ORANGE COUNTY EMERGENCY MEDICAL SERVICES (OCEMS)
EMERGENCY MEDICAL TECHNICIAN - ACCREDITATION
INSTRUCTOR REFERENCE

Version 1.0

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WELCOME MESSAGE FROM THE ORANGE COUNTY EMS MEDICAL DIRECTOR

It is an honor to welcome you to the Orange County EMT Accreditation program. This reference manual is the result of the work of many individuals in Orange County who enthusiastically shared their expertise on a voluntary basis.

An important aspect of this work is the renewed recognition of the importance of the EMT in the Orange County EMS System. Changes in EMT education, policies, and scope of practice have been made to support the philosophical shift in Orange County that reflects the EMS system being based on well educated and skilled EMTs. Regardless of the severity of an EMS response, basic EMT skills and knowledge always provide the foundation for proper and high quality field medical care.

The newly developed Orange County EMT Accreditation Program expands the scope of practice for the EMT to the maximum allowed by California law. It is the intent of Orange County EMS to maintain the highest level of skills and knowledge within the EMT program. As new EMT related advancements and information are developed, they will be applied in Orange County.

It is important to acknowledge the EMT educators in Orange County. This group has done the majority of the work in putting together the Accreditation Program. The dedication, enthusiasm, and expertise of the Orange County EMT educators are beyond expectation. As EMS Medical Director, I am comfortable that the EMT educators will continue to be the supporting structure for our quality EMT program.

As a final note, I would personally like for each EMT in Orange County to know that I hold them in high regard. Too often, the EMT is forgotten while the paramedic, nurse, and physician receive credit for a “great save”. But the bottom line is that without the EMT initiating initial evaluation and stabilization, there would be no “great saves”. With respect for each Orange County EMT, it is my pleasure to welcome you to the Orange County EMT Accreditation Program.

Samuel J. Stratton, MD, MPH
Orange County EMS Medical Director

ACKNOWLEDGEMENT PAGE

To all Orange County EMS Educators,

We all feel fortunate to either live or work in Orange County. After all, our beautiful county has inspired numerous television shows, is an enviable place to live, work and play, as represented by our cultural diversity, and the mass tourist industry and resorts that are located within our borders and along our pristine coastline.

It is with great pride that we offer you the Orange County EMT Accreditation Curriculum. This is a product that reflects more than a year of very intense work from committed individuals who wanted to represent our wonderful county and its prehospital EMS providers well. We believe this accreditation empowers the EMT to increase their skills, self-confidence, and ultimately satisfaction in their work. They are the future leaders of our EMS system, and we are helping to build a strong foundation.

This ambitious accreditation could not have happened without the forward-thinking and visionary ideas of both our Orange County Emergency Medical Services Medical Director, Dr. Samuel Stratton, M.D., and our BLS Coordinator, Patrick Powers, Paramedic. Special recognition must also go to those task force members who have helped create this curriculum and most of the accompanying policies and procedures that support the EMT's scope of practice in Orange County. They include: Cliff Bramlette, Paramedic, of Capo-Laguna ROP; Kevin Chao of Care Ambulance; Elaine Dethlefsen, RN, of Santa Ana College; Ruth Grubb, RN, of Orange County Fire Authority; Randy Hardick, Paramedic, of Saddleback Community College; Jane Lambert, RN, of Orange County Fire Authority; Thanh Nguyen, Paramedic, of North County ROP; Patrick Ochoa, EMT, of Coastline ROP; Scott Romanowski, EMT, the Education and Training Advisory Subcommittee; and all of the OCEMS staff.

With regards and happy training,

Phylicia I. Hassapis, RN, MA, M.Ed.
Chair, EMT-Basic Accreditation Task Force
Education and Training Advisory Subcommittee
July, 2009

INTRODUCTION TO THE OCEMS EXPANDED SCOPE OF PRACTICE CURRICULUM

Orange County Emergency Medical Services (OCEMS) is pleased to present the Emergency Medical Technician (EMT) Expanded Scope of Practice training curriculum. This product is a result of almost two years of work and collaboration by educators and operators of the OCEMS system. After receiving instruction and a completion certificate, a California certified EMT is eligible for OCEMS EMT Accreditation for the expanded skills authorized by the OCEMS Medical Director.

The instructional notes provided should be used as a reference by instructors when performing an overview of the OCEMS system. The core content of this curriculum is made up of expanded scope of practice skills such as self administration of the Mark 1® injector, EMT ALS assistance with Blood Glucose determination and the skills provided by the California basic scope of practice. Addendum I of OCEMS policy 315.00 provides a side by side comparison of the EMT scope of practice allowed by the OCEMS Medical Director through OCEMS EMT Accreditation and the standardized scope of practice provided by the California EMS Authority (EMSA). Addendum II of policy 315.00 was developed as a field reference tool.

Due to the various types of responses and transports that an EMT will encounter in Orange County an equal emphasis of instruction shall be placed on the curriculum by instructors. Allowable medications added to IV's for interfacility transport, the medical devices attached to patients for ongoing medical care, and the physical treatments that may be provided to patients at the scene of an emergency are all of primary importance to the knowledge of an Orange County Accredited EMT. Teaching emphasis should be placed on the need to upgrade and notify Advanced Life Support whenever an expanded scope skill is provided or patients are assisted with any medications allowable by OCEMS policy # 315.00.

This OCEMS expanded scope of practice curriculum was created to be inclusive of all EMS provider agencies in Orange County. By defining the OCEMS Accredited EMT in a local policy, the EMT scope of practice for Orange County can be determined and expanded upon as future demands on our system are encountered or identified.

I. INTRO TO OCEMS

- Facilities (base stations, trauma centers, PRCs, CVRCc, Neuro Centers, Burn, etc.)
- Destination decisions (I-40 Transport Guidelines)
- The 13 ALS Providers
- The one air transport provider (Mercy Air), Orange County Fire Authority Air Services may be used for search and rescue
- OCEMS approved CE providers with contact information
- OCEMS approved/accredited educational programs

II. POLICIES AND PROCEDURES

- Provide handout of Treatment Guideline I-40
- Review of I-40 Procedure, specifically transport information
- Provide handout on OCEMS BLS treatment guidelines
- Review of OCEMS DNR policy and California State POLST

III. EMT SCOPE OF PRACTICE – OCEMS POLICY 315.00

- Handout of review of basic EMT State scope of practice
- Specific Orange County EMS EMT scope of practice adds:

i. Assisting/administration of medications
ii. Glucometer
iii. Tourniquet
iv. 12 lead ECG placement
v. Pulse oximetry monitoring
vi. Intravenous therapy and intravenous site monitoring
vii. Interfacility Transport:

1. Intravenous: Lactate Ringers, Total Parenteral Nutrition (TPN), Folic Acid (B9), Thiamine (B1), Multivitamins, additional other basic solutions per OCEMS medical director
2. Preset self-contained medication infusion pumps for IV, SQ routes
3. Chest tubes
4. Home ventilators and home CPAP
5. Central lines:
   a. Okay to Transport: Any central vascular access line that does not require a constant infusion to keep the line open.
   b. Cannot Transport: Any patient with a central vascular access line that is presently being used to monitor the patient's condition, status, and or signs of life – requires ALS for transport.
   c. Cannot Transport: Any patient with an arterial line – requires ALS for transport.

6. Preset enteric feeding
7. Foley catheter
8. Gastrostomy, colostomy and urostomy

IV. SKILLS

- Skills Competency Testing:
  - Skills competency checklist
    - Each training program shall use a common standardized OCEMS approved skill checklist
    - Each student shall have a checklist completed for each skill that requires competency validation
    - Student skills testing sheets shall be maintained by the educational provider for 4 years
  - Skills Testing
    - Each training program may choose to validate skills individually or in a group setting
    - If skills testing is performed in a group setting the proctor/student ratio shall not exceed 6 students for each proctor
- Definitions:

i. Administer: A medication carried on a BLS ambulance (Medication brought to the scene by the EMT and stored in the ambulance)
ii. Assist: A medication that is the patients' own prescribed medication

- Reinforce/review 7 patients rights of medication administration

i. Right Patient
ii. Right Medication
iii. Right Dosage
iv. Right Route
v. Right Time (expiration, not exceeding maximum dose, etc.)
vi. Right Documentation
vii. Right Response (Proper reassessment and re-evaluation of patient)

- **CONTACT ALS and RAPID TRANSPORT (refer to I-40) for ALL of the Patients below:**

- **Use of auto-injector**
  - **i. Epinephrine Auto-Injector - Patient Assist**
  1. Review of Patient's own epinephrine auto-injector
     a. Medication administration technique
     b. Proper disposal

2. Reassessment after interventions (oxygen, positioning, patient's own epinephrine auto-injector, pulse oximetry monitoring, etc.)
3. Documentation of all of the above
4. Proficient student return demonstration of administration of a prop/ trainer epinephrine auto-injector to a mock patient

ii. Mark One® and Duodote® Auto-Injector - Self administration

1. Review of S-L-U-D-G-E-M (salivation, lacrimation, urination, defecation, gastrointestinal, emesis, muscle twitching) symptoms consistent with known or suspected exposure to an organophosphate
2. Review of the types of antidote auto-injectors available for self administration
3. Review of technique for self administration
4. Reassessment of self looking for S-L-U-D-G-E-M symptoms or other changes to consider repeating auto-injector dose one time
5. Seek further medical care and documentation
6. Discuss limiting spread of nerve agent/organophosphate compound by speaking with public safety personnel on scene
7. Proficient return student demonstration of self administration of a prop auto-injector

- **Metered-Dose-Inhaler - Patient Assist**

i. Albuterol or Atrovent

1. Review of patient's own metered-dose-inhaler (MDI)
   a. Medication administration technique
   b. Spacers
2. Reassessment after interventions (oxygen, positioning, patient's own MDI, pulse oximetry monitoring, respiratory rate, tidal volume, effort quality, etc.)
3. Documentation of all of the above
4. Proficient student return demonstration of administration of a prop metered-dose-inhaler to a mock patient

- **Nitroglycerine – tablet and spray - Patient Assist**

i. Contraindications:

1. Systolic blood pressure less than 90
2. Recent head injury
3. Recent use of medications to treat erectile dysfunction such as Viagra®, Levitra® or Cialis®

ii. Nitroglycerine tablets

1. Review of patient's own sublingual nitroglycerine tablets
2. Reassessment after interventions (oxygen, positioning, patient's own nitroglycerine, pulse oximetry, pain scale, respiratory status, etc.)
3. Documentation of all of the above
4. Proficient student return demonstration of administration of a prop sublingual nitroglycerine tablet to a mock patient

iii. Nitroglycerine Spray

1. Review of patient's own sublingual nitroglycerine spray
2. Reassessment after interventions (oxygen, positioning, patient's own nitroglycerine, pulse oximetry, pain scale, respiratory status, etc.)
3. Documentation of all of the above
4. Proficient student return demonstration of administration of a prop sublingual nitroglycerine spray to a mock patient

- **Aspirin - Patient Assist**

i. Contraindications:

