

MRSA: What You Should Know

WHAT IS MRSA (pronounced Mer-sah)?

Staphylococcus aureus, often referred to simply as "staph," is commonly carried on the skin or in the nose of healthy people. The U.S. Centers for Disease Control (CDC) reports that approximately 25% to 30% of the population is colonized with staph bacteria in the nose or on the skin. Staph is among 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, in some instances staph can cause serious infections that require antibiotic treatment.



Some staph bacteria are resistant to antibiotics. MRSA (**methicillin-resistant *Staphylococcus aureus***) is a type of staph that is resistant to some antibiotics including methicillin and its close cousins oxacillin, penicillin and amoxicillin. While 25 percent to 30 percent of the population is colonized with staph, only about 1 percent normally carries MRSA.

HOW IS MRSA SPREAD?

Close skin-to-skin contact, cuts, abrasions and poor hygiene have been linked to the spread of MRSA. Frequent hand washing and good hygiene are among the best preventative measures to avoid infection.

MRSA has been around for a number of years and occurs most frequently among people in health-care facilities and who have weakened immune systems but can be seen in the general population as well. Community-acquired MRSA infections (CA-MRSA) usually involve infections of the skin or soft tissue (such as pimples, boils and abscesses) and occur in otherwise healthy people. CA-MRSA is usually easy to treat.

Although MRSA has been isolated from environmental surfaces (e.g., floors, work areas, medical equipment), these are not considered to be the most important sources for spread. However, it is important to routinely clean shared items like athletic equipment.

HOW CAN I AVOID GETTING OR SPREADING MRSA?

- I. **Personal Hygiene** is the best way to prevent MRSA.
 - **Wash hands often** with soap and water and scrub for at least 15 seconds. If soap and water are not accessible, alcohol-based hand sanitizers can be used unless hands are visibly soiled.
 - **Do not share personal items** like towels, wash cloths, bar soap, razors, clippers, and toothbrushes.
 - **Keep wounds clean and covered** with a clean dry bandage, especially if the wound is draining. Seek medical care immediately at the first signs of infection. **Follow the direction of your medical provider** in caring for the wound and to prevent the spread of the infection.
 - **Throw away soiled bandages** and avoid contact with other people's wounds and bandages.



- **Shower** with soap and water immediately after exercise and activities where there is frequent skin-to-skin contact.

II. Using Shared Equipment (e.g. exercise machines)

- **Use a barrier** such as long sleeved clothing or a towel to act as a barrier between surfaces of shared equipment/benches and bare skin.
- **Wipe surfaces with disinfectant** before and after use, especially if the surface has become wet with sweat.
- Individuals with open wounds or active skin infections should keep them covered with clean dry bandages and should avoid public swimming pools, whirlpools and other common tubs.

HOW DO I CLEAN AND DISINFECT SURFACES?

- **Routinely (at least daily) clean equipment and soiled surfaces** with which multiple individuals have bare skin contact. Staff in heavily used areas (e.g. fitness centers) should be encouraged to clean equipment multiple times throughout the day. Spray bottles and paper towels should be available in these heavily used areas so that users can also disinfect equipment.
- **Regularly clean** sinks, showers, and toilets with disinfectant.
- **Wear plastic or rubber gloves** when cleaning/disinfecting surfaces and handling laundry.
- **Clean equipment and surfaces using disinfectants** that are effective in removing MRSA from the environment. Check the label of the container to confirm that it is effective on MRSA and/or *Staphylococcus aureus*. Effective disinfectants commonly used at Penn State include:
 - 1 to 10 dilution of household chlorine bleach in water (must be made fresh every 3 days)
 - Lysol
 - Virex 64, 128 or 256
 - Quat Stat
 - Fullsan
- **Read the instruction labels** on all cleaners to make sure they are used safely and to determine appropriate dilution and contact times.
- **Launder towels, sports uniforms, sheets and underclothing** with hot water and detergent and dry on the hottest suitable temperature (do not line dry). Add bleach, if label instructions indicate it is suitable.

ADDITIONAL INFORMATION

For more information on MRSA, visit the following website:

<http://www.psu.edu/ur/2007/MRSA%20vs%20CA-MRSA.html>

Posters containing information on MRSA prevention are available for download from the CDC at:

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

A flyer that emphasizes hand washing for influenza prevention is available for your use and posting in bathrooms and throughout buildings and can be found at:

http://www.ehs.psu.edu/help/info_sheets/Flu_Season_Good_Health_Habits.pdf

Contact Penn State University Health Services at (814) 865-6556 or EHS at (814) 865-6391 if you have any questions about this information.

Source: U.S. Centers for Disease Control and PA Department of Health