

What to do about MRSA in Schools: Guidance for School Nurses

Methicillin-Resistant *Staphylococcus aureus* (MRSA)

Skin and Soft Tissue Infections



Description

MRSA is a bacterial infection caused by *Staphylococcus aureus* (“Staph”) bacteria that are resistant to many antibiotics such as penicillin. It frequently causes skin infections and can also enter wounds, urine, the lungs or other body sites. As a skin infection, it can present as an abscess, impetigo, boil or an open wound and is often mistaken for a spider bite. Symptoms can include fever, redness, warmth, swelling, pus and tenderness at the site. Any drainage from a skin lesion should be considered infectious.

Mode of Transmission

MRSA is primarily spread through contact with the bacteria, either by direct person-to-person contact or indirectly through shared equipment, personal articles/objects or contaminated surfaces. Examples of shared objects include towels, soap, razors, clothing and athletic equipment.

Incubation Period

Variable.

Infectious Period

An open wound may contain MRSA bacteria and should be treated as infectious.

School/Nurse Responsibility

1. Report to your local health jurisdiction is not required. Although, if a cluster of three or more cases occurs in a single classroom or athletic team, please notify your local health department.
2. Make referral to licensed health care provider. Skin infections may need to be incised and drained and/or antibiotic treatment based on a wound culture and sensitivity.
3. Ensure contact precautions when doing wound care. Ensure standard precautions if the potential for splashing exists.

Control of Spread

1. Students or staff members, who are colonized or infected with MRSA, do not need to be routinely excluded from the classroom.
2. Exclusion from school should be reserved for those with wound drainage that cannot be covered and contained with a clean, dry dressing taped on all four sides.
3. People with MRSA infections should not be placed in classrooms with anyone who has severe immune system suppression.
4. Athletes with active skin and soft tissue infections should not participate in wrestling until wounds are completely healed. Consider using this rule for all contact sports.
5. Individuals with open wounds should keep them covered with clean, dry bandages that are taped on all four sides.
6. Gloves should be worn if you expect to have contact with non-intact skin or mucous membranes. Hands should be washed immediately after removing gloves.
7. Good personal hygiene and hand washing with soap and water for at least 20 seconds should be encouraged.
8. If soap and water are not available, use an alcohol-based hand sanitizer with at least 60% alcohol concentration.

9. Potentially contaminated surfaces should be cleaned with an EPA-registered disinfectant labeled effective against *MRSA* and manufacturer's directions should be followed. Household bleach diluted 1:100 (new solution every day) may be used.
10. Health room cots should be cleaned and disinfected regularly (at least daily), and pillow protectors should be used. See "*Quick Reference Environmental Cleaning for School Nurses*" handout.
11. If soiled linens and clothing are washed on school premises, wash with laundry detergent in hot water (minimum 160°F), add one cup of bleach if water is not 160°F and dry thoroughly in a hot dryer.

Special Considerations in Sport Settings

1. Do not allow athletes with active skin and soft tissue infections to participate in wrestling until wounds are completely healed (bandages can become wet with perspiration and loosen/fall off). Consider using this rule for all contact sports.
2. Instruct students not to share personal hygiene items such as towels, washcloths, razors and soap.
3. Encourage use of a barrier (towel or layer of clothing) between the skin and shared equipment as well as surfaces such as benches.
4. Establish routine disinfectant cleaning of shared surfaces such as wrestling mats and benches in weight-room, shower and pool area. See "*Disinfection of Hard Surfaces and Athletic Mats*" in Infectious Disease Control Guide for School Staff.
5. Strongly encourage athletes and coaches participating in sports involving close personal contact (e.g. wrestling and football) to shower immediately after each practice, game or match.
6. Strongly encourage athletes to wash athletic clothing after each use.
7. Encourage athletes to report skin lesions to coaches and encourage coaches to assess athletes regularly for skin infections and report findings to school nurse or health technician.

Resources

- Centers for Disease Control and Prevention (CDC), *MRSA Educational Materials*:
www.cdc.gov/mrsa/library/posters.htm
- Living with MRSA booklet, March 2006
- Howe, WB (2003). Preventing infectious disease in sports. *The Physician and Sports Medicine*, 31(2), 23–31.
- Stokowski, Laura. Questions about MRSA and answers from the experts, posted 11/01/06, Medscape Nurses.