EMERGING TOPICS
IN SPORTS EMERGENCY CARE

John Boulay B.Sc., CAT(C), EMT-PCP, D.O.(Q)
Certified Athletic Therapist, Paramedic, Osteopath
First Responder, Emergency Medical Responder Instructor-Trainer
Concordia University / Osteo-MedSport Clinic, Montréal, Canada

Buffalo Niagara Convention Center, Buffalo, New York, USA
Saturday, January 6th, 2013
POTENTIAL CONFLICT OF INTEREST DISCLOSURE

• “I have no conflict of interest to declare”

• “I have no affiliation, honoraria or monetary support from an industry source”.

EATA Conf 2013 - John Boulay CAT(C)
EMERGING TOPICS

1. Principles & Preferences
2. Standards update: CPR/AED ILCOR-ECC 2010 UCAB vs UABC
4. EMS/911 calls, EAP/ERP
5. H.A.I.N.E.S: patient position
6. Manual Head Stabilization: Head hold vs Trap hold
7. Airway Management: Rescue airway (King LTS-D vs Combitube)
8. Medical Issues in Sport: Asthma, Diabetes, Anaphylaxis
9. EHS/Hyperthermia: Rectal temperature
EMERGING TOPICS

10. TBI update: 4th CIS Nov 2011, Pediatric updates
11. Spinal Skill Sets: PHTLS / ITLS and Sport adaptation
13. Sports Equipment Removal Issues: Regional differences
14. Mock-ups/Simulation
15. Community Training: ER / EMS / Coaches
16. Standards consensus
17. Level of training: FR→EMR+
18. EMR+Future directions
Principles of Sport Emergency Care

• Emergency interventions should be sport specific.
• Mock-ups and simulations may illustrate need for modifications in approach.
• Guidelines are “ideals” which provide direction for optimal intervention.
• Protocols/guidelines and quality of care may vary nationally / internationally
• There is always more than one way to intervene.
• Not all venues will have an EAP/ERP or trained responders
1. Principles & Preferences

“Efficient care at time of patient contact depends on caregiver preferences based on situation, clinical condition, providers skills and training along with equipment available.”

- PHTLS- Trauma First Response - 2012
Principle

- “What is necessary for patient improvement or survival”.

Preference

- “How principle is achieved in time needed and by provider available”.
- “Factors include: situation, condition, fund of knowledge of provider, equipment available at the time of incident.”
2. Standards Update: CPR/AED

ILCOR-ECC Oct 2010  UCAB vs UABC
Agency/ Regional variances in application

Heart Association (AHA / HSF Canada)
UCABd
Unresponsiveness EMS/911 Circulation Airway Breathing defib

Red Cross (ARC / CRC)
UABCd
Unresponsiveness EMS/911 Airway Breathing Circulation defib

EATA Conf 2013 - John Boulay CAT(C)
• Certification validity: ARC  1yr
  CRC  3yr
  AHA  2 yr

• Annual refresher recommended for CPR/AED
  -skills good for 6 - 10.5 months

• On-line CPR certification not valid for professionals

• Conscious choking:
  ARC/CRC:  5  back blows  + abdominal thrusts
  AHA/HSF:  abdominal thrusts

EATA Conf 2013 - John Boulay CAT(C)
Unresponsiveness  Glasgow>AVPU

While determining Unresponsiveness
…observe for effective breathing.

Application of GLASGOW in sport

Ask:  What happened?
Tell:  Open your eyes!
Ask:  Where does it hurt?
Tell:  Move your fingers!
Give:  Painful Stimuli (triceps/nailbed)
CAB vs ABC

- Heart Assoc.  
  **Unresponsiveness, visualize absence / effective breathing**
  - CAB: Circulation assess pulse 5-10 sec, if absent compress 30:2 CPR
  - Airway is opened
  - Breathing (Look Listen Feel omitted if determined pulseless)

- Red Cross:  
  **Unresponsiveness, call EMS/911**
  - ABC: Airway opened,
    - Breathing Look/Listen/Feel, *give 2 breaths
    - Circulation, assess pulse 5-10 sec CPR 30:2

- Lifesaving:  
  - ABC: water rescues
  - CAB: dryland rescues (no pulse check)

- Paramedics:  
  - CAB: initial eval unresponsive victims
    - ABC: continous eval of non-arrested unconscious victims
    - ABC: conscious/semi-consc. victims

