

# A.G. West Black Hills High School

# Athletic Training Policies & Procedures

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Spring 2023

# BLACK HILLS HIGH SCHOOL EMERGENCY ACTION PLAN/POLICIES FOR ATHLETICS

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#### **BLACK HILLS HIGH SCHOOL**

#### **EMERGENCY ACTION PLAN FOR ATHLETICS - OVERVIEW**

Emergency situations can arise at any given moment during athletic events, home or away. Quick & efficient action must be taken in order to provide the best possible care to the person in emergency and/or life-threatening conditions. The development and implementation of an emergency action plan will help ensure the best care possible being given.

As emergencies can occur at any time during any activity, all involved must be prepared. All athletic organizations have a responsibility and duty to develop an emergency action plan that can be implemented immediately when necessary and to provide appropriate standards of emergency care to all sports participants. Since athletic injuries can occur at any time, the sports medicine/emergency care team must be prepared. This preparation includes the formulation of an emergency action plan, proper medical coverage of events, maintenance of appropriate emergency equipment & supplies, utilization of appropriate medical personnel and continued education in the area of emergency medicine and planning. Through adequate medical coverage, safe practice and training techniques and other safety avenues, some potential emergencies may be avoided. However, accidents and injuries are inherent with sports participation, and proper preparation on the part of the sports medicine/emergency care team should allow for each emergency situation to be managed appropriately.

#### **Components of an Emergency Action Plan (EAP)**

These are the basic components of every emergency action plan for athletics:

- 1. Emergency Personnel
- 2. Emergency communication
- 3. Emergency equipment
- 4. Roles of Certified Athletic Trainers, team physicians, coaches, administrators
- 5. Venue maps with directions

#### **Emergency Action Plan Personnel**

During athletic practices and competitions, the first responder to an emergency situation is typically a member of the sports medicine staff, most commonly a certified athletic trainer. A team physician is sometimes on site for an emergency, but not always present at practices/competitions. The level of adequate sports medicine coverage for an athletic event may vary widely, based on such factors as the sport or activity, the setting, and the type of training or competition. The first responder in some instances may be a coach or other school personnel. This is why certification in cardiopulmonary resuscitation (CPR), first aid, prevention of disease transmission, and emergency plan review is strongly recommended and/or required for all athletics personnel associated with sport practices, competitions, skill instruction and weight room/strength & conditioning.

The development of an EAP cannot be complete without the formation of an emergency team. The emergency team may consist of a number of healthcare providers including physicians, emergency medical technicians, certified athletic trainers; coaches, parents, other team participants, and possibly other bystanders, as designated. Roles of these individuals within the emergency team may vary based on various factors, such as the number of team members, the athletic venue/facility itself, or the preference of the head athletic trainer. There are four basic roles within the emergency team: 1. This is the most important role, as it establishes the safety of the scene and immediate care of the athlete-in many instances this role will be assumed by the certified athletic trainer, although if the team physician is present, he/she may be called in for this role. 2. EMS activation may be necessary in situations where emergency transportation is not already present at the facility/event. This should be done as soon as the situation is deemed an emergency or a life-threatening event. Time is the most critical factor under emergency conditions. Activating the EMS system may be done by anyone on the team, usually the person designated for this role is usually calm under pressure and who communicates well. This person is also familiar with the location and address of the sporting event. Refer to the below table for EMS activation 3. Equipment retrieval, such as the AED, may be done by someone who is familiar with the types and location of the specific equipment needed. This person also needs to be relatively quick, as equipment retrieval is vital for emergency response. 4. Directing EMS to the scene; this person is responsible for meeting emergency medical personnel as they arrive at the site of the emergency. This person should have keys, or access to keys, for any locked gates/doors that may slow the arrival of medical personnel. This can be a designated student aid(es), administrator or coach.

#### **ROLES WITHIN THE EMERGENCY TEAM**

- 1. Establish scene safety and immediate care of athlete
- 2. Activation of Emergency Medical System (EMS)
- 3. Emergency equipment retrieval
- 4. Direction of EMS to scene

#### **ACTIVATING EMS SYSTEM**

- Make the call 911
- Provide information
  - 1. Name of caller
  - 2. Your title/role within Black Hills High School
  - 3. Location of injured athlete
  - 4. Nature of emergency
  - 5. Condition of athlete (i.e. conscious, breathing, pulse, skin color)
  - 6. Name/gender/age of athlete
  - 7. Description of care being provided and by whom
  - 8. Address and specific directions to location of emergency
  - 9. Victim's location (if different than provider's location)
  - 10. Any other information requested by dispatcher

When forming the emergency team, it is important to adapt the team to each situation, sport and resources available. It may be advantageous to have more than one individual assigned to each role, in the event one individual is not present during an emergency.

#### **Emergency Communication:**

Communication is critical to quick emergency response. Athletic trainers and emergency medical personnel must work together to provide the best emergency response capability and should have contact information, such as a telephone tree, established as part of pre-planning for emergency situations. Communication prior to an event is a great way to establish boundaries and to build rapport between all involved. If emergency medical transportation is not available on site during an event, then direct communication with the emergency medical system at the time of injury or illness is necessary.

