May 24, 2011

To EMS Community

Dear EMS Participants:

NEW/REVISED 2011 EMERGENCY MEDICAL SERVICES TREATMENT PROTOCOL/ POLICIES

The Protocol Revision Subcommittee, Base Station Physicians’ Committee, the Emergency Medical Care Committee and many of you in the EMS System have been working to updated the policies and protocols contained within the County San Diego Emergency Medical Services Policy and Procedure Manual. Thank you for your dedication and hard work on this update. We are pleased once again to present the complete manual on CD/DVD. Summaries of the ALS/BLS adult and pediatric treatment changes are included on the CD/DVD. The table of contents reflects the documents that have been updated for July 1, 2011 implementation.

Please replace earlier copies of your EMS Policy Manual with the updated documents. The County protocols and policies can also be found on our County website at www.SanDiegoCountyEMS.com under the EMS Prehospital system section. Contact Rebecca Pate at the EMS office for questions related to documents in the EMS System Policy and Procedure Manual. Thank you again for all your help.

Sincerely,

Bruce E. Haynes, MD
Emergency Medical Services

BH:kc
COUNTY OF SAN DIEGO
EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES
Master List

Policy Designators:
A  Air Medical
B  EMT-B
D  EMT-D
N  Non Emergency Medical Transport
P  Paramedic
S  System - applies to all components of EMS system
T  Trauma Care System

000 - SYSTEMS

S-001 Emergency Medical Services System Compliance with State Statutes and Regulations (7/07)
S-002 Approval of Emergency Medical Services System Standards, Policies and Procedures (7/07)
S-003 Program Record Keeping: Training and Certification (1/05)
S-004 Quality Assurance/Quality Improvement for the Prehospital Emergency Medical Services System (1/05)
S-005 EMS Medical Director's Advisory Committee (Base Station Physicians' Committee) (7/07)
S-006 Prehospital Audit Committee (7/10)
S-007 Transfer Agreements (7/07)
S-008 Interfacility Transfers - Levels of Care (7/10)
S-009 Guidelines for the Prevention of Infectious and Communicable Diseases (7/10)
S-010 Guidelines for Hospitals Requesting Ambulance Diversion (7/07)
S-011 EMT/Advanced EMT/Paramedic Disciplinary Process (7/10)
S-014 Guidelines for Verification of Organ Donor Status (7/05)
S-015 Medical Audit Committee on Trauma (7/02)
S-016 Release of Patient Information/Confidentiality (7/04)
S-017 Downgrade or Closure of Emergency Services in a Hospital Designated as a Basic Emergency Receiving Facility (7/07)
S-018 EMS for Children (EMSC) Advisory Committee (7/02)
S-019 Cardiac Advisory Committee (8/06)
S-020 Designation of a Cardiovascular “STEMI” Receiving Center (8/06)
S-021 De-Designation of a Cardiovascular “STEMI” Receiving Center (8/06)
S-022 Infant Safe Surrender (4/08)

100 - TREATMENT GUIDELINES AND PROTOCOLS

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S-100 Introduction (7/11)
S-101 Glossary of Terms (7/11)
S-102 List of Abbreviations (7/11)
**COUNTY OF SAN DIEGO**  
**EMERGENCY MEDICAL SERVICES**  
**POLICIES AND PROCEDURES**  
**Master List**

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- **P-104** ALS Skills List (7/11)
- **S-105** Latex-Safe Equipment List (7/11)
- **P-110** Adult ALS Standing Orders (7/11)
- **P-111** Adult Standing Orders for Communications Failure (7/11)
- **P-112** Pediatric ALS Standing Orders (7/11)
- **P-113** Pediatric Standing Orders for Communications Failure (7/11)
- **P-114** Pediatric MICU Inventory (7/11)
- **P-115** ALS Medication List (7/11)
- **P-115 (a)** Pediatric Weight Based Dosage Standards (7/11)
- **P-117** ALS Pediatric Drug Chart (7/11)

### SECTION III Adult Treatment Protocols
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- **S-121** Airway Obstruction (Foreign Body) (7/11)
- **S-122** Allergic Reaction/Anaphylaxis (7/11)
- **S-123** Altered Neurologic Function (Non-Traumatic) (7/11)
- **S-124** Burns (7/11)
- **S-126** Discomfort/Pain of Suspected Cardiac Origin (7/11)
- **S-127** Dysrhythmias (7/11)
- **S-129** Envenomation Injuries (7/11)
- **S-130** Environmental Exposure (7/11)
- **S-131** Hemodialysis Patient (7/11)
- **S-132** Near Drowning/Diving Related Incidents (7/11)
- **S-133** Obstetrical Emergencies (7/11)
- **S-134** Poisoning/Overdose (7/11)
- **S-135** Pre-Existing Medical Interventions (7/11)
- **S-136** Respiratory Distress (7/11)
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- **S-138** Shock (7/11)
- **S-139** Trauma (7/11)
- **S-140** Triage, Multiple Patient Incident/Mass Casualty Incident/Annex D (7/11)
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- **S-161** Altered Neurologic Function (Non-Traumatic) (7/11)
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- **S-163** Dysrhythmias (7/11)
- **S-164** Envenomation Injuries (7/11)
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- **S-172** Apparent Life Threatening Event (7/11)
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A-260 Airway Obstruction (7/07)
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P-305 Paramedic Accreditation in San Diego County (7/10)
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D-620 Emergency Medical Technician/Public Safety-Defibrillation Data Collection and Evaluation (2/99)
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B-850 Basic Life Support Ambulance Service Provider Requirements (11/10)
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A-877 Air Ambulance Service Provider Authorization (11/10)
## Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

### Adult Protocols:

| S-100 Introduction | Added: referenced P-104 next to “Skills List” (#1)  
Change: w/s changed to “joules”  
Reference page updated |
|-------------------|--------------------------------------------------|
| S-101 Glossary of Terms | Deleted:  
“fluids are routinely Normal Saline” under IV/IO.  
Weight criteria under “Pediatric Patient”.  
Sinus Pause definition  
Unconsciousness definition  
Added: “immediate or anticipated immediate need for” added to Definitive Therapy.  
Added: “respiratory rate of less than 12” added to Opioid Overdose, Symptomatic.  
Added: “Pediatric trauma patient is determined by age, regardless of weight.”  
Added: delayed capillary refill under “Shock” in the patient <15 years. This section reformatted to define shock in the patient <15 as someone exhibiting any one of the signs of inadequate perfusion. |
| S-102 Abbreviation List | Added:  
AEMT: Advanced EMT  
AHA: American Heart Association  
LT Airway: Laryngeal Tracheal Airway  
MTV: Major Trauma Victim  
PAA: Perilaryngeal airway adjunct |
### Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>P-104 ALS Skills</strong></td>
<td>See end of list for ALS Skill changes</td>
<td></td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td>O2 Saturation prn moved from ALS to BLS</td>
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</tbody>
</table>
| **S-120 Abdominal Pain** | **ALS:**  
  Added: MR x1 q 10” Zofran 4mg IV/IM/ODT for nausea/vomiting SO  
  Added: 500 ml fluid bolus IV/IO for suspected volume depletion SO. BP criteria deleted.  
  Added: “Titrate to BP 80” to note regarding suspected intra-abdominal catastrophe or suspected aortic aneurysm. |   |
| **S-121 Airway Obstruction** | **BLS:**  
  Added: For inadequate air exchange: airway maneuvers (AHA). Abdominal thrusts. Use chest thrusts in the obese or pregnant patient. |   |
| **S-122 Allergic Reaction/Anaphylaxis** | **ALS:**  
  Reformatted. Treatment divided by “Mild” “Acute” “Anaphylaxis”.  
  Added: Atrovent to first dose of Albuterol in Acute and Anaphylaxis. |   |
| **S-123 Altered Neurologic Function** | **BLS:**  
  Change: Value changed from 75mg/dL to 60mg/dL.  
  “Hypoglycemia (suspected) or patient’s glucometer results read <60mg/dL.”  
  **ALS:**  
  Change: Treatment of hypoglycemia value changed from 75mg/dL to 60mg/dL. |   |
### Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<table>
<thead>
<tr>
<th>Section</th>
<th>Change/Deletion</th>
</tr>
</thead>
</table>
| **S-123**<br>Altered Neurologic Function (continued) | **Change:** Narcan - combined the two sections: Symptomatic OD & Symptomatic OD in opioid dependent pain management patients, by adding the note “use caution in opioid dependent pain management patients”. Criteria (RR<12) and dosing unchanged (titrate to effect up to 2mg)  
  **Change:** administer O2 for O2 saturation <94% (was 92%). Moved to BLS section.  
  **Deleted:** 10 minutes between first and second dose of Versed in seizure.  
  **Added:** clarification note regarding seizure time: greater than 5 minutes “includes seizure time prior to arrival of prehospital provider”. |
| S-124<br>Burns | O2 Saturation prn moved from ALS to BLS |
| S-126<br>Discomfort/Pain of Suspected Cardiac Origin | **Added:** Note – Report poor quality EKG, artifact, BBB, paced rhythm, atrial fibrillation or atrial flutter for exclusion from STEMI determination.  
  **Added:** Note - If the 12 Lead is of poor quality may re-attempt to a total of three. Do not delay transport to repeat. Repeat the 12-lead ECG only if the original ECG interpretation is NOT ***ACUTE MI SUSPECTED***, and patient’s condition worsens.  
  **Deleted:** “if NTG x 3 ineffective or contraindicated” – (do not need to give three NTG prior to MS administration.) |
### County of San Diego Health and Human Services
### Emergency Medical Services

**Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011**

| S-127 Dysrhythmias | **ALS:**
|                   | Deleted: note stating “treat dysrhythmias if they have the potential to or are causing symptoms of decreased cardiac output.”
|                   | Change: external cardiac pacing from BHPO to SO. (Morphine and Versed SO).
|                   | Added: “a minimum of” 1 mg Atropine under narrow complex bradycardia prior to pacing.
|                   | Change: in all appropriate sections deleted numeric joule setting and replaced with “at manufacturer’s recommended energy dose”.
|                   | Added: Amiodarone for ventricular tachycardia (SO) and post-conversion (BHO).
|                   | Deleted: “sinus pause” and replaced with “if no sustained rhythm change.”
|                   | Added: Note – “if return of pulses transport to STEMI Receiving Center.” (Applies ONLY to ROSC patient if initially pulseless VT/VF.)
|                   | Deleted: Atropine and NaHCO3 deleted from PEA protocol. |

| S-129 Envenomation Injuries | **BLS:**
|                            | Change: Jellyfish sting changed from “rinse with alcohol” to “liberally rinse with salt water or alcohol or vinegar, if available, for at least 30 seconds.”
|                            | Added: Consider heat as tolerated (not to exceed 110 degrees). Use warm water if available, not to exceed 110 degrees. |

| S-130 Environmental Exposure | **ALS:**
|                            | Added: Heat Exhaustion - 500ml fluid bolus IV/IO SO, if clear lungs. |
### County of San Diego Health and Human Services
#### Emergency Medical Services

#### Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

| S-131 Hemodialysis | **ALS:**  
| Added: “Immediate” to the statement regarding intravenous access. Requires immediate critical need for administration and no other route available (e.g. IN/IM/PO). |

| S-132 Near Drowning/Diving | **ALS:**  
| Added: CPAP at 5-10cm H2O SO |

| S-133 Obstetrical Emergencies | **BLS:**  
| Deleted: “spinal immobilization when indicated” under Eclampsia.  
**ALS:**  
| Deleted: 10 minutes between first and second dose of Versed in seizure. |

| S-134 Poisoning/Overdose | **ALS:**  
| Change: Narcan - combined the two sections: Symptomatic OD & Symptomatic OD in opioid dependent pain management patients, by adding the note “use caution in opioid dependent pain management patients”. Criteria (RR<12) and dosing unchanged (titrate to effect up to 2mg)  
| Added: to Charcoal administration, “if ingestion within 60 minutes and recommended by Poison Center.”  
**Change:** NaHCO3 in Tricyclic OD to SO from BHO  
| Added: May administer Sodium Thiosulfate 25% IV & Amyl Nitrite per inhalation or Hydroxocobalamin (Cyanokit) if cyanide kit available on site (e.g. industrial accident).  
| Deleted: 10 minutes between first and second dose of Versed for severe agitation. |
Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<table>
<thead>
<tr>
<th>S-135</th>
<th>Pre existing Medical Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BLS:</strong></td>
<td>Deleted: “check for prior IV, IM, SC, and non-routine PO medication delivery to assure minimum wait period of 30””</td>
</tr>
<tr>
<td><strong>ALS:</strong></td>
<td>Change: “remove dermal NTG when indicated SO” &amp; “remove other dermal medications BHO” changed to “Remove dermal medications when indicated (CPR, shock) SO”</td>
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<table>
<thead>
<tr>
<th>S-136</th>
<th>Respiratory Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALS:</strong></td>
<td>Deleted: “If available” on EtCO2 and CPAP.</td>
</tr>
<tr>
<td>Added: “start low and titrate pressure” to note regarding use of CPAP in the ?COPD patient.</td>
<td></td>
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<tr>
<td>Change: Epinephrine 0.3mg 1:1000 IM is BHPO if known cardiac history or history of hypertension, BP &gt;150, age &gt;40 years and no definite history of asthma.</td>
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<thead>
<tr>
<th>S-137</th>
<th>Sexual Assault</th>
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<tbody>
<tr>
<td>No changes</td>
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<table>
<thead>
<tr>
<th>S-138</th>
<th>Shock</th>
</tr>
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<tbody>
<tr>
<td><strong>BLS:</strong></td>
<td>Deleted: Shock position</td>
</tr>
<tr>
<td><strong>ALS:</strong></td>
<td>Added: Shock: (?)Septic. If history suggestive of infection and two or more of the following are present suspect sepsis and report:</td>
</tr>
<tr>
<td>• Temperature &gt;100.4 or &lt;96.0</td>
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<td>• HR &gt;90 (except for patients on beta-blockers)</td>
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<td>• RR &gt;20</td>
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<tr>
<td>500ml fluid bolus SO, MR to maintain BP &gt;90</td>
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<tr>
<th>S-139</th>
<th>Trauma</th>
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<tbody>
<tr>
<td><strong>BLS:</strong></td>
<td>Added: Keep warm</td>
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</table>
## County of San Diego Health and Human Services
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<table>
<thead>
<tr>
<th>Protocols</th>
<th>ALS:</th>
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<tbody>
<tr>
<td>S-139 Trauma (continued)</td>
<td><strong>Changed:</strong> “BP &lt;90” to “if MTV IV/IO enroute**</td>
</tr>
<tr>
<td></td>
<td><strong>Changed:</strong> BP goal in the trauma patient – “500ml fluid bolus to maintain BP 80” (changed from BP &gt;90). BP goal is not &gt;80 but a target of 80.</td>
</tr>
<tr>
<td>S-140 Triage, Multiple Patient Incident</td>
<td>No changes</td>
</tr>
<tr>
<td>S-141 Pain Management</td>
<td><strong>ALS:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Change:</strong> Morphine administration in “2-4mg increments” deleted. Now reads, “…2-10mg IV”</td>
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<tr>
<td></td>
<td><strong>Added:</strong> Ondansetron (Zofran) for nausea/vomiting with MS administration.</td>
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<tr>
<td>S-142 Psychiatric/Behavioral Emergencies</td>
<td><strong>ALS:</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Deleted:</strong> 10 minutes between first and second dose of Versed for severe agitation.</td>
</tr>
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## Pediatric Protocols:

<table>
<thead>
<tr>
<th>Protocols</th>
<th>BLS:</th>
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</thead>
<tbody>
<tr>
<td>ALL</td>
<td>O2 Saturation prn moved from ALS to BLS</td>
</tr>
<tr>
<td>P-160 Pediatric Airway Obstruction</td>
<td><strong>Added:</strong> 5 back blows and chest thrusts for infants &lt;1year. MR prn.</td>
</tr>
<tr>
<td></td>
<td><strong>Added:</strong> Note referencing S-167 (If suspected epiglottitis: Place patient in sitting position. Do not visualize the oropharynx. STAT transport. Added note: Treat as per Respiratory Distress Protocol S-167.).</td>
</tr>
</tbody>
</table>
# County of San Diego Health and Human Services
## Emergency Medical Services

**Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011**

<table>
<thead>
<tr>
<th>P-160</th>
<th>Change: “For inadequate air exchange: airway maneuvers (AHA). Abdominal thrusts. Use chest thrusts in the obese or pregnant patient.” Replaces statement that maneuvers done only if complete airway obstruction.</th>
</tr>
</thead>
</table>
| S-161 | BLS: Change: Value changed from 75mg/dL to 60mg/dL. “Hypoglycemia (suspected) or patient’s glucometer results read <60mg/dL.” (Infant and neonate values unchanged.)  
ALS: Change: Treatment of hypoglycemia value changed from 75mg/dL to 60mg/dL. (Infant and neonate values unchanged.)  
Deleted: 10 minutes between first and second dose of Versed in seizure.  
Added: clarification note regarding seizure time: greater than 5 minutes “includes seizure time prior to arrival of prehospital provider”.  
Added note: Versed not required for simple febrile seizure. |
| S-162 | ALS: Reformatted. Treatment divided by “Mild” “Acute” “Anaphylaxis”.  
Added: Atrovent to first dose of Albuterol in Acute and Anaphylaxis. |
| S-163: | BLS: Deleted: Age restriction on AED.  
Added: “Begin compressions, after first 30 compressions give first ventilations.”  
ALS: Deleted: “sinus pause” under SVT, changed to “If no sustained rhythm change” after Adenosine MR. |
### Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<table>
<thead>
<tr>
<th>S-164</th>
<th>Pediatric Envenomation Injuries</th>
</tr>
</thead>
</table>
| **BLS:** | **Change:** Jellyfish sting changed from “rinse with alcohol” to “liberally rinse with salt water or alcohol or vinegar, if available, for at least 30 seconds.”  
Added: Consider heat as tolerated (not to exceed 110 degrees). Use warm water if available, not to exceed 110 degrees. |

<table>
<thead>
<tr>
<th>S-165</th>
<th>Pediatric Poisoning/Overdose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALS:</strong></td>
<td><strong>Added:</strong> to Charcoal administration, “if ingestion within 60 minutes and recommended by Poison Center.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S-166</th>
<th>Pediatric Newborn Deliveries</th>
</tr>
</thead>
</table>
| **BLS:** | **Change:** statement regarding suctioning, “suction baby’s airway if excessive secretions causing increased work of breathing, first mouth, then nose, suction after fully delivered.”  
Added: wait 60 seconds after delivery prior to clamping and cutting cord.  
**Change:** regarding premature or low birth weight infants: “after delivery” added to statement regarding removing infant from amniotic sac.  
**Change:** Criteria for initiation of CPR changed to <20 weeks. (eyelids fused & weight removed from criteria). |

<table>
<thead>
<tr>
<th>S-167</th>
<th>Pediatric Respiratory Distress</th>
</tr>
</thead>
</table>
| **BLS:** | **Added:** “May assist patient to self medicate own prescribed MDI ONE TIME ONLY. Base Hospital contact required prior to any repeat dose.”  
**ALS:**  
**Added:** note regarding “avoid Albuterol in Croup”.  
**Added:** “at rest” to nebulized epinephrine treatment - Respiratory Distress with Stridor at rest. |
# Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

**S-168 Pediatric Shock**

**BLS:**
*Added:* “Keep Warm”

**S-169 Pediatric Trauma**

**BLS:**
*Added:* “neuro deficit/blunt trauma” to spinal stabilization.

**ALS:**
*Added:* “If MTV IV/IO en route”

**S-170 Pediatric Burns**

O2 Saturation prn moved from ALS to BLS

**S-172 ALTE**

**Change:** under the definition, “characterized by some combination of:” changed to “characterized by one or more of the following.”

