**Chapter 1 Medical Emergencies**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Identify and describe the types of first responders and their training requirements in the US
2. Differentiate among fractures those with a high potential for loss of limb or life and the required immediate treatment in the sporting venue
3. Describe the 3 most serious types of cardiac injury leading to death
4. Apply knowledge of the various categories of injury to adapt a sideline medical kit for coverage of various sports
5. Recall in order, the steps of the Primary and Secondary assessment during emergency care of the injured athlete
6. Given a wound, determine the best dressing to utilize
7. List the signs and symptoms of shock and the most appropriate treatment
8. Explain the rules of splinting
9. Complete a sample Emergency Action Plan for your facility

**Objectives:**

1. Given an injured athlete scenario, apply the tools and skills learned in the primary and secondary assessment to treat the athlete on the field of play.
2. Choose the correct splint to use on an athlete with a suspected ankle fracture.

**Chapter 2 Adolescent and Pediatric Athletes**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Appreciate the terminology specific to the young athlete.
2. Identify fractures specific to the immature skeleton.
3. Understand Salter Harris fracture classification.
4. Differentiate traumatic injuries specific to the immature skeleton.
5. Recognize potential causes of the acutely limping athlete.
6. Understand the management of traumatic injuries in the young athlete.
7. Recognize and identify specific concerns regarding the young athlete.

**Objectives:**

1. Given an 11-year-old female soccer player who fell and injured her left knee evaluate her for possible musculoskeletal injuries.
2. Compare possible shoulder injuries in adolescent boy baseball players.

**Chapter 3: Senior athletes:**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Increase awareness of trends in sport participation of the senior athlete.
2. Recognize systemic changes with aging that may impact a senior athlete.
3. Report awareness of typical musculoskeletal injury trends in senior athletes and any special care indicated for these conditions.
4. Report awareness of potential medical emergencies that may be seen in the senior athlete.
5. Describe the signs and symptoms, risk factors, potential interventions for common medical emergencies possible with the senior athlete.
6. Report awareness of tools utilized in the physical screening of senior athletes.

**Objectives:**

1. Interpret the Health History of a Senior Athlete to clear the athlete to participate in a sprint triathlon.
2. Analyze the cardiovascular changes in a 68-year-old female who reports to the aid station after completing a 10K run.

**Chapter 4: Gender Differences**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Understand the role that growth/development of the pre-adolescent athlete leads to sex specific differences in mortality rates, participation rates and injury patterns.
2. Understand the specific differences in the adolescent athlete as they relate to maturation patterns, mortality rates, participation rates and specific musculoskeletal, neurological and environment injury patterns.
3. Understand the role that aging plays in gender specificity as it relates to cardio/cerebral vascular disease and osteoarthritis.

**Objectives:**

1. Compare the injury patterns between 13 year old boy and girl soccer players.
2. Analyze the differences in concussion incidence between boys and girls.

**Chapter 5: Physically Impaired/Challenged Athletes**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Recognize different groupings and sports available to adaptive sports athletes.
2. Explain the reasoning and process of classification for adaptive sports athletes.
3. Compare and contrast injury patterns for athletes in adaptive sports to able-bodied athletes.
4. Describe common injury patterns in adaptive sports athletes based on the athlete’s type of disability.
5. Discuss measures of prevention for and the appropriate emergency management of the following conditions in an adaptive sports athlete:
   1. Autonomic Dysreflexia
   2. Seizure
   3. Thermoregulatory condition
   4. Concussion
   5. Behavioral issue
6. Recall sports medicine considerations and issues relating to travel for an adaptive sports athlete.
7. Identify sports medicine considerations as they relate to the equipment and adaptations used by an adaptive sports athlete.

**Objectives:**

1. Explain autonomic dysreflexia in spinal cord injured athletes.
2. Given a physically challenged athlete, propose the athlete’s classification level

**Chapter 6: Performance Enhancement**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Identify four major areas of concern to performance enhancement that can lead to health/medical emergencies.
2. Define and explain the nature of the processes of each of the four performance enhancing areas of concern that can cause health and medical emergencies.
3. Identify common medical emergencies and disorders with specific performance enhancing behaviors and procedures.
4. Recognize possible signs and symptoms of athletes engaging in these behaviors in order to properly identify medical emergencies and/or prevent a medical emergency.

**Objectives:**

1. Recognize the signs and symptoms of an athlete engaging in the use of diuretics

**Chapter 7: Environmental**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Identify risk factors, signs and symptoms associated with cold injuries, and discuss both prevention and management strategies.
2. Identify risk factors, signs and symptoms associated with exertional heat illness, and discuss both prevention and management strategies.
3. Identify signs and symptoms of dehydration, its effect on the athlete and performance, and provide recommendations for fluid replacement.
4. Identify common etiologies of anaphylaxis, manifestations, and the management of anaphylaxis from an emergency response perspective.
5. Identify causes of asthma exacerbations, major signs and symptoms of asthma, and describe pharmacologic and nonpharmacologic management strategies.
6. Identify detrimental dermatologic environmental elements, and discuss their signs, symptoms and management.
7. Discuss the hazards of lightening, management of a lightening victim, and prevention measures.

**Objectives:**

1. Discuss the athlete’s bodily response to altitude.
2. Distinguish between the symptoms of heat cramps, dehydration, heat exhaustion and heat stroke in a football player presenting to you on the sideline during practice
3. Design a lightning plan for your summer softball league

**Chapter 8: Ethics and Legal**

**Learning Goals:**

*Upon completion of this section, the learner will:*

1. Identify the legal duties of both an EMR and sports medicine clinician
2. Recognize the importance of consent, refusal of care and confidentiality
3. Describe the components of mandatory reporting
4. Understand the properties of negligence
5. Define and explain the Good Samaritan Law
6. Describe the legal difference between various roles as a care provider EMR, PT, volunteer, paid practitioner
7. Understanding the basic components of direct access
8. Identify medical support requirements for venue coverage
9. Explain the role of governing associations on laws, ethics and practice procedures

**Objectives:**

1. Articulate the Good Samaritan Law as it applies to your volunteers at your 10K race
2. Defend “Life First” application in regards to using an EpiPen