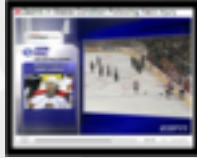


### Emergency Care in Athletics Emerging Scope of Practice/CAATE 2020 Standard Implications for AT in Emergency Situations



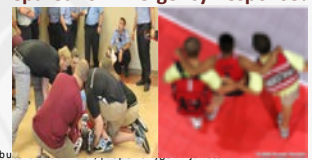
Dr. Eric J. Fuchs, ATC, AEMT

Chair, Department of Exercise & Sport Science/  
Professor Athletic Training & Associate Graduate Faculty  
Eastern Kentucky University

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### Are You & Your Staff Prepared for Emergency Response?

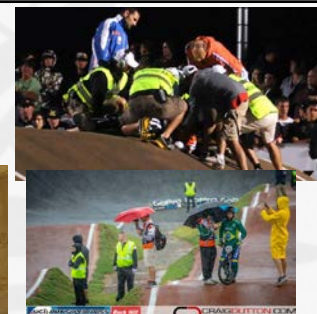
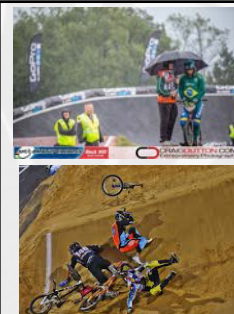
- **Personnel**
  - Do you know all the medical staff on site
  - Do you know the Emergency Action Plan
  - Do you have the appropriate equipment
  - Do you know every ones Roll
- **Proper Equipment / Supplies / Access**
  - Communication Equipment
  - Spinal Motion Restriction capabilities
  - Airway Bag with Medications i.e. Oxygen, Albu...
  - Trauma Bag w/ Emergency Medications: Aspirin, IV Fluids, Naloxalone, Insulin, D50/D25, glucagon, etc....
- **Practice/ Rehearse Procedure**
  - Know preferred transport for injury or medical emergency
  - Do You have a Mass Casualty / Catastrophic Event Plan?
- **Emergency Medical Services Role / ED Department**



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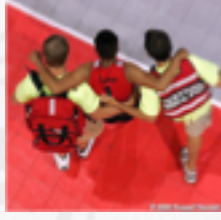
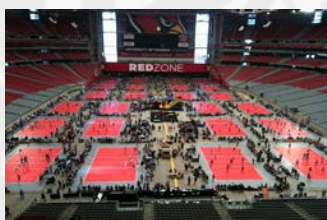


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**You Must Not Panic and Have a Plan**  
Operating with No Focus or Plan, No Matter How Intense  
Can and will Lead to Problems



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### Medical Staff available at Event?

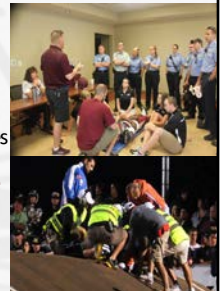
- Athletic Trainer's
- Orthopedic Surgeon, MD
- General Practitioner, MD
- EMS Personnel
  - what level? ALS, BLS?
  - Dedicated?, first call?, last call?
- AT Students
- PT's, PA's, RN's or DC?
- Coaches / Strength Coaches
- Law Enforcement / Security?



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### Sports Medicine Team Mission and Planning

- Provide highest possible quality of health care to athletes using Evidence Based Medicine
- Work together as an efficient unit or team to accomplish quality care of patients
- Team concept critical in suspected spinal cord injuries
  - Severe consequences for patient or patients
  - Share resources, equipment and train and practice together
  - 1 time a year is not enough!



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### EAP Planning Considerations

- Develop in Conjunction with Local EMS and Team Physicians
- All levels of school administration are involved and aware of the plan
- Emergency equipment and preventative maintenance of equipment is documented
  - When is the last time you did or can pull ou your gator repair/service records
  - Can you show when your AED's and Oxygen was last check in documented form?
  - Can you show when you last checked your trauma bag or medications in field emergency kits
- Do you have your medications secured and inventoried in field kits
- Documentation of Staff Training
  - Every member of the sports medicine team including physicians
  - Can you document training of AT staff on new CAATE 2020 Standards
- Must Include All Venues
- Must include a catastrophic event rehearsal i.e. active shooter, bleacher collapse, bus / van crash annually
- **MUST BE REHEARSED PRACTICED REGULARLY!!**
  - Not just annually & multiple situation

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Build Interactive Dynamic EAPs that can be loaded to Mobile Devices & Phones – Hyperlinks, Phone Numbers etc...