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### ALS Skills (P-104):

**P-104 ALS Skills List**

**CPAP**

*Added:* pneumonia or drowning added to indications.

*Added:* to comment section: “Patients with a GCS of <9 are unconscious and unlikely to comply. Non-verbal patients with poor head/neck tone may be too obtunded for CPAP. BVM assisted ventilation is the appropriate alternative.”

**12-Lead EKG**

*Added:* “Report poor quality EKG, artifact, paced rhythm, atrial fibrillation or atrial flutter for exclusion from STEMI assessment”
## Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<table>
<thead>
<tr>
<th>Procedure/Device</th>
<th>Change/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12-Lead EKG (continued)</strong></td>
<td><strong>Added:</strong> “Repeat the 12-lead EKG only if the original EKG interpretation is NOT <em><strong>ACUTE MI</strong></em> and patient’s condition worsens. Do not delay transport to repeat.”</td>
</tr>
<tr>
<td><strong>Esophageal Detection Device – aspiration based</strong></td>
<td><strong>Added:</strong> Laryngeal/Tracheal (King) airway to contraindications.</td>
</tr>
<tr>
<td></td>
<td><strong>Added:</strong> to comments – Optional</td>
</tr>
<tr>
<td><strong>External Cardiac Pacemaker</strong></td>
<td><strong>Changed:</strong> “Yes” to Standing Order column.</td>
</tr>
<tr>
<td></td>
<td><strong>Added:</strong> “BP &lt;90” to indications for unstable wide complex bradycardia.</td>
</tr>
<tr>
<td><strong>Glucose Monitoring</strong></td>
<td><strong>Added:</strong> to comments “Repeat BS must be done if patient left on scene and initial was abnormal. (AMA/Release).”</td>
</tr>
<tr>
<td><strong>Indwelling Devices</strong></td>
<td><strong>Added:</strong> if needed for “immediate” definitive therapy ONLY “and no other medication delivery route available.”</td>
</tr>
<tr>
<td><strong>Injection: SC</strong></td>
<td><strong>Deleted:</strong> skill removed from all protocols.</td>
</tr>
<tr>
<td><strong>Intubation-ET/Stomal</strong></td>
<td><strong>Change:</strong> Apply c-collar to all intubated patients changed to “If intubated patient is to be moved apply c-collar prior to moving.”</td>
</tr>
<tr>
<td><strong>Intubation: Perilaryngeal airway adjunct (PAA)</strong></td>
<td><strong>Changed:</strong> Re-formatted - ETAD and LT airway combined under PAA</td>
</tr>
<tr>
<td><strong>Nasogastric/orogastric tube</strong></td>
<td><strong>Added:</strong> to comments “If NG/OG tube needed in a patient with a King Airway, insertion should be via the suction port, if available.”</td>
</tr>
</tbody>
</table>
### County of San Diego Health and Human Services
### Emergency Medical Services

### Summary of Changes to BLS/ALS Adult and Pediatric Treatment Protocols for July 1, 2011

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Thoracostomy</td>
<td><strong>Change:</strong> Preferred site is 2\textsuperscript{nd}/3\textsuperscript{rd} ICS in mid-clavicular line on the involved side.</td>
</tr>
<tr>
<td></td>
<td><strong>Changed:</strong> “Yes” to Standing Order column.</td>
</tr>
<tr>
<td>Spinal stabilization</td>
<td><strong>Added:</strong> “if no neuro deficit” added to “Optional if”</td>
</tr>
<tr>
<td></td>
<td><strong>Added:</strong> “Optional if” criteria applies to patients &lt;65 years of age.</td>
</tr>
<tr>
<td></td>
<td><strong>Added:</strong> “No language barrier” added to list of “AND all of the following are present and documented:”</td>
</tr>
</tbody>
</table>
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.220.

II. **Purpose:** To assure compliance for the emergency medical services (EMS) system with applicable State Statutes and Regulations.

III. **Policy:** The County of San Diego’s EMS system and all its components shall comply with all State of California Statutes and Regulations regarding emergency medical services.

Approved:

[Signature]
Administration

[Signature]
Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.220 and 1798.

II. **Purpose:** To approve standards, policies, and procedures for the Emergency Medical Services (EMS) system.

III. **Policy:**

   A. EMS system standards, policies, and procedures shall be approved by the County of San Diego EMS Medical Director, or the Director of the Health and Human Services Agency, or designee, after review and comment by the Emergency Medical Care Committee (EMCC).

   B. All standards, policies, and procedures regarding medical control and medical accountability shall be approved by the County of San Diego EMS Medical Director, after review and comment by the EMS Medical Director's Advisory Committee (Base Station Physicians' Committee). This includes but is not limited to:

      1. Treatment and triage protocols;
      2. Prehospital patient report;
      3. Patient care reporting requirements;
      4. Field medical care protocols.

   C. Providers shall be notified a minimum of forty-five (45) days prior to implementation of new or revised policies.

   D. It is preferred that implementation of new or revised policies take place annually in July.

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Approved:

[Signature]

**Administration**

[Signature]

**Medical Director**
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.204 and 1797.208.

II. **Purpose:** To identify specific records to be maintained by the Emergency Medical Services Branch (EMS) regarding EMT-B certification, EMT-ETAD accreditation, PS-D accreditation, Paramedic accreditation, MICN authorization, AED authorization, and County approved continuing education (CE) providers and training programs.

III. **Policy:**

A. County of San Diego, Emergency Medical Services Branch (EMS) shall maintain on its premises for a minimum of five (5) years, the following records:

1. Approved EMS training program documentation including:
   a. Application form and accompanying materials.
   b. Copy of written approval from EMS.

2. A list of current EMS Training Program medical directors, course directors, clinical coordinators and principal instructors.

3. A list of all prehospital field personnel currently certified/accredited/authorized by the County of San Diego EMS Medical Director.

4. A list of all field prehospital field personnel whose certificates have been suspended or revoked.

5. A list of approved CE providers, including approval dates.

B. EMS shall submit annually, in January, to the State Emergency Medical Services Authority, the following:

1. The names, addresses, and course directors of each approved EMS Training Program.

2. The number of currently certified EMT-Bs, EMT-ETAD’s, accredited Paramedics,

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Approved:

[Signatures]

Administration

EMS Medical Director
PS-D’s and authorized MICNs in San Diego County.

C. The State Emergency Medical Services Authority shall be notified in writing of any changes in the list of approved training programs as they occur.

D. The State EMS Authority and the applicable EMT-B certifying authority shall be notified in writing of all reportable actions taken regarding a certificate holder's certificate, according to regulation.

Approved:

[Signatures for Administration and EMS Medical Director]
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220, 1798, 1798.100 and 1798.102.

II. **Purpose:** To identify primary responsibilities of all participants in the County of San Diego’s EMS system for achievement of optimal quality of prehospital care for patients who access the system.

III. **Definition(s):**

**Emergency Medical Services System Quality Improvement Program (EMS QI)**

Methods of evaluation that are composed of structure, process, and outcome evaluations that focus on improvement efforts to:

1. Identify root causes of problems
2. Intervene to reduce or eliminate these causes
3. Take steps to correct the problems.

IV. **Policy:**

A. The Health and Human Services Agency, Division of Emergency Medical Services (EMS) shall:

   1. Develop and implement, in cooperation with other EMS system participants, a system-wide, written EMS QI plan.
   2. Review the system EMS QI program annually for appropriateness to the system and revise as needed.
   3. Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI program identifies a need for improvement.
   4. Provide the EMS Authority with an annual update of QI program activities.

B. EMS Service Providers shall:

   1. Develop and implement, in cooperation with other EMS System participants, a provider-specific, written EMS QI plan.
   2. Review the provider specific EMS QI program annually for appropriateness to the operation of the EMS provider and revise as needed.
   3. Participate in the local EMS agency’s EMS QI Program that includes making available mutually agreed upon, relevant records for program monitoring and evaluation.
   4. Develop in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement.

C. Paramedic Base Hospitals shall

   1. Develop and implement, in cooperation with other EMS System participants, a hospital-specific, written EMS QI program.
   2. Review the provider specific EMS QI program annually for appropriateness to the operation of the base hospital and revise as needed.

Approved:

[Signature]

Administration

EMS Medical Director
3. Participate in the local EMS agency’s EMS QI Program that includes making available mutually agreed upon, relevant records for program monitoring and evaluation.

4. Develop in cooperation with appropriate personnel/agencies, a performance improvement action plan when the EMS QI Program identifies a need for improvement.

D. Agreements:

1. The County of San Diego, Division of EMS shall maintain agreements with Base Hospitals and EMS service providers requiring, but not limited to,
   a. compliance with all the provisions listed in the California Code of Regulations, Title XXII, Division 9
   b. compliance with all County of San Diego, Division of EMS system policies, procedures and protocols.
   c. Reporting of significant issues in medical management to the EMS Medical Director.

   1. Incidents in which medications or treatments are provided which are outside approved treatment protocols, shall be reported to the EMS QI Program through the Base Hospitals or Provider Agencies in a timely manner. These incidents will also be reported at the Prehospital Audit Committee.

   2. Actions outside of the scope of prehospital personnel and actions or errors resulting in untoward patient effects, such as errors in the administration of medications, invasive procedures, defibrillation/cardioversion, or other patient treatments, shall be reported to the EMS Medical Director, within 48 hours.

2. These agreements shall provide the authority for the EMS Division to:
   a. Perform announced and unannounced site surveys of Base Hospitals and EMS provider agencies.
   b. Review patient care records necessary to investigate medical QI issues.

3. Additionally the Division of EMS shall:
   a. Support regional QI committees (not limited to Prehospital Audit Committee, Medical Audit Committee).
   b. Attend Base Hospital/Agency Meetings.
   c. Periodically monitor prehospital continuing education offerings.
   d. Perform random audits of prehospital patient records.
   e. Develop and implement internal mechanisms to monitor, identify, report and correct, quality issues.

4. Reporting of significant issues in medical management to the EMS Medical Director:
   a. Incidents in which medications or treatments are provided which are outside approved treatment protocols shall be reported to the regional QIP system shall be reported by the Base hospital or Agency personnel in a timely manner, through the Prehospital Audit Committee.

   b. Actions that are outside of the scope of practice of prehospital personnel, and actions or errors resulting in actual or potential untoward patient outcomes, shall be reported to the EMS Medical Director within 48 hours.

Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Section 1798.

II. **Purpose:** To designate an advisory committee to provide consultation, medical protocol review, and recommendations regarding prehospital medical care issues to the Medical Director of the County of San Diego Emergency Medical Services (EMS).

III. **Policy:** The County of San Diego EMS Medical Director may consult with the EMS Medical Director's Advisory Committee on issues concerning prehospital treatment protocols and prehospital medical care delivery in the EMS system.

A. **Membership:** The County of San Diego EMS Medical Director's Advisory Committee will have the following members:
   
a. All Base Hospital Medical Directors
b. One member representing Children's Hospital Emergency Department physician staff
c. One member representing approved paramedic training programs
d. One member representing County Paramedic Agencies Committee (CPAC)
e. One member representing the Base Hospital Nurse Coordinators Committee
f. One member representing the San Diego County Paramedics' Association
g. All prehospital agency physician Medical Directors
h. County of San Diego EMS Medical Director or designee (ex officio)
i. County of San Diego EMS Prehospital Coordinator (ex officio)

B. The responsibilities of the San Diego County EMS Medical Director's Advisory Committee are:

   1. To meet as an Advisory Committee on a monthly basis.
2. To develop an agenda in conjunction with the San Diego County EMS Medical Director.

3. To consult on prehospital medical issues.

4. To convene small task forces of Advisory Committee members and others to work with the San Diego County EMS Medical Director or designee on specific medical management issues.

5. To consult with other medical specialties, or other advisory bodies in the County, as necessary.

6. To evaluate written statement(s) from Base Hospital Medical Director(s) questioning the medical effect of an EMS policy.

C. Election of Officers:

Committee officer shall consist of one chairperson which is a physician. Elections will take place during the last meeting of each calendar year and appointee shall assume office at the first meeting of the new calendar year. Officers elected shall serve a one year term, and may be re-elected for an additional term.

D. Due to the “advisory” nature of the committee, many issues require consensus rather than a vote process. Vote process issues will be identified as such by the Chairperson. When voting is required, a “simple” majority of the voting members of the committee need to be present to constitute a quorum.

Approved:

[Signatures]

Administration  EMS Medical Director
I. **Authority:** Division 2.5, Health and Safety Code, Sections 1797.204 and 1798; evidence Code, Sections 1040 and 1157.7.

II. **Purpose:**

A. To establish an advisory committee to the local Emergency Medical Services (EMS) Agency to monitor, evaluate and report on the quality of prehospital medical care.

B. To promote Countywide standardization of the quality improvement process with emphasis on the educational aspect.

C. To review issues and matters of a system wide nature. It shall not be the function of this committee to become directly involved in the disciplinary action of any specific individual. The authority for actual disciplinary action rests with the County EMS Medical Director and/or the State EMS Authority in accordance with Health and Safety Code, Division 2.5, Section 1798.200.

III. **Policy:**

A. **Scope of Review:**

The scope of review to be conducted by the committee may include any patient encountered in the prehospital system in the County of San Diego. The review will include, but not be limited to:

1. Issues reported to the County (refer to P-409 of County San Diego Emergency Medical Services Policy and Protocol Manual).

2. Variations from Protocols.

3. Deviations from Scope of Practice.


5. Intubation complications.
7. Unusual cases or cases with education potential.

B. **Membership:**

Members will be designated according to the following format and changes in elected/appointed members will take place at the end of the odd calendar year.

**Voting members:**

1. The Base Hospital Medical Director of each of the County's Base Hospitals.
2. The Base Hospital Nurse Coordinator of each of the County's Base Hospitals.
3. The Medical Director of the Emergency Department at Rady Children's Hospital and Health Center.
4. The prehospital nurse liaison of the Emergency Department at Rady Children's Hospital and Health Center.
5. The Medical Director of each of the County's approved advanced life support (ALS) agencies.
6. One medical EMS liaison military representative.
7. One current paramedic provider agency representative appointed by County Prehospital Agencies Committee (CPAC).
8. One San Diego County Fire Chiefs' Association, EMS Section representative.
9. Two paramedics (one public and one private provider) appointed by San Diego County Paramedic Association.
11. One first responder representative.
12. County staff (*ex officio*).
13. One Trauma Hospital Medical Director representing the Medical Audit Committee (MAC) on Trauma.

Associate members (non-voting):

1. One designated representative responsible for QI/QA/Education from each ALS transporting agency. The ALS transporting agency will send a letter of notification to County of San Diego Emergency Medical Services designating their representative, updating as needed.

2. The Program Director of each of the County's approved EMT-Paramedic training programs.

3. One emergency medicine resident or fellow from each training program.

C. Attendance:

1. Members will notify the Chairperson of the committee in advance of any scheduled meeting they will be unable to attend.

2. Resignation from the committee may be submitted, in writing, to the EMS Medical Director, and is effective upon receipt, unless otherwise specified.

3. At the discretion of the PAC Chairperson and/or County EMS, other invitees may participate in the medical audit review of cases where their expertise is essential to make appropriate determinations. These invitees may include, but are not limited to the following:
   - Paramedic agencies representatives
   - Law enforcement
   - EMT provider
   - Paramedics

Approved:

[Signatures]
D. **Election of Officers:**

Committee officers shall consist of two co-chairpersons, one of which is a physician. Elections will take place during the last meeting of each calendar year and appointees shall assume office at the first meeting of the new calendar year. Officers elected shall serve a one year term, and may be re-elected for one additional term.

E. **Voting:**

Due to the "advisory" nature of the committee, many issues will require input rather than a vote process. Vote process issues will be identified as such by the Chairperson. When voting is required, a "simple" majority of the voting members of the committee need to be present to constitute a quorum.

F. **Meetings:**

The committee shall meet on a monthly basis or at a frequency as determined to be appropriate by the Chairperson, but never less frequently than bimonthly.

G. **Minutes:**

Minutes will be kept by the EMS Secretary or designee and made available to the members of the committee. Due to the confidentiality of the committee, any distributed confidential documents will be collected by the EMS staff at the close of each meeting and no copies may be made or processed by members of the committee.

H. **Confidentiality:**
1. All proceedings, documents and discussions of the Prehospital Audit Committee are confidential and pursuant to Sections 1040, 1157.5 and 1157.7 of the Evidence Code of the State of California. The prohibition relating to the discovery of testimony provided to the committee shall be applicable to all proceedings and records of this committee, which is one established by a local government agency as a professional standards review organization which is organized in a manner which makes available professional competence to monitor, evaluate and report on the necessity, quality and level of specialty health services, including but not limited to prehospital care services. Guests may be invited to discuss specific cases and issues in order to assist the committee in making final case or issue determinations. Guests may only be present for the portions of the meeting about which they have been requested to review or testify.

2. All members shall sign a confidentiality agreement not to divulge or discuss information that would have been obtained solely through Prehospital Audit Committee membership. Prior to the invited guests participating in the meeting, the Chairperson is responsible for explaining, and obtaining, a signed confidentiality agreement for invited guest(s).
I. **Authority**: California Health & Safety Code Section 1798.172.

II. **Purpose**: To ensure that all interfacility transfers of patients are accomplished with due consideration for the patients' health and safety.

III. **Policy**:

A. All acute care hospitals in San Diego County with basic or comprehensive emergency departments shall comply with all applicable statutes and regulations regarding the medical screening, examination, evaluation, and transfer of patients that present to that hospital’s emergency department.

B. All acute care hospitals shall comply with all applicable statutes and regulations regarding implementation of agreements to ensure that patients with an emergency medical condition who present at that facility, and that facility is unable to accommodate that patient’s specific condition, are transferred to a facility with capabilities specific to that patient’s need.

1. Hospitals shall develop the mechanisms or agreements necessary to ensure that patients requiring specialty services are appropriately transferred when that hospital is unable to provide that specialty service.

2. Hospitals shall ensure the appropriateness and safety of patients during transfers by implementing policies and protocols which address the following:

   a. Type of patient.

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Approved:

[Signature]
Administration

[Signature]
Medical Director

c. Requirements and standards for interhospital care.

d. Logistics for transfer, evaluation, and monitoring the patient.

II. Purpose: To provide guidelines for ambulance transport of patients between acute care hospitals.

III. Policy:
   A. A patient whose emergency medical condition has not been stabilized should not be transferred from a hospital which is capable of providing the required care.
   B. Unstable patients shall be transferred only when the reason for the transfer is to medically facilitate the patient's care. The transport of unstable patients must have the concurrence of both the transferring and receiving physicians that the transfer is appropriate.
   C. It is the responsibility of the transferring physician, in consultation with the receiving physician, to determine the appropriate mode of transportation and the appropriate medical personnel (EMT, Paramedic, RN, Physician, etc.) to provide care during transport.
   D. Medical personnel providing interfacility transport shall have the capabilities and skills reasonably necessary to provide for the specific needs of the patient during the transport.
   E. Prehospital personnel involved in the interfacility transportation of patients shall adhere to pertinent County and State policies, procedures and protocols pertaining to the scope of practice of prehospital personnel.
   F. Hospitals with basic or comprehensive emergency departments shall comply with
all applicable statutes and regulations regarding the medical screening examination, evaluation, and transfer of patients that present to that hospital’s emergency department.