Access to a working phone or other telecommunications device, whether fixed or mobile, should be assured. The communications system should be checked prior to each practice or competition. A back-up communication plan should be in effect should there be a failure of the primary communication system. The most common method of communication is a cellular phone. At any athletic venue, whether home or away, it is important to know the location of working phones (charged, reception, etc)

#### **Emergency Equipment**

All necessary emergency equipment should be at the site and quickly accessible. Personnel involved in the emergency team should be familiar with the function and operation of any emergency equipment that may be used. All equipment should be checked at the beginning of each school year to ensure working condition. AEDs are assessed each year and batteries/pads are replaced every 2 years, per manufacturer's recommendation. Other emergency equipment, such as vacuum splints, shoulder be checked on a yearly basis and use rehearsed by emergency personnel. The emergency equipment available should be appropriate for the level of training of the emergency medical providers. Creating an equipment inspection log book is highly recommended. The certified athletic trainer should be trained and responsible for the care of the emergency equipment.

Black Hills' emergency medical equipment, such as the vacuum splints (red long bag), is kept in the Athletic Training Room. The portable AED is housed in the block shed by the fastpitch field, but brought out to each sporting event that the athletic trainer covers. During fall/spring practices, the AED is brought to the turf field as it is a middle point for all other sport fields. A fixed AED is located in the west corner of the main gymnasium. At Tumwater District Stadium, the fixed AED is located in the storage room under the stands on the \_\_\_\_\_\_side of the stadium.

#### **Medical Emergency Transportation**

There should always be emphasis placed on having an ambulance at high-risk sporting events, such as football. In the event an ambulance is on-site, there should be a designated location with immediate access to that site and a cleared route for entering/exiting the venue. If an ambulance is not present at an event, entrance to the facility should be clearly marked and accessible. In the event of an emergency, the EMS system will be utilized for activating emergency transport.

During the medical emergency evaluation, the primary surveyor assists the emergency care provider in identifying emergencies requiring critical intervention and determining transport decisions. In the emergency situation, the athlete should be transported by ambulance, where the necessary staff and equipment is available during transport in order to deliver appropriate care. Emergency care providers should refrain from transporting unstable athletes in inappropriate vehicles. Care must be taken to ensure that the activity areas are supervised should the emergency care provider leave the site in transporting the athlete. Any emergency situation where there is impairment in level of consciousness (LOC), airway, breathing, or circulation (ABC), or there is neurovascular compromise, should be considered a "load and go" situation and emphasis placed on rapid evaluation, treatment and transport. In order to provide the best possible care for Black Hills HIgh School athletics, all emergency trauma transports are to be sent to St. Peter's Providence Hospital, or otherwise directed by the emergency personnel.

#### **Non-medical Emergencies**

For the following non-medical emergencies: fire, bomb threats, and violent and/or criminal behavior, refer to the school district's emergency action plan and follow the instructions provided.

#### Conclusion

The importance of being properly prepared when medical/athletic emergencies arise cannot be stressed enough. An athlete's survival may hinge on how well trained and prepared athletics healthcare providers are. It is prudent to invest in the athletic department "ownership" in the emergency plan by involving athletic administration and sports coaches as well as sports medicine personnel. The emergency plan should be reviewed at least once a year with all athletic personnel, along with CPR and first aid refresher and concussion training. Through development and implementation of the emergency plan, Black Hills High School helps to ensure that the athlete will have the best care provided when an emergency situation does occur.



#### PART II: ATHLETIC TRAINING ROOM POLICIES & PROCEDURES

#### Role of the Athletic Trainer(s):

Certified by the **National Athletic Trainers Association (NATA)**, a Certified Athletic Trainer (ATC), is a member of the allied healthcare community whose role is to care for, and help prevent, athletic-related injuries. At Black Hills HIgh School, there is one Certified Athletic Trainer on staff during after-school ours. The priority of the athletic trainer is to provide on-site care for all home sporting events, but also away football games. Due to limitations of availability, there may or may not be an athletic trainer available for all sporting contests. However, all other sports' athletes are welcome to utilize athletic training services at the school during posted training room hours, or by appointment. If any athlete is injured during athletic participation, they need to be evaluated by the athletic trainer. Services in the training room are rendered on a first-come-first-serve basis for taping, unless stated otherwise by the athletic trainer. All injury evaluations will be completed after athletes are taped and sent out to practice.

