



Human
Services

Facts About

MRSA (Methicillin-resistant *Staphylococcus aureus*)

Staphylococcus aureus is a group of bacteria. It is also called "staph".

Staph, like many other bacteria, can be found anywhere. People can have staph on their skin and in their nose and it doesn't make them sick. Staph, however, can cause illness if it enters the body through a cut or scrape in the skin. It can cause different illnesses that range from mild to severe. This is one reason it is so important to wash cuts or scrapes with mild soap and water—to prevent infection.

A form of staph developed that became resistant to some of the drugs (antibiotics) used to treat it. This form of "staph" is known as methicillin-resistant *Staphylococcus aureus* or MRSA.

HOW IT'S SPREAD

MRSA can be spread through cuts or other openings in the skin:

- By close skin to skin contact
- On contaminated items and surfaces like towels and athletic equipment
- By poor hygiene
- In crowded living conditions

WHO'S AT RISK

Most MRSA infections are found in people with weakened immune systems who are in hospitals and other health care facilities like nursing homes and dialysis centers.

MRSA infections are becoming more common in people outside of healthcare facilities. Anyone can get infected with MRSA, however people who seem to be most affected are:

- children
- athletes
- military recruits
- prisoners

SYMPTOMS

Staph and MRSA infections can start out looking like a pimple or boil. It can be red, painful and swollen. Other symptoms may include:

- Drainage of fluid or pus
- Fever
- Warmth around the infected area

In addition to the symptoms above, signs of a more serious staph infection may include:

- Rash
- Shortness of breath
- Chills
- Chest pain
- Fatigue
- Muscle aches
- Headache
- General feeling of illness

TREATMENT

MRSA is usually a mild skin infection that can be treated successfully with proper skin care and **specific antibiotics prescribed by a doctor**. In rare cases, both MRSA and common staph infections can lead to serious bone or blood infections that become harder to treat. People should see a doctor if skin conditions worsen or wounds become infected. The doctor may have lab tests done depending on the symptoms and how severe they are.

PREVENTION

There are things you can do to help prevent MRSA infections.

Clean cuts and scrapes with mild soap and water. Cover open sores with sterile bandages until they heal. This will keep germs from getting into the sore and germs from the sore from spreading to others.

(see back for more prevention information)



Human Services

MRSA

(Methicillin-resistant *Staphylococcus aureus*)

MORE ABOUT PREVENTION

Wash your hands for 15-20 seconds with soap and water. Teach children how and when to wash hands. Wash hands after going to or visiting the hospital, a nursing home or other healthcare facility. Ask hospital and healthcare staff to wash their hands before touching you.

Don't share personal items. Each person should have their own washcloths, towels, sheets, razors, and clothes. MRSA can spread on contaminated objects and by direct contact.

Keep athletic equipment and uniforms clean. Wash uniforms after each use. Wipe down non-washable gear like head protectors with alcohol. Don't share athletic equipment or uniforms. Shower with soap and water after practices and games.

Take antibiotics as prescribed. If a doctor prescribes antibiotics it is very important to take all of the medication as it is prescribed—even if you start to feel better. Not finishing antibiotic treatment can cause the germ being treated to become resistant to the drug. That can make the infection harder to treat and the illness last longer.

FOR MORE INFORMATION

Centers for Disease Control and Prevention

http://www.cdc.gov/ncidod/dhgp/ar/mrsa_ca_public.html

Mayo Clinic

<http://www.mayoclinic.com/health/mrsa/DS00735>

National Library of Medicine

<http://www.nlm.nih.gov/medlineplus/ency/article/007261.htm>

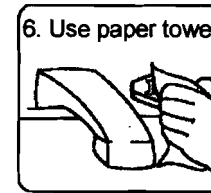
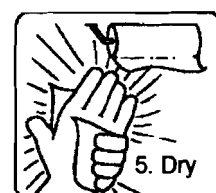
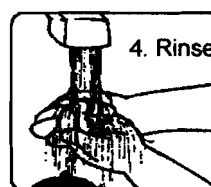
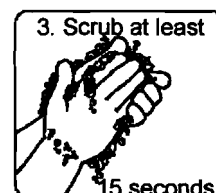
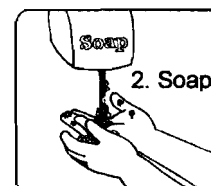
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Handwashing is one of the most important things a person can do to prevent the spread of many diseases!