G. The levels of ambulance services available for the interfacility transport of patients include:

1. **Basic Life Support Ambulance**
   a. The ambulance is staffed with at least two EMTs.
   b. The patient is anticipated to require no more than basic life support skills during the transport.
   c. Patient care may not exceed the EMT Scope of Practice.
   d. The patient must be considered "stable" prior to the transport.
   e. If the patient’s condition deteriorates during the transport, the ambulance shall immediately proceed to the closest facility with a licensed emergency department.

2. **Critical Care Transport** - (including air medical ambulances)
   a. The ambulance is staffed with clinical personnel (R.N., Respiratory Therapist, Physician, etc.) appropriate to the requirements of the patient as determined by the transferring physician in consultation with the receiving physician.
   b. Unstable patients and those requiring clinical skills beyond those of EMTs shall be transported via critical care transport.
c. When nursing personnel are utilized during the transport, written orders from the transferring physician or other responsible physician covering medical and nursing activities shall accompany the patient.

3. Paramedic and/or AEMT Ambulance
   a. Paramedic/AEMT/9-1-1 system personnel may be used to transport patients ONLY as a last resort when alternative forms of transportation are unavailable, or when the delay in obtaining alternative transport would pose an imminent threat to the patient's health and safety.
   b. Hospital personnel accessing the emergency medical services (EMS) system for such transports shall note that, by accessing the EMS system, they may deplete the EMS resources of their local community.
   c. In such situations, Paramedic/AEMT/9-1-1 system personnel shall be given as thorough and complete a patient report as is possible by sending hospital staff, and will transport the patient IMMEDIATELY.
   d. Paramedic/AEMT/9-1-1 system personnel should NOT wait at the sending hospital for the completion of medical procedures or the copying of medical records, x-rays, etc. Paramedic/AEMTs will not be expected to wait longer than 10 minutes while a patient is being prepared for transport by the sending facility. After 10 minutes, they may notify their dispatcher and may return to service.
   e. Interfacility transfers utilizing Paramedic/AEMT personnel shall remain
under Base Hospital (not sending hospital) medical direction and control. Additional hospital resources (e.g., Physicians, nurses, etc) may be requested, when in the judgment of the Base Hospital, additional resources are needed. Paramedics/AEMTs will operate within their scope of practice and in accordance with all other County policies and procedures during interfacility transfers.

f. The Prehospital Audit Committee (PAC) will review significant events and/or trends when Paramedic/AEMT/9-1-1 system personnel have been utilized for interfacility transfers to ensure that 9-1-1 system personnel are being utilized appropriately. Issues identified by PAC will be referred to the EMS Branch for further action.
I. **Authority:** California Health & Safety Code Chapter 3, Article 5, Section 1797.186, 1797.188 and 1797.189.

II. **Purpose:** To reduce the risk of exposure/transmission of infectious and communicable diseases to prehospital personnel and to patients.

III. **Policy:**

A. All prehospital agencies (including first responder agencies, EMT, Advanced EMT (AEMT), and Paramedic provider agencies, EMT, AEMT and Paramedic training agencies, Base Hospitals, and aeromedical providers) shall develop and implement comprehensive policies and procedures that are in compliance with the guidelines and requirements outlined by the Centers for Disease Control and the California Occupational Safety & Health Administration regarding "universal precautions" and the protection of personnel and patients from exposure to blood borne and other infectious diseases.

B. All prehospital provider agencies shall develop and implement policies regarding the prompt reporting and follow-up of exposures to infectious diseases.
I. **Authority:** California Health and Safety Code, Division 2.5, Section 1797.220, 1798 and California Code of Regulations, Title 13, Section 1105c: “In the absence of decisive factors to the contrary, ambulance drivers shall transport emergency patients to the most accessible emergency facility equipped, staffed, and prepared to administer care appropriate to the needs of the patient.”

II. **Purpose:**

A. To transport emergency patients to the most accessible medical facility which is staffed, equipped, and prepared to administer emergency care appropriate to the needs and requests of the patient.

B. To provide a mechanism for a receiving hospital to request diversion of patients from its emergency department when it has been determined that the hospital is not staffed, equipped, and/or prepared to care for additional patients. It is the expectation that all basic emergency receiving hospitals shall make every effort to minimize the duration and occasions of closure and diversion requests, and make every effort to re-open as soon as possible.

C. To assure prehospital providers units are not unreasonably removed from their area of primary response when transporting patients to a hospital.

III. **Policy:**

A. **Diversion Categories**

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Approved:

[Signatures for Administration and EMS Medical Director]
It shall be the responsibility of the satellite hospitals to keep their Base Hospital(s) informed of their status. Satellite hospitals may request diversion; however, the final destination decision shall be made by the Base Hospital MICN/BHMD after consideration of all pertinent factors (i.e. status of area hospitals, ETA’s, patient acuity and condition). A hospital may request diversion for the following reasons:

1. **Emergency Department Saturation** – Hospital’s emergency department resources are fully committed and are not available for additional incoming ambulance patients.

2. **Neuro/CT Scan Unavailability** - Hospital is unable to provide appropriate care due to non-functioning CT-Scan and/or unavailability of a neurosurgeon. (Only for patients exhibiting possible neurological problems.)

3. **Internal Disaster** – Hospital cannot receive any patients because of a physical plant breakdown (e.g. fire, bomb threat, power outage, etc.)

B. In the event of anticipated prolonged diversion, notification shall be made to the County of San Diego, Health and Human Services Agency (HHSA) Emergency Medical Services Branch.

C. Units dispatched as BLS and/or downgraded to BLS will contact the anticipated patient destination. If that destination is unable to accept patients

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Approved:

[Signatures]

[End of page]
due to diversion status, the transporting crew will contact the Base Hospital to determine destination and to relay patient information.

D. Base Hospital direction of Mobile Intensive Care Units (MICUs).

1. Base Hospitals will attempt to honor diversion requests provided that:
   
a. The involved MICU estimates that it can reach an “alternate” facility within a reasonable time, giving consideration to limiting transport time to no greater than 20 minutes.
   
b. Patients are not perceived as exhibiting uncontrollable life threatening problems in the field (e.g. unmanageable airway, uncontrolled non-traumatic hemorrhage, or non-traumatic full arrest) or any other condition that warrants immediate physician intervention. (Patients meeting trauma criteria shall be transported according to Trauma Policies Protocols and Policy (See S-139 B, S-169, and T-460).

2. If all area receiving hospitals are “requesting diversions” due to emergency department saturation, the “diversion requests” status may not be honored and the patient will be transported to the most accessible emergency medical facility within that area.

3. MICNs and prehospital personnel will make best efforts to ensure ambulance patients will be transported to their (patient/family) requested facility.

Approved:

[Signatures]

Administration
EMS Medical Director
4. Any exceptions from this policy will be made by Base Hospital Physician Order only.

E. HHSA EMS Branch staff and/or designee may monitor and/or perform unannounced site visits to hospitals to ensure compliance with these guidelines.

F. Issues of noncompliance should be reported to the Emergency Medical Services Branch.

Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.61, 1797.62, 1797.107, 1797.118, 1797.176, 1797.184, 1797.202, 1797.210, 1797.216, 1798.201, & 1798.202

II. **Purpose:** To establish the requirements for “Disciplinary Cause” which refers to an act that is substantially related to the qualifications, functions, and duties of an EMT and/or AEMT and to define an equitable process for discipline that allows the County of San Diego EMS to protect the public health and safety while ensuring the due process rights of the holder or applicant for an EMT and/or AEMT certification.

III. **Policy-EMT/ AEMT:**

A. The classification of prehospital emergency medical services personnel certified under provisions of the California Code of Regulations, Title 22, Division 9, Chapter 6 include:

1. Emergency Medical Technician (EMT).
2. Emergency Medical Technician-II (EMT-II).
3. Advanced Emergency Medical Technician (AEMT).

B. The County of San Diego EMS Medical Director may take appropriate action according to these policies and procedures, against the certificate of any prehospital emergency care personnel certified, pursuant to Division 2.5 of the Health and Safety Code, for which any of the following conditions is true:

1. The certificate was issued by the local EMS Medical Director; or
2. The certificate holder utilizes or has utilized the certificate or the skills authorized by the certificate within the County of San Diego.
C. The County of San Diego EMS, upon receiving any complaint against an EMT or AEMT shall forward the original complaint and any supporting documentation to the relevant employer for investigation. A relevant employer is defined as an ambulance service permitted by the California Highway Patrol, or a public safety agency, a fire department, law enforcement agency, or other public safety agency that employs EMT’s.

D. The responsibilities of the relevant employer Include:

1. Develop agency policy regarding disciplinary action and notification processes for EMT and/or AEMT staff.

2. Within three (3) days of validated allegation(s), the relevant employer shall notify the LEMSA that has jurisdiction in the county in which the alleged violation occurred, as well as the certifying entity.

3. Relevant Employers will have first right of refusal to conduct investigations of an allegation of misconduct.

4. Relevant Employers who conduct investigations shall create a disciplinary action plan that is consistent with the State of California Recommended Guidelines for Disciplinary Orders and Conditions of Probation for EMT and Advanced EMT. The disciplinary action plan shall be submitted to the County of San Diego EMS within three (3) working days of adoption of the disciplinary plan. If the certification was issued outside the County of San Diego, the disciplinary plan shall be submitted to the issuing LEMSA. If the certification was issued by a non-LEMSA certifying entity, the disciplinary plan shall be...
submitted to the LEMSA that has jurisdiction where the headquarters of the certifying entity is located.

5. The relevant employer is to notify, within three (3) days, both the certifying entity and the local EMS agency that has jurisdiction where the alleged action occurred of any of the following:
   a. The EMT or AEMT is terminated or suspended for disciplinary cause
   b. The EMT or AEMT retires or resigns following the notification of impending investigation based on evidence that would indicate the existence of disciplinary cause, or
   c. The EMT or AEMT is removed from EMT or AEMT related duties for disciplinary cause after the completion of the employer’s investigation.

6. The relevant employer is to refer investigations that may lead to certification action to the local EMS agency in the event the relevant employer does not wish to conduct the investigation.

7. County of San Diego EMS shall consult with the relevant employer regarding issuing a temporary suspension order prior to initiation.

E. An evaluation and determination by the Relevant Employer and/or County of San Diego EMS that any of the following actions have occurred constitutes evidence of a threat to the public health and safety and is cause for initiating a formal investigation and possible disciplinary action:
   1. Fraud in the procurement of any certification issued under Part 1 of Division 2.5 of the Health and Safety Code.
2. Gross negligence.


4. Incompetence.

5. The commission of any fraudulent, dishonest or corrupt act, which is substantially related to the qualifications, functions, and duties of Prehospital personnel.

6. Conviction of any crime, which is substantially related to the qualifications, functions and duties of Prehospital personnel. The record of conviction or certified copy thereof shall be conclusive evidence of such conviction.

7. Violating or attempting to violate directly or indirectly, or assisting or abetting the violation of, or conspiring to violate any provision of Part 1 of Division 2.5 of the Health and Safety Code or of the regulations adopted by the Authority pertaining to Prehospital personnel.

8. Violating or attempting to violate any Federal or State statute or regulation, which regulates narcotics, dangerous drugs or controlled substances.

9. Addiction to the excessive use of, or the misuse of alcoholic beverages, narcotics, dangerous drugs or controlled substances.

10. Functioning outside of the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification.

11. Demonstration of irrational behavior or occurrence of physical disability to the extent that a reasonable and prudent person would have reasonable cause to
believe that the ability to perform the duties normally expected may be impaired.

12. Unprofessional Conduct Exhibited by any of the following:
   a. The mistreatment or physical abuse of any patient resulting from force in excess of what a reasonable and prudent person trained and acting in a similar capacity while engaged in the performance of his or her duties would use if confronted with a similar circumstance.
   b. The failure to maintain confidentiality of patient medical information, except as disclosure is otherwise permitted or required by law in Sections 56-56.6, inclusive of the Civil Code.
   c. The commission of any sexually related offense specified under Section 290 of the Penal Code.

F. Certification actions relative to the individual’s certificate shall be taken as a result of the findings of an investigation and will be consistent with State of California Recommended Guidelines for Disciplinary Orders and Conditions of Probation for EMT and/or AEMT as noted in this policy

G. The following factors shall be considered for determination of the certification action to be imposed on the respondent. Specifically, whether the certification action warranted is denial, probation, suspension, or revocation:

1. Nature and severity of the act(s), offense(s), or crime(s) under consideration
2. Actual or potential harm to the public
3. Actual or potential harm to any patient
4. Prior disciplinary record

5. Prior warnings on record or prior remediation

6. Number and/or variety of current violations

7. Aggravating evidence

8. Mitigating evidence

9. Rehabilitation evidence

10. In case of a criminal conviction, compliance with terms of the sentence and/or court-ordered probation

11. Overall criminal record

12. Time elapsed since the act(s) or offense(s) occurred

13. If applicable, evidence of expungement proceedings pursuant to Penal Code 1203.4

14. In determining appropriate certification disciplinary action, the County of San Diego medical director may give credit for prior disciplinary action imposed by the respondent’s employer.

The County of San Diego Medical Director has the final determination as to the certification action and/or disciplinary action to be imposed.

H. Certification Actions:

Actions taken shall be in accordance with Model Disciplinary Orders (MDOs) established by the State of California EMS Authority.

1. Probation
The County of San Diego EMS Medical Director may place an EMT or AEMT certificate holder on probation any time an infraction or performance deficiency occurs which indicates a need to monitor the certificate holder’s conduct in the EMS system, in order to protect the public health and safety.

2. Suspension

The County of San Diego EMS Medical Director may suspend an EMT or AEMT certificate for a specified period of time for disciplinary cause in order to protect the public health and safety.

a. Upon the expiration of the term of suspension, the individual’s certificate shall be reinstated only when all conditions for reinstatement have been met. The medical director shall continue the suspension until conditions for reinstatement have been met.

b. If the suspension period will run past the expiration date of the certificate the EMT or AEMT shall meet the recertification requirements for certificate renewal prior to the expiration date of the certificate.

3. Denial and/or Revocation

The Medical Director shall deny or revoke an EMT or AEMT certificate if any of the following apply to an applicant or certificate holder:

a. Has committed any sexually related offense specified under Section 290 of the Penal Code.

b. Has been convicted of murder, attempted murder, or murder for hire.

c. Has been convicted of two (2) or more felonies.
d. Is on parole or probation for any felony.

e. Has been convicted and released from incarceration for said offense during the preceding fifteen (15) years for the crime of manslaughter or involuntary manslaughter.

f. Has been convicted and released from incarceration for said offense during the preceding ten (10) years for any offense punishable as a felony.

g. Has been convicted of two (2) or more misdemeanors within the preceding five (5) years for any offence relating to the use, sale, possession, or transportation of narcotics or addictive or dangerous drugs.

h. Has been convicted of two (2) or more misdemeanors within the preceding five (5) years for any offence relating to force, threat, violence, or intimidation.

i. Has been convicted within the preceding five (5) years for any theft related misdemeanor.

The County of San Diego EMS Medical Director may deny or revoke an EMT or AEMT certification if any of the following apply to the applicant:

a. Has committed any act involving fraud or intention dishonesty for personal gain within the preceding seven (7) years.

b. Is required to register pursuant to Section 11590 of the Health and Safety Code.
c. The certificate holder failed to disclose to the certifying entity any prior convictions when completing his/her application for initial EMT or Advanced EMT certification or certification renewal.

4. Temporary Suspension Order

a. The County of San Diego EMS Medical Director may temporarily suspend a certificate prior to hearing if the certificate holder has engaged in omissions that constitute grounds for denial or revocation according to State of California regulations, and if it is in the opinion of the medical director that permitting the certificate holder to continue to engage in certified activity would pose an imminent threat to the public health and safety.

b. Prior to, or concurrent with, initiation of temporary suspension order of a certificate pending hearing, the County of San Diego EMS Medical Director shall consult with the relevant employer of the certificate holder.

c. The notice of temporary suspension pending hearing shall be served by registered mail or by personal service to the certificate holder immediately, but no longer than three (3) working days from making the decision to issue the temporary suspension. The notice shall include the allegations that allowing the certificate holder to continue to engage in certified activities would pose an imminent threat to the public health and safety.

d. Within three (3) working days of the initiation of the temporary suspension, the County of San Diego EMS Medical Director and the relevant employer
shall jointly investigate the allegation in order for the County of San Diego EMS Medical Director to make a determination of the continuation of the temporary suspension.

1) All investigatory information, not otherwise protected by the law, held by the County of San Diego EMS Medical Director and the relevant employer shall be shared between the parties via facsimile transmission or overnight mail relative to the decision to temporarily suspend.

2) If the certificate holder files a Notice of Defense, an administrative hearing shall be held within thirty (30) calendar days of the County of San Diego EMS Medical Director's receipt of the Notice of Defense.

I. Appeals Process:

If the County of San Diego EMS Medical Director makes a decision to place a certificate holder on probation or deny, suspend or revoke a certificate, the applicant for, or holder of a certificate may request an appeal in writing, within thirty (30) calendar days of the date that written notification of the decision to take disciplinary action is received via registered mail or personal service.

J. Certification action by the County of San Diego Medical Director shall be valid statewide and honored by all certifying entities for a period of at least twelve (12) months from the effective date of the certification action. An EMT or AEMT whose application was denied or revoked by the County of San Diego Medical Director shall not be eligible for re-application by any other certifying entity in the State of
California for a period of at least twelve (12) months from the effective date of the certification action.

K. The County of San Diego EMS medical director shall notify the applicant/certificate holder and his/her relevant employer(s) of the certification action within ten (10) working days after making the final determination. The notification of final decision shall be served by registered mail or personal service and shall include the following:

1. The specific allegations or evidence which resulted in the certification action(s)
2. The certification action to be taken and the effective date of the certification action, including the duration of the action.
3. Which certificate(s) the certification action applies to in cases of holders of multiple certificates.
4. A statement that the certificate holder must report the certification action within ten (10) working days to any other LEMSA and relevant employer in whose jurisdiction he/she uses the certificate.

L. Investigations involving EMTs and AEMTs who are employed by a public safety agency as a firefighter shall be conducted in accordance with Chapter 9.6 of the Government Code, Section 3250 et. seq. The rights and protections described in chapter 9.6 of the Government Code shall only apply to a firefighter during events and circumstances involving the performance of his/her official duties.

M. The information shared among EMT and AEMT employers, County of San Diego EMS Medical Director, the EMS Authority and certifying entities other than the
County of San Diego EMS, shall be deemed to be investigative communication that is exempt from public disclosure as a public record pursuant to subdivision (f) of Section 6254 of the Government Code.

IV. Policy-Paramedic:

A. When information comes to the attention of the County of San Diego EMS Medical Director than a Paramedic license-holder has committed any act or omission that appears to constitute grounds for disciplinary action under above noted EMSA Health & Safety Codes, the Medical Director may evaluate the information to determine if there is reason to believe that disciplinary action may be necessary.

B. If the Medical Director sends a recommendation to the EMS Authority for further investigation or discipline of the license-holder, the recommendation shall include all documentary evidence collected by the medical director in evaluating whether or not to make that recommendation. The recommendation and accompanying evidence shall be deemed in the nature of an investigative communication and be protected by Section 6254 of the Government Code. In deciding what level of disciplinary action is appropriate in the case, the EMS Authority shall consult with the County of San Diego EMS Medical Director.

