The Maryland Fire and Rescue Institute of the University of Maryland is the State’s comprehensive training and education system for all emergency services.

The Institute plans, researches, develops, and delivers quality programs to enhance the ability of emergency service providers to protect life, the environment, and property.
Lesson 1-1 Protocol Updates

Objective
- Given information from discussion, handouts, and reading materials the student will be able to interpret recent protocol updates according to the Maryland Institute for Emergency Medical Services Systems Maryland Medical Protocols.

Overview
- Parameters for recertification as EMT
- Recent protocol updates
Parameters for Recertification

- Maryland State Law defines the parameters for recertification (COMAR 30.02.02.07).
- Affiliations with a fire/EMS or rescue department are required.
- Extensions may be granted for up to six months.

Recent Protocol Updates

- Documentation
  - A patient care report (PCR) must be completed and given to the receiving facility as soon as possible, ideally upon transfer of care.
  - If the ideal situation is not available, the provider must complete documentation in the format provided and approved by MIEMSS, then deliver the PCR within 24 hours after the transfer of care.

Recent Protocol Updates

- Patient Initiated Refusal of EMS
  - Patients who meet certain criteria are allowed to make a self-determination of evaluation, treatment, and transport.
    - Medically capable of making decisions
    - Adult (18+)
    - Those patients who are under 18 and are:
      - Married
      - Parent of a child
      - Requesting treatment for alcoholism, STI, contraception, treatment for an alleged rape or sexual offense
Recent Protocol Updates

- **High Performance CPR**
  - Minimize interruptions in compressions
  - Keep your hands off the patient for less than 5 seconds
  - When the AED charges continue compressions
  - Provide adequate depth and rate of compressions
  - Depth = 2 inches for adult and 1/3 the size of the chest for child/infant
  - Rate = 100–120 beats per minute
  - Allow full chest recoil after compressions
  - Avoid excessive ventilation

<table>
<thead>
<tr>
<th>Method</th>
<th>Infant 0–1 years old</th>
<th>Child 1 year old to Puberty</th>
<th>Adult Puberty+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compress with</td>
<td>2 Fingers just below nipple line</td>
<td>Heel of 1 hand or 2 hands Center of chest, between nipples</td>
<td>Heel of 2 hands Center of chest, between nipples</td>
</tr>
<tr>
<td>Depth of Compressions</td>
<td>1/3 depth of chest approx 1 1/3 inches</td>
<td>1/3 depth of chest approx 2 inches</td>
<td>At least 2 inches</td>
</tr>
<tr>
<td>Compression rate</td>
<td>At least 100/min</td>
<td>At least 100/min</td>
<td>At least 100/min</td>
</tr>
<tr>
<td>Ratio compressions to breaths</td>
<td>30 : 2 (2 rescuer) (HCP)</td>
<td>30 : 2 (2 rescuer) (HCP)</td>
<td>30 : 2</td>
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<tr>
<td>Rescue Breathing</td>
<td>12 to 20/min (approx 1 breath every 3 to 4 sec)</td>
<td>12 to 20/min (approx 1 breath every 3 to 4 sec)</td>
<td>10 to 12/min (approx 1 breath every 5 to 6 sec)</td>
</tr>
</tbody>
</table>
Recent Protocol Updates

- **Albuterol**
  - Indications
  - Adverse side effects
  - Precautions
  - Contraindications/preparations
  - Dosages
    - Adult: Maximum of 2 doses (1 dose = 2 puffs; therefore 2 doses = 4 puffs) over a 30-minute period
    - Pediatric: Maximum of 2 doses (1 dose = 2 puffs; therefore 2 doses = 4 puffs) over a 30-minute period
    - ADDITIONAL DOSES MAY BE ADMINISTERED WITH MEDICAL CONSULTATION

Recent Protocol Updates

- **Poisonous Snakebites**
  - Do not apply any constricting bands to any extremity
  - Remove all jewelry

Recent Protocol Updates

- **Nitroglycerin**
  - Indications
  - Adverse effects
  - Precautions
  - Contraindications
  - Preparation (spray or tablet)
  - Dosages
Recent Protocol Updates

- Acetaminophen
  - Acetaminophen is used for effective pain management for adults and children
    - Indications for pain management
    - Contraindications for pain management
    - Dosages for pain management for patients 3 years and above

Recent Protocol Updates

- Trauma definitions
  - Patients that have not reached their 15th birthday should be transported to a pediatric trauma center.
  - Any patient that has an isolated penetrating mechanism should not have spinal immobilization performed.
  - Maintain spine stabilization for blunt trauma patients.

