

ECA

# Study Guide

Knowledge Objectives  
Clinical Operating Guidelines  
06.01.08

This study guide encompasses all the knowledge objectives for the Austin/Travis County EMS System Clinical Operating Guidelines (COG). Every exam question will reference one or several knowledge objectives found in this document. This study guide follows the COG released June of 2008. In addition, some knowledge objectives covered here address basic ECA knowledge, as it is expected that the ECA will have a knowledge base appropriate for his or her certification level.

Review of this study guide will cover every point on the COG exam. More importantly, it is designed to prepare the provider to use the COG to provide patient care to the citizens of Austin/Travis County.

It is suggested that the provider first read the appropriate section of the COG then review the objectives.

As always if there are any questions please feel free to contact the OMD at [www.atcomd/contact.htm](http://www.atcomd/contact.htm) or call the office at 978-0000.



## Professional Practice

### ***System Design***

- Describe the term “EMS System”
- Identify who comprises the EMS System
- Identify what the System provides our ill or injured patients
- Identify who may provide care within the environment specified in the COGs
- Explain licensure or certification requirements for credentialed providers
- Describe how a non-TDSHS certified/licensed individual can provide care within the System
- Explain how 911 requests for care will be managed.
- Identify what level of care all First Response Organizations (FROs) will be able to provide.
- Identify what supplies all FRO’s must maintain according to the COG’s.
- Identify what part(s) of the System are capable of delivering ALS care.
- Explain the use of “non-prescriptive” medications not specifically included in the COG.
- Identify under what conditions the System Design may be modified to best meet the needs of the EMS system.

### ***Medical Oversight of the System***

- Identify the Medical Director for the Austin/Travis County EMS System
- Explain the process used by the Office of the Medical Director to implement change.
- Identify who must approve all medical care within the Austin/Travis County EMS System
- Explain the purpose of a Medical Directive
- Explain the dissemination process for a Medical Directive
- Describe the purpose of the Quality and Medical Oversight team.
- Identify the issues the Office of the Medical Director will address during Special Circumstances.
- Identify the organization that determines demobilization and how and when the System will return to normal activities.
- Describe the process for implementing research or trials.

### ***System Credentialing***

- Explain the difference between “credentialed” and “certified/licensed”
- Explain how a credentialed provider is able to provide care.
- Explain delegated authority
- Describe “credentialing”
- Identify the different levels of Credentialing
- Explain the difference between “credential” and “qualification”
- Explain what a provider must do after being initially credentialed to continue providing care at a designated level over time.
- Describe what happens for individual providers with special circumstances such as FEMLA, Military Deployment, OJI, etc.

**Skills/Interventions Authorized by Credential Level and Qualification**

- List the skills allowed for the ECA

**Credentialing Requirements**

- Identify the initial credentialing requirements for the ECA
- Identify the maintenance requirements to remain credentialed as an ECA

**System Identification Badges**

- Identify who requires proper identification of System Providers
- Explain the reasons for proper identification
- Identify which department “owns” the credentialing badges
- Explain the circumstances under which the badge is valid
- Describe what happens to a badge if credentials are revoked or the provider leaves an organization
- Describe how the badges will be worn
- Identify the badge color appropriate for the ECA
- Explain what level you will operate as should you be credentialed but without your badge
- Identify who on scene is responsible for assuring badge compliance
- Explain what would happen should a Provider within the A/TCEMS System perform a procedure without being credentialed to do so
- Describe the actions the Provider must take should he or she perform a procedure without being credentialed to do so

**Suspension or Revocation of Credentials**

- Identify the *Five Deadly Sins*
- Explain what happens within the System should the provider have a lapse, loss, or suspension of TDSHS Certification, Licensure or Texas Nursing Board License
- Describe what happens within the System should the provider have a lapse, or loss of required national standards certifications required for his or her credentialing level
- Explain what a provider must do if he or she is no longer affiliated with the Registered System Provider Organization
- Explain what happens to a provider’s credentials if he or she goes 30 days without affiliation with a System Provider Organization
- Describe the process for a provider who has had his or her credentials revoked but then associates with a System Provider Organization
- Explain what a provider must do should he or she be arrested for an activity that could be considered a threat to public health
- Describe what the provider must do if he or she has action taken against them by TDSHS or the Texas Nursing Board
- Identify who will be notified of a problem with a provider’s credentials

**Logistics of Patient Care On-Scene**

- Identify the emphasis for on-scene care
- Describe the seniority of credentialed providers on-scene
- Identify what should happen should there be an unresolved on-scene conflict

***Cancellation or Alteration of a Response***

- Identify who may modify or cancel the response of another system provider
- Describe what you may do should you be cancelled but decide to continue on to the scene

***Transfer of Care to a Provider of Lesser Credentialing***

- Identify who on scene has the ultimate decision of whether or not to initiate transport
- Identify when it is appropriate to leave patients on-scene
- Describe incidences where it may be appropriate to transfer care from to a provider at a more basic credentialing level
- Identify what must happen prior to transport of the critically ill patient
- Explain what must happen should a patient requiring immediate advanced stabilization still be on scene
- Identify who makes transport decisions in mass and multi-casualty incidents

***First Responder Accompanying Ambulance Transport of Critically Injured/III Patients***

- Describe what happens if an ECA is requested to accompany transport providers during transport of critically ill/injured patients, particularly if first responders are not available

