

Methicillin Resistant *Staphylococcus aureus* (MRSA) Fact Sheet

- 1. What is *Staphylococcus aureus*?** - *Staphylococcus aureus*, often referred to simply as "staph," are bacteria commonly carried on the skin or in the nose of healthy people. Approximately 25% to 30% of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. Sometimes, staph can also cause an infection. Staph bacteria are one of the most common causes of skin infections in the United States. Most of these skin infections are minor (such as pimples and boils) and can be treated without antibiotics. However, staph bacteria also can cause serious infections (such as surgical wound infections, bloodstream infections, and pneumonia).
- 2. What is MRSA (methicillin-resistant *Staphylococcus aureus*)?** - Some staph bacteria are resistant to antibiotics. MRSA is a type of staph that is resistant to antibiotics called beta-lactams. Beta-lactam antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. While 25% to 30% of the population is colonized with staph, less than 2% is colonized with MRSA.
- 3. Who gets staph or MRSA infections?** - Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers). These patients have weakened immune systems and undergo procedures or have devices that make it easier for MRSA to get into the body. MRSA in healthcare settings usually causes more severe and potentially life-threatening infections, such as bloodstream infections, surgical site infections, or pneumonia. The signs and symptoms vary by the type and stage of the infection.
- 4. What is community-associated MRSA (CA-MRSA)?** - Staph and MRSA can also cause illness in persons outside of hospitals and healthcare facilities. Staph or MRSA infections in the community are usually manifested as skin infections and occur in otherwise healthy people.
- 5. How common are staph and MRSA infections?** - Staph bacteria are one of the most common causes of skin infection in the United States and are a common cause of pneumonia, surgical wound infections, and bloodstream infections. The majority of MRSA infections occur among patients in hospitals or other healthcare settings; however, it is becoming more common in the community setting. Data from a prospective study in 2003, suggests that 12% of clinical MRSA infections are community-associated, but this varies by geographic region and population.
- 6. What does a staph or MRSA infection look like?** - In the community, most MRSA infections are skin infections that may appear as pustules or boils which often are red, swollen, painful, or have pus or other drainage. They often first look like spider bites or bumps that are red, swollen, and painful. These skin infections commonly occur at sites of visible skin trauma, such as cuts and abrasions, and areas of the body covered by hair (e.g.,

back of neck, groin, buttock, armpit, beard area of men). More serious infections may cause pneumonia, bloodstream infections, or surgical wound infections.

7. **Are certain people at increased risk for community-associated staph or MRSA infections?** - Factors that have been associated with the spread of MRSA skin infections include: close skin-to-skin contact, openings in the skin such as cuts or abrasions, contaminated items and surfaces, crowded living conditions, and poor hygiene. Because of these factors, people may be more at risk in locations such as athletic facilities, dormitories, military barracks, correctional facilities and daycare centers. Information specific to athletes can be found at: <http://www.cdc.gov/mrsa/groups/advice-for-athletes.html>.
8. **How can I prevent staph or MRSA skin infections?** Practice good hygiene:
 - a. Keep your hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer.
 - b. Keep cuts and scrapes clean and covered with a bandage until healed.
 - c. Avoid contact with other people's wounds or bandages.
 - d. Avoid sharing personal items such as towels or razors.
9. **Are people who are positive for the human immune deficiency virus (HIV) at increased risk for MRSA? Should they be taking special precautions?** - People with weakened immune systems, which include some patients with HIV infection, may be at risk for more severe illness if they get infected with MRSA. People with HIV should follow the same prevention measures as those without HIV to prevent staph infections, including practice good hygiene, cover wounds (e.g., cuts or abrasions) with clean dry bandages, avoid sharing personal items such as towels and razors, and contact their doctor if they think they have an infection.
10. **Can I get a staph or MRSA infection at my health club?** - The environment usually does not play a significant role in the transmission of MRSA. MRSA is transmitted most frequently by direct skin-to-skin contact. You can protect yourself from infections by practicing good hygiene (e.g., keeping your hands clean by washing with soap and water or using an alcohol-based hand rub and showering after working out); covering any open skin area such as abrasions or cuts with a clean dry bandage; avoiding sharing personal items such as towels or razors; using a barrier (e.g., clothing or a towel) between your skin and shared equipment; and wiping surfaces of equipment before and after use.
11. **What should I do if I think I have a staph or MRSA infection?** - See your healthcare provider.
12. **How is MRSA diagnosed?** The only way to diagnose MRSA is to take a sample and examine it in the laboratory. There are rapid tests to diagnose MRSA and staph bacteria can be cultured. MRSA cannot be reliably diagnosed based on appearance or clinical symptoms.

- 13. Are staph and MRSA infections treatable?** - Yes. Most staph and MRSA infections are treatable with good wound care and, if needed, with antibiotics.
- a. If you are given an antibiotic, take all of the doses, even if the infection is getting better, unless your doctor tells you to stop taking it. Do not share antibiotics with other people or save unfinished antibiotics to use at another time.
 - b. Many staph skin infections may be treated by draining the abscess or boil and may not require antibiotics. Drainage of skin boils or abscesses should only be done by a healthcare provider.
 - c. If after visiting your healthcare provider the infection is not getting better after a few days, contact them again. If other people you know or live with get the same infection tell them to go to their healthcare provider.
 - d. If I have a staph, or MRSA skin infection, what can I do to prevent others from getting infected? - You can prevent spreading staph or MRSA skin infections to others by following these steps:
 - (1) Cover your wound. Keep wounds that are draining or have pus covered with clean, dry bandages. Follow your healthcare provider's instructions on proper care of the wound. Pus from infected wounds can contain staph and MRSA, so keeping the infection covered will help prevent the spread to others. Bandages or tape can be discarded with the regular trash.
 - (2) Clean your hands. You, your family, and others in close contact should wash their hands frequently with soap and warm water or use an alcohol-based hand sanitizer, especially after changing the bandage or touching the infected wound.
 - (3) 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 sheets, towels, and clothes that become soiled with 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 any healthcare providers who treat you that you have or had a staph or MRSA skin infection.
- 14. Is it possible that my staph or MRSA skin infection will come back after it is cured?** - Yes. It is possible to have a staph or MRSA skin infection come back (recur) after it is cured. To prevent this from happening, follow your healthcare provider's directions while you have the infection, and follow the prevention steps above after the infection is gone.
- 15. What should I do if someone I know has a staph or MRSA infection?** - If you know someone that has a staph or MRSA infection you should also follow the prevention steps.



For more information about MRSA:

http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca_public.html#8#8

This fact sheet provides general information. Please contact your physician for specific clinical information related to you.