1. Children younger than 24 months
2. Nasal polyps
3. Known history of gastrointestinal bleeding

ii. Assistance

1. Review of patient's own aspirin tablets
2. Assist patient with the administration of their own aspirin in accordance with their physician directions or the drug manufacturer's directions. It is recommended to have the patient chew the aspirin and allow them to drink no more than a small sip of water if needed.
3. Reassessment after interventions (oxygen, positioning, patient's own aspirin, pulse oximetry, pain scale, respiratory status, etc.)
4. Documentation of all of the above
5. Proficient student return demonstration of administration of a prop aspirin to a mock patient

- **Oral Glucose Agents Administration – gels, tablets, liquid - FDA® approved**

i. Contraindications:

1. Unresponsiveness
2. Inability to swallow or control own airway

ii. Oral Glucose Gel, Tablets and Liquids

1. Review of oral glucose gel, tablets and liquids and appropriate administration techniques

2. Reassessment after interventions (oxygen, positioning, oral glucose gel, pulse oximetry, mental status, etc.)
3. Documentation of all of the above
4. Proficient student return demonstration of prop oral glucose gel to a mock patient

- **12-lead placement**
  - i. Review of anatomical landmarks, intercostal spaces, and midclavicular line
  - ii. Demonstration of proper lead placement using anatomical landmarks
  - iii. Discuss patient privacy/modesty and appropriate lead placement and techniques on women
  - iv. Proficient return student demonstration indicating proper placement of leads on either a manikin or other appropriate model

- **Pulse Oximetry Use**
  - i. Review of proper application and placement of probe to assure reliable readings
  - ii. Treat patient's symptoms, not the pulse oximeters reading
  - iii. Documentation of pulse oximeters readings
  - iv. Care and maintenance of common pre-hospital pulse oximeter equipment per manufacturer's recommendations
  - v. Proficient return student demonstration of pulse oximetry use and documentation on a mock patient

- **Tourniquet application**
  - i. Discuss and review control of hemorrhage to an extremity
  - ii. Direct pressure
  - iii. Demonstrate control of external hemorrhage to an extremity using an OCEMS approved tourniquet (proper placement in relation to wound and joints)
  - iv. Demonstrate and discuss proper assessment of circulation, sensation and motor of the extremity before and after placement of the tourniquet and ongoing assessment
  - v. Documentation of tourniquet application
  - vi. Proficient student return demonstration of application of an OCEMS approved tourniquet or simulated tourniquet to control hemorrhage to an extremity with proper assessment of circulation, sensation and motor before and after tourniquet application on a mock patient

- **Glucometer use**
  - i. Review of aseptic technique, BSI and required equipment
  - ii. Review of the steps of the procedure
  - iii. Demonstration of the use of an FDA approved glucometer to obtain a fingerstick serum glucose value, including care of the wound and disposal of the sharp
  - iv. Discuss and/or demonstrate the care, cleaning and routine calibration of a common FDA approved glucometer per manufacturer's guidelines
  - v. Proficient student return demonstration of obtaining a fingerstick serum blood glucose value and documentation of the results on a mock patient, with proper wound care, and sharps disposal

- **Monitoring IV site**
  - i. Review of types of intravenous solutions that a patient may have which an EMT may transport without the assistance of ALS
  - ii. Demonstrate where to find information about what is contained in the intravenous solution and the expiration date
  - iii. Review of types of IV tubing
    1. Micro tubing
    2. Macro tubing
    3. Buretrol
  - iv. Explanation of TKO (to-keep-open) or KVO (keep-vein-open) rate and how to calculate this by counting the drops per minute
  - v. Demonstrate how to prepare an IV bag and tubing for administration
  - vi. Discuss different types of common IV dressing and when it is appropriate to reinforce a dressing, such as when an IV site is leaking or bleeding
  - vii. Discuss integrity of IV flow and common causes of occlusions
  - viii. Monitoring the IV site
    1. Signs and symptoms of IV site infiltration
    2. Signs and symptoms of IV site infection
  - ix. When and how to shut off the IV infusion by clamping the tubing
  - x. Discussion of types of preset infusion pumps

V. STUDENT ASSESSMENT

- Final written exam standardized between all accreditation classes
  - i. Skills Testing – Each student shall be tested on the following six skills using the provided OCEMS-approved skill testing sheets. It is up to the instructor or program director if they feel students should be tested on further skills, but it is not required. Students may be tested individually, or in groups of up to six students per one qualified testing proctor.
    1. Suctioning of a tracheostomy and endotracheal tube
    2. Glucometer use
    3. Metered-dose-inhaler administration
    4. Auto-injector administration
    5. 12-lead placement
    6. IV preparation and monitoring
  - ii. Written Post Test – Each student shall take the provided OCEMS-approved written post test and pass with an 80%. The post test is included in the OCEMS EMT Accreditation Curriculum Packet.
  - iii. Student Evaluation – Each student is asked to complete an evaluation of their educational experience.
  - iv. Continuing Education Hours/Units – Each approved OCEMS CEU provider may offer CEUs for successful participation in the OCEMS EMT Accreditation Class which corresponds to the number of hours that were spent teaching the curriculum.
  - v. Required Record Keeping – Each educational provider offering the OCEMS EMT Accreditation Class must keep accurate attendance records, including copies of the written post test results and all skill testing sheets for each student, and the student evaluations, for four years.

- In **1980** Senate Bill 125 was carried by Senator John Garamendi, creating section 1798 of the Health and Safety code and formally recognizing EMS as an organized system of Pre-Hospital Emergency Medical Care in the state of California. On February 2, 1982 the Orange County Board of Supervisors recognized OCEMS as the local EMS agency for Orange County.

- Over twenty BLS Ambulance providers operate in Orange County. These professional ambulance companies provide contracted 911 emergency ambulance response, interfacility transport of patients requiring a BLS level of care and specialty care transport (SCT) with a Registered Nurse and/or Respiratory Therapy licensed practitioners.

- Thirteen fire departments provide Advanced Life Support (ALS) service in Orange County.
    - In Orange County, ALS service providers are the fire departments of each city and the OCFA, and LA County Fire Department in the City of La Habra. There are no professional ambulance providers with Paramedics responding to 9-1-1 calls in Orange County. Fire department paramedics can be involved in the interfacility transport of patients from one acute care hospital to another for higher level of care.

- Twenty-three acute care hospitals are designated as "**paramedic receiving centers**", or PRCs. EMS patients who access the 911 system shall only be transported to one of these designated facilities. All OC PRCs are reviewed by OCEMS at least once every 3 years to ensure they are in full compliance with all OCEMS policies.
    - Orange County does not designate Emergency Departments Approved for Pediatrics
        - All hospitals in Orange County are expected to provide immediate evaluation and stabilization for any and all age patients
        - Age-specific equipment must be immediately available in the ED to treat peds patients
        - All Emergency Department RNs and MDs must be PALS certified
    - In 1980 Orange County was the first in the State to develop an organized trauma system for the treatment of trauma victims
        - The three trauma hospitals are: University of California Irvine Medical Center, Western Medical Center Santa Ana, and Mission Hospital
    - Orange County was the first in the nation to have a comprehensive county-wide system of triage to Cardiovascular Receiving Centers (CVRC) for patients identified as having an acute myocardial infarction.

- 12 cardiac receiving hospitals
  - Anaheim Regional Medical Center; Fountain Valley Regional Hospital; Hoag Memorial Hospital Presbyterian; Los Alamitos Medical Center; Mission Hospital; Saddleback Memorial Medical Center – Laguna Hills; St. Joseph Hospital; St. Jude Medical Center; University of California Irvine Medical Center; West Anaheim Medical Center; Western Medical Center – Anaheim; Western Medical Center – Santa Ana

- Orange County is also the first to have a comprehensive county-wide system to triage patients with s/s of acute stroke (ischemic as well as hemorrhagic) to designated **Stroke-Neurology Receiving Centers (SNRC's)**.
  - 9 SNRCs
    - Fountain Valley Regional Hospital; Hoag Memorial Hospital Presbyterian; Mission Hospita; St. Joseph Hospital; University of California Irvine Medical Center; Western Medical Center – Santa Ana; Los Alamitos Medical Center; St. Jude Medical Center; and Saddleback Memorial Medical Center – Laguna Hills
- Other specialty designations:
  - 2 **Burn** specialty hospitals are University of California Irvine Medical Center and Western Medical Center – Santa Ana.

- **TRANSPORT PROTOCOLS**
  - Patients not requiring a specialty center who are stable for EMT transport should be transported to the closest, most accessible paramedic receiving center (PRC) unless …
    - the patient has requested transport to a facility where
      - he has previously received medical care or
      - is currently receiving medical care or
      - his physician is on staff or
      - the facility is identified by his insurance carrier as a "plan" hospital
    - OCEMS considers these to be home hospital requests and every effort to accommodate transport of patients to their home hospital should be made
    - In general, patients from within the City of La Habra should be transported to an Orange County hospital unless they request transport to an Los Angeles County hospital

- Patients meeting specialty center triage will be transported to the closest open specialty hospital as directed by the base hospital. These patients generally will require ALS treatment and transport.
    - Trauma, cardiac, stroke, burn, replant, OB, peds etc
    - Patients meeting replant criteria (see TxG T-15) will be transported to either UCIMC or Western Medical Center – Santa Ana; the two hospitals alternate service days. The base hospital has a list which identifies which hospital is accepting replant patients that day.

- **INTERFACILITY TRANSFERS USING 9-1-1**
    - Hospitals in OC are permitted to access the 9-1-1 system to effect transfer of an acutely ill or injured patient from one acute care hospital to another for higher level of care.
    - Hospitals are also permitted to upgrade a patient upon arrival to the ED and request paramedics transport the patient to another acute care hospital for higher level of care; this situation is termed a **call continuation**. See policy #670.10.

- **AEROMEDICAL TRANSPORT**
    - If the patient requires transport via helicopter, the helicopter service that is the closest and can provide the shortest ETA to the scene should be used.
        - Mercy Air is the only approved ALS Aeromedical provider in Orange County

- **LOCAL ACCREDITATION** requirements are addressed in policy; see policy #415.00
    - EMT's can only be locally accredited by OCEMS when they
        - Are currently certified in California by an approved certifying authority
        - Have completed an approved course for Orange County EMT Accreditation
        - Have an orientation to the EMS system in Orange County (the purpose of this class)
        - Have current CPR certification at the American Heart Association level of healthcare provider or equivalent
        - Have a live scan on file with OCEMS or are registered in the Emergency Medical Services Authority (EMSA) EMT registry (after 7/1/2010)

- To maintain Orange County accreditation, the EMT must
    - Attend all mandatory training (usually an annual update to OCEMS policies and practice)
        - Failure to attend OCEMS annual updates will result in denial of renewal of OC accreditation. Accreditation can be regained by repeating the OCEMS EMT accreditation course.
        - OCEMS also requires a copy of each EMT's state certification; when renewing accreditation if certified by a certifying authority other than OCEMS, a copy of current EMT certification must be provided to OCEMS.

