2023 - 2024

Sports Medicine Packet

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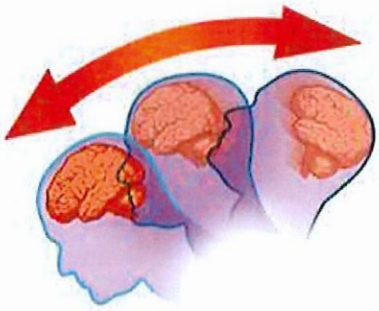
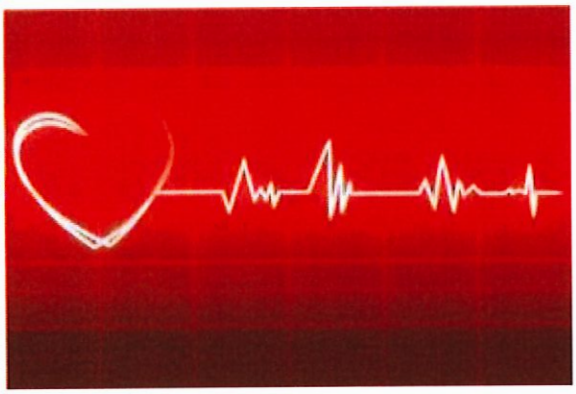
IMPORTANT: REQUIRED COURSES FOR ALL COACHES

ALL coaches are required to complete the "Concussion in Sports" online course as well as the "Sudden Cardiac Arrest" online course ANNUALLY. The "Heat Illness Prevention" online course must be completed one time for all new coaches. The courses are free and the links to the courses may be found on the WVSSAC homepage at www.wvssac.org. The links are also below:

https://nfhslearn.com/courses/61037/concussion-in-sports
https://nfhslearn.com/courses/61032/sudden-cardiac-arrest
https://nfhslearn.com/courses/34000/heat-illness-prevention





WVSSAC

Return to Play (RTP) Protocol

An athlete removed from a contest that shows signs/symptoms of a concussion shall be immediately evaluated by an appropriate health care professional. If no appropriate health care professional is available, the athlete shall not be allowed to RTP.

When the athlete is evaluated by the appropriate health care professional, if it is determined the athlete has suffered a concussion, the athlete shall not be permitted to RTP until successful completion of the progressions and clearance to RTP. If it is determined by the appropriate health care professional that the athlete did not suffer a concussion, the athlete may be returned to play as deemed appropriate by the health care professional. In all cases, when an athlete has been evaluated for signs and symptoms, the concussion report must be submitted within 7 days.

RTP shall be delayed until athlete is asymptomatic and has undergone a progression of tests to determine if they are able to RTP. **Each step / test in the progression takes 24 hours (1 per day)**

The progression shall follow: (Neuro-cognitive testing is strongly recommended.)

- No activity with complete physical and cognitive rest
- Light aerobic exercise (less than 70% of maximum heart rate)
- Sport specific exercise (drills specific to the athlete's sport)
- Non-contact training drills (more intense sport drills with no contact from other players)
- Full participation practice (following written medical clearance)
- Return to Play (normal game play)

If any symptoms occur during the progression, the athlete should rest for 24 hours before attempting the same progression again.

Appropriate Health Care Professional

Note: Any of the following who have appropriate training in the evaluation and management of head injuries.

- Medical Doctor (MD)
- Doctor of Osteopathy (DO)
- Doctor of Chiropractic (DC)
- Advanced Registered Nurse Practitioner (ARNP)
- Physician Assistant (PA-C)
- Licensed or Registered Certified Athletic Trainer (ATC/R, LAT, ATC)
- Licensed Physical Therapist

Approved Board of Directors 5/06/10. Revised May 2020

Concussions

WVSSAC Policy and 2013 Legislation - Senate Bill 336

Based upon the recommendation of the Sports Medicine Advisory Committee, the Board of Directors approved the following at its June, **2016** meeting.

1) **ALL COACHES** will be required to annually complete the NFHS Concussion Course.

2) The principal shall monitor and maintain appropriate records regarding completion of the course.

3) **ANY COACH** that does not complete the NFHS Concussion Course annually will not be permitted to coach until the course has been completed.

4) Make concussion information available to parents and athletes.
   - Physical Form
   - CDC Letter
   - Parents Guide to Concussion in Sports

5) Return to Play protocol (RTP)- Must have written permission to RTP from a health care professional with training in the evaluation of head injuries.

6) WVSSAC Concussion Report - Required online submission to school administration. Report must be submitted to Dr. Dan Martin within seven (7) days of injury. Report may be accessed at www.wvssac.org under the "Forms" tab.

Information/directions regarding the NFHS Concussion Course may be found at www.nfhslearn.com.

Additional information regarding concussions may be found on the Sports Medicine tab at the WVSSAC website. (www.wvssac.org)

A FACT SHEET FOR

High School Parents

CDC HEADS UP
SAFE BRAIN. STRONGER FUTURE.

This sheet has information to help protect your teens from concussion or other serious brain injury.

What Is a Concussion?

A concussion is a type of traumatic brain injury—or TBI—caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move quickly back and forth. This fast movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging the brain cells.

How Can I Help Keep My Teens Safe?

Sports are a great way for teens to stay healthy and can help them do well in school. To help lower your teens' chances of getting a concussion or other serious brain injury, you should:

- Help create a culture of safety for the team.
  - Work with their coach to teach ways to lower the chances of getting a concussion.
  - Emphasize the importance of reporting concussions and taking time to recover from one.
  - Ensure that they follow their coach's rules for safety and the rules of the sport.
  - Tell your teens that you expect them to practice good sportsmanship at all times.
- When appropriate for the sport or activity, teach your teens that they must wear a helmet to lower the chances of the most serious types of brain or head injury. There is no "concussion-proof" helmet. Even with a helmet, it is important for teens to avoid hits to the head.

How Can I Spot a Possible Concussion?

Teens who show or report one or more of the signs and symptoms listed below—or simply say they just "don't feel right" after a bump, blow, or jolt to the head or body—may have a concussion or other serious brain injury.

Signs Observed by Parents

- Appears dazed or stunned
- Forgets an instruction, is confused about an assignment or position, or is unsure of the game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows mood, behavior, or personality changes
- Can't recall events *prior* to or *after* a hit or fall

Symptoms Reported by Teens

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness, or double or blurry vision
- Bothered by light or noise
- Feeling sluggish, hazy, foggy, or groggy
- Confusion, or concentration or memory problems
- Just not "feeling right," or "feeling down"

Talk with your teens about concussion. Tell them to report their concussion symptoms to you and their coach right away. Some teens think concussions aren't serious or worry that if they report a concussion they will lose their position on the team or look weak. Remind them that *it's better to miss one game than the whole season.*

GOOD TEAMMATES KNOW:
IT'S BETTER TO MISS ONE GAME THAN THE WHOLE SEASON.

CDC

cdc.gov/HEADSUP

CONCUSSIONS AFFECT EACH TEEN DIFFERENTLY.