How to Wash



When to Wash

- Before handling food and food preparation items
- Before and after eating
- After using the bathroom, after changing a diaper, after helping a child use the bathroom
- After exposure to blood and other body fluids (blood, urine, feces, runny noses, vomit, etc.)
- After handling pets, after cleaning their cages or tanks
- After coughing, sneezing or blowing your nose, after wiping a child's nose
- After playing or working outside
- After handling trash
- Whenever hands look, feel or smell dirty

Control of MRSA on Athletic Teams NC Public Health Recommendations

1. Hygiene and Infection Control Practice

a. Staff

- i. Hand hygiene is the single most important factor in preventing the spread of MRSA. Coaches and trainers should perform appropriate hand hygiene (wash with soap and water or use alcohol-based hand sanitizer) after contact with players, especially when changing bandages, providing care for wounds, and after removal of gloves. In situations where access to sinks is limited- e.g., games- carry individual containers of alcohol-based hand sanitizer.
- ii. Educate players on appropriate management of wounds (clean or infected), which includes immediate washing of wounds with soap and water; covering wounds with bandage/dressing until healed and no drainage is present; changing dressing at least 2 times/day and when visibly soiled; washing hands after changing dressings; and disposing of dressing in proper containers.
 1. Exclude players with draining lesions or open wounds (whether covered or not) from whirlpools, ice tubs, saunas and hot tubs.
 2. All wounds should be covered until healed, especially when contact with multi-use items (weight equipment, electric stimulation cuffs) is possible.
 3. Wounds should be adequately covered during competition (e.g., bandaged and use of protective sleeve) especially if drainage is present

b. Players

- i. Do not share towels (even on the sidelines of games) or other personal hygiene items with other players.
- ii. Shower *with soap* before using the whirlpool, steam room, or sauna.
- iii. Shower as soon as possible after EVERY practice, game, or tournament.
- iv. Avoid contact with draining lesions and contaminated items (e.g., bandages) from other people
- v. Wash hands after using multiuse equipment (e.g., weight equipment) and after contact with potentially contaminated items (e.g., another person's wounds, infected skin, or soiled bandages).

2. Environmental Cleaning

- a. Clean all shared surfaces that come in contact with bare skin - e.g., mats, massage tables, training tables, and therapy machines - after each person with a cleaning/disinfecting spray.
- b. Clean all skin contact points of weight equipment at a minimum once per day with a commercial disinfectant approved as effective against *Staphylococcus aureus* by the Environmental Protection Agency, or a solution of 1 tablespoon bleach in one quart of water (must be mixed fresh daily). Follow the directions listed on the labels of all cleaning/disinfecting products.
- c. Use a clean towel as a barrier between bare skin and shared surfaces (e.g., exercise equipment, sauna bench, leg supports during therapy).
- d. Repair or discard equipment with damaged surfaces that cannot be adequately cleaned- e.g., equipment with exposed foam.
- e. Wash towels, uniforms and other laundry in hot water for at least 25 minutes with ordinary detergent and dry on the hottest setting the fabric will tolerate.

3. Disease Surveillance

MRSA infections spread quickly on athletic teams and can be difficult to control. Therefore, it is important for coaches and trainers to be aware of every skin infection as soon as it occurs to prevent a single case from becoming an outbreak.

- a. Instruct players to report suspicious skin changes such as redness, warmth, swelling, tenderness, or drainage, especially when associated with cuts, boils, or sites of skin irritation and abrasions.
- b. If MRSA infections occur among team members, coaches and trainers should begin actively checking for new lesions among team members. This may include questioning all team members before practices and referring those with new lesions to their physicians.
- c. If MRSA infections occur among players on children's sports teams, consider notifying parents of all team members to enlist their support with reinforcing hygiene measures and reporting of skin lesions to team officials. *Care must be taken to maintain confidentiality of players with infected wounds to avoid stigmatization and anxiety.*

4. Diagnosis and Treatment

- a. Consider all draining wounds as MRSA infections.
- b. All players with suspicious skin lesions should be evaluated by a physician or other qualified healthcare provider. There is no single accepted treatment for MRSA skin and soft tissue infections. Decisions about antibiotic treatment should be made by the healthcare provider. Guidelines for management of suspected MRSA infections have been developed by NC Statewide Program for Infection Control and Epidemiology (SPICE).

5. Player Exclusion from Participation

- a. Any athlete with a draining wound should be evaluated by a physician or qualified healthcare provider for participation in athletic activities. Decisions regarding participation should be based on the following factors:
 - i. **Ability to cover lesions:** Athletes with draining lesions or packed open wounds should be excluded from practice and participation unless the lesions can be adequately and completely covered with a bandage that can withstand the rigors of competition.
 - ii. **Presence of infections in other team members:** Coaches and administrators should consider excluding all athletes with draining lesions or packed open wounds (covered or uncovered) from practice and participation if there are multiple players on the team with confirmed or suspected MRSA lesions.
 - iii. **Nature of contact:** Whether a lesion can be adequately covered depends on the nature of the contact. Wrestlers with draining lesions or open packed wounds (covered or uncovered) should not be allowed to participate until all drainage has resolved, or until packing is no longer required in the case of open wounds. Decisions regarding exclusion from other high-contact sports (e.g., football) should be made after consideration of the first two factors.

6. Additional Resources

- a. Centers for Disease Control and Prevention MRSA Educational Materials http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca_posters.html#Athletic
- b. Mecklenburg County Health Department website (poster, prevention video, FAQ) <http://www.charmeck.org/Departments/Health+Department/Top+News/MRSA.htm>