The Use of Emergency Action Plans by Athletic Trainers in High Schools within the Eastern Athletic Trainer’s Association

by William P. Nowlan

Ed.D., ATC, LAT, CSCS
Plan of Attack

- Introduction / Significance
- Methodology / Instrumentation
- Results
- Discussion
- Recommendations
- Questions
Introduction

- Many Emergency situations can arise at athletic events
- First step is to develop an effective Emergency Action Plan (EAP)
- Primary coordinator should be the nationally certified athletic trainer (ATC) at the school
ATC’s receive educational training
Both a Professional and Legal need
  ◦ Professional: NCAA and NFSHSA recommend
  ◦ Legal: Reasonably Prudent Professional
An EAP will establish both the roles and procedures to follow
Research shows a lack of utilization
Significance of the Study

- Athletic events have an increased risk of an emergency situation developing amongst participants or spectators
- Having an established emergency action plan is important
- ATC’s are educated on the importance of an EAP
- EAP’s should be rehearsed on a regular basis
Methodology

Selection of Participants

- ATC’s with e-mail addresses on record with NATA in Districts I & II (EATA)
- NATA sent out survey utilizing survey monkey (865)
- Follow-up letter sent 10 days later
Instrumentation

- Demographic Data Sheet
- Athletic Trainers Emergency Planning and Perception Survey
  - Multiple choice questions
  - Existence of EAP, how often rehearsed, venue specific, written copies available, availability of AED’s (training), communication systems, Perceptions of readiness
Your Emergency Action Plan is comprehensive enough to cover all of the above mentioned emergency situations.

All members of your emergency response team are aware of their roles and can complete them without any difficulties in an emergency situation.

You have had an adequate amount of educational preparation in the areas of emergency preparedness and the development of Emergency Action Plans.

Budget limitations are preventing me from being as prepared as I would like to be for handling emergency situations that may occur at the school that I work for.
Procedures and Data Collection

- Panel of Experts utilized for content validity
- Pilot study completed (internal consistency)
- Survey sent to ATC’s

Data Analysis
- SPSS v19 and Survey Monkey
- percentages, means, frequencies, standard deviation for demographic data
Results

- 865 surveys e-mailed out
- 224 (25.8%) responded
- Variable amounts of respondents completed each question of the survey
  - 224 responded to three questions
  - Question #21 only had 128 responses
Results

- **Gender (222 responses)**
  - Male – 112 (50.5 %)
  - Female – 110 (49.5 %)

- **Chronological Age (223 responses)**
  - 21–25: 28 (12.6 %)
  - 26–30: 30 (13.5 %)
  - 31–35: 28 (12.6 %)
  - 36–40: 39 (17.5 %)
  - >40: 98 (43.9 %)
Results

Ethnic Distribution
- White/Caucasian – 215 (96.8%)
- African American – 3 (1.4%)
- Hispanic/Latino – 2 (0.9%)
- Mixed Race – 2 (0.9%)

Years of Experience
- 1–5: 54 (24.1%)
- 6–10: 26 (11.6%)
- 11–15: 34 (15.2%)
- 16–20: 27 (12.1%)
- >20: 83 (37.1%)

Highest Educational Degree
- Bachelors: 79 (35.6%)
- Masters: 135 (60.8%)
- Doctorate: 8 (3.6%)
Results

Educational Program
  BOC accredited : 171 (76.7%)
  Internship : 52 (23.3%)

EMT Training
  Yes: 31 (13.8%)
  No: 193 (86.2%)

Additional Emergency Planning Training
  Yes: 94 (42 %)
  No: 130 (58%)
Results

Distribution by State

Maine: 9 (4.1%)  R. Island: 2 (0.9%)
NH: 11 (5 %)   NY: 21 (9.5%)
Vt: 2 (0.9%)   NJ: 53 (23.8%)
Mass: 39 (17.6%)  Penn: 69 (31%)
Conn: 11 (5 %)  Del: 5 (2.3%)
Results

