DIAA SMAC Protocol for Management of Rash Illnesses / Skin Lesions in Sports

(with information from Delaware Division of Public Health & National Federation of High School Associations)

INTRODUCTION

Staphylococcus aureus, often referred to simply as "staph," are bacteria commonly carried on the skin or in the nose of healthy people. Approximately 25% to 30% of the population is colonized (when bacteria are present, but not causing an infection) in the nose with staph bacteria. Sometimes, staph can cause an infection. Staph bacteria are one of the most common causes of skin infections in the United States. Most of these skin infections are minor (such as pimples and boils) and can be treated without antibiotics (also known as antimicrobials or antibacterials). However, staph bacteria also can cause serious infections (such as surgical wound infections, bloodstream infections, and pneumonia).

Most staph bacteria are susceptible to antibiotics, and are termed MSSA (methicillin susceptible staphylococcus aureus). Some staph bacteria are resistant to several antibiotics and are therefore more difficult to treat. MRSA is a type of staph that is resistant to antibiotics called beta-lactams. Beta-lactam antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. While 25% to 30% of the population is colonized with staph, approximately 1% is colonized with MRSA.

While most frequently found in a hospital setting, Staph and MRSA can also cause illness in persons outside of hospitals and healthcare facilities. MRSA infections that are acquired by persons who **have not** been recently (within the past year) hospitalized or had a medical procedure (such as dialysis, surgery, catheters) are known as CA-MRSA infections. Staph or MRSA infections in the community are usually manifested as skin infections, such as pimples and boils, and occur in otherwise healthy people. Staph bacteria, including MRSA, can be red, swollen, painful, or have pus or other drainage. More serious infections may cause pneumonia, bloodstream infections, or surgical wound infections.

The chance of acquiring Staph and MRSA can be minimized by practicing good hygiene:

1. Keep hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer.
2. Keep cuts and scrapes clean and covered with a bandage until healed.
3. Avoid contact with other people’s wounds or bandages.
4. Avoid sharing personal items such as towels or razors.
5. Use a towel to cover surfaces frequently used by other people such as exercise equipment.
6. Make sure all athletic equipment is proper cleaned, including carrying bags.

Protocol

A. Initial Screening

1. All athletes/sports team members that participate in close skin-to-skin contact, shall receive a general visual screening daily before practice, for the presence of rash illnesses and/or skin lesions. Currently skin-to-skin contact sports include the sport(s) of wrestling. This can be conducted by the coach, athletic trainer or other staff member. All other collision sports should undergo weekly general visual screening. All sports should undergo education on MRSA and other potentially infectious disorders at the beginning of their season, and should be instructed to notify the school nurse, wellness center nurse practitioner, physician's assistant, team physician, athletic trainer, primary care physician (MD/DO), or other qualified healthcare provider (hence called "qualified healthcare provider") with any suspicions. All athletes should receive a copy of this protocol at the beginning of their high school sporting career.
2. Any individual that exhibits a rash illness and/or skin lesion should be referred to the qualified healthcare provider (Note: If referring a student athlete to their primary care physician or other qualified healthcare provider outside of the school setting, send a copy of this protocol, along with all relevant forms)
3. Formal skin checks of team members involved with skin-to skin contact sports must be completed on a weekly basis by one of the qualified healthcare providers. Preferably there should be consistency in the qualified healthcare provider used by a school. A form must be completed and given to the coach (see attached). The coach must present the form to the official prior to competition. This should be done within 12 hours of a competition (Friday for Saturday competitions). Additional checks must be completed prior to a practice that follows out-of-state competition, to assure potential contamination does not spread in-state.
4. Schools are encouraged to have a qualified healthcare provider present at wrestling weigh-ins to assure all teams are adhering to this skin lesion management protocol. Any athlete was ANY skin lesion must present himself to the official during weigh-ins, (and each day thereafter if a tournament) for clearance prior to competition. Failure to comply will result in immediate disqualification and a one match suspension of the athlete. Second infraction will result in a two match suspension, etc.
5. If any athlete is found to have a potential MRSA skin lesion, treatment should be started immediately. School nurses and athletic trainers should refer the athlete to the team physician, Wellness Center nurse practitioner, or personal physician/physicians assistant. Wellness Center nurse practitioners should begin treatment immediately.
6. ANY lesion suspected of being a MRSA infection shall be treated as a suspected MRSA infection until proven otherwise. Culture should be collected and treatment initiated immediately.
7. More serious infections (i.e., abscesses) may require incision and drainage. These individuals should be referred out to a physician. In these cases, proper drainage of the infection can be more important than antibiotic therapy.

