COMMUNITY-ASSOCIATED METHICILLIN RESISTANT
STAPHYLOCOCCUS AUREUS (CA-MRSA)

Sports Teams/Athletes

What is STAPHYLOCOCCUS AUREUS (STAPH)?
Staphylococcus aureus, often referred to as "staph," are bacteria commonly carried on the skin or in the nose of healthy people. Approximately 25 percent to 30 percent of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. 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).

What is METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)?
Most staph bacteria are susceptible to antibiotics, and are termed methicillin susceptible Staphylococcus aureus (MSSA). Some staph bacteria are resistant to several antibiotics and are therefore more difficult to treat. 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 percent to 30 percent of the population is colonized with staph, only approximately 1 percent is colonized with MRSA.

Who gets staph or MRSA infections?
Staph infections, including MRSA, occur most frequently among persons in hospitals and health care facilities who have weakened immune systems. These health care-associated staph infections include surgical wound infections, urinary tract infections, bloodstream infections, and pneumonia.

What is community-associated MRSA (CA-MRSA)?
Staph and MRSA can also cause illness in persons outside of hospitals and health care facilities. CA-MRSA infections are acquired by persons who have not been hospitalized nor had a medical procedure within the past year. Staph or MRSA infections in the community are usually manifested as skin infections, such as pimples and boils, and occur in otherwise healthy people.

What does a staph or MRSA infection look like?
Staph bacteria, including MRSA, can cause skin infections that may look like a pimple or boil. These skin infections can be red, swollen, painful, or have pus or other drainage. More serious infections may cause pneumonia, bloodstream infections, or surgical wound infections.

Are certain people at increased risk for community-associated staph or MRSA infections?
Clusters of CA-MRSA skin infections have been investigated among athletes, military recruits, children, Pacific Islanders, Alaskan Natives, Native Americans, men who have sex with men, and prisoners. 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.
How can a school and their athletes prevent staph or MRSA skin infections?

**Prevention steps:**

1. Keep hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer before, during and after events. Always wash or sanitize hands after sneezing, blowing or touching the nose and after using the toilet.
2. Keep cuts, scrapes and wounds clean and covered with a bandage until healed. If a wound cannot be covered adequately, exclude players with potentially infectious skin lesions from practice or competitions until the lesions are healed or can be covered adequately.
3. Avoid contact with other people’s wounds or bandages.
4. Avoid sharing personal items such as towels (even on the sidelines at a game or match), clothing, equipment and other personal items.
5. Encourage good hygiene, including showering and washing with soap after all practices and competitions. Always dry with a clean dry towel.
6. Establish routine cleaning schedules for the athletic area and equipment at least once weekly. Use an EPA approved commercial disinfectant (which contains phenol) or a fresh (mixed daily) solution of one part bleach to 100 parts water (1 tablespoon bleach in one quart of water).
7. Wash towels, uniforms, scrimmage shirts, and any other laundry in hot water and ordinary detergent and dry on the hottest cycle. Also, inform parents of these precautions if laundry is sent home. Laundry must be in an impervious container or plastic bag for transporting home.
8. Train athletes and coaches in first aid for wounds and recognition of wounds that are potentially infected.
9. Encourage athletes to report skin lesions to coaches and encourage coaches to assess athletes regularly for skin lesions.

Division of Public Health (DPH) recommends that facilities introduce a policy in which participants must inform the athletic director and/or coaching staff if they have a rash illness or skin lesion. Participants should be excluded from contact activities until evaluated by a health care professional or until the lesion is clear and dry.

What should coaching staff do if an athlete presents with a possible staph or MRSA infection?

1. Treat any draining wound as a potential MRSA infection.
2. Separate the infected athlete from direct physical contact with other participants. This includes practicing or training using any shared equipment.
3. The participant with an active infection must be evaluated by a health care professional.
4. Inform the physician or clinician of the possibility of MRSA.
5. Treat uncultured wounds as MRSA.

Health care provider management of an athlete with a possible staph or MRSA infection:

The health care provider should perform a culture and susceptibility test to determine what bacteria the athlete has and what antibiotic will be the most effective with the fewest side effects. Start the athlete on an antibiotic that is appropriate for MRSA at the same time the culture is taken. If the physician or clinician determines that the athlete does not have a bacterial infection, he or she will not receive an antibiotic. Antibiotics are not effective for nonbacterial infections. If an antibiotic is prescribed, the athlete must take all medication even after the infection seems to have healed. If a topical ointment is prescribed, it should be applied as directed. The athlete should follow all other directions as instructed by the health care provider. The health care provider must be informed if the athlete does not respond to treatment.
Are staph and MRSA infections treatable?
Yes. Staph and MRSA infections are treatable with antibiotics and/or drainage of the lesion. 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.

Many staph skin infections may also 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 health care provider.

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 recur after it is cured. To prevent this from happening, follow your health care provider’s directions while you have the infection, and follow the prevention steps above.

What can I do to prevent MRSA and other staph infections?
You can prevent spreading staph or MRSA skin infections to others by following these steps:

- **Report all cuts, scraps, wounds or skin lesions to coaching staff.** Give all documentation from a health care provider regarding your injuries or wounds to coaching staff and the school nurse, especially if exclusion from sports has been advised.

- **Cover your wound.** Keep any draining wound covered with clean, dry bandages. Follow your health care provider’s instructions on proper wound care. Pus from infected wounds can contain staph and MRSA. Discard bandages or tape with the regular trash.

- **Wash 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.

- **Do not share personal items.** Avoid sharing personal items such as towels, washcloths, razors, clothing, or sports equipment that may have had contact with the infected wound or bandage. Wash soiled sheets, towels, and clothes with water and laundry detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria in clothes.

- If a sore or cut becomes red, oozes, causes pain, or is not healing, consult a health care provider.

- Do not insist on antibiotics for treating colds or other viral infections.