

# Sports Medicine Monthly

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## FOCUS ISSUE:

### Medical Emergencies in Athletics

As anyone who has been around athletics for any considerable amount of time can testify, medical emergencies in athletics do occur. For most individuals however, experiences with medical emergencies are usually news stories about other people, at other places, and at other times. Rarely do most individuals find themselves handling a life threatening emergency. However, when dealing with the high speeds, the high force, and the high probability of contact that is prevalent in athletics, coaches, athletes, administrators, and parents alike should have a basic understanding of emergency medicine. For a majority of school districts and coach's associations, this preparation usually involves mandatory training in CPR, First Aid, and AED usage. This training is an excellent tool to have and it is very simple to gain. To find out more information about becoming trained in CPR, First Aid, and AED usage, contact your local American Red Cross or American Heart Association.



American  
Red Cross

[www.redcross.org](http://www.redcross.org)



Learn and Live.

[www.americanheart.org](http://www.americanheart.org)

Likewise, to gain information regarding AED (Automated External Defibrillator) products and even AED grants, visit [AED Grant.com](http://AEDGrant.com).

### Defining a Medical Emergency

According to the dictionary, emergency medicine is defined as "a medical specialty concerned with the care and treatment of acutely ill or injured patients who need immediate medical attention." The focal point being, for those "who need immediate medical attention." Now while the assumption is that all medical emergencies are obvious, many times this may not be the case. This is the very reason why there are several key objective measurements that medical doctors, athletic trainers, and paramedics alike utilize to determine the presence or absence of an emergency. Furthermore, in the event that an individual does require emergency medical assistance and 911 is called, it is this information that the operator will be requesting.



- #1. Airway: Does the individual have an open airway?
- #2. Breathing: Is the individual breathing?
- #3. Circulation: Is the individual's heart and blood vessel system working (i.e. do they have a pulse) and are there any deficiencies in the system (i.e. uncontrolled bleeding)?
- #4. Consciousness: Is the individual awake and alert?
- #5. Deformities: Any deformity (i.e. fracture, burn, laceration, swelling, etc...) that will eventually lead to failure or compromise of airway, breathing, circulation, and/or consciousness also defines a medical emergency..

Just remember your ABC's!!!



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## Emergency Action Plan (EAP)

When dealing with emergencies, clear, concise, and quick execution is vital to patient well being. Many times, emotion, intensity, and uncertainty govern these situations where an individual's life is on the line. This should not, nor cannot be the case if we desire to ensure for the best possible outcomes. As a head coach or an administrator, or even a parent who directs a youth little league, having an emergency action plan that directs coaches, parents, and staff in assisting with medical care is pivotal towards ensuring quality care for the patient. And, much like an offensive or a defensive strategy is a blueprint that is created and practiced many weeks prior to a game, an emergency action plan should be developed and practiced several weeks before competition begins.



Common components of Emergency Action Plans include:

- \*Who, What, Where, When, Why, and How:
  - \*Administers Medical Care
  - \*Retrieves Medical Equipment (AED)
  - \*Contacts EMS
  - \*Retrieves the athletes medical forms
  - \*Directs EMS to the specific location
- \*List of emergency phone numbers, emergency contacts, facility directors, administrators, etc...
- \*A description of each facility with noted access points for Emergency Medical Services. These include gates, driveways, and doors, and also who has the keys to opening such.

For those who supervise athletic or recreational events, take the opportunity to contact your certified athletic trainer, team physician, and/or your local emergency medical services so that all may be fully prepared in the event of an emergency.

## Tools of the Trade:

Here are a few generalized points to remember when dealing with common medical emergencies in sports.



\*When suspecting a cervical spine injury in a football player, never remove the helmet or the shoulder pads. Both work together to keep the cervical spine in a neutral position. Removing one or the other, or both, subjects the vertebra and spinal cord to extreme flexion or extension.

\*PEARL: Pupils Equal and Reactive to Light  
Pupils should always be equal and reactive light. Any change in pupil size or reactivity after forceful trauma to the head or neck should always be considered a medical emergency.



\*Inexpensive X-ray: Small fractures and bruises to bones usually present very similar. However, although ice should drastically improve the pain of a bruise, you cannot ice away the pain of a fracture.



\*McBurney's Point: Located halfway between the belly button and the right prominent hip bone, McBurney's Point is the location of the appendix. Extreme pain in this area, especially upon palpation, along with a fever, which develops over a period of hours, is a sign of an appendicitis and the need for immediate medical attention.

## A Note to the Reader.....

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