Recent Protocol Updates

- Termination of resuscitation (if any doubt, initiate resuscitation and transport)
  - Exclusions
    - If arrest is believed to be secondary to hypothermia or submersion, treat according to the proper protocol and transport to the nearest appropriate facility.
    - If the patient is pregnant, treat according to the proper protocol and transport to the nearest appropriate facility.
    - If the patient has NOT reached his or her 18th birthday, treat according to the proper protocol and transport to the appropriate facility.
Recent Protocol Updates

- Termination of resuscitation (if any doubt, initiate resuscitation and transport)
- Medical Arrest
  - EMS providers may terminate resuscitation WITHOUT medical consultation when ALL three criteria are met
    - The arrest was NOT witnessed by an EMS provider (and patient is unresponsive, pulseless, and apneic).
    - There is NO shockable rhythm on an AED.
    - There is NO return of spontaneous circulation (ROSC) prior to the decision to terminate despite the field EMS treatments that includes 15 minutes of minimally interrupted EMS CPR.

- Trauma Arrest
  - EMS providers may terminate resuscitation WITHOUT medical consultation when:
    - There are NO signs of life AND
    - The patient is in asystole
  - EMS providers may terminate resuscitation in blunt or penetrating trauma WITHOUT medical consultation when:
    - There are no signs of life AND
    - The patient is in a rhythm other than asystole, no ROSC, despite 15 minutes of minimally interrupted CPR
Recent Protocol Updates

- Pronouncement of death in the field
  - Purpose—An individual is dead if, based on ordinary standards of medical practice, the individual has sustained either
    - Irreversible cessation of circulatory and respiratory functions OR
    - Irreversible cessation of all functions of the entire brain, including the brain stem

Indications—EMS providers can pronounce the death of a patient when one or more of the following criteria has been met
- Decapitation
- Rigor mortis
- Decomposition
- Dependent lividity
- The termination of resuscitation protocol was used

Documentation
- Document the exact time and location of the pronouncement of death.
- Notify law enforcement and follow jurisdictional protocol if in the field.
- If death is pronounced during transport, deliver patient to emergency department and follow hospital policies.
Recent Protocol Updates

• Acupressure
  • Use acupressure with patients who are presenting with nausea or vomiting due to an underlying medical condition, injury, side effect of medication, or active motion sickness.
  • Place the patient in the left lateral position or position of comfort and place pressure on the P6 point.

Recent Protocol Updates

• Naloxone
  • Identify the amount and/or means of exposure
    • Absorption
    • Ingestion
    • Injection

Recent Protocol Updates

• Naloxone
  • Identify signs of patient presentation
    • Respiratory distress with decreased loss of consciousness
    • Constricted pupils
    • Strong suspicion of opioid/narcotic overdose
  • Identify treatment dosages for naloxone by age
    • 28 days to 8 years – administer 0.8–1mg of naloxone (Narcan) intranasal atomizer
    • 8 years to adult – administer 2mg of naloxone (Narcan) intranasal atomizer
Recent Protocol Updates

- BLS Glucometer
  - BLS Providers can obtain a blood glucose reading by using a glucometer
  - BLS Providers can administer oral glucose when the glucose level is below 70mg/dl
    - Adults: administer 10–15 grams buccal (between the cheek and gum)
    - Pediatric: administer 10–15 grams buccal (between the cheek and gum)

Objective

- Given information from discussion, handouts, and reading materials the student will be able to interpret recent protocol updates according to the Maryland Institute for Emergency Medical Services Systems Maryland Medical Protocols.