* varies: region / agency

EATA Conf 2013 - John Boulay CAT(C)
# FOOTBALL SCA SCENARIO

Single-rescuer time to first compression

<table>
<thead>
<tr>
<th>UCABd</th>
<th>UABCd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arrive</strong></td>
<td>10-15 sec</td>
</tr>
<tr>
<td>Unresp / visual breaths</td>
<td>10 sec</td>
</tr>
<tr>
<td>ERP</td>
<td>5 sec</td>
</tr>
<tr>
<td>Pulse check</td>
<td>10 sec</td>
</tr>
<tr>
<td>Chest access</td>
<td>15 sec</td>
</tr>
<tr>
<td><strong>FIRST COMPRESSION</strong></td>
<td>50-55 sec</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* All times approximate in optimal conditions for illustration purposes only..

EATA Conf 2013 - John Boulay CAT(C)
UCABd

More appropriate in a sports medicine setting
Team approach in HCP: simultaneous interventions
3. Standards Update: PHTLS 2010 vs. ITLS 2011

PHTLS - Pre-Hospital Trauma Life Support
General Impression/Glasgow
Airway/C-Spine
Breathing
Circulation/Bleeding
Disability, Expose/Environment…

ITLS - International Trauma Life Support
General Impression/AVPU
Airway/C-Spine
Breathing
Pulses/Bleeding
Rapid trauma Survey
Secondary Survey…
Standards Consensus

- Pre-hospital consensus among groups, regions difficult as resources vary.
- Important to follow local guidelines and be aware of variances in other regions.
- When a visitor, use local approach, as long as it is “safe” and is “sports specific”.
- Need to know variations, what works and what doesn’t.
SPORTS INTERVENTION MODEL PREFERENCES

Primary Survey
   Mechanism of injury usually witnessed
   Response time 10-15 seconds

U Unresponsiveness (Glasgow vs AVPU)
   Mechanism known?
   EMS/911 EAP/ERP

CAB

Secondary Survey
   Head to toe / PMSC x 4 / Vital Signs

D: Disability (head / spine)
E: Epidermis
F: Fracture
G: General

EATA Conf 2013 - John Boulay CAT(C)
4. EMS / 911, EAP / ERP

EMS/911 call protocols still need improvement

- E-911/ Smart phones
- Have someone else call/speak to 911
- Person calling 911 should be on-site
- Focus care on your patient
- Give responses to questions via call person

911 Call Center - Typical Questions:
1. Address of emergency site
2. Your call back number

EMS/911 Universal questions:
1. Victim’s problem?
2. Approximate age?
3. Is victim conscious?
4. Is victim breathing?
Medical Priority Dispatch System
<table>
<thead>
<tr>
<th>Card</th>
<th>Category</th>
<th>Card</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Abdominal Pain/Problems</td>
<td>20</td>
<td>Heat/Cold Exposure</td>
</tr>
<tr>
<td>2</td>
<td>Allergic Reactions/Animal Stings/Envenomation</td>
<td>21</td>
<td>Hemorrhage/Lacerations</td>
</tr>
<tr>
<td>3</td>
<td>Animal Bites/Attacks</td>
<td>22</td>
<td>Inaccessible Incident/Entrapments</td>
</tr>
<tr>
<td>4</td>
<td>Assault/Sexual Assault</td>
<td>23</td>
<td>Overdose/Poisoning (Ingestion)</td>
</tr>
<tr>
<td>5</td>
<td>Back Pain (Non-Traumatic/Non-Recent)</td>
<td>24</td>
<td>Pregnancy/Childbirth/Miscarriage</td>
</tr>
<tr>
<td>6</td>
<td>Breathing Problems</td>
<td>25</td>
<td>Psychiatric/Suicide Attempt</td>
</tr>
<tr>
<td>7</td>
<td>Burns/Explosions</td>
<td>26</td>
<td>Sick Calls (Should be Sick Person according to MPDS Version 12)</td>
</tr>
<tr>
<td>8</td>
<td>Carbon Monoxide/Inhalation/HazMat</td>
<td>27</td>
<td>Stab/Gunshot/Penetrating Trauma</td>
</tr>
<tr>
<td>9</td>
<td>Cardiac or Respiratory Arrest/Death</td>
<td>28</td>
<td>Stroke (C.V.A.)</td>
</tr>
<tr>
<td>10</td>
<td>Chest Pain</td>
<td>29</td>
<td>Traffic/Transportation Accidents</td>
</tr>
<tr>
<td>11</td>
<td>Choking</td>
<td>30</td>
<td>Traumatic Injuries</td>
</tr>
<tr>
<td>12</td>
<td>Convulsions/Seizures</td>
<td>31</td>
<td>Unconscious (Near)</td>
</tr>
<tr>
<td>13</td>
<td>Diabetic Problems</td>
<td>32</td>
<td>Unknown Problem (Man Down)</td>
</tr>
<tr>
<td>14</td>
<td>Drowning/Diving/SCUBA Accident</td>
<td>33</td>
<td>Inter-Facility Transfer/Palliative Care</td>
</tr>
<tr>
<td>15</td>
<td>Electrocution/Lightning</td>
<td>34</td>
<td>Automatic Crash Notification (A.C.N.)</td>
</tr>
<tr>
<td>16</td>
<td>Eye Problems/Injuries</td>
<td>35</td>
<td>HCP (Health-Care Practitioner) Referral</td>
</tr>
<tr>
<td>17</td>
<td>Falls</td>
<td>36</td>
<td>Flu-Like Symptoms (Possible H1N1)</td>
</tr>
<tr>
<td>18</td>
<td>Headache</td>
<td>37</td>
<td>Inter-Facility Transfer specific to medically-trained callers</td>
</tr>
<tr>
<td>19</td>
<td>Heart Problems/A.I.C.D.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Response Determinant New Clinical Response Model

