Cleaning Protocols to prevent Staph Infections

Background:

What is MRSA?

Methicillin resistant *Staphylococcus aureus* (MRSA) is a type of “staph” bacteria that is resistant to penicillin as well as some other common antibiotics. MRSA commonly causes skin infections that may look like spider bites, infected turf burns, impetigo, boils or abscesses. It is spread by touching the infection/drainage or by touching surfaces that have come in contact with the infection/drainage. MRSA can stay on surfaces for weeks. Some strains of *S. aureus* are resistant to a class of antibiotics frequently used to treat Staph infections such as methicillin (which is a synthetic form of penicillin)—and thus are called Methicillin-Resistant Staph aureus (or MRSA).

Who is at risk of getting MRSA?

*S. aureus* (or Staph) including MRSA can be spread among people having close contact with an infected person. MRSA is almost always spread by direct physical contact and not through the air. However, spread may also occur through indirect contact by touching objects (e.g., towels, sheets, wound dressings, clothes, workout areas, or sports equipment) contaminated with Staph bacteria or MRSA.

Staph bacteria can live on the skin or in the nose of healthy individuals without causing any symptoms of disease. This is known as colonization and MRSA can also be carried in this way. However, injury to the skin (e.g. scrape or cut) can allow an opportunity for bacteria to enter the skin and cause an infection.

Infections caused by Staph or MRSA are usually mild, limited to the surface of the skin, and can be treated successfully with proper hygiene and antibiotics. In rare cases, if left untreated or not recognized early, MRSA infections can be difficult to treat and can progress to life-threatening blood or bone infections. Because there are fewer effective antibiotics available for treatment MRSA infections occur most commonly among persons in hospitals and healthcare facilities. However, MRSA can cause illness in persons outside of hospitals and healthcare facilities as well. Cases of MRSA infection in the community setting (e.g. day care centers, schools, prisons) are called Community-Associated Methicillin Resistant Staphylococcus aureus and have been associated with recent antibiotic use, sharing contaminated personal items, reoccurring skin infections, and living in crowded settings.
General Recommendations for Schools

Any infection or draining wound could pose a threat to others. When a student with a MRSA infection is in the classroom, certain infection control measures should be in place. These measures include, but may not be limited to:

- Keep infections, particularly those that produce pus or drainage, covered with clean, dry bandages. The student should follow the healthcare provider’s instructions on proper care of the wound. Pus from infected wounds can contain bacteria, including MRSA, and spread the bacteria to others. Bandages should be disposed of in a manner such that other people cannot have contact with the drainage (e.g., in a closed plastic bag).

- Advise those who may have contact with the infected wound to wash their hands thoroughly with soap and warm water. Persons who expect to have contact with the infected wound should wear disposable gloves, and wash their hands after removing the gloves. Hand washing is the single most important measure to prevent MRSA transmission.

- Avoid sharing personal items (e.g., towels, washcloths, and clothing) that may have come in contact with the infected wound. Wash soiled linens and clothes with hot water and laundry detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria.

- Clean potentially contaminated surfaces carefully with a disinfectant or a bleach-water solution (1:10 dilution of sodium hypochlorite, which is approximately 1 cup of 5.25% household chlorine bleach to 1 gallon of water) after caring for the wound.

Schools should continue to provide general cleaning on a regular schedule. Students who are infected with MRSA should follow the healthcare provider’s treatment plan, including completion of any antibiotics prescribed.

Additional measures to prevent and control MRSA infections within the athletic setting

Athletes, athletic personnel, and parents can help prevent and control MRSA infections within the athletic setting by following these simple health and hygiene practices.

In addition, athletes who participate in sports involving direct physical contact (e.g. wrestling and football) and athletes participating in sports that do not involve direct physical contact, but who share workout areas should follow these health and hygiene practices listed below to help prevent and control MRSA within the athletic setting:
Infection Control Guidance for Middle & High School Athletic Directors

Frequent hand washing is the best way to prevent MRSA. It is also important to have students and coaches practice good hygiene, including showering after practice and meets; not sharing personal hygiene items and not participating in practices/meets with a potentially infected skin wound/lesion. A healthy environment should be maintained by routinely cleaning athletic equipment (balls, bats, rackets) and surfaces, such as benches and wrestling mats.

Ask your athletes to report all potential skin infections to their coaches, the trainer and/or the school nurse. Open wounds should be covered with a clean, dry bandage that is taped to the skin on all four sides. Do not let athletes participate in wrestling if they have potentially contagious wounds, even if covered. Consider not letting athletes participate in any contact sport if they have potentially contagious wounds; refer them to medical providers for treatment.

