

**Instructor Note:** The core principle of this chapter is for the Texas Peace Officer to recognize an emergency medical condition, request additional/appropriate resources as indicated, and provide emergency lifesaving care until arrival of said resources. The primary focus of emergency medical assistance/intervention for the Texas Peace Officer is Tactical Casualty Care and Cardio-Pulmonary Resuscitation (CPR) with Automated External Defibrillator (AED).

For additional information, refer to the national standard best practices disseminated by: American Heart Association (AHA) Heartsaver First Aid/CPR/AED, American Red Cross (ARC); Community CPR, First Aid, and Safety; Committee on Tactical Emergency Casualty Care (CoTECC) guidelines for First Responders with a Duty to Act; National Association of Emergency Medical Technicians (NAEMT) First On The Scene (FOTS); National Highway Traffic Safety Administration (NHTSA) First Responder National Standard Curriculum; and/or other accredited first responder emergency medical care course(s) which satisfy the learning objectives.

**Unit Goal: Provide emergency medical assistance pending arrival of medical support.**

**40.1. Discuss the legal aspects of providing emergency medical assistance.**

Legal aspects:

- Duty to Request and Render Aid - CCP 2.35
  - Request Emergency Medical Services (EMS)
  - Provide first aid or treatment... to the extent of the officer's skill and training.
- Duty to Give Information and Render Aid - TC 550.023
  - Provide any person injured in the accident reasonable assistance.
- Good Samaritan Law - CPRC 74.152
  - Persons not licensed/certified... who in good faith administer emergency care as emergency medical service personnel are not liable in civil damages.
  - Note: this protection does not apply to persons licensed/certified as ECA/EMT/AEMT/Paramedic by Texas Department of State Health Services.

**40.2. Identify factors associated with treatment of different cultures.**

- Be aware of possible religious, lifestyle, or ethnic beliefs affecting medical care.
- Be sensitive to people's differences – You must provide equity in treatment.

**40.3. Identify universal precautions for preventing transmission of communicable diseases.**

Common Communicable Diseases:

- Tuberculosis (TB) = Airborne
- Coronavirus (COVID) = Droplet
- Influenza (Flu) = Droplet
- Meningitis = Droplet
- Scabies = Contact
- Herpes (HSV) = Contact
- Varicella / Chickenpox / Shingles (VZV) = Contact
- Human Immunodeficiency Virus (HIV) = Blood / Body Fluid
- Hepatitis B Virus (HBV) = Blood / Body Fluid

Universal Precautions

- Avoidance
- Treat all persons as if infected.
- Gloves
- Goggles
- Mask (surgical vs N95)
- Hand/skin washing.
- Changing clothes

#### Exposure

- If you believe you have been exposed, contact your agency's Infection Control Officer and/or follow your agency's exposure policy.
- Often, agency policy dictates notification of local hospital emergency department and/or local public health department.
- Possible exposures will be triaged, and specific advice given for the exact situation.

#### **40.4. Identify the three general phases of law enforcement emergency medical assistance.**

##### Phases of Care

- Direct Threat Care / Hot Zone / Care Under Fire
  - Care provided in any area with an ongoing direct and immediate threat of additional injury (shooting, stabbing, flame/fire, live electrical lines, vehicles on highway, etc.)
  - Focus is: Mitigate, Move, communicate... Get off the "X", prevent additional casualties, stay in the "fight."
- Indirect Threat Care / Warm Zone / Tactical Field Care
  - Care provided in an area of relative safety, with adequate security and cover/concealment/
  - Focus is Security, Immediate Action Plan, Medical
- Evacuation Care / Cold Zone / CASEVAC
  - Care provided while efforts being made to move casualty toward EMS or hospital.
  - Focus is: Reassess prior interventions, Perform additional interventions.