<table>
<thead>
<tr>
<th>Letter</th>
<th>Severity</th>
<th>Resources</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED 1</td>
<td>Immediately Life Threatening</td>
<td>Advanced Life Support</td>
<td>Emergency</td>
</tr>
<tr>
<td>RED 2</td>
<td>Possibly Life-Threatening</td>
<td>Advanced Life Support</td>
<td>Emergency</td>
</tr>
<tr>
<td>Green 1</td>
<td>Serious but NOT Life-Threatening</td>
<td>Face to Face Clinical Assessment within 30 minutes</td>
<td>Emergency</td>
</tr>
<tr>
<td>Green 2</td>
<td>Serious but NOT Life-Threatening</td>
<td>Face to Face Clinical Assessment within 30 minutes (Urgent)</td>
<td>Non-Emergency</td>
</tr>
<tr>
<td>Green 3</td>
<td>Planned Clinical Telephone Assessment</td>
<td>Planned clinical telephone assessment call back within 10 minutes</td>
<td>Non-Emergency</td>
</tr>
</tbody>
</table>
5. H.A.I.N.E.S. Recovery Position
(High Arm In Endangered Spine)

- One rescuer technique for unconscious patient left alone and at risk of aspiration
- Provides some protection for c-spine, best to use head hold if possible.
- Not meant as a primary technique in sports setting (spinals, helmets)
- Prevents passive regurgitation
- Replaces basic recovery position
- Left side preferred
6. Manual Head Stabilization: Head Hold vs Trap Hold

- Field interventions require spinal skill management with respect to the type of sport.

- Head stabilization and support required may vary depending on playing surface and protective equipment worn.

- Initial contact always involves manual head/neck stabilization.
Head Hold Methods

**Head Squeeze**
Best hold during transfers and lifts.
Best with helmets
And sweaty heads

**Trap Squeeze**
Best hold to stabilize agitated spinal suspect.
Better on unstable surfaces such, net, tramp or foam pit.

7. Rescue Airways

Supraglottic airway devices

Combitube placement

King LTS-D placement

EATA Conf 2013 - John Boulay CAT(C)
King LTS-D vs Combitube

- Both seal larynx between esophageal and oropharyngeal balloon
- Both can be used whenever an OPA would have been indicated
- King LTS-D has 1 pilot balloon, Combitube has 2
- King LTS-D success rate: 98-100%? Really dependant on insertion technique
- Insertion technique very important - ensure tongue jaw lift is used
- King LTS-D: various sizes: eg: #3 Yellow 4-5ft, #4 Red 5-6ft, #5 Purple >6ft
- Combitube: not for children/adults <4 feet tall
- King LTS-D also comes in children sizes
- Contraindicated: intact gag, known esophageal disease, caustic ingestion
KING LTS-D IS “RESCUE” AIRWAY of choice for sport physicians in the field.
USA: Now part of AT airway management strategies.
CANADA: Training with certain AT groups over past 3 years, but not yet certified.
Use dependant on local EMS guidelines.
8. Medical