8. Suspect Staph infections consist of, but are not limited to: pustules of any type, abscesses, furuncles, carbuncles, folliculitis, impetigo, and cellulites.

B. Culture collection / Treatment

1. Collection of culture:
    a. Utilize standard precautions for collecting and handling all specimens.
    b. Whenever possible, collect culture specimens prior to administration of antimicrobial agents.
    c. Deliver all specimens to the laboratory as soon as possible after collection. Specimens for bacterial culture should be transported at room temperature.
    d. Specimens should be contained in tightly sealed, leakproof containers and transported in sealable, leakproof plastic bags.
    e. Superficial ulcers – Cleanse surface with sterile saline and collect material from below the surface. Cleanse rubber stopper of transport device with alcohol; push needle through the septum and inject all abscess material on top of agar. If a swab must be used, pass the swab deep into the base of the lesion to firmly sample the fresh border. Specimens should be received at the laboratory as soon as possible.
    f. Abscess – Tissue or aspirates are always superior to swab specimens. Remove surface exudates by wiping with sterile saline or 70% alcohol. Aspirate with needle and syringe. If a swab is used, pass the swab deep into the base of the lesion to firmly sample the fresh border. Specimens should be received at the laboratory as soon as possible.
    g. Other dermal lesion – Obtain either a small biopsy of skin or drainage from the infected site after debriding the surface and cleansing with sterile saline. Cleanse rubber stopper of transport device with alcohol; push needle through the septum and inject all abscess material on top of agar. If a swab must be used, pass the swab deep into the base of the lesion to firmly sample the fresh border. Specimens should be received at the laboratory as soon as possible.
    h. Further questions regarding collection may be referred to the Division of Public Health Laboratory (Microbiology department): 302-223-1520.

2. Antimicrobial therapy**:**
    a. MRSA bacteria are resistant to many types of antibiotics and it is important to make sure that a culture from the infected area is obtained.
    b. Laboratories can do sensitivity testing to find out which antibiotics will be effective in killing the bacteria. This will ensure that the correct antibiotic is given for the treatment of the infection.
    c. Trimethoprim/Sulfamethoxazole (TMP-SMX) is considered the drug of choice as of 2006. Recommended dosage: 160mg/800mg twice daily x 10-14 days.
    d. For individuals with sulfa allergies, Doxycycline/minocycline 100mg twice daily x 10-14 days is an acceptable alternative.

e. Physicians may alter drug of choice based on new research or wound response to the aforementioned drugs.

C. Reporting

1. Besides weekly reports as noted above, the DIAA skin lesion form must be completed by a physician/physician assistant or Wellness Center nurse practitioner on any and all skin lesions requiring intervention. Potential MRSA infections shall be reported to the DIAA and athletes must be removed from further participation until cleared as noted below. Proven MRSA infections shall be reported to the DIAA, Department of Public Health, and opposing team's athletic director if interscholastic wrestling occurred within the previous 1 week period. A school should not use personally identifying information when reporting a MRSA case to DIAA and the opposing team's athletic director. Failure to report by the coach or athletic director, to the DIAA and opposing school, may result in disqualification in the state tournament.
2. By communicable disease regulation, MRSA is also reportable to DPH. Qualified healthcare providers are all obligated to report under this regulation (888-295-5156).
3. School nurses or athletic trainers are responsible for conducting passive/active surveillance for the presence of any communicable disease and report unusual findings to DPH Epidemiology (888-295-5156) and DIAA (1-302-857-3365). This includes suspected outbreaks among athletic teams, etc.

D. Exclusion and Return

1. Any athlete/sports team member presenting with a suspect Staph infection should be excluded from further athletic activity. This applies to <u>any</u> activity involving person-to-person contact or use of <u>any</u> shared athletic equipment (i.e., weight room equipment, balls, mats, and protective gear).
2. All suspect Staph infections must be treated as a potential MRSA infection, cultured, and appropriate antimicrobial therapy instituted.
3. If the participant is evaluated by a healthcare provider who chooses to treat with topical medications and wound care, the participant must continue to be excluded until they are clear of any moist, exudative or draining lesions.
4. If MRSA is culture-confirmed, *at a minimum*, the athlete/sports team member must be excluded for 48 hours after antimicrobial therapy was begun. However, participant should be reevaluated as detailed below prior to return to play. Any participant who has culture-confirmed MRSA must be excluded until they are clear of any moist, exudative or draining lesions.