C. The director of the EMS Authority or the County of San Diego EMS Medical Director, after consultation with the relevant employer, may temporarily suspend, prior to hearing, any Paramedic license upon a determination that:

1. The licensee has engaged in acts or omissions that constitute grounds for revocation of the Paramedic license; and
2. Permitting the licensee to continue to engage in the licensed activity, or permitting the licensee to continue to engage in the licensed activity without restriction, would present an imminent threat to the public health and safety.
I. Authority: Health & Safety Code, Section 7152.5(b).

II. Purpose: To establish guidelines for emergency medical services (EMS) field personnel to search for verification of organ donor status on adult patients for whom death appears imminent.

III. Definitions:

A. Reasonable Search: A brief attempt by EMS field personnel to locate an organ donor document of gift, or other information that may identify a patient as a potential organ donor or one who has refused to make an anatomical gift.

B. Imminent Death: A condition wherein illness or injuries are of such severity that, in the opinion of EMS personnel, death is likely to occur before the patient arrives at the receiving hospital. For purposes of this policy, this definition does not include any conscious patient regardless of the severity of illness or injury.

IV. Policy:

A. When EMS field personnel encounter an unconscious adult patient for whom it appears death is imminent they shall attempt a "reasonable search" of the patient's belongings to determine if the individual carries an organ donor document of gift or other information indicating the patient's status as an organ donor.

B. Treatment and transport of the patient remains the highest priority for field personnel. This search shall not interfere with patient care or transport.

C. Field personnel shall notify the receiving hospital personnel if organ donor document of gift or other information is discovered. Advanced life support units shall notify the base hospital in addition to the receiving hospital personnel.

Approved:

[Signatures]

Administration                               Medical Director
D. Any organ donor document of gift or other information that is discovered shall be transported to the receiving hospital with the patient, unless an investigating law enforcement officer requests it. In the event that no transport is made, any organ document of gift or other information shall remain with the patient.

E. Field personnel shall briefly note the results of the search on the EMS Prehospital Patient Record.

F. No search is to be made by EMS personnel after the patient has expired.

G. If a member of the patient's immediate family objects to the search for an organ donor document of gift or other information at the scene, their response to a question about the patient's organ donation wishes shall satisfy the requirement.
I. **Authority:** Division 2.5, Health and Safety Code, Sections 1797.204 and 1798; and Evidence Code, Sections 1040 and 1157.7.

II. **Purpose:** To establish the scope, membership and functions of an advisory committee to the local Emergency Medical Services (EMS) agency. This committee shall meet to monitor and evaluate the medical care of identified patients with traumatic injury.

III. **Policy**

A. The scope of the committee shall include, but not be limited to:

1. Review of trauma deaths in the County
2. Evaluation of trauma care
3. Provision of input to the local EMS agency in the development, implementation and evaluation of medical audit criteria
4. Design and monitoring of corrective action plans for trauma medical care
5. Assistance and participation in research projects
6. Provision of medical care consultation at the request of the County of San Diego Division of EMS (County EMS), including on-site facilities evaluation by committee members
7. Establishment of subcommittees of outside consultants at the request of County EMS
8. Recommendation of process improvement strategies related to trauma care

B. **Membership:**

The committee shall be comprised of the following:

1. Members:
   a. Trauma Center Medical Directors from all designated centers

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**Approved:**

[Signatures]

Administrator

Medical Director
b. Trauma Nurse Coordinators from all designated Trauma Centers

c. County EMS Trauma System Coordinator/Trauma Quality Assurance Specialist
d. County Trauma System Surgical Consultant
e. Base Hospital Physician representing the Prehospital Audit Committee (PAC)
f. Neurosurgeon appointed by the Academy of Neurosurgeons
g. Anesthesiologist appointed by the Anesthesia Association
h. Orthopedic Surgeon
i. Emergency Physician not affiliated with a trauma center, appointed by San Diego Emergency Physicians Society
j. County EMS Medical Director

2. Ad Hoc Members that may participate:
   a. Trauma Base Hospital Medical Directors
   b. Medical Director Air Medical Services
   c. Designated Assistant Trauma Medical Directors or Trauma Surgeon staff of trauma centers
d. Approved physicians enrolled in Trauma fellowships
e. Trauma Center Intensivists
f. Assistant Trauma Coordinators
g. Physicians from non-trauma facilities who are presenting cases
h. President of the Medical Society

Approved:

[Signature]
Administrator

[Signature]
Medical Director
C. Attendance:

1. Members should notify County EMS staff (285-6429) in advance of any scheduled meeting they would be unable to attend. Attendance at these meetings for the Trauma Medical Directors and Trauma Nurse Coordinators or their designees is mandatory. The Trauma Medical Directors and the Trauma Nurse Coordinators should use their best efforts to attend 90% of the scheduled MAC meetings annually. After three (3) consecutive absences in a calendar year, an appointed member may be replaced on the Committee.

2. Resignations from the committee shall be submitted, in writing to County EMS.

3. Invitees may participate in the medical review of specified cases where their expertise is requested. All requests for invitees must be approved by County EMS in advance of the scheduled meeting.

4. Invitees not participating in the medical review of specified cases must be approved by County EMS and all Trauma Medical Directors.

D. Voting:

Due to the "advisory" nature of the committee, many issues require consensus rather than a vote process. Vote process issues will be identified.
as such by the Chairperson. When voting is required, the majority of the
voting members of the committee need to be present. Voting members may
include Trauma Medical Directors, Trauma Nurse Coordinators and the
appropriate physician specialist. Members may not participate in voting
when a conflict of interest exists.

E. Meetings:

The committee shall meet at least six (6) times per year at times arranged by
County EMS/MAC.

F. Committee Documentation:

Minutes will be kept by County EMS staff and distributed to the members at
each meeting. Due to the confidentiality of the committee, confidential
committee documents will be collected by County EMS staff at the close of
each meeting and no copies may be made or possessed by members of the
Committee. All official correspondence and communication generated by
the Medical Audit Committee will be approved by County EMS staff and
sent on San Diego County letterhead.

Approved:

Administrator

Medical Director
G. Confidentiality:

All proceedings, documents and discussions of the Medical Audit Committee are confidential and are covered under Sections 1040 of the Government Code and 1157.7 of the Evidence Code of the State of California. The prohibition relating to discovery of testimony provided to the Committee shall be applicable to all proceedings and records of this Committee, which is one established by a local government agency to monitor, evaluate and report on the necessity, quality and level of specialty health services, including, but not limited to, trauma care services. Issues which require prehospital medical/system input may be sent to the confidential Prehospital Audit Committee.
I. **Authority:** Confidentiality of Medical Information Act (Civil Code, Section 56 et. seq.) Title 22, Division 9, Sections 100075, 100159, Health Insurance Portability and Accountability Act (HIPAA).

II. **Purpose:** To describe the conditions and circumstances by which protected health information may be released.

III. **Definitions:**

- **Protected Health Information (PHI):** HIPAA regulations define health information as:
  - “any information, whether oral or recorded in any form or medium” that
    - “is created or received by a health care provider, health plan, public health authority, employer, life insurer, school or university, or health care clearinghouse” and,
    - “relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual, or the past, present, or future payment for the provision of health care to an individual.”

IV. **Policy**

A. All prehospital provider agencies shall have policies in place regarding the disclosure of PHI of EMS patients.

B. Prehospital provider agencies shall designate a Public Information Officer (PIO) or other designated person(s) authorized to release operational or general information, as authorized by State and Federal law.

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Approved:

[Signatures]

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Administration

Medical Director
C. PHI may not be disclosed by prehospital personnel, except as follows:

1. To other care givers to whom the patient care is turned over, for continuity of patient care (including the prehospital patient record).

2. To the County of San Diego, Base Hospital or provider agency quality improvement program (including the provider agency supervisory personnel).

3. To the patient or legal guardian.

4. To law enforcement officers in the course of their investigation under the following circumstances:
   a. As required by law (e.g. court orders, court-ordered warrants, subpoenas and administrative requests).
   b. To identify or locate a suspect, fugitive, material witness or missing person.
   c. In response to a law enforcement official’s request for information about a victim or suspected victim of a crime.
   d. To alert law enforcement of a person’s death if the covered entity suspects that criminal activity caused the death.
   e. When a covered entity believes that PHI is evidence of a crime that has occurred on the premises.

Approved:

________________________             ________________________
Administration                                    Medical Director
f. In a medical emergency and it is necessary to inform law enforcement about the commission and nature of a crime, the location of the crime or crime victims, and the perpetrator of the crime.

5. To the provider agency’s billing department, as needed for billing purposes.

6. In response to a properly noticed subpoena, court order or other legally authorized disclosure.

C. Any prehospital records (recorded or written), used for training or continuing education purposes, must be edited to remove identifying patient/incident information.

Approved:

[Signature]

administration

[Signature]

medical director
I. Authority: Health and Safety Code, Division 2.5, Section 1300.

II. Purpose: To identify the procedures instituted prior to closure or downgrade of emergency services provided by a licensed acute care hospital with a permit to provide basic or comprehensive emergency services.

III. A. Hospitals planning to close or downgrade their capacity to provide emergency services shall notify the Emergency Medical Services (EMS) Branch of their intent at least 90 days prior to the scheduled change, in accordance with applicable regulations. This notification shall provide the EMS Branch with the following information:

1. Rationale for downgrade or closure.
2. Proposed timeline for downgrade or closure.
3. Annual patient volume seen in the emergency department.
4. Any other services provided by the hospital that may additionally be impacted by the emergency department closure/downgrade.
5. Plans for community notification including the scheduling of mandated public hearings.

B. Upon notification that a hospital intends to close or downgrade the level of emergency services offered pursuant to its permit to operate a basic or comprehensive emergency facility, the County of San Diego EMS Branch shall conduct an evaluation of the potential impact to prehospital emergency care providers and upon the remaining emergency care facilities in the geographic area.
area. The impact evaluation and a public hearing shall occur within 60 days of receiving notification of the intent of closure. This impact evaluation shall include the following:

1. **Geographical Data** regarding facility isolation, service area population density, travel time and distance to next closest facility, number and type of other available emergency services, and availability of prehospital resources.

2. **Base Hospital Designation** information to include the number of calls received, number of patients received, and impact on patients, prehospital personnel and other Base Hospitals.

3. **Trauma Care** impact based on the number of patients received, and impact on remaining hospitals, trauma centers and trauma patients.

4. **Specialty Services provided** that are not readily available at other community facilities and the next nearest availability of those services such as burn center, neurosurgery, pediatric, critical care, etc.

5. **Patient Volume** on an annual basis including both 9-1-1 transports, transfers and walk-in patients.

6. **Public Notification** of the intended downgrade or closure has occurred with a minimum of one public hearing in addition to advertisement to the community via publications, education sessions or media forums.

C. In addition to performing the impact evaluation, the EMS Branch shall:
1. Notify and consult with all prehospital health care providers and hospitals in the geographical area regarding the potential closure or change.

2. Notify all planning or zoning authorities prior to completing an impact evaluation.

3. Provide, in writing, a copy of the EMS Branch’s impact evaluation to the California EMS Authority and the California State Department of Health Services within three (3) days of the completion of the impact evaluation.
I. **Authority:** Health and Safety Code, Division 2.5, Section 1798 and 1797.204 and Chapter 12, 1799.

II. **Purpose:** To establish the scope, membership and functions of an advisory committee to the Division of Emergency Medical Services (EMS). This committee will provide consultation, medical protocol review, evaluate and make recommendations regarding medical care, access to care, medical preparedness, community preparedness and illness and injury prevention regarding children to the Medical Director of the Division of Emergency Medical Services (EMS).  

III. **Policy:** The EMS Medical Director may consult with the EMSC Advisory Committee on issues concerning pediatric system, protocol, education, medical care delivery, community preparedness and prevention within County of San Diego.

A. **Membership:** The EMS-C Advisory/Steering Committee will have the following membership:
   1. Base Station Physicians’ Committee representative;
   2. Hospital Administration /Association Representative;
   3. One physician member representing Children’s Hospital Emergency Dept. physician staff;
   4. One physician member representing the Medical Society Emergency Physicians or a Non-Trauma Center, non-Base Hospital Emergency Department physician;
   5. One physician member representing AAP or COPEM;
   6. One physician member representing U.S. Naval Hospital;
   7. One physician member representing private practice pediatrics;
   8. One member representing Community Injury Prevention;
   9. One member representing approved paramedic training programs;
   10. One member representing the San Diego County Paramedic Association;
   11. One member representing the Base Hospital Nurse Coordinators Committee;
   12. One member representing Children’s Hospital Emergency Department nursing staff;
   13. One member representing the pediatric Trauma Center; and,
   14. One member representing community, i.e. Parents-Teachers Association.

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1 EMSC Project, Final Report, CA EMSA #196, 1994
EMSC Five Year Plan, Goals & Objectives 2001-5, CA EMSA

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Approved:

[Signature]

Administration

EMS Medical Director
B. The responsibilities of the EMS-C Advisory Committee are:
   1. To develop a system EMS-C plan listing goals, priorities and timeline.
   2. To convene small task forces of the Advisory Committee and others to work with the EMS Medical Director or designee on specific medical management issues and community initiatives.
   3. To consult with other medical specialties, community representatives or other advisory bodies in the County of San Diego, as necessary.
   4. To provide steering recommendations for the implementation of EMSC related projects.
   5. To develop recommended policy/guidelines/protocols/procedures concerning medical care delivery for children, community preparedness, access to medical care and illness and injury prevention.
   6. To develop programs providing public education concerning EMSC and related projects.
   7. To participate in the implementation of approved policy/guidelines/programs/ protocols/procedures concerning access to and medical care delivery for children, community preparedness and illness and injury prevention as requested by EMS.

C. Attendance:
   1. Members should notify Division of EMS staff (619-285-6429) in advance of any scheduled meeting they would be unable to attend.
   2. An appointed member may be replaced after two consecutive absences.

D. Voting:
   1. Due to the “advisory” nature of the committee, many issues require consensus rather than a vote process. The Chairman will identify issues requiring a vote and the vote process.
   2. When voting is required, a simple majority of committee members needs to be present. Members may not participate in voting when a conflict of interest exists.

E. Meetings:
   The committee shall meet at least four (4) times per year at times arranged by the Division of EMS.

Approved:

______________________________   __________________________
Administration          EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Section 1798; and Evidence Code, Sections 1157.7.

II. **Purpose:** To designate an advisory committee to provide consultation, medical protocol review, and recommendations on issues concerning prehospital treatment protocols and emergency medical care delivery for patients with acute coronary syndromes to the Medical Director of the County of San Diego Emergency Medical Services (EMS).

III. **Policy:** The County of San Diego EMS Medical Director may consult with the San Diego County Cardiovascular Advisory Committee on issues concerning prehospital treatment protocols and emergency medical care delivery for patients with acute coronary syndromes in San Diego County.

A. **The Scope:** not limited to

   1. Provision of input to County of San Diego EMS in the development, implementation and evaluation of medical audit criteria.
   2. Designing and monitoring corrective action plans on cardiovascular care.
   3. Provision of medical care consultation at the request of the County of San Diego EMS.
   4. Recommendation of performance improvement strategies related to care of patients with acute myocardial infarction.

B. **Membership:** County of San Diego EMS Medical Director’s Cardiovascular Advisory Committee will have the following members:

   1. One Cardiovascular “STEMI” Program Medical Director from each designated Cardiovascular “STEMI” Receiving Center (SRC).
   2. One SRC Program Manager or designee from each designated SRC.

Approved:

[Signatures]

**Administration**

**EMS Medical Director**
3. San Diego County EMS “STEMI” Program Coordinator (QA Specialist).

4. One cardiologist representing non-certified centers from the San Diego County Medical Society or as appointed by EMS.

5. One emergency physician representing the County of San Diego's Base Station Physician’s Committee (BSPC).

6. One emergency physician representing the San Diego County Medical Society EMS Oversight Committee (EMOC) from a non-designated SRC.

7. San Diego County EMS Medical Director.

C. **Ad Hoc Members that may participate:**

1. Managed care cardiologist representative appointed by EMS.

2. One emergency physician representing EMOC from a designated SRC.

3. One representative from County Paramedic Agencies Committee (CPAC).

4. One nurse representing the Base Hospital Nurse Coordinator’s Committee.

5. County EMS Administrator/appropriate EMS staff.

6. Other members as appointed by the EMS Medical Director.


8. Paramedic Training agency representative.

D. **Responsibilities**

1. To meet as an advisory committee on a quarterly basis.

2. To develop an agenda in conjunction with the County of San Diego EMS Medical Director or designee.

3. To consult on prehospital and hospital acute coronary syndrome issues.

Approved:

[Signatures]

Administration

EMS Medical Director
4. To convene small task forces/subcommittees of advisory committee members and others to work with the County of San Diego EMS Medical Director or designee on specific medical management issues.

5. To consult with other medical specialties, or other advisory bodies in the County, as necessary.

E. Attendance

1. Participation by the SRC Medical Directors and SRC Managers in the County of San Diego Cardiovascular Advisory Committee’s (CAC) performance improvement process is mandatory. Attendance at quarterly meetings is encouraged.

2. Invitees may participate in the medical review of specified cases where their expertise is requested. All requests for invitees must be approved by County of San Diego EMS STEMI QA Specialist in advance of the scheduled meeting.

3. County of San Diego EMS and all SRC Medical Directors present must approve the invitees observing case reviews in which the invitees are not participating.

F. Voting

1. The CAC will elect a chairperson who must be a SRC Medical Director, annually.

2. Due to the “advisory” nature of the committee, many issues require consensus rather than a vote process. Vote process issues will be identified as such by the Chairperson. When voting is required, a “simple” majority of the voting members of the committee need to be present to constitute a quorum. Members may not participate in voting when a conflict of interest exists.

3. There will be one vote from each SRC that may be registered by either the SRC Medical Director or the SRC Program Manager/designee.

Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
G. **Confidentiality**

All proceedings, documents and discussions of the Cardiovascular Advisory Committee are confidential and are covered under Section 1157.7 of the Evidence Code of the State of California. The prohibition relating to discovery of testimony provided to the Committee shall be applicable to all proceedings and records of this Committee, which is one established by a local government agency to monitor, evaluate and report on the necessity, quality and level of specialty health services, including, but not limited to, cardiovascular services. Issues, which require prehospital medical/system input, may be sent to the confidential Prehospital Audit Committee.

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**Approved:**

[Signatures]

Administration

EMS Medical Director
I. **Authority:** Division 2.5 Health and Safety Code, Section 1797.67, 1798 and 1798.170.

II. **Purpose:** To define the process and procedure for designating a Cardiovascular “STEMI” Receiving Center.

III. **Policy:**

   The Board of Supervisors or designee shall approve recommendations for Cardiovascular “STEMI” Receiving Center designations.

   1. The designation SRC will be a non-competitive process based on past performance of the acute care hospital’s emergency department, cardiac catheterization laboratory, staff and on-call interventionalists and on its ability to provide required services and willingness to participate in the performance improvement process.

   2. The designation of an SRC for purposes of the County of San Diego Emergency Medical Services (EMS) confers upon the facility, the recognition that it has the commitment, personnel and resources necessary to provide optimum medical care for the patient with a acute myocardial infarction, to include, but not limited to the ability to provide prompt percutaneous coronary interventions and to meet outcome benchmarks.

---

**Approved:**

[Signature]

Administration

[Signature]

EMS Medical Director
3. The designation as a SRC is specific to the cardiac catheterization laboratory’s location and is not transferable.

