# WFR Scope of Education

The Scope of Education is subject to change as we continue to focus on the delivery of evidence-based curriculum. Do not share this version of the SOE with others outside of the Base Medical Team

The Scope of Education (SoE) defines the core, elective, and banned curriculum and associated learning objectives at each certification level. Every online and hybrid WFR course will contain the core curriculum. Core curriculum topics marked as mandatory must be included in the practical training delivered by a Base Medical Certified Instructor. WFR non-mandatroy core and elective curriculum topics can be added to the practical training at the instructors discretion as long as the mandatory curriculum topics and objectives are met.

Each SOE topic is divided into 'Assessment' and 'Management' and contains the associated learning objectives. The learning objectives are also separated into 'knowledge objectives' and 'skill objectives'.

Base Medical learning objectives guide our curriculum, online courses, student assessment, and practical training delivered by Base Medical Certified Instructors. For the student, the knowledge objectives outline the knowledge that is needed to adequately assess and manage a particular topic. Skill Objectives outline the actions a student must perform to adequately assess or manage a particular topic.

For a Base Medical Certified Instructor, the knowledge objectives are the objectives that need to be reinforce with students during the practical training. The skill objectives are the actions a student should complete during the practical training. It is the instructor's responsibility to facilitate successful student achievement of the skill objectives.

#### Wilderness First Responder Definition:

A Wilderness First Responder (WFR) is lay medical responder trained to provide initial patient assessment and management, risk-benefit analysis, and evacuation decision making in an area where organized rescue and hospital care is delayed. The WFR has a limited advanced skillset to deal with specific, common issues in wilderness medicine.

#### A Wilderness First Responder course is recommended for:

Non-medical recreational users in outdoor areas where advanced help, evacuation, and access to definitive care may be delayed.

Persons involved with organizations who will be working with other more highly trained individuals. Outdoor professionals, employed or volunteer, such as wilderness guides, outdoor instructors and educators, Search and Rescue members, Mountain Rescue members, ski patrol, medical personnel for adventure races/events, missionaries, and National Park Service members.

# **WFR Course Objectives**

Upon completion of a Wilderness First Responder course, an individual is expected to:

Assess a patient to identify potentially life threatening problems. (Evaluate)

Complete the necessary non-invasive first aid and basic life support interventions to prevent medical problems and injuries from occurring or progressing. (Apply)

Manage a patient in a remote setting for an extended time while mitigating environmental and terrain risks.

(Analyze

Coordinate patient care as the lead medical provider in the absence of higher level care providers. (Create) Determine the need for additional resources and higher level care for patients with life threatening problems.

(Evaluate)

Determine the need for and urgency of evacuation for ill or injured patients. (Evaluate)

**Prerequisites** CPR and AED training

Minimum Time: 62 hours (22 hours online + 40 hours practical training)

#### **Mandatory Practical Topics:**

Medical Legal

WFR Scope and Responsibilities

Consent

Reporting and Documentation

Verbal patient care report

Decision Making

Responder and patient safety concerns

Risk Mitigation Evacuation Decision

### WFR Core Curriculum Topics and Objectives

# **Documentation and Reporting**

Mandatory Verbal Report

The objectives for this topic are currently being written and reviewed.

Mandatory Patient Care Report

The objectives for this topic are currently being written and reviewed.

**Radio Report** 

The objectives for this topic are currently being written and reviewed.

**Medical Legal Practices and Responsibilities** 

Mandatory WFR Scope and Responsibilities

Knowledge Objectives

Describe the general definition a Wilderness First Responder. (Understand)

Describe the major responsibilities of a Wilderness First Responder. (Understand)

Recognize that there are other scopes of practices for each level of medical licensure. (Remember)

Idenitify the hierarchy of medical licensure. (Remember)

Distinguish the WFR SOP as the boundaries of a Wilderness First Responder. (Understand)

Articulate the legal and practical importance of staying with the WFR SOP. (Understand)

Medical Legal

Mandatory Consent

Knowlegde Objectives

Describe the different forms of consent. (Understand)

Recognize that the failure to obtain consent infringes on the patient's right to autonomy. (Remember)

Recognize a patient's right to refuse medical treatment. (Remember) Determine which form of consent applies to a given situation. (Apply)

Skill Objectives

Attain the appropriate form of consent during each scenario. (Apply)

Privacy

**Knowledge Objectives** 

Recognize the legal requirement to protect a patient's privacy. (Remember)

**Duty to Act** 

Knowledge Objectives

Describe the concept of Duty to Act as it applies to a WFR. (Remember)

**Good Samaritan Law** 

Knowledge Objectives

Describe the Good Samaritan Law. (Understand)

Recognize the Good Samaritan Law may differ per state. (Understand)

Abandonment

Knowledge Ojectives

Describe abandonment. (Understand)

Negligence

List the tenents of negligence. (Remember)

**Decision Making** 

Mandatory Rescuer & Patient safety concerns

Knowlegde Objectives

 $\label{patient:equal} \mbox{Evaluate a situation for hazards that threaten the safety of one's self, other rescuers, and the patient.}$ 

(Evaluate)

Evaluate a situation for hazards related to the terrain and environment. (Evaluate)

Determine the appropriate Personal Protective Equipment needed based on the given situation. (Apply)

Skill Objectives

Demonstrate appropriate PPE based on the provided scenario. (Apply)

Mandatory Risk Mitigation

Knowledge Ojectives

Contrast the risks of self-evacuation to technical evacuation. (Understand)

 $\label{linear limit} \mbox{Identify high risk evacuation operations. (Remember)}$ 

Recognize that every situation requires a risk vs benefit analysis. (Remember)

Skill Objectives

Evaluate the risks vs benefits of a given evacuation decision. (Evaluate)

Apply risk mitigation strategies based on evaluation of safety hazards. (Apply)

Mandatory Evacution Decision

Knowledge Ojectives

Recognize that urgency of an evacuation is determined by the severity of the situation. (Remember)

Recognize that urgent evacuation is needed any time a patient's condition is high risk, is worsening, or is not

treatable. (Recognize)

Evaluate the available and needed resources. (Evaluate)

Skill Objectives

Determine appropriate evacuation decisions based on the scenario provided.

Basic Lifts/Moves

Mandatory B.E.A.M.

