On Field Management of the Critically Injured Athlete

Preparation and Planning

Success is where preparation and opportunity meet

Bobby Unser

Hello and Thank you

- 15th Annual Cutting Edge Concepts in Orthopaedics and Sports Medicine Seminar
 - Andrew Reber
 - Dr. Randy Schwartzberg

Collaborators and Supporters

- Darryl Conway, MA, AT, ATC (UM)
- David Berry, PhD ATC (SVSU)
- MD State Police Aviation Command
- Univ of MD Shock Trauma Center Staff

Introduction

- Certified Athletic Trainer (1997)
- EMT-B (97), I(06) Paramedic
 (10)
- Alpine Ski Patroller (1999)
- Certified Flight Paramedic (2013)
- Certified Tactical Paramedic (2017)

Positions

- Maryland State Police Aviation Command
- Liberty Mountain Ski Patrol
- Rotational ATC, US Ski and Snowboard

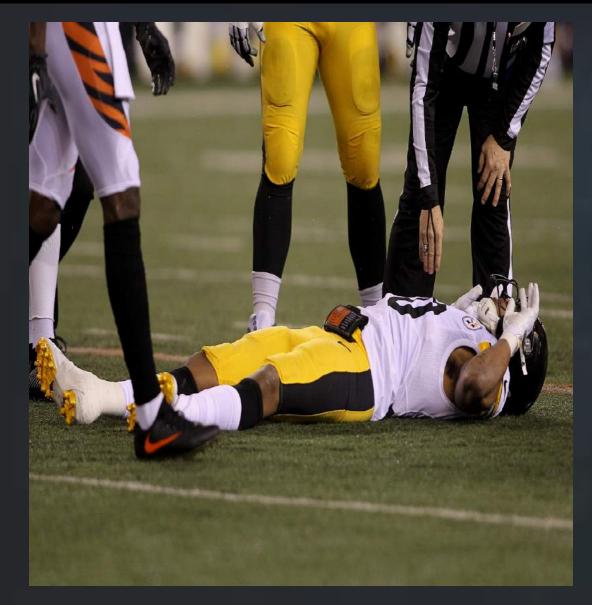
Why are we here?





This is why we are here

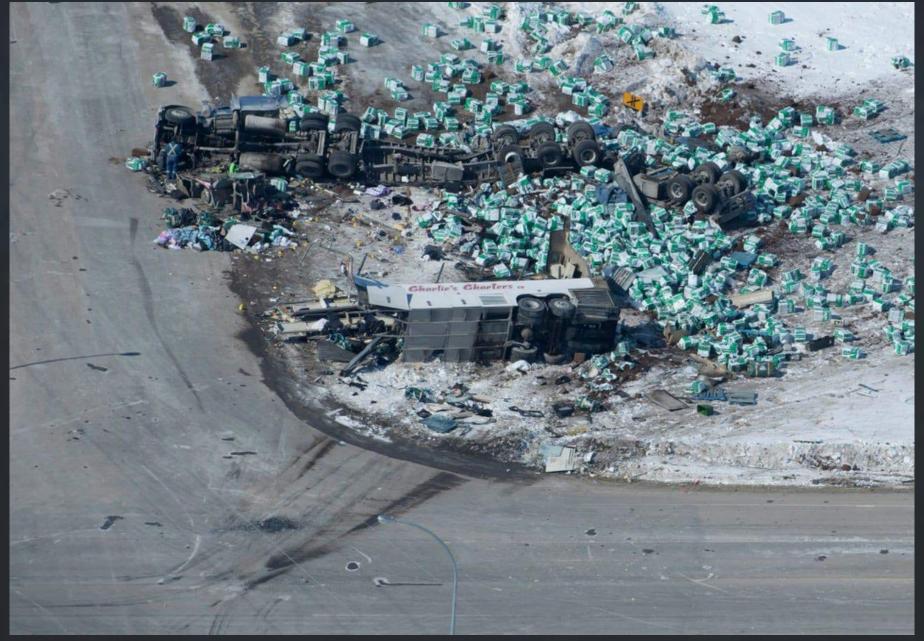




Are you prepared for the ultimate emergency?

We don't just act on the field....