- Snipit - PC
- Jing for Mac or PC
- Google Maps / imap
- KSI website
- Consider GPS Markers &/ or shooting Lat & Longitude for Aeromedical

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### Implement the Medical Time Out (MTO) at all Events

- Medical Time out!
  - Sports medicine teams should conduct a "time Out" before each athletic event
  - This should also be done prior to the start of practices
  - Who should be involved in this pre-event/game/ practice time out
    - All personnel who have a role in the E.A.P.
  - Medical Staff and EMS meet before the event
    - All parties should do this a minimum 15 min prior to start
  - Introductions and review of EAP's
    - Quick synopsis of important components of the EAP
  - EAP should overlap and be a quick last minute check of EAP
  - Should only take a few minutes / NOT TO BE A WEEKEND SUMMIT



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### Implement the Medical Time Out (MTO)



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## Shift in Pre-Hospital Care-EMS Techniques

- Some states and EMS Agencies across the U.S. no longer using Spine boards for maintaining spinal precautions, including not having them on Ambulance
- EMS Management of Patients with Potential Spinal Injury – Paper
  - Approved by the **ACEP Board of Directors January 2015**
- Too many patients are unnecessarily placed on spine boards for transportation to the appropriate medical facility
  - Systemic harm to patient
  - Delayed care for some patients

## SMR & Equipment Removal Techniques

- Never say Never or Always
- Every Situation and every patient different
- Minimum of three trained rescuers for new SMR Guidelines
- Are you familiar and training on all new types of equipment?
  - Vicis Helmet, RipKord shoulder pads, quick release facemask systems, etc
- Facilitates packaging
- Facilitates Emergency Department Physician Evaluation and Dx
- Is local ED/ Trauma Center trained to remove Equipment if received athlete with equipment on?

**What about ability to respond to non-trauma medical emergencies???**

- Sickie Cell Crisis – oxygen available, IV access / Fluids Available
  - Acute Asthma Attack – Albuterol IN, Albuterol SVN w/Oxygen, Epi-Pen?
  - Cardiac Event – AED, Aspirin, Oxygen, Airway Management Devices, Transport
- Decisions recommendation
- Diabetic Emergencies – ability to check BGL, admin glucagon, D50/D25, oral glucose
  - Stroke etc...



### Items for Side Line Airway/Medical Bag/Kit







### KS State Board of health Art Scope of Practice

- Each practice protocol shall contain the following information:
  1. The name, license number, signature, and date of signature of any person licensed to practice the healing arts *who will delegate to the athletic trainer any professional responsibilities that constitute the practice of the healing arts*
  2. A description of the functions and procedures delegated to the athletic trainer that constitute the athletic trainer that constitute the practice of healing arts
  3. *Statement from a person licensed to practice the healing arts specifying those acts that have been delegated to the athletic trainer in absence of unavailability of the licensee*
  4. A statement that the board will be provided with any changes or amendments to the practice protocol within 10 days after any changes or amendments have been made.

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### OK Board of Medical Licensure

1. "Athletic Trainer" means a person with qualifications specified in section 530 of this title, whose major responsibility is the rendering of professional services for the prevention, emergency care, first aid and treatment of injuries incurred by an athlete by whatever methods are available *by a team physician or consulting physician to effect cure or rehabilitation*

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### NM Board of Medical Licensure

- **SCOPE OF PRACTICE:** In the absence of specific direction in the act or these regulations as to standards of practice, the standards of practice established by the National Athletic Trainers Association and the New Mexico Athletic Trainers Association shall serve as guidelines.
- A. The current Competencies in Athletic Training issued by the NATA or its successor organization are adopted as establishing the standard of practice and the authorized use of exercise and physical modalities by persons licensed under these regulations. Information for obtaining a copy of the Competencies in Athletic Training may be obtained by calling or writing the Board office.
- B. *These records must be provided upon the request of the board or their designee.*
- C. The athletic trainer shall maintain records which shall include:
  - (1) documentation in accordance with Section Subsection B or 16.3.2.8 NMAC;
  - (2) prescription for treatment of post surgical conditions from the athlete's surgeon; and
  - (3) consent for athlete's participation and for services in the event of illness or injury.