#### **40.5. Identify the principles of universal patient assessment using MARCH or XABCDE.**

##### MARCH

- Massive Hemorrhage
  - Wound Sweep: Legs, Neck, Arms
- Airway
  - Open, Clear, Asses
- Respirations
  - Wound Sweep: Chest, Abdomen, Back
  - Monitor Breathing: Normal vs Abnormal.
- Circulation
  - Pulse Check: Radial vs Carotid
  - Skin Check: Normal vs Abnormal
- Head/Hypothermia/Hyperthermia
  - Wound Sweep: Head, Face, Eyes, Ears
  - Pupil Check: Dilated vs Pinpoint vs Unequal

- Temperature Check: Normal vs Hot vs Cold

#### XABCDE

- Exsanguination
  - Wound Sweep: Legs, Neck, Arms
- Airway
  - Open, Clear, Asses
- Breathing
  - Wound Sweep: Chest, Abdomen, Back
  - Monitor Breathing: Normal vs Abnormal.
- Circulation
  - Pulse Check: Radial vs Carotid
  - Skin Check: Normal vs Abnormal
- Disability
  - Wound Sweep: Head, Face, Eyes, Ears
  - Pupil Check: Dilated vs Pinpoint vs Unequal
- Environment
  - Temperature Check: Normal vs Hot vs Cold

**Practical Scenario:** Have each student demonstrate either MARCH or XABCDE assessment.

#### 40.6. Demonstrate emergency aid procedures for hemorrhage/bleeding control.

##### Direct Pressure

- Apply pressure directly to the wound.
  - Gauze, cloth, or gloved hand
- Maintain pressure until bleeding stops or other effective intervention utilized.

##### Indirect Pressure

- Utilize pressure points “above” the wound (closer to the heart)
  - Brachial Artery
  - Femoral Artery
- Maintain pressure until bleeding stops or other effective intervention utilized.

##### Tourniquet

- For use with massive extremity hemorrhage (heavy bleeding from arms/legs).
- Preferentially utilize a commercial tourniquet device.
- Place “high and tight” or a minimum of 3 inches “above” the wound (closer to the heart).
- If bleeding not controlled with first tourniquet, apply a second tourniquet “above” the first.
- Notate time of tourniquet application.

##### Wound Pack

- For use with massive junctional hemorrhage (heavy bleeding from groin, buttocks, shoulder, armpit, collar bone, neck/shoulder/back connection).
- Preferentially utilize commercial gauze with an impregnated hemostatic agent.
- Fully pack the void in all directions, starting towards the direction of bleeding.
- Once fully packed, hold firm direct pressure for at least 3 minutes.

#### Pressure Dressing

- For use with bleeding that is not massive/heavy; or to maintain pressure after wound pack.
- Preferentially utilize a commercial pressure dressing with leverage bar/button/tab.

**Practical Scenario:** Have each student demonstrate all hemorrhage/bleeding management techniques.

#### **40.7. Demonstrate emergency aid for airway management.**

##### Position of Comfort

- For conscious casualties without concern for neck/spine injury (no major fall/wreck) who can maintain their own airway.
- Casualty assumes any preferred position of comfort to maintain own airway, if able
- Consider tripod position.
- If airway completely blocked, follow steps for choking management.

##### Head-Tilt / Chin-Lift

- For casualties without concern for neck/spine injury (no major fall/wreck) who cannot maintain their own airway.
- If blood, vomit, teeth, or other debris in mouth:
  - If liquid, carefully roll patient into Recovery Position to drain.
  - If solid, and easily identifiable/accessible, consider removing with fingers and/or roll patient into Recovery Position to drain.
  - Do not “blind” finger sweep.
  - If airway completely blocked, follow steps for choking management.

##### Jaw Thrust

- For casualties with concern for neck/spine injury (yes major fall/wreck) who cannot maintain their own airway.
- If blood, vomit, teeth, or other debris in mouth:
  - If liquid, carefully roll patient into Recovery Position to drain while maintaining head/neck in neutral/midline position.
  - If solid, and easily identifiable/accessible, consider removing with fingers and/or roll patient into Recovery Position to drain while maintaining head/neck neutral/midline.
  - Do not “blind” finger sweep.
  - If airway completely blocked, follow steps for choking management.

##### Recovery Position

- For any casualty with active bleeding/vomit/debris in mouth.
- For any unconscious casualty that will be left unattended/unsupervised.

##### Choking Management

- Utilize/Follow current American Heart Association or American Red Cross recommendations/guidelines as part of the integrated course in CPR/AED.
- Must include Adult, Child, and Infant.

**Practical Scenario:** Have each student demonstrate all airway management techniques.

**40.8. Demonstrate emergency aid procedures for respiration/breathing management.**

Occlusive Dressing

- For use with penetrating injury to the chest, abdomen, and/or back.
- Do not use if major evisceration (intestines coming out of wound).
- Preferentially utilize a commercial vented chest seal.
- Monitor for development of tension pneumothorax and “burp”/remove if indicated.
- Rapidly refer to medical personnel, as this is a life-threatening event.