Conflict of Interest

 The views expressed in these slides and today's discussion are mine

 My views may not be the same as the views of my colleagues

ALWAYS use local protocols and treatments or interventions approved by your medical director or employer.

Disclosures



- I do not have financial or other associations with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters.
- No Conflict of Interest or Financial relationships
- There was no commercial support for this activity.
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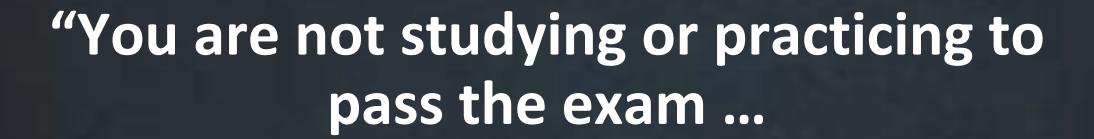
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Overview of Presentation



At the conclusion of this morning:

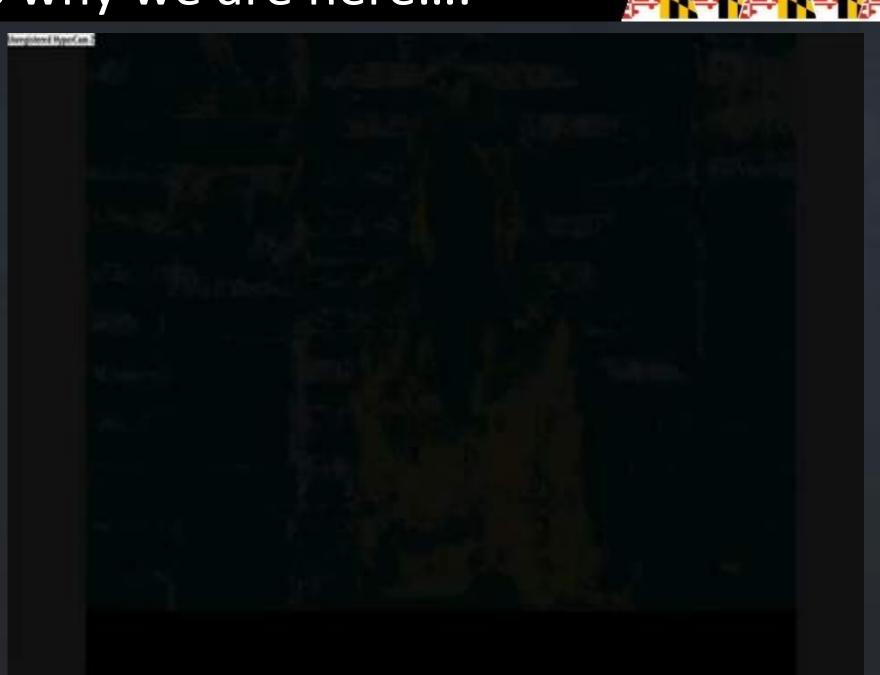
- Explain how a pre-hospital inter-professional healthcare team works collaboratively to improve patient outcomes
- Discuss risk management, catastrophic injury planning, & crisis management principles.
- Discuss principles for the effective development of various policies & procedures
- Describe effective strategies for the management of an active threat scenario



You are preparing for the day when you are the only thing between the athlete and the grave!"

This is why we are here....





Why this topic?