4. Each designated SRC shall meet the criteria set forth in their agreement and demonstrate a continuous ability and commitment to comply with policies, protocols and procedures developed by the County of San Diego EMS.

5. Each designated SRC’s shall undergo an annual performance evaluation based upon their agreement. Results of the evaluation shall be made available to the designated facility.

6. All designated SRC’s shall participate in the quality improvement process as outlined in the Cardiovascular Performance Improvement Manual and Data Dictionary.

II Procedure:

A. The County of San Diego EMS develops and distributes an Application for Designation as a Cardiovascular “STEMI Receiving Center (SRC).

B. The County of San Diego EMS evaluates applications, including an independent review process and on-site evaluation and makes recommendations to the Board of Supervisors.

Approved:

[Signatures]

Admin: Carmel Angelo
EMS Medical Director: Ben Youniss

Page: 2 of 2
I. **Authority:** Division 2.5, Health and Safety Code, Section 1797.67, 1798 and 1798.170.

II. **Purpose:** To establish a policy and procedure for de-designation of a “STEMI” receiving center (SRC).

III. **Policy**

A. Termination for Cause:

1. The County of San Diego may immediately terminate its Cardiovascular “STEMI” Receiving Center (SRC) Memorandum of Agreement (MOA), if a receiving center's license to operate as a general acute care hospital is revoked or suspended.

2. The County of San Diego may immediately terminate its SRC MOA, if the hospital no longer operates as a receiving center with a “Basic or Comprehensive” Emergency Department.

3. The County of San Diego may immediately suspend its MOA upon written notice if a SRC is in gross default of material obligation under its MOA which default could adversely affect patient care provided by Contractor.

4. For any other material breach of its MOA, The County of San Diego may terminate a receiving center MOA for cause, per the language of the Agreement. Such cause shall include, but not be limited to:

   a) Failure to comply with material terms and conditions of the SRC MOA, after notice of the failure has been given.
b) Failure to make available sufficient, qualified personnel and hospital resources to provide immediate care for acute myocardial infarction patients as required by the MOA.

b) Failure to provide timely cardiac interventionalist coverage for acute myocardial infarction patients as required by the MOA.

c) Failure to provide physicians, surgeons, and other medical, nursing and ancillary staff who possess that degree of skill and learning ordinarily possessed by reputable medical personnel in like or similar localities and under similar circumstances for the provision of medical services for acute myocardial infarction patient requiring percutaneous coronary interventions.

d) Gross misrepresentation or fraud.

c) Substantial failure to cooperate with the County of San Diego EMS monitoring of SRC services.

f) Substantial failure or refusal to cooperate with quality assurance and audit findings and recommendations within a reasonable time.

B. Termination for Convenience:

Either the County of San Diego or the SRC may terminate the SRC MOA, as a termination for convenience per the language of the Agreement.

C. Upon the de-designation of a receiving center, the County of San Diego EMS shall be responsible for system redesign decisions.
I. **Authority:** California Health and Safety Code, Sections 1255.7 and 1798, California Penal Code 271.5.

II. **Purpose:** To describe guidelines for steps to be followed when an individual surrenders an infant appearing to be <72 hours old, under the California Safely Surrendered Baby Law of 2001, to EMS staff at a San Diego County Fire Station that is staffed 24 hours/day.

III. **Guidelines:**

EMS Personnel will accept infants brought to them with the intent of surrendering the child. The infant should be accepted for surrender even if the child’s age is suspected to exceed 72 hours.

A. EMS personnel should follow their own departmental policies when an infant is surrendered to their care.

B. A “Newborn Safe Surrender Kit” shall be used, and a confidential infant ID bracelet shall be placed on the newborn’s ankle, and the number code from the bracelet recorded on the infant’s Prehospital Patient Report (PPR).

C. EMS personnel will perform a rapid assessment of the infant to identify immediate medical needs, and this assessment will be documented on the infant’s PPR. If there is any suspicion of child abuse, law enforcement should be contacted immediately.

D. EMS personnel shall offer care to the mother if she is the caretaker surrendering the infant. Documentation of the mother’s assessment/care should be on a separate PPR if provided.

Approved:

[Signatures]

Administrator

Medical Director
E. The caregiver surrendering the infant should be encouraged to immediately
   complete the “Newborn Family Medical History Questionnaire”. If necessary,
   EMS personnel should assist the caregiver in completing the document. The
caregiver may also fill out the questionnaire at a later time and return via mail.

F. The infant should then be transferred to the most appropriate Emergency
   Department as directed by the base hospital. A copy of the infant’s PPR
   should be provided to hospital staff.

G. EMS personnel must notify County of San Diego Health and Human Services,
   Child Welfare Services by phone, advising them of a surrendered infant
   incident, and must complete a Child Protective Services (CPS) report,
   submitted according to agency protocol.

Approved:

[Signatures]

Administrator

Medical Director
INTRODUCTION

These Protocols define the basic and advanced life support treatment and disposition standards for San Diego County.

1. These treatments are listed in sequential order for each condition. Adherence is recommended. All skills follow the criteria in the Skills List (P-104)

2. All treatments may be performed by the EMT (BLS treatments), AEMT and/or paramedic without an order EXCEPT for those stating "Base Hospital Order (BHO)" or "Base Hospital Physician Order (BHPO)". All treatments requiring an order are at the discretion of the Base Hospital providing medical direction. Standing orders may be implemented at the discretion of the field EMT/A-EMT/paramedic and may be continued following the initial notification. Once a complete patient report is initiated:
   - All BH orders supersede any standing orders except defibrillation and intubation.
   - **ALL** subsequent medication orders **MUST** be from that Base (S-415).

3. **BHPO (Base Hospital Physician Order)**: BHPOs may be relayed by the MICN. Physician must be in direct voice contact for communication with another physician on scene.

4. Abbreviations and definition of terms are attached.

5. All medications ordered are to be administered as described UNLESS there is a contraindication, allergy or change in condition.

6. Cardioversion when listed in the protocols is always synchronized.

7. Personal protective equipment must be used on all patient contacts per provider agency policy (S-009).

8. **PEDIATRIC SPECIAL CONSIDERATIONS:**
   a. A pediatric patient is defined as appearing to be <15 yo.
   b. Pediatric cardioversion is CONTRAINDICATED whenever the defibrillator unit is unable to deliver <5 joules/kg or equivalent biphasic.
   c. Medications are determined by use of length based resuscitation tape; refer to the pediatric drug chart, P-117. Children ≥37 kg. use adult medication dosages regardless of age or height.
RESOURCES AND REFERENCES USED:


Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care, American Heart Association, 2010.


Pediatric Advanced Life Support, American Heart Association and American Academy of Pediatrics, Mary Fran Hazinski, Editor, Dallas, Texas, 2010

Pediatric Education for Prehospital Professionals, American Academy of Pediatrics, Jones and Bartlett, MA, 2006.


GLOSSARY OF TERMS

**Apparent Life Threatening Event (ALTE):** an episode involving an infant less than 12 months of age which is frightening to the observer and is characterized by one or more of the following:
1) Apnea (central or obstructive)
2) Color change (cyanosis, pallor, erythema)
3) Marked change in muscle tone
4) Unexplained choking or gagging

**Definitive therapy:** Immediate or anticipated immediate need for administration of a fluid bolus or medications.

**End Tidal CO<sub>2</sub> – Quantitative Capnography:**
Quantitative capnometer to continuously monitor end tidal CO<sub>2</sub> is mandatory for use in the intubated patient.

**Esophageal Tracheal Airway Device (ETAD):** The "Combitube" is the only such airway approved for prehospital use in San Diego County. See also PAA.

**IV/IO:** Intravenous/Intraosseous.

**Laryngeal/Tracheal (LT) Airway:** The "King Airway" is the only such airway approved for prehospital use in San Diego County. See also PAA.

**LEADSD:** Acronym for the steps to be performed in the assessment and documentation of endotracheal intubation attempts:

**Minor:** A person under the age of 18 and who is not emancipated.

**Opioid:** Any derivative, natural or synthetic, of opium or morphine or any substance that has their effects on opioid receptors (e.g. analgesia, somnolence, respiratory depression).

**Opioid Dependent Pain Management Patient:** An individual who is taking prescribed opioids for chronic pain management, particularly those with opioid infusion devices.

**Opioid Overdose, Symptomatic:** Decreased level of consciousness and respiratory depression (e.g. respiratory rate of less than 12).

**Nebulizer:** O<sub>2</sub> powered delivery system for administration of Normal Saline or medications.

**Pediatric Patient:** Children appearing to be <15 years
Pediatric Trauma patient is determined by age, regardless of weight. Neonate: up to 30 days. Infant: one month to one year of age.
Perilaryngeal airway adjunct (PAA):

**Esophageal Tracheal Airway Device (ETAD):** The “Combitube” is the only such airway approved for prehospital use in San Diego County.

**OR**

**Laryngeal/Tracheal (LT) Airway:** The “King Airway” is the only such airway approved for prehospital use in San Diego County.

"Shock" is defined by the following criteria:

Patient's age:

1. **> 15 years:**
   - Systolic BP <80 mmHg **OR**
   - Systolic BP <90 mmHg **AND** exhibiting any of the following signs of inadequate perfusion:
     a. altered mental status (decreased LOC, confusion, agitation)
     b. tachycardia
     c. pallor
     d. diaphoresis

2. **<15 years:**
   - Exhibiting any of the following signs of inadequate perfusion:
     a. altered mental status (decreased LOC, confusion, agitation)
     b. tachycardia (<5yrs >180bpm; >5yrs >160bpm)
     c. pallor, mottling or cyanosis
     d. diaphoresis
     e. comparison (difference) of peripheral vs. central pulses.
     f. delayed capillary refill
     g. systolic BP < [70 + (2 x age)]

**Unstable (adult):** Systolic BP<90 and chest pain, dyspnea or altered LOC.
# COUNTY OF SAN DIEGO TREATMENT PROTOCOL
## ABBREVIATION LIST

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHA</td>
<td>American Heart Association</td>
</tr>
<tr>
<td>AED</td>
<td>Automated External Defibrillator</td>
</tr>
<tr>
<td>AEMT</td>
<td>Advanced EMT</td>
</tr>
<tr>
<td>AICD</td>
<td>Automatic Implanted Cardiac Defibrillator</td>
</tr>
<tr>
<td>ALS</td>
<td>Advanced Life Support</td>
</tr>
<tr>
<td>ALTE</td>
<td>Apparent Life Threatening Event</td>
</tr>
<tr>
<td>AV</td>
<td>Arterio-Venous (fistula)</td>
</tr>
<tr>
<td>BEF</td>
<td>Basic Emergency Facility</td>
</tr>
<tr>
<td>BH</td>
<td>Base Hospital</td>
</tr>
<tr>
<td>BHO</td>
<td>Base Hospital Order</td>
</tr>
<tr>
<td>BHPO</td>
<td>Base Hospital Physician Order</td>
</tr>
<tr>
<td>BLS</td>
<td>Basic Life Support</td>
</tr>
<tr>
<td>BP</td>
<td>Blood Pressure</td>
</tr>
<tr>
<td>BPM</td>
<td>Beats per Minute</td>
</tr>
<tr>
<td>BS</td>
<td>Blood Sugar (Blood Glucose)</td>
</tr>
<tr>
<td>BSA</td>
<td>Body Surface Area</td>
</tr>
<tr>
<td>CaCl₂</td>
<td>Calcium Chloride</td>
</tr>
<tr>
<td>C/C</td>
<td>Chief complaint</td>
</tr>
<tr>
<td>CHF</td>
<td>Congestive Heart Failure</td>
</tr>
<tr>
<td>CO</td>
<td>Carbon Monoxide</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
</tr>
<tr>
<td>CPAP</td>
<td>Continuous Positive Airway Pressure</td>
</tr>
<tr>
<td>CPR</td>
<td>Cardio-Pulmonary Resuscitation</td>
</tr>
<tr>
<td>CVA</td>
<td>Cerebrovascular Accident</td>
</tr>
<tr>
<td>d/c</td>
<td>Discontinue</td>
</tr>
<tr>
<td>dL</td>
<td>Deciliter</td>
</tr>
<tr>
<td>D₂₅</td>
<td>25% Dextrose (diluted D₅₀)</td>
</tr>
<tr>
<td>D₅₀</td>
<td>50% Dextrose</td>
</tr>
<tr>
<td>EKG</td>
<td>Electrocardiogram</td>
</tr>
<tr>
<td>EpiPen</td>
<td>Brand name for auto-injector containing epinephrine</td>
</tr>
<tr>
<td>ET</td>
<td>Endotracheal Tube</td>
</tr>
<tr>
<td>ETAD</td>
<td>Esophageal Tracheal Airway Device</td>
</tr>
<tr>
<td>ETCO₂</td>
<td>End tidal CO₂</td>
</tr>
<tr>
<td>GM or Gm</td>
<td>Gram</td>
</tr>
<tr>
<td>HR</td>
<td>Heart Rate</td>
</tr>
<tr>
<td>ICS</td>
<td>Intercostal space</td>
</tr>
<tr>
<td>IM</td>
<td>Intramuscular</td>
</tr>
<tr>
<td>IN</td>
<td>Intranasal</td>
</tr>
<tr>
<td>IO</td>
<td>Intraosseous</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>j</td>
<td>joule(s)</td>
</tr>
<tr>
<td>Kg</td>
<td>Kilogram</td>
</tr>
<tr>
<td>L</td>
<td>Liter</td>
</tr>
<tr>
<td>LT Airway</td>
<td>Laryngeal Tracheal Airway</td>
</tr>
</tbody>
</table>

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Approved:

[Signature]

EMS Medical Director
LOC  Level of Consciousness or Loss of Consciousness
mA   Milliampere
MAD  Mucosal atomizer device
max  Maximum
mcg  Microgram
MCI  Mass Casualty Incident
MDI  Metered-Dose Inhaler
mEq  Milliequivalent
mg   Milligram
min  Minute
ml   Milliliter(s)
MOI  Mechanism of injury
MPI  Multiple Patient Incident
MR   May repeat
MS   Morphine Sulfate
MTV  Major Trauma Victim
NaHCO₃ Sodium Bicarbonate
NC   Nasal Cannula
NG   Nasogastric
NPO  Nothing by mouth
NS   Normal Saline
NTG  Nitroglycerin
O₂   Oxygen
OD   Overdose
ODT  Oral Dissolving Tablet
OG   Orogastric
PAA  Perilaryngeal airway adjunct
PEA  Pulseless Electrical Activity
PO   Per Os (by mouth)
POLST Physician Orders for Life-Sustaining Treatment
prn  Pro Re Nata (as often as necessary)
PVC  Premature Ventricular Complex
q    Every
SL   Sublingual
SO   Standing Order
SOB  Shortness of Breath
SVT  Supraventricular Tachycardia
TIA  Transient Ischemic Attack
TKO  To Keep Open
TOP  Topical
VF   Ventricular Fibrillation
VSM  Valsalva Maneuver
VT   Ventricular Tachycardia
?    Possible/questionable/suspected
"    Minutes or Inches
<    Less than
>    Greater than or equal to
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** Identify a minimum standardized inventory on all Basic Life Support and Advanced Life Support Transport Units.

III. **Policy:** Essential equipment and supplies are required by California Code of Regulations, Title 13, Section 1103.2(a) 1-2 (for vehicle requirements refer to Policy # B 833). Each Basic Life Support or Advanced Life Support Transporting Unit in San Diego County shall carry as a minimum, the following:

### Basic Life Support Requirements:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance cot and collapsible stretcher</td>
<td>1 each</td>
</tr>
<tr>
<td>Straps to secure the patient to the cot or stretcher</td>
<td>1 set</td>
</tr>
<tr>
<td>Ankle and Wrist Restraints</td>
<td>1 set</td>
</tr>
<tr>
<td>Linens (Sheets, pillow, pillow case, blanket, towels)</td>
<td>2 sets</td>
</tr>
<tr>
<td>Personal Protective Equipment (masks, gloves, gowns, shields)</td>
<td>2 sets</td>
</tr>
<tr>
<td>Oropharyngeal Airways</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>2</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Neonate</td>
<td>1</td>
</tr>
<tr>
<td>Pneumatic or rigid splints</td>
<td>4</td>
</tr>
<tr>
<td>Bag-valve-mask w/reservoir and clear resuscitation mask</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Neonate</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen Cylinder w/wall outlet (H or M)</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen tubing</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen Cylinder - portable (D or E)</td>
<td>2</td>
</tr>
<tr>
<td>Oxygen administration mask</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>4</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Nasal cannulas (Adult)</td>
<td>4</td>
</tr>
<tr>
<td>Nasal airways (assorted sizes)</td>
<td>1 set</td>
</tr>
<tr>
<td>Nebulizer for use w/sterile H2O or saline</td>
<td>2</td>
</tr>
<tr>
<td>Glucose Paste/Tablets</td>
<td>1 15g tube or 9 tablets</td>
</tr>
<tr>
<td>Bandaging supplies</td>
<td></td>
</tr>
<tr>
<td>4&quot; sterile bandage compresses</td>
<td>12</td>
</tr>
<tr>
<td>3x3 gauze pads</td>
<td>4</td>
</tr>
<tr>
<td>2&quot;, 3&quot;, 4&quot; or 6&quot; roller bandages</td>
<td>6</td>
</tr>
<tr>
<td>1&quot;, 2&quot; or 3&quot; adhesive tape rolls</td>
<td>2</td>
</tr>
<tr>
<td>Bandage shears</td>
<td>1</td>
</tr>
</tbody>
</table>

Document revised 7/1/2011

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[Signature]

EMS Medical Director
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10&quot;x 30&quot; or larger universal dressing</td>
<td>2</td>
</tr>
<tr>
<td>Emesis basin (or disposable bags)</td>
<td>1</td>
</tr>
<tr>
<td>Covered waste container</td>
<td>1</td>
</tr>
<tr>
<td>Portable suction equipment (30 L/min, 300 mmHg)</td>
<td>1</td>
</tr>
<tr>
<td>Suction device - fixed (30 L/min, 300 mmHg)</td>
<td>1</td>
</tr>
<tr>
<td>Suction Catheter - Tonsil tip</td>
<td>3</td>
</tr>
<tr>
<td>Suction Catheter (6, 8, 10, 12, 14, 18)</td>
<td>1 set</td>
</tr>
<tr>
<td>Spinal Immobilization devices with straps</td>
<td>1 each</td>
</tr>
<tr>
<td>Head Immobilization device</td>
<td>2 each</td>
</tr>
<tr>
<td>Cervical collars - rigid</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>3</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>2</td>
</tr>
<tr>
<td>Traction splint*</td>
<td></td>
</tr>
<tr>
<td>Adult or equivalent</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric or equivalent</td>
<td>1</td>
</tr>
<tr>
<td>Tourniquet, County approved type</td>
<td>2</td>
</tr>
<tr>
<td>Blood pressure manometer &amp; cuff</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Obstetrical Supplies to include:</td>
<td></td>
</tr>
<tr>
<td>gloves, umbilical tape or clamps, dressings, head coverings, ID bands, towels, bulb syringe, sterile scissors or scalpel, clean plastic bags</td>
<td>1 kit</td>
</tr>
<tr>
<td>Potable water (1 gallon) or Saline (2 liters)</td>
<td>1</td>
</tr>
<tr>
<td>Bedpan</td>
<td>1</td>
</tr>
<tr>
<td>Urinal</td>
<td>1</td>
</tr>
<tr>
<td>Disposable gloves - non-sterile</td>
<td>1 box</td>
</tr>
<tr>
<td>Disposable gloves - sterile</td>
<td>4 pairs</td>
</tr>
<tr>
<td>Cold packs</td>
<td>2</td>
</tr>
<tr>
<td>Warming packs (not to exceed 110 degrees F)</td>
<td>2</td>
</tr>
<tr>
<td>Sharps container (OSHA approved)</td>
<td>1</td>
</tr>
<tr>
<td>Agency Radio</td>
<td>1</td>
</tr>
<tr>
<td>EMS Radio</td>
<td>1</td>
</tr>
</tbody>
</table>