***On-Line Medical Consultation (OLMC)***

- Describe reasons you may wish to contact OLMC
- Identify where OLMC should be requested from
- Explain what should be done with orders received from OLMC or the patient's personal physician

***Interacting with On-Scene Healthcare Professionals***

- Explain the difference between a "Patient's Personal Physician" and an "Intervener Physician"
- Describe the general guidelines for use of a physician on-scene
- Describe the responsibilities of the patient's personal physician on-scene
- Describe the provider's responsibilities when using the patient's personal physician
- Explain what will happen if there is a disagreement between the patient's personal physician and the System COGs
- Explain the options the OLMC has with an intervener physician on-scene
- Describe what happens should there be a disagreement between the intervener physician and OLMC
- Describe where and how the intervener physician must document
- Explain how the decision for the intervener physician to accompany the patient to the hospital will be determined
- Explain whether or not non-physician healthcare providers may give medical orders

## Applicability of COG's

### ***What is the Definition of a "Patient"?***

- Explain why it is important to define a patient
- Define "patient"
- Explain what you will do if there are questions or doubts as to whether or not a person should be considered a patient
- Define "adult"
- Define "minor"
- Explain the meaning of "emancipated"
- Define "pediatric patient"

### ***Patient Consent and Refusal***

- Explain the universal goal for patient care
- Describe the best policy should providers and patients disagree about patient care decisions
- Identify who has the right to refuse care
- Describe "informed consent"
- What are the providers' responsibilities when it comes to informed consent?
- Define "implied consent"
- Explain when the provider may provide care under implied consent
- Describe "substituted consent"
- Explain the five principles providers must follow to meet our obligation for consent
- Identify what information the provider must give the patient should he or she refuse further evaluation/treatment

### ***Legal Competency and Present Mental Capacity to Consent or Refuse Evaluation or Treatment***

- Explain "mental competency"
- Explain "present mental competency"
- Describe the things a provider must evaluate to determine if a patient's disposition is safe and appropriate given the circumstances
- Explain what may happen should a patient show evidence of suicidal ideations, suicide attempts, or indicate in some way that he or she may be a danger to themselves or others – but are also refusing care
- Describe what a thorough test of the patient's mental status actually tests (i.e. "orientation, etc...")
- Describe how to test for Level of Consciousness
- Explain how to determine if a patient is awake, alert, and oriented
- Explain how to test for memory, or registration
- Describe how to test attention and calculation
- Describe how to test for recall
- Explain what the provider must do if the patient does not have the legal competency and present mental capacity to consent, and the principles of implied consent do not apply

- Identify who must be contacted prior to any patient being transported against his or her will
- Describe the documentation required for a patient refusal

***Consent to Evaluation/Treatment for a Minor and Refusal of Evaluation/Treatment for a Minor***

- Identify who may provide consent for a minor
- Describe under what circumstances a minor can provide consent or refuse treatment
- Describe under what circumstances a provider may be denied access to minor children by a guardian
- Identify whether parents or guardians can refuse life-saving therapy for a child based on religious or other grounds

***Restraint/Transport Against Patient Will***

- Explain the steps the provider will take prior to transporting a patient against his or her will
- Explain what must be determined prior to restraining a patient with or without law enforcement assistance
- Describe the documentation related to the physically restrained patient
- Explain whether or not it is appropriate to ever leave a patient alone while restrained
- Explain how often a patient should be monitored while restrained

***Initiation and Termination of Cardiopulmonary Resuscitation (CPR)***

***Initiation of CPR***

- Explain when it is not appropriate to initiate CPR
- Describe when it is not appropriate to begin CPR on the traumatic arrest patient

***Termination of Resuscitation Efforts Without OLMC***

- Describe the circumstances when a provider may discontinue resuscitation efforts WITHOUT OLMC
- Describe what to do if the provider elects to not initiate resuscitative efforts or to terminate efforts without involvement of OLMC in terms of notifying incoming units.

***Out of Hospital Advanced Directives Pertaining to Resuscitation***

- Explain when an Out of Hospital Do Not Resuscitate (OOH DNR) should NOT be honored
- Describe what to do if there is a question whether or not to honor an OOH DNR or other advanced directive

***Important Points to Remember***

- Explain when it may be appropriate to transport a patient to the hospital for pronouncement when the COG's indicate that it might not be needed
- Identify where you would document the non-honoring of a DNR
- Describe care that might be provided to a patient with a DNR
- Explain what will be done if there is doubt as to the validity of a DNR or the patient's wishes

***Crime Scene Preservation Principles/Access to Patients in a Potential Crime Scene***

- Explain the first general principle of crime scene management
- Identify who will be notified should law enforcement prevent entrance to a scene
- Identify how a weapon will be handled if it is necessary
- Describe documentation required for a crime scene
- Explain what you would tell a patient who wants to take a shower/bath prior to transport
- Explain how you would handle bindings on a patient
- Describe how you would handle containers of a substance that may have been ingested in a suicide attempt
- Identify what you will do with disposable items used on scene
- Explain how to manage covering a body on scene
- Identify who takes responsibility of the body once a pronouncement time is obtained
- Explain whether or not it is acceptable to share patient care information with appropriate law enforcement officers if the patient has been pronounced dead
- Describe how the responder will make entry and exit from a crime scene where no resuscitation is initiated
- Explain how to document items left on scene
- Explain what the responder will do if law enforcement is not on scene prior to transport of the patient