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### GA Board of Athletic Trainers

#### Chapter 53-5 STANDARDS OF PRACTICE [Rule 53-5-.01 Standards of Practice](#)

2. Licensees shall provide competent care consistent with both the requirements and the limitation of their profession.
- 8 Licensees shall provide only those services for which they are qualified via education and/or experience and by pertinent legal regulatory process.

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### LA State Practice Act

Louisiana State Board of medical Examiners, LA Revised Statutes Title 37 Chapter 48. Athletic Trainers 3302.

2) "Athletic trainer" means an individual licensed by the board as an athletic trainer with the

specific qualifications set forth in R.S. 37:3306.1 who, under the general supervision of a physician, carries out the practice of prevention, emergency management, and physical rehabilitation of injuries and sports-related conditions incurred by athletes. In carrying out these functions, the athletic trainer shall use whatever physical modalities are prescribed by a team physician or consulting physician, or both

(8) "Emergency management" means the care given to an injured athlete under the general supervision of the team or consulting physician. To accomplish this care, an athletic trainer may use such methods as accepted first aid procedures approved by the American Red Cross, the American Heart Association, or other recognized authority.

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### TN Board of Athletic Trainers?

#### 63-24-101. Chapter definitions.

As used in this chapter, unless the context otherwise requires:

(1) Athletic injury means any injury sustained by a person as a result of such person's

participation in exercises, sports, games, or recreation requiring physical strength, agility, flexibility, range of motion, speed, or stamina, or comparable athletic injury that prevents such person from participating in such activities;

(2) Athletic trainer means a person with specific qualifications as set forth in this chapter, who, upon the advice, consent and oral or written prescriptions or referrals of a physician

licensed under this title, carries out the practice of prevention, recognition, evaluation, management, disposition, treatment, or rehabilitation of athletic injuries, and, in carrying out these functions the athletic trainer is authorized to use physical modalities, such as heat, light, sound, cold, electricity, or mechanical devices related to prevention, recognition, evaluation, management, disposition, rehabilitation, and treatment

and

(3) Board means the board of athletic trainers.

[Acts 1983, ch. 361, § 2; T.C.A., § 63-6-301; Acts 1993, ch. 361, § 1; 2000, ch. 694, § 1; 2006, ch.

872, § 1.]

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## AL Board of Athletic Training

██████████ 2

(5) **ATHLETIC TRAINING PRACTICE.** Practice by an athletic trainer of any of the following:  
a. Under physician direction or referral, or both, the prevention of athletic injuries.

(9) **PHYSICIAN SUPERVISION.** A licensed athletic trainer acting under the supervision of a physician if:

a. The activities are undertaken pursuant to a verbal or written order of the physician who has evaluated the injured athlete; and

b. The activities are undertaken pursuant to a written protocol developed by the athletic trainer and approved by the physician. The State Board of Medical Examiners shall establish

minimum medical criteria for any protocol used by athletic trainers and shall specify those conditions and circumstances which require referral to the physician for further evaluation.

(Acts 1993, No. 93-617, p. 1013, §2.)