While most teens with a concussion feel better within a couple of weeks, some will have symptoms for months or longer. Talk with your teens' healthcare provider if their concussion symptoms do not go away or if they get worse after they return to their regular activities.

Plan ahead. What do you want your teen to know about concussion?

What Are Some More Serious Danger Signs to Look Out For?

In rare cases, a dangerous collection of blood (hematoma) may form on the brain after a bump, blow, or jolt to the head or body and can squeeze the brain against the skull. Call 9-1-1, or take your teen to the emergency department right away if, after a bump, blow, or jolt to the head or body, he or she has one or more of these danger signs:

- One pupil larger than the other
- Drowsiness or inability to wake up
- A headache that gets worse and does not go away
- Slurred speech, weakness, numbness, or decreased coordination
- Repeated vomiting or nausea, convulsions or seizures (shaking or twitching)
- Unusual behavior, increased confusion, restlessness, or agitation
- Loss of consciousness (passed out/knocked out). Even a brief loss of consciousness should be taken seriously

What Should I Do If My Teen Has a Possible Concussion?

As a parent, if you think your teen may have a concussion, you should:

1. Remove your teen from play.
2. Keep your teen out of play the day of the injury. Your teen should be seen by a healthcare provider and only return to play with permission from a healthcare provider who is experienced in evaluating for concussion.
3. Ask your teen's healthcare provider for written instructions on helping your teen return to school. You can give the instructions to your teen's school nurse and teacher(s) and return-to-play instructions to the coach and/or athletic trainer.

Do not try to judge the severity of the injury yourself. Only a healthcare provider should assess a teen for a possible concussion. You may not know how serious the concussion is at first, and some symptoms may not show up for hours or days. A teen's return to school and sports should be a gradual process that is carefully managed and monitored by a healthcare provider.

Teens who continue to play while having concussion symptoms or who return to play too soon—while the brain is still healing—have a greater chance of getting another concussion. A repeat concussion that occurs while the brain is still healing from the first injury can be very serious, and can affect a teen for a lifetime. It can even be fatal.

Revised January 2019

To learn more, go to **cdc.gov/HEADSUP**

CDC HEADS UP

CDC

Concussion Course Required

All Coaches are required to take the free course "Concussion **in Sports"** annually.

If the **Coach** took the course last year, he/she **MUST** take the course again before they are permitted to coach.

You must go through the purchase/checkout process for the free course in order to get credit for the current year and to be able to print the certificate.

All New Coaches must take the course now. Follow the directions **"New to NFHS Learn? Register Now"** on www.nfhslearn.com

Concussion in Sports - What You Need to Know
Ordering Information at www.nfhslearn.com

Steps to access the FREE course:

1. Go to **www.nfhslearn.com**
2. Sign in with your e-mail and password if you have previously registered.
3. If you need to register, it will only take a couple of minutes. All users at www.nfhslearn.com must be registered with a unique e-mail address and password.
4. Toward the upper left-hand part of the screen , you will see the "Click to Access This Free Course" for **"Concussion in Sports — What You Need to Know."**
5. You can order licenses as an individual to take the course yourself OR you can purchase courses in bulk if you intend to distribute the courses to others (there is a limit of 99 licenses per any one order).
6. Note: You will need to click on "Save" once you have put the course(s) in your cart and before you can proceed to Checkout.
7. As you go through the process you will see that you are using the "purchasing process" that is standard for NFHS Coach Education courses. You are not being charged anything for the Concussion courses. You do have the ability to order other courses at the same time, and you will be asked for payment for those.
8. You can then start the course if you ordered as an individual or begin distributing the licenses if you ordered in bulk.
9. If necessary, refer to the form regarding distributing bulk licenses. It can be found in the Locker Room at www.nfhslearn.com.

The online concussion course is offered at no cost to the user. Once you have finished, you will be added to the database as having completed the course. The name of the individual completing the course will appear in the "Coach Search" feature as having completed this course along with any other courses completed at **www.nfhslearn.com**.

All coaches are required to be trained in AED/CPR. An AED must be available at all practices and contests.

WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION
2875 STAUNTONTURNPIKE, PARKERSBURG, WV 26104

BODY FLUID HANDLING PROCEDURES

PURPOSE

The West Virginia Secondary School Activities Commission has adopted this policy in an effort to minimize the possibility of transmission of any infectious disease during a high school athletic practice or contest. The policy primarily addresses blood-borne pathogens such as Hepatitis B virus and the Human Immunodeficiency Virus (HIV). However, it also discusses common-sense precautions against the spread of less serious contagions such as the Influenza virus and the Common Cold virus.
Much of this policy has been written with contacts sports such as football, wrestling, and basketball in mind. However, it is applicable for all sports.

BLOOD-BORNE PATHOGENS

Blood-Borne pathogens such as Hepatitis B and HIV are serious infectious diseases which are present in blood as well as other bodily fluids; such as semen, vaginal secretions and breast milk. While there are a number of other such blood-borne diseases, Hepatitis B and HIV are the most commonly known.
Hepatitis B is a virus which results in a dangerous inflammation of the liver. Its victims suffer long-term consequences and reoccurrences, and the disease can be deadly if not treated. HIV is the virus that causes Acquired Immunodeficiency Syndrome (AIDS), which weakens the immune system, thus making a person susceptible to infections their immune systems would normally fight off.
The precise risk of HIV transmission during exposure of open wounds or mucous membranes such as the eyes, ears, nose, and mouth to contaminated blood is not known. However, evidence would suggest it is extremely low. In fact, the possibility of contracting HIV in this manner is much less than the possibility of contracting Hepatitis B and other blood-borne viral infections.
Therefore, student athletes, coaches, and officials must understand that while it is possible for HIV to be transmitted by blood from one individual to another through an open wound or a mucous membrane, the probability is very low. However, since the chance of this occurring is not zero, the appropriate precautions should be taken to ensure no transmission can occur.

PRECAUTIONS AGAINST TRANSMISSION OF BLOOD-BORNE PATHOGENS

The proper handling of body fluid spills should be a concern of teachers, coaches, officials, and student athletes. All concerned individuals must be aware that any time there is blood and/or other body fluids present, there is the possibility of an infectious disease being present. However this possibility can be nearly eliminated of the following precautions are observed.

General Procedures:

1) Wear latex or vinyl disposable exam gloves before making contact with body fluids during care, treatment, and cleaning procedures.
2) Discard gloves after each use.
3) Wash hands after handling any body fluids, whether or not gloves are worn.
4) Discard disposal items in plastic lined containers with lids. Close bags and discard daily.
5) Do not reuse plastic bags.
6) Use disposable items to handle body fluids whenever possible.
7) Use paper towels to pick up and discard any solid waste materials such as vomitus and feces.