**Patient Care Reporting Requirements**

***Guiding Principles of Documentation for All Organizations Using Any Paper Form or Automated Charting***

- Describe the minimum requirements for all patient care documentation by any credentialed provider in the System

***Minimum Data Elements Required for First Responder Patient Care Report Documentation***

- List the minimum data to be collected on all patient encounters within the system
- Describe how data will be collected and stored

***Clinical Errors and Reporting***

- Describe the purpose of a review of a clinical error
- Explain how the provider will report clinical errors
- Explain the responsibility of the FRO regarding the incident
- Identify who will review all clinical incidents

***Clinical Review Process***

- Describe the purpose of the clinical review process
- Explain what the A/TCEMS Quality and Medical Oversight Team hopes to use the process for
- Identify the primary focus of the clinical review process

**System Impact**

- Explain whether or not providers are expected to participate in the clinical review process

**Philosophy**

- Identify who initiates and administers the clinical review process
- Describe the goal behind the clinical review process
- Describe the general structure of the clinical review process

**Purpose**

- Describe the desired outcomes of the clinical review process
- Identify which department is responsible for resolving clinical conflicts

**Confidentiality**

- Identify who should be directly involved in clinical performance concerns or complaints
- Explain why discussion of events is strongly discouraged

**Definitions**

- Define “organization”
- Define “event”
- Define “event review”
- Define “incident”
- Define “near miss”
- Define “sentinel event”
- Explain the expanded description of “sentinel event” as explained by the OMD
- Define “non-sentinel event”

**Process**

- Explain when a review will take place
  - Explain when notification must take place for a:
    - Sentinel event
    - Non-sentinel event
    - Near-miss event

**Core Principle – Provider Safety and Well Being**

**Introduction**

- List some of the inherent risks to the EMS provider
- Describe the first step in minimizing provider risk
- List some examples of scenes requiring caution

**Infection Control**

**Basic Protection Guidelines and Immunizations**

- List the currently recommended immunizations
- Describe proper handwashing technique

***Personal Protective Equipment (PPE)***

- Explain whether or not PPE eliminates the possibility of infection
- Describe the purpose of PPE
- Describe when gloves will be worn
- Describe what type(s) of PPE are appropriate during airway management procedures or during any other situation where fluid splash contact with the provider's face is a possibility
- Explain when a provider should use a gown
- List patient signs/symptoms that indicate the need for some level of respiratory protection
- Describe the proper use of the N95 mask

***Sharps Hazards***

- Identify the most common occupational blood exposure

***Cleaning and Disinfection of Equipment and Work Areas***

- Explain whether or not it is appropriate to wear PPE during cleaning
- Describe how you would properly clean and disinfect a surface

***Exposure Follow-Up***

- Describe the general guidelines after an exposure
- Explain whether or not exposures require immediate intervention
- Identify who you will report a suspected exposure to
- Identify who you can contact with questions or for consultation regarding post exposure actions
- Describe what the provider should do post needle stick, spray to the mucous membrane, or patient blood contacting non-intact skin

***Violence Against Providers***

- Explain our first obligation on any medical scene
- Explain whether or not it is expected for providers to place themselves in a situation that has a high likelihood of causing harm to the provider

***Staging and Retreat***

- Explain whether or not it is appropriate to stage and/or retreat from a scene
- Identify who should be a part of any dangerous scene management

***Psychological Stress and Burnout***

- Explain how excessive stress and/or inadequate coping strategies affect job performance
- List health problems related to chronic stress

## **Core Principle – Airway, Breathing, and Circulation (Perfusion & Resuscitation)**

### ***Introduction***

- Describe our initial priority (on a secure scene)
- Describe perfusion
- Identify what must be in place to have adequate perfusion

## **Core Principle - Airway**

### ***Introduction***

- Identify the purpose of establishing an adequate airway
- Identify risks that occur DURING airway intervention
- Explain what needs to be done if attempts at advanced airway placement are difficult or prolonged
- Describe how to know whether a BLS airway may be more appropriate for the patient than an advanced airway
- Identify who is responsible for identifying when periods of no ventilation exist and make efforts to correct the situation

### ***The TEAM Leader***

- Identify when a team leader should be designated
- Explain how the team leader is identified
- Describe how the decision for team leader should be determined
- Explain whether a team leader can give orders outside their designated credential level
- Identify the data the team leader will obtain and provide to the other providers on scene
- Explain what a team leader is NOT

### ***Airway Management Approach***

- Explain the process a provider should go through to decide how to best manage an airway
- Describe the “least to most invasive” process when determining airway management procedures

### ***Monitoring Appropriate Advanced Airway Assessment***

*Note: although Advanced Airway placement is not a BLS skill, monitoring of the Advanced Airway frequently is assigned to a BLS provider for ventilation. Therefore, it is considered crucial that the basic provider understand management of the advanced airway.*

- Describe how the provider will stabilize the spine/restrict spinal motion restriction immediately post advanced airway insertion
- Describe how the patient with an advanced airway will be transported
- Explain when the provider may disconnect the BVM/Ambubag from the airway

- Identify when the tube should be (will be) reassessed

### ***Tools/Tricks of the Trade – Airway Management***

- Define/describe:
  - Suctioning Device
  - Oropharyngeal Airway (OPA)
  - Nasal Pharyngeal Airway (NPA)
  - Endotracheal Intubation
  - Surgical Cricothyrotomy
  - King LTS-D Airway Device