5. Dermatologic conditions that are **not** suspect Staph infections (or other communicable condition) can be covered by a bandage made of non-permeable material that will withstand the rigors of competition. These participants should not be excluded.
6. ***Under no circumstances shall a participant with a suspect or confirmed Staph infection be allowed to participate until they are clear of any moist, exudative or draining lesions.***
7. Any time two or more athletes from any one school are suspected of having a potential MRSA infection, competition may be postponed at the discretion of the DIAA. Competitions maybe postponed with less than two infections if the DIAA Sports Medicine Committee, working in conjunction with the Delaware Division of Public Health, feel that competition would potentially result in an unsafe environment. Teams with multiple outbreaks may be required to have nose cultures to determine if there are any carriers. Carriers may be required to receive medical intervention in order to continue to participate. .
8. If the healthcare practitioner chooses *not* to culture the rash and/or skin lesion because it is not a "potential MRSA lesion", the participant should not return until their rash/skin lesion is dry and clear of any moist, exudative or draining substance.

E. Rescreening Process for Culture-confirmed MRSA

1. No athlete with a potential MRSA infection, may return to practice or competition until cleared by the school physician, their personal physician(MD/DO)/physician assistant, or school's nurse practitioner. Clearance for participation must be documented on the new DIAA Skin Lesion form (see attached). The DIAA Skin Lesion form must be completed by one of these four authorized providers, and handed into the Wellness Center nurse practitioner, school nurse and/or athletic trainer for review, before activity is resumed
2. To assure DIAA protocol has been followed, any participant with culture-confirmed MRSA must also be rescreened by the school nurse, ATC, and/or Wellness Center nurse practitioner (if available) prior to returning to sporting activities. The Wellness Center nurse practitioner, school nurse, or athletic trainer must co-sign and date the DIAA skin lesion form indicating that such clearance has occurred.

F. Prevention Strategies

1. Personal hygiene**:**
    a. Handwashing is the single most important behavior in preventing infectious disease. Encourage frequent handwashing with warm water/soap during the course of practices/games/matches.
    b. When hand-washing facilities are not readily available, provide alcohol-based sanitizers and encourage frequent use.

c. Do not share personal care items (i.e., towels, soap, razors, and water bottles). This includes sideline towels and drinking reservoirs
d. Encourage all participants to shower as soon as possible after direct contact sports using a clean, dry towel.
e. Do not share any topical preparations (i.e., ointments, salves, antibiotic creams)
f. Laundry: Wash towels, uniforms, etc. and any other soiled items using hot water, ordinary detergent, and dry on the hottest cycle after each use. Prewash or rinse any item that has been contaminated with body fluids. Laundry should be contained in an impervious container or sealed plastic bag for transport home.

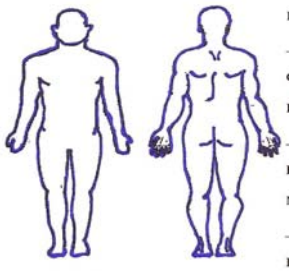
2. Environmental sanitation:
    a. Establish and enforce routine cleaning schedules for all athletic areas or equipment (i.e., shared protective gear, weight rooms, locker rooms, wrestling mats, etc.)
    b. Locker rooms and weight rooms should be cleansed at least once weekly using a commercial phenol-containing disinfectant, or a fresh mixture of 1:100 bleach solution (1 tablespoon bleach in one quart of water).
    c. If a single case of MRSA is diagnosed, cleaning should be increased to at least twice weekly.
    d. Shared athletic equipment (i.e., wrestling mats, protective gear, etc.) should be cleansed after each use using a commercial phenol-containing disinfectant, or a fresh mixture of 1:100 bleach solution (1 tablespoon bleach in one quart of water).
    e. Whirlpool equipment should be sanitized following the manufacturer's recommendations. Participants with suspect Staph infections and/or MRSA infections should be excluded from the use of whirlpool equipment.