Review

- Parameters for recertification as EMT
- Protocol Updates
EMT Refresher
Lesson 1-2
Special Patient Populations

Objective
• Given information from discussion, handouts, and reading materials the student will be able to identify special patient populations according to the Maryland Institute for Emergency Medical Services Systems Maryland Medical Protocols

Overview
• Autism Spectrum Disorder
• Obesity
• Terminal Illness
• Disabilities
• Poverty/Homelessness
• Tracheostomy Tubes
Autism Spectrum Disorder

- ASD is a collective group of disorders.
- The spectrum is the wide range of skills, abilities, symptoms, and levels of impairment a person can have.
- Autistic disorder (classic autism)
- Asperger’s disorder (Asperger’s Syndrome)
- Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS)
- Rett’s Disorder (Rett’s Syndrome)
- Childhood Disintegrative Disorder (CDD)

Autism Spectrum Disorder

- Causes of ASD are unknown
  - Scientists do not know the exact cause.
  - Research suggests environment and genetics are factors.
    - In identical twins who share the same genetic code, if one twin has ASD the other twin has it.
    - In siblings, if one sibling has ASD, another sibling is 35 times more likely to develop ASD.
    - According to the NIH, there is no link between vaccines and diagnosis of ASD.

Autism Spectrum Disorder

- Signs and symptoms of ASD will vary from person to person
  - Those with social impairment may
    - Make little eye contact
    - Listen poorly
    - Not readily show excitement in their toys or other activities
    - Respond unusually to anger, distress, or affection
Autism Spectrum Disorder

- Signs and symptoms of ASD (continued)
  - Those with communication impairment may
    - Fail or be slow to respond to their name or other verbal attempts to gain their attention
    - Fail or be slow to point out things to others
    - Coo or babble during their first year and then fail to do so after
    - Have delayed language development
    - Speak in one-word phrases or short sentences and repeat words or sentences
    - Use words that seem odd or out of place except to the people surrounding the one affected

- Signs and symptoms of ASD (continued)
  - Those who engage in repetitive and stereotyped behavior may
    - Behave in a way that is noticeably unusual
    - Have small and discreet behavioral tendencies or tendencies that are extreme and noticeable
    - Be fascinated by moving objects
    - Display obsessive preoccupation (e.g., learning everything there is to know about one particular topic such as cars, trains, planes, etc.)

- Use ABCS when talking with a patient with ASD
  - Awareness
  - Basic
  - Calm
  - Safety
Obesity

- Obesity is defined as one having a body mass index (BMI) of over 30
  - Body Mass Index (BMI) is a number based on the height and weight of a person
    - A person with a BMI of less than 18.5 is considered underweight
    - A person with a BMI of 18.5 to 24.9 is considered healthy weight
    - A person with a BMI of 25 to 29.9 is considered overweight
  - Obesity is common, serious, and costly
  - More than one-third of U.S. adults (35.7%) are obese

Obesity-related conditions include

- Heart disease
- Stroke
- Type 2 diabetes
- Certain types of cancer
- In 2008, medical costs associated with obesity were estimated at $147 billion (the medical costs paid by third-party payers for people who are obese were $1,429 higher than those of normal weight)
- Bariatric stretchers and larger devices are needed in most cases

Terminal Illness

- DNR/MOLST acceptable forms
  - Original Maryland EMS/DNR order form
  - Copy of the Maryland EMS/DNR order form
  - Other State EMS/DNR order form
  - Maryland EMS/DNR bracelet insert
  - Medic Alert DNR bracelet or necklace
Terminal Illness

- DNR/MOLST acceptable forms (continued)
  - Oral DNR Order from EMS System Medical Consultation
  - Oral DNR Order from other on-site physician or nurse practitioner
  - Maryland MOLST form
  - Maryland MOLST bracelet

- Non-acceptable DNR/MOLST forms
  - Advance directives without an EMS/DNR Order
  - Facility specific DNR orders
  - Notes in medical records
  - Prescription pad orders
  - DNR stickers
  - An oral request from someone other than a physician or nurse practitioner
  - An oral order from an attending physician or nurse practitioner who is not on site

Terminal Illness

- DNR/MOLST will determine the patient’s level of care
  - Option A: Maximal Care (ALS)—also called restorative care with intubation prior to arrest and then DNR
  - Option A (DNI)—Comprehensive efforts to prevent arrest but DNI (do not intubate), then DNR
  - Option B: Palliative Care only (BLS)—Care only before arrest and then DNR
Disabilities

• General Guidelines
  • Know your response area and get familiar with buildings that house persons with disabilities
  • Participate in emergency planning for people with disabilities
    • Emphasize accommodations for persons with specific abilities (meaning work with what they can do versus what they cannot do)
    • Include persons with disabilities in the planning process to gain input

• General Guidelines
  • Treat the persons with respect and dignity
    • They have opinions
    • They are not objects.
  • Use a person's strengths to assist you
  • Ask questions of the person with disabilities if the situation warrants time to do so
    • What is the best way to help you?
    • What is the best way to pick you up?