## **Core Principle - Breathing**

### ***Introduction***

- Describe the initial assessment as it applies to respirations (the “quick picture”)
- Describe the items that the provider will use to monitor ongoing assessment of adequate oxygenation and ventilation

### ***Oxygen and Ventilation – The Important Relationship***

- Define “ventilation”
- Define “oxygenation”
- Identify considerations the provider will use to determine a patient’s need for supplemental oxygen
- Describe signs and symptoms related to hyperventilation syndrome
- Explain the treatment for hyperventilation syndrome
- List the primary treatment goals for patients suffering from inadequate oxygenation
- Define and describe the appropriate use for a:
  - Nasal canula
  - Non-rebreather
  - Bag-Valve-Mask (BVM)

### ***Ventilation Rate and Depth***

- Describe a common pitfall in ventilation
- Explain what happens to circulation when the provider is overly aggressive with ventilation
- List the appropriate ventilation rates for:
  - Birth to 4/5 days old
  - 4/5 days old – 8 years old
  - Greater than 8 years old
- Describe ventilation concerns associated with patients with obstructive airway diseases and evidence of bronchospasm (wheezing)

### ***Ventilation in Head Injuries***

- Describe problems associated with over and under-ventilating head injured patients
- Describe initial signs/symptoms of herniation syndrome
- Describe immediate treatment (including change in ventilatory rate) for the patient you suspect is herniating.

### ***Pneumothorax***

- Describe signs and symptoms of a pneumothorax

### ***Open Pneumothorax***

- Describe management of an open pneumothorax

### ***Closed Pneumothorax***

- Describe treatment for the closed, non-tension pneumothorax

### ***Tension Pneumothorax***

- Describe signs and symptoms (early and late) of the tension pneumothorax
- List the criteria used to determine treatment decisions for the tension pneumothorax
- Identify the treatment for the tension pneumothorax (even if it is NOT a BLS procedure)

### ***Tools of the Trade – Breathing***

- Describe:
  - Pulse oximetry
  - End-tidal carbon dioxide (ETCO<sub>2</sub>) detectors
  - Nebulized Medications
  - CPAP

## **Core Principle – Circulation**

### ***Introduction***

- Explain why it is crucial to determine WHY the patient's circulation is impaired
- Describe:
  - Tachycardia
  - Bradycardia
  - Hypertension
  - Hypotension
  - Permissive hypotension
- Explain how to determine bradycardia in a child
- Identify how to determine hypotension in a child

### ***General Management of Hypoperfusion***

- Describe how the provider should position the hypoperfused patient
- Explain how to address external hemorrhage in the hypoperfused patient
- Explain how hypothermia is related to hypoperfusion
- Describe when PASG would be used

### ***Circulatory Support During Arrest (Non-Traumatic)***

- Describe proper ventilation to compression ratios (one and two person) for:
  - Newborns
  - Infants and children
  - Adults
- Describe how the provider will do effective compressions
- Describe proper compressions for the:
  - Newborn

- Infant and child
- Adult
- Define “Witness” as it pertains to a “witnessed arrest”
- Explain how you will use the AED for a witnessed arrest
- Explain how you will use the AED for the unwitnessed arrest

### ***Circulatory Support During Arrest (Traumatic)***

- Explain when resuscitation attempts should be carried out for the traumatic arrest patient
- Explain why defibrillation with an AED for the traumatic arrest is usually unsuccessful

### ***Tools of the Trade – Circulation Management Adjuncts***

- Describe:
  - AED
  - Pneumatic Anti-Shock Garment
  - Impedance Threshold Device (ITD) ResQPOD

## **Core Principle - Disability**

- Explain “Primary Injuries”
- Describe “Secondary Injuries”
- Describe what happens when the brain is deprived of oxygen
- Explain how high quality CPR is crucial for the brain
- Describe the different metabolic abnormalities affecting neurologic function

### ***Stroke***

- Describe the most common type of stroke
- Describe how patients with carotid artery occlusion present differently than patients with vertebral artery occlusion
- Identify risk factors for stroke
- Describe how early recognition of a CVA affects in-hospital treatment of a stroke

### ***Traumatic Brain Injury***

- Define “Traumatic Brain Injury” or TBI
- List the most common types of TBIs

### ***Spinal Cord Injuries***

- List the most common types of spinal cord injuries
- Describe a complete spinal cord injury
- Describe an incomplete spinal cord injuries
- Explain the Spinal Restriction Algorithm (Appendix A-D-4)
- Describe exceptions to the Spinal Restriction Algorithm

### ***Nervous System Assessment***

- Explain why it is important to do a rapid neurological assessment on our patients with apparent neurological deficits
- List the components of a complete neurological exam
- Discuss signs and symptoms of herniation syndrome
- Explain why you see different respiratory patterns with some neuro patients
- Describe the Glasgow Coma Scale (GCS)
- Explain what information the provider acquires from a pupil assessment
- Explain why we perform a glucose assessment on every patient with an altered mental status
- Identify whose responsibility it is to determine whether or not a patient should have spinal motion restriction implemented

### ***Treatment for Nervous System Impairment***

#### ***Head Injury***

- Explain the focus for the treatment for brain injury
- Describe how fast ventilations should be for the adult with a suspected head injury
- Describe how fast ventilations should be for the pediatric patient with a suspected head injury
- Explain how ventilation rates differ for the patient with the suspected stroke
- Describe positioning for patients with brain injuries