Here is a list of services provided by the Certified Athletic Trainer:

- Preventative care for all student-athletes (including evaluation, consultations, taping and use of therapeutic modalities such as ice therapy, manual therapy and therapeutic exercise.
- Immediate evaluation and care of more serious injuries/conditions
  - EMS activation
  - Head/neck emergency care
  - o cardiac emergency care
- Return to play decision-making of the injured student-athlete
- Physician referral of an injured student-athlete
  - o Team physician can be seen in a quicker time-frame than usual family practice appointments
- Communication with the parent(s) of the injured student-athlete
- Rehabilitative care for injured student-athletes (this is included with the initial evaluation, taping and use of therapeutic modalities)

#### **Training Room Hours**

On most school days, the athletic trainer will be available Monday-Friday, after school until the end of practice/game sessions. Hours for the week will be posted on the Athletic Training Room door as a reference, including where the athletic trainer will most likely be throughout the afternoon/evening. On game days, especially varsity football game days, training room hours will vary. If a student-athlete needs to see the athletic trainer and is struggling to find a time that works for both, they can email the athletic trainer directly to discuss scheduling. If coaches schedule practice times outside of athletic trainer's known availability, it is up to those coaches to alert/notify the athletic trainer and arrange for the athletic trainer to be available to the athletes. There is no guarantee of athletic trainer coverage of practice/game with less than 24-hour notice of a change. There is only coverage of weekend events if pre-arranged/notified ahead of time. The athletic trainer does not rely on social media for game/practice changes/updates; direct communication via text/email or in-person is the best way to confirm availability/coverage.

#### **Athletic Trainer Priorities**

The athletic trainer will be at as many athletic practices and games as possible. Coaches should remember that there is only one athletic trainer, and at times there are overlapping events. All varsity events will have main priority as well as all on-campus events. Off campus events that are not covered: cross country, swim & dive, bowling, & golf. If more than one event is occurring on campus, the athletic trainer will give priority to the event with the higher risk of severe injury, but may also roam between events as well.

#### Reporting injuries to the athletic trainer

It is expected that all injuries sustained during Black Hills High School sanctioned athletic events be reported to the athletic trainer for management. This includes coaches reporting to the athletic trainer, even if the athlete has not done so themselves. The athletic trainer cannot be at all fields/facilities at once, so it is up to the coaches to help in putting priority into the health and safety of the student-athletes. If an injury is sustained during after-hours, or when the athletic trainer is not available, the coach needs to instruct the athlete to report to the athletic trainer the following day, along with some form of communication with the athletic trainer (i.e. email, text, etc). If there is a severe injury, and it is determined that the athlete will seek evaluation from a physician immediately, then the coach also needs to communicate that with the athletic trainer, as all physician release forms must go to the athletic trainer.

#### Taping & Treatment: Services available

The Black HIlls HIgh School athletic trainer will only tape athletes who are evaluated and recognized as having an orthopedic issue (aka TV taping, NFL taping, etc will not come from the athletic trainer). Preventative taping will be performed as long as the athlete is also performing rehabilitation as instructed by the athletic trainer. Game day taping does require the athlete to participate in some preventative rehabilitation/strengthening as prescribed by the athletic trainer. If an athlete needs to be taped, it is because the Certified Athletic Trainer has initially assessed the athlete and decided upon the need. As the coach, please do not perform your own assessment outside of your scope (i.e. emergency conditions, initial concussion signs). As a coach, you cannot diagnose and treat medical injuries. That is explicitly the role of the Certified Athletic Trainer to determine treatment/taping needed. Other treatment services available in the Black Hills HIgh School athletic training room include cold therapy (ice, ice bucket), instructed/assisted stretching, rehabilitation instruction and manual therapy (manual massage, foam roller)

#### **Specialized Tape**

Occasionally, the athletic trainer will provide specialized tape for specific needs, as deemed necessary by athletic trainer or their physical therapist. Due to the expense of these specialized taping materials, these specific taping treatments may not be provided long term to the athlete. If the athlete has injured themselves where the coach/athlete/parent feels they need the specific tape to continue play, the below scenarios <u>may</u> happen:

- 1. The athlete will be removed from play to do extensive rehabilitation until they are more functional without relying on the brace/taping
- 2. The athlete will be asked to purchase an appropriate brace or to continue to provide the necessary taping supplies (the athletic trainer may be able to work with either the athlete's doctor or our team physician to arrange the purchase of the brace, which could be purchased through the students/parents' insurance)
- 3. The team may be required to provide the specialized tape

#### **Over-The-Counter Medications**

In the state of Washington, it is currently against the law for Certified Athletic Trainers to dispense any type of medicine to student-athletes. Coaches also are not allowed to dispense any type of medication and should strongly discourage athletes from carrying their own and/or dispensing medications to their teammates. Athletes are not permitted to carry medications on their person while in school either.

#### Physician/Orthopedic Referrals

Should an injury or illness warrant additional evaluation or treatment, the athletic trainer can assist in the referral process. Here at Black Hills HIgh School, we have a team physician as a resource. In most cases, the athletic trainer can directly communicate with the team physician and an athlete can be seen within 2-3 days. The athletic trainer also has direct communication abilities with another orthopedic group locally. Any athlete who sees a physician for any injury sustained, or any illness that has removed them from play, <a href="must present a signed physician release">must present a signed physician release</a> form/notation to the athletic trainer. No note, no play. Any athlete who does not present a physician release to the athletic trainer will not be allowed to resume participation until they do. It is highly recommended that this policy be followed during off-season/summer team activities as well.

