

## Region X 2021 SOP Study Guide for EMTs

### Part 1

#### Advocate Condell EMS System

1. Adult Routine Medical Care
  - a. Assess Scene safety, use of standard precautions
  - b. Initial/Primary assessment
    - i. Airway
    - ii. Breathing
    - iii. Circulation
    - iv. AVPU and GCS
    - v. Expose
  - c. Identify priority patients and make transport decision
  - d. Additional Assessment (SAMPLE and focused history, physical exam)
    - i. Vital signs including pain scale, temp, and glucose if indicated
    - ii. Determine weight
    - iii. Apply pulse ox, capnography and recording reading before and during oxygen administration
      1. Administer oxygen if SPO2 less than 94% or respiratory distress
        - a. Nasal cannula @ 2-6 liters/minute
        - b. Non-rebreather mask @ 12-15 liters/minute
        - c. BVM @ 15 liters/minute
    - iv. Evaluate ECG rhythm, obtain 12 lead (as indicated), transmit
    - v. Reassess condition, VS, pain scale, pulse ox, capnography as frequently as condition indicates and after each intervention
  - e. Contact Medical Control
  - f. Transport to closest appropriate facility
2. Universal Adult Emergency cardiac care
  - a. Assess responsiveness
  - b. Assess pulse
  - c. RESPONSIVE
    - i. Adult routine medical care
  - d. UNRESPONSIVE
    - i. If no pulse/breathing felt within 10 seconds
      1. CPR at 30:2 compression to ventilation cycle for 2 minutes
    - ii. Apply AED/cardiac monitor
    - iii. Follow AED instructions and check pulse every 2 minutes during CPR
3. Drug assisted intubation
  - a. Routine medical/trauma care

- b. Pre-oxygenate 100% Oxygen for 3 minutes
  - c. Assist ventilations 1 breath every 5-6 seconds (10-12 breaths per minute)
- 4. Transition of care from AED trained personnel to ALS
  - a. For suspected opioid emergency (if not previously given): Administer Naloxone 2mg IN/IM, may repeat in 3 minutes to maximum of 10mg
- 5. Adult Acute Coronary Syndrome
  - a. Adult routine medical care
  - b. Apply cardiac monitor, send 12 lead ECG for interpretation
  - c. STABLE
    - i. Aspirin 81mg x 4 (324mg) PO chewed and swallowed
  - d. UNSTABLE
    - i. Aspirin 81mg x 4 (324mg) PO chewed and swallowed if patient can tolerate
- 6. Adult Supraventricular Tachycardia (narrow complex tachycardia)
  - a. Adult routine medical care
  - b. STABLE
    - i. Instruct patient to perform Valsalva Maneuver
- 7. Adult Rapid AFib/Flutter (narrow complex tachycardia)
  - a. Adult routine medical care
  - b. STABLE
    - i. Instruct patient to perform Valsalva Maneuver
- 8. Adult Asthma/COPD with wheezing
  - a. Adult routine medical care
  - b. Albuterol 2.5mg mixed with Ipratropium (Atrovent) 0.5mg (DUONEB) neb treatment with oxygen flow of 6 liters/minute
    - i. DUONEB
      - 1. May repeat x 1
    - ii. If no improvement, administer Albuterol 2.5mg/3ml Neb treatment, may repeat every 5 minutes
    - iii. Contact MEDICAL CONTROL to consider Epinephrine 1mg/ml 0.3mg IM in anterolateral thigh
    - iv. And/or CPAP begin at 5cm PEEP, may increase to maximum of 10cm PEEP
- 9. Carbon monoxide/smoke inhalation
  - a. Adult/pediatric routine medical care
  - b. Exposure history
  - c. Remove from hazardous environment
  - d. Airway management/Oxygen at 100%
  - e. Vomiting precautions
- 10. Adult allergic reaction/anaphylactic shock
  - a. Adult routine medical care
  - b. STABLE ALLERGIC REACTION

- i. Including hives, itching, rash, GI distress. Patient alert, skin warm and dry  
SBP  $\geq$  90
    - ii. Apply ice/cold pack to site
  - c. STABLE ALLERGIC REACTION WITH AIRWAY INVOLVEMENT
    - i. Epinephrine 1mg/ml 0.3mg IM in anterolateral thigh, may repeat every 5 minutes
    - ii. If wheezing, DUONEB
    - iii. If no improvement, Albuterol neb every 5 minutes
  - d. UNSTABLE ANAPHYLACTIC SHOCK
    - i. Secure airway
    - ii. Epinephrine 1mg/ml 0.3mg IM in anterolateral thigh, may repeat every 5 minutes
    - iii. If wheezing, DUONEB
    - iv. If no improvement, Albuterol neb every 5 minutes