- **COMMUNICATIONS**

  "Control One" and "OCC" (Orange County Communications) oversees and coordinates all emergency communications within the county.
    - Is located in the hills above the City of Orange in Silverado Canyon at Loma Ridge, within the County's Emergency Operations Center and the Sheriff's 9-1-1 PSAP.
    - Is <u>not</u> a dispatch center
    - <u>Is</u> a coordination center that can access City, County, State and Federal communications systems and agencies through dedicated radio, landline, microwave and satellite communications systems
    - Orange County's communications system interconnects all public safety agencies and hospitals throughout OC, allowing coordination between federal, state and local public service agencies as well as private and volunteer organizations (RACES and HAMS)
        - RACES: Radio Amateur Civil Emergency Service. Licensed amateur radio operators trained to assist governmental agencies during times of emergencies or disasters.
            - Available on-call 24/7/365
            - Access via Control One Supervisor at 714/ 628-7008
    - The 24-hour Countywide Coordinated Communications Center ("Control One" or "Orange County Communications" aka OCC) is equipped to communicate on all trunked talk groups, conventional 800 MHz repeaters, as well as other VHF and UHF radio systems such as the Med 10 Radio which is required to be installed in each licensed ambulance operating in Orange County
    - All of OC's public safety agencies operate on one common frequency band, the 800 MHz radio system. This enables interoperability among all participating City and County law, fire, public works and lifeguard/marine safety departments.

- Backup system "FailSafe"
- OCC Coordinates all EMS radio communications
- Coordination between hospitals and public safety agencies is via
    - HEAR (Hospital Emergency Administrative Radio)
    - ReddiNet (Rapid Emergency Digital Data Information NETwork

- **OCEMS VERBIAGE**
    - Orange County's "PCT" (patient contact time) is the equivalent of "at patient"
    - "MAR" (most accessible receiving) is nearest paramedic receiving center (PRC) in Orange County
    - Patient orientation – Orange County uses "times 4" for reporting full patient orientation
    - Classification of trauma patients will be discussed below

- **TRAUMA**
    - OC recognizes two classifications of trauma patients; those who are critically injured or present with abnormal vital signs, termed CTV (critical trauma victims), and those who are less seriously injured, who have stable vital signs, and whose mechanism of injury is the primary concern. These are termed MTV (moderate trauma victims).
        - **CTV (critical trauma victims)** the equivalent of **"major" or "criteria" trauma**
        - **MTV (moderate trauma victims)** the equivalent of **"minor" or "guidelines" trauma**
    - CTV patients will always be transported to a designated trauma center
        - If in cardiac arrest secondary to penetrating trauma, to trauma center
        - If in cardiac arrest secondary to blunt force trauma, to nearest PRC
    - MTV patients are usually transported to a designated trauma center but can be transported to the nearest PRC if base so directs
    - Trauma patients presenting with unmanageable problems (e.g., exsanguination, uncontrolled airway) may be directed to the closest PRC for stabilization. Once the patient is stabilized, paramedics will escort the patient to a trauma hospital. This is a classic use of "call continuation" (OCEMS policy #670.10)

- **DOCUMENTATION**
  - Pursuant to the California Health and Safety Code and the California Code of Regulations, Title 22, a prehospital care report (PCR) must be created for every occurrence in which prehospital care providers deem a person to be a patient.
  - In Orange County a patient is defined in Policy 390.15 of the Orange County Policy and Procedures Manual. A patient is defined as anyone who meets one or more of the following:

    - Has a chief complaint
    - A witness / someone with personal knowledge of the person states the person has a chief complaint, or makes a request for examination or treatment on the person's behalf
    - Has an obvious symptom or signs of injury or illness
    - Has been involved in an event with significant mechanism that the average first responder would believe could cause an injury
    - Appears to be disoriented or to have impaired psychiatric function
    - Has evidence of suicidal intent
    - Is dead

  - Public EMS provider agencies generally utilize the OCEMS approved PCR Report Form.
  - Professional EMS provider agencies utilize a PCR form that meets the needs of the organization.
  - The OC EMS System is in the process of transitioning to electronic prehospital care reports (ePCR). Public and private provider agencies who adopt an ePCR solution must utilize Local EMS Data Standards that have been adapted from State and Federal EMS Data Standards. The new ePCR system will be know as the Orange County Medical Emergency Data System (OC-MEDS).

OCEMS EMT SCOPE OF PRACTICE: EMT-OCEMS ACCREDITED

I. AUTHORITY:

Health and Safety Code, Sections 1797.107, 1797.109, 1797.160, 1797.170 and California Code of Regulations, Title 22, Division 9, § 100061, 100063 and 100064.

II. APPLICATION:

To define the scope of practice of an Accredited Emergency Medical Technician (EMT) practicing in Orange County.

III. POLICY:

During training, while at the scene of an emergency, during transport of the sick or injured, or during interfacility transfer, a supervised EMT student or certified EMT is authorized to do any of the following:

1. Evaluate the ill and injured.
2. Render basic life support, rescue and emergency medical care to patients.
3. Obtain diagnostic signs to include, but not be limited to, the assessment of temperature, blood pressure, pulse and respiration rates, blood oxygen saturation level, level of consciousness, pain level, skin signs, and pupil status.
4. Perform cardiopulmonary resuscitation, including the use of mechanical adjuncts to basic cardiopulmonary resuscitation.
5. Use the following adjunctive airway breathing aids:
   a. Oropharyngeal airway
   b. Nasopharyngeal airway
   c. Suction devices
   d. Administer oxygen utilizing basic oxygen delivery devices
   e. Manual and mechanical ventilating devices
6. Use stretchers and body immobilization devices including long boards, short boards, KED boards, pediatric immobilization devices and cardboard or vacuum splints.
7. Provide initial prehospital emergency care of trauma.
8. Administer oral glucose or sugar solutions.
9. Extricate entrapped persons.
10. Perform field triage based on OCEMS policies and procedures including MCI policy #900.00.
11. Transport patients based on OCEMS Policies, & Procedures, and Treatment Guidelines.
12. Set up for ALS procedures, under the direction of an Advanced EMT (AEMT) or Paramedic.

13. Perform automated external defibrillation.

14. Monitor intravenous lines delivering glucose solutions or isotonic balanced salt solutions, including Ringer's Lactate for volume replacement.

15. Monitor, maintain, and adjust if necessary in order to maintain, a preset rate of flow and turn off the flow of intravenous fluids to include these physician prescribed medications:

    a. Total parenteral nutrition (TPN)
    b. Folic Acid
    c. Thiamine
    d. Multivitamins
    e. Antibiotic, antifungal, and antiviral agents

16. Transfer of a patient who is deemed appropriate for Basic Life Support transfer by the transferring physician, who has any of the following:

    a. Nasogastricng tubes
    b. Gastrostomy tubes
    c. Heparin locks
    d. Tracheostomy tubes
    e Hemodialysis shunts (both subcutaneous and external)
    f. Long-term established central venous lines (e.g. PIC lines) for on-going medication administration
    g. Colostomy bags
    h. Urostomy bags
    i. Foley catheters
    j. Enteric Feeding Tubes
    k. Continuous flow oxygen
    l. Thoracostmy (chest) tube(s)

    ❖ **All arterial lines are excluded from EMT transport.**

    ❖ **Central vascular lines used for patient monitoring or infusing intravenous fluid and medications are excluded from EMT transport.**

17. Assist ALS providers to perform blood glucose determination.

18. Transport patients with subcutaneous or intravenous implanted or external patient- operated infusing pumps but not limited too:

    a. Insulin
    b. Meperidine (Demerol)
    c. Morphine
    d. Total parenteral nutrition (TPN)

19. Transport patients with Fentanyl patches previously placed on the patient.

20. Transport patients with Nitrobid, nitroglycerine patches, nitroglycerine paste or clonidine patches previously placed on the patient.

21. If available and indicated, concomitant with notifying ALS providers, allow patient self administration or *assist* patient with physician prescribed emergency medications limited to the following:

    a. Nitroglycerine aerosol or tablets
    b. Albuterol inhalation - metered dose inhaler or nebulizer treatment
    c. Epinephrine auto-injector
    d. Aspirin

22. Assist ALS providers in placement of 12-lead ECG leads.

23. Assist ALS providers during endotracheal intubation by handing them the flexible intubation guide.

24. Place pulse oximetry probes and record oxygen saturation results. If patient is short of breath and pulse oximeter reading is less than 95%, administer oxygen.

25. Place mechanical tourniquets for uncontrolled external bleeding of extremities.

26. Place and initiate operation of the Autopulse® external chest compression device for management of cardiopulmonary arrest.

27. Administer atropine and 2-PAM by means of Duodote® or Mark-1 kit to self or under ALS direction.

28. Withhold resuscitation of a patient meeting declared dead criteria as identified in OCEMS policy 330.50 and honor a DNR request, Advanced Healthcare Directive or California POLST form as defined by OCEMS policy 350.51.

TITLE 22 AND OCEMS ACCREDITED EMT SCOPE OF PRACTICE COMPARISON

Title 22, CCR § 100063. Scope of Practice of Emergency Medical Technician (EMT).	**OCEMS Policy 315.00 - OCEMS Local EMT Accredited Scope of Practice**
(a) During training, while at the scene of an emergency, during transport of the sick or injured, or during interfacility transfer, a supervised EMT-I student or certified EMT-I is authorized to do any of the following:	(A) During training, while at the scene of an emergency, during transport of the sick or injured, or during interfacility transfer, an OCEMS accredited EMT or EMT student supervised by an OCEMS accredited EMT is authorized to do any of the following:
(1) Evaluate the ill and injured	(1) **same as state**
(2) Render basic life support, rescue and emergency medical care to patients.	(2) **same as state**.
(3) Obtain diagnostic signs to include, but not be limited to, the assessment of temperature, blood pressure, pulse and respiration rates, level of consciousness, and pupil status.	(3) **same as state** with blood oxygen saturation level added
(4) Perform cardiopulmonary resuscitation, including the use of mechanical adjuncts to basic cardiopulmonary resuscitation. (5)Use the following adjunctive airway breathing aids:	(4) **same as state** (5) **same as state**
(A) oropharyngeal airway;	(a) **same as state**
(B) nasopharyngeal airway;	(b) **same as state**
(C) suction devices;	(c) **same as state**
(D) basic oxygen delivery devices; and	(d) Administer oxygen utilizing basic oxygen delivery devices
(E) manual and mechanical ventilating devices designed for prehospital use.	(e) Manual and mechanical ventilating devices
(6) Use various types of stretchers and body immobilization devices.	(6) Use stretchers and body immobilization devices including long boards, short boards, KED boards, pediatric immobilization devices and cardboard or vacuum splints.
(7) Provide initial prehospital emergency care of trauma.	(7) **same as state**
(8) Administer oral glucose or sugar solutions.	(8) **same as state**
(9) Extricate entrapped persons.	(9) **same as state**
(10) Perform field triage.	(10) Perform field triage based on OCEMS policies and procedures including MCI policy # 900.00.
(11) Transport patients.	(11) Transport patients based on OCEMS policies, procedures, and treatment guidelines.
(12) Set up for ALS procedures, under the direction of an EMT-II or Paramedic.	(12) **same as state**
(13) Perform automated external defibrillation when authorized by an EMT AED service provider.	(13) Perform automated external defibrillation
(14) Assist patients with the administration of physician prescribed devices, including but not limited to, patient operated medication pumps, sublingual nitroglycerin, and self-administered emergency medications, including epinephrine devices.	(14) **same as state** (b)(1) (15) **same as state** (b)(2) (a) Total parenteral nutrition (TPN) (b) Folic Acid (c) Thiamine (d) Multivitamins (e) Antibiotic, antifungal, and antiviral Agents
(b) In addition to the activities authorized by subdivision (a) of this section, the medical director of the local EMS agency may also establish policies and procedures to allow a certified EMT-I or a supervised EMT-I student in the prehospital setting and/or during interfacility transport to:	(16) Transfer of a patient, who is deemed appropriate for Basic Life Support transfer by the transferring physician, and who has any of the following: Nasogastric tubes (NG), Colostomy bags, Gastrostomy tubes, Urostomy bags, Heparin locks, Foley catheters, Tracheostomy tubes, Enteric Feeding tubes, Continuous flow oxygen, and Thoracostomy (chest) tube(s) Hemodialysis shunts (both subcutaneous and external), Long-term established central venous lines (e.g. PIC lines) for on-going medication administration * **Arterial lines and central vascular access lines that are used for monitoring of patient vital statistics are excluded from EMT transport.**
(1) Monitor intravenous lines delivering glucose solutions or isotonic balanced salt solutions including Ringer's lactate for volume replacement;	
(2) Monitor, maintain, and adjust if necessary in order to maintain, a preset rate of flow and turn off the flow of intravenous fluid; and	