Attachments:
DIAA Weekly Skin Check Form
DIAA 2006 Skin Lesion Form
DIAA Skin Lesion Protocol Summary

School:_____
Team:_____

DIAA MEDICAL RELEASE FOR ATHLETES TO PARTICIPATE WITH SKIN LESION

Name:_____ Diagnosis:_____
Communicable____ or Non-Contagious____ Sport:_____
Date first seen:___/___/___ Date treatment started:___/___/__
Date cultured:___/___/___ Culture Site(lab):_____
Location of lesion(s) (describe and mark on drawing):



Medication(s) used to treat lesion(s):_____

Earliest Date may return to participation: __/__/__

Provider Name (MD,DO,PA,NP- print):_____ Phone#_____

Provider Signature_____ Date:_____

As a qualified healthcare provider at participants school, I hereby certify that DIAA protocol for skin lesions has been followed and athlete is cleared for return to participation:
School Healthcare Provider Name (School RN,ATC, or NP -print):_____

School Healthcare Provider Signature:_____ Date:_____

Note to Providers: Non-contagious lesions do not require treatment prior to return to participation (e.g. eczema, psoriasis, etc.). If athlete is a wrestler, please familiarize yourself with NFHS Wrestling Rule 4-2-3 which states: *"If a participant is suspected by the referee or coach of having a communicable skin disease or any other condition that makes participation appear inadvisable, his coach shall provide current written documentation from a physician (MD,DO) physician assistant or nurse practitioner stating that the suspected disease or condition is not communicable and that the athlete's participation would not be harmful to his opponent.* ***Covering a communicable condition shall not be considered acceptable and does not make a wrestler eligible to participate****. This document shall be furnished at the weigh-in or prior to competition in the dual meet or tournament."* For all athletes, please familiarize yourself with the DIAA skin lesion protocol.

Note: If an on-site physician is present, he/she may overrule the diagnosis of the physician signing this form. Below are some treatment guidelines that suggest minimum treatment before returning to sports that involve direct skin-to-skin contact.

Bacterial diseases (impetigo, boils): ***ALL SUSPECTED LESIONS MUST BE TREATED AS MRSA UNTIL PROVEN OTHERWISE***. See DIAA Skin Lesion Protocol for more information. Otherwise, oral antibiotic for 2 days and no drainage, oozing or moist lesions.

Herpetic lesions (Simplex fever blisters, zoster, gladiatorium): Minimum of 120 hours or full five days of oral anti-viral treatment with no new lesions and all lesions dry and healed. If no oral treatment has been given, no visible lesions may be present.

Tinea lesions (ringworm scalp, skin): Oral or topical treatment for 7 days on skin and 14 days on scalp.

Scabies, Head Lice : 24 hours after appropriate topical management. And subsequent clearance by school/Wellness nurse.

Conjunctivitis: 24 hours of topical or oral medication and no discharge.

Molluscum Contagiosum: 24 hours after curettage.