Skill Objectives

Perform patient BEAM lift to move patient appropriately.

Mandatory Log Roll

Skill Objective:

Perform patient log roll to clear airway appropriately.

Mandatory Recovery Position

Knowledge Objectives

Distinguish the recovery position as protective position for the airway. (Understand)

Skill Objectives

Place a patient into recovery position as appropriate for the given situation. (Apply)

#### Mandatory Litter Packaging

#### **Knowledge Objectives**

Describe the function and importance of padding under and around a patient in a litter basket. (Understand)

Evaluate the risks and benefits of patient litter packaging and transport. (Evaluate)

Demonstrate appropriate patient litter packaging. (Apply)

Demonstrate appropriate Spinal Motion Restriction application to a patient in a litter basket. (Apply)

Demonstrate correct litter carrying techniques with and without a litter wheel. (Apply)

#### Patient Assessment

#### Mandatory Patient Assessment System

#### Knowledge Objectives

Recognize the importance of using the same systematic approach for every patient interaction. (Remember)

Skill Objectives

Complete a comprehensive patient assessment in less than 15 min for a simple scenario. (Apply)

# Mandatory Scene Size Un

#### Skill Objectives

Evaluate a scene as it relates to safety, surrounding terrain, environment, resources, and patient condition.

(Evaluates)

Analyze how aspects relating to safety, terrain, environment, resources, and patient condition may influence the situation. (Analyze) Successfully complete the scene size up using S.T.E.R.I. with each scenario. (Apply)

#### Mandatory Primary Assessment

#### **Knowledge Objectives**

Prioritize the assessment of life threats over other aspects of the Patient Assessment System. (Analyze) Prioritize the management of life threats over other aspects of the Patient Assessment System. (Analyze)

Successfully complete a Primary Assessment survey in each scenario. (Apply)

Assess for life threats before moving on to the secondary assessment. (Evaluate)

Apply appropriate treatment to life threats in a timely manner before moving on to the secondary assessment. (ylqqA)

Ensure patient protection from the environment based on a scenario provided. (Analyze)

# **Basic Life Support**

#### Mandatory Airway & Breathing

# Airway & breathing Assessment

**Knowledge Objectives** 

Distinguish signs and symptoms of airway and breathing compromise. (Understand) Distinguish need for higher level medical care for airway and breathing concerns. (Analyze)

Assess for airway and breathing compromise. (Evaluate)

# Airway & Breathing Management

**Knowledge Objectives** 

Prioritize the management of airway and breathing concerns over less concerning patient problems. (Analyze)

Determine which airway maneuver is appropriate for the given situation. (Apply)

Identify need for airway repositioning in semi and unconscious patients. (Analyze)

Skill Objectives

Apply appropriate treatment to airway and breathing concerns in a timely manner. (Apply)

Determine need for higher level medical care and evacuation for airway and breathing concerns. (Analyze)

# Jaw Thrust

# Skill Objectives

Demonstrate how to open a patient's airway using jaw-thrust as appropriate. (Apply)

# Head Tilt/Chin lift

# Skill Objectives

Demonstrate how to open a patient's airway using head-tilt chin lift as appropriate. (Apply)

# **Mouth-Mask Respirations**

#### **Knowledge Objectives**

Identify need for mouth-to-mask ventilations in patients with decreased or absent respiratory effort. (Analyze) Skill Objectives

Demonstrate correct mouth-to-mask ventilations on an airway mannequin. (Apply)

#### OPA

#### **Knowledge Objectives**

Identify an OPA as an adjunct that facilitates obtaining and maintain a patent airway. (Analyze)

Describe the indications for an OPA. (Understand)

#### Skill Objectives

Determine appropriate size OPA for a patient. (Evaluate)

Demonstrate correct insertion of an OPA in an airway mannequin. (Apply)

#### NPA

#### **Knowledge Objectives**

Identify an NPA as an adjunct that facilitates obtaining and maintain a patent airway. (Analyze)

Identify an NPA as an adjunct option for obtaining and maintaining a patent airway in conscious or semiconscious patients. (Analyze)

Describe the indications for an NPA. (Understand)

Skill Objectives

Determine appropriate size NPA for a patient. (Evaluate)

Demonstrate correct insertion of an NPA in an airway mannequin. (Apply)

Suctioning

**Knowledge Objectives** 

Idenitfy the indications for airway suctioning . (Evaluate)

Review commerical battery-operated and manually operated suction devices. (Remember)

Skill Objectives

Demonstrate correct suctioning technique on an airway mannequin. (Apply)

Avoid suctioning longer than 10 seconds. (Apply)

Oxygen Administration

**Knowledge Objectives** 

Identify indications for supplemental oxygen administration. (Evaluate)

Determine appropriate oxygen delivery device for a given patient. (Evaulate)

Determine appropriate flow rate for a given oxygen delivery device. (Evaluate)

Skill Objectives

Demonstrate correct oxygen tank and regulator assembly. (Apply)

Demonstrate correct oxygen tank and regulator disassembly. (Apply)

Demonstrate appropriate application and use of a nasal cannula. (Apply)

Demonstrate appropriate application and use of a non-rebreather mask. (Apply)

Ventilation

**Knowledge Objectives** 

Explain tidal volume. (Analyze)

Describe the benefits and risks associated with positive-pressure ventilation. (Evaluate)

Explain the importance of avoiding overinflation when delivering positive pressure ventilation to a patient.

(Analyze)

Identify the indication for positive pressure ventilation. (Evaluate)

Skill Objectives

Demonstrate correct bag-valve-mask seal techniques. (Apply)

Demonstrate appropriate operation of a bag-valve-mask to delivery positive pressue ventilations. (Apply)

Demonstrate correct ventilation rate with a BVM on an airway mannequin. (Apply)

Assess patient for complications associated with positive pressure ventilations. (Apply)

Mandatory Circulation Assessment

**Knowledge Objectives** 

Distinguish signs and symptoms of circulation compromise. (Understand)

Distinguish need for higher level medical care for circualtion concerns. (Analyze)

Skill Objectives

Assess for circulation compromise. (Evaluate)

**Circulation Management** 

**Knowledge Objectives** 

Prioritize the management of circulation concerns over less concerning patient problems. (Analyze)

Skill Objectives

Assess for circulation compromise. (Evaluate)

Apply appropriate treatment to circulation concerns in a timely manner. (Apply)

Determine need for higher level medical care and evacuation for circulation concerns. (Analyze)

Bleed Control

Skill Objectives

Complete a blood sweep in 90 secs or less. (Apply)

Prioritize correction of heavy bleeding over airway and breathing concerns. (Analyze)

CPR

AED

Secondary Assessment

Mandatory Patient Interview

**Knowledge Objectives** 

Distinguish SAMPLE history as a necessary means of gathering subjective patient information. (Analyze)

Identify when a situation requires further information gathering beyond SAMPLE. (Analyze)

Distinguish OPQRST as means of gathering subjective patient pain information. (Analyze)

Hx Activity ?