(3) Transfer a patient, who is deemed appropriate for transfer by the transferring physician, and who has nasogastric (NG) tubes, gastrostomy tubes, heparin locks, foley catherters, tracheostomy tubes and/or indwelling vascular access lines, excluding arterial lines; (4) Monitor preexisting vascular access devices and intravenous lines delivering fluids with additional medications pre-approved by the Director of the EMS Authority.	(17) Assist ALS providers to perform blood glucose determination. (18) Transport Patients with subcutaneous or intravenous implanted or external patient-operated pumps infusing but not limited too: (a) Insulin (b) Meperidnine (Demerol) (c) Morphine (d) Total Parenteral nutrition (TPN) (19) Transport patients with Fentanyl patches previously placed on the patient. (20) Transport patients with Nitrobid, nitroglycerine patches, nitroglycerine paste or clonidine patches previously placed on the patient. (21) If available and indicated, allow patient self-administration or **assist** patient with physician prescribed emergency medications limited to the following: (a) Nitroglycerine aerosol or tablets (b) Albuterol inhalation - metered dose inhaler or nebulizer treatment. (c) Epinephrine auto-injector (d) Aspirin (22) Assist ALS providers in placement of 12-lead ECG leads (23) Assist ALS providers by handing them the flexible intubation guide during endotracheal intubation. (24) Place pulse oximetry probes and record oxygen saturation results (25) Place mechanical tourniquets for uncontrolled external bleeding of extremities. (26) Place and initiate operation of the Autopulse® external chest compression device for management of cardiopulmonary arrest. (27) Perform self administration of atropine and 2-PAM by means of Duodote® or Mark-1 kit. (28) Withhold resuscitation of a patient meeting declared dead criteria identified in OCEMS policy 330.50 or honor a DNR request, Advanced Healthcare Directive or California POLST form as defined by OCEMS policy 330.51.

Treatment during Interfacility Transport

During the transport of a patient requiring a BLS level of care, an OCEMS Accredited EMT may transport a patient with the following:

Additives to IV Fluid Therapy

Adjusted to TKO rate by Hospital Personnel.

1. Folic Acid (B9)
2. Thiamine (B1)
3. Multivitamins
4. Antibiotic, antifungal, and antiviral agents

Transport Patients with Medical Devices

Arterial lines and central vascular access lines used for monitoring of patient vital or infusing fluid or Meds are EXCLUDED from BLS transport.

1. Nasogastric tubes
2. Gastrostomy tubes
3. Enteric Feeding tubes
4. Thoracostomy (chest) tubes
5. Heparin locks
6. Colostomy and Urostomy bags
7. Foley catheters
8. Hemodialysis shunts (subcutaneous and external)
9. Continuous flow Oxygen
10. Long term established central venous lines used for on-going medication administration (PIC lines)

Patient Operated Medication Pumps

Implanted or external pumps infusing to include but not limited to:

1. Insulin
2. Meperidnine (Demerol)
3. Morphine
4. Total parenteral nutrition (TPN)

Patients with Medication Patches

Patches must be previously placed by facility

1. Fentanyl patches
2. Nitrobid, Nitroglycerine patches or Nitroglycerine paste
3. Clonidine (Catapress)

Treatment on Scene

An OCEMS Accredited EMT may perform or assist ALS with the following proceedures:

1. Evaluate the ill and injured and render basic life support
2. Perform field MCI triage (OCEMS policy **900.00**)
3. Obtain vital signs to include assesment of:
   a. Blood pressure, Pulse and Respiration rates
   b. Level of consciousness
   c. Pain level, Skin signs and Pupil status
4. Obtain blood oxygen saturation level using pulse oximeter device.
5. Perform Automated External Defibrillation
6. Perform CPR including use of Autopulse® device
7. Utilize OCEMS approved mechanical tourniquets for uncontrolled bleeding of extremities.
8. Administer Oxygen
9. Administer oral glucose solutions
10. Self Administration of Mark 1/ Duodote® autoinjector

Assist Patients w/ prescribed meds limited to:

Assistance to patients with prescribed or home medications requires ALS response for the following:

1. Nitroglycerine aerosol or tablets
2. Albuterol inhalation - metered dose or nebulizer
3. Epinephrine auto-injector
4. Aspirin for cardiac chest pain

Assist Paramedics with the following:

OCEMS Accredited Paramedic must be on scene or enroute for an EMT to perform the following:

1. Placement of ECG leads for 12 lead acquisition
2. Prepare Intravenous (IV) fluid therapy
3. Assist with preparation for ALS airway proceedures
4. Assist with determination of blood glucose levels

Honor DNR Request

1. Physician signed DNR or Copy
2. Advance Healthcare Directive
3. California POLST Form

(Refer to OCEMS policy **350.51)**

Withhold Resuscitative Efforts

EMT's may withhold resuscitative efforts consistent with OCEMS P&P **350.50** Patients meeting criteria "declared dead"

BASE HOSPITAL CONTACT/REPORT/TRANSPORT/ESCORT

BASE HOSPITAL (BH) CONTACT / ON-LINE MEDICAL CONTROL:

Base Hospital Contact is required for the following types of cases:

- All persons classified as moderate (unless meeting ALS No-Contact Criteria) or acute medical, moderate or critical trauma, or full arrest.
- Persons transported by EMT-Ps as per P/P #670.10, Interhospital Emergency Patient Transfer Guidelines.
- Persons who meet criteria for triage to a Trauma, Cardiovascular, Stroke Neurology, or Burn Center.
- Minors (age less than 18) who meet ALS Contact or No-Contact criteria for whom the parent or caretaker is not present to provide consent or for whom written emergency medical consent is not available.
- Known or suspected exposure to nerve agents, cyanide, radiation sources, or when decontamination procedures are indicated.
- Patients for whom a 12-lead ECG is performed who request to sign out AMA for further treatment.

NOTES:

— Contact the assigned base hospital as soon as possible for destination decision to facilitate field treatment and for early notification of the receiving center (PRC).
— Refer to P/P #330.15 if base hospital contact cannot be established or maintained.

RADIO REPORT:

- An EMT-P shall provide the base hospital (BH) with a complete, detailed and timely report sufficient to allow the BH to make appropriate care and triage decisions for the patient.

TRANSPORT:

- Persons who have stable vital signs, are not in full arrest, or who do not meet Trauma, Burn, Cardiovascular or Stroke Neurology Receiving Center criteria should be transported to their preferred receiving center or "home hospital" (P/P # 310.10). **A "home hospital" request supersedes an individual hospital request for ambulance diversion except when that hospital is experiencing an internal disaster.**
- Those persons without a preferred receiving center should be transported to the most accessible open PRC.
- Persons who meet Trauma, Burn, Stroke Neurology, or Cardiovascular Center triage criteria should be ALS transported to the nearest appropriate, open specialty center.
  - Persons meeting Cardiovascular or Stroke Neurology Receiving Center triage criteria, who have stable vital signs and are mentally competent, may sign AMA to be transported to their "home hospital" which may or may not be a Cardiovascular or Stroke Neurology Receiving Center.

Special Circumstances:

- Pregnant persons who appear near term with cardiac arrest or impending arrest should be transported immediately to the most accessible open PRC (see OCEMS Policy/Procedure #310.30, Trauma Triage Guidelines).
- Victims of sexual assault should be transported to the most accessible open PRC or specialty center based on OCEMS triage criteria.
- First responders may expedite immediate transport of an infant/small child near-drowning victim to the most accessible PRC (see Treatment Guideline E-15).
- Persons requesting or in need of medical care who are being legally detained will be managed by appropriate OCEMS policies and guidelines. "Medical Clearance" requires emergency department evaluation and is not considered a field procedure *(U.S. CMS Emergency Medical Treatment And Labor Act [EMTALA])*
  - Detained persons who are mentally competent may refuse medical care and sign AMA per P/P #330.65.

Boxed text indicates BH order
Unboxed text indicates standing order

- First responding BLS units may transport unstable medical cases to the nearest PRC, while providing appropriate BLS interventions, if the estimated time for ALS arrival exceeds BLS transport time to the PRC.
  - An unstable medical case is defined as persons with abnormal vital signs as defined below and a primary medical complaint:

	(adults)	(newborn to 12 years)
○ Pulse	<50 or >130	<60 or >200 or age appropriate
○ Respirations	<12 or >26	<12 or >50 or age appropriate
○ Systolic blood pressure	<90	<80

  - BLS level transports of unstable medical cases must be reported to the OCEMS Medical Director by the BLS Provider within 24 hours of occurrence. The report must include a cover letter identifying the provider contact person for questions regarding the call, the provider PCR and a printout of the dispatch record; these documents can be sent by mail or facsimile to (714) 834-3125.

ESCORT:

- EMT-P escort to the appropriate OCEMS approved facility is required for persons classified as: moderate or acute medical; moderate trauma victim; critical trauma victim; cardiopulmonary or respiratory arrest; and persons designated to a Cardiovascular, Stroke Neurology, or Burn Specialty center.
- Exception:
  - Persons refusing care who meet competency criteria (P/P # 330.65).
- Refer to P/P #330.20 for Transport of Minors.

ALS No-Contact: Criteria

Base contact is **NOT REQUIRED** for persons meeting all of the following criteria:

- The patient is stable, as defined by:
  - Vital signs are within this range*:

– Pulse	50 – 130	bpm
– Respirations	12 – 26	per minute
– Systolic blood pressure	≥90	mmHg

- The patient is 18 years-old or older or if under 18 years-old, has consenting parent, caretaker or written or telephone verbal emergency medical consent present.
- The patient would normally be triaged to the most accessible non-specialty receiving center.
- Only these ALS interventions may be required:
  - Oxygen.
  - IV at TKO rate or a saline lock.
  - Field blood glucose determination.
  - Cardiac monitoring.

  OR, if following the interventions below, the patient is asymptomatic with normal vital signs* after a single dose or treatment:

  - IV dextrose / IM glucagon / PO glucola or sugar tabs for hypoglycemia (BS < 80).
  - Albuterol nebulized treatment for asthma / COPD.
  - Nitroglycerin for cardiac chest pain with or without aspirin administration.
  - Naloxone for suspected narcotic overdose.
  - Morphine sulfate for pain due to skeletal trauma or burns.
  - IV fluid bolus (200-250 mL normal saline) with return of vital signs to established parameters above*.
  - Normal saline nebulized treatment for suspected croup.
  - Aspirin given in management of cardiac chest pain.