In Washington State, there are only five allied healthcare professionals that can clear an athlete from injury:

- 1. Medical doctor (MD)
- 2. Doctor of Osteopathic Medical (DO)
- 3. ARNP (Advanced Registered Nurse practitioner)
- 4. PA-C (Certified Physician's Assistant)
- 5. ATC (Certified Athletic Trainer)

# WIAA Rules on returning from a physician visit. All visits to a medical doctor must provide a note to be eligible to participate back to sport

**18.4.4** To resume participation following medical care by a medical authority licensed to perform a physical examination and/or a dentist (for dental injury) or podiatric physician (for a foot and/or ankle injury), a participating student must present to the school officials a written release from a medical authority licensed to perform physical examinations as listed in 18.4.2 and/or a dentist or podiatric physician as applicable.

## Remember: a physician's note of clearance clears the student-athlete back to the school whereas the athletic trainer will provide return-to-play clearance

#### Getting injured on the field/court of play

If an athlete is injured on the field/court, no matter what type of injury it seems, **he/she should not be moved** if a head/neck injury is suspected. If the injured athlete has a head or spinal injury and is moved, the vertebrae can shift and cause severe damage to the spinal cord. An athletic trainer will be present at all home and away football games, and all home events for other athletic competitions. At away events, there may not be an athletic trainer present, so the coach will need to evaluate the injury within their first aid training scope and use a "common sense" approach to whether or not it would be necessary to activate EMS.

#### WHEN IN DOUBT, DIAL 9-1-1

#### Other injury management

In the event that an athlete sustains an injury, it is his/her responsibility to contact/report to the athletic trainer immediately after the injury is sustained (if the ATC was not present when the injury occurred.) The athletic trainer will then evaluate the injury and give treatment instructions to the athlete. If the athlete is going back out to the field/court of play, but not participating, the athletic trainer will provide a short note to give to the coach with the athlete's restrictions. In the event that a physician referral is necessary, the athletic trainer at Black Hills will contact the athlete's parent/guardian either via email or phone, and discuss the evaluation findings and options for the athlete to see. The athletic trainer can easily facilitate an appointment with the team physician, if the parent/guardian agrees. If the athlete is seen by a physician, the athletic trainer will then follow that physician's instructions for treatment, timeline, rehabilitation, etc. Please note, the coaches do prefer that an injured athlete still attend practices as an observer. If the athletic trainer is treating an athlete for an injury (i.e. rehab/ice bucket, etc), it is that athlete's responsibility to report to the athletic training room at the designated time **DAILY** to receive such treatment. The athletic trainer is not responsible for chasing athletes to do their treatment.

#### Return-to-Play from injury

When an athlete has been absent from practice/competition for a period of time, before they can return to play, they must be able to pass the athletic trainer's functional assessment test; this can also include mental capability to return as well as the cardiovascular requirements for their sport. This is the same policy, even with a physician's clearance with a specific date of return. If the athlete has sustained a moderate injury, they must participate in one full practice, unrestricted, before returning to competition.

#### **Coaching First Aid & CPR Training**

In accordance with the Washington Interscholastic Activities Association (WIAA) rules and recommendations, all coaches, both head and assistants, at Black Hills High School must be trained in First Aid, CPR and AED.

#### **Concussion Training**

As of July 2009, all head coaches must take an online concussion course and test through WIAA before they can coach at any level. The athletic trainer will discuss and review the concussion protocol at the beginning of the season to answer any questions and to ensure the coaches and athletic trainer are in understanding of each other - See EAP and BHHS Concussion Protocol for more in-depth information.

#### **Team Medical Kits**

The athletic trainer will supply a medical kit with first aid supplies to all teams for use at away competitions; this includes when a visiting ATC is present. Supplies are limited as the supplies provided are not to be used for anything other than for medical purposes. Coaches should not tape athletes who are not currently being taped daily by the athletic trainer (unless otherwise discussed WITH the athletic trainer). The athletic trainer will periodically check on the supplies of the kits, but if the kit is showing depletion of supplies, it is the teams' responsibility to bring the kit to the athletic trainer for re-fill.

#### Injury Privacy and the Law

The Health Insurance Portability and Accountability Act (HIPAA) as well as the Family Educational Rights and Privacy Act (FERPA) prohibit any dissemination of medical information to non-authorized parties. Administrators, coaches and sports medicine personnel should never release any information about an athlete's injury or condition to any person with expressed consent of the athlete's parent/quardian.

#### **Lightning Protocol**

In the event there is lightning in the weather forecast during an outdoor athletic event/activity, the athletic trainer is in charge of monitoring the range of lightning detection. The athletic trainer will utilize WeatherBug for this purpose. If lightning is detected within 15 miles outside of the location, the athletic trainer will put the officials and coaches on "notice". If lightning is detected within 10 miles of the location, the game/practice will be put on hold by the athletic director/administrator on-site once the athletic trainer has informed them and all personnel (including spectators) will be instructed to find appropriate shelter

- Safe shelter includes: main gym building, baseball shed building, inside cars with hard top & windows up
- UNSAFE shelters include: soccer covered benches, baseball/softball dugouts, underneath metal seating/benches, isolated tree cover

