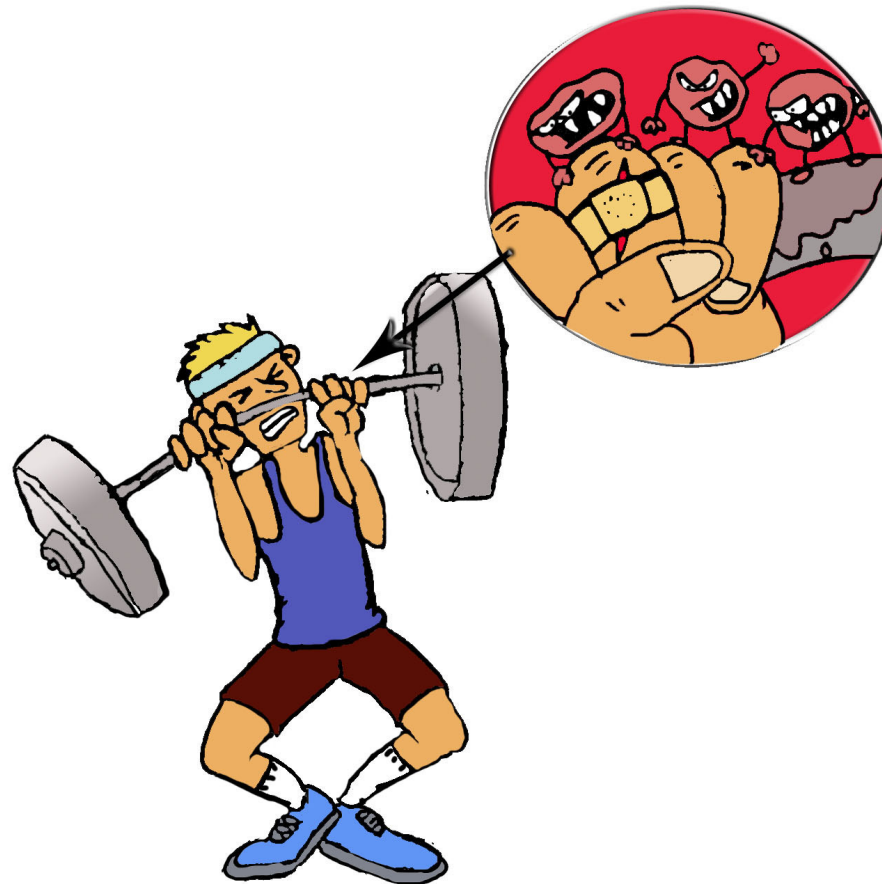


Methicillin-resistant
Staphylococcus aureus
What YOU Need to Know



Methicillin-Resistant *Staphylococcus aureus* (MRSA)

Outbreaks of skin infections caused by *Staphylococcus aureus* resistant to antibiotics have been increasingly reported in high school, college, and professional sports teams, including football, basketball, rowing, wrestling, and volleyball. Sharing of sports equipment and/or physical contact between players will increase the risk of infection. The information in this booklet will help you understand the risk, prevention, and treatment of these infections.



What is *Staphylococcus aureus*?

Staphylococcus aureus ("staph") are bacteria carried on the skin or in the nose of healthy people. About 25% to 50% of people in the United States carry staph in their nose at any given time, but it does not make them sick. Staph can also be carried in the armpit, groin, or genital area. Most skin infections caused by staph are minor, like pimples, and can be treated without antibiotics. However, staph can sometimes cause serious infections like pneumonia, blood or joint infections, and deep skin infections.

What is MRSA?

Methicillin-resistant *Staphylococcus aureus* (MRSA) is staph that has become resistant to the most common antibiotics used to treat it. MRSA infections are similar to other staph infections but can result in longer or repeated illness, more doctor visits, and a need for more expensive and toxic antibiotics. Originally, MRSA was confined to hospitals and nursing homes. More recently, a strain of MRSA has been found in the community that is different from hospital strains in that it causes more skin and soft tissue infections. This strain may also be called "community-associated" MRSA or CAMRSA. If you are an athlete with a staph infection, this is the strain you probably have.

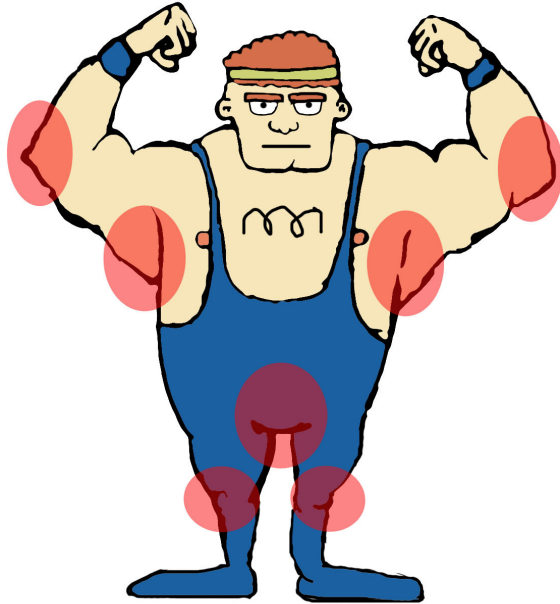
What do MRSA infections look like?