Boxed text indicates BH order
Unboxed text indicates standing order

BASE HOSPITAL CONTACT/REPORT/TRANSPORT/ESCORT

Comprehensive Standing Orders: Criteria (Authorized for use only by Anaheim Fire Department)

Base contact **IS REQUIRED** for the following persons / situations:

- Persons with abnormal vital signs:

	(adults)	(newborn to 12 years)
– Pulse	<50 or >130	<60 or >200 or age appropriate
– Respirations	<12 or >26*	<12 or >50 or age appropriate
– Systolic blood pressure	<90	

* except known narcotic overdose

- Anaphylaxis.
- Acute status respiratory distress.
- Labor / childbirth.
- Cardiopulmonary arrests.
- Needle thoracostomy.
- When medical direction is needed.
- Triage decisions (*e.g.,* consent issues [including consent for minors under 18], ALS refusal with question of capacity, uncertain destinations).
- MCI (for receiving PRC / PTRC destination).
- Interfacility transports.
- Cardiovascular Receiving Center patients (to allow for activation of the receiving hospital cardiac catheterization lab for the incoming case).
- Burn Center and Replant Criteria (to determine which of these centers is scheduled for receiving acute cases that day).
- Stroke Neurology Center and CTV patients to provide alert to such specialty receiving centers such that a CT scanner can be made available for the incoming specialty center patient.
- Patients for whom a 12-lead ECG is performed who request to sign out AMA for further treatment

Boxed text indicates BH order
Unboxed text indicates standing order

- Appropriate space to accommodate the number of students and is conducive to learning
- Appropriate teaching staff that meet OCEMS approval to instruct curriculum
- Appropriate secured storage of student records for a minimum of four years
- Auto-injector trainers or simulators
- Glucometer with required supplies
- Tracheostomy model/manikin or a close simulation at the discretion of OCEMS approval
- Airway manikin for endotracheal tube
- Intravenous solution bag(s) and tubing
- Metered-dose inhaler cartridge or trainer
- Standard BSI equipment
- Sharps containers
- Means to dispose of biohazard waste
- 12-lead electrodes or equivalent/mock leads
- (Optional) manikin for 12-lead placement [a student or volunteer may be used as appropriate]
- Additional equipment, supplies, or further resources may be required with advance notice at the discretion of OCEMS

- **STUDENT SKILLS ASSESSMENT**
  - Final written exam standardized between all accreditation classes
    - Skills Testing – Each student shall be tested on the six following skills using the provided OCEMS-approved skill testing sheets. It is up to the instructor or program director if they feel students should be tested on further skills, but it is not required. Students may be tested individually, or in groups of up to six students per one qualified testing proctor.

      1. Endotracheal Tube and Tracheostomy Tube Suctioning
      2. Glucometer Use
      3. MDI Assistance
      4. Auto-Injector
      5. 12-Lead Placement
      6. IV Set-Up/Monitoring

Student:_____ Date:_____

Skill Sheet: Endotracheal Tube and Tracheostomy Tube Suctioning

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Prepares for Suctioning		
Uses and maintains sterile technique appropriate to prehospital setting	1	
Chooses appropriate size soft-tipped suction catheter	1	
Assures that patient is prepared with proper oxygen/ventilation	1	
Assures suction equipment functions properly	1	
Endotracheal Tube		
Measures depth of catheter insertion by measuring maximum length against an unused ETT of the same size	1	
Inserts suction catheter into ETT no deeper than length measured	1	
Applies suctions while removing catheter from ETT • "Twists" or slightly "swirls" catheter while retracting • Suctions no longer than 15 seconds for an adult/5 seconds for child/infant	2	
Tracheostomy Tube		
Measures depth of catheter insertion by measuring maximum length against an unused or comparable tracheostomy tube	1	
Inserts suction catheter into tracheostomy tube no deeper than length measured	1	
Applies suctions while removing catheter from ETT • "Twists" or slightly "swirls" catheter while retracting • Suctions no longer than 15 seconds for an adult/5 seconds for child/infant	2	
Patient Assessment		
Demonstrates/verbalizes removal and replacement of O2 and ventilation	1	
Demonstrates/verbalizes assessment of airway and respiratory status	1	
Total Points	**15**	

Critical Criteria:

__ Did not use appropriate standard precautions
__ Did not use appropriate size equipment and/or measure catheter correctly
__ Did not maintain sterility appropriate to prehospital setting
__ Did not assure equipment functioned properly
__ Applied suction while entering tube
__ Suctioned for longer than maximum allowed time
__ Did not obtain a score of 12

☐ Pass ☐ Fail

_____

Proctor's name and certification/license level

Student:_____ Date:_____

Skill Testing Sheet: Glucometer Use

	Possible Points	Points Awarded
Takes or verbalizes appropriate body substance isolation precautions *	1	
Gathers all appropriate equipment	1	
Turns on the blood glucose monitor	1	
Checks to ensure monitor and test strips are compatible *	1	
Places test strip in the monitor	1	
Prepare the patient's finger with an alcohol pad*	1	
Holding the patient's finger securely, use a lancet to puncture the tip of the finger	1	
Dispose of the lancet in an appropriate sharps container*	1	
Obtains blood sample without squeezing finger	1	
Appropriately transfers blood sample to test strip	1	
Correctly interprets glucose meter LED reading	1	
Appropriately disposes of contaminated items, and assures monitors is clean	1	
Provides appropriate wound care	1	
Correctly documents glucose monitor reading	1	
Total Points	**14**	

Critical Criteria:

__ Did not use appropriate PPE/BSI

__ Did not appropriately cleanse puncture site

__ Did not place lancet in appropriate sharps container

__ Did not assure that test strip and monitor were compatible

__ Did not obtain clean test sample

__ Did not obtain a score of 11

☐ Pass ☐ Fail

_____

Proctor's name and certification/license level

Student:_____ Date:_____

Skill Sheet: MDI Assistance

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Prepare medication and equipment		
Obtains patient's prescribed inhaler and ensures prescription is written for patient	1	
Check and recheck medication		
Inspects and assures the integrity of the inhaler	1	
Confirms that the medication is Albuterol (generic or a trade name)	1	
Assures that the medication has not expired	1	
Medication Administration/Assistance		
Shakes inhaler vigorously several times and ensures the device is at room temperature	1	
Removes high-flow oxygen mask from the patient	1	
Has the patient exhale deeply	1	
Has patient place lips around the opening of the inhaler (or spacer device)	1	
Has patient inhale deeply as the inhaler is simultaneously depressed	1	
Instructs the patient to hold their breath for as long as comfortably possible and exhale through pursed lips if able	1	
Replaces the oxygen mask on the patient	1	
Monitor the patient		
Demonstrates/verbalizes reassessments of patient appropriate to MDI administration	1	
Total Points	**13**	

Critical Criteria:

__ Did not use appropriate standard precautions

__ Did not assure medication was correct and had not expired

__ Did not appropriately mix the medication by shaking MDI prior to administration

__ Did not assure patient created seal with mouth around MDI

__ Did not depress MDI when patient inhaled

__ Did not reassess patient after medication administration for desired or adverse effects

__ Did not obtain a score of minimum score of 10

☐ Pass ☐ Fail

_____

Proctor's name and certification/license level

Student:_____ Date:_____

Skill Sheet: Auto-Injector

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Prepare medication and equipment		
Identifies appropriate medication and dosage	1	
Check and recheck medication:		
Inspects and assures integrity of auto-injector	1	
Inspects for solution clarity (if able)	1	
Assures medication has not expired	1	
Administration of the Medication		
Selects appropriate site (anterior-lateral thigh)	1	
Prepares the site as necessary and/or appropriate	1	
Removes the safety cap from auto-injector	1	
Firmly places the auto-injector against the anterior-lateral thigh muscle with enough force to activate the injection device	1	
Holds auto-injector against site long enough to administer medication (approximately 10 seconds)	1	
Quickly withdraws the auto-injector	1	
Disposes of auto-injector into appropriate receptacle (sharps container)	1	
Monitor the patient		
Demonstrates/verbalizes reassessment of patient related to auto-injector use	1	
Total Points	**13**	

Critical Criteria:

__ Did not use appropriate standard precautions

__ Did not properly administer medication (procedure/location)

__ Did not reassess patient after medication administration

__ Did not dispose of auto-injector in sharps container

__ Did not obtain a score of 10

☐ Pass ☐ Fail

_____

Proctor's name and certification/license level

Student:_____ Date:_____

Skill Sheet: 12-Lead Placement

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Identifies the correct placement of the limb leads (4-lead placement)		
Black electrode (LA) – Left Arm	**1**	
Red electrode (LL) – Left Leg	**1**	
White electrode (RA) – Right Arm	**1**	
Green electrode (RL) – Right Leg	1	
Identifies the correct placement of the chest electrodes to complete a 12-lead (V-leads)		
V_1: 4th intercostal space to the right if the sternum	1	
V_2: 4th intercostal space to the left of the sternum	1	
V_3: Directly between leads V_2 and V_4	1	
V_4: 5th intercostal space at mid-clavicular line	1	
V_5: Level with V_4 at left anterior axillary line	1	
V_6: Level with V_5 at left mid-axillary line	1	
Total Points	**11**	

Critical Criteria:

__ Did not use appropriate standard precautions

__ Did properly place the limb lead(s)

__ Did not properly place the chest lead(s)

__ Did not receive a minimum score of 8

☐ Pass ☐ Fail

_____

Proctor's name and certification /license level

Student:_____ Date:_____

Skill Sheet: IV Set-Up/Monitoring

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Inspects IV Bag		
Reads label on IV bag and identifies type of solution	1	
Checks that IV bag has no leaks	1	
Assures that IV solution is clear	1	
Assures IV fluid has not expired	1	
Prepare Solution and Tubing		
Correctly identifies tubing instructed to use as macro vs. micro	1	
Opens tubing package	1	
Assures sterility of tubing by keeping cover over the "spike" and at the distal end	1	
Moves roller clamp on tubing to appropriate position • Upwards toward drip chamber • Closes clamp	2	
Removes protective cap off solution bag maintaining sterility	1	
Removes protective cap on the spike maintaining sterility	1	
Correctly inserts tubing spike into solution bag without compromising sterility	1	
Flush IV Tubing		
Squeezes drip chamber to fill half full (to mark) with IV fluid	1	
Opens roller clamp to allow fluid to run, removing all air bubbles form the entire length of tubing	1	
Maintains sterility of distal end of tubing	1	
Setting IV Drip Rate		
Adjusts valve until IV is dripping at a to keep open (TKO) rate	1	
Demonstrates/verbalizes how to monitor IV drip rate and IV site during transport	1	
Total Points	**18**	

Critical Criteria:

__ Did not use appropriate standard precautions
__ Did not ensure the IV bag was usable
__ Did not maintain sterility of appropriate areas when assembling IV set and IV bag
__ Did not fill drip chamber half full prior to opening roller clamp
__ Did not ensure that all air was removed from IV tubing prior to administration to patient
__ Did not set rate to TKO
__ Did not obtain a score of 14

☐ Pass ☐ Fail

_____

Proctor's name and certification/license level

TOURNIQUETS: INDICATIONS AND PROCEDURE

INDICATIONS:

- Use of a tourniquet is appropriate when upper or lower extremity hemorrhage cannot be controlled by applying direct pressure to the site of bleeding.

