more often in people who are otherwise healthy. This form of MRSA is more likely to occur as a non-invasive infection such as a skin abscess. These can be treated with a procedure called incision and drainage (or I&D), and usually do not require antibiotics. See our Fact Sheet titled "Bacterial Skin Infections" for more specific information. In rare instances, this type of MRSA can cause serious illness such as pneumonia or bloodstream infection, and require hospitalization.

How is the MRSA spread?

All forms of staph bacteria including MRSA are spread from person to person by direct or indirect contact. **Direct contact** means that a person whose hands were contaminated with MRSA spread it by touching another person. **Indirect contact** means that a person whose hands were contaminated with MRSA touched an object that was later touched by a person who caught the MRSA bacteria. The MRSA bacteria can live on unclean environments for many hours, sometimes days. MRSA can live and multiply on hands that have not been cleaned, just like all bacteria can.

How can I prevent the spread of MRSA?

The most important action is to perform **hand hygiene** frequently using soap and water or alcohol-based hand gel. This is especially important after touching something or someone who may have MRSA, such as in a hospital or nursing home, or someone with skin infections.

How long is someone able to spread MRSA?

Contagiousness decreases as the infection heals, whether through antibiotic treatment or incision and drainage. However, even after the infection is healed, people who have been infected often become colonized, and can stay colonized for several months. Colonized people are still able to spread MRSA, but infected people are more likely to spread it.

Can a person with MRSA be admitted to a nursing home?

Yes, people who are recovering from MRSA infection, or who are colonized are safe to admit to facilities such as nursing homes or other types of facilities. Spread of MRSA in these conditions is low, and can be prevented by good hand hygiene. Handwashing sinks with adequate supplies of soap or hand hygiene stations with alcohol-based hand gel products should be available for employees and residents of these facilities to use. Everyone should be encouraged to clean their hands frequently, especially after contact with people or objects that may be contaminated. Facilities should be informed if a person known to have MRSA is being transferred to the facility. Sometimes a private room or assignment of a low-risk roommate are used to further decrease the chance of spread.

Can a person with MRSA safely live with healthy individuals?

Yes, healthy individuals who practice good hand hygiene are at very low risk of catching MRSA. In a long term care setting such as a nursing home, a colonized patient can be placed with another known colonized patient, or with a patient who is at low risk for MRSA infection. A person with an MRSA infection should be receiving treatment by a physician before being placed in long term care setting.

How is MRSA treated?

Persons who are colonized with MRSA usually do not need to be treated. Persons with serious MRSA infections such as pneumonia or blood stream infections are usually treated with an intravenous antibiotic. Persons with MRSA skin infections are usually treated with procedures such as incision and drainage (I&D), strict wound management to keep any drainage contained. Antibiotic treatment is only needed for skin infections in certain situations.

How can I prevent getting an MRSA skin infection?

Practice good hygiene:

- 1. Keep your hands clean by washing thoroughly with soap and warm water for 20 seconds or using an alcohol-based hand sanitizer.
- 2. Keep cuts and scrapes clean and covered with a bandage until healed to prevent catching an infection.
- 3. Avoid contact with other people's wounds or dirty bandages.
- 4. Avoid using someone else's personal items such as towels or razors that may be contaminated.
- 5. Shower or bathe regularly, especially after contact sports practices or events.

If I have an MRSA skin infection, what can I do to prevent others from getting infected?

You can prevent spreading MRSA skin infections to others by following these steps:

- Cover your wound until it is healed. Keep unhealed or draining wounds completely covered with clean, dry bandages. Replace a bandage as soon as it becomes saturated. Pus from infected wounds can contain bacteria, so keeping the wound covered will help prevent the spread to others. Soiled bandage items should be immediately discarded into the regular trash.
- 2. **Clean your hands often.** You, your family, and others in close contact should wash their hands frequently with soap and warm water or use an alcohol-based hand gel, especially after changing the bandage or touching the infected wound or any item that may be contaminated.
- 3. **Do not share personal items.** Avoid sharing personal items such as towels, washcloths, razors, clothing, or uniforms that may have had contact with an infected wound or bandage. Wash sheets, towels, and clothes that become soiled with hot water and laundry detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria in clothes.
- 4. **Talk to your doctor.** Tell all healthcare providers who treat you that you have or had a staph or MRSA skin infection. Report any infections that do not heal with treatment.

What is the most important measure to prevent the spread of MRSA?

Good hand hygiene is the single most important measure to prevent the spread of infections including MRSA. Hand hygiene should be performed after caring for sick people, after handling soiled bandages and clothing, and after removing protective gloves.

What MRSA guidelines are available in Oklahoma?

In 1990, the Oklahoma State MRSA Working Group (consisting of physicians and nurses) and the Oklahoma State Department of Health (OSDH) wrote guidelines for the control of MRSA in nursing homes in Oklahoma. These guidelines can be obtained by calling the OSDH Communicable Disease Division.

OSDH 04/06



For further information call or visit us on the World Wide Web Communicable Disease Division Oklahoma State Department of Health Phone (405) 271-4060