ASTHMATIC ATHLETE

Portable spirometry allows field monitoring of FEV,

(SPIROMETRY: EMR Skill)
ASTHMA ACTION PLAN

**Green Zone**- no symptoms, usual activities peak flow 80% of personal best  
*Action*: Maintain medication use as is

**Yellow zone**-some symptoms

- wakes you up at night or
- can only do some of usual activities or
- peak flow between 50-80% of best

*Action*: Take extra puffs of reliever meds  
Adjust doses of other asthma meds (MD)
**Red Zone** - Asthma Attack

**s/s:**
- very short of breath
- reliever meds not helping
- can’t do usual activities or been in yellow zone at least 24 hrs
- symptoms staying same or getting worse or peak flow is less than 50% of personal best

**Action:**
- take rapid sequential doses of reliever meds and/or
- take a dose of oral steroids meds as prescribed by physician
- enact asthma EAP which should include oxygen administration

**Call EMS/911**
- if in red zone >15 minutes or can’t reach MD
  - if cyanotic, hard to talk/walk
  - if not relieved after 3 admin of extra inhaler puffs
  - if available: oxygen to sat >92%, oxygen nebulizer,
  - if no meds available consider strong coffee…
  - consider Epipen,
Aerochamber useful addition to trauma kit

Education/Planning for acute asthma management is important

If available: oxygen nebulizer with SABA

Treat with oxygen before saturation meter shows deficit

See: NATA Position Statement: Preventing Sudden Death in Sports- 2012
Athletes with diabetes should have individual safe blood glucose ranges determined and monitored. Athletic trainers/therapists should be part of the prevention, recognition, and treatment plan.

National Athletic Trainers’ Association Position Statement: Preventing Sudden Death in Sports-2012

Standards of Medical Care in Diabetes—2013:
http://care.diabetesjournals.org/content/36/Supplement_1

www.diabetes.org/
www.diabetes.ca/

EATA Conf 2013 - John Boulay CAT(C)
ANAPHYLACTIC ATHLETE

EAP/ERP for anaphylaxis
Better training and intervention available
Some regions have deregulated epi auto-injectors
to permit emergency administration to anyone in need

QUEBEC 2012

- Regulation respecting Professional activities that may be engaged in within the framework of pre-hospital emergency services and care

"In the absence of a first responder or ambulance technician, any person having received training in the administration of adrenalin approved by the regional or national medical director of pre-hospital emergency services may administer adrenalin with an auto-injection device to a person in the case of an acute anaphylactic allergic reaction."
Anaphylaxis - Auto-injector
9. EHS - Exertional Heat Stroke & Rectal Temperatures

EHS/Endurance event medical coverage:
   Education/Recognition: CNS dys & core body temp
   Rapid Intervention: ideally cold water immersion

- Rectal Temperature -more accurate than oral/axillary
  in thermo-regulatory emergencies
  -ideally rectal thermometry/ingestible thermistors
- Contraindications: -cardiac issue (vagus n. stim)
  -hemorrhoids
  -recent rectal surgery
  -diarrhea

EATA Conf 2013 - John Boulay CAT(C)
Rectal Temperature

Average: 37.5 deg, Range: 34.4-37.8°C, Hyperthermic: >40 deg C

- Hygienic procedures
- Sims’s position (side-lying, top knee flexed
- Thermometer, cover, gauze, lubricant, watch
- Shake thermometer down, apply cover, lubricate
- Lift upper buttock, expose, pt. breath in then out
- Insert 1-2”, release buttock,
- Hold thermometer 2 min, ensure safe position
- Lift buttock, remove gently on exhalation
- Wipe thermometer with gauze, read, clean
- Record temperature, wash hands......
Now part of AT curriculum at Concordia University.
10. TBI 4th Concussion In Sport Consensus

- Latest CIS in Zurich -November 2012
- Concussion management topic of great media interest
- Most AT are current with updates/management .
- In our area, the local childrens’ hospital has already adopted a more strict approach with pediatric TBI.