The game/practice will remain on pause for 30 minutes from the last lightning strike detected/seen within 10 miles of the location; if during that time another strike occurs, the 30 minutes begins again

#### Contacting the athletic trainer

Each coach will have the athletic trainer's direct cell phone number Each team medical kit also will have the athletic trainer's contact information

Kailynn Arnold: 253-226-9735 kailynn.arnold@tumwater.k12.wa.us



#### Part III: Basic Injury Management for BHHS Coaches

#### **Fractures**

An open fracture (compound) will typically be self evident due to the exposed bone. However, sometimes, athletic equipment/uniform can cover the area. The following clues suggest you are dealing with a probable **closed** fracture:

- The athlete felt a bone break or heard a "snap"
- The athlete feels a grating sensation when he/she tries to move the limb in question
- One limb appears to be a different length, shape or size than the other, or is improperly angulated
- Reddening of the skin around a fracture may appear shortly after the injury is sustained
- The athlete may not be able to move the limb, or part of the limb, or to do so produces intense pain
- Loss of pulse at the end of that extremity
- Loss of sensation at the end of that extremity
- Numbness or tingling sensations are reported by the athlete
- Involuntary muscle spasms
- Other unusual pain, such as severe pain in the rib cage when an athlete takes a deep break or coughs

Ice on a fracture usually makes it throb worse and/or the pressure of an ice pack is too much

#### **Concussions**

"Any transient neurological dysfunction from a biomechanical force that may or may not result in a loss of consciousness" (Giza & Hovda, 2001, p.228)

#### **Recognizing Concussions**

Concussions do not always involve a loss of consciousness. ANY traumatic blow to the head or another part of the body (which causes a whiplash effect to the head) should be considered as a mechanism of concussion injury. While a headache is the most common reported symptom of a concussion, all people will experience concussions differently. Therefore, all of the potential signs and symptoms of a concussion should be considered. A symptom checklist can assist the evaluator in making a more objective decision (but note: concussion symptoms can sometimes be delayed as well)

If a player sustains a hit to the head, or a hit that causes a whiplash effect, and reports any sign or symptom of a concussion, he/she must be pulled immediately from play. A signed document from one of the five approved healthcare professionals designated by the WIAA is needed prior to the athlete's return to play (RTP), in addition to the athlete's completion of the Black Hills High School and Evergreen Conference Concussion Protocol.

#### **Concussion Signs & Symptoms**

#### Athlete-Reported

Nausea

Double/disrupted vision

Drowsiness

Ringing in the ears

Feeling in a "fog"

Seeing "stars"

Feeling "slowed down"

Sensitive to light/noise

Headache

Getting their "bell rung"

Feeling numbness/tingling

#### Observed

Amnesia

Loss of orientation

Balance issues

Memory problems

Dazed/confused

Nervousness

Depressed

Poor concentration

Easily distracted

Personality changes

"Glassy eved"

Blank/vacant stare

Sadness

Sluggish

Emotional outburst (inappropriate)

Irritability

Sleep disturbance

Loss of consciousness

Vomiting

ANY ATHLETES WHO GET "ROCKED" AND EXHIBIT ANY OF THESE SIGNS OR SYMPTOMS SHALL BE REMOVED FROM ACTIVITY IMMEDIATELY AND REFERRED TO THE ATHLETIC TRAINER OR PHYSICIAN. COACHES ARE TRAINED TO RECOGNIZE SUSPECTED CONCUSSIONS, NOT MAKE RETURN TO PLAY DECISIONS.

#### **ENVIRONMENTAL CONCERNS**

#### **Avoiding Heat Related Illness/Emergencies**

People suffer heat-related illnesses when the body's temperature control system is overloaded. The body normally cools itself by sweating; but under some conditions, sweating is not enough. In such cases, a person's body temperature rises rapidly, and very high body temperatures may damage the brain and other vital organs. Factors that contribute to heat-related illness include high humidity, obesity, fever, dehydration, poor circulation, sunburn, drug and/or alcohol use and side effects of some medications. Here are some things to do to try to prevent heat-related illnesses:

- Drink plenty of fluids (water mostly) before, during and after exertion. This means hydrating the days leading up to high-exertion activities
- include electrolytes in your fluids (salts, sodium, potassium)
- wear light clothes on hotter days
- wear sunscreen
- coaches: schedule practices during cooler periods of the day (try to avoid 10am-2pm) and acclimate athletes to heat gradually.
- Heat illness can occur indoors as well. Confined rooms with little ventilation can be of high concern (i.e. wrestling rooms)

Per WIAA, per the Heat Index Policy, when the Heat Index (calculated) meets or exceeds 70 degrees F, it is strongly recommended that all schools provide at any practice or event, a method for rapidly cooling athletes. Such approved methods include ice water immersion or tarp-assisted cooling with oscillation (TAO). Here at Black Hills HIgh School, the ice-water immersion method is available. The heat index shall be calculated within one hour prior to the start of each teams' practice and/or event. This shall be done by the BHHS Athletic Trainer, and recorded. Heat index calculation is only required on days where the forecasted heat index is 85 degrees F or higher.

