



Sports Related Skin Infections **Position Statement and Guidelines**

National Federation of State High School Associations (NFHS) Sports Medicine Advisory Committee

Skin related infections have grown considerably in the community and needless to say also in the sports environment. The vast majority of these infections are transmitted through skin-to-skin contact, but a smaller yet significant portion is due to shared equipment. If proper hygienic practices are followed (See NFHS Sports Hygiene Position Statement and Guidelines), this risk can be reduced. Contact with an opponent or piece of equipment in certain sporting events is inherent to the activity. Some sports have more direct contact than others and therefore carry a much greater risk for transmission. Others have virtually none and their risk is minimal. Due to the uniqueness of Wrestling, it requires its own protocol and is addressed separately (See NFHS Wrestling Physician Release for Skin Lesion(s) Form). The NFHS Sports Medicine Advisory Committee realizes these issues and has helped establish guidelines to educate the sporting and medical community about their presence, means to treat and reduce transmission of sports related skin infections.

Definitions of contact: High Risk – where the nature of the sport requires significant contact with an opponent or equipment. Medium Risk – there exists a minimal level contact. Low Risk – where virtually no contact exists.

Risk of Transmission

High Risk	Medium Risk	Low Risk
-Football	-Baseball	-Tennis
-Wrestling	-Lacrosse	-Track and Field
	-Ice Hockey	-Cross Country
	-Softball	-Gymnastics
	-Soccer	-Bowling
	-Basketball	-Swimming and
	-Spirit / Cheer	Diving
	-Field Hockey	-Golf
	-Volleyball	
	-Water Polo	

High Risk Sports: Contact with an opponent or equipment is by nature a high occurrence in these sports. Specific concern needs to address exposed areas that have direct contact with an opponent.

Ringworm, Tinea Corporus - Due to a dermatophyte, or fungal infection. Easily transmissible to an opposing player. Must be covered with a biocclusive dressing (i.e., Tegaderm) then prewrap and taped. If the area can't be covered, then the athlete may need to be removed from competition. In these situations, the athlete needs treatment with oral or topical antifungal medication for 72 hours before return to competition.

Impetigo, Folliculitis, Carbuncle, Furuncle – Infection due to *Staphylococcal* or *Streptococcal* bacteria. The athlete needs to be removed from competition and started on oral antibiotics. May return to competition after 72 hours of treatment, provided the infection is resolving and not oozing. Scabs must be well adherent and have no signs of weeping fluid or material. Reevaluate any lesion not improving and consider Herpes or Methicillin-Resistant Staph aureus (MRSA) as a possible source. (See NFHS Statements on MRSA and Herpes Gladiatorum for guidance). Covering with Tegaderm, prewrap and tape only after 72 hours and when infection shows signs of resolving.

Herpes, Cold Sores, Shingles – Transmission of this virus is via skin-to-skin contact. Exposed areas of the skin that isn't naturally covered with equipment, i.e., forearms, shins, hands, require the player to be withdrawn from competition until properly treated and resolving. Primary Outbreaks require 10-14 days of oral antiviral medications. Recurrent outbreaks 5 days of treatment. Covering these lesions can help prevent secondary bacterial infections, but may come off with competition thus not helping to prevent spreading it to opposing players. Cover with Tegaderm, prewrap and tape under equipment.

Other viral infections (Molluscum Contagiosum, Warts) – No restrictions. Can be covered by Tegaderm, prewrap and tape.

Medium Risk Sports: Activities that require infrequent contact with an opponent. Equipment may play a larger role in transmission. The risk of transmission is minimal.*

Ringworm, Tinea Corporus – Due to a dermatophyte, or fungal infection. No restrictions for competition provided the area can be covered with Tegaderm, prewrap and tape. If the area can't be covered, then the athlete may need to be removed from competition. In these situations, the athlete needs treatment with oral or topical antifungal medication for 72 hours before return to competition.

Impetigo, Folliculitis, Carbuncle, Furuncle – Infection due to *Staphylococcal* or *Streptococcal* bacteria. No restrictions for competition, provided the area can be covered with Tegaderm, prewrap and tape. If the area can't be covered, may return to competition after 72 hours of treatment provided the infection is

resolving and not oozing. Scabs must be well adherent and have no signs of weeping fluid or material. Reevaluate any lesion not improving and consider Herpes or MRSA as a possible source. (See NFHS Statements on MRSA and Herpes Gladiatorum for guidance).

Herpes, Cold Sores, Shingles – Transmission of this virus is via skin-to-skin contact. Covering the outbreak with biocclusive (Tegaderm), prewrap and tape may help reduce that risk. Areas that can't be covered and are in a region of potential contact should prompt the withdrawal of the athlete until the infection has resolved. Primary Outbreaks require 10-14 days of oral antiviral medications. Recurrent outbreaks require 5 days of treatment. Covering these lesions may also help prevent secondary bacterial infections, but may not help prevent spreading it to opposing players.