#### 11. Adult Sepsis

- a. Adult routine medical care
- b. Contact medical control to notify of sepsis alert if meets criteria:
  - i. Suspected or documented infection
  - ii. Two or more of following:
    - 1. SBP <100, MAP <65, Temp >38 C or <36 C, RR >20, HR >90, ETCO<sub>2</sub>  $\leq$  25, AMS

#### 12. Adult Altered mental status/syncope/pre-syncope

- a. Adult routine medical care
- b. Immobilize C-spine as indicated
- c. Obtain blood glucose and record
  - i. If less than 60
    - 1. Oral Glucose gel 15G if able to tolerate PO intake, has gag reflex and can protect own airway
    - 2. Glucagon 1mg IM/IN if unable to give PO
- d. Perform BEFAST Prehospital Stroke Scale
- e. If patient is not alert, respirations are decreased, or narcotic overdose suspected:
  - i. Naloxone 2mg IN/IM, may repeat in 3 minutes to maximum of 10mg.

#### 13. Stroke/TIA

- a. Adult Routine medical care
- b. Contact Medical Control for stroke alert with BEFAST response and time of symptom onset
- c. Determine time of onset of symptoms (last known well time)
- d. Obtain glucose level and record. Correct before calling Medical Control for stroke alert.
  - i. If less than 60

1. Glucagon 1mg IM/IN
  - e. Perform BEFAST Prehospital Stroke scale and document
    - i. Balance
    - ii. Eyes
    - iii. Face
    - iv. Arm
    - v. Speech
    - vi. Time
  - f. If rapid neurologic deterioration (unequal pupils, extensor posturing, lateralizing signs)
    - i. Ventilate with BVM
      1. 1 breath every 3-6 seconds
      2. Guide by capnography to aim for ETCO<sub>2</sub> of 35 when there is a perfusing rhythm
14. Adult Diabetic Emergencies
- a. Adult routine medical care
  - b. Obtain history of time of patient's last medication dosage and if patient has eaten
  - c. HYPOGLYCEMIA
    - i. BG <60, ams, OR unable to determine glucose level and cool, clammy skin
      1. Oral Glucose gel 15G if able to tolerate PO intake, has gag reflex and can protect own airway
      2. Glucagon 1mg IM/IN if unable to give PO
  - d. HYPERGLYCEMIA/KETOACIDOSIS
    - i. BG >250 with symptoms of dehydration, vomiting, abdominal pain, or ams, OR unable to determine BG level and warm, flushed skin, and deep, rapid respirations
15. Adult Seizures/Status Epilepticus
- a. Adult routine medical care
  - b. Protect patient from Injury
  - c. Vomiting/aspiration precautions
  - d. Do NOT place anything in mouth if actively seizing
  - e. Obtain blood glucose
    - i. If less than 60
      1. Glucagon 1mg IM/IN
16. Severe Febrile Respiratory Illness
- a. Symptoms
    - i. Fever >100.4
    - ii. Cough, SOB, hypoxia
    - iii. Close contact with person confirmed or suspected of illness in the last 10 days

- iv. Employment in an occupation associated with risk
    - v. Atypical pneumonia without an alternative diagnosis
    - vi. Travel history to high-risk area
  - b. Take measures to decrease risk of transmission by droplet/airborne/contact
  - c. PATIENT
    - i. Patient to don surgical mask
    - ii. Hand hygiene with waterless soap
    - iii. Instruct to use tissues
  - d. PROVIDER
    - i. Limit number of personnel exposed
    - ii. Don N95 mask, gloves, gown, and eye protection
    - iii. Avoid touching outside of N95 mask
  - e. Adult routine medical care
  - f. Limit interventions to essential procedures
  - g. Notify receiving hospital of precautions
  - h. Leave equipment in room until appropriately cleaned
  - i. Refer to agency policy on decon of ambulance and equipment
  - j. Document exposure to possible communicable disease
- 17. Adult drowning/submersion/scuba injury
  - a. Adult routine medical/trauma care
  - b. History including MOI, time under water, depth, water temp
  - c. Spinal precautions applied as needed
  - d. 100% oxygen
  - e. Consider hypothermia
  - f. Monitor cardiac rhythm
  - g. Supine position
  - h. Contact medical control to consider CPAP
- 18. Adult heat emergencies
  - a. Adult routine medical care
  - b. Move to cool environment
  - c. Remove as much clothing as necessary to facilitate cooling
  - d. CRAMPS
    - i. Normal level of consciousness
    - ii. Muscle cramps or spasms
  - e. EXHAUSTION
    - i. Possible AMS, perspiring, weakness, fatigue, frontal headache, nausea/vomiting, dizziness, syncope, temp may be elevated
  - f. STROKE
    - i. AMS, flushing, hot skin (dry or moist), temp  $\geq 104$
    - ii. Initiate rapid cooling