• General Guidelines
  • Trust the person with the disability
    • The patient will know his/her body
    • The patient will know his/her weaknesses
Disabilities

• Visual Impairments (the person may be completely blind or have low vision)
  • Announce your presence when you approach
  • Talk directly to the person, not to a third party
  • Find the means by which the person is mobile
    • Guide dog (let the patient handle the dog if the patient is able; do not do anything with the animal unless the owner says to do so, e.g., feed the dog)
    • Canes

Disabilities

• Visual Impairments
  • Offer to let the person use your arm or shoulder for guidance
  • Point out the obvious obstacles
    • Stairs
    • Doorways
    • Ramps
  • Use directional terms like right, left, or straight ahead
  • Ensure a person is assigned to stay with the person with visual impairments

Disabilities

• Hearing Impairments
  • People with hearing impairments can still communicate
    • Some patients will use hearing aids
    • Some patients will use lip reading or sign language to communicate
    • Some patients will use a pencil and paper to communicate
    • Some patients will not catch everything you say the first time you say it; be patient
Disabilities

- Hearing Impairments
  - Announce your presence by flicking the lights on and off in a room
  - Be ready to ask hearing-impaired people to repeat things or to be asked to repeat things
  - Establish eye contact and stay in the light
  - Do not chew gum

Disabilities

- Developmental Disabilities
  - General characteristics
    - Persons may have limited cognitive abilities, social skills, or motor skills and may
    - Have a problem identifying first responders
    - Be slow to respond to directions
    - Be slow to respond in emergency situations

Disabilities

- Developmental Disabilities
  - Guidelines for first responders
    - Break things down into simple steps
    - Use simple signals, charts, diagrams, or pictures to assist
    - Do not talk down to people with developmental disabilities; treat them with respect
Disabilities

- Mental Illness
  - General characteristics
    - There may be no visual cues indicating a person has mental illnesses
    - There are varying states of mental illnesses and they can change in an instant
    - People with mental illnesses may experience hallucinations

Disabilities

- Mental illnesses include
  - Schizophrenia – hallucinations
  - Bipolar Disorder – going from one extreme to another
  - Post-Traumatic Stress Disorder – patients may be reliving a traumatic event

Disabilities

- Mental Illness
  - First responder guidelines
    - Ensure the safety of yourself and your crew and then the patient
    - Do not confront people with mental illness about their hallucinations if they are discussing them
    - Ensure patients know they are safe
Disabilities

- Mobility Impairments
  - Ask respectful, straightforward questions
  - Consider factors such as weather, distance, and obstacles when giving directions to a person with a wheelchair
  - Don’t lean on someone’s wheelchair (it may be considered a violation of personal space by some)
  - Sit or kneel when talking to someone in a wheelchair
  - Ensure the wheelchair is waiting after the evacuation or rescue; the wheelchair is the means by which the person can be mobile.
  - Offer to hold the cane or walker when a person has to use stairs

Poverty/Homelessness

- More than 15,000 people are homeless in Washington, D.C. a year
- On one night in January 2013, 6,865 people were homeless; 473 of those were veterans
- The number of homeless families has increased by 40% since 2009
- There are more than 1,868 children in D.C. who are homeless
- Among single homeless persons 32% report substance abuse of some kind, 28% report severe mental illness, 12% suffer chronic health issues, and 23% are physically disabled

Tracheostomy Tubes

- Protocol
  - Maryland Medical Protocols state suctioning of a tracheostomy is a standing order for BLS providers
  - Protocol states that in general patient care, establishing the airway is completed in the initial patient assessment
    - Establish the airway
    - Place the patient in the appropriate position
    - Suction the airway as needed including tracheostomy tubes
Tracheostomy Tubes

