

# Chapter 12:

## On-the-Field Acute Care and Emergency Procedures

# How is an emergency defined?

- An unexpected serious occurrence that may cause injuries that require immediate medical attention

What becomes very critical in an emergency situation?

- Time

# What must all sports programs have?

- An emergency plan

Once the rescue squad is called, who should have the final say on how the athlete is to be transported?

- The emergency medical technicians

Once the rescue squad is called, what role does the athletic trainer assume?

- An assistive role

What does the on-the-field assessment help determine?

- The nature of the injury and provides direction in the decision-making process concerning the emergency care that must be rendered.

How is the on-the-field assessment subdivided?

- Primary survey and secondary survey



When is the primary survey done and what does it determine?

- Initially, and determines life-threatening situations

# When is the secondary survey done and what does it determine?

- After the primary survey, when all life-threatening situations have been ruled out or corrected. It takes a closer look and gathers specific information about the injury from the athlete. It uncovers problems that do not pose an immediate threat to life, but may do so if they remain uncorrected.

The unconscious athlete must always be considered to have?

- A life-threatening injury

What situations are considered life-threatening?

- Cardiopulmonary resuscitation (i.e., obstruction of the airway, no breathing, no circulation), profuse bleeding, and shock

# What are the signs of shock?

- Blood pressure is low
- Systolic pressure is usually below 90 mmHg
- Pulse is rapid and weak
- Athlete may be drowsy and appear sluggish
- Respiration is shallow and extremely rapid
- Skin is pale, cool, and clammy

# What vital signs should be observed?

- Pulse
- Respiration
- Blood pressure
- Temperature
- Skin color
- Pupils
- State of consciousness
- Movement
- Abnormal nerve response

What decisions can be made from the secondary survey?

- Seriousness of the injury
- Type of first aid required
- Whether injury warrants physician referral
- Type of transportation needed

# What is the initial management of musculoskeletal injuries?

## ■ RICE

- Rest
- Ice
- Compression
- Elevation



# Chapter 13:

# Off-the-Field Injury Evaluation

What are the four distinct evaluations routinely conducted by an athletic trainer?

- Preparticipation (pre-season), physical examination or screening (pre-season), on-the-field injury assessment, off-the-field injury assessment.

Define the following term:

- Biomechanics
- Application of mechanical forces to living organisms

Define the following term:

- Pathomechanics
- Mechanical forces that are applied to a living organism and adversely change the body's structure and function

Define the following term:

- Etiology
- Cause of disease; mechanism

Define the following term:

- Pathology
- Functional and structural changes that result from injury

Define the following term:

- Symptom
- Change that indicates injury or disease; subjective

Define the following term:

- Sign
- Indicator of a disease; objective



Define the following term:

- Diagnosis
- Name of a specific condition

Define the following term:

- Prognosis
- Predicted outcome of an injury

Define the following term:

- Sequela
- Condition resulting from disease or injury

Define the following term:

- Syndrome
- Group of symptoms that indicate a condition or disease

# What are the four broad categories of the evaluation scheme?

- HOPS or HIPS
  - History
  - Observation (inspection)
  - Palpation
  - Special tests

# What is the purpose of each of the categories?

## ■ History

- Obtaining as much information as possible about the injury
- Past history
- Present history
- Injury location
- Pain characteristics
- Joint responses
- Determining whether the injury is acute or chronic

# What is the purpose of each of the categories?

- Observation
- The examiner gains knowledge and understanding of the athlete's major complaint not only from a history but also through general observation, often done at the same time the history is taken.

# What is the purpose of each of the categories?

## ■ Palpation

- Bony palpation
- Soft tissue palpation



What is the purpose of each of the categories?

- Special tests Movement assessment
  - Active range of motion (AROM)
  - Passive range of motion (PROM)
  - Resisted motions
  - Manual muscle testing

# Manual Muscle Strength Grading Scale:

Grade	%	Value	Strength
5	100	Normal	Complete ROM against gravity, with full resistance
4	75	Good	Complete ROM against gravity, with some resistance
3	50	Fair	Complete ROM against gravity, with no resistance
2	25	Poor	Complete ROM with gravity omitted
1	10	Trace	Evidence of slight contractility with no joint movement
0	0	None	No evidence of muscle contractility

# Reflex Grading

Grade	Name	Definition
0	Areflexia	Absence of reflex
1	Hyporeflexia	Diminished reflex
2	Average	Normal
3	Hyperreflexia	Exaggerated reflex
4	Clonus	Spasmodic alternation of muscle contraction and relaxation, indicating nerve irritation