CONTRAINDICATIONS:

- None.

EQUIPMENT:

- An OCEMS approved tourniquet device.
- Personal protective equipment, dressings and bandages.

PROCEDURE:

- Always use personal protective equipment (PPE) appropriate for potential blood exposure.
- Visually inspect injured extremity and avoid placement of a tourniquet over joint, angulated or open fracture, stab or gun shot wound sites.
- Assess and document circulation, motor and sensation distal to injury site.
- Apply tourniquet proximal to wound (usually 2-4 inches).
- Tighten tourniquet incrementally to the least amount of pressure required to stop bleeding.
- Cover wound with an appropriate sterile dressing and/or bandage.
- Do not cover tourniquet (keep tourniquet visible).
- Re-assess and document circulation, motor and sensation distal to tourniquet.
- Ensure receiving facility staff are aware of tourniquet placement and time tourniquet placed.

DOCUMENTATION:

- Estimated blood loss.
- Vital signs, assessment of circulation, motor, and sensation distal to injury site before and after tourniquet application.
- Time tourniquet is applied.

NOTES:

- Advanced Life Support (ALS) level response is required when a tourniquet is placed.
- Refer to treatment guideline T-15 regarding appropriate field management of an amputated body part.
- During multi-casualty incidents, consider a patient requiring a tourniquet to have a (**P**)perfusion problem and categorize as START category "Immediate" (Red) to facilitate treatment and minimize tourniquet time.

BLS PROVIDER ASSISTING WITH NITROGLYCERINE FOR CHEST PAIN/CARDIAC ISCHEMIA

INDICATIONS:

- Patient with chest pain who has prescribed Nitroglycerine and who is awake and alert.

CONTRAINDICATIONS:

- Systolic Blood pressure below 90 mm Hg
- Patient has already taken three (3) doses of Nitroglycerine for this chest pain episode
- Use of Viagra®, Cialis®, or Levitra® within the past 24 hours
- Prescribed Nitroglycerine has expired

EQUIPMENT:

- Personal protective equipment (PPE) - surgical gloves
- Blood pressure cuff and stethoscope
- Oxygen delivery equipment

PROCEDURE:

- Assure that ALS responders are en-route
- Perform a complete assessment on the patient to include medical history, medications, and allergies to medication
- Place patient in a position of comfort and administer oxygen at a flow rate that is appropriate for the patient and condition
- If patient is having active chest pain or discomfort, ask if they have taken any of their prescribed Nitroglycerine
- If the patient has taken any of their Nitroglycerine, determine how much has been taken and when it was taken
- If the patient has no relief from oxygen and/or medication already taken and it is not contraindicated, consider assisting with the administration of a single dose of Nitroglycerine

Nitroglycerine Tablets – The patient should be familiar with the proper method for self administering their own medication. If necessary assist the patient by placing one tablet under their tongue. Advise the patient not to swallow the tablet.

Nitroglycerine Spray – Do not shake the medication container prior to administration. Advise the patient not to inhale. Direct medication spray under the tongue or to side of inner mouth.

- Resume oxygen therapy after administration of medication
- Update vital signs five (5) minutes after Nitroglycerine administration and document

DOCUMENTATION:

- Complete Assessment including initial and updated vital signs
- Description of the need to assist the patient with Nitroglycerine
- Time for Nitroglycerine assisted administration

BLS PROVIDER ASSISTING WITH NITROGLYCERINE FOR CHEST PAIN/CARDIAC ISCHEMIA

NOTES:

- Give detailed report to ALS personnel when they arrive, including time(s) and dose(s) Nitroglycerine taken by patient
- If patient becomes hypotensive prior to arrival of ALS personnel place patient in a position of comfort and elevate legs as tolerated
- Refer to Treatment Guideline C-15 for the BLS/ALS management of the patient with chest pain or discomfort

BLS PROVIDER ASSISTING WITH METERED DOSE INHALER (MDI)

INDICATIONS:

- Respiratory distress in a patient with a prescribed Albuterol or ipratropium (Atrovent ®) MDI

CONTRAINDICATIONS:

- Altered mental status
- Prescribed inhaler has expired
- Known allergy to medication delivered by MDI

EQUIPMENT:

- Personal protective equipment
- Oxygen delivery equipment
- Blood pressure cuff and stethoscope

PROCEDURE:

1. Ensure that Advanced Life Support is enroute
2. Perform a complete assessment, including initial vital signs
3. Verify respiratory distress (wheezing, use of accessory muscles, labored breathing)
4. Provide supplemental oxygen at a flow rate that is appropriate for the patient and condition
5. Verify MDI is labeled and prescribed for patient and not expired
6. Do not shake MDI
7. Assist patient with administration of MDI medication
    a. Remove nozzle cover if present
    b. Have patient exhale and place MDI to lips
    c. Have patient seal lips around nozzle and inhale
    d. Fully depress medication canister into holder while patient inhales
    e. Remove MDI and have patient hold breath for 10 seconds or as long as comfortable
    f. Allow patient to resume breathing and when possible repeat second dose following steps a - e above.
8. Resume oxygen therapy after administration of medication
9. Update vital signs every ten (10) minutes and document

DOCUMENTATION:

- Complete Assessment including initial and updated vital signs
- Time(s) for assisted administration of MDI
- Description of why the patient needed assistance with inhaler

NOTES:

- Ensure that Advanced Life Support is enroute
- Give detailed report to ALS personnel when they arrive, including time(s) MDI used
- Absence of wheezing may be due to low air exchange (shallow breathing from severe disease)
- For patient with difficulty speaking, always consider upper airway obstruction

BLS PROVIDER ASSISTING WITH ASPIRIN FOR CHEST PAIN/CARDIAC ISCHEMIA

INDICATIONS:

- Patient with own aspirin and chest pain consistent with cardiac origin who is awake and alert.

CONTRAINDICTIONS:

- Known aspirin allergy
- History of bleeding disorder or recent GI bleeding (including ulcers)
- History of asthma and nasal polyps
- History unreliable or unobtainable
- Patient's aspirin is expired or obviously deteriorated

EQUIPMENT:

- Personal protective equipment (PPE)
- Blood pressure cuff and stethoscope
- Oxygen delivery equipment

PROCEDURE:

- Assure that ALS responders are en-route
- Perform a complete assessment on the patient to include medical history, medications, and allergies to medication
- Place patient in a position of comfort and administer oxygen at a flow rate that is appropriate for the patient and condition
- If patient is having active chest pain or discomfort, ask if they have already taken a dose of aspirin
- If aspirin taken, determine how much has been taken and when it was taken
- If not contraindicated and no aspirin has previously been taken, assist patient in chewing or swallowing either two "baby" (81 mg) tablets or one 325 mg tablet
- Resume oxygen therapy after administration of medication
- Update vital signs five (5) minutes after administration and document

DOCUMENTATION:

- Complete Assessment including initial and updated vital signs
- Description of the need to assist the patient with aspirin
- Time for aspirin assisted administration and brand name of aspirin taken

NOTES:

- Give detailed report to ALS personnel when they arrive, including time(s) and dose(s) aspirin taken by patient
- Refer to Treatment Guideline C-15 for the BLS/ALS management of the patient with chest pain or discomfort

12-LEAD ELECTROCARDIOGRAPHY PLACEMENT PROCEDURE

INDICATIONS:

- For use on any patient as directed by ALS personnel on scene

CONTRAINDICATIONS:

- None

EQUIPMENT:

- 12-lead capable cardiac monitor
- Skin prep to include: alcohol swabs, razor, and 4x4 bandages
- Sufficient quantity of electrodes for procedure

PROCEDURE:

1. Expose chest as necessary for placement of electrodes
2. Prepare chest skin by carefully removing body hair as needed for electrode placement
3. Place 12-lead pads under the direction of on-site ALS personnel. Refer to figure (1)
4. For female patients, use dorsal surface of hand to lift any body parts interfering with lead placement. Do not place leads on top of breast.

DOCUMENTATION:

- Document time for procedure

NOTES:

- Leave leads in place unless directed to remove by ALS personnel.
- Do not place defibrillator-pacer pads over electrocardiogram leads; remove leads before placing pads.

12-LEAD ELECTROCARDIOGRAPHY PLACEMENT PROCEDURE

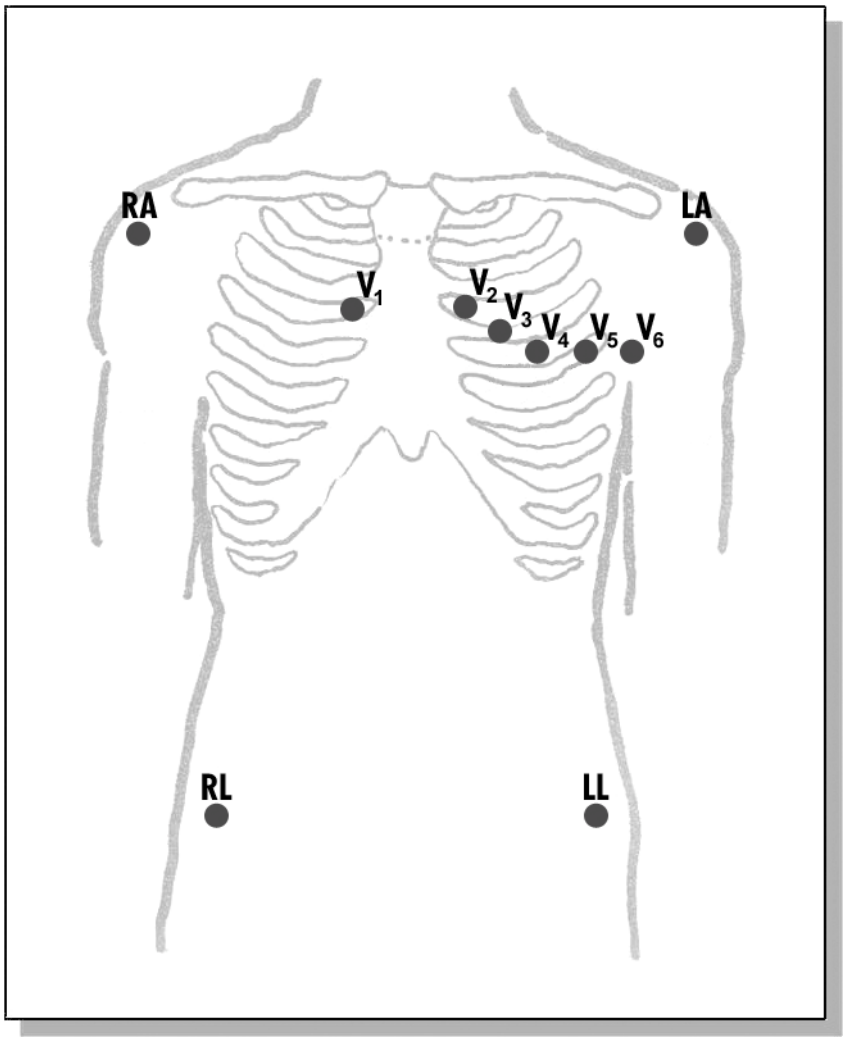

Figure (1) 12-Lead Electrode Placement

- Attach ECG leads to the patient (limb leads to the upper arms and lower abdomen or legs, and six chest leads)
- V1: right 4th intercostal space
- V2: left 4th intercostal space
- V3: halfway between V2 and V4
- V4: Left 5th intercostal space, mid-clavicular line
- V5: horizontal to V4, anterior axillary line
- V6: horizontal to V5, mid-axillary line

NERVE AGENT EXPOSURE ANTIDOTE AUTOINJECTION

INDICATIONS:

- Possible or known exposure to a nerve agent
- Signs and symptoms consistent with organophosphate (insecticide or nerve agent) toxicity:
  S-L-U-D-G-E-M
  Salivation - Lacrimation - Urination - Defecation - GI Upset - Emesis - Miosis (pupil constriction)

CONTRAINDICATIONS:

- Patients greater than age 65 years-old must weigh at least 80 kg to receive 1 auto-injector of 2-PAM
- Patients under 12-years-old must weigh at least 30 kg to receive an auto-injector IM

EQUIPMENT:

- Mark I® Nerve Agent Antidote Kit containing (1) Atropine and (1) 2-PAM Chloride auto-injectors
  Or
  DuoDote® Antidote Kit containing Atropine and 2-PAM Chloride in a single auto-injector.

