





#### Creating Emergency Action Plans that Work

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- Every school that sponsors athletics should develop an EAP for managing serious and/or potentially life-threatening sport-related injuries
- The EAP should be developed and coordinated with local EMS, school public safety officials, on-site medical personnel, and school administrators.
- Every school should distribute the EAP to all athletics staff members.
- The EAP should be specific to each venue (including addresses and specific directions).
- On-site emergency equipment that may be needed should be listed.







- The EAP should identify personnel and their responsibilities to carry out the plan of action with a designated chain of command.
- Appropriate contact information for EMS and the best method of contact should be listed (games vs practice)
- Plan should specify documentation actions that need to be taken post emergency.
- EAP should be reviewed and rehearsed annually by all parties involved.
- Healthcare professionals who will provide medical coverage dureing games, practices, and other events should be included.







- Knowing the different potential causes of death and serious injury/illness can greatly improve the effectiveness of an EAP
  - Developed for each specific condition in relation to:
    - prevention
    - recognition
    - treatment
    - return-to-play guidelines







#### Creating Emergency Action Plans that Work

#### Challenges

- ~37% of high schools nationwide do not have medical staff present on-site to implement these
  - In Florida, 60% of schools report having regular athletic trainer presence; an additional 20% report some degree of AT service.
  - Florida ranks #23 on the Korey Stringer Institute list of 2017 High School Sports Safety Policy rankings.
- These circumstances leave the sport coach, athletic director, S&CC responsible for implementing policies (EAP, prevention, Recognition Tx, RTP)







- Major concerns
  - Most common life-threatening conditions having similar signs and symptoms
  - Delay in care due to insufficient knowledge of these conditions will likely increase the odds of an adverse outcome
  - Emergency medical conditions require action within first few minutes
  - Should coaches be responsible for life-saving responsibilities?







#### Creating Emergency Action Plans that Work

#### Challenges

- No medical supervision → increased risk of legal liability
- Those participating in organized sport have a reasonable expectation of receiving appropriate emergency care







- Coaches should be trained in first aid, CPR, and AED
  - AEDs should be no further than 2 minutes away
- Every high school *should* have an on-site athletic trainer who is specifically trained to prevent, recognize, and treat emergencies related to active individuals
- ATs should work with a supervising physician to develop and implement EAPs and RTP protocols







- Every sports organization needs to develop an EAP that specifically addresses:
  - all related staff & their roles (coaches, athletic directors, etc.).
  - specific prevention, recognition, treatment, and RTP strategies for all common causes of death in sport
- These items should be supervised by the on-site AT







# Creating Emergency Action Plans that Work The Need for an EAP

- A written EAP document defines the standard of care.
- The absence of an EAP frequently is a basis for claims and suits based on negligence.
- EAP should be developed in consultation with local emergency medical services (EMS)
- Written document should be approved and signed by the medical director for athletic organization
- The EAP should be distributed to attending physicians, athletic trainers and athletic training students, institutional and organizational safety personnel and administrators, coaches, and strength and conditioning staff.







- An athletic emergency situation may involve:
  - certified and student athletic trainers
  - EMTs
  - physicians
  - Coaches
- The sports medicine team must work together as a unit to accomplish its goals
- In an emergency situation, the team concept is critical → seconds may mean the difference between life or death or permanent disability
- It is recommended that health care providers conduct a "time-out" before events. This ensures EAPs are reviewed and in place.