1. Douse towels or sheets with cool water, place on patient, fan body
2. Cold packs to neck, axilla, and groin
3. Stop cooling if shivering occurs

19. Adult hypothermia/cold emergencies

a. FROSTBITE

- i. Move to warm environment
- ii. Rapidly re-warm frozen areas with warm water, hot packs in towels
- iii. Handle skin like a burn
  1. Light, dry, sterile dressings
  2. Elevate and immobilize
  3. Do not let affected skin surfaces rub together

b. SYSTEMIC HYPOTHERMIA

- i. Avoid rough handling and excess activity
- ii. Apply heat packs to axilla, groin, neck and thorax

20. Beta Blocker/Calcium channel blocker overdose

- a. Obtain accurate ingestion history to include time, route, quantity
- b. Bring container of drug or substance providing it does not pose safety risk
- c. Symptoms include:
  - i. Ams, HR <60, SBP <90, slurred speech, nausea/vomiting
- d. Do not give anything by mouth, do not induce vomiting

21. Stimulant/depressant overdose

- a. Obtain accurate ingestion history to include time, route, quantity
- b. Bring container of drug or substance providing it does not pose safety risk
- c. STIMULANT/HALLUCINOGENIC
  - i. Dilated pupils, tachycardia, htn, hyperthermia, diaphoresis, delusions
  - ii. Restrain if necessary, DOCUMENT!!
  - iii. Initiate rapid cooling if hyperthermic
  - iv. Monitor cardiac status and capnography
  - v. Quiet environment
- d. Opiates/Depressants
  - i. AMS, respiratory depression
  - ii. Treat resp depression
  - iii. Naloxone 2mg IN/IM, may repeat in 3 minutes to max of 10mg
  - iv. Consider restraints
  - v. Monitor cardiac status and capnography
  - vi. Quiet environment
- e. Do not give anything by mouth, do not induce vomiting

22. Bites and envenomation

- a. Assess scene safety
- b. Adult routine medical care/routine pediatric care

- c. Consider allergic reaction/anaphylaxis
- d. Keep supine with minimal movement, keep bitten extremity at level of heart
- e. Locate puncture wounds
- f. Remove all constricting jewelry, rings, watches, bracelets from affected extremity
- g. Mark border of any swelling/redness and note time
- h. Do not apply tourniquet, compression wrap or ice pack
- i. If snakebite, note bite time and species, transfer any anti-venom supply with patient

#### 23. Behavioral emergencies

- a. Establish scene and personal safety
- b. Call law enforcement as appropriate
- c. Determine and document if patient is threat to self or others, or if unable to care for self
- d. Attempt to verbally calm the patient
- e. Restrain as necessary by securing all four extremities while patient is supine to maximize safety for patient and providers (avoid prone position). DOCUMENT!!!
- f. Consider medical etiology of behavior disorder
- g. All EDs in region X are able to receive patients with behavioral emergencies

#### 24. Return of Spontaneous Circulation

- a. Adult routine medical care/Trauma care/Pediatric medical/trauma care
- b. Confirm ROSC:
  - i. Palpable carotid pulse, recordable BP, ETCO<sub>2</sub>  $\geq$  35
- c. Consider etiology of arrest, monitor closely for recurring arrest
- d. Reassess need for airway if not yet secured
- e. Administer oxygen with target of 94-98% saturation, do not hyperoxygenate
- f. If apneic, ventilate to achieve ETCO<sub>2</sub> 30-40, do not hyperventilate
- g. Treat hypoglycemia
- h. Neuro assessment, vitals, 12 lead ECG

#### 25. Withholding resuscitative efforts

- a. Risk to health and safety of EMS personnel
- b. Resources are inadequate to treat all patients
- c. Signs of irreversible death
  - i. Rigor mortis without profound hypothermia
  - ii. Profound dependent lividity
  - iii. Decapitation
  - iv. Transection
  - v. Incineration
  - vi. Decomposition
  - vii. Obvious mortal trauma
  - viii. Mummification and/or putrefaction

- d. Death has been declared by physician, med examiner, or coroner
- e. A valid "POLST" form or "DNR" has been secured
  - i. Must have name of patient, the words "do not resuscitate" or "do not attempt resuscitation/DNR," and signatures of patient/legal representative, witness to consent, authorized practitioner with date