PROCEDURE:

- Determine location at mid-anterior lateral thigh where injection(s) will be given

For Mark I® Injectors:

1. Access Mark I® Kit and remove injector containing atropine
2. Grasp the injector and hold it like a pen; do not handle or grasp at the green tip
3. Place on the mid-anterior lateral thigh of selected leg at a 90° angle
4. Push firmly until auto injector discharges
5. Hold in place for ten (10) seconds to ensure atropine has been properly delivered
6. Place used atropine auto injector in appropriate sharps container, or properly control injector until it can be placed in appropriate container
7. Remove injector containing 2-PAM chloride
8. Grasp the injector and hold it like a pen; do not handle or grasp at the black tip
9. Repeat steps 1 through 4 with the 2-PAM chloride

For DuoDote® Injectors:

1. Remove injector from plastic pouch
2. Grasp the center of the injector with the green tip (needle end) pointing down, do not handle or grasp the green tip
3. Pull off the gray safety release
4. Swing and firmly push the green tip of the injector straight down at 90° against the mid-anterior lateral thigh
5. Hold injector firmly in place for at least 10 seconds to ensure medication is delivered
6. Remove injector and look at the green tip; if the needle is visible, the medication has been administered. If the needle is not visible, check to ensure the gray safety release has been removed and if not, remove the gray safety release and inject as described above.
7. Place injector in appropriate sharps container, or properly control injector until it can be placed in appropriate container

DOCUMENTATION:

Document the time, location, and the name of the antidote kit administered. This documentation may be on a triage tag or temporarily on the back of the hand.

NERVE AGENT EXPOSURE ANTIDOTE AUTOINJECTION

Dosing Table

Signs & Symptoms	DuoDote® Dose	Mark 1 Atropine Dose	Mark 1 Two-Pam Dose
Sever Respiratory Distress, Agitation SLUDGEM	3 Auto-Injectors	3 Auto -Injectors (6 mg) Monitor every 5 minutes	3 Auto-injectors (1.8 g)
Respiratory Distress, SLUDGEM	2 Auto-Injectors	2 Auto-injectors (4 mg) Monitor every 10 minutes	2 Auto-injectors (1.2 g)
None	Monitor for respiratory distress / SLUDGEM Every 15 minutes	Monitor for respiratory distress / SLUDGEM Every 15 minutes	Monitor for respiratory distress / SLUDGEM Every 15 minutes

NOTES:

- If possible, relocate to a safe area prior to initiating self treatment
- It is not necessary to expose or prep the injection site prior to self administering the medication
- Remove all items from pockets on the side chosen for injection
- Seek evaluation and follow up at an appropriate medical facility post incident
- No more than three doses of DuoDote® should be administered unless definitive medical care is available
- Refer to Treatment Guideline M-55 for the management of the patient with exposure to chemical agents

AUTOPULSE® DEVICE

Date: 10/8/08

INDICATIONS:

- Cardiopulmonary arrest victims for whom manual chest compressions are indicated

CONTRAINDICATIONS:

- Trauma victims
- Weight greater than 300 pounds (estimated)
- Chest circumference too large or small to properly fit the Autopulse® compression band
- Chest tube in place or recent chest surgery
- Left ventricular assist device in place

EQUIPMENT:

- AutoPulse® Automated Chest Compression System in good working order

PROCEDURE:

- Observe appropriate PPE precautions
- Remove clothing from thorax area
- Apply defibrillation - monitor pads to chest in usual manner
- Log roll technique
    - Extend and open the AutoPulse® device next to patient
    - Log roll patient away from AutoPulse® device
    - Slide AutoPulse® device under back of patient and roll patient onto board
    - Check alignment and close compression band fully extended on the patient's chest
    - Activate AutoPulse® device and assess for proper functioning
- Tilt forward technique
    - Extend and open the AutoPulse® next to the patient
    - Carefully sit the patient forward
    - Slide AutoPulse® behind the patient and position down to the buttocks
    - Position the patient onto the AutoPulse® and check alignment
    - Close the compression band fully over the patient's chest
    - Activate AutoPulse® device and assess for proper functioning

DOCUMENTATION:

- Document time device placed and if properly functioning
- Check AutoPulse® box on PCR

NOTES: If device fails, immediately open compression band and begin manual chest compressions

BLS PROVIDER ASSISTING WITH EPINEPHRINE AUTO-INJECTOR

Date: 9/09

INDICATIONS:

- Signs and symptoms of a severe allergic reaction (e.g. rash, urticaria, facial/neck/tongue swelling, wheezing, dyspnea, hypotension).

CONTRAINDICATIONS:

- Chest pain
- Hypertension
- Medication does not belong to patient or has expired

EQUIPMENT:

- Personal protective equipment (PPE) appropriate for potential blood exposure
- Appropriate sharps disposal container
- Patient's own prescribed epinephrine auto-injector

PROCEDURE:

1. Use PPE for blood exposure
2. Examine patient's own epinephrine auto-injector to ensure that:
    - The auto-injector is prescribed for the patient
    - The auto-injector medication has not expired and the visible medication is clear
    - The auto-injector is the correct dosage for the patient
        - 0.3 mg epinephrine for adult patients
        - 0.15mg epinephrine for pediatric patients <12 years-old
3. Remove the safety cap from the auto-injector
4. Place the tip of the auto-injector on the mid-anterior lateral area of the patient's thigh, midway between the groin area and the knee (may place over clothing)
5. Push the auto-injector against the thigh until you hear an audible click
6. Hold the auto-injector in place until all of the medication is administered (about 10 seconds)
7. Dispose of auto-injector in an appropriate sharps disposal container
8. Reassess patient for improvement of symptoms
9. Reassess vital signs

DOCUMENTATION:

- Time of assistance with administration of epinephrine auto injector
- Dosage administered
- Patient's response to treatment and repeat vital signs

NOTES:

- Any patient receiving epinephrine by auto-injector pen must be upgraded to ALS response
- Assisted epinephrine auto-injector administration may be done while awaiting incoming ALS response
- Also refer to treatment guideline M-15

BLS PROVIDER ADMINISTRATION OF ORAL GLUCOSE

Date: 9/09

INDICATIONS:

- Altered mental status or acute neurological deficiency and one or both of the following:
  1. A history of diabetes and taking insulin or oral diabetes medication
  2. A glucometer reading below 80mg/dL and ALS present or en-route
- The patient must have the ability to swallow and an intact gag reflex

CONTRAINDICATIONS:

- Patient is unresponsive, cannot swallow, or has no gag reflex

EQUIPMENT:

- Oral glucose solution, gel, paste, or tablets
- Suction equipment

PROCEDURE:

1. Assure ALS is en-route
2. Assure that the patient is responsive, has an intact gag reflex, and the ability to swallow and protect their own airway
3. Assure the medication is "glucose for oral administration", and has not expired
4. Administer glucose medication:
   A. For gel or paste:
   - Squeeze small portions the glucose gel or paste into the patient's mouth between the cheek and gum on each side until the tube is empty
     or
   - Apply the oral glucose gel to one or two tongue depressors and place the tongue depressor(s) between the cheek and the gum, one on each side of the patent's mouth, with the medication side contacting the patient's cheek

   Lightly massage the cheek area to maximize absorption

   B. For solution or tablets
   - Ensure patient can swallow without difficulty and administer small amounts of solution until all is given or allow to chew and swallow two tablets (one tablet for children age under 12-years-old)

5. Monitor the patient for signs of airway compromise, such as choking, gagging, drooling, or uncontrolled coughing.
6. Suction the patient as necessary and support and maintain an open airway
7. Reassess mental status, vital signs and repeat the initial assessment after 5 minutes and every 5 minutes until ALS arrives

DOCUMENTATION:

- The indication(s), time, route and dose of oral glucose administration
- Patient response, and results of reassessments done every 5 minutes

NOTES:

- Refer to treatment guideline M-20 regarding appropriate field treatment of the patient with AMS.
- Be alert to deterioration of the patient's mental status and subsequent loss of independent airway control.
- Continually reassess the patient's airway status and manage as appropriate to assure airway patency and prevent aspiration.

BLS PROVIDER ASSISTING ALS WITH GLUCOMETER

Date: 9/09

INDICATIONS:

- Altered mental status and/or neurological dysfunction
- Known diabetic with confusion, weakness, tachycardia, or flushing

CONTRAINDICATIONS:

- Possible skin infection present at sample site

EQUIPMENT:

- FDA approved glucometer
- Appropriate cleansing wipes, such as an alcohol swab
- Sterile 2X2 or 4X4 gauze
- Sterile lancets
- Small clean or sterile bandage or band-aid
- Appropriate sharps disposal container

PROCEDURE:

1. Use appropriate PPE for blood exposure
2. Prepare sample site (side of fingertip pad or lateral side of heel of infant) with appropriate cleansing wipe and allow to air dry
3. Remove a new test strip from container and insert in the glucometer per manufacturer's guidelines – assure the code on the glucometer LED screen matches the test strip vial
4. Grasp the finger near the prepared site, keeping the site below the level of the heart if possible. Using the lancet, quickly prick the side of the finger or heel until a drop of blood is formed. Wipe away the first drop of blood with gauze and allow the puncture site to form a second blood drop.
5. Place the second blood drop onto the test strip in the glucometer per manufacturer's guidelines
6. Cover patient sample site with a sterile bandage or band-aid
7. When blood glucose value is displayed, record and document the value
8. Dispose of the lancet in an approved sharps disposal container and the test strip into a biohazard container

DOCUMENTATION:

- Time blood glucose value was obtained
- Blood glucose value

NOTES:

- OCEMS accredited EMT providers may assist ALS personnel to obtain a blood glucose value using a glucometer at the direction of ALS personnel.
- Do not obtain blood samples from bleeding wounds or blood from the nose, ears or mouth
- Follow the glucometer manufacturer's guidelines regarding calibration and cleaning
- Assure that the test strips remain in an airtight container and are not expired
- Refer to treatment guideline M-20 regarding appropriate field treatment of the patient with altered mental status

BLS PROVIDER ASSISTING ALS WITH PULSE OXIMETRY

Date: 9/09

INDICATIONS:

- Respiratory distress
- Poor skin signs
- Altered level of consciousness
- Chest pain
- Patients meeting Trauma Criteria (see Policy # 310.30)

CONTRAINDICATIONS:

- None

EQUIPMENT:

- Pulse oximeter
- Sensor, appropriate size
- Nail polish remover and gauze pad

PROCEDURE:

1. Select location i.e., finger, earlobe, toe (remove nail polish if necessary)
2. Attach sensor firmly in place
3. Allow the oximeter to provide a steady reading
4. Document SpO_2 level reading

DOCUMENTATION:

- Record initial and regular interval pulse oximetry readings
- Note time, delivery method, and flow rate when oxygen is provided

NOTES:

- OCEMS accredited EMT providers may assist ALS personnel to obtain an oxygen saturation value using a pulse oximeter at the direction of ALS personnel.
- Do not withhold oxygen therapy to obtain a room air pulse oximeter reading.
- Pulse oximetry is an additional assessment tool. Treat patients appropriately based upon the clinical presentation.
- Pulse Oximetry equipment must be maintained per manufacturer's recommendations.
- Motion and a loose sensor may result in inaccurate readings.
- Acrylic fingernails and fingernail polish may cause inaccurate pulse oximetry readings. Remove nail polish or use an alternate site.