ATs 1st on the scene

Ability to improve patient outcomes

Changes in equipment

Changes in EMS policies

Developing Interprofessional relationships are key during critical events

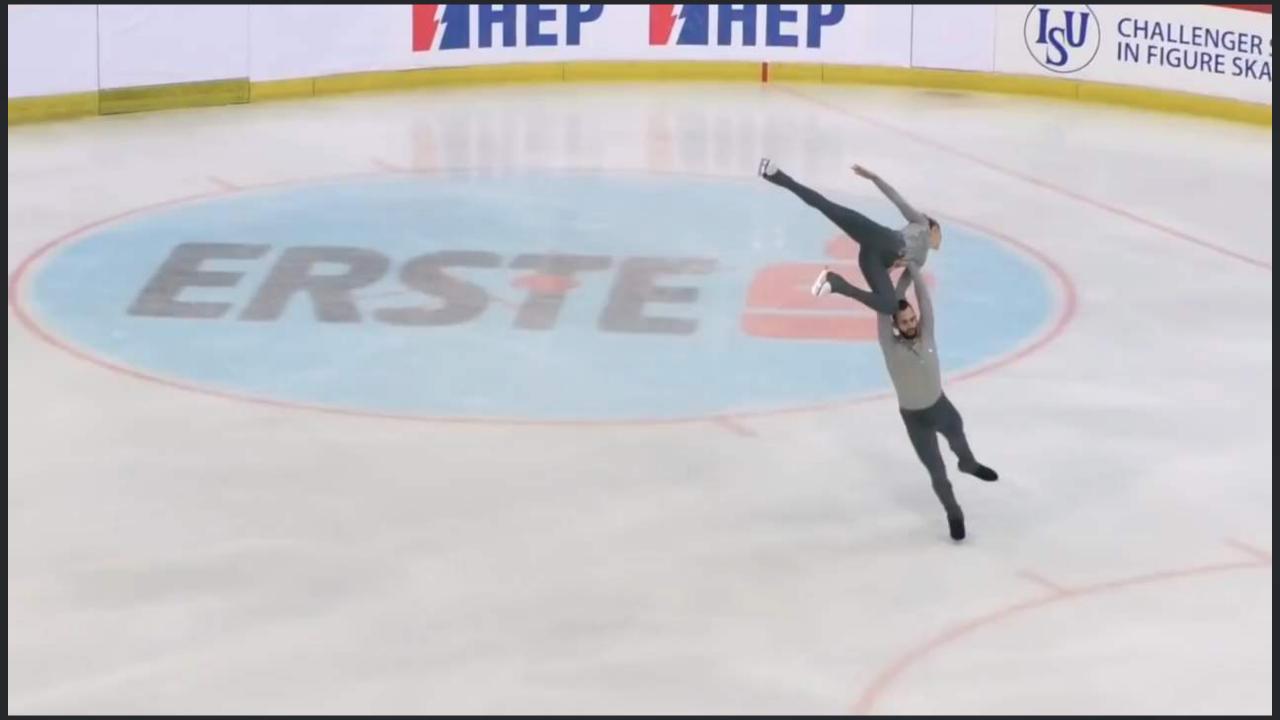
This is why we are here....



Why this topic?



"As the profession of athletic training continuously evolves and ATs practice in various settings, these healthcare providers must have the ability to maintain a high level of preparation and proficiency in all aspects of immediate and emergency care. This ability is critical to minimizing risk to the injured participant." - BOC, 2015



When Then Thinking



"If it is predictable ... It is manageable!

What might we see?



Traumatic Injury Sudden Cardiac Arrest **Environmental Exposure** Spectator or Officials event School Shooting Bus Accident Terrorist Attack

Risk Management

RM Concerns

- Policies / Procedures
- Supervision
- Documentation
- Training
- Corrective Actions



- PPE
- Emergency Plans
- Medications
- Medical Coverage
- Concussion Policies
- Special Populations
- Medical DQ
- Team Physicians
- Environmental Issues



Pre-Event Planning



- Creating or reviewing EAPs
 - For every facility and every type of event
- Develop and train with inter-professional partners
 - Meet with event medical team and local facilities

Purchase, practice and prepare equipment



Inter-Professional Practice



•Why is this Important?

Facilitate & optimize collaborative patient-centered care that is current, competent, compassionate, efficient, effective, and safe!

Reduce service duplication and minimize unnecessary interventions while enhancing clinical effectiveness!

Increased engagement!

Inter-Professional Practice

Educate-

- What is the education level
 & capabilities of EMS
 personnel?
- Educate fire / EMS
 personnel about the
 education & training of ATCs
- EMS capabilities vs ATC skills / capabilities
- EMS protocols
- Joint training opportunities

Equipment-

- What equipment does EMS have? Sports Medicine have?
- What equipment is available at an event?
- What equipment is necessary for what emergencies?
- What equipment will be used (e.g. Splints, spineboard, etc.)?

Event Planning

Questions-

- Just because you hold a certification, are you the best to perform the procedure?
- What are the qualifications of those executing the plan?
- Who is going to be involved in carrying out the EAP at all different times?

"Pit Crew Concepts"

Cervical Spine Injury

CPR

Other

What personnel are involved in your management of emergency situations?

Before EMS arrives?