#### Creating Emergency Action Plans that Work

#### 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)?







- EAP should be specific to each individual athletic venue and encompass the following subjects:
  - Emergency personnel
  - Emergency communication
  - Emergency equipment
  - Medical emergency transportation
  - Venue directions with map





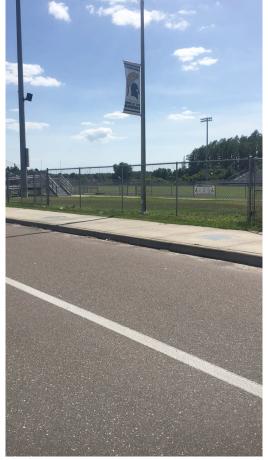


- Most important roles
  - Establishing the safety of the scene
  - Providing immediate care of the athlete
- EMS activation may be necessary in situations in which emergency transportation is not already present at the sporting event.
- Equipment retrieval (AED, airway adjuncts)
  - by anyone on the emergency team familiar with the types, location, etc.
- Directing EMS personnel to the scene
- Access to working telephone or other device should be secured prior to event















- Emergency equipment should be:
  - at the site and quickly accessible.
  - in good operating condition.
  - checked on a regular basis.
  - appropriate for the level of training of the emergency medical providers.
- Emergency personnel should:
  - be familiar with the function and operation of each type of emergency equipment.
  - rehearse the use of the emergency equipment.







### Creating Emergency Action Plans that Work

Emergency Equipment:

- AED (should be checked monthly, accessible within 2 minutes)
- Airway management supplies
- Personal protective equipment (gloves, etc.)
- Wound care supplies
- CPR pocket mask
- Cervical collar
- Spine board
- Splints
- Face mask removal tools
- Cooling tub available within 5-10 minutes for rapid cooling in someone with a suspected EHS event.



















- Weather Events
  - Lightning NFHS vs county policy vs NATA "If you see it or hear it, go inside" "If thunder roars, go indoors"
    - Athlete safety
    - Spectator safety
  - Tornado
  - Heat
- Concussions "When in doubt, sit them out"
  - Never leave the athlete alone
  - When to transport?
  - AT18 return to play protocol
- Active Shooter/Violent Acts Emergency
- Injuries/Illnesses of fans/spectators
- Heat Illness Cool first then transport!
  - Cold tub, tarp, kiddie pool
  - Rectal thermometry is the only accurate measure of core temp





LORIDA INTERSCHOLASTIC ATHLETIC ADMINISTRATORS ASSOCIATION



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#### **Guidelines for Developing Lightning Safety Policies**

By Abby Mettler, M.Ed, ATC, and Verle Valentine, M.D., FACSM on April 09, 2018

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Late spring and summer are perfect months for baseball, swimming, hiking and other outdoor activities associated with summer weather. These warmer months also give rise to ideal atmospheric conditions that generate thunderstorms. As spring and summer sports seasons get underway, it is important to review the lightning safety policies and procedures that protect athletes and spectators.

While the National Weather Service estimates that a person living in the United States has only a 1:10,000 risk of being struck by lightning by the time he or she reaches 80 years of age, lightning consistently ranks as one of the top three causes of storm-related deaths. On average, 30 people are killed by lightning annually, with hundreds more injured, some with permanent neurological injuries. In order to reduce the risk of lightning-related casualties, it is important to ensure that athletes, coaches and event administrators are appropriately educated regarding best practices for lightning safety.

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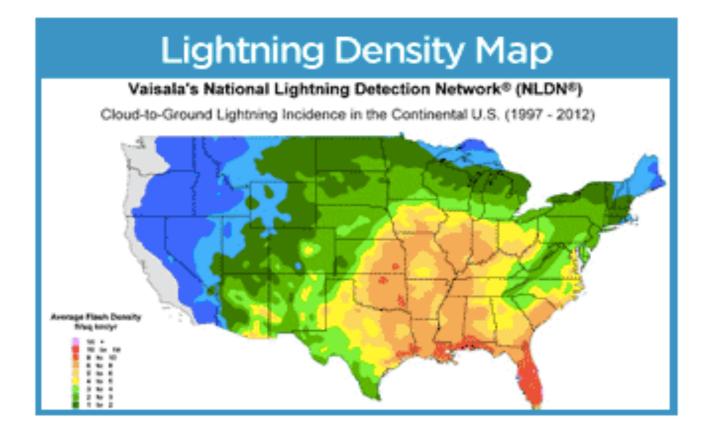
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A person well-versed in the details of the school's severe weather policy should be designated to monitor weather conditions and make the decision regarding suspending activity. This person should have unchallengeable authority to suspend the activity. When thunder is heard or lightning is reported within six miles of the outdoor event, everyone should be in a designated safe area. Importantly, all activities in indoor swimming pools must be considered "outdoor events" when developing a lightning policy.