Our recommendations, listed below, may refer to policies that are already in place, as well as policies that should be developed and adopted.

**General Guidance**

- Wash hands frequently with soap and water, especially after using any sports facilities.
- Avoid sharing personal items (e.g., towels, washcloths, razors, clothing, or uniforms) that may have had contact with and infected individual or potentially infectious material.
- Report any suspicious skin sore or boil to your healthcare provider and school nurse immediately.
- If you participate in sports involving close personal contact (e.g. wrestling and football) shower with soap immediately after each practice, game, or match.
- Non-washable gear (e.g. head protectors), should be wiped down with alcohol after each use.
- Athletic equipment such as wrestling or gymnastics mats should be wiped down regularly with an antibacterial solution.
- Athletes involved in close contact sports should receive a total body check by the appropriate athletic personnel prior to any game, match or tournament.
- Individuals with an infection involving drainage (e.g. pus drainage), who are involved in close contact sports, should be excluded from participation in sporting events and practices until no pus drainage is present and the infected site can be adequately covered with a bandage and clothing.
- Any cut or break in the skin should be washed with soap and water and a clean, dry dressing applied on a daily basis, before and after participation in close contact sports, and after using any sports facilities.
- Tell your healthcare provider (e.g. primary care doctor or school nurse) and the appropriate athletic personnel if you currently have or have had a history of an antibiotic-resistant Staph skin infection(s).
1. All environmental hard surfaces that may come in contact with body fluids should be cleaned1 and sanitized2 daily with an EPA-approved disinfectant, including benches, weights, workout machines, etc.

2. All floors/wall padding in athletic settings should be washed daily (if room is used).

3. Locker rooms, including any shower areas should be cleaned daily, if used.

   1) Clean all visibly soiled areas, using friction.
   2) Sanitize or disinfect “clean” areas to remove bacteria. Always wear gloves when using disinfectants.

4. If soap is furnished, it should NOT be bar soap and it should be accessible from a wall dispenser.

5. Towels should not be shared. If they are washed at school, they should be washed in soap and water at 71°C (160°F) minimum and dried in a hot dryer.

6. Ensure that athletic areas, locker rooms and restrooms all have separate cleaning mops and buckets, and that all mops (washable micro-fiber heads or disposable mop cloths preferred) and buckets are cleaned regularly.

Wrestling Room and Mats

1. Wipe down padding along walls, benches and door pulls/knobs with a quaternary ammonium (quart) or bleach solution (household bleach diluted 1:100 with water) after practices/matches. Please refer to the manufacturer’s directions for recommended contact times for the various disinfectants.

2. Clean floors when mats are stored and before mats are used again.

3. Use “dedicated” mops to clean athletic areas, and wash mop heads on a regular basis. Please use disposable swiffer style mop with disposable cloths that are discarded after each use.

4. May use mat tape to cover small holes and small tears on top and bottom surfaces of mats. Tape mats together for practice as well as for matches to cover up mat sides that are in poor condition.

5. Promptly replace mat coverings when there are medium to large holes and/or large areas of excessive wear.

6. Clean and sanitize mats before and after practice and matches. When mats are rolled up, all sides of mats should be cleaned before they are rolled up.
7. Use “dedicated” mop heads to clean mat surfaces. Wash these mop heads on a regular basis.

**Weight Room**

1. Replace all torn and worn out padding on weight machines.

2. Place wall dispensers with 60% alcohol-based (or greater) hand sanitizer at entrances/exits inside weight room. Athletes/coaches should be instructed to use hand sanitizer when entering and leaving weight room (minimum use, may use more often). If hands are visibly dirty, they should use soap and water to wash before entering the weight room.

3. Remove tape from weight bars and grips. (Metal surfaces are easier to wipe down.)

4. Wipe down grips on weights and lifting belts at least daily.

5. Clean floors, benches, supports, pads, light switches and door pulls/knobs daily.

**Locker Rooms/Shower Rooms**

1. Provide wall-mounted dispensers for soap in shower room (next to showers).

2. Soap dispensers should have disposable soap “unit” refills.

3. Provide adequate shower facilities in new and remodeled schools.

**Sports Equipment**

1. Schedule regular cleanings for sports equipment: balls (football, basketballs, baseballs, softballs, volleyball balls), racket grips, bats, gloves, pads, etc.

2. Clean and sanitize sports equipment that comes in direct contact with the skin of players, such as wrestling headgear, football helmets and fencing equipment (including wires) after each use.

**Coach**

1. Include 60% or greater alcohol-based hand sanitizer in coach’s first aid kit so that coaches/trainers will always be able to sanitize hands before and after caring for each injured player when soap and water is not readily available.