Skill Objectives

Complete a full patient history. (Apply)

Attain OPQRST when appropriate for a given situation. (Apply)  $\,$ 

Attain a history of activity when appropriate for a given situation. (Apply)

Mandatory Vital Signs

Knowledge Objectives

Evaluate vital signs as a measurement of a patient's health status. (Evaluate)  $\,$ 

Interpret a given vital sign or set of vital signs as abnormal or normal. (Evaluate)

Distinguish need for higher level medical care in patients with abnormal vital signs. (Analyze)

Skill Objectives

Complete basic WFR appropriate vital signs (HR, RR, LOC, Skin, BP). (Apply)

**Heart Rate** 

Skill Objectives

Acquire a patient's heart rate. (Apply)

Palpate carotid, radial, and pedal pulses. (Apply)

**Respiratory Rate** 

Skill Objectives

Acquire a patient's respiratory rate. (Apply)

Skin

Skill Objectives

Assess a patient's skin temperature, color, and moisture. (Apply)

Level of Consciousness - A&Ox4, AVPU

Skill Objectives

Determine patients AVPU mental status based on scenario. (Evaluate)

Determine the extent of a patient's alertness using A&O x4 assessment as appropriate for given situation.

(Evaluate)

**Blood Pressure** 

Skill Objectives

Demonstrate appropriate technique for obtaining a patients blood pressure. (Apply)

Acquire a patient's blood pressure via auscultation. (Apply)

Acquire a patient's blood pressure via palpation. (Apply)

**Pulse Oximetry** 

**Knowledge Objectives** 

Recognize that external environmental factors may influence a pulse oximetry reading. (Remember)

Skill Objectives

Demonstrate appropriate technique for obtaining a pulse oximetry reading. (Apply)

**Oral Temperature** 

Skill Objectives

Demonstrate appropriate technique for obtaining a patient's oral temperature. (Apply)

Mandatory Physical Exam

Knowledge Objectives

Distinguishes the Physical Examination as an essential component of the Patient Assessment System.

(Understand)

Skill Objectives

Completes a thorough physical examination. (Apply)

**Palpation** 

Skill Objectives

Distinguishes normal verses abnormal palpation findings. (Understand)

**Motor Function** 

Knowledge Objectives

Identify abnormal motor function findings as an urgent concern. (Analyze)

Skill Objectives

Evaluate gross motor function distal to an injury before and after injury management. (Evaluate)

Sensation

**Knowledge Objectives** 

Identify abnormal sensation function findings as an urgent concern. (Analyze)

Skill Objectives

Evaluate gross sensation function distal to an injury before and after injury management. (Evaluate)

Skin temp/color/moisture

Knowledge Objectives

Identify abnormal skin findings as a concern that warrants further investigation. (Analyze)

Skill Objectives

Evaluate skin distal to an injury before and after injury management. (Evaluate)

Evaluate skin for abnormalities. (Evaluate)

Cap Refill

**Knowledge Objectives** 

Identify abnormal cap refill findings as a possible urgent concern. (Analyze)

Identify reasons for slowed cap refill in absence of pathology. (Analyze)

**Distal Pulses** 

Knowledge Objectives

Identify absent distal pulses as an urgent concern. (Analyze)

Skill Objectives

Evaluate pulses distal to an injury before and after injury management. (Evaluate)

Mandatory Shock

**Shock Assessment** 

**Knowledge Objectives** 

Describe perfusion as the delivery of oxygen and other nutrients by circulation of blood to the cells, tissues and organs. (Understand)

Describe the major body systems and functions that maintain perfusion. (Understand)

Identify that life threats lead to shock due to decreased perfusion. (Analyze)

Identify the signs and symptoms of shock. (Analyze)

Identify shock as life threatening condition that requires urgent management. (Analyze)

Skill Objectives

Identify shock or the potential for shock within the primary assessment. (Analyze)

Shock Management

Knowledge Objectives

Distinguish a decrease in a patient's body temperature as a potentiator of shock. (Analyze)

Determine ABC maintenance, environmental exposure protection, and immediate evacuation as the management of a shock patient. (Evaluate)

Skill Objectives

Apply appropriate treatment to a shock patient in a timely manner. (Apply)

Apply appropriate measures to prevent a decrease in patient body temperature and protect patient from environment. (Apply)

Complete continuous monitoring and maintenance of ABC's. (Evaluate)

Recommend immediate and urgent evacuation of shock patient. (Evaluate)

#### Mandatory Bleed Control

#### **Bleed Control Assessment**

#### Knowledge Objectives

Distinguish bleeding as capillary, venous, or arterial. (Analyze)

Identify a junctional bleeds from extremity bleeds. (Analyze)

Distinguish that significant bleeding and blood loss can occur interally. (Understand)

Identify injuries and mechanisms that are high risk for internal bleeding. (Analyze)

Determine significant blood loss as a life threat. (evaluate)

Skill Objectives

Proiritze significant bleed management over the management of airway and breathing concerns. (Analyze)

Determine the need for immediate and urgent evacuation of patients with a significant bleed. (Evaluate)

#### **Bleed Control Management**

#### Knowledge Objectives

Distinguish the need for management of significant bleeding before the management of airway and breathing concerns. (Understand)

Skill Objectives

Apply appropriate bleed management during the primary assessment. (Apply)

#### Direct Pressure

#### Knowledge Objectives

Identify direct pressure as the inital management of all types of bleeding. (Analyze)

Skill Objectives

Apply direct pressure to a bleed site with a gloved hand. (Apply)

#### **Pressure Dressing**

#### Skill Objectives

Construct a pressure dressing with basic bandages appropriately. (Create)