Procedures for Activities:

1) All athletes must cover any open wound.
2) Student athletes should treat and cover their own wounds whenever possible.
3) When administering first aid, disposable latex or vinyl gloves should be worn. A different pair of gloves should be worn for each treatment administered.
4) If an individual gets someone else's blood on his/her skin, the area should be washed with soap and water and wipe the area with disinfectant, such as isopropyl alcohol.
5) If a student athlete begins to bleed during activity, play must be stopped, the student athlete who is injured removed, and any potentially contaminated surfaces cleaned using a disinfectant. The surface should be wiped with clean water.
6) Any student athlete that is removed must have the wound covered and the bleeding stopped, prior to returning to contest.
7) Any individual who has treated a wound or cleaned a contaminated surface should wash his/her hands with soap and warm water.
8) A student athlete should take a shower using a liberal amount of soap and warm water following the contest.
9) Towels, which are used by athletes, coaches, or officials should not be used to clean off any potentially contaminated surfaces.
10) All soiled linens such as towels and uniforms should be washed in hot water and in a detergent containing bleach, if possible.
11) If a coach or an official gets blood on them they should first wash the area with warm water and soap, and then wipe the area with a disinfectant such as isopropyl alcohol.
12) All coaches, athletes, and officials should practice good hygiene. Towels, cups, and water bottles should not be shared.
13) Keeping locker rooms and other areas well ventilated and clean can also help in preventing other air-borne contagions from being transmitted.

REFERENCES

St. Joseph's Hospital, Sports Medicine Staff, Parkersburg, WV.
West Virginia Chapter of the American Academy of Family Physicians, Sports Medicine Committee.
"Blood-Borne Pathogens in the Health Care of the Athlete," The First Aider, Fall 1992, Vol. 62, No.1.
"Infectious Disease Policy of the Florida High School Activities Association." 8-8-92.
"Routine for Handling Body Fluids," Michigan High School Association.

Policy Adopted by the Board of Directors

ag/bodyfluidhandlingprocedures

GENERAL GUIDELINES FOR SPORTS HYGIENE, SKIN INFECTIONS AND COMMUNICABLE DISEASES

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

Proper precautions are needed to minimize the potential risk of the spread of communicable disease and skin infections during athletic competition. These conditions include skin infections that occur due to skin contact with competitors and equipment. The transmission of infections such as Methicillin-Resistant Staphylococcus aureus (MRSA) and Herpes Gladiatorum, blood-borne pathogens such as HIV and Hepatitis B, and other infectious diseases such as Influenza and COVID-19 can often be greatly reduced through proper hygiene. The NFHS SMAC has outlined and listed below some general guidelines for the prevention of the spread of these diseases.

Universal Hygiene Protocol for All Sports:

- Shower immediately after every competition and practice, using liquid soap and not a shared bar soap.
- Wash all workout clothing after each practice, washing in hot water and drying on a high heat setting.
- Clean and/or wash all personal gear (knee pads, head gear, braces, etc.) and gym bags at least weekly.
- Do not share towels or personal hygiene products (razors) with others.
- Refrain from full body and/or cosmetic shaving of head, chest, arms, legs, abdomen, and groin.
- Students should clean hands with an alcohol-based gel or soap and water before and after every practice and contest to decrease bacterial load on the hands.
- Covering up coughs and sneezes in the bend of the elbow instead of the hand
- Stay home from school and athletic participation if frequent cough, diarrhea, vomiting, or fever.

Infectious Skin Diseases

Strategies for reducing the potential exposure to these infectious agents include:

- Students must notify a parent/guardian and coach of any skin lesion prior to any competition or practice. An appropriate health-care professional must evaluate all concerning skin lesions before returning to practices or competition.
- If an outbreak occurs on a team, especially in a contact sport, all team members should be evaluated to help prevent the potential spread of the infection. All shared equipment shall be properly cleaned/disinfected prior to use.
- Coaches, officials, and appropriate health-care professionals must follow NFHS or state/local guidelines on "time until return to competition." Participation with a covered lesion may be considered if in accordance with NFHS, state or local guidelines and the lesion is no longer contagious.

Blood-borne Infectious Diseases

Strategies for reducing the potential exposure to these agents include following Universal Precautions such as:

• A student who is bleeding, has an open wound, has any amount of blood on a uniform, or has blood on their body, shall be directed to leave the activity (game or practice) until the bleeding is stopped, the wound is covered, the uniform and/or body is appropriately cleaned, and/or the uniform is changed before returning to activity.

• Athletic trainers or other caregivers must wear gloves and use Universal Precautions to prevent blood or body fluid-splash from contaminating themselves or others.

• In the event of a blood or body fluid-splash, immediately wash contaminated skin or mucous membranes with soap and water. Skin antiseptics (e.g., isopropyl alcohol) or moist towelettes may be used if soap and water not available.

• Clean all contaminated surfaces and equipment with disinfectant before returning to competition. Be sure touse gloves when cleaning.

• Blood on an opponent's uniform during competition or teammate's uniform during practice should be cleaned at that time by wiping with a disinfectant such as isopropyl alcohol.

• Any blood exposure or bites to the skin that break the surface must be reported and immediately evaluated by an appropriate health-care professional.

Other Communicable Diseases

Means of reducing the potential exposure to these agents include:

•Make certain that students, coaching staff, and medical staff are current on all required vaccinations (MMR, Hepatitis B, Chickenpox, Meningitis, Hepatitis A). COVID-19 vaccine and yearly influenza vaccine are strongly encouraged.

•During times of outbreaks, follow the guidelines set forth by the CDC as well as State and local Health Departments.

For more detailed information, refer to the "Blood-Borne Pathogens," "Common Illnesses" and "Skin Conditions and Infections" sections contained in the NFHS Sports Medicine Handbook.

Sports-Related Skin Infections
Position Statement and Guidelines

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

Skin-related infections in both the community setting and the sports environment have increased considerably over the past several years. While the majority of these infections are transmitted through skin-to-skin contact, a significant number are due to shared equipment, towels or poor hygiene in general.

The NFHS Sports Medicine Advisory Committee (SMAC) has put forth general guidelines for the prevention of the spread of these infectious diseases (See NFHS General Guidelines for Sports Hygiene, Skin Infections and Communicable Diseases). The NFHS SMAC recognizes that even with strict adherence to these guidelines, given the nature of certain sports, skin infections will continue to occur. For example, the risk of transmission is much higher in sports with a great deal of direct skin-to-skin contact such as wrestling and football. Therefore, the NFHS SMAC has developed specific guidelines for the skin infections most commonly encountered in sports. The guidelines set forth follow the principles of Universal Precautions and err in favor of protecting participants in situations where skin-to-skin contact may occur. Consideration may be given to the particular sport regarding risk of transmission, but these guidelines must be strictly adhered to in sports where skin-to-skin contact is frequent and unavoidable.

Tinea Corporis (ringworm), Tinea Capitis (scalp), Tinea Cruris (groin)

These fungal lesions are due to dermatophytes. Diagnosis can be made visually or by a KOH preparation if diagnosis is in question. As they are easily transmissible, the student should be treated with topical antifungal medication (terbinafine or naftidine) for a minimum of 72 hours prior to participation and a minimum of 1 week after lesion resolution. Persistent lesions require oral anti-fungal medications. Once the lesion is considered to be no longer contagious, it may be covered with a bio-occlusive dressing. For scalp involvement (Tinea Capitis), the infection is more difficult to treat and requires 14 days of oral antifungal medication before return to practice and competition. With scalp involvement, shedding of fungal spores can persist well beyond 2 weeks. Consider washing scalp before practice with ketoconazole 1% shampoo to reduce transmission of spores. Continue with treatment until scalp lesions are gone. Tinea Cruris is a groin infection. Treatment with a topical antifungal until resolution is usually adequate. As lesion is covered by the uniform no exclusion from participation is indicated. Athletes should be reminded to wash hands with soap and water after applying medication.