Optional Items:

- Automated External Defibrillator
- Oxygen Saturation Monitoring Device
  - Adult probe
  - Infant/Pediatric
- Positive Pressure Breathing Valve, maximum flow 40 Liters/min.
  - Mark 1 Kit(s) or equivalent
Advanced Life Support Requirements:

All supplies and equipment in Basic Life Support Requirements in addition to the following:

A. Airway Adjuncts:

- Capnograph (Quantitative End Tidal CO₂)
- CPAP (Continuous Positive Airway Pressure) Equipment
- Endotracheal Tubes: Sizes:
  - 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0 (cuffed)
- Esophageal Tracheal Double Lumen Airway (Kit)
  - (Combitube: Small Adult)
- OR
- Laryngeal/Tracheal Airway
  - (King Airway: Size 3, Size 4, Size 5)
- ET Adapter (nebulizer)
- Feeding Tube - 5, 8 French
- Laryngoscope - Handle
- Laryngoscope - Blade:
  - straight sizes 0-4
  - curved sizes 2-4
- Magill Tonsil Forceps small and large
- Mask - Bag-valve-mask Neonate size
- Stylet 6 and 14 French, Adult

B. Vascular Access/Monitoring Equipment

- Blood Glucose Monitoring Device
- IV Administration Sets: Macrodrrip
- Microdrip
- IV Tourniquets
- Needles:
  - IV Cannula - 14 Gauge
  - IV Cannula - 16 Gauge
  - IV Cannula - 18 Gauge
  - IV Cannula - 20 Gauge
  - IV Cannula - 22 Gauge
  - IV Cannula - 24 Gauge
  - IM - 21 Gauge X 1"
  - Angiocath for Needle Decompression
  - IO –Jamshidi-type (or approved device) needle –8 Gauge
  - IO –Jamshidi-type (or approved device) needle –15 Gauge
- OR
- IO Power Driver with appropriate IO needles:
  - 15mm (3-39kg)
  - 25mm (40kg and greater)
Syringes: 1 ml, 3 ml, 5 ml, 10 ml, 20 ml 3 each

C. Monitoring

Defibrillator pads 2 pkgs
Electrodes 1 box
Electrode Wires 1 set
Monitor/Defibrillator with 12 lead EKG & Pacing capability 1
Oxygen Saturation Monitoring Device 1
   Adult probe 1
   Infant/Pediatric 1

D. Packs

Drug Box 1
Trauma Box/Pack 1

E. Other Equipment

Broselow Tape 1
Mucosal atomizer device (MAD) 2
Nasogastric Set-Up (10, 12 or 14, 18 French 48") 1 each
Pediatric Drug Chart (laminated) 1
Thermometer 1
Water Soluble Lubricant 1

F. Communication Items:

Communication Failure protocol (laminated) 1
Standing Orders Protocol (laminated) 1

G. Replaceable Medications:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenosine</td>
<td>6 mg/2ml</td>
<td>30mg total</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg/3 ml or 0.083%</td>
<td>6 vials</td>
</tr>
<tr>
<td>ASA, chewable</td>
<td>80 mg each</td>
<td>6 units</td>
</tr>
<tr>
<td>Atropine Sulfate</td>
<td>1 mg/10 ml</td>
<td>3</td>
</tr>
<tr>
<td>Atropine Sulfate, multidose</td>
<td>0.4 mg/ml</td>
<td>1</td>
</tr>
<tr>
<td>Atrovent</td>
<td>2.5 ml (1 unit dose)</td>
<td>2</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>1 GM/10 ml</td>
<td>1</td>
</tr>
<tr>
<td>Charcoal activated (no sorbitol)</td>
<td>50 GM</td>
<td>1</td>
</tr>
<tr>
<td>Dextrose, 50%</td>
<td>25 GM/50 ml</td>
<td>2</td>
</tr>
<tr>
<td>Diphenhydramine HCL (Benadryl)</td>
<td>50 mg/1 ml</td>
<td>2</td>
</tr>
<tr>
<td>Dopamine HCL</td>
<td>400 mg</td>
<td>1</td>
</tr>
<tr>
<td>OR PreMixed Dopamine 400mg/250ml in D5W</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Epinephrine</td>
<td>1:1,000 (1 mg/1ml ampule)</td>
<td>6</td>
</tr>
<tr>
<td>Epinephrine</td>
<td>1:10,000 (1 mg/10 ml)</td>
<td>6</td>
</tr>
</tbody>
</table>

Document revised 7/1/2011
Approved:

[Signature]
EMS Medical Director
Subject: BLS/ALS Ambulance Inventory

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucagon</td>
<td>1 ml (1 unit) 1</td>
</tr>
<tr>
<td>Lidocaine HCL (preservative free)</td>
<td>100 mg/5 ml (2%) 4</td>
</tr>
<tr>
<td>Midazolam (Versed)</td>
<td>5 mg/1 ml 20 mg total 2</td>
</tr>
<tr>
<td>Morphine Sulfate (injectable)</td>
<td>10 mg/1 ml 2</td>
</tr>
<tr>
<td>Naloxone HCL (Narcan)</td>
<td>1 mg/1 ml 6 mg total 6</td>
</tr>
<tr>
<td>Nitroglycerin</td>
<td>0.4 mg 1 container 1 tube</td>
</tr>
<tr>
<td>Nitroglycerin topical preparation</td>
<td>2% 1 tube</td>
</tr>
<tr>
<td>Ondansetron (Zofran)</td>
<td>4 mg/2 ml 2</td>
</tr>
<tr>
<td>Ondansetron (Zofran) ODT</td>
<td>4 mg 4</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>50 mEq/50 ml 3</td>
</tr>
<tr>
<td>IV Solutions</td>
<td></td>
</tr>
<tr>
<td>Normal Saline</td>
<td>1000 ml bag 4</td>
</tr>
<tr>
<td>Normal Saline</td>
<td>250 ml bag 2</td>
</tr>
</tbody>
</table>

H. Optional Items:
I. Amiodarone 150mg/3ml
   Armboard: Long
   Armboard: Short
   Aspiration based endotracheal tube placement verification devices
   Bougie
   Cardiac compression device
   Colorimetric carbon dioxide detector (if capnography not equipped to read EtCO2 in patients weighing <15kgs).
   Curved laryngoscope blades, size 0, 1
   Dopamine (Premixed) 400 mg in 250 ml D5W
   IO Power Drive needle 45 mm (40 kg and greater with excessive tissue)
   Lidocaine 2% Jelly - 5 ml tube
   Morphine Sulfate (Oral Immediate Release) 10 mg/5 ml
   Mesh hood, (spit sock or similar). Light color only (beige/white)
   Three-Way Stopcock with extension tubing
   Valium Autoinjector (MMST only)

Note: Pediatric required supplies denoted by italics.
   * One splint may be used for both adult & pediatric e.g. Sager Splint
<table>
<thead>
<tr>
<th>SKILL</th>
<th>INDICATION</th>
<th>STANDING ORDER</th>
<th>CONTRAINDICATION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broselow Tape</td>
<td>Determination of length for calculation of pediatric drug dosages and equipment sizes.</td>
<td>Yes</td>
<td>None</td>
<td>Base dosage calculation on length of child, if weight unknown. Refer to pediatric chart for dosages (P-117). Children &gt;37 kg. use adult medication dosages regardless of age or height.</td>
</tr>
<tr>
<td>Cardioversion:</td>
<td>Unstable VT&lt;br&gt;Unconscious VT&lt;br&gt;Unconscious Atrial fibrillation/flutter and HR &gt;180&lt;br&gt;Unstable, conscious SVT (BHO)&lt;br&gt;Unstable, conscious Atrial Fibrillation/Flutter HR &gt;180 (BHPO)</td>
<td>Yes</td>
<td>Pediatric: If defibrillator unable to deliver &lt;5 J or biphasic equivalent</td>
<td>In addition to NTG patches, remove chest transdermal medication patches prior to cardioversion.</td>
</tr>
<tr>
<td>CPAP</td>
<td>Age ≥ 15 years&lt;br&gt;Respiratory Distress: CHF, COPD, asthma, pneumonia or drowning. Moderate to severe respiratory distress. Retractions/accessory muscle use AND&lt;br&gt;• RR &gt;25/min&lt;br&gt;• SpO₂ &lt;94%</td>
<td>Yes</td>
<td>CPR&lt;br&gt;BP &lt;90 mmHg&lt;br&gt;Vomiting&lt;br&gt;Age &lt;15&lt;br&gt;Possible pneumothorax&lt;br&gt;Facial trauma&lt;br&gt;Unable to maintain airway&lt;br&gt;Unconscious</td>
<td>CPAP should be used cautiously for patients with severe COPD or pulmonary fibrosis. Patients with a GCS of &lt;9 are unconscious and unlikely to comply. Non-verbal patients with poor head/neck tone may be too obtunded for CPAP. BVM assisted ventilation is the appropriate alternative.</td>
</tr>
<tr>
<td>Defibrillation</td>
<td>VT (pulseless)&lt;br&gt;VF</td>
<td>Yes</td>
<td>None</td>
<td>In addition to NTG patches, remove chest transdermal medication patches prior to defibrillation.</td>
</tr>
<tr>
<td>Dermal Medication</td>
<td>When route indicated.</td>
<td>Yes*</td>
<td>Profound shock, CPR, Peds</td>
<td>Avoid application to areas that may be used for cardioversion.</td>
</tr>
<tr>
<td>SKILL</td>
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<td>COMMENTS</td>
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<tr>
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</tr>
<tr>
<td>EKG monitoring</td>
<td>Any situation where potential for cardiac dysrhythmia.</td>
<td>Yes</td>
<td>None</td>
<td>Apply monitor before moving patient with chest pain, syncope, or in arrest. Document findings on PPR and leave strip with patient.</td>
</tr>
<tr>
<td>12 lead EKG</td>
<td>Chest pain and/or Signs and symptoms suggestive of myocardial infarction.</td>
<td>Yes</td>
<td>None</td>
<td>Report: <em><strong>Acute MI</strong></em> or <em><strong>Acute MI Suspected</strong></em> Bundle Branch Block (LBBB, RBBB). Poor quality EKG, artifact, paced rhythm, atrial fibrillation or atrial flutter for exclusion from STEMI assessment. Repeat the 12-lead EKG only if the original EKG interpretation is NOT <em><strong>ACUTE MI SUSPECTED</strong></em>, and patient’s condition worsens. Do not delay transport to repeat. Document findings on the PPR and leave EKG with patient.</td>
</tr>
<tr>
<td>End tidal CO₂ Detection Device (Qualitative)</td>
<td>All intubated patients &lt;15kgs - unless quantitative end tidal CO₂ available for patient &lt;15kgs.</td>
<td>Yes</td>
<td>None</td>
<td>Monitor continuously after ET / ETAD/ Perilaryngeal Airway Adjunct insertion</td>
</tr>
<tr>
<td>End tidal CO₂ Detection Device – Capnography (Quantitative)</td>
<td>All intubated patients Respiratory distress Trauma</td>
<td>Yes</td>
<td>None</td>
<td>Monitor continuously after ET / ETAD/ Perilaryngeal Airway Adjunct insertion Use early in cardiac arrest</td>
</tr>
<tr>
<td>Esophageal Detection Device-aspiration based</td>
<td>Patients intubated with ETT or ETAD</td>
<td>Yes</td>
<td>Patient &lt;20 kg Laryngeal/Tracheal Airway (King Airway)</td>
<td>Repeat as needed to reconfirm placement. May use for both ET/ETAD (Port 2) Optional</td>
</tr>
<tr>
<td>External Cardiac Pacemaker</td>
<td>Unstable narrow complex bradycardia with a pulse refractory to Atropine 1 mg Unstable wide complex bradycardia (BP &lt;90)</td>
<td>Yes</td>
<td>None</td>
<td>Document rate setting, milliamps and capture</td>
</tr>
<tr>
<td>SKILL</td>
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</tr>
<tr>
<td>Glucose Monitoring</td>
<td>Hypoglycemia (suspected)</td>
<td>Yes</td>
<td>None</td>
<td>Repeat BS not indicated en route if patient is improving. Repeat BS must be done if patient left on scene and initial was abnormal. (AMA/Release)</td>
</tr>
<tr>
<td>Intranasal: IN</td>
<td>When IN route indicated</td>
<td>Yes*</td>
<td>None</td>
<td>Volumes over 1ml per nostril are likely too dilute and may result in runoff out of the nostril.</td>
</tr>
<tr>
<td>Injection: IM</td>
<td>When IM route indicated</td>
<td>Yes*</td>
<td>None</td>
<td>Usual site: Deltoid in patients &gt;3 yo. Vastus lateralis patients &lt;3 yo.</td>
</tr>
<tr>
<td>Injection: IV</td>
<td>When IV route indicated</td>
<td>Yes*</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Intubation- ET/Stomal</td>
<td>Apnea or ineffective respirations for unconscious adult patient or decreasing LOC.</td>
<td>Yes</td>
<td>? Opioid OD prior to Narcan. Able to adequately ventilate the pediatric patient via BVM. Gag reflex</td>
<td>3 attempts per patient. Additional attempts BHPO. Attempt=attempt to pass ET (not including visualizations and suctioning). Document and report LEADSD. Reconfirm and report EtCO2 and lung sounds after each pt movement. Extubation per BHO. ET Depth Pediatrics: Age in years plus 10. If intubated patient is to be moved apply c-collar prior to moving.</td>
</tr>
</tbody>
</table>

Document revised 7/1/2011

Approved:

[Signature]

EMS Medical Director
<table>
<thead>
<tr>
<th>SKILL</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Intubation: Perilaryngeal airway adjunct (ETAD/Combitube, Laryngeal-Tracheal/King Airway)</td>
<td>Apnea or ineffective respirations for unconscious patient or decreasing LOC.</td>
<td>Yes</td>
<td>Gag reflex present Patient &lt;4’ tall ? Opioid OD prior to Narcan Ingestion of caustic substances Hx esophageal disease Larynectomy/Stoma</td>
<td>Extubate per BHO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>King Airway: Use Size 3 (yellow) for patients 4’ – 5’ tall Use Size 4 (red) for patients 5’ – 6’ tall Use Size 5 (purple) for patients &gt;6’ tall ETAD: Use Small Adult size tube in all patients under 6’ Report and document LEADSD. Report and document ventilation port number if ETAD. Reconfirm and report EtCO2 and lung sounds after each patient movement.</td>
</tr>
<tr>
<td>Magill Forceps</td>
<td>Airway obstruction from foreign body with decreasing LOC/unconscious</td>
<td>Yes</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Nasogastric / Orogastric tube</td>
<td>Gastric distention interfering w/ ventilations</td>
<td>Yes</td>
<td>Severe facial trauma Known esophageal disease</td>
<td>If NG tube needed in a patient with a King Airway, insertion should be via the suction port, if available.</td>
</tr>
<tr>
<td>Nebulizer, oxygen powered</td>
<td>Respiratory distress with: • Bronchospasm • Wheezing • Croup-like cough • Stridor</td>
<td>Yes*</td>
<td>None</td>
<td>Flow rate 4- 6 L/min. via mouthpiece; 6-10 L/min. via mask/ET.</td>
</tr>
<tr>
<td>SKILL</td>
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</tr>
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</tr>
<tr>
<td>Needle Thoracostomy</td>
<td>Severe respiratory distress with unilateral, absent breath sounds and systolic BP &lt;90 in intubated or positive pressure ventilated patients.</td>
<td>Yes</td>
<td>None</td>
<td>Use 14g, 3.25 inch IV catheter Insert into 2nd/3rd ICS in mid-clavicular line on the involved side. (Preferred) OR Insert catheter into anterior axillary line 4th/5th ICS on involved side Tape catheter securely to chest wall and leave open to air.</td>
</tr>
<tr>
<td>Prehospital Pain Scale</td>
<td>All patients with a traumatic or pain-associated chief complaint</td>
<td>Yes</td>
<td>None</td>
<td>Assess for presence of pain and intensity</td>
</tr>
<tr>
<td>Prehospital Stroke Scale</td>
<td>All adult patients with suspected Stroke/CVA</td>
<td>Yes</td>
<td>None</td>
<td>Assess facial droop, arm drift, &amp; speech.</td>
</tr>
<tr>
<td>Pulse Oximetry</td>
<td>Assess oxygenation</td>
<td>Yes</td>
<td>None</td>
<td>Obtain room air saturation if possible, prior to O₂ administration.</td>
</tr>
<tr>
<td>Re-Alignment of Fracture</td>
<td>Grossly angulated long bone fracture</td>
<td>Yes</td>
<td>None</td>
<td>Use unidirectional traction. Check for distal pulses prior to realignment and every 15” thereafter.</td>
</tr>
<tr>
<td>Removal of Impaled Object</td>
<td>Compromised ventilation of patient with impaled object in face/cheek or neck.</td>
<td>Yes</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>SKILL</td>
<td>INDICATION</td>
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<td>CONTRAINDICATION</td>
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<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Spinal Stabilization</td>
<td>Spinal pain of trauma</td>
<td>Yes</td>
<td>None</td>
<td>Pregnant patients (&gt;6mo) tilt 30 degree left lateral decubitus. W Optional if no neuro deficit AND all of the following are present and documented: Adult Patient (&lt;65 years of age) 1. awake, oriented to person, place &amp; time 2. no drug/ETOH influence 3. no pain/tenderness of neck or back upon palpation 4. no competing pain 5. cooperative 6. No language barrier Pediatric Patient N=no altered LOC E=evidence of obvious injury absent C=complete spontaneous ROM without pain K=kinematic (mechanism) negative</td>
</tr>
<tr>
<td></td>
<td>MOI suggests potential spinal injury -Not indicated penetrating trauma without neurologic deficit. -</td>
<td></td>
<td></td>
<td>tracts</td>
</tr>
<tr>
<td>Tourniquet</td>
<td>Severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage.</td>
<td>Yes</td>
<td></td>
<td>Direct pressure failure not required prior to tourniquet application in mass casualty.</td>
</tr>
<tr>
<td>Valsalva Maneuver</td>
<td>SVT</td>
<td>Yes</td>
<td>None</td>
<td>Most effective with adequate BP D/C after 5-10 sec if no conversion</td>
</tr>
<tr>
<td>VASCULAR ACCESS</td>
<td>When unable to establish other peripheral IV and IV is needed for definitive therapy ONLY.</td>
<td>Yes</td>
<td>None</td>
<td>Tamponade vein at end of catheter until tubing is securely attached to cannula end.</td>
</tr>
<tr>
<td>External jugular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SKILL</td>
<td>INDICATION</td>
<td>STANDING ORDER</td>
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</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Extremity</td>
<td>Whenever IV line is needed or anticipated for definitive therapy.</td>
<td>Yes</td>
<td>None</td>
<td>Use extension tubing for suspected STEMI and *** Acute MI***</td>
</tr>
<tr>
<td>Indwelling Devices</td>
<td>Primary access site for patients with indwelling catheters if needed for definitive therapy.</td>
<td>Yes</td>
<td>Devices without external port</td>
<td>Clean site for minimum of 15 seconds prior to accessing. Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor. Examples include Groshong, Hickman, PICC lines.</td>
</tr>
<tr>
<td>Intraosseous</td>
<td>Fluid/medication administration in <strong>acute status</strong> patient when needed for definitive therapy and unable to establish venous access.</td>
<td>Yes</td>
<td>Tibial fracture Vascular Disruption Prior attempt to place in target bone</td>
<td>Splint extremity. Observe carefully for signs of extravasation. Do not infuse into fracture site. Neonate &lt; 28 days old BHO (&lt;1 cm in depth). In conscious adult patient slowly infuse Lidocaine 2% (preservative free) 40mg IO prior to fluid administration.</td>
</tr>
<tr>
<td>Percutaneous Dialysis Catheter Access(e.g. Vas cath)</td>
<td>Unable to establish other peripheral IV and <strong>IV needed for immediate definitive therapy ONLY</strong> and no other medication delivery route available</td>
<td>Yes</td>
<td>None</td>
<td>Vas Cath contains concentrated dose of Heparin which must be aspirated PRIOR to infusion. Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor.</td>
</tr>
<tr>
<td>Shunt/graft - AV (Dialysis)</td>
<td>Unable to establish other peripheral IV and <strong>IV is needed for immediate definitive therapy ONLY</strong> and no other medication delivery route available.</td>
<td>Yes</td>
<td>None</td>
<td>Prior to access, check site for bruits and thrills. Access fistula on venous side (weaker thrill). Inflate BP cuff around IV bag to just above patient's systolic BP to maintain flow of IV. If unsuccessful, hold direct pressure over site for 10” to stop bleeding. Do not apply pressure dressing.</td>
</tr>
</tbody>
</table>

* When medication by that route is a **SO**.
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** Identify essential equipment that must be available for use with patients identified as latex-sensitive.