#### **Tourniquet**

#### **Knowledge Objectives**

Identify the need for a tourniquet to control blood loss in a timely manner. (Analyze)

Identify the potential need for a second tourniquet. (Analyze)

Recognize that a tourniquet must not be removed or loosened after tourniquet application. (Remember)

Skill Objectives

Demonstrate correct application of an improvised tourniquet. (Apply)

# **Hemostatic Dressings**

# Knowledge Objectives

Identify the need for a hemostatic dressing for junctional bleeds. (Analyze)

Skill Objectives

Demonstrate correct application of a hemostatic dressing. (Apply)

# Pelvic Splint

# Skill Objectives

Apply an improvised pelvic splint to high risk patients. (Apply)

### Mandatory Spine Injury

#### **Spine Injury Assessment**

#### **Knowledge Objectives**

Identify mechanisms can cause spinal injury. (Analyze)

Identify the signs and symptoms of spinal injury. (Analyze)

Identify spinal injury as a life threatening injury. (Analyze)

Evaluate the risks and benefits of spinal motion restriction creates for patients and rescue personnel.

(Evaluate)

Skill Objectives

Evaluate need for Spinal Motion Restriction in appropriate patients. (Evaluate)

# NEXUS Knowledge Objectives

(Understand)

Skill Objectives

Assess a patient using NEXUS with the assistance of a study aid. (Apply)

# Spine Injury Management

# **Knowledge Objectives**

Describe Spinal Motion Restriction. (Understand)

 $\label{prioritize} \mbox{ Prioritize the limitation of spinal movement in spinal injury patients. (Analyze)}$ 

Identify B.E.A.M. lift as the preferred patient maneuver. (Understand)

Skill Objectives

Apply spinal motion restriction as appropriate for provided situation. (Apply)  $\,$ 

Complete a patient transfer utilizing the B.E.A.M. lift. (Apply)

Complete a patient log roll. (Apply)

# Mandatory Head Trauma

#### Severe Head Injury

#### Severe Head Injury Assessment

**Knowledge Objectives** 

Identify the signs and symptoms of a severe head injury. (Analyze)

Identify the mechanisms that may cause a severe head injury. (Analyze)

Distinguish a severe head injury as a life threat. (Understand)

Define increasing intracranial pressure. (Remember)

Define Traumatic Brain Injury. (Remember)

Skill Objectives

Assess and monitor the ABC's. (Apply)

Assess and monitor a patient's level of consciousness. (Evaluate)

Determine the need for immediate and urgent evacuation of patients with a severe head injury. (Analyze)

# **Severe Head Injury Management**

**Knowledge Objectives** 

Describe ABC monitoring, LOC monitoring, environmental exposure protection, the limiting of spine movement, elevating the head, and immediate evacuation as the appropriate management of severe head injury patients. (Understand)

Skill Objectives

Apply appropriate measures to prevent a decrease in patient body temperature and protect patient from environment. (Apply)

Apply Spinal Motion Restriction appropriately for severe head injury patients. (Apply)

Apply appropriate head elevation of severe head injury patients. (Apply)

#### Mandatory Concussion

#### **Concussion Assessment**

#### **Knowledge Objectives**

Define a concussion. (Remember)

Identify signs and symptoms of a concussion. (Analyze)

Identify a potential concussion. (Analyze)

#### **Concussion Management**

**Knowledge Objectives** 

Explain how further activity will increase morbidity in concussion. (Analyze)

Skill Objectives

Remove a possibly concussed patient from further activity, observe for signs of worsening, and arrange for further medical evaluation and treatment. (Apply)

#### Mandatory Chest Trauma

### **Chest Trauma General Assessment**

**Knowledge Objectives** 

Review the organs and structures within the chest cavity. (Understand)

Identify mechanisms that increase risk for chest injury. (Evaluate)

Skill Objectives

Expose a patients chest to adequately assess for injury. (Apply)

# **Chest Trauma General Management**

Skill Objectives

Assess and monitor the ABC's of a patient with a chest injury. (Apply)

# **Rib Injuries**

### **Rib Injuries Assessment**

**Knowledge Objectives** 

Identify the possibility of lung injury to underlying tissues from an isolated fractured rib. ( Remember)

Describe flail chest. (Understand)

Identify the high risk of lung injury associated with flail chest injury. ( Analyze)

# **Rib Injuries Management**

**Knowledge Objectives** 

Identify flail chest management as the application of a bulky dressing, lying the patient down on their injured side, monitoring ABC's, and immediate evacuation. (Analyze)

Skill Objectives

Apply a bulky dressing appropriately to flail chest injury. (Apply)

Determine the need for immediate and urgent evacuation for a patient with flail chest injury. (Evaluate)

# **Lung Injury**

# Lung Injury Assessment

Knowledge Objectives

 $\label{thm:continuous} \mbox{Describe basic lung anatomy, including the pleural membranes.} \mbox{ (Understand)}$ 

Identify an open chest wall injury. (Analyze)

Describe a pneumothorax. (Understand)

Describe a hemothorax. (Understand)

Explain the basic pathophysiology of a tension pneumothorax. (Evaluate)  $\,$ 

Identify the signs and symptoms of respiratory compromise. (Evaluate)

# **Lung Injury Management**

**Knowledge Objectives** 

Identify the management of an open chest wall injury as application of an occulsive dressing, monitoring ABC's, and immediate evacuation. (Analyze)

Skill Objectives

Apply a gloved hand over an open chest wall injury immediately upon its discovery. (Apply)

Construct an improvised occulsive dressing taped on four sides over a chest wall injury. (Apply)

Determine the need to immediate and urgent evacuation of a patient experiencing a lung injury. (Evaluate)

# **Cardiac Injuries**

#### **Heart Injury Assessment**

**Knowledge Objectives** 

Identify the possibility of comprpmised cardiac function as a result of chest trauma. (Evaluate) Identify the signs and symptoms can compromised circulation. (Evaluate)

#### **Heart Injury Management**

Skill Objectives

Determine need for immediate and urgent evacution of a patient with compromised cardiac function from chest trauma. (Evaluate)

#### Abdominal Trauma

#### **Abdominal Trauma Assessment**

**Knowledge Objectives** 

Distinguish that injuries within the abdominopelvic cavity can be life threatening. (Understand)

Recognize that solid organ injury can be a source of life threatening internal bleeding. (Remember) Recognize that hollow organ injury witin the abdominal cavity can be life threatening. (Remember) Identify the location of the liver and spleen. (Remember)

Identify the signs and symptoms of abdominal trauma.