Other viral infections (Molluscum Contageosum, Warts) – No restrictions. Can be covered by Tegaderm, prewrap and tape.

Low Risk Sports: By definition, activities that have no direct physical contact with an opponent during play. * Equipment may play a larger role in transmission.

Ringworm, Tinea Corporis - Due to a dermatophyte, or fungal infection. No restrictions. Must be covered in certain sports where shared surfaces do occur, i.e., mats. If covering is needed, then use a biocclusive dressing (i.e., Tegaderm), prewrap and tape. If the area can't be covered, then the athlete may need to be removed from competition. In these situations, the athlete needs treatment with oral or topical antifungal medication for 72 hours before return to competition.

Impetigo, Folliculitis, Carbuncle, Furuncle – Infection due to *Staphylococcal* or *Streptococcal* bacteria. Bacterial infections can be transmitted via fomites, i.e., inanimate objects like balls, batons and mats. Skin infections on exposed areas must be covered with Tegaderm, prewrap and tape. If the area can't be covered, may return to competition after 72 hours of treatment provided the infection is resolving and not oozing. Scabs must be well adherent and have no signs of weeping fluid or material. Reevaluate any lesion not improving and consider Herpes or MRSA as a possible source. (See Statements on MRSA and Herpes Gladiatorum for guidance).

Herpes, Cold Sores, Shingles – Transmission of this virus is via skin-to-skin contact. No restrictions are necessary in these sports. Covering these with biocclusive (Tegaderm), prewrap and tape may also help prevent secondary bacterial infections.

Other viral infections (Molluscum Contagiosum, Warts) – No restrictions.

* Medium and low risk activities may have variations that increase skin contact with an opponent, teammate or shared equipment. These situations may require following the guidelines set for higher contact sports to reduce the risk of transmitting an infectious disease.

Basic hygienic principles are the foundation to help reduce/prevent the development and spread of these infectious diseases (See NFHS Sports Hygiene Statement). Athletes need to continue to; shower after each event, don't share towels or personal hygiene items, have all open wounds or abrasions evaluated by the coach or Certified Athletic Trainer before each practice or competition, use clean gear with each event or practice. Even with diligent monitoring and proper care, skin infections will occur. The guidelines above are presented to help prevent transmission of skin infections to other participants. Even though some are rather innocuous, i.e. ringworm, others are very serious, such as Herpes Gladiatorum or MRSA. These concepts are based on accepted treatment protocols and clinical observations that error in favor of protecting the athlete from the more serious infections and yet being more tolerant of others.

References

Kohl TD, Martin D, Berger MS. Comparison of Topical and Oral Treatments for Tinea Gladiatorum. Clin J Sports Med 1999, Vol.9, No.3;161-6.

Kohl TD, Lisney M. Tinea Gladiatorum, Wrestling's Emerging Foe. Sports Med 2000, Jun 29(6):439-47.

Hand JW, Wroble RR. Prevention of Tinea Corporis in Collegiate Wrestlers. J Ath Training 1999;34(4):350-52.

Anderson BJ. The Epidemiology and Clinical Analysis of Several Outbreaks of Herpes Gladiatorum. Med Sci Sports Exerc. 2003-11-6, 35(11);1809-14.

Anderson BJ. The Effectiveness of Valacyclovir in Preventing Reactivation of Herpes Gladiatorum in Wrestlers. Clin J Sports Med. Vol. 9, No. 2, 1999:86-90.

Becker TM, et. al. Grappling with herpes: Herpes Gladiatorum. Am J Sports Med 1988;16:665-69.

Naimi TS, LeDell K, Como-Sabetti K, et al. Comparison of Community-and Health Care-Associated Methicillin-Resistant *Staphylococcus aureus* Infection. JAMA 2003;290:2976-84.

Cohen PR, Kurzrock R. Community-acquired methicillin-resistant *Staphylococcal aureus* skin infection: an emerging clinical problem. J Am Acad Dermatol. 2004;50:277-280.

Cohen PR, Grossman ME. Management of cutaneous lesions associated with an emerging epidemic: community acquired methicillin-resistant *Staphylococcal aureus* skin infections. *J Am Acad Dermatol*. 2004;51:132-135.

Centers for Disease Control and Prevention: Methicillin-resistant *Staphylococcal aureus* infections among competitive sports participants-Colorado, Indiana, Pennsylvania, and Los Angeles county, California, 2000-3. *Morb Mort Wkly Rep (MMWR)*. 2003;52:793-5.

Nguyen DM, Mascola L, Bancroft E. Recurring Methicillin-resistant *Staphylococcal aureus* Infections in a Football Team. *Emerg Inf Dis*. 2005.Vol.11,No.4: 526-32.

Revised and Approved October 2006