Common skin conditions caused by MRSA may look like any of the following:

- 🥥 Sores that look and feel like spider bites (but are not spider bites);
- 🥥 Red painful bumps under the skin, called boils or abscesses;
- 🥥 A cut that is swollen, hot, and filled with pus;
- 🥥 Blisters filled with fluid (usually on the face, called impetigo); or
- 🥥 A red, warm, firm skin area that is painful and getting larger, usually on the legs (called cellulitis).



Athletes tend to get the infection anywhere equipment rubs and causes broken skin, such as on the hands; knees or elbows for football, basketball, or volleyball players; or on the buttocks or sides of the legs for rowers.



How did I get MRSA?

MRSA spreads easily through direct contact with people or contact with surfaces contaminated with staph. MRSA is spread more frequently in crowded areas such as locker rooms, dormitory rooms, or other crowded living conditions. A single infected athlete can quickly cause an outbreak that can affect the entire team. Most infections occur when staph that is already on your skin or nose enters through a break in the skin (cut or scrape), or when broken skin touches objects (such as shared athletic equipment or clothing, bed linens, or furniture) that are contaminated with staph.



Unwashed hands can also transfer staph to cuts or scrapes on the skin. Staph is not usually passed through the air and is not found in dirt or mud.

What should I do if I think I have MRSA?

- 🥖 Tell your athletic trainer or coach right away. After your trainer looks at the site of the infection, s/he may refer you to a doctor for treatment.
- 🥖 Do not squeeze or pick at the area.
- 🥖 Do not ignore the sore and hope it will go away.

For your safety and the safety of your teammates, you may be excluded from some activities but not others. It is very important that you follow instructions from the trainer and/or doctor. The information in this booklet on the treatment of MRSA infections, together the instructions from your trainer and/or doctor, will help you to get better and return to active participation in your sport as quickly as possible. Your health, and the health of your teammates, is more important than any one practice, game, or competition.



Treating and managing MRSA


How is MRSA treated?


Most boils are treated by draining them of pus, a minor surgical procedure performed by a doctor.

Do not squeeze pus from the wounds on your own.

The pus may be tested to determine the type of bacteria it contains. This will help the doctor decide if an antibiotic would help to heal the infection. A dressing will be put on the wound(s). The doctor will explain that the dressing must prevent fluid from leaking out of the bandage and that the bandage should be changed at least twice daily, taking care to keep the wound clean.

Antibiotics may not be needed. If the doctor does put you on antibiotics, be sure to take all the medicine, even if the wounds seem to be healing. If you are taking antibiotics, see the doctor if the wound has a lot of pus and is not yet draining. If there is too much pus, the antibiotic may not be able to reach the wound to heal it.


 Avoid skin-to-skin contact with others until the wound is no longer draining and you have been instructed by the doctor to resume your usual activities.


 Wash your hands frequently, especially before and after changing band-aids,

bandages, or wound dressings.

 Dry your hands completely after washing.

 Keep the wound covered.

 The dressing must be changed at least twice a day or more often if it is draining and leaking.

 In a team sport, you may be able to take part in drills, but not scrimmages or games.

How to take care of the wound

1. Wash hands well with soap and water prior to changing the bandage.
2. Wear disposable gloves. They can be purchased at a drugstore.
3. Remove the old bandage and place it in a plastic bag.
4. Take off gloves and place them in the plastic bag, wash and dry hands (or use hand sanitizer), then put on a new pair of gloves.
5. If a topical ointment is prescribed, apply as directed.
6. Apply the new bandage.
7. Take off gloves. Place gloves in the plastic bag, tie the bag closed securely, and dispose of it as regular garbage. Wash and dry hands completely.
8. Use rubbing alcohol to clean reusable items such as scissors or tweezers after each use.
9. Follow all other directions the doctor gives you.
10. Tell the doctor if the wound is not getting better, if you develop a fever after starting on antibiotics, if an area of cellulitis gets bigger, or if you develop red streaks spreading from a wound.

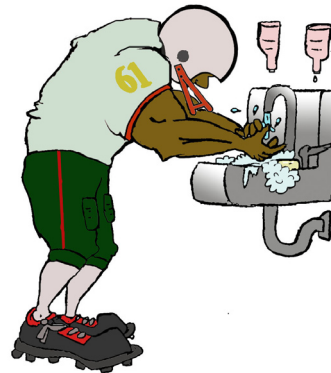
How do I prevent spreading MRSA to teammates, house mates, family or friends?