Unstable patient?

After EMS arrives?

Visiting Team



Event Planning

Questions-

- Are your coaches, strength coaches, & other staff prepared to participate?
- Is a coach, strength coach, etc. who has trained with ATCs better suited than a MD who never trains?

- Who travels with injured athlete?
- •Will activity be adequately supervised when you leave?
- What Facilities will be utilized?
 - Level 1 Trauma Center
 - Level 2 Trauma Center
 - Speciality Center
- Aeromedical vs ground

WHO HAS THE CAR KEYS ????????

Medical Time Outs

"Time Out" system for athletic health care

Convene the health care professionals who comprise the emergency response team

Pre-event checklist

- EAP
- Roles & responsibilities
- Communication
- Equipment & resources
- Transportation plan
- Other / Miscellaneous

Roles during an Event

- Immediate care
- Equipment retrieval
- **EMS** activation
- Direction of EMS to scene
 - Meeting EMS if Not on Scene
- Communication
 - Family, Spectators, Media
- Other
- Gates, Family, Spectators,

"Athletic teams excel because they practice! It is not conceivable that personnel responsible for emergency management cannot practice and expect to excel at the time of an emergency"

Ron Courson, ATC, PT, NREMT-I, CSCS, University of Georgia

Recommendations

- AED
- Airway Management
- Bleeding Management
- Splints
- Spine Board (and head Immobilization)
- Heat Illness equipment
- Medications
 - Epi, Albuterol, Narcan

- EAP will "provide directions" but is not the exact final road map
- EAP must be flexible"
 - adjust on the fly"
- A written EAP, will become your minimum standard of care



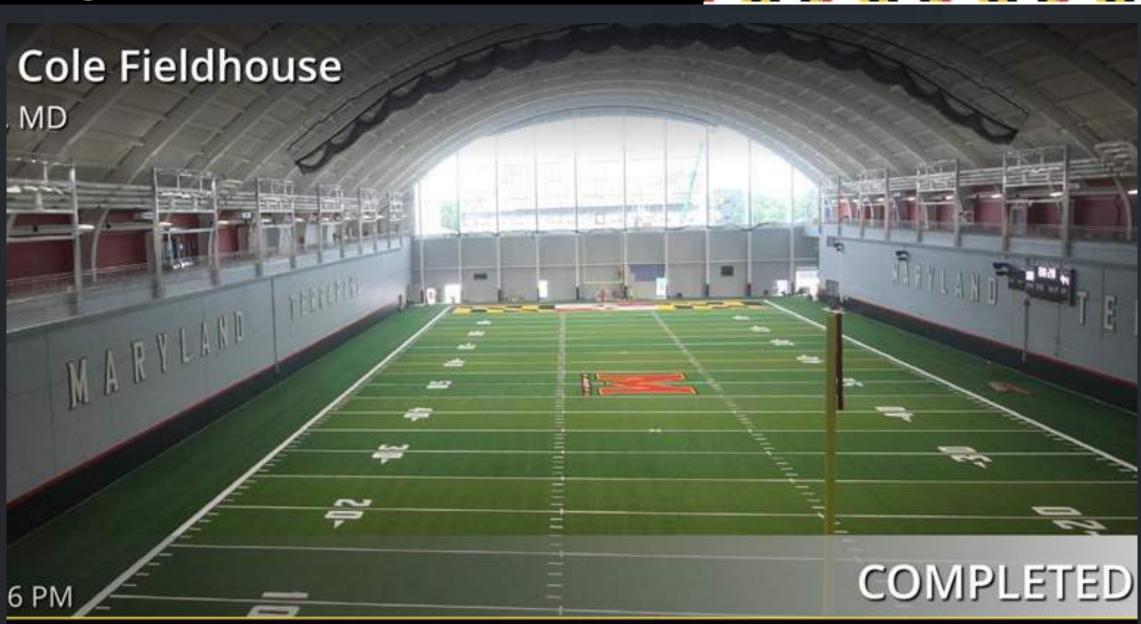


"In times of stress, you will always fall to the level of your training, not rise to the level of your expectations"

