Hibiclens® / Hibistat® and Wrestling

MRSA Life Span Facts[1]

- MRSA can live for up to 7 months on dust
- MRSA can live for up to 8 weeks on a mop head
- MRSA can live for up to 9 weeks on cotton (towel)
- MRSA can live for up to 203 days (over 6 months) on a blanket
- MRSA can live on the skin of otherwise healthy individuals, with no symptoms indefinitely

MRSA Facts

- MRSA is a resistant form of Staphylococcus aureus that can live on the skin and cause skin infections
- Community Acquired MRSA (CA-MRSA) can progress from first symptom to death in as few as 3 days (Ref: LA County Jail)
- Intact skin is the body's natural defense against infection.
- Any abrasion or break in the skin creates a potential portal of entry
- Abraded skin under a knee pad may create a portal of entry for infection. Knee pads do not protect against infection, and they may, in fact, be carriers of bacteria that can cause infection.
- CA-MRSA has many treatment options and is very treatable, with many options, if diagnosed in the early stages
- MRSA is most commonly misdiagnosed as a spider bite, impetigo or as a harmless pimple. Look for disproportionately greater pain compared to the size of the affected area to help differentiate MRSA from lesser concerns. Another important thing to consider is that spider bites are extremely rare. You are more likely to be struck by lightning than to be bitten by a spider. Informed health care professionals in high risk environments often treat "spider bites" as MRSA if a dead (brown recluse) spider cannot be produced.
- Always consult a health care professional immediately if MRSA is suspected

Suggestions to Reduce the Risk of MRSA Infections

Surfaces:

- Clean regularly with a cleaner proven to kill MRSA. Make sure that the surface cleaner has been EPA tested and approved for MRSA. Also consider daily cleaning of surfaces with spore killing cleaners to prevent the transfer of molds and spore-forming bacteria (MRSA is not a spore-former)
- Mats: Consider a disposable, single-use mopping device rather than a reuseable mop. Mops can harbor bacteria spread contamination. If a reuseable mop is your only option, make sure it is soaked in a concentrated form of a cleaner proven to kill MRSA between uses.

[1] Survival of MRSA on sterile goods packaging, Journal of Hospital Infection (2001), 49:255-261

    - Is the wrestling room a dedicated room? If not, it is critical that the mat be cleaned after use because the school cafeteria or other frequently used room is often used for wrestling if a dedicated wrestling room is unavailable. The entire student body passes through the cafeteria every day.
- Training and taping tables: since it is unlikely there will be time to clean the tables between each athlete, use a cleaner with residual killing (cidal) properties. (Residual kill means that the agent keeps killing after being applied, and not just upon initial contact.)

Equipment:

- Regularly clean equipment with a product proven to kill MRSA. Alcohol-based wipes are excellent killers, but they are also excellent solvents, so beware of the type of surface you are cleaning if using alcohol.
- Consider cleaning everything that can be touched. The obvious equipment to be cleaned is head gear, but cell phones, keyboards, pens, clip boards, etc. also can harbor and transfer bacteria.
- Laundry: To kill MRSA, the wash temp needs to exceed 140º. Most residential and many commercial machines do not reach this temperature. Fabrics should also be dried on the hot setting. With uniforms and other fabrics, cleaning at high temperatures may not be recommended. The CDC has stated that it is critical that all fabrics be completely dry when they come out of the dryer. Because bacteria love warm, humid environments, being dry is very important.

Skin:

- Hibiclens is FDA approved for use as a general skin cleanser, skin wound cleanser, and hand hygiene antiseptic (in addition to being approved as a surgical scrub and preoperative skin prep). It has been proven to be almost as non-irritating as water on the skin, yet it is a broad spectrum antimicrobial which bonds to the skin and continues to actively kill for up to 6 hours after use (residual kill). CHG, the active ingredient in Hibiclens, bonds to the outer layers of skin and is not absorbed into the body.[2] Hibiclens kills MRSA and other Staph strains of bacteria.[3]
- Skin is perhaps the most overlooked area when preventing MRSA infections. Because MRSA is a skin infection, skin is perhaps the most important area to treat.
- Have athletes wash their entire arms with Hibiclens BEFORE practice and competition. After washing, CHG in Hibiclens bonds to the skin and continues to actively kill bacteria for up to 6 hours after use. A study was recently completed where arms were washed with Hibiclens one time. The arms were inoculated with MRSA bacteria at 1 hour, 2 hours, 3 hours and 4 hours. The Hibiclens-washed arms demonstrated the ability to continue bactericidal action (active killing) at all test points and to significantly reduce the risk of transfer of MRSA bacteria.[4] Since the CHG in Hibi bonds to the skin, it is invisible and leaves no residue on the skin after washing.

---

[2] Study 030917-150
[3] Tests 050338-201, 05-0521-201,HIB3-107-10-1
[4] Protocol 061123-150.01

- Have athletes wash the skin under pads regularly (daily – this can be done at home). Since knee pads are never completely dry (see laundry instructions), become a bacteria friendly environment (smell them), and slightly abrade the skin under the pad, knee pads provide the perfect conditions for MRSA and other skin infections. Washing with Hibiclens regularly will help reduce the risk of transfer of bacteria to the skin under the pad. [4]
- Hibiclens is also effective against the bacteria that cause acne. Since body acne is common in sports and a portal of entry for a more serious infection, washing the affected area with Hibiclens can reduce acne and the risk of providing a portal for a more serious infection.[5]
- Hibiclens is also effective against the herpes virus. It will not enter the nervous system to eradicate the virus, but it is effective on the skin. [5]
- Hibiclens is effective against the flu virus. Since wrestlers' immune systems may be taxed during the season, use of Hibiclens can help reduce the chance of preventable illness. Antimicrobials are ineffective against the cold virus, but using Hibiclens can help reduce the risk of a more serious flu illness. [5]
- Hibistat is effective against ringworm and athletes foot. Hibistat is an alcohol wipe that contains CHG (the same active ingredient as Hibiclens). It is a portable wipe that also provides up to 6 hours of germ-killing action (residual kill) after use when a sink is not available. The Hibistat wipe also helps remove debris from skin – something that alcohol rinses without wipes fail to do. Hibistat is recommended for use on intact skin since it is an alcohol-based product.[6]

Other steps to be taken by athletes to reduce the risk:

- Do not share equipment or personal items. This includes head gear to razors to soap and towels and anything that comes in contact with the skin.
- Shower after practice or competition. Between the facility and home, hundreds of items will be touched. Considering how long MRSA can live on surfaces and the fact that these same surfaces will be touched on the way back to the facility the next day, removing potential contaminants before leaving the facility is a key step.
- Report any suspicious skin blemishes immediately. Steps can be taken to prevent small blemishes from becoming major infections.

---

[5] Protocol #050339-201

[6] Regent Medical Study #030917-150, Regent Medical Study #060134-150