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## Oral Pharyngeal Airways or OPA's

### • Indication for use

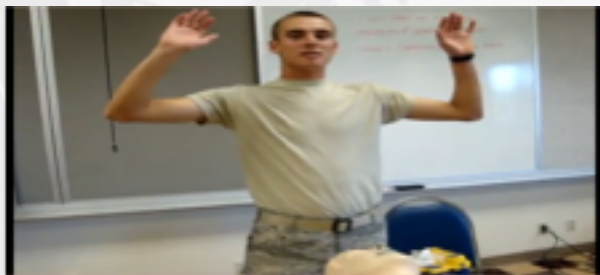
- No Gag Reflex
- Using BVM

### • Sizing OPA



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## Insertion of OPA



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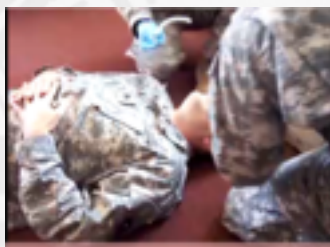
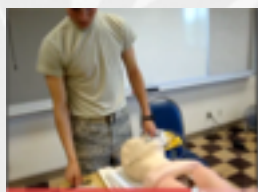
## Nasopharyngeal Airway or NPA's

- Used with patient with Gag Reflex
- Used when oral cavity compromised due to trauma
- Go to Airway over OPA since can be used if gag reflex intact



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## Insertion Technique for NPA



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## Supraglottic Airways

- I-Gel Airway
  - No air inflated cuff
  - Easier use for application
  - Bite Block built into tube
- King Airway
  - Easier Application
  - More sizes
  - No latex Allergy Concerns
  - Less steps for administration
- CombiTube



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### I-Gel Supraglottic Airways Sizing

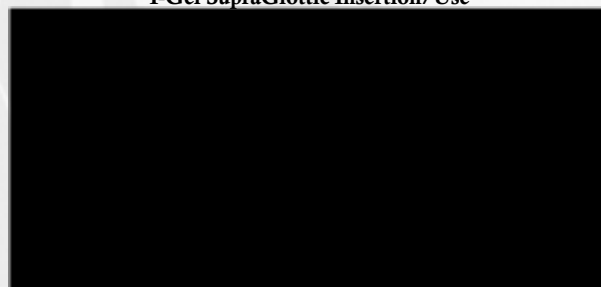
#### I-Gel Sizes:

- Size 1 (pink) 2-5 kg, 5-11 lbs
- Size 1.5 (light blue) 5-12 kg, 11-25 lbs
- Size 2 (grey) 10-25 kg, 22-55 lbs
- Size 2.5 (white) 25-35 kg, 55-77 lbs
- Size 3 (yellow) 30-60 kg, 65-130 lbs
- Size 4 (green) 50-90 kg, 110-200 lbs
- Size 5 (orange) 90+ kg, 200+ lbs



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### I-Gel SupraGlottic Insertion/Use



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### I-Gel Supraglottic Airway

#### • Contraindications:

- Patients with a gag reflex
- Patients with known esophageal disease or alcoholism (possibility of esophageal varices exists)
- Patients who have ingested a caustic substance



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### King Airway Instructions for use

- Patient has tolerated an OPA / No Gag Reflex
- Choose appropriate size based on patient's height.
- Test cuffs by inflating to recommended volume of air and deflate cuffs completely before attempting to insert.
- Generously lubricate tube using a water based lube.
- Pre-oxygenate patient with 100% O2
- Have suction available.



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### King Airway Size determined by Pt's height

- Yellow: 4-5 ft
- Red: 5-6 ft
- Purple: > 6 ft



Size	3	4	5
Connector Color	Yellow	Red	Purple
Patient Size	4-5 feet	5-6 feet	>6 feet
Outer/Inner Diameter	14 mm/10 mm	14 mm/10 mm	14 mm/10 mm
Cuff Volume	45-60 mL	60-80 mL	70-90 mL

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### Contraindications for King Airway

- Responsive patients with an intact gag reflex.
- Patients with known esophageal disease, i.e. esophageal varices.
- Patients known or suspected to have ingested caustic substances.