#### **Heat-Related Illness**

Heat exhaustion and heat stroke are the common heat-related illnesses that can lead to more serious damage. Heat cramps are a mild form of a heat-related illness that can easily be treated. But they are all preventable.

#### **Heat Stroke: Signs & Symptoms**

\*Body temp of 103 or higher (rectal thermometer most accurate)

\*Hot, red, dry or damp skin (not much sweat)

Fast, strong pulse

Headache

Dizziness

Nausea

\*Confusion/disorientation

\*Loss of Consciousness

#### What to do

Call 9-1-1 immediately

Move athlete to cooler/shaded place

Lower body temp by placing in cold water immersion tub, or adding cold water towels to groin, head, armpits Do NOT give them anything to drink

#### **Heat Exhaustion: Signs & Symptoms**

Heavy sweating

Cold, pale, clammy skin

Fast, weak pulse

Nausea/vomiting

Muscle cramps

Tiredness/weakness

Dizziness

Headache

Loss of Consciousness

#### What to do

Move to cool/shaded place

Loosen clothing/sports equipment

Place cold water towels on body or place in cold water immersion tub

Sip water (if not nauseous)

Call 9-1-1 Immediately if:

Begin vomiting

symptoms get worse

symptoms last longer than 1 hour

#### **Cold-related Illness**

Here in Washington State, cold-related illnesses are not very common. However, in the event there is a cold snap for outdoor athletics, here are the most common signs & symptoms:

- Frostbite: numbness ("wooden" feeling) in hands or feet, burning sensation to exposed skin (nose, ears, cheeks)
- Hypothermia (core temp below 35 degrees F): feeling cold, shivering, apathetic and withdrawn, impaired athletic and mental performance/ability, confusion, slurred speech, irrational thinking/behavior, cardiac arrhythmia and/or arrest.

What to do if a cold-related illness is suspected:

- remove from cold environment
- re-warm affected area (gradually)
- if related to an extremity, monitor pulse, splint area and re-check pulse
- Do not rub/massage the area and do not re-expose to the cold environment
- If area is white/grayish in coloring, or blotchy, suspect frostbite and send to hospital or call 9-1-1

**Bee/Insect Stings** (noticeable bite/sting, blotchy skin, pain or itching, burning, weakness, chills, fever, nausea, etc) The two greatest risks from most insect stings are allergic reactions (which in some individuals can be fatal) and infection (more common, less serious, typically). If an athlete is stung by a bee, wasp, hornet or yellow jacket, follow these instructions closely:

- check to see if stinger is injected. Do not try to pull it out as it may release more venom; instead gently scrape it out with a blunt-edged object, like a credit/ID card
- Wash the area with soap and water- continue this several times a day until the skin is healed
- apply an cold/ice pack, wrapped in a cloth if not a bag with ice cubes in it
- apply a paste of baking soda and water and leave on for 15-20 minutes
- Athlete can take acetaminophen (Tylenol) for pain ONLY PARENTS CAN ADMINISTER

IF ATHLETE ACKNOWLEDGES AN ALLERGY TO BEES OR HAS TROUBLE BREATHING
CALL 9-1-1 IMMEDIATELY
RETRIEVE ATHLETE'S EPI-PEN IF ON HAND

#### **Hydrating Athletes**

Athletes should be especially cautious to stay well-hydrated. While water is essential, it is also very important to replace lost electrolytes. Consuming sports drinks such as Powerade, Gatorade, or other replacement fluids is one way to do this. Energy drinks such as Red Bull, Bang, Celsius, Alani, Rockstar, etc are **not recommended** as a safe way to hydrate the body. Drinking these prior to athletic participation/high-level exercise puts athletes at risk of sustaining a cardiac event, even if they are seemingly healthy.

In general, the most important thing is that the athlete stays well-hydrated but not getting too much sugar intake. Here are some general guidelines to follow:

- Athletes should drink plenty of water throughout the day prior to athletic participation; it is recommended 17-20 fl oz of water or a sports drink be consumed 2-3 hours before activity, at the very least. It is highly encouraged that athletes continue to drink water throughout the entire day
- It is recommended that athletes drink 7-10 oz of water every 10-20 minutes during activity; those who sweat more should consume more
- cool beverages are best (50-59 degrees F); ice cold water cause the body to work harder internally to warm
  up to body temperature
- sports drinks that contain fructose should be avoided entirely; fructose can lead to gastric distress
- sports drinks, fruit juices, carbohydrate gels, sodas and other beverages containing more than 8&% carbohydrate concentration are not recommended as the sole source of fluid during exercise
- recognize signs of dehydration: thirst, irritability, general discomfort, followed by headache, weakness, dizziness, cramps, chills, vomiting, nausea, heat sensations and decreased performance.
- a moderate amount of sodium chloride in fluid-replacement beverages can be beneficial in offsetting electrolyte imbalances that result from loss of sweat

#### Encourage athletes to drink 16-32 fl oz for every pound lost during activity

#### **Seizures**

In the event of an athlete having a seizure, whether a known condition or not, follow these steps:

- Have the athlete lie down in a safe area, remove any object in their hand or nearby
- Loosen any restrictive clothing/equipment
- Try to put athlete on their side, if safe to; this helps to expel vomit if athlete begins to vomit
- Allow seizure to finish; do not "hold down" athlete during seizure activity;
- After seizure activity, ensure the airway is open; if the athlete is blue/gray-ish and not breathing, or has shallow breathing, CALL 9-1-1.
- If a seizure lasts longer than 5 minutes, and/or it is the athlete's first seizure, CALL 9-1-1
- If an athlete has a known seizure disorder, the written plan of care shall be followed (this will be gone over with school nurse and athletic trainer)

#### **Skin Disorders**

#### Impetigo & Staff Infections

If undetected, the MRSA virus can be fatal. It is absolutely imperative that all rashes and red areas be reported to an athletic trainer and <u>evaluated by a physician</u>. To prevent MRSA, athletes should practice good hygiene; practice and game clothes should be washed daily. Lockers should be cleaned and aired out nightly. Athletes should shower with soap as soon as possible following physical activity. Towels and water bottles should not be shared.

#### Signs of MRSA

- skin boils or blemishes
- redness (first appears like a spider bite in many cases)
- sometimes accompanied by fever and chills

#### Preventing MRSA & other skin disorders

- Avoid contact with infected individuals
- cover all wounds
- practice good hygiene: shower with soap immediately after every practice and game and do not re-wear sweaty clothing
- wash practice clothing daily
- do not share clothing
- clean all equipment-helmets, shoulder pads, wrestling mats, weight equipment, etc after each use

- report al skin blemishes/changes to athletic trainer for evaluation, or physician if athletic trainer is not available
- prevent getting turf burns
- wash hands regularly

#### Treating MRSA

 Requires physician evaluation and prescription for specific type of oral antibiotics and topical cleanser

### IT SHOULD BE STRESSED THAT ATHLETES WASH ALL PRACTICE CLOTHING AFTER EACH USE ATHLETES SHOULD SHOWER WITH SOAP AS SOON AS POSSIBLE AFTER PRACTICE/GAMES

#### Physician Examination of Skin Concerns

In accordance with the WIAA, the athletic trainer will supply a skin referral form where the athlete will have the physician fill out for return to play.

#### **Special Concerns**

#### **Allergic Reactions**

- If an athlete has an adverse allergic reaction, it is important that he/she gets medical treatment immediately
- If an athlete experiences breathing difficulties and/or if he/she has an Epi-Pen, get it for them and have him/her inject themselves, if capable. If not, do not do it for them, call 9-1-1
- If the athlete's reaction is minor (hives, itching, irritation, etc), contact the parent. In many cases, Benadryl will relieve their symptoms, but as a coach, you cannot administer medication

#### **Asthma**

- Only athletes who are medically diagnosed with asthma should use inhalers; athletes should not share inhalers ever
- If breathing disruptions persist, call 9-1-1

#### **Dental - Broken Tooth**

If an athlete gets a tooth knocked out (or broken off)

- Keep the tooth, if can find it
- Put tooth in cup of milk (if available); if unavailable, use water
- Send athlete to dentist, or emergency dentist, as soon as possible in order to save the tooth and the nerve roots

#### **Diabetics**

*Symptoms of diabetic events:* rapid onset of altered mental status, intoxicated appearance, elevated heart rate. cold/clammy skin, hinger, seizures, anxiousness

What to do: ask the athlete to direct you (if need diabetic supplies, if hypo/hyperglycemic?) most likely will need juice, or some guick sugar snack/food item

#### Muscle Cramping

- Poor hydration and low electrolytes most likely the cause
- Administer more water, gatorade
- Administer mustard, if available (no more than a packet's worth)
- PREVENTION: prior to games, those who are prone to camping, eat foods with high potassium, drink
  electrolyte-replacing fluids + water throughout the day the athletic trainer can provide Medi-lyte 30 minutes
  prior to the start of the game

#### Head, neck spine Injuries

# DO NOT MOVE ANY ATHLETE WITH A SUSPECTED HEAD, NECK, OR SPINAL INJURY

#### KEEP THE HEAD, NECK AND BACK STILL, MONITOR ABC'S AND CALL 9-1-1

#### **Ligament Sprains & Muscle Strains**

- Inflammation is the body's natural response to tissue trauma
- Encourage initial basic range of motion in addition to ice application
- Never apply heat to a sprain or strain within the first 48-72 hours this can increase inflammation
- Think **MICE**: Movement, Ice, Compression, Elevation

#### **Shin Splints**

"Shin splints" is an umbrella term for overuse of the lower legs. The pain associated with shin splints is a result of fatigue and trauma to the muscle's tendons where they attach themselves to the tibia (shin bone). In an effort to keep the foot, ankle and lower leg stable, the muscles exert a great force on the tibia. This excessive force can result in the tendons being overused in a chronic matter couples with constant inflammation of the tissue