Impetigo, Folliculitis, Carbuncle and Furuncle

While these infections may be secondary to a variety of bacteria, methicillin-resistant Staphylococcus aureus (MRSA) infections are of greatest concern. MRSA presents as abscess formation and if not properly addressed, can lead to serious consequences and possible reoccurrence. An infected athlete

should be treated and removed from practice and competition. Treatment may consist of incision and drainage with appropriate oral antibiotics based on culture if available. If MRSA is present, abscess incision and drainage is recommended for return to practice and competition may be considered after 72 hours of treatment,provided there is no further drainage or new abscess formation. For non-MRSA infections, return to contact practices and competition may occur after 72 hours of treatment, provided the infection is not actively draining and being treated. At this time the involved site may be covered with a bio-occlusive dressing. All lesions should be considered infectious until each one has a well-adherent scab without any drainage or weeping fluids. Once a lesion is no longer considered infectious, it should be covered with a bio-occlusive dressing until complete resolution.

During the time when a student has been identified with any of these infections, increased screening should occur. At this time, all team members should be carefully screened for similar infections on a daily basis by a knowledgeable coach or appropriate health-care professional. If multiple students are infected, consideration should be given to contacting the local or state health department for further guidance.

Varicella/Zoster (shingles), Herpes Simplex (HSV1 , cold sore, fever blister)

These are viral infections, which are transmitted by skin-to-skin contact. Contact with fluid from a shingles lesion can cause varicella (chickenpox) in an individual who has never had chickenpox or the varicella vaccine. Fever blisters (cold sores) are HSV1 infections around the mouth and lips. Lesions on exposed areas of skin that are not covered by clothing, uniform or equipment require the player to be withdrawn from any activity that may result in direct skin-to-skin contact with another participant. Covering infectious lesions with an occlusive dressing is not adequate, sufficient, or acceptable. Prior to returning to participation, primary outbreaks of shingles and cold sores require 10-14 days of oral antiviral medications, while recurrent outbreaks require 120 hours of treatment as a minimum treatment time. For a student to be considered "non-contagious," all lesions must be scabbed over with no oozing or discharge, no new lesions should have occurred in the preceding 72 hours, and no systemic symptoms (fever, malaise).

Herpes Gladiatorum

This skin infection, primarily seen among wrestlers, is caused by herpes simplex virus Type 1 (HSV-1). The spreading of this virus is strictly skin-to-skin. The majority of the outbreaks develop on the head, face and neck, reflecting the typical wrestling lock-up position. The initial outbreak is characterized by a raised rash with groupings of 6-10 vesicles (blisters). For head, face and neck involvement, symptoms include sore throat, fever, malaise and swollen cervical lymph nodes. The infected individual must be immediately removed from contact (practices and contests) and seek appropriate care and treatment. Return to contact is permissible only after all lesions are healed with well-adherent scabs, no new vesicles have formed, and no swollen lymph nodes remain near the affected area. Oral antiviral medications should be started and can expedite the clearing of an outbreak. Careful consideration should be given to prophylactic oral antivirals for the remainder of the season and each subsequent season. For a primary infection (first episode of Herpes Gladiatorum), wrestlers should be treated and not allowed to practice or compete for a minimum of 10 days. If general body signs and symptoms like fever and swollen lymph nodes are present, that minimum period of treatment should be extended to 14 days. If antivirals are not used, the infected participant may return to full contact wrestling only after all lesions are well-healed with well-adhered scabs, there has been no new vesicle formation in the preceding 72 hours, and there are no swollen lymph nodes near the affected area.

Recurrent outbreaks usually involve a smaller area of skin, milder systemic illness and a shorter duration of symptoms. Treatment should include oral antivirals. If antiviral therapy is initiated, the participant must be held from contact sports for a minimum of 120 hours. Even greater consideration should be given to prophylactic antivirals for the remainder of the season. As the herpes virus may spread prior to vesicle formation, anyone in contact with the infected individual during the three days prior to the outbreak must be isolated from any contact activity for eight days and be examined daily by a knowledgeable coach or appropriate health-care professional for suspicious skin lesions.

Miscellaneous Viral Infections

Verrucae (warts) are skin infections that are also caused by viruses but are not considered highly contagious. Therefore, these lesions require no treatment or restrictions, but should be covered if prone to bleeding when abraded. Molluscum contagiosum is considered contagious and transmits via direct skin-to-skin contact. Treatment consists of expressing the material from each vesicle and lightly treating with a hyfrecator or cryotherapy, usually performed by an appropriate health-care professional. Participation can ensue immediately after treatment, provided sites are covered with a bio-occlusive dressing.

WAYS TO PREVENT SKIN INFECTIONS: A PLAYER'S GUIDE

1 Cover Cuts & Sores!

With a bandaid or wrap before you play

2 Wash Up!

With soap and hot water

3 Don't Share!

Towels, clothes or personal items

4 Show & Tell!

Show cuts & sores to your coach

5 Be Prepared!

Learn first aid for cuts & sores

MEASURES FOR PREVENTING STAPHYLOCOCCAL SKIN INFECTIONS AMONG SPORTS PARTICIPANTS

Centers for Disease Control Recommendations for School Athletic Teams

1. Cover all wounds. If a wound cannot be covered adequately, consider excluding players with potentially infectious skin lesions from practice or competitions until the lesions are healed or can be covered adequately.

2. Encourage good hygiene, including showering and washing with soap after all practices and competitions.

3. Ensure availability of adequate soap and hot water

4. Discourage sharing of towels and personal items (e.g., clothing or equipment).

5. Establish routine cleaning schedules for shared equipment.

6. Train athletes and coaches in first aid for wounds and recognition of wounds that are potentially infected.

7. Encourage athletes to report skin lesions to coaches and encourage coaches to assess athletes regularly for skin lesions.

2004 West Virginia Department of Health & Human Resources, Bureau for Public Health, Division of Surveillance & Disease Control
Infectious Disease Epidemiology Program (304) 558-5358 (800) 423-1271

West Virginia Department of Health and Human Resources
Information for the Public -
Methicillin Resistant *Staphylococcus aureus* (MRSA)

What is *Staphylococcus aureus*?

Staphylococcus aureus, or Astaph@ is a bacteria that lives on the skin or in the nose of healthy people. Occasionally, staph can cause infections of the skin, bloodstream, lungs, bones, joints, heart, or almost any part of the body.

What is methicillin resistant *Staphylococcus aureus* (MRSA)?

MRSA (pronounced 'mursa') is a type of staph that has become resistant to some common antibiotics. This means that an infection with MRSA is more difficult to treat.

Where are staph and MRSA found?

