

Methicillin-resistant *Staphylococcus aureus* (MRSA)

Definition:

MRSA is a type of *Staphylococcus aureus* (*S. aureus* or staph) resistant to commonly prescribed antibiotics that are frequently used to treat staph infections. *S. aureus*, including MRSA, usually cause mild infections of the skin. MRSA, however can be more difficult to treat and can lead to life-threatening blood, bone, or pulmonary infections. Both *S. aureus* and MRSA are found on the skin or in the nose of some healthy people without causing any signs or symptoms of infection. This is referred to as colonization.

Signs and symptoms:

Most staph infections, including MRSA, appear as a bump or infected area on the skin. The area may appear red, swollen, painful, warm to the touch, and/or full of pus or other drainage. The skin infection symptoms may also be accompanied by a fever.

Transmission:

MRSA is transmitted most frequently by direct skin-to-skin contact. Indirect contact with personal items or surfaces contaminated with the bacteria may also lead to acquiring infection. It is also possible for transmission to occur when persons are asymptotically colonized on the skin, in the nares, or other anatomic sites.

MRSA infection risk increases when individuals participate in activities or are in places that involve crowding, skin-to-skin contact, and/or shared equipment or supplies. Athletes and school students are at a higher risk for acquiring these infections.

Diagnosis:

This disease is diagnosed based on clinical signs and symptoms and the results of laboratory tests.

Role of the School Nurse:

Educate coaches, staff and students (especially athletes) about the importance of:

- Frequent hand washing/use of alcohol-based hand sanitizers
- Being aware of skin lesions/infections among students/staff
- Reporting/referring persons with skin lesions/infections to the school nurse as soon as possible
- Keeping skin infections and wounds covered with clean, dry bandages
- Establishing that persons diagnosed with MRSA infection/lesions may attend school and participate in physical education lessons only if lesions are kept consistently covered with a dry dressing
- Not sharing personal items (towels, razors, clothing, etc.)
- Cleaning or laundering shared equipment or clothing between use
- Showering thoroughly with soap and water after practices and competitions
- Fully completing antibiotic treatment as prescribed for an infected person



Educate custodial staff and coaches about the importance of:

- Routinely cleaning athletic equipment, including contact surfaces of shared equipment such as mats, blocking pads and weights
- Cleaning practice surfaces, such as mats, with an appropriate germicide prior to, and following, each practice session as recommended
- Consulting with the school maintenance supervisor to assure use of a broad spectrum bactericide
- Using effective proprietary cleansing solutions or dilute bleach (1 part bleach in 9 parts water)
- Confirming with equipment manufacturers the cleanser's compatibility with the surface to be cleaned

Exclusions

Restrictions from school or participation in school sports programs should only be considered if wound drainage cannot be covered and contained with a clean, dry bandage and for those who cannot maintain good hygiene practices.

Reporting Requirements

Invasive MRSA infections and MRSA outbreaks are reportable to Maine CDC at 1-800-821-5821.

Resources:

CDC General MRSA Information - <https://www.cdc.gov/mrsa/community/index.html>

CDC MRSA Information for School and Daycare Officials - <https://www.cdc.gov/mrsa/community/schools/index.html>

CDC MRSA Information for Coaches, Athletic Directors, and Team Healthcare Providers - <https://www.cdc.gov/mrsa/community/team-hc-providers/index.html>

CDC Cleaning and Disinfecting Athletic Facilities for MRSA - <https://www.cdc.gov/mrsa/community/environment/athletic-facilities.html>

Selected EPA-registered Disinfectants (List H: EPA's Registered Antimicrobial Products Effective against Methicillin Resistant *Staphylococcus aureus* (MRSA) and Vancomycin Resistant *Enterococcus faecalis* or *faecium* (VRE)) – <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>

