

**Safety Tip of the Month – November 2007**  
**VSI Safety Committee**  
**“Facts and Safety about MRSA”**

Methicillin Resistant Staphylococcus Aureus (MRSA) is a "smart" bacterium that has developed genetic changes that enable it to be resistant to many commonly used antibiotics that would normally kill it.

Staphylococcus is a bacterium that is on our skin and in the nostrils of most people. The body's skin barrier and the lining of protective endothelial cells and white blood cells keep this bacterium from taking over in any part of the body.

Adults or children who develop a cut or who develop a respiratory tract infection will normally recover with the body's own protective immune response and, at times, addition of an antibiotic. Individuals who get MRSA in their bloodstream or in their lungs will not respond to the conventional antibiotics, and if the body's own immune system (white blood cells, cytokines that attack the bacteria, etc.) does not adequately sequester and eradicate the bacteria, the person may become very ill and not be adequately treated with the limited antibiotics available for MRSA. Individuals with compromised immune systems (e.g. the very young, the very old, patients undergoing chemotherapy, etc.) are more vulnerable to such infections.

Staph infections, including MRSA, generally start as small red bumps that resemble pimples, boils or spider bites. Keep an eye on minor skin problems — pimples, insect bites, cuts and scrapes — especially in children. These can quickly turn into deep, painful abscesses that require surgical draining. Sometimes the bacteria remain confined to the skin. But, they can also burrow deep into the body, causing potentially life-threatening infections in bones, joints, surgical wounds, the bloodstream, heart valves and lungs. If wounds become infected, see your doctor. Ask to have any skin infection tested for MRSA before starting antibiotic therapy. Drugs that treat ordinary staph aren't effective against MRSA, and their use could lead to serious illness and more resistant bacteria

Protecting yourself from MRSA — which might be just about anywhere — may seem daunting, but these common-sense precautions can help reduce your risk:

- **Keep personal items personal.** Avoid sharing personal items such as towels, sheets, razors, clothing and athletic equipment. MRSA spreads on contaminated objects as well as through direct contact. Although few outbreaks have been reported in public gyms, MRSA has spread among athletes sharing razors, towels, uniforms or equipment.
- **Keep wounds covered.** Keep cuts and abrasions clean and covered with sterile, dry bandages until they heal. The pus from infected sores often contains MRSA, and keeping wounds covered will help keep the bacteria from spreading.
- **Sanitize linens.** If you have a cut or sore, wash towels and bed linens in hot water with added bleach and dry them in a hot dryer. Wash gym and athletic clothes after each wearing.
- **Wash your hands.** Careful hand washing remains your best defense against germs. Scrub hands briskly for at least 15 seconds, then dry them with a disposable towel and use another towel to turn off the faucet. Carry a small bottle of hand sanitizer containing at least 62 percent alcohol for times when you don't have access to soap and water.

Athletes, officials, coaches and other volunteers can minimize the onset of such infections by maintaining a clean environment. Such measures include frequent hand washing with a disinfectant soap or alcohol/lotion dispenser in the locker room, placement of such alcohol / lotion dispenser on the swim deck, and vigorous daily cleansing of the locker room surfaces (walls from shoulder level down to floor, floor, benches, locker, toilet facilities, sinks, counters) with a bactericidal disinfectant.

Any blood, vomit, or wound drainage on the swim deck or locker room should be cleaned immediately with chlorine based disinfectant (life guard duty). Whenever handling a swimmer with open wounds, disposable gloves should be worn.