Staph and MRSA may be found on the skin or in the nose. About 30 to 50% of people may carry the staph bacteria on their skin without getting ill.

How common is MRSA?

In many communities, including some in West Virginia, MRSA is now the most common cause of skin infections due to 'staph.' According to some studies, 1 to 10% of people now carry MRSA in their nose or on their skin.

Who is most at risk for staph infections?

While anyone can get an infection with staph, certain persons are more at risk. These people include diabetics, people on dialysis, persons who use injection drugs, people who have recently had surgery, and persons with chronic diseases such as cancer. Staph infections are also more common in persons who have a tube going into their body (such as a urinary catheter or intravenous (IV) catheter).

MRSA infections are more likely in persons who have recently received antibiotics or recently been in a hospital or nursing home. In the last few years, MRSA infections have also been identified in persons outside of hospitals. Cases of MRSA disease in the community are associated with recent antibiotic use, sharing contaminated items, active skin disease, and living in crowded settings. Outbreaks have occurred on sports teams, in jails or military units, camps and even hospital wards. Community associated MRSA infections are usually skin infections; however, severe illness can also occur.

Are staph and MRSA infections treatable?

Yes, staph infections are treatable. Skin infections can usually be treated with oral antibiotics. MRSA infections are usually treatable, but they may be more difficult to treat. The doctor will have to get a laboratory test to tell the difference between MRSA and staph.

How are staph and MRSA spread?

Staph and MRSA can spread among people by close physical contact. Spread may also occur by touching objects, such as towels, sheets, clothes, work-out areas and sports equipment contaminated by the skin of a person with MRSA or staph.

How can I prevent staph or MRSA infections?

- Keep your hands clean by washing thoroughly with soap and water. Alcohol-based hand cleansers also help.
- Keep cuts and wounds clean and covered with a dressing until healed. Avoid contact with other peoples= wounds.
- Avoid sharing towels, clothing, sports equipment, deodorant, cosmetics and other personal items.
- Only take antibiotics if you really need them. Antibiotics do not work for a cold, the flu or other viral infections. When a doctor prescribes antibiotics, take them as directed.

WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION
WVSSAC Sports Medicine Committee

Heat Acclimatization and Heat Illness Prevention Position Statement

Although deaths from heat illness are rare, constant surveillance and education of our student athletes and coaches is necessary in order to maintain the safety and health of our students and coaches. Students participating in high-intensity, long-duration or repeated same-day sports practices and training activities during times of high heat and/or humidity may be at risk.

Following the recommended guidelines and procedures as established by the WVSSAC Sports Medicine Committee can reduce the risk and incidence of heat illnesses and the resulting deaths and injuries in high and middle school athletics. The Sports Medicine Committee and WVSSAC Board of Directors recognize the importance of our coaches and other individuals responsible for supervising our students. They have the ultimate responsibility for the health and welfare of those students under their care.

Heat Acclimatization and Heat Illness Prevention Position Statement

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

Exertional Heatstroke (EHS) is the leading cause of preventable death in high school athletics. Students participating in high-intensity, long-duration or repeated same-day sports practices and training activities during the summer months or other hot-weather days are at greatest risk.

This NFHS Sports Medicine Advisory Committee (SMAC) position statement is the companion piece to the NFHSLearn.com online course "Heat Illness Prevention." This position statement provides an outline of "Fundamentals" and should be used as a guiding document by member state associations. Further and more detailed information can be found within the NFHSLearn.com online course, the NFHS Sports Medicine Handbook, the NFHS SMAC "Position Statement and Recommendations for Maintaining Hydration to Optimize Performance and Minimize the Risk for Exertional Heat Illness" and the resources listed below.

Following the recommended guidelines in this position statement and "Heat Illness Prevention" can reduce the risk and incidence of EHS and the resulting deaths and injuries in high school athletics. The NFHS recognizes that various states and regions of the country have unique climates and variable resources, and that there is no "one-size-fits-all" optimal acclimatization plan. However, the NFHS and the NFHS SMAC strongly encourage member state associations to incorporate all of the "Fundamentals" into any heat acclimatization plan to improve athlete safety. In addition, the online course "Heat Illness Prevention" should be required viewing for all coaches.

Heat Acclimatization and Safety Priorities:

- Recognize that EHS is the leading preventable cause of death among high school athletes.
- Know the importance of a formal pre-season heat acclimatization plan.
- Know the importance of having and implementing a specific hydration plan, keeping your athletes wellhydrated, and encouraging and providing ample opportunities for regular fluid replacement.
- Know the importance of appropriately modifying activities in relation to the environmental heat stress and contributing individual risk factors (e.g., illness, obesity) to keep your athletes safe and performing well.
- Know the importance for all members of the coaching staff to closely monitor all athletes during practice and training in the heat and recognize the signs and symptoms of developing heat illnesses.
- Know the importance of, and resources for, establishing an emergency action plan and promptly implementing it in case of suspected EHS or other medical emergency.
- Energy drinks are NOT appropriate hydration fluids. Refer to NFHS SMAC "Position Statement and Recommendations for the Use of Energy Drinks by Young Athletes".

Fundamentals of a Heat Acclimatization Program:

1. Physical exertion and training activities should begin slowly and continue progressively. An athlete cannot

be "conditioned" in a period of only two to three weeks.

A. Begin with shorter, less intense practices and training activities, with longer recovery intervals between bouts of activity.

B. Minimize protective gear (such as helmets and pads) during first several practices, and introduce additional uniform and protective gear progressively over successive days.

C. Emphasize instruction over conditioning during the first several practices.

Rationale: The majority of heat-related deaths happen during the first few days of practice, usually prompted by doing too much, too soon, and in some cases with too much protective gear on too early in the season (wearing helmet, shoulder pads, pants and other protective gear). Players must be allowed the time to adapt safely to the environment, intensity, duration, and uniform/equipment.

2. Keep each athlete's individual level of conditioning and medical status in mind and adjust activity accordingly. These factors directly affect exertional heat illness risk.

Rationale: Athletes begin each season's practices and training activities at varying levels of physical fitness and varying levels of risk for exertional heat illness. For example, there is an increased risk if the athlete is obese, unfit, has been recently ill, has a previous history of exertional heat illness, or has Sickle Cell Trait.

3. Adjust intensity (lower) and rest breaks (increase frequency/duration), and consider reducing uniform and protective equipment, while being sure to monitor all players more closely as conditions are increasingly warm/humid, especially if there is a change in weather from the previous few days.

Rationale: Coaches must be prepared to immediately adjust for changing weather conditions, while recognizing that tolerance to physical activity decreases and exertional heat illness risk increases, as the heat and/or humidity rise. Accordingly, it is imperative to adjust practices and/or competitions to maintain safety and performance. Coaches can monitor the athletes' weights pre and post practice to ensure adequate fluid replacement, and can follow guidelines for hot and humid weather including using Wet Bulb Globe Temperature (WBGT) readings.

