SKIN INFECTIONS IN WRESTLERS

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GENERAL GUIDELINES FOR SPORTS HYGIENE, SKIN INFECTIONS AND COMMUNICABLE DISEASES

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

Sports-Related Skin Infections
Position Statement and Guidelines

National Federation of State High School Associations (NFHS)
Sports Medicine Advisory Committee (SMAC)
WRESTLING POINTS OF EMPHASIS - 2016-17
BY NFHS ON OCTOBER 24, 2016

- For the 2016-17 high school wrestling season, attention is being called to:
  - Communicable skin conditions and skin checks
  - Control
  - Arm trap
  - Sportsmanship
NFHS RECOMMENDATIONS

- If suspected skin condition, the participant must have current, written documentation from an appropriate healthcare provider that the athlete's participation would not be harmful to an opponent.

- Cold sores are considered a skin condition and fall under this rule.

- All referees must perform skin checks or verify that skin checks have been done by a designated, on-site meet, appropriate healthcare professional prior to EVERY dual meet and tournament.

- For any suspected condition, the wrestler or coach MUST present the proper clearance form at weigh-in.

- Designated on-site health care professional CAN overrule the diagnosis of the health care professional who signed the clearance form.
TYPES OF SKIN INFECTIONS

- **Bacterial**
  - Cellulitis
  - Folliculitis
  - Impetigo
  - Abscesses/CA-MRSA

- **Fungal**
  - Tinea Corporis Gladiatorum

- **Viral**
  - Molluscum Contagiosum
  - Herpes Gladiatorum
  - Verruca vulgaris
IMPETIGO
IMPETIGO
FOLLICULITIS
HSV-HERPES VIRUS
HERPES SIMPLEX
HERPES SIMPLEX
HERPES SIMPLEX
TINEA CORPORIS
TINEA
Sports Medicine Advisory Committee (SMAC)

- Sports Related Skin Infections Position Statement and Guidelines April 2016

- Follow Universal Precautions

- Err in favor of protecting the participants

- Strictly followed in sports with skin to skin contact
MRSA-METHICILLIN RESISTANT STAPH AUREUS
MRSA

- It is **NOT** a spider bite
- Very painful, pimple or abscess
- Treatment with I&D (incision and drainage) and/or antibiotics
- Antibiotics:
  - Bactrim, Doxycycline, Clindamycin, Vancomycin, Linezolid
- Return to play
  - 5 days if not actively draining and if improving
  - Lesion must be covered
- Can be cultured from surfaces and athletic equipment
- Screen all team members daily
MRSA

- If multiple athletes affected or athlete with recurrent episodes:
  - Consider nasal cultures

- Identified carriers:
  - Intranasal mupirocin (Bactroban) BID for 5 days
  - Daily chlorhexidine 4% solution (Hibiclens) body washes for 5 days
FOLLICULITIS
NFHS
IMPETIGO, FOLLICULITIS, CARBUNCLE, FURUNCLE

- If non-MRSA infection
  - Remove from practice and competition
  - Treat with oral antibiotics

- Return to practice/competition **after 72 hours if infection is resolving**

- Considered infectious until:
  - Well-adhered scab without any drainage or weeping fluids

- Once lesion is no longer considered to be contagious
  - Cover with bio-occlusive dressing until complete resolution
TINEA
TINEA
NFHS
Tinea Corporis/Ringworm

- Treat with oral or topical antifungal medication
  - Minimum of 72 hours prior to participation

- Once lesion is no longer considered to be contagious:
  - Cover with bio-occlusive dressing
    - Opsite or Bioclusive then Pro Wrap and Stretch tape
    - Change after each match so lesion can dry

- Scalp infection requires 2 weeks of oral antifungal medication
  - Consider washing scalp before practice/competition with 1% ketoconazole shampoo to reduce transmission
NFHS
SHINGLES, COLD SORES

- Herpes simplex virus and Varicella (chickenpox) virus
- Remove from participation
- Primary outbreaks need 10-14 days of treatment
- Recurrent outbreaks need 5 days of treatment (minimum)

To return to participation:
- All lesions must be scabbed
- No oozing or discharge
- No new lesions for 48 hours
HERPES SIMPLEX
HERPES VIRUS AND WRESTLING

- Herpes Gladiatorum-HSV Type 1
  - Grouped vesicles on an erythematous base
  - Very contagious
  - Any individual exposed to the outbreak 3 days prior to its development, should be isolated from direct contact with other athletes for 8 days
    - Examine athletes daily for potential Herpes Gladiatorum.
  - “Skin check”-medical exam done early on day of competition-ATC or healthcare provider
NFHS
HERPES GLADIATORUM-PRIMARY OUTBREAK

- Due to HSV-1

- Most outbreaks on head, face, neck
  - In typical “lock-up” position

- Raised rash with vesicles (blisters)

- Sore throat, fever, malaise, swollen cervical lymph nodes.

