The Role of the Team Physician in the Emergency Action Plan

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Objectives

- Discuss:
  - the responsibility of the Team Physician for mass participation events and schools
  - NATA Emergency Planning statement
  - ACSM mass participation consensus statement
  - pre-event considerations
  - responsibilities during and after events

- Review NOVA Southeastern Universities Emergency Action Plan and discuss physician involvement
Basics

* Emergency Action Plan (EAP)
  * Written document to organize and facilitate athletic staff during emergencies

  “It is essential that the athletic department have a developed emergency plan that identifies the roles in an emergency situation, the necessary emergency equipment, and the emergency protocol for each sporting venue.” Nova Southeastern University EAP

http://allshookup-malloryann.blogspot.com/
Basics

- NCAA and National Federation of State High School Associations recommends all member institutions develop an emergency plan for athletics
- Should encompass pre-season, season and off-season events/practices in ALL sports
Basics

- As of March 2002, 10% of NCAA institutions did not have an emergency plan in season
  - 33% lacked a plan for off-season
- High risk sports
  - Football
  - Gymnastics
  - Cross Country
  - Pole vault
  - Lacrosse

Basics

- Affects everyone who treats athletes
- Preparation
  - Know team members
    - Physician, ATC, student ATC, coach, Athletic Directors
  - Assign roles
  - Knowledge of action plan
**Basics**

- Communication
- Goal is to manage athlete until transported or EMS arrives and prevent delayed care
  - minimize risk to athlete
  - protect organization personnel
- Similar to ACLS...clear communication
  - Multiple local agencies work together
Creating an EAP

- Includes
  - Personnel
    - On field, training room, etc
    - Roles/responsibilities
  - Equipment
    - AED, spine board, splints, etc
    - Where is the equipment
    - Check before event
    - Yearly maintenance or service
Creating an EAP

- Communication
  - Roles
  - Pathway to notify transport

- Venue
  - Address
  - Local roads to access venue
    - Gates
  - Contact information for emergency facility
Creating an EAP

- Implementation
  - Document events
    - Send with athlete
  - Review the written plan yearly
  - Educate and practice plan
    - Staff may change

Delineates spectator versus personnel and athlete

NOVALERT
  Any emergency

Divides roles/responsibility
Nova Southeastern University

- Set up by venue
- Gate keys are numbered and assigned to specific ATC
- Gives alternate routes
- Describes procedure for away events

http://nsunews.nova.edu/nsu-rowing-team-captures-ncaa-division-ii-national-championship/
Nova Southeastern University

- Communication
  - Reviews how to provide information to NOVALERT and 911 in a step wise manner
  - Phone numbers for campus administration, ATC, campus life (hotlines), Physicians
  - Media

- Equipment
  - Lists equipment available during practices and events
Nova Southeastern University

- Physician
- Available
- Flexible
- Reviews protocol with athletic staff
- Involved in yearly education

http://www.cneagles.com/sports/m-soccer/2012-13/releases/20120901bstwaq
Specific Procedures: The following procedures should be enacted in the event of an emergency at the NSU Soccer Complex

1. Direction of EMS to the scene in conjunction with NOVALERT.
   a. Designate an individual to stand on Mary McCahill Dr. at the NW corner of the game field
   b. Designate an individual to unlock at the west entrance to the NSU soccer practice facility
   i. KEY: CSA---14 opens this gate. This key is in the possession of the NSU athletic trainer assigned to the venue.
NATA Position Statement

- Plan needed for limb or life threatening emergencies
- Develop and implement a written emergency plan
  - “all personnel involved with athletic activities share a legal duty to develop, implement, and evaluate an emergency action plan”
NATA Position Statement

★ Consider sport, rule of competition, weather, and level of competition
★ determine if an emergency situation could reasonably occur during sport

★ “The sports medicine team has a legal and professional obligations to protect the interest of both the athletes and organization/institution”.

Sample Venue-Specific Emergency Protocol
University Sports Medicine Football Emergency Protocol
1. Call 911 or other emergency number consistent with organizational policies

2. Instruct emergency medical services (EMS) personnel to “report to _____ and meet at _____ as we have an 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
NATA Sample Protocol

3. Provide necessary information to EMS personnel:
   - name, address, telephone number of caller
   - number of victims; condition of victims
   - first-aid treatment initiated
   - specific directions as needed to locate scene
   - other information as requested by dispatcher

4. Provide appropriate emergency care until arrival of EMS personnel: on arrival of EMS personnel, provide pertinent information (method of injury, vital signs, treatment rendered, medical history) and assist with emergency care as needed

http://www.nicholls.edu/athletic-training/
NATA Sample Protocol

Note:
- sports medicine staff member should accompany student-athlete to hospital
- notify other sports medicine staff immediately
- parents should be contacted by sports medicine staff
- inform coach(es) and administration
- obtain medical history and insurance information
- appropriate injury reports should be completed

Emergency Telephone Numbers
Hospital - Emergency Department -
University Health Center - Campus Police -

Emergency Signals
Pre-event Considerations

- Team Physician Responsibilities
  - Fans
  - Athletes
  - Team staff
  - Referee

- Will there be an ambulance on site?
Pre-event Considerations

* Check equipment
* Fluids
* Safety
  * Fence near end zone or sidelines
* Weather

Mass Participation Events

- Mass Participation Event Management for the Team Physician: A Consensus Statement
  - Physicians organize the medical team
  - Provide on site care to decrease use of local emergency facilities except for participants requiring more advanced care
Mass Participation Events

* Know the venue
* Need “eyes” and communication with the field of play
* Transport from the field to medical tent or emergency facility
  * Police, Fire, Rescue
* Weather
* Educate participants and medical personnel on plan
Triage