- READ THE BLOG ABOUT LATEST CIS 2012 ZURICH:
- http://theconcussionblog.com/2012/11/02/zurich-day-2-and-we-are-live/#more-6659
ADULT RTP

Table 1. Return to play protocol

<table>
<thead>
<tr>
<th>Step</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No activity, complete rest; once asymptomatic, proceed to level 2</td>
</tr>
<tr>
<td>2.</td>
<td>Light aerobic exercise such as walking or stationary cycling</td>
</tr>
<tr>
<td>3.</td>
<td>Sport-specific training (eg, skating in hockey, running in soccer)</td>
</tr>
<tr>
<td>4.</td>
<td>Noncontact training drills</td>
</tr>
<tr>
<td>5.</td>
<td>Full contact training after medical clearance game play</td>
</tr>
<tr>
<td>6.</td>
<td>Game play</td>
</tr>
</tbody>
</table>

*(Adapted from the Canadian Academy of Sports Medicine [4*].)*
mTBI - Pediatric Updates

RETURNING TO ACTIVITY AFTER A CONCUSSION
THE ATHLETE MUST BE “SYMPTOM FREE” AT REST FOR ONE WEEK.
When symptom-free for one week, the athlete will be advised to undergo a gradual increase in exercise intensity over several days before returning to activity.

- Follow the Return to Sports Guidelines provided (activity-specific).
- Verify that the athlete has regained his/her pre-injury skill-level.
- Ensure that the athlete is confident in his/her ability to

11. Spinal Skill Sets & Sport Adaptation

Cervical Collar-
sizing/application
- supine, standing, knight stand
- seated, four-point
- avoid over-size collar
  (Internal decapitation-Baylor)

Supine Emergency Log Roll
- Emerg LR-1
  (c-spine, aspiration risk)
- Emerg LR-2
  (c-spine, aspiration risk)

Prone Emergency Log Roll
- Emerg LR-1
  (c-spine, code 99)
- Emerg LR-2
  (c-spine, code 99)

Supine Lift & Slide
- technique of choice,
- better than log roll:
  L&S-8, L&S-6
  careful with heavy athletes
Spinal Skill Sets

Supine Log Roll
- More movement than lift & slide (L&S)
- Requires fewer rescuers: LR-5, LR-4, LR-2

Supine Straddle-Lift
- Application in tight spaces, uneven surface: SSL-5, SSL-4

Prone Log Roll
- Rescuers on board, lunge back, roll onto board
- On ice: use wet towel under board

Standing Take Down
- Collar first, patient brought down on board
- 2 rescuers, 1 spotter
- Not advised on ice

Seated Take Down
- Collar first, patient brought down on board with 3-5 rescuers

EATA Conf 2013 - John Boulay CAT(C)
Spinal Skill Sets

Four-Point Take Down
- Prone: collar first, patient lowered down with 3 rescuers, then rolled supine
- Lateral: collar first, patient lowered laterally with 3 rescuers, then rolled supine

Re-positioning Board
- PHTLS: lateral then vertical
- ITLS: V-slide

Strapping
PHTLS:
- Torso - 2 straps X cross,
- ASIS- 1 strap horizontal
- Mid-femur-1 strap horizontal
- Feet/Tibia- 1 strap figure 8

Strapping
ITLS:
- Torso- 2 straps X cross
- Pelvis- 2 straps X cross
- Feet/Tibia- Triangular bandage across
*LR Less effective than L&S, but can be performed by 2 rescuers (ambulance)

*L&S Causes less movement than log roll, requires 6-8 rescuers

Del Rossi G. et al -"6 plus person transfer technique compared." J.A.T. 2008;43:6-13
Re-Positioning on Board

- ITLS: V-Slide in 2 steps
  - less shear
  - a practiced skill
- PHTLS: Separate vertical / lateral slides
  - easier to perform, better on ice
  - may cause shear if not careful

Both techniques effective & have advantages
V-Slide (ITLS)
1. Slide down and diagonally
2. Slide up and towards center of board
8-Person Lift & Slide

EATA Conf 2013 - John Boulay CAT(C)
5-Person Straddle Lift

EATA Conf 2013 - John Boulay CAT(C)
Prone Log Roll On Skeleton Sled

- Log-roll athlete and sled together into supine position.
- Once helmet removed and assessment performed, apply cervical collar and transfer to spine board
12. Emerg Skill Set Training

- Feedback (FB) is important for learning
- Knowledge of Performance (KP) important to improve
- FB & KP should be provided sooner than later
- Electronic monitoring during training important tool
- New possibilities exist with advances in electronic monitoring. Movement that was difficult to measure in the past now possible (provides FB).
- Need more training with FB and KP to enhance emergency skill development of responders.

EATA Conf 2013 - John Boulay
CAT(C)
Studies have developed acceptable ranges of motion for skill training in the management of acute cervical spine injuries.

Everyone’s goal in a suspected spinal is to “create as little movement as possible”.