Tension Pneumothorax

- Injury to chest/abdomen/back with severe difficulty breathing and signs of shock.
- Early recognition during assessment is the key.
- Rapidly refer to medical personnel, as this is a life-threatening event.

Allergic Reaction (Severe = Anaphylaxis)

- Often caused by ingestion/injection of an allergen (food/drink/bite/sting) and can occur with or without a known history of allergic reaction.
- Common symptoms include diffuse skin rash, hives, difficulty breathing, difficulty speaking, difficulty swallowing, whistling sound in throat, wheezing sound in lungs.
- If casualty has a prescribed Epi Pen™ (Epinephrine), encourage self-administration.
- Rapidly refer to medical personnel, as this is a life-threatening event.

Asthma Attack (Severe = Status Asthmaticus)

- Often caused by inhalation of an allergen (mold/pollen/smoke/pollutant), and/or intense physical exercise, usually with a known history of asthma.
- Common symptoms include difficulty breathing, difficulty speaking, wheezing sound in lungs, tripod positioning, anxious appearance.
- If casualty has a prescribed inhaler/nebulizer (Albuterol), encourage self-administration.
- Rapidly refer to medical personnel, as this is a life-threatening event.

Opioid Overdose (Narcotic Overdose)

- Often caused by inhalation/injection/ingestion of codeine, fentanyl, heroin, morphine, oxycodone, hydrocodone.
- Common symptoms include altered level of consciousness, slow/shallow breathing, weak pulse, pale or blue skin, pinpoint pupils.
- Provide Rescue Breathing if indicated and able to do so.
- Administer naloxone / Narcan™ if indicated, available, and able/authorized to do so.

Rescue Breathing

- Use/Follow current American Heart Association or American Red Cross recommendations/guidelines as part of the integrated course in CPR/AED.
- Must include Adult, Child, and Infant

**Practical Scenario:** Have each student demonstrate all respiration/breathing management techniques.

**40.9. Demonstrate the emergency aid procedures for circulation management.**

Heart Attack (Acute Myocardial Infarction)

- Generally caused by a blockage in an artery that feeds blood/oxygen to the heart muscle.
- Common symptoms include chest pain/pressure, jaw pain, left arm pain, shortness of breath, indigestion, nausea, pale/sweaty skin.
- Do not allow the casualty to exert themselves, place casualty in a position of comfort.
- Rapidly refer to medical personnel, as this is a life-threatening event.

#### Shock (Physiological, not Psychological)

- Inadequate blood flow to the body tissues and organs, highlighted by altered level of consciousness, pale/cool skin, rapid/weak/absent pulse.
- Can be caused by many things: hemorrhage/bleeding, tension pneumothorax, heat/dehydration, severe infection, severe allergic reaction, etc.
- Place casualty in recovery position and try to obtain/maintain normal body temperature.
- Rapidly refer to medical personnel, as this is a life-threatening event.

#### Complete course in CPR/AED

- Texas Peace Officer candidates must complete a full, nationally accredited course in Cardio-Pulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) use.
- American Heart Association (AHA) Heartsaver or American Red Cross (ARC) CPR/AED
- Must include Adult, Child, and Infant.
- In addition to CPR/AED, must include choking and rescue breathing components.

**Practical Scenario:** Have each student demonstrate Adult, Child, and Infant CPR/AED

#### **40.10. Demonstrate emergency aid procedures for environmental emergencies (heat/cold).**

##### Cold Emergency (Hypothermia)

- Move victim to a warm place.
- Remove wet clothing and dry victim.
- Warm the victim with blankets, and/or heat packs to the neck, armpits, groin (do not apply heat packs directly to skin, use a barrier such as a cloth)
- Keep all trauma patients warm.

##### Heat Emergency (Hyperthermia)

- Get victim out of the heat.
- Loosen tight clothing.
- Cool the victim with cold wet clothes on skin, and/or ice packs to the neck, armpits, groin.
- If conscious casualty, give them water to drink.
- Discuss one-rescuer and two- rescuer methods.

#### **40.11. Discuss emergency aid procedures for burns.**

##### Thermal Burns

- Generally caused by a heat source, such as sun, fire/flame, steam, stove, boiling water.
- Common symptoms include red painful skin, blisters, black charred skin, white waxy skin.
- Stop the burning process and remove casualty from source, do not expose yourself.