- Anatomy and Physiology of the Airway
  - Pediatric
    - Tongue is large
    - Vocal chords are fragile
    - Trachea is short and narrow
Tracheostomy Tubes

- Anatomy and Physiology of the Airway
  - Adult
    - Larynx is at the 4th and 5th vertebrae
    - Vocal chords are the narrowest part of the airway

Tracheostomy Tubes

- Reasons for Tracheostomy
  - Vocal cord paralysis
  - Inability to handle secretions
  - Head and neck anatomical differences
  - High spinal cord injuries
  - Inability to maintain functional airway
  - Laryngeal cancer
  - Long-term mechanical ventilation

Tracheostomy Tubes

- Anatomy of tracheostomy tubes
  - The tubes can be metal or plastic
  - The tubes are cuffed for patients greater than 8 years of age
  - Smaller sizes do not have an inner cannula
  - The length of the tube itself is variable
    - Neonatal
    - Pediatric
    - Custom
Tracheostomy Tubes

- Suctioning of a tracheostomy tube
  - Attempt to ventilate the patient. If resistance is met, then stop.

Tracheostomy Tubes

- Instill saline into the tracheostomy tube.

Tracheostomy Tubes

- Give supplemental oxygen to the patient.
Tracheostomy Tubes

- Measure to the obturator of the tracheostomy to ensure proper length of suctioning catheter.
- Suctioning must be done with the appropriate size catheter (see chart).
- Sizing must be two times the size of the trach tube or the largest size that will fit.

Tracheostomy Tubes

- Insert the suction catheter
  - Keep fingers at the measured length.
  - Insert catheter WITHOUT applying suction.

Tracheostomy Tubes

- Apply suction.
  - Cover the opening on the catheter.
  - Suction for no more than 5–10 seconds (hold your breath comfortably).
  - Twist the catheter between fingers on the withdraw.
Tracheostomy Tubes
- Re-oxygenate patient between suctioning attempts.

Objective
- Given information from discussion, handouts, and reading materials the student will be able to identify special patient populations according to the Maryland Institute for Emergency Medical Services Systems Maryland Medical Protocols

Review
- Autism Spectrum Disorder
- Obesity
- Terminal Illness
- Disabilities
- Poverty/Homelessness
- Tracheostomy Tubes
Lesson 2-1
Cardiovascular and Respiratory System

Objective
- Given information from lecture, discussion, handouts, and reading materials the student will be able to identify all parts of the cardiovascular and respiratory system and determine what are considered baseline vital signs.

Overview
- Anatomy of the Cardiovascular System (Circulatory System)
- Anatomy of the Respiratory System
- Baseline Vitals
Anatomy of the Cardiovascular System

- **Heart**
  - The heart has four chambers
  - Right atrium
  - Right ventricle
  - Left atrium
  - Left ventricle

The right atrium receives blood from the vena cavae, two large veins that return the blood to the heart, and sends the blood to the right ventricle. The right ventricle then pumps the blood out to the lungs via the pulmonary arteries. (The blood is still at this point very low in oxygen and is carrying waste.)

The now-oxygen-rich blood is returned to the left atrium via the pulmonary veins. The left atrium receives blood from the pulmonary veins and when the left atrium contracts it sends the blood to the left ventricle. The left ventricle receives the oxygen-rich blood and when the left ventricle contracts it pumps blood into the aorta for distribution to the entire body.
Anatomy of the Cardiovascular System

- Heart
  - Between each atrium and ventricle there is a one-way valve to prevent backflow into the previous atrium or ventricle

- Arteries—carry blood away from the heart
  - Coronary arteries—branch off from the aorta and supply the heart muscle with blood
  - Aorta—largest artery in the body
  - Pulmonary artery—carries oxygen-poor blood to the lungs
Anatomy of the Cardiovascular System

- Arteries—carry blood away from the heart
  - Carotid artery—major artery in the neck, carries the main blood supply to the head
  - Femoral artery—major artery in the thigh, carries the main blood supply to the lower extremities
  - Brachial artery—in the upper arm, used to check pulse in pediatric patients

- Radial artery—supplies blood to the lower arm, used to take a pulse in an adult patient
- Posterior tibial artery—is used to determine the circulatory status of the lower extremities
- Dorsalis Pedis artery—on the top of the foot lateral to the large tendon of the big toe

- Capillaries—tiny blood vessels found throughout the body
  - Capillaries are where the gases, nutrients, and waste products are exchanged between the cells and the blood stream.
  - From the capillaries, the blood begins its journey back to the heart.
Anatomy of the Cardiovascular System

- Capillaries—tiny blood vessels found throughout the body
  - Perfusion is the supply of oxygen to and the removal of wastes from the cells and tissues of the body as a result of the flow of blood through the capillaries.
  - Hypoperfusion (shock) is poor perfusion as a result of insufficient blood flow through the capillaries.