#### ***Spinal Cord Injury***

- Describe basic airway management for the patient with the suspected spinal cord injury
- Explain why a patient may require ventilation
- Describe signs and symptoms of spinal shock
- Explain why patients with spinal cord injuries need to be kept warm
- Describe positioning for the pregnant patient in need of spinal motion restriction

### ***Patient Comfort***

#### ***Patient Interactions***

- Describe the demeanor and approach for each provider in the System
- Explain why demeanor and approach are emphasized here in the COG

#### ***Pain***

- Describe the three major factors influencing individual pain perception and response to pain
- List non-verbal cues to pain
- Describe the 10 non-pharmacological interventions the BLS provider can perform to help control pain

## Patient Care Guidelines

### Medical Patient Care Guidelines

#### ***Allergic Reaction/Anaphylaxis***

- List the appropriate ECA guidelines for the patient having an allergic reaction or anaphylaxis
- Explain whether or not it is appropriate to apply a cold pack to the site
- Describe an appropriate focused history and physical exam for the patient having an allergic reaction/anaphylaxis
- List common assessment findings for allergic reactions and anaphylaxis

#### ***Environmental Temperature Emergencies***

##### ***Heat Related***

- Explain what you would do if the patient was still in the hot environment
- Describe an appropriate focused history and physical exam for the patient with heat-related emergency
- Describe how to relieve severe muscle cramps
- Describe ways to cool patients with heat-related emergencies but NO altered mental status
- Describe how to cool the patient with a heat related emergency WITH altered mental status
- Explain when aggressive cooling should be stopped
- Describe signs and symptoms of the patient with heat cramps
- Describe signs and symptoms of the patient with heat exhaustion
- Describe signs and symptoms of heat stroke

##### ***Cold Related***

- Describe how to protect the patient from further heat loss
- Identify how long you will check pulse for the patient in cardiac arrest in a cold environment
- Identify what, in addition to the focused history and exam, the provider should check as part of the assessment of the patient in the cold environment
- Describe rewarming for the patient with a body temperature confirmed <86 degrees F.
- Describe rewarming for the patient with a body temperature confirmed between 86-93 degrees F
- Describe rewarming for the patient with a body temperature >93 degrees
- Describe general signs and symptoms for the patient experiencing a cold-related emergency

##### ***Excited Delirium Syndrome***

- Explain why these patients must be constantly reassessed
- Describe what to do if these patients also present “hot” to the touch

***Glucose Abnormalities/Hypoglycemia/Hyperglycemia***

- Define “hypoglycemia”
- Describe signs and symptoms of hypoglycemia
- Describe signs and symptoms of hyperglycemia
- Explain how to perform a blood glucose assessment in the pediatric patient < 1 year
- Identify the dose for pediatric oral glucose
- Identify the dose for adult oral glucose
- Identify what the patient must be able to do prior to administration of oral glucose
- Identify what you do FIRST with the hypoglycemic patient with an insulin pump in place
- Describe the two methods for disconnecting an insulin pump
- Explain what you will tell the patient once his/her mental status returns to normal after a hypoglycemic episode

***Hypotension/Hypoperfusion (Non-Traumatic)***

- Describe positioning for the hypotensive/hypoperfused patient

***Nausea/Vomiting***

- Describe positioning for the vomiting patient
- Identify whether or not the vomiting patient should be allowed to eat or drink

***Obstetrical Emergencies***

- Explain whether or not you would perform a pelvic exam on the OB patient
- Describe proper suctioning of the newborn
- Explain what you would do if the head delivers but the membrane is still intact
- Identify what “level” you would keep the newborn at once delivered
- Describe how you would clamp and cut the cord
- Describe how you would manage the newborn IMMEDIATELY after birth
- Identify when it is not appropriate to let a newborn nurse
- Describe APGAR scoring
- Explain when you would use APGAR scoring
- Explain what you would do if there is significant hemorrhage immediately following delivery or the placenta does not deliver
- Describe how you would address a nuchal cord
- Explain how you would manage a prolapsed cord or limb presentation
- Describe how you would manage a breech presentation
- Describe how to manage a shoulder presentation
- Explain how to manage a stillborn/spontaneous abortion

***Obstructive Airway Disease/Reactive Airway Disease***

- Identify what allergy question we will specifically ask the patient with obstructive airway disease such as asthma
- Describe signs and symptoms of asthma

***Overdose***

- Describe an appropriate patient assessment for an overdose patient

***Pain/Anxiety Management***

- Describe BLS pain management techniques per the Core Principles for pain management

***Seizures***

- List common causes of seizures
- Describe different types of seizures
- Describe the two assessment questions you will ask in addition to the general focused history and physical exam
- Explain how you will manage the patient having a seizure that you suspect is having a febrile seizure
- Explain what you will say to the parent of the pediatric seizure patient under 12 months of age

***Stroke***

- Describe the Cincinnati Prehospital Stroke Scale (CPSS) (Appendix C-5)
- Describe common signs and symptoms of a stroke
- Explain why it is important to swiftly assess for a stroke with all patients presenting with altered mental status or neuro deficits

***Submersion/Drowning***

- Describe how a patient will be moved from the water
- Describe positioning of the submersion/drowning patient
- Describe other considerations for the treatment of the submersion/drowning patient
- Explain what you will do with the scuba diver's dive computer or log book if it is available

***Violent Patient/Chemical Sedation***

- Explain what you will ensure prior to touching any patient that has been subdued using a taser unit
- Describe how to remove a taser probe