* Mass participation
  * Typically considered pre-hospital or field triage
  * High patient presentation rate
  * Existing triage systems favor traumatic injury
    * Do not address secondary factors (environment, intoxication, etc)
    * May improperly resources
Triage

* Must determine which patients need “limited resources”
  * Medications
  * Emergency transport
  * Equipment (stretchers, spine boards)
* “Triage during Mass Gatherings”
  * Literature review article (40 total)

http://crissiecudd.wordpress.com/2010/07/02/band-aids-and-cancer/
Triage

- An effective triage system has not been determined for mass gatherings
  - Limitations
    - Not evidence based (no agreement)
    - Population bias
      - Research focuses on trauma vs illness
    - Various systems = lack of standardization
  - Parallel versus Serial (Group vs individual)
  - 2 step system...currently in 2nd phase
High Schools

* 7.6 million high school athletes in 2009
* Who is at the game?
  * EMS
  * ATC
  * Team Physician
* Know local and state groups
  * Jacksonville Sports Medicine Program
  * Florida High School Athletic Association

http://www.psychologytoday.com/blog/singletons/200808/raising-star-children-the-pressure-may-be-too-great
Cardiac

- Leading cause of death in youth sports

- 66 deaths per year 2000-2006

- Most common
  - Hypertrophic Cardiomyopathy
  - Congenital anomalies of coronary arteries
Hypertrophic Cardiomyopathy
Belgium Soccer 6/2009

http://www.youtube.com/watch?v=4PwpSFDuhCZy
Cardiac

- Medical staff coverage should include personnel with BLS experience at minimum
- AED location should be known by staff
- Roles/responsibilities

http://www.glucocardyouchoose.com/life/protect-your-heart/
Concussion

- 1827 deaths of athletes <21yo from 1980-2009
- 14% from trauma to head or neck
- 17 athletes from second impact syndrome

Concussion

- Prevention is key
  - Safe tackling
  - Pre-participation Physicals

- Return to play after evaluation
  - Florida High School Athletic Association
  - Requires coaches to take online course

http://scienceline.org/2008/04/ask-heger-concussion/
Concussion

- Florida High School Athletic Association

- “An interscholastic student-athlete who has been removed from play may not return to play until the student-athlete is evaluated by a licensed health-care professional familiar in the evaluation and management of concussion and receives written clearance to return to play from that health-care professional.”
Florida High School Athletic Association

In Florida, an appropriate health-care professional (AHCP) is defined as either a licensed physician (MD, as per Chapter 458, Florida Statutes), a licensed osteopathic physician (DO, as per Chapter 459, Florida Statutes), or a licensed physicians assistant under the direct supervision of a MD/DO (as per Chapters 458.347 and 459.022, Florida Statutes).

http://wakemedvoices.org/2010/03/crack-down-on-concussions/
Cervical Spine

- Highest number of cervical spine injuries in the United States occur in American football
- Tackling with head as first contact point (Spearing)
- Rule change in mid-1970s
  - Team leader
  - Equipment for stabilization
    - Removal of athlete’s equipment
  - Communication with receiving facility
Cervical Spine

http://www.youtube.com/watch?v=cJEVVCXy6te
Cervical Spine

- Immobilization/stabilization
  - Start with manual, convert to device
    - Spine Board
    - Transfer of the athlete
    - log roll
    - lift and slide
  - Cervical Collar

Lightning

- National Athletic Trainers’ Association
- Suspend activity
  - Flash-to-bang count of 30 seconds or less
  - Wait 30 minutes or longer after the last flash of lightning or sound of thunder is before resuming activity

http://www.swfwmd.state.fl.us/education/kids/lightning.php
Deaths by state 2013
National Weather Service

http://www.lightningsafety.noaa.gov/fatalities.htm
Lightning

- Nova Southeastern University EAP
- Safe shelter listed by sporting location
- Separates officials, team, fans

http://www.swfwmd.state.fl.us/education/kids/lightning.php
After the game

Document

Duke vs UVA MBB

February 28, 2013

“The 66-year-old Krzyzewski stopped and hollered an F-bomb at a fan before security could drag him away. Right behind the Hall of Fame coach were his players, some cursing at fans, some ignoring it and ducking into the hallway. Assistant coach Jeff Capel went back and yelled a few curse words while another assistant coach, Steve Wojciechowski, did his best to quickly usher players into the safe area.” Fox Sports
Case

✶ 18yo NCAA Division 1 football player hyperextension injury while tackling the ball handler during game
  ✶ (+)LOC
  ✶ ?? C-Spine injury
  ✶ ?? Concussion

Case

- Medical team on the field
  - Fellow stabilized head
  - Attending to right
  - ATC to left
  - EMS legs
- Regain consciousness
  - Unable to move or feel arms or legs
  - Responsive
  - Spine boarded
Legal Issues

- Negligence has to be proven
- Responsibility to provide high quality care in a timely manner based on standard of care
- Emergency action plans are the standard of care documents in emergency situations
Legal Issues

* Do I need an EAP?
* Foreseeability
  * Can an emergency situation arise?
  * Is there a reasonable possibility?

http://www.avca.org/awards/players-of-the-week/kelly-murphy/
Legal Cases

* Gatheres vs Loyola Marymount University
  * Care was delayed = negligence

* Kleinknecht vs Gettysburg College
  * “College must provide recruited athletes emergency services while participating in school sponsored athletic activities”
Take Home

- Medicolegal
- Phone, social media
- Be Prepared
- Know personnel roles
- Educate
- Review yearly
Questions
References


* Griffin LY. Emergency preparedness: things to consider before the game starts. Instr Course Lect. 2006; 55: 677-86


* Brown GT. NCAA group raising awareness on medical coverage. NCAA News. 1999; March 15: 6-7