Define evisceration. (Remember)

Skill Objectives

Examine the abdomen for signs of trauma and internal bleeding. (Apply)

#### **Abdominal Trauma Management**

**Knowledge Objectives** 

Avoid removing impaled object, unless object interfers with CPR efforts. (Apply) Identify evisceration management as the application of clean, moist dressings, an occulsive dressing,

protecting the patient from the environment, and urgent evacuation. (Evaluate)

Skill Objectives

Stabilize impaled objects in the abdomen. ( Apply)

Construct an appropriate evisceration dressing. (Apply)

Determine the need for immediate and urgent evacuation of patients with an eviseration. (Evaluate) Determine the need for immediate and urgent evacuation of patients with an impaled object. (Evaluate)

#### Mandatory Orthopedic Injuries

### **Orthopedic Injuries General Assessment**

Knowledge Objectives

Differentiate normal vs abnormal CMS findings. (Analyze)

Identify abnormal CMS findings distal to an orthopedic injury as an emergency that requires urgent evacuation. (Analyze)

Skill Objectives

Assess circulation, motor, and sensation (CMS) function distal to injury before and after orthopedic injury management. (Evaluate)

# **Orthopaedic Injury General Management**

Knowledge Objectives

Describe orthopedic injury management as injury stabilization, protection, and monitoring. (Understand) *Skill Objectives* 

Complete CMS monitoring distal to orthopedic injury throughout patient care. (Apply)

Apply appropriate splinting techniques for orthopedic injuries. (Apply)

 $\label{thm:manage} \mbox{Manage pain with over-the-counter Acetaminophen as recommended on medication packaging. (Analyze)}$ 

# Splinting

Knowledge Objectives

Identify the necessery criteria for constructing an adequate improvised splint. (Analyze)

Skill Objectives

Splint injury in position found. (Apply)

Create an adequate improvised splint following the splinting criteria with or without the help of an aid. (Create)

#### Sling and Swathe

Skill Objectives

Create an adequate improvised sling and swathe as appropriate for the injury. (Create)

# **Buddy Tape**

#### Fractures

# **Fractures Assessment**

Knowledge Objectives

Describe a fracture. (Understand)

Differentiate between an open and closed fracture. (Apply)

Identify the signs and symptoms of a fracture. (Analyze)

Skill Objectives

Identify high risk fractures. (Analyze)

#### **Fractures Management**

Skill Objectives

Apply appropriate management techniques of high risk fractures during the primary assessment. (Apply)

Apply gentle traction to align limb into an anatomically neutral position. (Apply)

Apply direct pressure to open fractures to control bleeding. (Apply)

Complete irrigation for open fractures. (Apply)

#### **Pelvis and Hip Injuries**

The objectives for this topic are currently being written and reviewed.

Sprains, Strains, and Dislocation

#### **Sprains and Strains Assessment**

**Knowledge Objectives** 

Describe a sprain or strain. (Understand)

#### **Dislocation Assessment**

**Knowledge Objectives** 

Describe a dislocation. (Understand)

 $Identify\ the\ risk\ of\ circulation,\ sensation,\ and\ motor\ function\ damage\ associated\ with\ a\ dislocation\ injury.$ 

(Analyze)

Other objectives for this topic are currently being written and reviewed.

#### **Compartment Syndrome**

#### **Compartment Syndrome Assessment**

**Knowledge Objectives** 

Describe compartment syndrome. (Understand)

Identify the signs and symptoms of compartment syndrome. (Analyze)

# **Compartment Syndrome Management**

**Knowledge Objectives** 

Identify compartment syndrome as an emergency that requires urgent evacuation. (Analyze)

Skill Objectives

Determine the need for immediate and urgent evacuation for patients experiencing compartment syndrome. (Evaluate)

#### Mandatory Wound Care

#### **Wound Care Assessment**

**Knowledge Objectives** 

Identify which wounds are high risk wounds. (Analyze)

Identify signs and symptoms of wound infection. (Analyze)

Identify situations that are high risk for skin injury. (Analyze)

Associate wound tissue irritation with increased infection risk. (Understand)

Determine which wounds require immediate and urgent evacuation. (Evaluate)

Skill Objectives

Assess CMS distal to wound injury before and after wound management. (Evaluate)

# **Wound Care Management**

**Knowledge Objectives** 

Determine appropriate wound dressing for the given environment and circumstances. (Evaluate)

Avoid topical ointments and impregnated dressings over the surface of the wound. (Apply)

Identify need to change wound dressings every 24 hours. (Understand)

Skill Objectives

Apply appropriate wound dressing for the given environment and circumstances. (Apply)

# **Wound Irrigation**

**Knowledge Objectives** 

Distinguish pressurized wound irrigation with clean drinking water free of additives as the best mechanism of preventing infection. (Analyze)

Skill Objectives

Demonstrate proper wound irrigation. (Apply)

Avoid use of additives such as soaps and disinfectants in irrigation solution. (Apply)  $\,$ 

#### **Non-Invasive Wound Closure**

Knowledge Objectives

Determine which wounds can be closed with non-invasive wound closure techniques. (Evaluate)

Skill Objectives

Apply adhesive bandages (such as steri strips) for wound closure appropriately. (Aplpy)

#### **Blisters**

#### **Blister Assessment**

Knowledge Objectives

Describe the mechanisms of blister formation. (Understand)

#### **Blister Management**

Knowledge Objectives

Determine which blisters should be to drained. (Evaluate)

Identify the reasons for leaving the roof of a blister intact. (Analyze)

#### Burn Injuries

# **Burn Assessment**

# **Knowledge Objectives**

Describe a minor burn as ....

Describe a major burn as...