**Cardiac Patient Care Guidelines**

- Acute Coronary Syndromes (ACS)/Acute Myocardial Infarction (AMI)
- Describe signs and symptoms of a heart attack/MI
- Describe interventions/treatments you will use for the patients having ACS or an AMI
- Describe what mnemonic you will use to remember how to assess pain – include what each letter means
- Identify what drugs we will specifically assess for
- What medication and dose can you administer to the patient you suspect is having an acute coronary syndrome/myocardial infarction

***Congestive Heart Failure/Pulmonary Edema***

- Describe signs and symptoms of CHF
- Describe your treatment plan for the patient with signs and symptoms of CHF

***Determination of Death and Pronouncement Process***

- Describe situations in which you would not initiate CPR on a pulseless, apneic patient
- Describe what you would do immediately after determination of an obvious death in terms of notifying incoming units
- Describe when resuscitation efforts may be discontinued

***Newborn Resuscitation***

- Describe how you will suction the newborn
- List, in order, the treatment plan for the apneic newborn
- List, in order, the treatment plan for the slow-to-respond newborn
- List, in order, the treatment plan for the newborn with a heart rate below 60 bpm

**Toxic Exposures**

***Toxic Exposure – Ammonia (Liquid & Gas)***

- Explain how the patient will be removed from the exposure
- Describe the treatment plan for the patient with the Ammonia exposure
- Identify who will be decontaminating the patient

***Toxic Exposure – Carbon Monoxide***

- Describe what the provider will do with the patient immediately after determining scene safety
- Describe the treatment plan for the carbon monoxide exposure patient

***Toxic Exposure – Chlorine and Related Compounds***

- Identify who will remove these patients from the environment
- Describe the treatment plan for the chlorine exposure patient
- Explain what other signs/symptoms the provider will monitor for

***Toxic Exposure – Cyanide***

- Identify who will remove these patients from the environment
- Identify associated signs and symptoms of a cyanide exposure
- Describe the treatment plan for the cyanide exposure patient

***Toxic Exposure – Fumigants: Methyl Bromide, Sulfuryl Fluoride, Chloropicrin, & Phosphides***

- Identify who will remove these patients from their environment
- Identify who will decontaminate these patients
- Explain why these patients need to be transported even if their initial signs and symptoms are minimal
- Describe the treatment plan for the fumigant exposure patient
- Identify what other signs and symptoms you will reassess for

**Toxic Exposure – Hydrazines**

- Identify who will remove these patients from the environment
- Identify who will decontaminate these patients
- Describe the treatment plan for the hydrazine exposure patient

**Toxic Exposure – Hydrofluoric Acid**

- Describe the treatment plan for the patient who has only had a skin exposure
- Describe the treatment plan for the patient who has had an exposure in the eye(s)
- Describe the treatment plan for the patient who has ingested hydrofluoric acid

**Toxic Exposure – Hydrogen Sulfide, Sulfides and Mercaptans**

- Identify who will remove these patients from the exposure
- Identify who will decontaminate these patients
- Explain what other issue the patient may be suffering due to the chemical characteristics of this type of chemical
- Explain the treatment plan for the sulfide exposure patient

**Toxic Exposure – Sodium Hydroxide**

- Identify who will remove the patient from the exposure
- Identify who will decontaminate this patient
- Identify whether or not to use an acid to neutralize the sodium hydroxide
- Describe the treatment plan for the patient with sodium hydroxide exposure

**Toxic Exposure – Organophosphates/Nerve Agents**

- Identify who will remove the patient from the environment
- Describe “S.L.U.D.G.E.”
- Describe when you would use a Nerve Agent Response Kit

**Trauma Patient Care Guidelines**

**Regional Trauma System**

**EMS Trauma Alert**

- List all types of patients who qualify for the Trauma Alert Criteria

**EMS Trauma Transport**

- Identify the two differences between the adult and pediatric Trauma Transport designations
- List all patient types that meet the Trauma Transport Criteria

**Amputations**

- Describe the treatment plan for the incomplete amputation
- Describe the treatment for an amputated body part and/or tissue
- Describe the management of a tooth avulsion

**Traumatic Brain Injury**

- Identify whether or not it is appropriate to implement the spinal movement restriction protocol for the TBI patient
- Identify positioning for the TBI patient
- Identify whether or not it is appropriate to apply direct pressure to bleeding from the nose
- Describe how to bandage the open skull fracture

**Burns – Electrical/Lightning**

- Identify who should receive the highest priority of care if multiple patients are struck simultaneously by lightning or a high voltage source
- Describe dressings for burns
- Describe which patients could be transported directly to a burn center
- Describe the treatment plan for the patient burned from an electrical source

**Burns – Thermal**

- Identify the first thing the provider should do after scene safety
- Describe general burn treatment
- Describe dressings for burns
- Identify which patients could be transported directly to a burn center

**Crush Injuries**

- Describe general treatment for crush injuries

**Pneumothorax**

- Describe wound care for the open pneumothorax
- Describe signs and symptoms of a pneumothorax
- Describe the difference between a pneumothorax and a tension pneumothorax

**Skeletal Injuries**

- Describe treatment for the uncomplicated fracture/dislocation with adequate circulation
- Describe treatment for the fracture/dislocation with circulation deficits or severely angulated injuries
- Describe stabilization for a potential pelvic fracture
- Identify management for isolated proximal femur fractures (especially in the elderly)
- Identify contraindications to the use of the traction splint