John Sims, AA County Sheriff

Thoughts





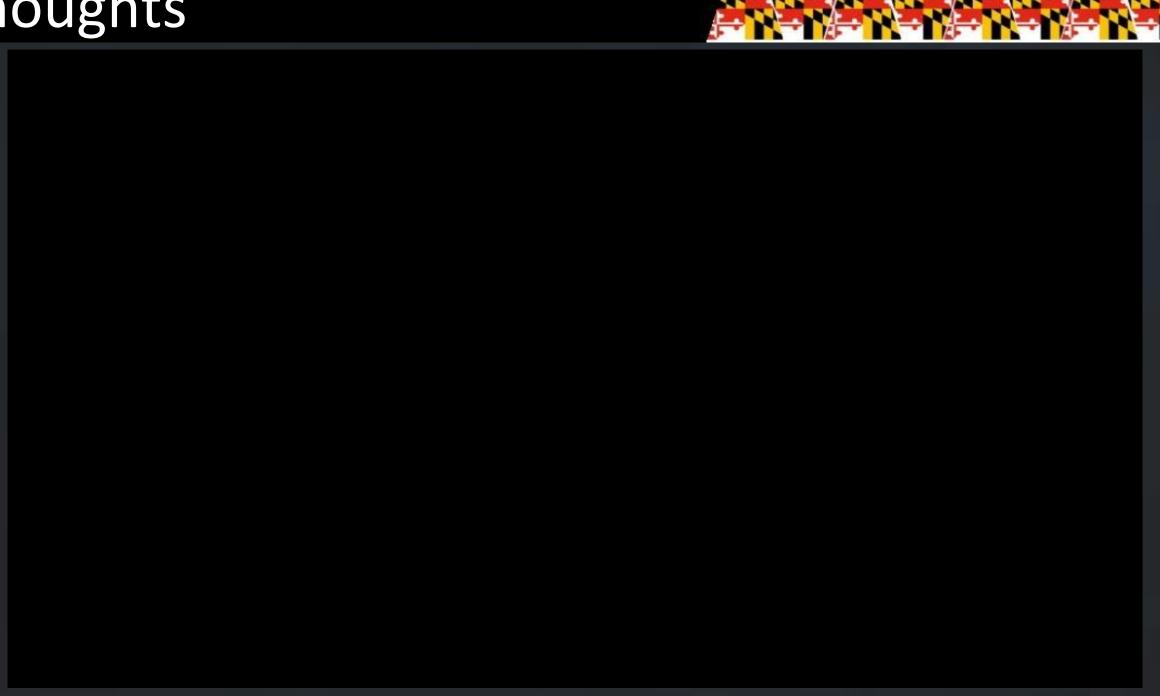
Thoughts





Thoughts





Changing your thinking



International Travel Considerations

Unique Environment considerations

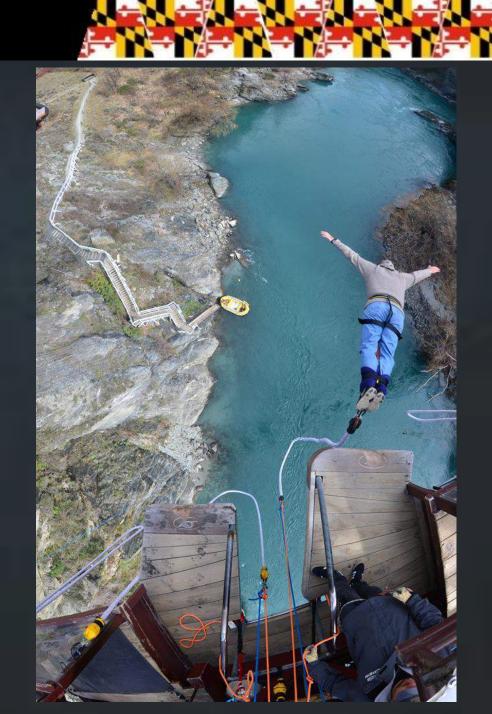
Atypical Event considerations

Morning Review

- Discuss various situations we may present emergency management
- Change IF WHEN thinking to WHEN THEN thinking
- Explain how a pre-hospital inter-professional healthcare team works collaboratively to improve patient outcomes
- Discuss risk management, catastrophic injury planning, & crisis management principles.

Thank you

QUESTIONS





Resources and References

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- Management of Sport Concussion (March 2014)
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Resources and References

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