Consideration for the size of the event and the number of people who will have to be evacuated should be given when making the decision to suspend activity, erring on initiating evacuation sooner when larger crowds are in attendance or when a longer time is needed to get to a safe place. Activities should not be resumed until 30 minutes after the last rumble of thunder or lightning flash.













WBGT READING	ACTIVITY GUIDELINES & REST BREAK GUIDELINES
UNDER 82.0	Normal activities – Provide at least three separate rest breaks each hour of minimum duration of 3 minutes each during workout.
82.0 - 86.9	Use discretion for intense or prolonged exercise; watch at-risk players carefully; Provide at least three separate rest breaks each hour of a minimum of 4 minutes duration each.
87.0 – 89.9	Maximum practice time is 2 hours. For Football: players restricted to helmet, shoulder pads, and shorts during practice. All protective equipment must be removed for 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 of a minimum of 4 minutes each.
90.0 – 92.0	Maximum length of practice is 1 hour. <u>For Football</u> : no protective equipment may be worn during practice, and there may be no conditioning activities. <u>For All Sports</u> : there must be 20 minutes of rest breaks distributed throughout the hour of practice.
OVER 92	NO OUTDOOR WORKOUTS. Delay practice until a cooler WBGT level is reached.

#### **GUIDELINES FOR HYDRATION AND REST BREAKS:**

- 1. Rest time should involve both unlimited hydration intake (water or electrolyte drinks) and rest without any acivity involved.
- 2. For football, helmets should be removed during rest time.
- 3. The site of the rest time should be a "cooling zone" and not in direct sunlight.
- 4. When the WGBT reading is over 86:
  - a. Ice towels and spray bottles filled with ice water should be available at the "cooling zone" to aid the cooling process.
  - b. Cold immersion tubs must be available for practices for the benefit of any player showing early signs of heat illness.



