4. Athletes must begin practices and training activities adequately hydrated.

Rationale: While proper hydration alone will not necessarily prevent exertional heat illness, it will decrease risk. Athletes can observe the color of their urine, which should be straw yellow or the color of lemonade, when adequately hydrated. A Urine Color Chart can be accessed at: http://www.urinecolors.com/themes/uctheme/assets/dehydration-chart.pdf

5. Recognize early signs of distress and developing exertional heat illness, and promptly adjust activity and treat appropriately. First aid should not be delayed!

Rationale: An athlete will often show early signs and/or symptoms of developing exertional heat illness. If these signs and symptoms are promptly recognized and the athlete is appropriately treated, serious injury can be averted and the athlete can often be treated, rested and returned to activity when the signs and symptoms have resolved.

6. Recognize more serious signs of exertional heat illness (clumsiness, stumbling, collapse, obvious behavioral changes and/or other central nervous system problems), immediately stop activity and promptly seek medical attention by activating the Emergency Medical System (or Call 9-1-1). On-site rapid cooling should begin

immediately.

Rationale: Immediate medical treatment and prompt rapid cooling can prevent death or minimize further injury in the athlete with EHS. Ideally, pools or tubs of ice water to be used for rapid cooling of athletes should be available on-site and personnel should be trained and practiced in using these facilities for rapid cooling. Ice water baths are the preferred method for rapid cooling, however, if ice water pools or tubs are not available, then applying ice packs to the neck, axillae, and groin and rotating ice-water soaked towels to all other areas of the body can be effective in cooling an affected athlete. Remember, cool first, transport later.

7. An Emergency Action Plan (EAP) with clearly defined written and practiced protocols should be developed and in place ahead of time.

Rationale: An EAP should be in place in case of any emergency, as a prompt and appropriate response in any emergency situation can save a life. The EAP should be designed and practiced to address all teams (freshman, junior varsity, and varsity) and all practice and game sites. For heat illness emergencies, emphasis must be placed on full body cooling prior to transport.

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WVSSAC Heat Acclimatization and Heat Illness Policy and Procedures

This policy describes required practices for the WVSSAC schools to follow for the prevention, monitoring, acclimatization, and treatment of exertional heat illnesses for student athletes, faculty, and staff of WVSSAC member schools. Exertional heat illnesses may include full body cramps, syncope/fainting, exhaustion, and stroke. The policy applies to all practice and conditioning activities (in season, out of season, summer) in which heat illness poses a risk, both outdoor and indoor.

Prevention:

Coaches will be notified of any student athlete with pre-existing conditions that place the individual at higher risk of exertional heat illness

Monitoring:

Monitoring will occur at the beginning of each practice or conditioning session, and continue every 30 minutes during the activity, using a Wet Bulb Globe Thermometer (WBGT) device. The monitoring will be recorded either in a hard copy or stored in the device. Modifications will be made as follows:

WBGT Reading	Activity Guidelines/Modifications
Under 82.0	Normal activities. Provide at least three separate rest breaks each hour with a minimum duration of three minutes each during the workout.
82.0-86.9	Use discretion for intense of prolonged exercise; watch at-risk players carefully. Provide at least three separate rest breaks each hour with a minimum duration of 4 minutes each.
87.0-89.9	Maximum practice time is 2 hours. **For football**: players are restricted to helmet, shoulder pads, and shorts during practice, and all protective equipment must be removed during conditioning activities. If the WBGT rises to this level during practice, players may continue to work out wearing football pants without changing to shorts. **For all sports:** Provide at least four separate rest breaks each hour with a minimum duration of 4 minutes each.
90.0-92.0	Maximum practice time is 1 hour. **For football**: no protective equipment may be worn during practice, and there may be no conditioning activities. **For all sports**: There must be 20 minutes of rest breaks distributed throughout the hour of practice.
Over 92.0	No outdoor workouts. Delay practice until a cooler WBGT level is reached.

Acclimatization:

For Football:

Days 1- 2 – Organized Practice, Helmets Only, No Contact

Days 3-4 – Helmet and Shoulder Pads, Soft Equipment Contact Only (bag, shield, sled, tackling wheel, etc.)

Day 5 – Full Pads – Soft Equipment Contact Only (bag, shield, sled, tackling wheel, etc.)

Day 6 – Full Pads, Full Contact

Hydration:

Water breaks are to be provided as outlined in the activity modification chart.

Treatment:

Monitoring of student athlete safety will be continuous during any physical activity. School staff should be educated on the signs and symptoms of exertional heat illness. The signs and symptoms include, but are not limited to:

Headache, confusion or "out of it" look, disorientation, or dizziness, altered consciousness or coma, nausea or vomiting, diarrhea, hot and moist or dry skin. A rectal temperature greater than 104 F at time of incident indicates exertional heat stroke.

If a student athlete is suspected of having exertional heat stroke, EMS must be called immediately. However, anyone with exertional heat stroke must be COOLED FIRST and then transported by EMS.

A cooling zone must be designated at each practice site. Treatment must include minimum:

-Removing excess clothing

-Placing patient in a cold-water immersion tub (35-59 F), or ice floating on top of tub if no thermometer available to check water temperature

-Placing an ice-cold towel over the head/neck and rewetting/replacing every 2 minutes while in the tub

Once diagnosed with exertional heat illness, the student athlete must complete a rest period and/ or obtain medical clearance from a physician before returning to play, depending on the type of illness diagnosed.

This policy shall be reviewed annually with all appropriate school personnel.

Note – This policy was developed using information provided by the Korey Stringer Institute. Approved by WVSSAC Board of Directors on May 17, 2022.

WVSSAC

SUDDEN CARDIAC ARREST AWARENESS

All coaches are required to complete the NFHS Sudden Cardiac Arrest Awareness course annually.

What is Sudden Cardiac Arrest?

- Occurs suddenly and often without warning.
- An electrical malfunction (short-circuit) causes the bottom chambers of the heart (ventricles) to beat dangerously fast (ventricular tachycardia or fibrillation) and disrupts the pumping ability of the heart.
- The heart cannot pump blood to the brain, lungs and other organs of the body.
- The person loses consciousness (passes out) and has no pulse.
- Death occurs within minutes if not treated immediately.

What are the symptoms/warning signs of Sudden Cardiac Arrest?

- SCA should be suspected in any athlete who has collapsed and is unresponsive
- Fainting, a seizure, or convulsions during physical activity
- Dizziness or lightheadedness during physical activity
- Unusual fatigue/weakness
- Chest pain
- Shortness of breath
- Nausea/vomiting
- Palpitations (heart is beating unusually fast or skipping beats)
- Family history of sudden cardiac arrest at age <50

ANY of these symptoms/warning signs may necessitate further evaluation from your physician before returning to practice or a game.

What causes Sudden Cardiac Arrest?

- Conditions present at birth (inherited and non-inherited heart abnormalities)
- A blow to the chest (Commotio Cordis)
- An infection/inflammation of the heart, usually caused by a virus. (Myocarditis)
- Recreational/Performance-Enhancing drug use.
- Other cardiac & medical conditions / Unknown causes. (Obesity/Idiopathic)

What are ways to screen for Sudden Cardiac Arrest?