WASH YOUR HANDS!

The most important thing you can do is wash your hands frequently and thoroughly. If soap and running water is not available and your hands do not have visible dirt on them, staph germs can be killed by using an alcohol-based hand rub.

When should I wash my hands?

- 🥖 Before and after practice, games, or working out;
- 🥖 Whenever there is bare skin contact with others or with shared surfaces or equipment;
- 🥖 After sneezing, coughing, blowing, or touching your nose;
- 🥖 Before and after touching wounds, the mucous membranes of your eyes, nose, or mouth, or non-intact skin like acne, boils and skin rashes;
- 🥖 After using the toilet or urinal;
- 🥖 After touching any item soiled with wound fluids, such as dressings or bedding;
- 🥖 After cleaning the bathroom, changing your bedding, or doing laundry; and
- 🥖 Before preparing food, eating, or drinking.



How should I wash my hands?

Hand Hygiene with Soap and Water		
1. Remove jewelry. Wet hands with warm water	2. Add soap to palms	3. Rub hands together to create a lather
4. Cover all surfaces of the hands and fingers	5. Clean knuckles, back of hands and fingers	6. Clean the space between the thumb and index finger
7. Work the finger tips into the palms to clean under the nails	8. Rinse well under warm running water	9. Dry with a single-use towel and then use towel to turn off the tap
Minimum wash time 10-20 seconds.		

SHOWER WITH SOAP AND WATER AS SOON AS POSSIBLE AFTER DIRECT CONTACT SPORTS!

- 🍪 Dry using a clean, dry towel.
- 🍪 Do not share towels (even on the sidelines of games), soap, razors, or other personal toiletry items.

CLEAN AND DISINFECT!

Clean your environment by removing visible dirt. Disinfect it by applying a chemical product that kills the bacteria on a cleaned surface for a period of time specified by the manufacturer (usually 10 minutes). Disinfectants will not work if the surface is dirty. Under favorable conditions, MRSA can survive on surfaces in the environment for days to weeks if you do not clean and then disinfect the surfaces.

- 🍪 Any item that comes into contact with wound drainage must be cleaned then disinfected. If the item is colorfast, one tablespoon of household bleach mixed with one quart of water is the best disinfectant. A new solution must be mixed daily. To disinfect any cloth, upholstered, or non-colorfast surface, use a phenol-containing solution (such as Lysol® or Pine-sol®) mixed according to package instructions.
- 🍪 Regularly clean surfaces that you commonly touch (e.g., door knobs, light switches, faucets, keyboards).
- 🍪 If an object such as a chair is soiled with wound fluids, it must be cleaned prior to being disinfected.

- 🍪 Cooking utensils and dishes should be washed in the usual manner with soap and hot water or using a standard home dishwasher.

DO YOUR LAUNDRY!

- 🍪 Change your sheets and towels daily, especially if you have a draining wound.

- 🍪 When handling MRSA-soiled bedding, carry it away from your body to avoid soiling your clothing.



- 🍪 To kill the bacteria, contaminated clothing, towels, and bedding should be washed in a separate load with the hottest water and dryer temperature the fabric will tolerate.
- 🍪 Wash your hands after handling drainage-soiled bedding, towels, or clothing.

OTHER STRATEGIES TO PROTECT YOURSELF AND OTHERS

- 🍪 Ensure that your sore is covered with a clean dry bandage. If possible, keep the bandage covered with clean clothing.
- 🍪 If you have a sore that cannot be covered (such as on your face), do not touch the area! If you do

touch it, wash your hands immediately.

👉 Carry alcohol-based hand cleaner with you so that you can cleanse your hands if soap and running water are not available.

👉 Do not work out on public equipment until cleared by the trainer. This includes use of hot tubs, saunas, or whirlpools.

👉 When working out, use a towel or clothing to act as a barrier between surfaces of shared equipment and bare skin, such as weight or locker room benches.

👉 If your infection comes back or you have a similar new infection later, cover the area with a bandage (if it is a skin infection) and tell the trainer or seek medical attention as soon as possible. Tell the health care provider that you have had MRSA in the past.

Thank you for your cooperation.

Acknowledgements:

“Information on Staphylococcal Infections, School Athletic Departments: Instructions for the Athlete” by the Texas Department of State Health Services, Infectious Disease Control Unit, http://www.tdh.state.tx.us/ideas/antibiotic_resistance/mrsa/athletics/athletes/.

“Living with MRSA” by the Tacoma-Pierce County Health Department, Washington State http://www.doh.wa.gov/topics/Antibiotics/providers_MRSA.htm.



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