Number of Athletic Facilities/Fields
- One: 13 (5.9%)
- Two: 23 (10.5%)
- Three: 29 (13.2%)
- Four: 26 (11.9%)
- Five: 30 (13.7%)
- >Five: 98 (44.7%)

Existence of EAP
- Yes: 194 (89%)
- No: 18 (8.3%)
- Unsure: 6 (2.8%)

The more experienced the AT is, the more likely there would be an EAP in place

Plan Developed with local EMS
- Yes: 52 (26.7%)
- No: 104 (53.3%)
- Unsure: 39 (20%)
Results

Specific EAP for each field
Yes: 142 (73.2%)   Unsure: 7 (3.6%)
No: 45 (23.2%)

Written copy of EAP at each venue
Yes: 63 (32.6%)   Unsure: 11 (5.7%)
No: 119 (61.7%)

Frequency of EAP practice
Annually: 93 (48.2%)   every 3 yrs: 1 (0.5%)
every 2 yrs: 22 (11.4%) not at all: 77 (39.9%)
Results

Participants in practices of EAP
- Police: 12 (9.4%)  
- AT: 127 (99.2%)  
- EMS: 28 (21.9%)  
- Physicians: 18 (14.1%)

Access to AEDs
- Yes: 210 (99.1%)  
- No: 2 (0.9%)

Number of AEDs
- One: 8 (3.9%)  
- Two: 31 (15.2%)  
- Three: 47 (23%)  
- Four: 30 (14.7%)  
- Five: 22 (10.8%)  
- >Five: 66 (32.4%)
Results

Location of AEDs
- AT Room: 150 (74.3%)
- Each Venue: 62 (30.7%)
- AT brings to each venue: 159 (78.7%)

Integration of AED with EMS
- Yes: 58 (28.7%) No: 144 (71.3%)

Established communication system at each venue
- Yes: 145 (70.7%) No: 34 (16.6%)
- Some but not all venues: 26 (12.7%)
Results

Post-Emergency plans
Yes: 134 (65.7%)  No: 70 (34.3%)

Confidence in Emergency Situations
Severe Bleeding: 185 (93.4%)
Asthma Attack: 178 (89.9%)  (96.5%)
Allergic Reactions: 180 (90.9%)
Cardiac Arrest: 181 (91.4%)  (91.9%)
Neck/Back Stab: 157 (79.3%)
Displaced Broken Bones: 176 (88.9%)
Multiple Injuries: 127 (64.1%)
Concussions:191
Dislocations:182
## Likert Responses

7 (strongly agree) – 1 (strongly disagree)

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<td>Comprehensive EAP</td>
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<td>Confidence Interval</td>
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Likert Responses

Adequate Emergency Preparation
6 – 92 (45.5%)  1 – 3 (1.5%)
Mean – 5.63  SD – 1.2989
Confidence Interval (.05) – 5.451 – 5.809

Budget Limitations
2 – 53 (25.9%)  7 – 17 (8.3%)
Mean – 3.66  SD – 1.884
Confidence Interval (.05) – 3.402 – 3.918
Discussion

- 89% have EAP – should be 100%
- 48.2% practice EAP annually – should be 100%
- Females tend to have less confidence in their staff
- 70.7% have communication system in place – should be 100%
Discussion

- Only 73% have specific EAP for each venue – should be 100%
- Only 30.7% have an AED at each venue with 78.7% having the AT bring an AED to each venue – this should be 100% access of an AED at each venue
- Only 65.7% have post-emergency response plans in place
Recommendations

- Educational programs need to stress all areas of emergency preparation and development of EAPs
- More educational opportunities related to emergency planning needs to occur within conferences and other continuing education programs for athletic trainers
Recommendations

- School systems need to ensure adequate budget appropriations for proper training and preparation for emergency responses.
- Further research should be completed concerning the level of preparedness and confidence that ATs have for their levels of emergency preparedness.
Thank You for your time and your attention

QUESTIONS ???????