- Remove from participation

- Treat with oral anti-viral medication—may take two weeks to clear

- Return to participation:
  - All lesions healed
  - No new vesicle formation in 48 hours
  - No swollen lymph nodes near affected area
NFHS
HERPES GLADIATORUM-RECURRENT OUTBREAKS

- Usually smaller area, less systemic symptoms
- Treat with oral anti-viral medication
  - Return to participation if treated:
    - After 5 days on anti-viral therapy
    - No swollen lymph nodes near affected area
- Return to participation if no anti-viral medication
  - All lesions healed with well-adherent scabs
  - No new vesicle (blister) formation in 48 hours
  - No swollen lymph nodes near affected area
NFHS
HERPES GLADIATORUM-PROPHYLAXIS

- Consider prophylaxis for remainder of season
  - Acyclovir 400mg BID
  - Valacyclovir 500-1000mg QD
    - If < 2 year history of HSV, use higher dose

- Consider for subsequent seasons if wrestler has had recurrent outbreaks
NFHS
HSV-1 EXPOSURE

- Anyone in contact with wrestler for 3 days prior to outbreak:
  - Isolate from contact activity for 8 days
  - Examine daily for suspicious skin lesions
WRESTLING AND HSV

- Questionable Cases
  - Tzanck prep and/or HSV antigen assay (if available)
  - Wrestler’s status deferred until Tzanck prep and/or HSV assay results complete

- Recurrent herpes labialis or herpes gladiatorum
  - Consider season long prophylaxis
  - This decision should be made after consultation with the team physician or appropriate health care professional
MOLLUSCUM CONTAGIOSUM
MOLLUSCUM CONTAGIOSUM
Molluscum contagiosum

Verruca vulgaris (warts)

- Not considered highly contagious
- No treatment or restrictions
- Cover if prone to bleeding when abraded
NEVADA INTERSCHOLASTIC ACTIVITIES ASSOCIATION

- Skin Check Form for Wrestling
  - NIAA uses the NFHS form

MEDICAL RELEASE FOR WRESTLER TO PARTICIPATE WITH SKIN LESION

Name: ___________________________________________ Date of Exam: ___ / ___ / ___

Diagnosis ____________________________

________________________________________________________________________

Location AND Number of Lesion(s) ____________________________

________________________________________________________________________

Medication(s) Used to Treat Lesion(s): ____________________________

________________________________________________________________________

Date Treatment Started: ___ / ___ / ___ Time: ____________

Form Expiration Date for this Lesion (Note on Diagram(s)): ___ / ___ / ___

Earliest Date the Wrestler May Return to Participation: ___ / ___ / ___

Provider Signature ___________________________________ Office Phone #: ___

Mark Location AND Number of Lesion(s)

Front

Back
PREVENTION

- Educate coaches, athletes, parents about communicable skin conditions and how they are spread
- Clean wrestling mats daily with 1:100 bleach solution or appropriate commercial cleaner
- Maintain proper ventilation in wrestling room
- Require each wrestler to shower after practice or meets
- Consider body wipes between matches
- Perform daily skin checks
- Educate wrestlers on skin care
PREVENTION

- **Universal Hygiene Protocol for All Sports**
  - Shower immediately after every practice and competition
    - Liquid soap, don’t share bar soap
  - Wash all workout clothing after every practice
    - Hot water, dry on high heat
  - Wash personal gear (braces, knee pads) weekly
    - Headgear after each practice and match?
  - Do not share towels or personal hygiene products (deodorant, razors) with others
  - Refrain from full body (chest, arms, abdomen, groin) cosmetic shaving
PREVENTION

- Athletes should notify parent/guardian or coach of any skin lesion prior to practice or competition
- Should be evaluated by health care professional before cleared to participate
- If outbreak occurs on team, evaluate all team members
- Clean and disinfect all equipment prior to use
- Follow appropriate NFHS guidelines on return to competition
ON-LINE PREVENTION PROGRAM-National Wrestling Coaches Association:
- http://www.nfhs.org/sports-resource-content/nwca-skin-infection-webinar/

NFHS MEDICAL RELEASE FORM FOR WRESTLER TO PARTICIPATE WITH SKIN LESION(S)
- http://www.niaa.com/sports/wrest/WWM/2012-13_April_NFHS_WR_Skin_Lesion_Form.pdf
Effectiveness of body wipes as an adjunct to reducing skin infections in high school wrestlers.

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OBJECTIVE:

To compare soap-and-water body wipes and 70% isopropyl alcohol (IPA) body wipes to a CONTROL (no treatment) in reducing skin infections in high school wrestlers competing in weekend tournaments.

DESIGN:

Repeated measures study evaluating a soap-and-water body wipe, a 70% IPA body wipe, and no-treatment CONTROL during 2 weekend tournaments.

SETTING:

High school wrestling tournaments in Minneapolis-St Paul and surrounding communities of Minnesota.

INTERVENTION:

Each team was randomly assigned to use either wipe or serve as CONTROL during each tournament.

MAIN OUTCOME MEASURES:

Presence of skin infections that developed the following week after a weekend tournament.

RESULTS:

A total of 151 athletes competed in a total of 474 individual matches. Thirteen athletes tested positive afterward for skin infections. The odds of infection for the tested group compared with the CONTROL group were 0.089 (95% confidence interval (CI), 0.01-0.75; P = 0.026) for the soap-and-water group and 0.44 (95% CI, 0.11-1.69; P = 0.23) for 70% IPA group.

CONCLUSIONS:

- Soap-and-water wipes seem to be more effective in reducing skin infections compared with the alcohol wipe or no-treatment group
QUESTIONS?