13. Sports Equipment Removal

- Different realities north of the border
- Much easier now with UCAB
- Trained/rehearsed in extrication of equipment “ideally” within 30 days before start of season.
- Equipment should be removed sooner than later depending on available resources/EMS system.
- If only one trained rescuer; provide basic life support as required, consider full removal upon arrival of paramedic team as per “principle and preference”.
• The football **faceguard** (facemask) should always be removed with a suspected spinal.

• Research has shown there is less movement of the head/neck during helmet removal when the facemask is removed first.

• Long face masks also present a challenge with pads still in place and helmet rotation needed to clear face is limited.

• Football helmet and pads always removed as unit

• Do not interrupt **first 6-10 minutes of CPR / first 3-5 analyses** for equipment removal if ALS has not arrived

• Hockey is not always like football.

• Should be competent in your designated sport.
Football: Quick Release/Unscrew/Cut

*VISOR may have to be modified to allow face mask to swivel up
Football: Jersey/Pad cut

RIP KORD- Latest shoulder pad removal system

EATA Conf 2013 - John Boulay CAT(C)
14. Mock-up / Simulations
2010 Olympics
Clinic - Mock-Up

Olympic Village - Dental Unit: A+
2010 Olympics
Sliding Center - Mock-Up: Problematic

4. LUGE ACCIDENT 2010 VIDEO.avi
Mock-up: F1- Grand Prix de Montréal

EATA Conf 2013 - John Boulay CAT(C)
Massa - F1 Crash July 2009
Mock-up: Vacuum Mattress

- 15+ years experience with vacuum mattress in Quebec EMS

- Use not applicable to all settings especially for athletes with protective equipment.

- Does not provide adequate stabilization in every case

- Transfer device only, removed upon arrival at hospital.

- Delays transport in scoop and run situations.

- Some crews transfer already boarded athletes to vac mat as per protocol

EATA Conf 2013 - John Boulay CAT(C)
Mock-up: Sliding Track
Track evacuation of immobilized athlete on spine board placed within litter stretcher.
Extrication from Heights

VIDEO Cirque Aerial Spinal Descent AVI

26/12/2012
15. Community Training

- Local ER staff: sports helmet/pad removal workshop
  
  eg: http://www.thechildren.com/trauma/_pdf/en
  /emergency-sports-equipment-removal-workshop.pdf

- Local Paramedic training center:
  - Share ERP
  - Equipment removal technique

- Coach education – first aid training
New program locally
“First Aid Courses for Coaches”

Taught by: CAT(C) certified

There is a limit to what a coach can safely and effectively manage.

This should be an option until trained responders arrive

EATA Conf 2013 - John Boulay CAT(C)
16. Future Directions
Scope of practice

• Since 2001, emergency standard of care has progressed from a first aider to first responder (FR) skill set.
• Most sports medicine provider groups now employ some type of FR training with similar skill sets.
• FR SKILL SETS include:
  CPR, AED, airway adjuncts, ventilation, O2 admin,
  suction, bleeding/wounds, fracture/spinal medical, anaphylaxis, thermo-regulatory, etc.
• As sports medicine professionals, AT should strive to have a higher standard of care than basic rescuers.
Advancements

- Position papers eg: NATA; Preventing Sudden Death in Sport
- Athletic Training Education Competencies: 5th ed AC-1 to 42
- Professional Trainer group initiatives
- Advances in technology, technique, equipment
- Advances in skills acquisition: FB, KP, simulators
- Continued research
- Legislation advancement eg; concussion
- Media coverage: eg; concussion
- Professional athlete advocacy:
- International consensus statements eg; CIS
- Enlarged scope of practice: first aiders to EMR+
PHATS a great model

- Trainer lobbying is effective to invoke changes
- PHATS were able to make pre-season mock-ups mandatory.
- In some professional rinks, defibrillation was never permitted on-ice in early years.
- Loaner emergency care equipment is now provided to visiting teams
- 2002 to 2012 many changes in NHL
- Gone from reactive to proactive
- Have a great training group out of Phoenix advancing their skill level on annual basis.
EMERGENCY CARE TRAINING TRANSITION

1980’s  First Responder (FR)  
(44-48 hrs)

2012..  Emergency Medical Responder (EMR)  
(40-60-88 hrs)

“As athletes train and compete at higher levels than ever, we have a responsibility to upgrade our game plan to match their level of intensity”

EATA Conf 2013 - John Boulay CAT(C)
SPORTS MEDICINE IS A TEAM SPORT

EATA Conf 2013 - John Boulay CAT(C)