#### Causes:

- Immediate high-impact exercise on hard surfaces i.e. concrete, old running track, gym courts
- Immediate exercise on uneven ground
- Beginning physical activity after a long off-period
- Increasing exercise intensity or duration too quickly
- Exercising in worn out or poor-fitting shoes
- Excessive uphill/downhill running

#### Treatment:

The best way to treat shin splints is to take appropriate measures to avoid getting them (prevention); this includes proper pre-activity stretching & warm-up, having proper fitting shoes that are supportive of your feet. Once an athlete has shin splints, the best management is to treat immediately so they do not develop into stress fractures of the tibia. Here are a few tips other than complete rest:

- Seek rehab and manual therapy treatment from athletic trainer (or physical therapist if athletic trainer is not available)
- ensure an adequate warm-up
- ice following any level of activity (can use ice cups for more direct compression/cryotherapy)
- Ibuprofen to manage inflammation and pain (only administered by parents and following dosage directions on bottle)
- Arch supports/insoles
- Modify training routine with non-impact activities (i.e. biking, swimming)

#### **SUPPLEMENTS**

#### The basics on nutritional supplements

Americans spend an estimated \$30.4 billion on supplements for performance (not to be confused with performance enhancing steroids) in hopes that the pills, drinks, powders, etc would help them bulk up, slim down, or compete more effectively. However, those who take these products are essentially conducting what amounts to be a vast, uncontrolled clinical experiment on themselves with untested and largely unregulated medications/products. The few prolific scientific studies available on these "dietary" supplements suggest that they either are ineffective or, at best, produce only slight changes in performance. More disturbing, they can, and usually, contain powerful and potentially harmful substances, such as:

- androstenedione: this can upset the body's hormonal balance when it metabolizes into testosterone and estrogen, and may cause premature puberty and stunted growth in adolescents
- *Creatine*: a substance produced by the body that can help generate brief surges of muscle energy during certain types of athletic performance. It may also cause kidney issues in susceptible individuals

• ephedra: an herbal stimulant that acts like an amphetamine ("speed") and that some investigators hold responsible for dozens of deaths and permanent injuries. Ephedra is currently banned in the US as of 2004 as an ingredient in dietary supplements.

#### **Creatine-based Supplements**

Creatine is a popular nutritional supplement used by athletes to increase muscle mass and strength. The results of continued use of Creatine are similar to those produced by anabolic steroids, if not used correctly. It is known that renal failure, weight gain and increased potential for muscle injury are potential short-term side effects. Therefore, it is recommended that, if taken, Creatine be used in low to moderate amounts and should not be used as an alternative for a good exercise and diet regimen.

For more information, you can follow these links:

https://www.nccih.nih.gov/health/ephedra

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8539210/

#### **BASIC WOUND CARE**

#### **Abrasions & Turf Burns**

- Clean affected area thoroughly
- Clean with a 4:1 Saline solution to make sure any dirt/grass is removed; if using peroxide, dilute to 50% peroxide/ 50% saline solution
- General soap and water is appropriate as well
- Apply antibiotic ointment
- Cover with gauze/non-stick padding and Powerflex (or other taping that does not adhere to skin, but to itself)
- Ensure appropriate cleaning of wound after all exercise participation (soap & water is sufficient)
- Allow area to air dry, keep ointment on it
- Continue to cover and bandage before exercise/contact participation
- Covering the wound is not sufficient enough; ensure the wound is cleaned thoroughly first to prevent potentially harmful bacteria and infection

#### Lacerations (deep, jagged cuts)

- Apply direct pressure with gauze to stop/slow active bleeding
- Clean wound thoroughly, irrigate with Saline solution
- Apply steri-strip/butterfly strip if no longer actively bleeding
- If bleeding continued and wound is deep (greater than 1/8" deep, cover with pressure bandage and send for stitches)
- If wound is caused by any metal object, refer for tetanus
- If stitches are put in, keep area covered when out in the elements and ensure a physician clearance for participation
- Watch for signs of infection: redness, swelling, warm to the touch

#### **Blisters**

- Clean area thoroughly
- Apply gel, square padding to avoid continuous friction
- Cover with bandage, pre-wrap and stretch tape
- Watch for signs of infection: redness, swelling, area warm to the touch
- Never cut away the "bubble" of skin: this provides a protective barrier

#### Shock (from excessive bleeding)

In the event of excessive bleeding from a wound, this can lead to shock; find bandages for blood control immediately

- Used gloved hand and apply direct pressure over wound
- elevate the extremity
- keep continuous, steady and firm pressure until bleeding is controlled
- once bleeding is controlled, apply a dressing firmly in place
- refer to ER for further treatment

#### Appendix A

# BLACK HILLS HIGH SCHOOL EMERGENCY CONTACTS

Emergency Medical S	9-1-1	
Athletic Director: Athletic Trainer: Team Physician:	Nikki Nelson Kailynn Arnold Dr. Cody Franzen	832-600-3068 253-226-9735
	Appendix B	
	Black Hills Administration Approval of Athletic Training Policies and Procedu	
Black Hills Administrator		Date
Black Hills Athletic Directo	<del></del>	Date
 Black Hills Team Physician		_ Date

Date

Black Hills Athletic Trainer