III. **Policy:** Prehospital personnel shall be prepared to manage patients that are identified as latex-sensitive in a manner that is as latex-safe as possible. Prehospital provider agencies shall attempt, when possible, to use patient equipment that minimizes exposure to latex containing products, and shall, at a minimum, maintain the items indicated below for use with patients identified as latex-sensitive. Provider agencies shall maintain documentation demonstrating the latex-safety of the equipment listed below. ALS ambulances shall maintain the complete listing below. BLS ambulance requirements are designated “+.”

A. **Airway Adjuncts:**
   - **Minimum**
     - Bag-valve-mask device with reservoir, adult and pediatric 1 each
     - Endotracheal Tubes: Sizes: 6, 6.5, 7, 7.5, 8, 8.5, 9 1 each
     - Nasal Airways +, Assorted Sizes 1 package
     - O₂ Cannula + 1 each
     - Positive Pressure Breathing Valve + - Mask must be latex-safe 1 each
     - Stylet 1 each
     - Suction Catheters (12, 14, 18 fr.) 1 each
     - Suction Catheters, Tonsil Tip + (Yankauer) 1 each

B. **Vascular Access/Monitoring Equipment**
   - **Minimum**
     - Armboard: Long (barrier protection acceptable) 1 each
     - Armboard: Short (barrier protection acceptable) 1 each
     - Blood Pressure Cuff + (barrier protection acceptable) 1 each
     - I.V. Administration Sets: (barrier protection acceptable) 1 each
       - Macrodrip 1 each
       - Microdrip 1 each
     - IV Tourniquets 1 each
       - Needles: I.V. Cannula - 14 Gauge 1 each
       - I.V. Cannula - 16 Gauge 1 each
       - I.V. Cannula - 18 Gauge 1 each
       - I.V. Cannula - 20 Gauge 1 each
     - Three-Way Stopcock with extension tubing 2 each
     - Syringes: 1 ml, 3 ml, 5 ml, 10 ml, 20 ml 1 each
     - Stethoscope + (barrier protection acceptable) 1 each

C. **Monitoring**
   - **Minimum**
     - Defibrillator pads + 1 pkg
     - Electrodes + 1 box
### COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

**POLICY/PROCEDURE/PROTOCOL**

**SUBJECT:** LATEX-SAFE EQUIPMENT LIST

**Date:** 7/1/2011

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D. **Splinting Devices:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrication Collars ++, Rigid, Adult</td>
<td>1 each</td>
</tr>
<tr>
<td>Traction Splint ++ (barrier protection acceptable)</td>
<td>1 each</td>
</tr>
</tbody>
</table>

E. **Packs**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Personal Protective Equipment ++ (masks, gloves, gowns, shields)</td>
<td>2 sets</td>
</tr>
</tbody>
</table>

F. **Other Equipment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Packs ++ (barrier protection acceptable)</td>
<td>1 each</td>
</tr>
<tr>
<td>Hot packs ++ (barrier protection acceptable)</td>
<td>1 each</td>
</tr>
<tr>
<td>Nasogastric Intubation Set-Up (12 or 14, 18 fr. 48&quot;)</td>
<td>1 each</td>
</tr>
</tbody>
</table>

G. **Replaceable Medications:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool to remove latex caps from multi-dose vials with latex plugs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV Solutions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Saline (barrier protection acceptable)</td>
<td>1000ml bag 1</td>
</tr>
<tr>
<td>Normal Saline (barrier protection acceptable)</td>
<td>250 ml bag 1</td>
</tr>
</tbody>
</table>

H. **OB/Pediatric supplies**

<table>
<thead>
<tr>
<th>Item</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulb Syringe ++</td>
<td>1</td>
</tr>
</tbody>
</table>

---

* Prehospital staff should minimize their own exposure to latex products at all times

** Staff shall be knowledgeable in procedures to use latex-containing products in a latex-safe manner. Such methods include:

- **Barrier protective measures** (for stethoscope, for example). If barrier protection is used, materials should be easily available to implement the barrier.

- Procedures to remove or cover latex-containing parts (such as the caps on multi-dose medication vials).

Note: See EMS Treatment Protocol S-122: Allergic Reaction/Anaphylaxis for additional information.

Questions regarding the management of latex-sensitive patients should be referred to the Base Hospital.

---

**Document revised 7/1/2011**

**Approved:**

[Signature]

EMS Medical Director
ADULT SKILLS

**Cardioversion-Synchronized**
Unconscious SVT
Unstable VT
Unconscious Atrial Fibrillation/Atrial Flutter with HR > 180:

**Continuous Positive Airway Pressure**
Age > 15 years
Respiratory distress: CHF, COPD, asthma, pneumonia or drowning.
Moderate to severe respiratory distress. Retractions/accessory muscle use AND RR > 25/min OR SpO2 < 94%

**Defibrillation**
VT (pulseless)/ VF
Repeat prn

**External cardiac pacemaker**
Narrow complex bradycardia with pulse, refractory to Atropine
Wide complex bradycardia

**Glucose Monitoring**
Hypoglycemia (suspected)

**Indwelling Devices**
Use pre-existing external indwelling vascular access devices as primary vascular access.
Use hemodialysis vascular access/fistula/graft if unable to start IV for immediate definitive therapy purposes ONLY and no other medication delivery route available.

**Intraosseous Infusion**: Fluid/medication administration in acute status patient when needed for definitive therapy and unable to establish venous access.

**Intubate (ET/Stomal/ETAD/Perilaryngeal)**
Apnea or ineffective respirations for unconscious patient or decreasing LOC.

**Magill Forceps with direct Laryngoscopy**
Airway obstruction from foreign body with decreasing LOC or unconscious.

**Nasogastric/Orogastric Tube Insertion**
Gastric distention interfering with ventilation.

**Needle Thoracostomy**
Severe respiratory distress with unilateral, absent breath sounds and systolic BP < 90 in intubated or positive pressure ventilated patients.

Document revised 7/1/2011
Approved:

[Signature]
EMS Medical Director
Re-alignment of Fracture  
Grossly angulated long bone fracture with gentle unidirectional traction if necessary for splinting.

Tourniquet  
Apply tourniquet in severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage. (attempt to control life-threatening hemorrhage with direct pressure or pressure dressing not required prior to tourniquet application in a mass casualty.)

Valsalva Maneuver  
SVT.
## MEDICATIONS

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSAGE / ROUTE / INDICATION</th>
</tr>
</thead>
</table>
| Albuterol  | Burns (respiratory distress with bronchospasm).  
Respiratory distress ? Asthma/COPD/respiratory origin.  
Allergic reaction in presence of respiratory distress.  
Suspected hyperkalemia in the symptomatic patient (widened QRS complex and peaked T-waves). |
| Adenosine  | SVT with no history of bronchospasm or COPD. |
| Amiodarone | Stable Ventricular Tachycardia (VT). |
| ASA        | Discomfort/Pain of suspected cardiac origin or discomfort/pain relieved with NTG SL (prior to arrival or EMS administered): |
| Atropine   | Unstable Bradycardia.  
Organophosphate poisoning. |
| Atrovent   | Respiratory distress ? Asthma/COPD/respiratory origin/pneumonia.  
Allergic reaction in presence of respiratory distress. |
| Benadryl   | Extrapyramidal reactions  
Allergic reaction/anaphylaxis |
| CaCl₂      | Symptomatic patient with suspected hyperkalemia (widened QRS complex and peaked T-waves). |
| Charcoal   | Oral ingestion of poison or overdose if ingestion within one hour and recommended by Poison Center. |
| D₅₀        | Hypoglycemia:  
Symptomatic patient with Altered LOC unresponsive to oral glucose agents. |
| Epinephrine 1:10,000 | Cardiac arrest. |
| Epinephrine 1:1,000 | Allergic reaction:  
Acute (facial/oral angioedema, bronchospasm or wheezing)  
Anaphylaxis (shock or cyanosis)  
?Respiratory Distress (?asthma/COPD/Respiratory origin/pneumonia), consider if severe or inadequate response to Albuterol/Atrovent and if no known cardiac history, history of hypertension, or BP <150 or <40 yrs and history of asthma. |
| Glucagon   | Symptomatic patient with altered LOC unresponsive to oral glucose agents, if no IV. |
| Lidocaine  | Stable VT  
Post Conversion VT/VF with pulse > 60 |
| MS         | For treatment of pain score assessment of ≥ 5 with systolic BP ≥ 100  
Discomfort/pain of suspected cardiac origin where systolic BP ≥ 100 |
### MEDICATION | DOSAGE / ROUTE/ INDICATION
--- | ---
Narcan | Symptomatic opioid OD (excluding opioid dependent pain management patients) with respiratory rate <12.
NTG | Pain or discomfort of cardiac origin if BP > 100. Respiratory distress ? CHF/cardiac origin. Fluid overload in hemodialysis patient.
NS | Definitive therapy
Crush injury with extended compression ≥2 hours of extremity or torso.
Symptomatic ? Stimulant Intoxication
?Intra-abdominal catastrophe
?aortic aneurysm
Shock: hypovolemia
Shock: anaphylaxis, neurogenic
Shock: ?cardiac etiology, septic
Trauma
Discomfort/pain of ?cardiac origin with associated shock with clear lung sounds
Dysrhythmias with clear lung sounds:
Burns > 20% 2nd or > 5% 3rd degree and ≥15 yo
Ondansetron (Zofran) | Nausea and/or vomiting
Sodium Bicarbonate (NaHCO₃) | Symptomatic patient with suspected hyperkalemia (widened QRS complex and peaked T-waves).
?Tricyclic OD with cardiac effects (hypotension, heart block or widened QRS).
Versed | Generalized seizure lasting ≥5"
Focal seizure with respiratory compromise.
Recurrent seizure without lucid interval.
Eclamptic seizure.
Pre-cardioversion for conscious VT.
Severe agitation.
Discomfort associated with pacing.
 Conscious VT prior to synchronized cardioversion.
External cardiac pacing.

Note: Maintain previously established, labeled IV solutions, medication delivery systems, and/or other treatment modalities at preset rates.
When unable to communicate with BH while at scene/enroute, IN ADDITION TO STANDING ORDERS, the following may be initiated without BH contact. **Maximum doses include standing order doses.**

<table>
<thead>
<tr>
<th>PROTOCOL</th>
<th>INDICATION and TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic Reaction/Anaphylaxis (S-122):</td>
<td><strong>Anaphylaxis (shock or cyanosis):</strong>&lt;br&gt;• Epinephrine 1:10,000 0.1mg IV/IO. MR x2 q3-5”&lt;br&gt;• Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV drip. Titrate systolic BP &gt;90</td>
</tr>
<tr>
<td>Discomfort/Pain of Suspected Cardiac Origin (S-126):</td>
<td>If systolic BP ≥ 100:&lt;br&gt;• MS 2 – 4 mg IV/IO MR to max of 20 mg&lt;br&gt; If systolic BP &lt; 100:&lt;br&gt;• NTG 0.4mg SL MR&lt;br&gt;• MS 2-4mg IV/IO MR to max of 20mg&lt;br&gt;<strong>Discomfort/Pain of ? Cardiac Origin with Associated Shock:</strong>&lt;br&gt; If BP refractory to fluid boluses:&lt;br&gt;• Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip.&lt;br&gt;• Titrate systolic BP ≥ 90</td>
</tr>
<tr>
<td>Dysrhythmias (S-127) Unstable Bradycardia</td>
<td><strong>NARROW COMPLEX BRADYCARDIA</strong>&lt;br&gt;• Dopamine 400mg/250ml at 10-40mcg/kg/min IV/IO drip, titrate to systolic BP ≥ 90 (after max Atropine or initiation of pacing)&lt;br&gt;<strong>WIDE COMPLEX BRADYCARDIA</strong>&lt;br&gt;• Dopamine 400mg/250ml at 10-40mcg/kg/min IV/IO drip, titrate to systolic BP ≥ 90 (after initiation of pacing)</td>
</tr>
<tr>
<td>SVT: (S-127)</td>
<td><strong>Patients with history of bronchospasm or COPD</strong>&lt;br&gt;• Adenosine 6mg rapid IV, followed with 20ml NS IV/IO&lt;br&gt;• Adenosine 12mg rapid IV followed with 20ml NS IV/IO&lt;br&gt;• If no sustained rhythm change, MR x1 in 1-2”&lt;br&gt;<strong>If patient unstable with severe symptoms OR rhythm refractory to treatment:</strong></td>
</tr>
</tbody>
</table>

Document revised 7/1/2011
Approved:

[Signature]
EMS Medical Director
<table>
<thead>
<tr>
<th>PROTOCOL</th>
<th>INDICATION and TREATMENT</th>
</tr>
</thead>
</table>
| SVT: (S-127) (continued)     | **Conscious (BP<90 systolic and chest pain, dyspnea or altered LOC):**  
  - Versed 1-5 mg slow IV/IO prn precardioversion. If age ≥ 60 consider lower dose with attention to age and hydration status  
  - Synchronized cardioversion at manufacturer’s recommended energy dose MR x3  
  **Unconscious:**  
  - Synchronized cardioversion MR prn                                                                                                                                                                                                                                                |
| Unstable Atrial Fib/Flutter (S-127) | **Unconscious:**  
  - Synchronized cardioversion MR                                                                                                                                                                                                                                                                  |
| V Tach (S-127)                | **Conscious (Systolic BP<90 and chest pain, dyspnea or altered LOC):**  
  - Synchronized cardioversion MR  
  **Unconscious:**  
  - Synchronized cardioversion MR  
  **Post conversion VT/VF with pulse >60:**  
  - Amiodarone 150mg IV/IO                                                                                                                                                                                                                                                                     |
<table>
<thead>
<tr>
<th>PROTOCOL</th>
<th>INDICATION and TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pulseless Electrical Activity (PEA) (S-127)</strong></td>
<td>Consider:</td>
</tr>
<tr>
<td></td>
<td>• If response to treatment noted, continue treatment and transport</td>
</tr>
<tr>
<td></td>
<td>• If no response after 3 doses of Epinephrine, d/c resuscitative efforts</td>
</tr>
<tr>
<td><strong>Asystole (S-127)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If response to treatment noted, continue treatment and transport</td>
</tr>
<tr>
<td></td>
<td>• If no response after 3 doses of Epinephrine, d/c resuscitative efforts</td>
</tr>
<tr>
<td><strong>Poisoning/Overdose (S-134)</strong></td>
<td><strong>Symptomatic Organophosphate poisoning:</strong></td>
</tr>
<tr>
<td></td>
<td>• Atropine 2mg IV/IM/SO MR q3-5”</td>
</tr>
<tr>
<td></td>
<td><strong>Suspected cyanide poisoning:</strong></td>
</tr>
<tr>
<td></td>
<td>If cyanide kit is available on site may administer if patient is exhibiting significant symptoms:</td>
</tr>
<tr>
<td></td>
<td>• Amyl Nitrate per inhalation (over 30 seconds)</td>
</tr>
<tr>
<td></td>
<td>• Sodium Thiosulfate 25%, 12.5grams IV OR</td>
</tr>
<tr>
<td></td>
<td>• Hydroxocobalamin (Cyanokit) 5mg IV</td>
</tr>
<tr>
<td><strong>Pre-existing Medical Intervention (S-135)</strong></td>
<td>Previously established electrolyte and/or glucose containing IV solutions: Adjust rate or D/C</td>
</tr>
<tr>
<td></td>
<td>Previously established and labeled IV medication delivery systems with preset rates and/or other preexisting treatment modalities: D/C pm</td>
</tr>
<tr>
<td><strong>Respiratory Distress (S-136)</strong></td>
<td><strong>Respiratory Distress ?asthma/COPD/respiratory origin:</strong></td>
</tr>
<tr>
<td></td>
<td>If systolic BP &lt;100</td>
</tr>
<tr>
<td></td>
<td>• NTG 0.4mg SL MR</td>
</tr>
<tr>
<td></td>
<td><strong>If severe respiratory distress or inadequate response to Albuterol/Atrovent consider:</strong></td>
</tr>
<tr>
<td></td>
<td>If known cardiac history or history of hypertension, or BP ≥150, or age ≥40 years and no definite history of asthma:</td>
</tr>
<tr>
<td></td>
<td>• Epinephrine 0.3mg 1:1000 IM, MR x2 q10”</td>
</tr>
<tr>
<td>PROTOCOL</td>
<td>INDICATION and TREATMENT</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Shock (S-138):           | **Shock (hypovolemic):** If BP refractory to fluid bolus:  
                            • Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip. Titrate systolic BP ≥ 90

**Shock: (anaphylactic, neurogenic):** If BP refractory to fluid boluses:  
• Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip. Titrate systolic BP ≥ 90

**Shock (? cardiac etiology):** If BP refractory to fluid bolus:  
• Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip. Titrate systolic BP ≥ 90

**Shock (septic shock):** If BP refractory to fluid bolus:  
• Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip. Titrate systolic BP ≥ 90 |
| Trauma (S-139):          | **Crush injury** with extended compression ≥ 2 hours of extremity or torso: Just prior to extremity being released:  
                            • NaHCO₃ 1mEq/kg IV/IO  
                            • CaCl₂ 250mg IV over 30 seconds

**Traumatic Arrest:**  
• Consider pronouncement at scene |
| Pain Management (S-141): | **For treatment of pain score assessment of > 5 with systolic BP > 100:**  
                            • MS MR 2-10mg IV to max of 20mg
                            OR
                            • MS MR to max of 10mg IM
                            OR
                            • MS MR to max of 30mg PO |
PEDIATRIC SKILLS

Defibrillation
VF/VT (pulseless)

Glucose Monitoring
Hypoglycemia (suspected)

Indwelling Devices
Use pre-existing external indwelling vascular access devices as primary vascular access. Use hemodialysis vascular access/fistula/graft if unable to start IV for immediate definitive therapy purposes ONLY and no other medication delivery route available.