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### King Airway Insertion



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### Indications for Combitube<sup>®</sup>

- Respiratory Arrest
- Cardiac Arrest
- Unconscious, without a gag reflex



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### Contraindications for Combitube<sup>®</sup>

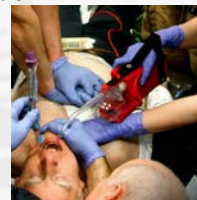
- Gag Reflex
- Conscious
- Breathing Adequately
- Caustic Ingestion
- Known esophageal disease or varices
- Under 4 feet or over 6 feet 8 inches
- Consider Latex Allergy



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### Suction Should Be Available with Use of Airway Adjuncts

- Should have suctioning equipment available
- Manual or powered in Airway Bag



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### Adding Advanced Airways To Protocols

- Develop EAP's with these devices
- Seek Approval of Supervising Physicians
- Check state practice acts to assure can utilize
- Have a dedicated Trauma / Airway Bag
- Decide on Device You will Utilize consult with your Medical Director & find out what local EMS utilizes for easy of patient transfer
- Also medication for Airway Bag: Oxygen, Albuterol for Nebulizer treatment, epinephrine, etc..

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### Emerging Skills /Competencies in Emergency Care & Medications for the AT

- Trauma bag / airway bag properly equipped and checked
- Medications to now consider carrying and learning how to administer as new standards of care are being established
- Check State Practice Acts, consult supervising physician, risk management officers and legal counsel
- Implement preventative maintenance or PM checks or routines
- Develop, practice and Rehearse EAP multiple times per year and change the scenarios



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### CAATE 2020 Standards



**Standard 74:** Educate patients regarding appropriate pharmacological agents for the management of their condition, including indications, contraindications, dosing, interactions, and adverse reactions.

**Standard 75:** Administer medications or other therapeutic agents by the appropriate route of administration upon the order of a physician or other provider with legal prescribing authority.





### CAATE 2020 Standards: Specifically Identified Medications in Standards

IV Medications	IM Medications	SubQ Medications	Oral/Sublingual	Inhalation
<ul style="list-style-type: none"> <li>Dextrose 25%</li> <li>Dextrose 50%</li> <li>Naloxone</li> </ul>	<ul style="list-style-type: none"> <li>Naloxone</li> <li>Epinephrine</li> <li>Glucagon</li> </ul>	<ul style="list-style-type: none"> <li>Epinephrine</li> <li>Insulin</li> </ul>	<ul style="list-style-type: none"> <li>Baby /Chewable Aspirin</li> <li>Nitroglycerin (NTG)</li> <li>Antihistamine ready tabs/ tabs</li> </ul>	<ul style="list-style-type: none"> <li>Oxygen</li> <li>Albuterol - MDI</li> <li>Albuterol SVN</li> <li>Oral Glucose</li> </ul>

### CAATE 2020 Standards

**Standard 72:** Obtain necessary and appropriate diagnostic or laboratory tests— including (but not limited to) imaging, blood work, urinalysis, and electrocardiogram — to facilitate diagnosis, referral, and treatment planning.










### Patient Assessment Vital Signs

- Complete a thorough patient assessment in new CAATE 2020 Standards for Vital Signs
  - BP including MAP – Mean Arterial Pressure
  - BGL – Blood Glucose Level with Blood Glucometer
  - Pulse
  - Electrocardiogram or EKG**
  - Pulse Ox
  - Respiratory Rate
  - LS Auscultate lung fields
- Document Findings

### A few Key Reminders

- Train & regularly practice your skills! Up Skill for new Standards!
- Document CEU Training of yourself & Staff
- Cross train even if you have staff to create a specific response team
- Be prepared to handle more than one patient and develop a catastrophic plan
- Remember
  - Always & Never Do not apply in emergency situations!
  - Use your training to enhance your staffs ability to adapt to situations
  - Remember just because this is Block away does not mean they are always there?



### Time for Hands on Practice for Airways !!

**Prior to the Real Situation Requiring it!!**



Practice!!!

Train /Up Skill!!!!!!

Rehearse !!!!!!!



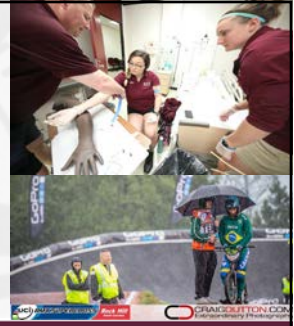

### Questions? Before Airway Lab Session?



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### Contact Information

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4. Conrad, B. P., Rossi, G. D., Horodyski, M. B., Prasam, M. L., Alemi, Y. & Rehtine, G. R. (2012). Eliminating log rolling as a spine trauma order.
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