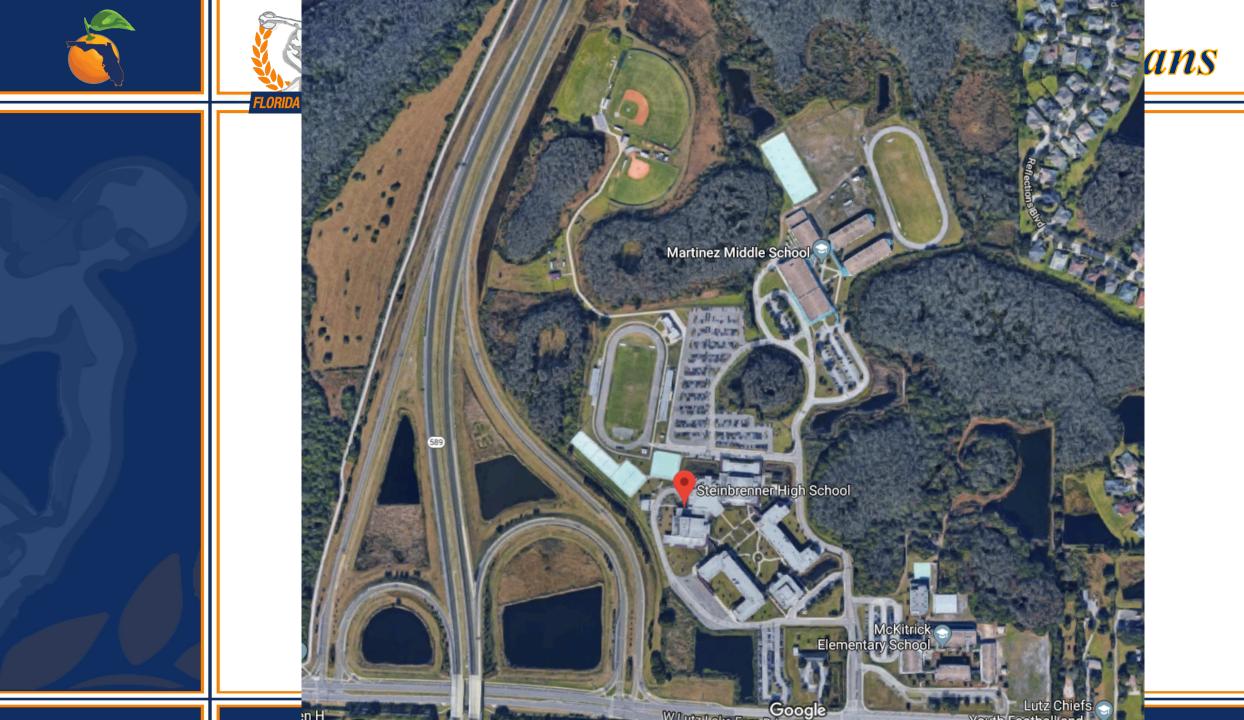




#### Creating Emergency Action Plans that Work

**Venue Directions** 

- EAP should have exact address, directions to venue, cross streets, landmarks
- Plans for ambulance ingress and egress
  - Gates, stadium, etc (keys/locks?)
  - Games vs practices
- Helicopter capabilities (GPS coordinates?)
  - Best landing site
  - If it is a stadium, will you evacuate spectators?









#### Creating Emergency Action Plans that Work

#### **Emergency Cards**

- Patient medical info, medications, medical conditions, etc.
  - Emergency contact info
  - All PPE's should be screened for potential issues (cardiac history, history of heat illness or concussion, Sickle Cell anemia or trait, epilepsy, current meds, etc.)

#### Documentation

- Assign someone to document emergency situation
  - Document everything!
- Include follow up info
- Document rehearsal of EAP (how often, dates, etc)
- Document other training (i.e. CPR, AED, airway, etc)







#### Sample Venue-Specific Emergency Protocol

University Sports Medicine Football Emergency Protocol
Call 911 or other emergency number consistent with organizational policies     Instruct emergency medical services (EMS) personnel to "report to and meet at as we have ar injured student-athlete in need of emergency medical treatment."  University Football Practice Complex: Street entrance (gate across street from) cross street: Street University Stadium: Gate entrance off Road
<ul> <li>3. Provide necessary information to EMS personnel:</li> <li>name, address, telephone number of caller</li> <li>number of victims; condition of victims</li> <li>first-aid treatment initiated</li> <li>specific directions as needed to locate scene</li> <li>other information as requested by dispatcher</li> <li>4. Provide appropriate emergency care until arrival of EMS personnel: on arrival of EMS personnel, provide pertinent information (method o injury, vital signs, treatment rendered, medical history) and assist with emergency care as needed</li> </ul>
Note:
<ul> <li>sports medicine staff member should accompany student-athlete to hospital</li> <li>notify other sports medicine staff immediately</li> <li>parents should be contacted by sports medicine staff</li> <li>inform coach(es) and administration</li> <li>obtain medical history and insurance information</li> <li>appropriate injury reports should be completed</li> </ul>
Emergency Telephone Numbers         -           Hospital         -           Emergency Department         -           University Health Center         -           Campus Police         -
Emergency Signals
Physician: arm extended overhead with clenched first Paramedics: point to location in end zone by home locker room and wave onto field Spine board: arms held horizontally Stretcher: supinated hands in front of body or waist level Splints: hand to lower leg or thigh







### Creating Emergency Action Plans that Work

#### **EAP Take-Homes**

- Well-executed EAP can be the difference in a matter of life or death
- Athletic organizations should have an EAP that includes administration, coaches, and sports medicine team
- Review EAP yearly (or more often—by season?)
- Check equipment regularly
- Provide CPR/first aid refresher courses







# Creating Emergency Action Plans that Work

Communication is Key!

The best EAP only works if everyone involved knows their roles and responsibilities.