Identify signs and symptoms of a possible airway burn. (Analyze)

Identify which burns are high risk burns that require immediate and urgent evacuation. (Analyze) Identify hypothermia, hypovolemic shock, and infection as risks associated with major burns. (Analyze)

#### **Burn Management**

#### **Knowledge Objectives**

Identify burn management as stopping the burning process, dressing the burn wounds, protecting the patient from environmental exposure, monitoring the ABC's, and urgent evacuation. (Analyze)

Skill Objectives

Apply cool water to burn wounds to stop the burning process. (Apply)

Apply dry, non-adherent dressing to burn site. (Apply)

Avoid the application of topical ointments to burn wounds and dressings. (Apply)

Apply appropriate measures to prevent a decrease in patient body temperature and protect patient from environment. (Apply)

Manage pain with over-the-counter Acetaminophen as recommended on medication packaging. (Analyze)

#### Mandatory Altered Mental Status

# **Altered Mental Status General Assessment**

#### **Knowledge Objectives**

Identify various causes of altered mental status. (Analyze)

Identify behavorial presentations of altered mental status. (Analyze)

Identify altered mental status as a symptom of a problem. (Analyze)

Identify altered mental status as a life threatening concern that needs further investigation. (Analyze)

Skill Objectives

Recognize a patient with abnormal behavior as having altered mental status. (Remember)

Create a differential problem list for patients exhibiting altered mental status. (Create)

#### **Altered Mental Status General Management**

#### Skill Objectives

Determine the need for immediate and urgent evacuation of patients exhibiting an altered mental status. (Evaluate)

#### Seizures

#### Seizure Assessment

#### Knowledge Objectives

Recognize that there are different types and causes for seizures. (Remember)

Define a seizure as abnormal brain activity typically manifesting as repetative jerking movements and/or loss of consciousness

Distinguish that a Postical patient with persistent unresponsiveness more than 20 minutes is atypical and worrisome

Create a differential problem list for patients exhibiting altered mental status. (Create)

Skill Objectives

Evaluate need for evacuation of a seizure patient. (Evaluate)

#### Seizure Management

#### Knowledge Objectives

Identify seizure management as providing patient protection, monitoring the ABC's, monitoring mental status, and possibly evacuation. (Analyze)

Skill Objectives

If available and training has been provided, assess patient's blood glucose level. (Apply)

Apply appropriate protective measures for a patient during and after seizure activity. (Apply)

#### Stroke

#### Stroke Assessment

#### Knowledge Objectives

Describe stroke as an interruption of cerebral circulation leading to brain cell death. (Understand)

Identify stroke as a time critical emergency that requires higher level medical care and immediate evacuation. (Analyze)

Identify signs and symptoms of a stroke. (Analyze)

Skill Objectives

Create a differential problem list for patients exhibiting stroke symptoms. (Create)

Demonstrate the FAST assessment for stroke victims with or without help of an aide. (Apply)

# **Stroke Management**

# **Knowledge Objectives**

Identify stroke management as monitoring the ABC's, avoiding oral intake or medication adminstration, and immediate evaucation. (Analyze)

Skill Objectives

 $\label{prop:continuous} A void \ or all intake \ or \ medication \ administration \ to \ stroke \ victims \ (including \ Aspirin). \ (Apply)$ 

Determine need for immediate and urgent evacuation. (Evaluate)

# Psychological Issues & First Aid

The objectives for this topic are currently being written and reviewed.

#### Mandatory Respiratory Difficulty

### **Respiratory Difficulty General Assessment**

#### **Knowledge Objectives**

Describe basic anatomy and physiology of the respiratory system. (Understand)

Identify respiratory difficulty of any nature as an emergency that requires higher level care and urgent evacuation. (Analyze)

Identify general pathophysiologies that result in respiratory difficulty. (Analyze)

Identify signs and symptoms of respiratory difficuly. (Analyze)

Skill Objectives

Assess respiratory difficulty within the primary assessment. (Apply)

Complete a focused patient history interview. (Apply)

#### **Respiratory Difficulty General Management**

Knowledge Objectives

 $Identify\ general\ management\ of\ respiratory\ difficulty\ as\ monitoring\ of\ ABC's\ and\ immediate\ and\ urgent$ 

evacuation. (Analyze)

Skill Objectives

Determine need for immediate and urgent evacuation. (Apply)

#### COPD

#### **COPD Assessment**

**Knowledge Objectives** 

Describe the basic pathophysiology of Asthma. (Understand)

Describe the basic pathophysiology of Chronic Bronchitis. (Understand)

Describe the basic pathophysiology of Emphysema. (Understand)

Identify the signs and symptoms of COPD. (Analyze)

Identify COPD as a potential life threat that requires higher level care and evacuation. (Analyze)

#### **COPD Management**

Skill Objectives

Assist with administration of patient's own emergency inhaler. (Apply)

Determine the need for patient evacuation. (Evaulate)

#### **Cardiac and Circulation Issues**

#### **Chest Pain**

#### **Chest Pain Assessment**

**Knowledge Objectives** 

Describe Angina Pectoris. (Understand)

Describe Myocardial Infarction. (Understand)

Identify unstable Angina Pectoris. (Analyze)

Differentiate between Angina Pectoris pain and Myocardial Infarction pain. (Analyze)

Identify the signs and symptoms of possible myocardial infarction. (Analyze)

Identify cardiac issues as life threatening and requires urgent evacuation to higher level medical care.

(Analyze)
Identify the need for higher level medical care and urgent evacuation with patient's experiencing unstable

Angina Pectoris. (Analyze)

Skill Objectives

Assess patient's cardiac history and illness with focused patient history interview. (Evaluate)

# Chest Pain Management

**Knowledge Objectives** 

Identify management of possible mycardial infarction as moniting ABC's, reducing patient's physical exertion, administering 325 mg ASA, and urgent evacuation. (Analyze)

Skill Objectives

Avoid patient physical exertion. (Apply)

Determine the requirement of higher level medical care and urgent evacuation. (Evaluate)

Syncope

The objectives for this topic are currently being written and reviewed.

#### **Palpitations**

The objectives for this topic are currently being written and reviewed.