I. AUTHORITY:

California Health and Safety (HS) Code 1797.220 and 1798.

II. APPLICATION:

Attempted cardiopulmonary resuscitation (CPR) of patients for whom there is no possibility of successful outcome is of no benefit to the patient or community. This policy provides EMS guidelines for indications to withhold CPR for obviously dead victims.

III. DEFINITIONS:

Cardiopulmonary arrest means absence of respiration with an open airway, absence of circulation of blood due to lack of cardiac function, and loss of consciousness and all neurological reflexes.

"**Declared Dead**" means a cardiopulmonary arrest victim has been determined to exhibit one or more of the following criteria:

- Decapitation.
- Rigor mortis and meets the procedure described below in subsection IV, B.
- Post-mortem lividity and meets the procedure described below in subsection IV, B.
- Decomposition.
- Incineration.
- Massive crush injury and/or evisceration of the heart or brain.
- Traumatic cardiopulmonary arrest and meets the procedure described below in subsection IV, B.
- It is determined that the person had an un-witnessed, non-trauma cardiopulmonary arrest with no bystander CPR or AED placement prior to EMS arrival and the person is found by cardiac monitor to be asystolic in two leads and meets the procedure described below in subsection IV, B.

Caution: Signs of death may be misleading. Normal skin reactions may look like lividity, while poor hygiene and/or gangrene may be mistaken for "decomposition." Burn victims may appear to be "incinerated" but still be alive. In these cases, rhythm should be confirmed with a cardiac monitor and resuscitation attempted if cardiac activity is detected. Hypothermia (low body temperature secondary to cold water immersion or cold environment exposure), especially in children, elderly and debilitated, may simulate death and resuscitation should be attempted if time of exposure to cold environment or water has been less than one hour or is unknown.

IV. GUIDELINES:

A. Patients Meeting Criteria for "Declared Dead":

When the patient is "declared dead" resuscitative measures are not indicated and may be terminated by EMS personnel. A Base Hospital need not be contacted. The rescuer shall complete and file an OCEMS-approved Prehospital Care Report (PCR) documenting the complete

assessment. The receiving hospital copy of the PCR shall be left at the scene for the Coroner's office. If the form is left with local law enforcement personnel, the rescuer shall alert law enforcement personnel that the PCR form must accompany the body to the Coroner's office. The OCEMS office copy of the PCR form shall be mailed within ten (10) days to the Base Hospital prehospital program coordinator for ALS responses and to the OCEMS Medical Director for BLS responses.

B. Procedures for Patients Meeting Criteria for "Declared Dead":

If the initial assessment reveals only rigor mortis, post-mortem lividity, traumatic cardiopulmonary arrest, or un-witnessed, no bystander CPR criteria for "declared dead", the rescuer shall perform the following patient assessment:

1. Assessment of respiratory status by:

   - Assuring that the patient has an open airway, and
   - Looking, listening, and feeling for respirations. This shall include auscultation of the lungs for a minimum of 30 seconds.

2. Assessment of cardiac status by:

   - Palpating for a central pulse for a minimum of 15 seconds, and
   - Auscultation for the apical pulse for a minimum of 15 seconds.

3. Assessment of neurological reflexes by checking for:

   - Pupil response with a penlight or flashlight, and
   - A response to painful stimuli.

4. If there is uncertainty regarding any of the above findings or at EMS discretion, rhythm strips in two leads to confirm asystole in support of the assessment of "declared dead" may be obtained.

5. If there are signs of life based on any of the above assessment elements, resuscitative intervention is required unless a DNR or Health Care Directive is present (Refer to OCEMS Policy # 330.51).

C. Patients Not Meeting Criteria for "Declared Dead":

A patient who cannot be "declared dead" as defined above shall be treated with appropriate resuscitative measures.

Base Hospital physicians have the authority to determine the medical appropriateness of initial and continued resuscitative efforts. Resuscitative efforts may be discontinued by order of a Base Hospital physician.

When a patient is pronounced dead by a Base Hospital physician and resuscitation is stopped in the field, the rescuer should remain on scene until the arrival of the investigative law enforcement agency. The family should be supported and assisted.

DO-NOT-RESUSCITATE (DNR) AND HEALTH CARE DIRECTIVES

I. AUTHORITY AND REFERENCES:

Health and Safety Code, Division 2.5, Section 1798; California Code of Regulations, Title 22, Division 5, Section 72527; Probate Code Sections 4000-4026, 4600-4643, and 4780-4786.

II. PURPOSE:

Mentally competent adults have the right to control decisions relating to their own health care, including decisions to have life-sustaining treatment withheld or withdrawn. This policy identifies the types of documents and the circumstances in which EMS personnel may withhold or withdraw resuscitative measures based on the expressed desires of an individual.

III. APPLICATION:

A. This policy shall apply to individuals in any licensed health care facility (e.g., long term health care facilities, skilled nursing facilities, hospice/other facilities) or to individuals in a private residence or other location who have expressed a desire about resuscitative measures.

B. EMS personnel may withhold or withdraw resuscitative measures when presented with a Do Not Resuscitate (DNR) directive or order, as long as it can be reasonably determined that the patient is the subject of the document. EMS personnel may also withhold or withdraw resuscitative measures for patients without DNR documents when immediate family is on scene and they desire to make a unanimous decision to withhold resuscitation.

C. Exception:

1. EMS personnel may relieve an airway obstruction.

IV. DEFINITIONS:

A. "**Advance Health Care Directive**" or "advance directive" means a document executed pursuant to the Health Care Decisions Law. This document allows either or both of the following:

1. Appoints another person as the patient's "health care agent" or "attorney-in-fact."

2. The patient may write specific health care wishes.

B. "**Attorney-in-Fact**" or "health care agent" means a person granted authority to act for the person as governed by the Power of Attorney Law (Division 4.5, commencing with Section 4670 of the Probate Code). This person has legal authority to make decisions about the named individual's medical care.

C. "**Do-Not-Resuscitate (DNR)**" means no chest compressions, no defibrillation, no assisted ventilation, no basic airway adjuncts, no advanced airway adjuncts (endotracheal tube, Combitube), no cardiotonic medications or other medications or means intended to initiate a heartbeat or to treat a non-perfusing rhythm.

D. "**DNR Directive**" means a DNR document or order that is:

1. An approved State of California Emergency Medical Services Authority (EMSA)/California Medical Association (CMA) prehospital DNR request or an equivalent document from another jurisdiction.

2. A Medic Alert ® medallion or bracelet with engraved directions.

3. DNR orders written by a physician for patients in hospices, skilled nursing facilities, or other licensed facilities.

E. "**DNR Medallion**" means a Medic Alert ® medallion/bracelet engraved with the words "do not resuscitate", or the letters "DNR", or "DNR-EMS", a patient identification number, and a 24-hour toll-free telephone number.

F. "**Immediate Family**" means the spouse, adult child(ren), parent of a patient, adult sibling, or domestic partner (pursuant to Section 297 of the Family Code).

G. " **POLST Physician Orders for Life-Sustaining Treatment"** is a form available statewide that allows an individual to express his or her desires regarding resuscitation, including various resuscitation modalities.

V. GUIDELINES FOR HONORING A DO-NOT-RESUSCITATE ORDER:

A. DNR patients shall receive non-resuscitation related supportive care and other comfort measures as would any other person.

B. A DNR directive shall be disregarded if the patient requests resuscitative measures.

C. EMS personnel shall honor a DNR request when it can be reasonably established that the patient is the subject of the DNR request, and

1. EMS personnel have identified a DNR directive, DNR medallion, or POLST form as defined in this document, or

2. EMS personnel have personally seen the DNR order in the patient's medical record in a health care delivery facility.

a. EMS personnel shall document on the prehospital care report (PCR) the name of the physician writing the order and the date the order was signed.

D. EMS personnel may accept a verbal request to withhold or withdraw resuscitative measures under the following circumstances:

1. A licensed physician and surgeon, identified as the patient's physician and present with the patient, gives a verbal DNR order.

a. The physician should write the DNR order on the PCR and sign the order.

b. The physician's name, address, telephone number, and medical license number should also be recorded on the PCR.

2. A DNR request is communicated by an "attorney-in-fact" or "health care agent."

a. The attorney-in-fact must specifically identify themselves as the prescribed attorney-in-fact in the written document.

b. The attorney-in-fact should sign the PCR as the "attorney-in-fact."

3. Immediate family, present at the scene, may decline resuscitative measures on behalf of the patient.

a. The name(s) of the immediate family who made the decision to withhold or withdraw resuscitative measures shall be documented on the PCR.

b. The immediate family member shall sign the PCR.

E. When a DNR is honored by EMS personnel, they should note on the PCR that a DNR order was present and honored.

F. Base contact should be made and the Base Physician consulted and resuscitation should be initiated:

1. If there are any questions regarding validity of the DNR order, or

2. If the DNR directive is incomplete or not signed, or

3. When a document other than those listed in this policy is presented, or

4. If there is a concern regarding identification of “immediate family,” or

5. If there is disagreement among family members regarding the withdrawal of resuscitative measures, or

6. Anytime EMS personnel have concerns or require assistance.

G. DNR patients who are in cardiopulmonary arrest should not be transported. EMS personnel will contact the local police agency and/or coroner’s office to report the death and support family members on scene as appropriate.

H. DNR patients who decline transport to the hospital, including those patients for whom transport is declined on their behalf, should not be transported. Preservation of the patient’s privacy, dignity, and concern for comfort measures must be assured prior to EMS personnel leaving the scene.

I. If a DNR patient is transported to a hospital, the following apply:

1. A DNR order/directive, DNR medallion, or POLST form shall be honored during transport of the patient.

2. The DNR order/directive, DNR medallion, or POLST form shall accompany the patient.

3. The attorney-in-fact (if applicable) should also go to the hospital.