**Snakebites**

- List initial interventions for the snakebite patient
- Describe wound care and positioning of the affected limb

**Soft Tissue Injuries**

- Describe bandaging of lacerations or puncture wounds in the neck
- Describe management of a nosebleed
- Describe wound management of an abdominal evisceration
- Describe treatment for an eye injury

- Describe treatment for an impaled object that does not compromise the airway or interfere with chest compressions

### ***Spinal Cord Injuries***

- Describe the Spinal Motion Restriction algorithm
- Explain how packaging of the pregnant patient at or greater than 20 weeks pregnant will differ than “usual” packaging

## **Appendices**

### ***Cricoid Pressure***

- Describe “cricoid pressure” (a.k.a. “Sellick Maneuver”)
- List indications for the use of cricoid pressure
- List contraindications for the use of cricoid pressure
- List notes/precautions for the use of this procedure
- Describe the procedure for performing the Sellick maneuver

### ***Pulse Oximetry***

- Describe pulse oximetry including how the oximeter works
- List indications for pulse oximetry
- Identify notes/precautions for pulse oximetry

### ***ECG Monitoring/12-lead***

- Identify notes/precautions for placing leads on a patient
- Identify which providers may place leads and acquire 12-lead ECG's
- Identify which providers are responsible for interpretation of ECG reports
- Describe the procedure for skin prep prior to lead placement
- Describe where the provider will place limb leads

### ***Glucose Assessment***

- Identify indications for glucose assessment
- Identify contraindications for glucose assessment
- Identify notes/precautions for glucose assessment
- Describe the procedure for using the glucometer to perform a glucose assessment

### ***Kendrick Traction Device (KTD)***

- Describe the KTD
- List indications for the use of the KTD
- Identify contraindications for the use of the KTD
- Identify any notes/precautions for the use of the KTD
- Describe the procedure for the use of the KTD

### ***Pelvic Binder (SAM Sling)***

- Identify the mortality rate for pelvic ring fractures
- Describe the SAM Sling
- Identify indications for the use of the pelvic binder

- Identify contraindications for the use of a pelvic binder
- Identify any notes/precautions for the use of the pelvic binder
- Describe the procedure for the use of the Sam Sling

### ***Spinal Motion Restriction Algorithm***

- Explain the need for a Spinal Motion Restriction Algorithm
- Identify indications for the use of the algorithm
- Identify sensory/motor considerations for the use of spinal motion restriction
- Identify spinal pain/tenderness considerations for the use of spinal motion restriction
- Identify distracting injury considerations for the use of spinal motion restriction
- Identify patient exam considerations for the use of spinal motion restriction

### ***Eye Irrigation***

- Identify indications for eye irrigation
- Describe the procedure for eye irrigation

### ***Patient Transport Condition Classification System***

- Explain the need for a Patient Transport Condition Classification System
- Identify notes/precautions for the use of this system
- Explain how patient categorization changes during a mass casualty incident
- Explain how trauma patients are categorized beyond this system
- Explain the basis behind patient transport condition classification
- Describe a patient who would be designated an “Alpha” patient
- Identify the equivalent MCI designation for an Alpha patient
- Describe a patient who would be designated a “Bravo” patient
- Describe a patient who would be designated a “Charlie” patient
- Describe a patient who would be designated a “Delta” patient
- Identify the equivalent MCI category for a Delta patient
- Describe a patient who would be designated an “Echo” patient
- Identify the equivalent MCI category for an Echo patient

### ***APGAR Scoring***

- Identify at what time(s) the provider will perform an APGAR assessment
- Identify any notes/precautions for the use of APGAR Scoring
- Assign an APGAR score for a baby with:
  - Pink skin except for his hands and feet
  - A pulse >100/min
  - Active pulling away to stimuli
  - Active movement
  - Strong cry

### ***Patient Assessment***

- Identify why a Patient Assessment guideline is necessary for the System
- Identify the age ranges for the:
  - Neonate
  - Infant
  - Child

- Adolescent
- Adult
- Identify vital sign “averages” for the:
  - Adult patient
  - Pediatric patient
- Identify compensated shock in a pediatric patient in terms of vital signs
- Identify the point at which the patient moves into decompensated shock in terms of vital signs

### ***H's & T's***

- Identify appropriate BLS assessments to determine:
  - Hypovolemia
  - Hypoxia
  - Hypothermia/Hyperthermia
  - High and Low Electrolyte Levels
  - Hypo and Hyperglycemia
  - Hydrogen ion (acidosis)
  - Trauma
  - Tension Pneumothorax
  - Thrombosis, lungs
  - Thrombosis, heart
  - Tamponade, cardiac
  - Tablets (drug and toxin overdoses)
- Identify appropriate BLS interventions to address (some may not be listed on this table but are appropriate BLS treatments for the ECA per core principle or ECA education):
- Hypovolemia
- Hypoxia
- Hypothermia/Hyperthermia
- Hypo and Hyperglycemia
- Hydrogen ion (acidosis)
- Trauma
- Tablets (drug and toxin overdoses)

### ***Glasgow Coma Scale (GCS)***

- Describe the GCS
- Identify indications for the use of the GCS
- Identify any contraindications to the use of the GCS
- Identify the GCS for the patient who opens his eyes to pain, is confused in his verbal responses, but will obey simple commands
- Identify the lowest possible GCS score