- Remove constricting clothing/jewelry and cover burns with dry dressings.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

#### Chemical Burns

- Generally caused by a substance, such as bleach, acid, drain cleaner, paint thinner.
- Common symptoms include red painful skin, blisters, skin peeling, swelling.
- Stop the burning process and remove casualty from source, do not expose yourself.
- Consider beginning decontamination with copious amounts of water, if safe to do so.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

#### Electrical Burns

- Generally caused by direct exposure to car battery, wall outlet, exposed wire, lightning
- Common symptoms include altered level of consciousness, wounds at entry and exit, red painful skin, blisters, swelling, weakness, abnormal heartbeat, cardiac arrest.
- Stop the burning process and remove casualty from source, do not expose yourself.
- Begin CPR/AED if no pulse.
- Remove constricting clothing and jewelry and cover burns with dry dressings.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

### **40.12. Demonstrate the emergency aid procedures for victims of diabetic emergencies, strokes, and seizures.**

#### Diabetic Emergencies

- Blood sugar levels either too low (hypoglycemia) or too high (hyperglycemia)
- If too low (hypoglycemia):
  - Common symptoms include altered mental status, symptoms like alcohol intoxication, irritability, pale/cool/clammy skin.
  - Maintain airway. If able to eat/drink, feed sugary food/drink and/or carbs.
  - “Cool and Clammy = Give ‘em Candy”
- If too high (hyperglycemia):
  - Common symptoms include altered mental status, deep/fast breathing, fruity/acetone breath, extreme thirst, headache, warm skin.
  - Maintain airway. If able to drink, give large amounts of water. Avoid sugar/carbs.
  - “Hot and Dry = Sugar High”
- Rapidly refer to medical personnel, as this can be a life-threatening event.

#### Seizure

- Can have many causes.
- Common symptoms include altered mental status, full-body general seizure activity, isolated extremity seizure activity, and/or seizure activity isolated to rapid eye jerking.
- Place casualty in recovery position with pillow under head.
- Do not attempt to “hold down” or restrict movement.
- If seizure activity due to heat stroke, attempt to cool patient.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

#### Stroke

- Generally caused by a blockage or tear of a blood vessel in the brain.
- Common symptoms include altered level of consciousness, headache, facial droop, one-sided body weakness, slurring of speech, unequal pupils, confusion.

- Maintain airway and continuously reassess casualty, keep head/shoulders elevated ~30°, if able.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

**40.13. Explain emergency aid procedures for broken bones and severe sprains.**

Bandaging and Splinting (Arms/Hands/Legs/Feet)

- Common signs include pain, weakness, swelling, bruising, bleeding, inability to move extremity, closed fracture, open fracture.
- Immobilize affected arm or leg above and below the site of injury.
- Preferentially utilize a commercial splint and/or sling, although other common items are effective, such as defensive baton, large flashlight, long board, rolled magazines, belt.
- Re-assess after immobilization for circulation in affected arm or leg.
- If no pulse in the affected arm or leg, rapidly refer to medical personnel.

**Practical Scenario:** Have each student demonstrate bandaging and splinting.

**40.14. Demonstrate the emergency aid procedures for childbirth.**

Childbirth (Normal/Routine)

- Common signs include “water broke”, contractions close in interval, urge to push, infant’s head crowning (visible from the outside)
- Place mother in a slightly seated position on back, with knees pulled towards chest.
- Simply assist the mother in the natural delivery of her baby (do not pull the baby)
- Support the baby's head as it delivers.
- Guide delivery of the upper shoulder followed by the lower shoulder.
- Support the baby’s body and legs as they deliver, keep baby level with mother.
- Warm/Dry/Stimulate baby until awake, color changing, and likely crying.
- Place baby on mother’s chest with skin contact, encourage breastfeeding, keep warm.
- If baby does not appear to be awake or breathing, consider CPR.

Childbirth (Abnormal)

- Common signs include severe sharp/tearing pain, bleeding from the birth canal, presentation of an arm, leg, or buttocks (visible from the outside).
- Do not encourage delivery.
- Rapidly refer to medical personnel, as this can be a life-threatening event.

**Practical Scenario:** Have each student demonstrate management of normal/routine childbirth.