- The American Heart Association recommends a pre-participation history and physical which is mandatory annually in West Virginia.
- Always answer the heart history questions on the student Health History section of the WVSSAC Physical Form completely and honestly.
- Additional screening may be necessary at the recommendation of a physician.

What is the treatment for Sudden Cardiac Arrest?

- Act immediately; time is critical to increase survival rate
- Activate emergency action plan
- Call 911
- Begin CPR
- Use Automated External Defibrillator (AED)

Where can one find additional information?

- Contact your primary health care provider
- American Heart Association (www.heart.org)

Courts Recognize A Coach Has Ten Legal Duties

1. Properly plan the activity
2. Provide proper instruction
3. Warn of inherent risks
4. Provide a safe physical environment
5. Provide adequate and proper equipment
6. Match your athletes appropriately
7. Evaluate athletes for injury or incapacity
8. Supervise the activity closely
9. Provide appropriate emergency assistance
10. Protect against physical and psychological harm from others

DON'T LET AN INJURY LEAD TO AN OPIOID ADDICTION

2 MILLION ATHLETES ARE EXPECTED TO SUFFER A SPORTS INJURY THIS YEAR

MANY OF THESE ATHLETES WILL BE PRESCRIBED OPIOID PAINKILLERS

75% OF HIGH SCHOOL HEROIN USERS STARTED WITH PRESCRIPTION OPIOIDS

HIGH SCHOOL ATHLETES ARE AT RISK OF BECOMING ADDICTED TO PRESCRIPTION DRUGS

- 28.4% used medical opioids at least once over a three year period.
- 11% of high school athletes have used an opioid medication for nonmedical reasons.
- Nearly 25% of students who chronically use prescription opioids also use heroin.

WHAT ARE OPIOIDS?

Opioids are a powerful and addictive type of prescription painkiller that have similar chemical properties and addiction risks as heroin. While opioids may provide temporary relief, they do nothing to address the underlying injury and can have serious side effects.

These drugs may lead to: dependence, tolerance, accidental overdose, coma and death.

The most common prescribed opioid painkillers in West Virginia are:

- Oxycodone (OxyContin)
- Hydrocodone (Lortab and Vicodin)

HOW TO PROTECT YOUR CHILD

- Talk to your healthcare provider about alternative pain management treatment options (see below).

  First-time prescription opioid users have a 64% higher risk of early death than patients who use alternative pain medication.

- If your child is prescribed an opioid painkiller, talk about the dangers of misusing medication, including overuse and medication sharing.
- Monitor your child's intake of prescription medication to ensure he/she is following dosage instructions.
- Safely dispose of any unused medication through a prescription drug drop box or a DEA Take-Back program.

NON-NARCOTIC PAIN MANAGEMENT ALTERNATIVES

Physical Therapy
Chiropractic
Massage Therapy
Acupuncture
Over-the-Counter Medication

WEST VIRGINIA ATTORNEY GENERAL'S OFFICE

SSAC

[redacted]

EMERGENCY ACTION PLAN

127-2-15 EMERGENCY ACTION PLAN (EAP)

15.1. Effective December 31, 2017, each member school shall adopt and submit to the WVSSAC and to the county board of education an EAP for athletics, designed to respond to athletic injuries that occur on school property during school-sponsored athletic practices and events.

15.2. Each EAP shall include:

15.2.a. Implementation of the EAP for every sport at every level. The EAP shall discuss how it is to be implemented with the participation of the school's principal and athletic director (if any), coaches, and athletes.

15.2.b. Training. The EAP shall include any necessary training for any person designated as responsible for any portion of the implementation of the EAP. Training may be in person or online, as may be available to the school.

15.2.c. Protocol for summoning emergency medical assistance. The EAP shall discuss how the school's sports teams will assign responsibility for summoning emergency medical assistance in the case of an emergency during a practice or event.

15.2.d. Protocol for beginning Cardiopulmonary Resuscitation (CPR). The EAP shall discuss how the school's sports teams will assign responsibility for beginning CPR in the event it is necessary. Each sports team must have individuals trained in CPR. The school shall provide proper training to any individual assigned responsibility for performing CPR.

15.2.e. Requirement for Automated External Defibrillator (AED); Protocol for the use of AED. Each member school will have an AED on the school or event grounds during the duration of all athletic events and practices. The EAP must address how the school's sports teams will assign responsibility for retrieving and using an AED in the event it is necessary. Each sports team must be instructed on the location of the nearest AED to any practice or event facility. The school shall provide proper training to any individual assigned responsibility for using an AED. (2021-22)

15.2.f. Protocol for the treatment of heat stroke. The EAP must address how the school's sports teams will prepare for and treat heat stroke. Each sports team that practices outdoors is recommended to have available an emersion tub, and must have water, ice, and towels, to be used for the treatment of heat stroke. The EAP must address how the school's sports teams will assign responsibility for obtaining these items and preparing them before a practice or game begins.

15.2.g. Written records. The EAP shall require that each of the school's sports teams assign responsibility for the items discussed above at the beginning of each season, and record those assignments on a written record, which record shall be retained by the sports team and the school.

15.2.h. Symptoms and risk factors for sudden cardiac arrest. The EAP shall require that schools train athletes, coaches, and volunteers about the symptoms and risk factors for sudden cardiac arrest.

15.2.i. Coordination with local Emergency Medical Systems. The EAP shall require that schools coordinate with their local Emergency Medical Services (EMS) personnel, notifying EMS personnel of the availability of AEDs at the school, and notifying EMS personnel of the EAP adopted by the school.

15.2.j. Follow up retraining. The EAP shall require that school sports teams that respond to an emergency incident meet to discuss their response after the incident has passed. Discussion shall center on the team's response to the incident, areas for improvement, and retraining that may be necessary, and any counseling that may be required for the individuals involved.

15.3. Schools may, but are not required to adopt the Anyone Can Save a Life Program (available at www.anyonecansavealife.org), which meets all of the requirements of this rule, to be implemented as that schools EAP in compliance with this rule.

15.4. Each EAP adopted pursuant to this rule shall be provided to the county board of education, and shall be retained by the county board of education until the EAP is superseded by a revised EAP.

National Athletic Trainers' Association®

Health Care for Life & Sport

National Athletic Trainers' Association Official Statement on Athletic Health Care Provider "Time Outs" Before Athletic Events

The National Athletic Trainers' Association recommends a "time out" system be adopted for athletic health care. Before the start of each athletic event – practice or competition – a time out should be held to convene the athletic health care professionals who comprise the emergency response team. The purpose of the meeting is to go through a pre-athletic event checklist reviewing the venue's emergency action plan (EAP).

Time out is a common term both in athletics and medicine. Time outs are taken immediately before surgery when all operating room participants stop to verify the procedure, patient identity, correct site and side. Coaches and athletes call time out to gather the team together and discuss game strategies or call a play. This new application of time out is expected to save lives by ascertaining all those involved in emergency care are properly briefed and ready before a potentially dangerous or life-threatening injury occurs.

A time out will help produce a decisive, coordinated emergency response and outcome. Typically the athletic trainer is the first person to respond to an athletic emergency situation. Other individuals also are involved – physicians, EMTs – and need to be part of the pre-event briefing so they are fully informed. Effective communication with all relevant parties is critical to ensure the athlete receives the best care when an emergency arises.