### ***Cincinnati Prehospital Stroke Scale (CPSS)***

- Describe the CPSS
- Identify indications for the use of the CPSS
- Identify any contraindications for the use of the CPSS
- Identify any notes/cautions for the use of the CPSS

- List the three tests for the CPSS
- Describe each of the tests, including abnormal and normal findings for each

### ***Newborn Resuscitation***

- Identify how you would assess the newborn's:
  - Airway
  - Breathing
  - Circulation
- Describe the newborn assessment/intervention triangle
- Identify the first things to do for the newborn that are ALWAYS needed
- Identify key thoughts for the assessment/intervention for the newborn

### ***OPQRST and Wong Baker***

- Describe the OPQRST pain scale
- Explain the reasons for its use
- Identify questions the provider would ask to assess:
  - Onset
  - Provocation/Palliation
  - Quality
  - Radiation
  - Severity
  - Time
- Identify patient types appropriate for the use of the Wong Baker assessment tool instead of OPQRST

### ***Rule of Nines***

- Explain the reasons for the use of the Rule of Nines
- Describe the Rule of Palm
- Identify indications for the use of the rule of nines
- Identify any contraindications to the use of the rule of nines
- Explain how the rule of nines is different for an infant/small child compared to the use of the rule of nines for an adult
- Identify percentage of burn when given different scenarios where the body areas are given: i.e. "the patient is burned down the entire front of her right leg and her abdomen – estimate the percent of body burned"

### ***Determination of Mental Status/Level of Consciousness (AVPU)***

- Explain why it is important to determine an appropriate determination of mental status on patients.
- Describe the considerations for evaluating mental status
- Identify indications for the assessment of level of consciousness
- Describe the use of "noxious stimuli"
- Describe how to assess A&Ox3
- Describe "registration" and how you would assess for it
- Describe "attention and calculation" and how you would assess for it
- Describe "recall" and how you would assess for it
- Describe how you would assess "language"

**Stroke Alert Criteria**

- Explain what a “stroke alert” is
- Explain why early notification is important for the potential stroke patient

**Mass Casualty Incident (MCI) Levels**

- Describe the Simple Triage and Rapid Treatment concept
- Describe indications for the use of MCI levels
- Explain Patient Categorization
- Describe exceptions to the triage criteria “Immediate” category
- Describe MCI Operational Levels
- Describe Level 1
- Describe Level 2
- Describe Level 3
- Describe the procedure for MCI
- Describe the assessment for MCI

**Suspected Child Abuse - Reporting**

- Describe “child abuse and neglect” per the Child Abuse Prevention and Treatment Act
- Describe the State of Texas definitions of Abuse and Neglect
- Identify WHO must report suspected child abuse and neglect
- Identify who the provider should report cases of suspected child abuse or neglect to
- Explain the process for reporting suspected child abuse and neglect
- Describe findings on scene that would suggest child abuse and/or neglect
- Explain procedures for caring for suspected abuse patients
- Describe documentation considerations for this group of patients

**Glossary**

**Define:**

- Adequate Airway
- Anaphylaxis
- Angina pectoris
- Apnea
- Aspiration
- Auscultate
- Avulsion
- Axilla
- Baseline Assessment
- Body Substance Isolation
- Breech Presentation
- Bronchi
- Bronchospasm
- BURP
- Clinical Review Process
- Congestive Heart Failure
- Credential

- Cricoid Pressure
- Criterion
- Critical Incident Stress Management (CISM)
- Cyanosis
- Decredential
- Diaphoresis/Diaphoretic
- Diastolic Blood Pressure
- Eclampsia
- Epiglottitis
- Epistaxis
- Evisceration
- Excited Delirium Syndrome (ED)
- Exsanguination
- External Laryngeal Manipulation (ELM)
- Extruded
- Five Deadly Sins
- Foramen Magnum
- Glasgow Coma Scale
- Hemoptysis
- Hemorrhage
- Herniation Syndrome
- Hypertension
- Hyperthermia
- Hyperventilation
- Hypoglycemia
- Hypoperfusion
- Hypotension
- Hypothermia
- Hypovolemia
- Impedance Threshold Device (ITD)
- Implied Consent
- Infarct
- Infection Control Officer
- Informed Consent
- Intervener Physician
- Ischemia
- Laceration
- Meconium
- Mediastinum
- Medical Directive
- Minimal Data Elements
- Myocardium
- Narcotic
- Nuchal Cord
- Nuchal Rigidity
- Obstructive Airway Disease

- Obtunded Patient
- Office of the Medical Director
- On-Line Medical Consultation (OLMC)
- Oxygenation
- Patent Airway
- Patient
- Patient Care Record (PCR)
- Peer Review Process
- Perfusion
- Permissive Hypotension
- Personal Physician
- Personal Protective Equipment
- Pneumatic Anti-Shock Garment (PASG)
- Pneumothorax
- Primary Injuries
- Professional Practice
- Prolapsed Cord
- Pulmonary Edema
- Pulse Oximetry
- Pulse Pressure
- Qualification
- Return of Spontaneous Circulation (ROSC)
- Secondary Injuries
- Shoulder Dystocia
- Substituted Consent
- Syncope
- Tachycardia
- Tachypnea
- Tension Pneumothroax
- Thermoregulation
- Tracheal Deviation
- Traumatic Brain Injury (TBI)
- Trendelenburg Position
- Unwitnessed Arrest
- Ventilation
- Witnessed Arrest