2. Have disposable gloves readily available in first aid kit for use when caring for the scrapes and cuts of players. Use gloves once then discard, wash hands or use hand sanitizer immediately after removing gloves.
3. Check athletes for skin infections before practice or games/matches. Do not let athletes participate in wrestling if they have potentially contagious wounds, even if covered. Consider not letting athletes participate in any contact sport if they have a potentially contagious wound.

4. Refer athletes with potential skins infections either to the team physician or their own medical provider. Culturing wounds should be encouraged.

5. Use scoop (not hands) when taking ice out of cooler to make ice packs to treat sports injuries. Also, clean scoop daily when in use and do not store scoop in ice cooler.

6. Do not have shared “drinking” water bottles; each player should have his/her own water container.

7. Shower immediately after matches/games/practices when there is physical contact with the athletes.

**Athlete**

1. Remind athletes that washing their hands with warm, soapy water frequently is one of the best things they can do to prevent MRSA and other diseases.

2. Strongly encourage showering with soap and water immediately after practice/games/matches.

3. Remind athletes NOT to share personal hygiene items (bar soap, towels, razors), clothing or water bottles.

4. Remind athletes NOT to share antibiotics or ointments and salves.

5. Remind athletes NOT to touch other peoples’ skin infections.

6. Remind athletes NOT to touch face, nose or groin while in practice/matches/games.

7. Ask athletes to consider refraining from cosmetic shaving.

8. Ask athletes to treat any draining wound as a potential skin infection.

9. Encourage athletes who use the weight room to wear workout clothing that minimizes contact with benches, weight equipment, etc.

10. Remind athletes to wear practice clothes/uniforms only once, then wash them with soap and water and dry in a hot dryer.
11. Remind athletes to report skin abrasions, wounds and potential skin infections to a coach/trainer and/or the school nurse.

12. Ask athletes to avoid whirlpools or common tubs. Individuals with scratches or open wounds can easily infect others in this kind of environment.

13. Inform parents of all these precautionary measures.

**ATHLETES SHOULD:**

- Shower daily with soap and warm water, especially after practice events and competitions
- Wash hands with soap and warm water frequently. If proper hand washing facilities are not available, a waterless, alcohol based hand sanitizer is an acceptable alternative
- Do not share personal items with others. Personal items include, but are not limited to: sporting equipment, clothes, towels, razors and uniforms
- Clean all shared sporting and protective equipment between uses. Use a disinfectant according to the manufacturer’s instructions
- Wash clothes and linens in hot water and soap
- Dry clothes and linens in a hot dryer; heat helps kill the bacteria
- Cover all wounds, particularly those that may be draining (wet), with a clean, dry bandage at all times
- Do not lance, pop or drain boils, wounds or other skin infections
- See a healthcare provider immediately if a skin infection develops
- Avoid participating in contact sporting events until wounds/skin infections are healed

It is essential for coaches, athletes, parents and other sporting event officials to enforce the recommendations described above. Strict adherence will help prevent the spread of MRSA infections among the community.

**Outside Groups Using High School Athletic Facilities**

1. Continue to ensure that custodians know schedule for outside events and are available to clean before students use any of the equipment/facilities.

2. Instruct outside groups to use the “standard school-recommended” cleaning products if they are responsible for any cleaning (i.e. wrestling mats, weight room equipment and shower facilities).

**Cleaning products we are currently using that are effective against MRSA and most other bacteria**

**A#16 Re-Juv-Nal Disinfectants/Cleaner**
Concentrated, hospital grade disinfectant, detergent cleaner, sanitizer, fungicide, mildewstat, virucide,
deodorizer. Cleans and controls the hazard of cross-contamination from environmental surfaces. Dilution rate: two ounces/gallon. **Kills HBV (Hepatitis B Virus) on pre-cleaned, environmental surfaces. EPA registered.**

**F. #33 SUPROX Concentrate**
Super concentrated, hydrogen peroxide multi-purpose cleaner with natural citrus solvents to provide highly effective cleaning. For use on many surfaces to include glass, restroom fixtures, tile and grout, counters, floors and carpets. Dilution rate: 5 oz./gal. low flow or 1 oz./gal. high flow.

**Claire Disinfectant Spray for Health Care Use**
Tuberculacidal – Disinfets HIV-1 (AIDS Virus) on inanimate environmental surfaces. Also disinfects Herpes Simplex Virus Types 1 and 2 on inanimate environmental surfaces. In addition, carries all claims listed for other disinfectant sprays. For use in Health care settings, such as hospitals, nursing homes, schools and institutions.