# Mandatory Allergic Reaction

### **Allergic Reaction Assessment**

**Knowledge Objectives** 

Differentiate between an isolated allergic reaction and anaphylaxis. (Analyze)

Identify the signs and symptoms of anaphylaxis. (Analyze)

Identify an anaphylactic reaction as a life threatening problem that requires higher level medical care and immediate evacuation. (Analyze)

Skill Objectives

Assess for respiratory difficulty and compromised circulation during the primary assessment. (Apply)

### Allergic Reaction Management

Knowledge Objectives

Identify management of an anaphylactic reaction as removal of allergen, administration of epinepherine, administration of diphenhydramine, monitoring the ABC's, and immediate evacuation to higher level medical care. (Analyze)

 $\label{eq:decomposition} \mbox{Describe the basic pharmacologic actions of epinepherine. (Understand)}$ 

Describe the basic pharmacologic actions of diphenhydramine. (Understand)

Skill Objectives

Determine need for epinepherine as soon as an allergic reaction threatens the airway or circulation compromise. (Evaluate)

Demonstrate proper administration of an epinepherine auto-injectore. (Apply)

Administer over-the-counter diphenhydramine as recommended on medication packaging. (Apply) Determine need for immediate and urgent evacuation, even with patient improvement. (Evaluate)

# Mandatory Hypoglycemia

#### Knowledge Objectives

Describe basic metabolism as the breakdown of glucose into energy for the body. (Understand)

Recognize the brain requires glucose to function normally. (Remember)

Describe hypoglycemia. (Understand)

Describe the various mechanism that may lead to hypoglycemia. (Understand)

Describe hyperglycemia. (Understand)

Identify hypoglycemia as an immediate life threat. (Analyze)

Identify signs and symptoms of hypoglycemia. (Analyze)

#### Hypoglycemia Management

#### **Knowledge Objectives**

Identify management of hypoglycemia as the adminstration of sugar, monitoring the ABC's, and possible evacuation. (Analyze)

Skill Objectives

Administer oral glucose in alert patients. (Apply)

Administer buccal glucose in semi-conscious patients. (Apply)

Avoid administration of insulin. (Apply)

Reassess patient and determine need for evacuation appropriately. (Evaulate)

#### GI/GU

#### **Abdominal Pain**

The objectives for this topic are currently being written and reviewed.

# Gastrointestinal Issues The Genitourinary Issues

The objectives for this topic are currently being written and reviewed.

The objectives for this topic are currently being written and reviewed.

# HEENT

Eye Injury

The objectives for this topic are currently being written and reviewed.

#### **Vision Issues**

The objectives for this topic are currently being written and reviewed.

# **Dental Injury**

The objectives for this topic are currently being written and reviewed.

#### Nose

The objectives for this topic are currently being written and reviewed.

#### Mandatory

### Hypothermia Hypothermia Assessment

#### Knowledge Objectives

Describe the mechanisms of evaporation, conduction, convection, and radiation heat loss into the environment.

(Analyze)

Identify the signs and symptoms of mild hypothermia. (Analyze)

Identify the signs and symptoms of moderate hypothermia. (Analyze)

Identify the signs and symptoms of severe hypothermia. (Analyze)

Recognize need to gently handle severely hypothermic patients to avoid cardiac dysrhythmia. (Remember)

Skill Objectives

Assess patient mentation. (Evaluate)

Verify that the patient has adequate and dry clothing layers to maintain warmth. (Evaluate)

Assess for other causes of altered mental status in a hypothermic patient. (Evaulate)

Avoid prolonged exposure to environment when assessing a patient. (Apply)

### **Hypothemia Mangament**

# **Knowledge Objectives**

Identify moderate to severe hypothermia management as removal of patient from environment into a

hyowrap, removal of wet clothing, monitoring ABC's and mentation, and immediate evacuation. (Analyze)

Identify the immediate need to isolate the patient from the ground. (Analyze)

Demonstrate gently handling of severly hypothermic patients. (Apply)

Provide ground insulation for a patient in a timely manner. (Apply)

Remove patient's wet clothing. (Apply)

Provide warm, sugary foods and liquids to patients with normal mentation. (Apply)

Reassess mild to moderate hypothermic patients for need of possible evacuation. (Evaluate)

# Hypothermia Wrap

# **Knowledge Objectives**

Identify the components of a hypowrap as ground insulation, patient insulation, heat reflection, and a vapor barrier. (Analyse)

Explain the function of each component of a hypothermia wrap. (Understand)

Determine the need to evacuate severe hypothermic patients. (Analyse)

Skill Objectives

Construct a hypothermia wrap succesfully. (Create)

Explore options to improvise the various components of a hypowrap when limited resources are available. (Analyze)

#### **CPR and Resuscitation Concerns**

#### Knowledge Objectives

Recognize CPR for a hypothermic patient is different. ( Remember)

#### Skill Objectives

Determines when to not initate CPR as appriopriate based on provided situation. (Evaluate)

Assesses for carotid pulse for a minimum of 60 seconds in hypothermic patients. (Apply)

# **Cold Injuries**

#### Frostbite

#### **Frostbite Assessment**

Knowledge Objectives

Define frostnip. (Remember) Recongize the presence of frostnip as the precursor to frostbite. (Remember)

Define Frostbite. (Remember)

Identify the signs and symptoms of frostbite before and after thawing. (Remember)

Associate discolored, darken tissue post-thawing as necrosed tissue that needs immediate medical attention.

(Understand)

Skill Objectives

Assess for the presence of other comorbidities, such as hypothermia, diabetes, etc. (Evaluate)

#### **Frostbite Management**

#### **Knowledge Objectives**

Identify frostbite management as protecting frostbiten site from injury and the environment, ceasing further tissue freezing, and immediate evacuation. (Remember)

Describe passive and active thawing. (Remember)

Skill Objectives

Avoid rubbing or massaging frostbiten site. (Understand)

Avoid initiatiing active thawing efforts for frostbiten areas. (Understand)

Avoid rupturing of blisters. (Understand)

Apply dry, bulky dressing to frostbiten site to isolate and protect from further injury and the environment.

(Apply)

Apply measures to prevent refreezing in thawed frostbite injuries. (Apply)

Manage pain with over-the-counter Acetaminophen or Ibuporfen as recommended on medication packaging.

(Analyze)

Determine need for immediate and urgent evacuation. (Evaluate)

#### **Immersion Foot**

### **Immersion Foot Assessment**

**Knowledge Objectives** 

Describe the etiology of immersion foot. (Understand)

Describe the signs and sypmtoms of immersion foot. (Understand)

#### **Immersion Foot Management**

**Knowledge Objectives** 

Describe the management of immersion foot as removal of wet items, gently drying, and protecting the feet with clean bulky dressings. (Undestand)

#### Mandatory

#### Heat Illnesses

# Heat Syncope

# **Heat Syncope Assessment**

Knowledge Objectives

Identify heat syncope as an isolated syncopal episode with no other signs or symptoms after heat exposure.