WEEKLY SKIN SCREEN FORM

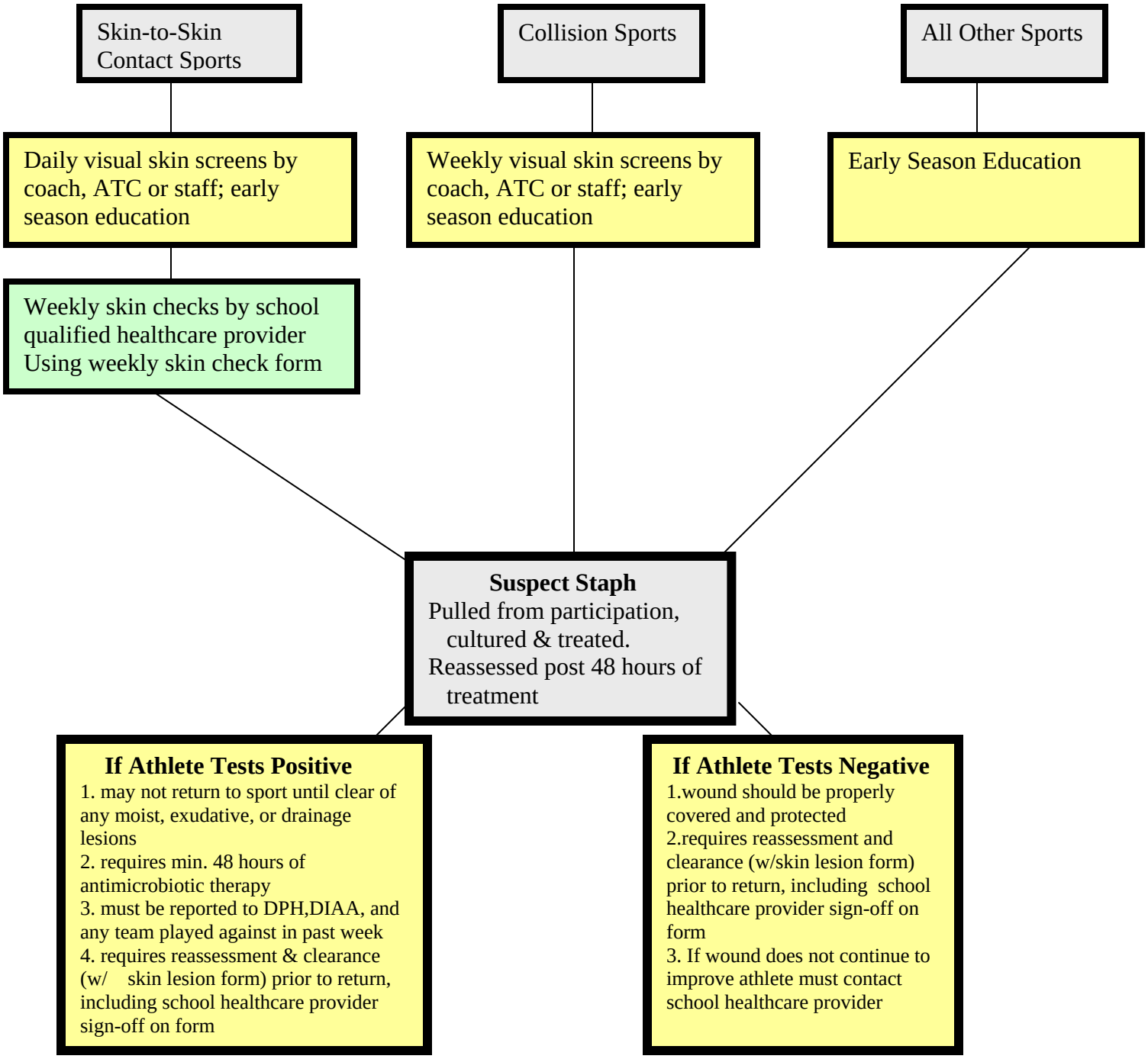
Form must be completed on every participating wrestler weekly; within 12 hours of competition
Authorized Screener: Team Physician, Wellness Center Nurse Practitioner, School Nurse or School Athletic Trainer
Authorized Screener to present this form to coach/AD, and coach/AD to present to official prior to competition

SCHOOL: SCREENER: DATE:
TEAM:

Athlete Name	Please check : Cleared*? yes	no	Date & Time checked	If not cleared, is this a new lesion*? yes	no	Comments			

* All new lesions require School Nurses and Athletic Trainers to refer athlete to a MD/DO/NP or PA for culture and initiation of treatment. Wellness Center Nurse Practitioner shall begin intervention immediately. All suspect lesions shall be considered MRSA until proven otherwise. Please see DIAA Skin Lesion protocol for more information on treatment, return to play, and reporting.

Signature of Screener:_____ Date:_____


Skin-to-Skin Contact Sports
Collision Sports
All Other Sports
Daily visual skin screens by coach, ATC or staff; early season education
Weekly visual skin screens by coach, ATC or staff; early season education
Early Season Education
Weekly skin checks by school qualified healthcare provider Using weekly skin check form
Suspect Staph
Pulled from participation, cultured & treated.
Reassessed post 48 hours of treatment
If Athlete Tests Positive
1. may not return to sport until clear of any moist, exudative, or drainage lesions
2. requires min. 48 hours of antimicrobiotic therapy
3. must be reported to DPH,DIAA, and any team played against in past week
4. requires reassessment & clearance (w/ skin lesion form) prior to return, including school healthcare provider sign-off on form
If Athlete Tests Negative
1.wound should be properly covered and protected
2.requires reassessment and clearance (w/skin lesion form) prior to return, including school healthcare provider sign-off on form
3. If wound does not continue to improve athlete must contact school healthcare provider