

Preventing MRSA Infections in the Fitness, Racquet, and Athletic Facilities

Written by: Elizabeth Bancroft, MD, Los Angeles County Department of Public Health; Jon Rosenberg, MD, California Department of Public Health; Erica Pan, MD, San Francisco Department of Public Health

What is *Staphylococcus aureus*?

Staphylococcus aureus is a bacteria; it is a common cause of skin and invasive infections. Methicillin-resistant *S. aureus* (MRSA) is *S. aureus* that has developed resistance to first-line antibiotics.

CA-MRSA vs. HA-MRSA

Healthcare associated MRSA (HA-MRSA) has been a problem in health care facilities for many years and is often resistant to many kinds of antibiotics. Community Associated MRSA (CA-MRSA) has recently been found outside of hospitals in California, the United States, and globally. CA-MRSA tends to be treatable with many kinds of antibiotics.

CA-MRSA Infections

Most infections with CA-MRSA are in the skin and soft tissue, such as boils, abscesses, and cellulitis. Typically, skin infected with CA-MRSA will be red, swollen, warm, tender to touch, and may have drainage of pus. Boils may be misdiagnosed as spider bites. If CA-MRSA enters the bloodstream, it can cause pneumonia and toxic shock syndrome, which are rare but can be fatal.

CA-MRSA Risk Factors

Risk factors for CA-MRSA include broken or not healthy skin, close and crowded living conditions, poor hygiene, frequent skin-to-skin contact, contaminated surfaces and shared personal items. Outbreaks have been reported in athletes (especially wrestlers and football and basketball players), the military, correctional facilities, and schools. Common risk factors in outbreaks include sharing personal items (towels, razors, soap) and equipment. A recent tattoo or body piercing may also be an area for the infection to grow. However, CA-MRSA often affects otherwise healthy people of all ages.

Treatment of CA-MRSA

CA-MRSA requires consultation with a health care professional for proper diagnosis and treatment. Three ways CA-MRSA can be treated include: (1) a health care professional performs an "incision and drainage" procedure to let the infection drain, (2) antibiotics (either oral, intravenous, or topical), and/or (3) warm compresses on the site may be recommended to reduce swelling and promote drainage. These treatments may be recommended alone or in combination to effectively treat a CA-MRSA skin infection. Until the wound is completely healed, it should remain bandaged. As long as wounds are adequately covered, a person with CA-MRSA should be able to participate in normal daily activities including school, work, sports, and working out.

Education and Hygiene for CA-MRSA

Since MRSA can exist in the nose, groin, rectum, underarms, and belly button, it is important to inform consumers about good hygiene including hand washing, taking showers after a workout, not sharing soap, not sharing towels, and washing gym clothes after a workout. Open or draining wounds should be properly bandaged before starting and during a workout. Used bandages should be immediately disposed of to ensure that other consumers are not exposed to them. If your facility offers child care, it is important to encourage young children and staff to wash their hands.

Protecting Your Facility from CA-MRSA

- Remind consumers that all wounds should be bandaged properly before using any of the facilities.
- Promote good hand washing (at least 20-30 seconds of soap and rinse) in the bathrooms, locker rooms, and child care areas.
- Encourage consumers to use a towel or cloth barrier between their skin and shared fitness equipment, sauna and steam room benches.
- Include information on improving hygiene, preventing infections, bandaging wounds in consumer and staff communication.
- Incorporate a regular schedule for cleaning and disinfecting. Cleaning is the process of wiping down surfaces before and after use of equipment. Many disinfectants kill *Staphylococcus aureus*. Read manufacturer labels as most require the disinfectant to sit on the surface for 10 minutes to ensure *Staphylococcus aureus* is killed. Disinfecting can be done by staff at the end of each business day.
- Advertise and offer approved EPA registered cleaning supplies for consumers to wipe down equipment before and after use.
- Staff can also model proper equipment cleaning and hand washing techniques.
- Hold regular educational meetings for staff, trainers, instructors and child care staff on how to prevent infections.
- Encourage staff to include prevention messages at check-in, during training sessions, and during all classes.

Public Health Notification

Fitness, racquet, and athletic facilities are not required to report CA-MRSA in clients or staff. If an outbreak is suspected, call your local Public Health Department.

Resources

www.aware.md

(California Medical Association Foundation – AWARE Project)

http://www.cdc.gov/ncidod/hip/Aresist/ca_mrsa.htm

(Centers for Disease Control and Prevention)

<http://www.cdph.ca.gov/healthinfo/discond/Pages/MRSA.aspx>

(California Department of Public Health)

<http://www.lapublichealth.org/acd/docs/MRSA/MRSA%20Guidelines.2007.pdf>

(Los Angeles County Dept. of Public Health)

<http://www.tpchd.org/page.php?id=12>

(Tacoma/Pierce County Health Department)

AWARE Project

California Medical Association Foundation initiated the Alliance Working for Antibiotic Resistance Education (AWARE) in 2000 to increase consumer awareness of appropriate antibiotic use and reduce inappropriate prescribing. AWARE is developing a statewide plan of action on CA-MRSA in partnership with the Centers for Disease Control and Prevention (CDC).

For more information, please contact:

The AWARE Project

Phone: 916-551-2550

E-mail: aware@cmanet.org

Website: www.aware.md