

Methicillin-Resistant Staphylococcus Aureus (MRSA)

National headlines about MRSA, the "superbug" that is resistant to a number of commonly used antibiotics, have raised important questions and understandable concerns on campus. National media hype has raised some unnecessary fears ("our athletes, our children, our schools are under siege!!") along with raising awareness of this issue.

Although certain strains of Staphylococcus are normal on the skin, some strains may occasionally cause infection. Due to overuse of antibiotics in people and our food sources, some usually benign bacteria has become resistant to our usual antibiotic treatments, and has been duped Methicillin Resistant Staph Aureus (MRSA). The MRSA bacterium may cause minor or serious skin infections, has dramatically increased in the past four years all across the United States. It is a problem that our clinicians at the UCSC Student Health Center encounter regularly in their evaluation of skin infections.

Three percent of the general population are carriers of the Methicillin Resistant Staphylococcus Aureus (MRSA) bacteria that causes painful boils and skin infections. 50% will spontaneously clear the carried state but the other half will have a longer duration of carriage gradually tailing off. The bacteria is carried in the nares, throat, axilla, groin and gastrointestinal tract as well as on the environment. Attempts at decolonization with topical therapy show little effect. Clorox baths, mupirocin nasal application are NOT recommended. One quarter of people get a second infection after the initial infection.

If your infection recurs, drainage procedure alone is sufficient for smaller boils. For more extensive disease oral antibiotics are the preferred treatments and should be done promptly at the earliest symptoms of recurrence. It is uncommon for roommates, teammates, family members to become infected without direct contact with the wound source. Standard hygiene techniques when changing dressings should include use of gloves followed by hand gel. Any bandages should be disposed of in a way to reduce exposure to housemates.

At this time, UCSC Health Center has three prescriptions – for individuals and for the campus community—for addressing concerns and anxieties related to MRSA:

1. Get the facts about MRSA

Gaining awareness of the facts will focus our attention in ways that will do us good rather than harm.

"Staph" is a common bacterium often found on the skin or in the nose of healthy people.

While causing no problems at all in the 25 to 30% of the general population who have the bacteria at any given time, Staph can cause infections, both minor ones such as pimples and boils and, rarely, more serious wound or bloodstream infections. Some staph bacteria have become resistant to certain antibiotics; even so, most staph and MRSA infections are treatable with specific antibiotics.

Although the drug-resistant Staph (MRSA) has been traditionally seen in hospitalized individuals or in those who have been treated at a healthcare facility, **cases of Community-Associated MRSA infections (CA-MRSA)- infections not acquired in a health care setting- are now making headlines.** Those who live in crowded settings and/or those who routinely share items that may be contaminated with the bacteria (e.g., athletes, daycare attendees), are at higher risk than the general public.

2. Seek early medical attention

If individuals seek early medical attention, they will reduce the chance of complications and spread of the infection to others.

Anyone with a skin condition that is not improving or is spreading, becomes red and swollen or abscessed, is associated with a fever, or seems otherwise unusual should consult with a health care provider. UCSC students may call the advice nurse at 831-459-2591 if they have questions, or come in to Same Day Clinic at the Student Health Center between the hours of 8 am and 4:30 pm Monday-Friday during the quarter (excluding holidays and campus closures).

3. Adopt good hygiene practices

Good hygiene practices are the best way to reduce the risk of transmission of MRSA and most of the other germs that are present in our environment.

Everyone

- **Wash hands frequently** with soap and water or an alcohol-based sanitizer.
- Disinfectant products list the organisms that they cover. There is no need to purchase specialized expensive products.
- Keep cuts and abrasions clean and covered with a band aid or dressing until healed.
- Avoid contact with other people's cuts, abrasions or soiled dressings.
- Avoid sharing personal items such as razors or towels and use a barrier (e.g., clothing or a towel) between your skin and shared equipment such as weight-training benches

Athletes

Because athletes have a somewhat higher risk of staph infections, we recommend that UCSC athletes also:

- Shower and wash with soap after every practice or competition. Don't share bar soap: use soap from dispensers or your own bar of soap.
- Wash promptly any abrasions such as turf burns, mat burns, or floor burns.
- Launder personal items such as towels, uniforms, supporters, etc. after each use.
- Avoid sharing towels, razors, and other personal items.
- Clean shared athletic equipment after each use (used commercial disinfectants or a solution of one tablespoon of bleach in one quart water).
- Be alert for any skin irritation. (Intercollegiate athletes should report skin lesions to trainers and coaches who should be able to recognize wounds that are potentially infectious and need treatment.)
- Apply topical antibiotic (e.g., bacitracin) and cover cuts and abrasions completely with dressings. Wash your hands before and after performing wound care.
- If potentially infected skin conditions cannot be adequately covered with dressings, delay sports participation until they can be.

For more information

http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca.html