EAP Time Out: Pre-Athletic Event Checklist

- Athletic health care providers meet before start of each practice or competition to review the emergency action plan.
- Determine the role and location of each person present (i.e., AT, EMT, MD)
- Establish how communication will occur (i.e., voice commands, radio, hand signals). What is the primary means of communication? What is the secondary or back-up method of communication?
- An ambulance should be present at all high-risk events. Where is it physically located? What is the planned route for entrance/exit and is the route unencumbered? Is the ambulance a dedicated unit or on stand-by? If an ambulance is not on site, what is the mechanism for calling one?
- In the event of emergency transport, what is the designated hospital? Consider the most appropriate facility for the injury/illness when selecting the hospital.
- What emergency equipment is present? Where is it located? Has it been checked to confirm it is in working order and fully ready for use?
- Are there any issues that could potentially impact the emergency action plan (i.e., construction, weather, crowd flow)?

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8/1/12

WEST VIRGINIA Department of Health & Human Resources
BUREAU FOR PUBLIC HEALTH
Office of Emergency Medical Services

Sports Venue Coverage: EMS Guidelines for Medical Time Out

Introduction

High school sporting venues are high profile community events with an inherent risk of sports trauma or spectator illness or injury. Emergency Medical Services (EMS) coverage of West Virginia inter-scholastic Friday night football has been documented to occur in over 94% of contests. Similar to other rural states, physician and certified athletic trainers (NATA) are present in less than 50% of events. The Medical Time Out protocol promotes pre-game organization for response to athlete and spectator injury.

These guidelines provide a rationale and structure for EMS entry to the sports trauma arena with the focus on pre-game preparation and communication with medical staff for participating schools. The guidelines in this protocol provide procedures for catastrophic injury recognition and response. This encourages direct participation and venue awareness with EMS positioning to promote precision of response. EMS event coverage is a valued community service with a component of unique high visibility "fish-bowl arena" and deserves a component of protection for adverse outcomes.

EMS Squad education and implementation for a Medical Time Out prior to providing coverage for scholastic sporting events is consistent with new legislation for sports concussion in all 50 states.

Medical Time Out education and checklist should be monitored by the Squad Training Officer and Squad Medical Director.

Pre-Game Checklist

The pre-game checklist should be initiated 15-30 minutes prior to the event and should document cell **phone contacts** for all participants - Team Medical Staff, EMS, Police, and School Officials.

The checklist should include **hand signals** for EMS response to the field of play with need for sport concussion, backboard, ACLS support, and spectator response. Event sideline and press box radio communication is recommended but optional.

AED locations in the venue should be recorded with documentation of Sentinel Seizure awareness in athlete sudden cardiac arrest.

Procedures for **head and neck injury** should be reviewed with the captain assigned for C-spine control, face mask removal equipment, and agreed **technique for boarding** (log roll or 8 person lift).

Additional information included in the checklist depending on the sport venue may include **cheerleading injury response** and in geographically isolated locations designated **aero-**

medical landing zone coordinates, and back-up EMS when game coverage is limited to a single unit.

Check List Items:

*Phone Contacts

*Hand Signals

*AED Locations

*Head and Neck Injury

*Technique for Boarding

*Cheerleading Injury Response

*Aero-medical Landing Zone Coordinates

Sports Arena Special Case Management

Sports Concussion

West Virginia 2013 legislation on sports concussion return to play requires mandatory removal from contest in all cases of suspected head injury identified by sideline physician, athletic trainer or coach. Return to play guidelines require a 5 day progression after symptom resolution and neuropsychological testing with physician involvement.

EMS intervention is typically requested in cases with loss of consciousness or worsening symptoms. During transport a symptom checklist should be recorded and provided to the receiving Emergency Department. (Sports Concussion

Checklist Tools can be found online).

Heat Illness

Heat stress is common in high school football. Exertion Heat Stroke with rectal temperature above 104 F and altered mental status requires rapid cooling with ice bath immersion prior to transport. Heat exhaustion with temp above 100 F should include IVF with normal saline bolus (1 liter). Athletes with known or suspected sickle cell trait (SCT) are at increased risk for heat stress and may progress to explosive rhabdomyolysis and deterioration to PEA cardiac arrest from acute renal failure induced hyperkalemia. SCT athletes with heat stress require cardiac monitoring for development of peaked T waves or QRS prolongation.

Athlete Sudden Cardiac Arrest (SCA)

Intense exercise is a trigger for Sudden Cardiac Arrest in athletes with unrecognized Hypertrophic Cardiac Myopathy (HCM), Coronary Artery Anomalies, Arrhythmogenic Right Ventricular Dysplasia (ARVD), and Long QT Syndrome.

Sudden collapse during sports play should be considered cardiac in origin. Athlete collapse with seizure (Sentinel Seizure) and/or agonal respirations require chest exposure for AED placement or cardiac monitor with high index of suspicion for cardiac etiology.

GUIDELINES ON HANDLING PRACTICES AND CONTESTS DURING LIGHTNING OR THUNDER DISTURBANCES

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

These guidelines provide a default policy to those responsible or sharing duties for making decisions concerning the suspension and restarting of practices and contests based on the presence of lightning or thunder. The preferred sources from which to request such a policy for your facility would include your state high school activities association and the nearest office of the National Weather Service.

PROACTIVE PLANNING

1. Assign staff to monitor local weather conditions before and during practices and contests.
2. Develop an evacuation plan, including identification of appropriate nearby safer areas and determine the amount of time needed to get everyone to a designated safer area:
    a. A designated safer place is a substantial building with plumbing and wiring where people live or work, such as a school, gymnasium or library. An alternate safer place from the threat of lightning is a fully enclosed (not convertible or soft top) metal car or school bus.
3. Develop criteria for suspension and resumption of play:
    a. When thunder is heard or lightning is seen*, the leading edge of the thunderstorm is close enough to strike your location with lightning. Suspend play for at least 30 minutes and vacate the outdoor activity to the previously designated safer location immediately.
    b. 30-minute rule. Once play has been suspended, wait at least 30 minutes after the last thunder is heard or lightning is witnessed* prior to resuming play.
    c. Any subsequent thunder or lightning* after the beginning of the 30-minute count will reset the clock and another 30-minute count should begin.
    d. When independently validated lightning-detection devices or mobile phone apps are available, this technology could be used to assist in making a decision to suspend play if a lightning strike is noted to be within 10 miles of the event location. However, you should never depend on the reliabil ity of these devices and, thus, hearing thunder or seeing lightning* should always take precedence over information from a mobile app or lightning-detection device.

* – At night, under certain atmospheric conditions, lightning flashes may be seen from distant storms. In these cases, it may be safe to continue an event. If no thunder can be heard and the flashes are low on the horizon,the storm may not pose a threat. Independently verified lightning detection information would help eliminate any uncertainty.

4. Review the lightning safety policy annually with all administrators, coaches and game personnel and train all personnel.
5. Inform student-athletes and their parents of the lightning policy at start of the season.