(Analyze)

Skill Objectives

Assess for other possible causes for syncopal episode. (Evaluate)

#### **Heat Syncope Management**

Knowledge Objectives

Identify management of heat syncope as removal from the heat, cooling, rest, and hydration. (Analyze)

Skill Objectives

Remove or protect patient from environment. (Apply)

#### **Heat Exaustion**

#### **Heat Exaustion Assessment**

**Knowledge Objectives** 

Describe heat exhaustion. (Understand)

Identify heat exhaustion as a precusor to heat stroke. (Analyze)

Skill Objectives

Assess for other potential problems besides or in addition to heat exhaustion. (Apply)

# **Heat Exhaustion Management**

**Knowledge Objectives** 

Identify management of heat exhaustion as removal from the heat, cooling, rest, and hydration. (Analyze)

Skill Objectives

Remove or protect patient from environment. (Apply)

# **Heat Stroke**

# **Heat Stroke assessment**

Knowledge Objectives

Define hyperthermia. (Remember)

Identify the signs and symptoms of heat stroke. (Analyze)

Identify heat stroke as a life threat. (Analyze)

#### **Heat Stroke Management**

#### **Knowledge Objectives**

Identify management of heat stroke as removal/protection from the environment, supporting the ABC's,

aggressive cooling, and immediate evacuation. (Analyze)

Prioritize agressive cooling on site if evacuation will delay cooling efforts. (Analyze)

Skill Objectives

Apply agressive cooling measures with ice water immersion if possible. (Apply)

Apply mosit clothing and fan to promote patient cooling in the absence of cold-water immersion. (Apply)

Recommend urgent evacuation of heat stroke patients. (Evaluate)

#### Mandatory Lightning

# **Lightning Assessment**

#### **Knowledge Objectives**

Describe basic lightning and thunderstorm safety. (Understand)

Identify risk high lightning locations. (Analyze)

Describe the lightning crouch position. (Understand)

Describe possible minor and major lightning-assoicated injuries. (Understand)

Skill Objectives

Assess scene for safety. (Apply)

Assess for lightning-associated injuries with a complete head-to-toe physical exam. (Apply)

Practice reverse triage for the assessment of multiple patients. (Apply)

#### **Lightning Management**

# Knowledge Objectives

Identify cardiopulomonary arrest as the cause of sudden death in patients with lightning-associated injuries.

(Analyze)

Prioritize the initiation of Cardiopulmonary Resusitation efforts. (Analyze)

Skill Objectives

Determine the need for immediate and urgent evacuation in critical patients with lightning-associated injuries.

(Evaluate)

Determine the need for evacuation of stable lightning-associated injury patients. (Evaluate)

#### Drowning

The objectives for this topic are currently being written and reviewed.

#### **Poisoning**

The objectives for this topic are currently being written and reviewed.

# Bites and Envenonmation

The objectives for this topic are currently being written and reviewed.

# Hyponatremia

# Hyponatremia Assessment

# **Knowledge Objectives**

Describe hyponatremia as a decrease in sodium levels within the body. (Understand)

Identify the primary cause of hyponatremia as overhydration and decreased urine output. (Analyze)

 $Identify\ hyponatremia\ as\ life\ threatening\ condition\ that\ requires\ immediate\ evacuation.\ (Analyze)$ 

Identify the signs and symptoms of hyponatremia. (Analyze)

Skill Objectives

Assess for other casues of the patients signs and symptoms. (Apply)  $\,$ 

Assess amount of fluid patient has ingested within 24 hours. (Apply)

# Hyponatremia Management

#### Knowledge Objectives

Identify management of hyponatremia as restriction of further water consumption, monitoring the ABC's, and urgent evacuation. (Analyze)

Skill Objectives

Provide a high sodium broth solution to alert and oriented patients if evacuation is delayed. (Apply)

Determine need for immediate and urgent evacuation. (Evaluate)

#### Mandatory Altitude Illness

# **Acute Mountain Sickness**

# **Acute Mountain Sickness Assessment**

Knowledge Objectives

Describe Acute Mountain Sickness. (Remember)

Identify the minimum altitude Acute Mountain Sickness may occur. (Remember)

Describe the signs and symptoms of Acute Mountain Sickness. (Remember)

Skill Objectives

Assess for causes other than Acute Mountain Sickness. (Apply)

# **Acute Mountian Sickness Managment**

Knowledge Objectives

Describe the recommended guidelines for high altitude acclimatization above 3000 meters (10,000 ft) .

(Understand)

Describe management of Acute Mountian Sickness as descent, rest, hydration. (Understand)

# High Altitude Cerebral Edema

High Altitude Cerebral Edema Assessment

#### **Knowledge Objectives**

Identify High Altitude Cerebral Edema as potentially life threatening brain swelling. (Analyze) Identify the signs and symptoms of High Altitude Cerebral Edema. (Analyze)

# **High Altitude Cerebral Edema Management**

# Knowledge Objectives

Identify management of HACE as descent by at least 1000 ft., oxygen administration if available, and immediate evacuation. (Analyze)

If descent is not possible, recommend the use of a portable hyperbaric chamber is management until descent is possible. (evaluate)

#### **High Altitude Pulmonary Edema**

#### High Altitude Pulmonary Edema Assessment

#### **Knowledge Objectives**

Identify High Altitude Pulmonary Edema as a possibly life threat. (Analyze) Identify the signs and symptoms of High Altitude Pulmonary Edema. (Analyze)

# **High Altitude Pulmonary Edema Management**

**Knowledge Objectives** 

Identify management of HAPE as descent by at least 1000 ft., oxygen administration if available, and immediate evacuation. (Analyze)

If descent is not possible, recommend the use of a portable hyperbaric chamber is management until descent is possible. (evaluate)

# Medications

The objectives for this topic are currently being written and reviewed.

Epinephrine Auto Injector
Oral glucose
Oral Hydration
Oral Nutrition
Over-the-Counter Medications
Aspirin
Acetaminophen
NSAIDs
Rescue Inhaler
Diphenhydramine