- Veins—carry blood to the heart
  - Venule—the smallest of all veins
  - Pulmonary vein—carries oxygenated blood from the lungs to the left atrium

Anatomy of the Respiratory System

- Pharynx (nasal cavity)
  - Oropharynx—the area directly posterior to the mouth
  - Nasopharynx—the area directly posterior to the nose

- Larynx—voice box
- Trachea—windpipe
Anatomy of the Respiratory System

- Bronchi—the two branches of the trachea, one into each lung
- Bronchioles—the branches inside the lungs that continually get small from the bronchi to the alveoli
- Alveoli—small sacs within the lungs where the gas exchange takes place with the bloodstream
- Lungs—the organs where the exchange of atmospheric oxygen and waste take place

Baseline Vitals

- Blood pressure—the force blood exerts against the walls of blood vessels
  - Systolic blood pressure—the pressure created when the left ventricle contracts and forces blood into circulation
  - Diastolic blood pressure—the pressure in the arteries when the left ventricle is refilling
- Pulse—the rhythmic beats caused as waves of blood move through and expand the arteries
  - Peripheral pulse—radial, brachial, posterior tibial, and dorsalis pedis pulses
  - Central pulse—the carotid and femoral pulses
Baseline Vitals

- Respirations—the process of moving oxygen and carbon dioxide between circulating blood and the cells
  - Inhaling
    - Inhaling is an active process by which the muscles of the rib cage and diaphragm contract.
    - The diaphragm lowers and the ribs move outward.
    - Negative pressure is created inside the chest cavity, pulling air into the lungs.

Baseline Vitals

- Respirations
  - Exhaling
    - Exhaling is a passive process during which the intercostal muscles and the diaphragm relax.
    - The diaphragm rises and the ribs move inward.
    - Positive pressure is created inside the chest cavity, pushing air out of the lungs.

Baseline Vitals

- Respirations
  - Ventilation—the process of moving gases between inhaled air and the pulmonary circulation of blood
Baseline Vitals

<table>
<thead>
<tr>
<th>Percent O₂ Saturation</th>
<th>Ranges</th>
<th>General Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 95%</td>
<td>Normal</td>
<td>Give O₂ as necessary</td>
</tr>
<tr>
<td>91-94%</td>
<td>Mild hypoxia</td>
<td>Give O₂ as necessary</td>
</tr>
<tr>
<td>86-90%</td>
<td>Moderate hypoxia</td>
<td>Give 100% O₂, consider assisting ventilations</td>
</tr>
<tr>
<td>&lt; 86%</td>
<td>Severe hypoxia</td>
<td>Give 100% O₂, assist ventilations if necessary. If indicated, intubate.</td>
</tr>
</tbody>
</table>

Average Baseline Vital Signs

<table>
<thead>
<tr>
<th>Average Normal Vital Signs</th>
<th>Average</th>
<th>Objective</th>
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</thead>
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Objective

- Given information from lecture, discussion, handouts, and reading materials the student will be able to identify all parts of the cardiovascular and respiratory system and determine what are considered baseline vital signs.
Review

- Anatomy of the Cardiovascular System (Circulatory System)
- Anatomy of the Respiratory System
- Baseline Vitals
Objective

- Given information from lecture, discussion, handouts, and reading materials the student will be able identify how to conduct a patient assessment.

Overview

- Assessment of the Medical Patient
- Assessment of the Trauma Patient
- Assessment of the Special Patient
Assessment of the Medical Patient

- Determine AVPU
  - Alert—Is the patient alert?
  - Verbal—Can the patient respond to verbal cues?
  - Painful—Does the patient respond to pain?
  - Unresponsive—Is the patient unresponsive?

Assessment of the Medical Patient

- Responsive patient
  - Obtain a history of the episode
    - Onset
    - Provok
    - Quality
    - Radiate
    - Severity
    - Time

Assessment of the Medical Patient

- Responsive patient
  - Obtain baseline vitals as previously discussed
  - Obtain a SAMPLE History
    - Signs and symptoms the patient is presenting
    - Allergies to anything
    - Medications—prescribed or over the counter
    - Pertinent past medical history
    - Last oral intake
    - Events leading to the MOI/NOI
Assessment of the Medical Patient

- Responsive patient
  - Conduct a focused physical exam
    - Deformities
    - Contusions
    - Abrasions
    - Punctures or penetration
    - Burns
    - Tenderness
    - Lacerations
    - Swelling

- Conduct detailed and ongoing assessments
  - Repeat initial assessment
  - Repeat vital signs
    - Every 5 minutes for unstable patients
    - Every 15 minutes for stable patients

- Unresponsive patient
  - Conduct a Rapid Physical Exam
    - Deformities
    - Contusions
    - Abrasions
    - Punctures or penetration
    - Burns
    - Tenderness
    - Lacerations
    - Swelling
Assessment of the Medical Patient

- Unresponsive patient
  - Obtain baseline vitals as previously discussed
  - Obtain a history of the episode
    - Onset
    - Provok
    - Quality
    - Radiate
    - Severity
    - Time

- Unresponsive patient
  - Detailed and ongoing assessments
    - Repeat initial assessment including vital signs
      - Repeat vitals every 5 minutes for unstable patients
      - Repeat vitals every 15 minutes for stable patients
    - Repeat focused assessment
    - Recheck interventions
    - Repeat DCAP-BTLS if necessary

Assessment of the Trauma Patient

- Significant MOI
  - Conduct a Rapid Trauma Assessment
    - Deformities
    - Contusions
    - Abrasions
    - Punctures or penetration
    - Burns
    - Tenderness
    - Lacerations
    - Swelling
Assessment of the Trauma Patient

- Significant MOI
  - Obtain baseline vitals
  - Obtain SAMPLE History
    - Signs and symptoms the patient is presenting
    - Allergies to anything
    - Medications—prescribed or over the counter
    - Pertinent past medical history
    - Last oral intake
    - Events leading to the MOI/NOI

Assessment of the Trauma Patient

- Conduct detailed and ongoing assessments
  - Repeat DCAP-BTLS
  - Recheck interventions
  - Reassess vitals
    - Every 5 minutes for unstable patients
    - Every 15 minutes for stable patients

Assessment of the Trauma Patient

- Non-significant MOI
  - Perform a focused exam on the injured site and areas compatible with MOI (DCAP-BTLS)
  - Obtain baseline vitals
  - Obtain SAMPLE History
  - Conduct detailed and ongoing assessments
    - Repeat DCAP-BTLS
    - Recheck interventions
    - Reassess vitals
      - Every 5 minutes for unstable patients
      - Every 15 minutes for stable patients
Assessment of the Special Patient

- Pediatric Patients
  - Use the pediatric assessment triangle
    - Appearance
    - Working of breathing
    - Circulation to skin

- Assessment of the Special Patient
  - Pediatric Patients
    - Use small words and phrases
    - Tell the patient what you are going to do before you do it
    - Ask simple questions

- Assessment of the Special Patient
  - Geriatric Patients
    - Treat geriatric patients with respect
    - Use traditional assessment methods for adults based on MOI/NOI
    - Geriatric patients may suffer from a decreased sense of touch
    - The geriatric patients' environment may play a factor in their injury or illness
Assessment of the Special Patient

- Geriatric Patients
  - Notice diseases and illnesses associated with age
  - Cardiovascular disease is common
  - Neurological disease is common
    - Alzheimer’s
    - Dementia
  - Poor perfusion is common
  - Poor vision is common
  - Do not assume all geriatric patients have a particular disease or illness

Objective

- Given information from lecture, discussion, handouts, and reading materials the student will be able identify how to conduct a patient assessment.

Review

- Assessment of the Medical Patient
- Assessment of the Trauma Patient
- Assessment of the Special Patient