Intraosseous Infusion: Acute status patient when other venous access unsuccessful. Fluid/medication administration in acute status patient when needed for definitive therapy and unable to establish venous access.

Intubate (ET/Stomal/ETAD)
When unable to adequately ventilate via BVM the unconscious apneic patient, or patient with ineffective respirations. Newborn delivery when HR remains <60 bpm after 30 seconds of ventilation with 100% O₂.

Magill Forceps with Direct Laryngoscopy
Airway obstruction from foreign body with decreasing LOC or unconscious

Nasogastric/Orogastric Tube Insertion
Gastric distension interfering with ventilation

Re-alignment of Fracture
Grossly angulated long bone fracture with gentle unidirectional traction if necessary for splinting.

Removal of impaled objects
From face/cheek or neck if there is total airway obstruction.

Tourniquet
Severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage. Direct pressure failure not required prior to tourniquet application in mass casualty.
All medications are per pediatric drug chart unless otherwise noted

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSAGE / ROUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atropine</td>
<td>Symptomatic Organophosphate Poisoning. Unstable bradycardia.</td>
</tr>
<tr>
<td>Atrovent</td>
<td>Respiratory distress with bronchospasm Via nebulizer added to first dose of Albuterol</td>
</tr>
<tr>
<td>Benadryl</td>
<td>Allergic reaction. Anaphylaxis. Extrapyramidal reaction.</td>
</tr>
<tr>
<td>D25</td>
<td>Hypoglycemia: Symptomatic patient unresponsive to oral glucose agents:</td>
</tr>
<tr>
<td>Epinephrine 1:10,000</td>
<td>Cardiac arrest. Unstable bradycardia after 30 seconds of ventilation. Newborn delivery with HR &lt;60 after 30 seconds of CPR.</td>
</tr>
<tr>
<td>Epinephrine 1:1000</td>
<td>?Allergic Reaction: acute (facial/cervical angioedema, bronchospasm or wheezing). Anaphylaxis (shock or cyanosis) Severe respiratory distress with bronchospasm or inadequate response to Albuterol. Respiratory distress with stridor at rest.</td>
</tr>
<tr>
<td>Glucagon</td>
<td>Symptomatic patient unresponsive to oral glucose agents: If no IV</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>Post Conversion VF/VT with pulse &gt; 60 bpm:</td>
</tr>
<tr>
<td>Morphine</td>
<td>For treatment of pain score assessment of &gt; 5 with systolic BP &gt; [70 + (2x age in years)]:</td>
</tr>
<tr>
<td>Narcan</td>
<td>Symptomatic ?opioid OD.</td>
</tr>
<tr>
<td>NS</td>
<td>Definitive therapy.</td>
</tr>
<tr>
<td>Versed</td>
<td>Seizure</td>
</tr>
</tbody>
</table>

Note: Maintain previously established, labeled IV solutions, medication delivery systems, and/or other treatment modalities at preset rates.
When unable to communicate with BH while at scene/enroute, in addition to standing orders, the following may be initiated without BH contact. **Maximum doses include standing order doses.**

All medications are per pediatric drug chart unless otherwise noted.

<table>
<thead>
<tr>
<th>PROTOCOL</th>
<th>INDICATION and TREATMENT</th>
</tr>
</thead>
</table>
| **Altered Neurological Function** (S-161):     | Symptomatic opioids OD in opioid dependent pain management patients:  
  • Narcan titrate per drug chart IV or IM MR                  |
| **Allergic Reaction/Anaphylaxis** (S-162):     | **Anaphylaxis (shock or cyanosis):**  
  • Epinephrine 1:10,000 per drug chart IV/IO. MR x2 q3-5”                                                   |
| **Dysrhythmias Unstable Bradycardia** (S-163): | Heart rate:  
  Infant/Child (<9 yrs) <60 bpm  
  Child (9-14yrs) <40bpm  
  • Epinephrine 1:10,000 per drug chart IV/IO MR q3-5” |
| **Supraventricular Tachycardia** (S-163):      | <4yrs >240bpm  
  >4yrs >200bpm  
  • Adenosine per drug chart rapid IV , follow with 20ml NS IVP  
  • Adenosine per drug chart rapid IV , follow with 20ml NS IVP  
  • If no sustained rhythm change, MR x1 **BHPO**  
  Versed per drug chart slow IV prn pre-cardioversion  
  Synchronized cardioversion per drug chart. MR per drug chart |
| **VF/Pulseless VT** (S-163):                   | Once IV/IO established, if no pulse after rhythm/pulse check:  
  • Epinephrine 1:10,000 per drug chart IV/IO MR q3-5” |
| **Pulseless Electrical Activity (PEA) / Asystole** (S-163): | Once IV/IO established, if no pulse after rhythm/pulse check:  
  • Epinephrine 1:10,000 per drug chart IV/IO MR q3-5” |
<table>
<thead>
<tr>
<th>PROTOCOL</th>
<th>INDICATION and TREATMENT</th>
</tr>
</thead>
</table>
| Poisoning/OD (S-165): | Symptomatic ? opioid OD in opioid dependent pain management patients:  
|                     | - Narcan titrate per drug chart direct IV or IM SO. MR                                                     |
|                     | **Symptomatic organophosphate poisoning:**  
|                     | - Atropine per drug chart IV/IM/IO. MR q3-5” prn                                                           |
|                     | **? Tricyclic OD with cardiac effects (hypotension, heart block, widened QRS):**  
|                     | - NaHCO₃ per drug chart IV x1                                                                               |
| Shock (S-168)       | **Cardiogenic Shock:**  
|                     | - IV/IO fluid bolus per drug chart MR if without rales                                                    |
| Trauma (S-169):     | **Crush injury** with extended compression ≥ 2 hours of extremity or torso:  
|                     | **Just prior to extremity being released:**  
|                     | - IV fluid bolus per drug chart                                                                           |
|                     | - NaHCO₃ drug chart IV                                                                                       |
|                     | **Severe Respiratory Distress (with unilateral absent breath sounds AND BP < [70 + (2 x age)] in intubated or positive pressure ventilated patients):**  
|                     | - Needle thoracostomy                                                                                       |
|                     | **Traumatic Arrest:**  
|                     | Consider pronounce at scene                                                                                 |
| Pain Management (S-173): | **For treatment of pain score assessment of > 5 with BP > 70+(2xage in years):**  
|                     | - MS per drug chart MR IV/IM/PO                                                                              |
I. **Authority**: Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose**: Identify a minimum standardized inventory on all Mobile Intensive Care Units.

III. **Policy**: Essential equipment and supplies to be carried on each Mobile Intensive Care Unit (MICU) in San Diego County shall include all items found in the adult inventory as well as the following:

<table>
<thead>
<tr>
<th><strong>Pediatric Items</strong></th>
<th><strong>Minimum</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Airway</strong></td>
<td></td>
</tr>
<tr>
<td>Bag-valve-mask device with reservoir 250ml, 500ml, 1000ml</td>
<td>1 each</td>
</tr>
<tr>
<td>and the following interchangeable masks:</td>
<td></td>
</tr>
<tr>
<td>premature size</td>
<td>1</td>
</tr>
<tr>
<td>neonate size</td>
<td>1</td>
</tr>
<tr>
<td>child size</td>
<td>1</td>
</tr>
<tr>
<td>End Tidal CO2 detection Device (15kg, ≥ 15 kg)</td>
<td>2 each</td>
</tr>
<tr>
<td>ET Tubes uncuffed 2.5, 3.0, 3.5, 4.0, 4.5, 5.0</td>
<td>1 each</td>
</tr>
<tr>
<td>ET Tube size 5.5 cuffed if available, or uncuffed</td>
<td>1</td>
</tr>
<tr>
<td>Feeding tube (8 Fr.)</td>
<td>1</td>
</tr>
<tr>
<td>Laryngoscope – Blades curved and straight sizes 0, 1, and 2</td>
<td>1 each</td>
</tr>
<tr>
<td>Magill Forceps – small</td>
<td>1</td>
</tr>
<tr>
<td>Oral Airways 0-5</td>
<td>1 each</td>
</tr>
<tr>
<td>O2 Mask (non-rebreather), Pediatric</td>
<td>1</td>
</tr>
<tr>
<td>Pedicap End Tidal CO2 Detection Device</td>
<td>2</td>
</tr>
<tr>
<td>Stylet (6F and 14F)</td>
<td>1 each</td>
</tr>
<tr>
<td>Suction Catheters (5,6,8,10 Fr.)</td>
<td>1 each</td>
</tr>
<tr>
<td><strong>2. Birth</strong></td>
<td></td>
</tr>
<tr>
<td>Bulb syringe</td>
<td>1</td>
</tr>
<tr>
<td>Head covering for newborn (or from OB pack)</td>
<td>1</td>
</tr>
<tr>
<td>Identification bands for mother/baby (or from OB pack)</td>
<td>1</td>
</tr>
<tr>
<td>Sterile Scissors (or scalpel from OB pack)</td>
<td>1</td>
</tr>
<tr>
<td>Umbilical Tape (or use clamp from OB pack)</td>
<td>1</td>
</tr>
<tr>
<td>Warm packs not to exceed 110 degrees F, or warming device with blanket</td>
<td>1</td>
</tr>
<tr>
<td><strong>3. Immobilization</strong></td>
<td></td>
</tr>
<tr>
<td>Extrication Collars, Rigid, Child (small, medium, large)</td>
<td>2 each</td>
</tr>
<tr>
<td>Traction Splint – Pediatric (or equivalent)</td>
<td>1</td>
</tr>
<tr>
<td><strong>4. Vascular Access/Monitoring Devices</strong></td>
<td></td>
</tr>
<tr>
<td>Defibrillation paddles (4.5 cm, 8.0 cm)</td>
<td>1 pair each</td>
</tr>
<tr>
<td>Gauze</td>
<td>1 package</td>
</tr>
<tr>
<td>IV cannula 22, 24</td>
<td>4 each</td>
</tr>
<tr>
<td>IO – Jamshidi-type needle – 18 Gauge</td>
<td>2</td>
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<tr>
<td>IO – Jamshidi-type needle – 15 Gauge</td>
<td>2</td>
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<tr>
<td>Three-Way Stopcock and extension tubing</td>
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</tr>
<tr>
<td>Broselow Tape</td>
<td>1</td>
</tr>
<tr>
<td>Blood Pressure Cuff:</td>
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</tr>
<tr>
<td>Infant size</td>
<td>1</td>
</tr>
<tr>
<td>Child size</td>
<td>1</td>
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<td>Pediatric Drug Chart</td>
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<td>INDICATIONS</td>
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<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ADENOSINE</td>
<td>SVT with no history of bronchospasm or COPD</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ALBUTEROL</td>
<td>Respiratory distress ?Asthma/COPD/respiratory origin</td>
</tr>
<tr>
<td></td>
<td>Burns</td>
</tr>
<tr>
<td></td>
<td>Suspected hyperkalemia in hemodialysis patient in presence of widened QRS complex and peaked T waves</td>
</tr>
<tr>
<td>AMIODARONE</td>
<td>VT with a pulse Post-conversion from VT</td>
</tr>
<tr>
<td>ASPIRIN</td>
<td>Pain/discomfort of ?cardiac origin</td>
</tr>
<tr>
<td>ATROPINE SULFATE</td>
<td>Unstable Bradycardia Organophosphate poisoning</td>
</tr>
<tr>
<td>ATROVENT</td>
<td>Respiratory distress ?Asthma/COPD/respiratory origin Allergic reaction</td>
</tr>
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<td>MEDICATION</td>
<td>INDICATIONS</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BENADRYL (DIPHENHYDRAMINE)</td>
<td>Allergic reaction, acute Anaphylaxis Extrapyramidal reaction</td>
</tr>
<tr>
<td>CALCIUM CHLORIDE</td>
<td>Suspected hyperkalemia in hemodialysis patient in presence of widened QRS complex and peaked T waves Crush injury (adult)</td>
</tr>
<tr>
<td>CHARCOAL (no Sorbitol)</td>
<td>Ingestion</td>
</tr>
<tr>
<td>D50 (Dextrose 50%) OR D25 (Dextrose 25%) Peds</td>
<td>Symptomatic hypoglycemia: if BS &lt;60mg/dL (Neonate &lt;45mg/dL)</td>
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<tr>
<td>DOPAMINE HYDROCHLORIDE</td>
<td>Shock:(anaphylactic, neurogenic) Shock: (?cardiac etiology, septic) Discomfort/Pain of ?cardiac origin with associated shock Unstable Bradycardia (after max Atropine or TCP)</td>
</tr>
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<td>MEDICATION</td>
<td>INDICATIONS</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>EPINEPHRINE</td>
<td>Cardiac arrest</td>
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<tr>
<td></td>
<td>Allergic reaction</td>
</tr>
<tr>
<td></td>
<td>Anaphylaxis</td>
</tr>
<tr>
<td></td>
<td>Severe Respiratory distress or inadequate response to Albuterol</td>
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<tr>
<td>GLUCAGON</td>
<td>Unable to start IV in patient with symptomatic hypoglycemia if BS &lt;60mg/dL</td>
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<tr>
<td></td>
<td>(Neonate &lt;45mg/dL)</td>
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<tr>
<td>LIDOCAINE (XYLOCAINE)</td>
<td>Post conversion from VT/VF with HR ≥ 60 bpm</td>
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<tr>
<td></td>
<td>Prior to IO fluid infusion in the conscious patient.</td>
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<td></td>
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<tr>
<td>LIDOCAINE JELLY (2%) optional</td>
<td>Intubation or Nasopharyngeal airway</td>
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<td>INDICATIONS</td>
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<td>-----------------------------</td>
<td>------------------------------------------------------------------------------</td>
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<tr>
<td>MORPHINE SULPHATE (MS)</td>
<td>Burns Envenomation injury Trauma Pain or discomfort of ?cardiac origin Pain associated with external pacing</td>
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<tr>
<td>NORMAL SALINE</td>
<td>Definitive therapy</td>
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<tr>
<td>NARCAN (NALOXONE HYDROCHLORIDE)</td>
<td>Symptomatic ?opioid OD</td>
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<tr>
<td>NITROGLYCERINE (NTG)</td>
<td>Pain or discomfort of ?cardiac origin Respiratory distress ? CHF/cardiac origin</td>
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<td>INDICATIONS</td>
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<td>----------------------------------</td>
<td>------------------------------------------------------------------------------</td>
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<tr>
<td>Fluid overload in hemodialysis</td>
<td>patient</td>
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<tr>
<td>SODIUM BICARBONATE (NaHCO₃)</td>
<td>Symptomatic patient with suspected hyperkalemia (widened QRS complex and</td>
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<td></td>
<td>peaked T-waves). Tricyclic OD with cardiac effects (hypotension, heart block</td>
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<tr>
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<td>or widened QRS). Crush injury</td>
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<tr>
<td>VERSED (MIDAZOLAM)</td>
<td>Precardioversion</td>
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<td></td>
<td>Severe Agitation</td>
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<td>External Pacemaker post capture Seizure</td>
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<tr>
<td>ZOFRAN (Ondansetron)</td>
<td>Nausea and/or vomiting</td>
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<td>MEDICATION</td>
<td>DOSE</td>
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<tr>
<td>----------------------------------------------------</td>
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<tr>
<td>Adenosine IV fast 1st</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Adenosine IV fast 2nd/3rd</td>
<td>0.2 mg/kg</td>
</tr>
<tr>
<td>Albuterol-Nebulized</td>
<td>5 mg (6 ml)</td>
</tr>
<tr>
<td>Atrovent-Nebulized</td>
<td>0.5 mg (2.5 ml)</td>
</tr>
<tr>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.02 mg/kg</td>
</tr>
<tr>
<td>Atropine (OPP) IV/IM</td>
<td>0.02 mg/kg</td>
</tr>
<tr>
<td>Atropine ET</td>
<td>0.04 mg/kg</td>
</tr>
<tr>
<td>Benadryl IV/IM</td>
<td>1 mg/kg</td>
</tr>
<tr>
<td>Charcoal PO</td>
<td>1 GM/kg</td>
</tr>
<tr>
<td>Dextrose 25% IV</td>
<td>0.5 GM/kg (2 ml/kg)</td>
</tr>
<tr>
<td>Epinephrine IV / IO (1:10,000)</td>
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<td>Epinephrine ET (1:1,000)</td>
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<tr>
<td>Epinephrine SC (1:1,000)</td>
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<tr>
<td>Epinephrine-Nebulized (1:1,000)</td>
<td>2.5 – 5.0 ml</td>
</tr>
<tr>
<td>Glucagon IM</td>
<td>0.05 mg/kg</td>
</tr>
<tr>
<td>Lidocaine 2% IV / IO</td>
<td>1 mg/kg</td>
</tr>
<tr>
<td>Lidocaine 2% ET</td>
<td>2 mg/kg</td>
</tr>
<tr>
<td>Morphine Sulfate IV/IM</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Morphine Sulfate PO</td>
<td>0.3 mg/kg</td>
</tr>
<tr>
<td>Narcan IN/IM/IV</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Narcan IV titrated increments</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Normal Saline Fluid Bolus</td>
<td>20 ml/kg</td>
</tr>
<tr>
<td>Sodium Bicarb IV</td>
<td>1 mEq/kg</td>
</tr>
<tr>
<td>Versed IV slow</td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td>Versed IN/IM</td>
<td>0.2 mg/kg</td>
</tr>
</tbody>
</table>
**Broselower color:** GREY/PINK

- Kg range: < 8 kg  
- Approx Kg: 5 kg  
- Approximate LBS: 10 lbs  
- Defib: 10 J 20 J 20 J  
- 1st 2nd 3rd  
- Cardiovort: 5 J 10 J 10 J  
- (or clinically equivalent biphasic energy dose)

### VOL | MEDICATION | DOSE | CONCENTRATION |
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>0.2 ml</td>
<td>Adenosine IV 1st</td>
<td>0.5 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>0.4 ml</td>
<td>Adenosine IV 2nd/3rd</td>
<td>1 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>6 ml</td>
<td>Albuterol-Nebulized</td>
<td>5 mg</td>
<td>2.5 mg/3 ml</td>
</tr>
<tr>
<td>1.25 ml</td>
<td>Atrovent-Nebulized</td>
<td>0.25 mg</td>
<td>0.5 mg/2.5 ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.1 mg</td>
<td>1 mg/10 ml</td>
</tr>
<tr>
<td>0.3 ml *</td>
<td>Atropine (OPP) IV/IM</td>
<td>0.1 mg</td>
<td>0.4 mg/1 ml</td>
</tr>
<tr>
<td>0.1 ml</td>
<td>Benadryl IV/IM</td>
<td>5 mg</td>
<td>50 mg/1 ml</td>
</tr>
<tr>
<td>24 ml</td>
<td>Charcoal PO</td>
<td>5 GM</td>
<td>50 GM/240 ml</td>
</tr>
<tr>
<td>10 ml</td>
<td>Dextrose 25% IV</td>
<td>2.5 GM</td>
<td>12.5 GM/50 ml</td>
</tr>
<tr>
<td>0.5 ml</td>
<td>Epinephrine IV/IO</td>
<td>0.05 mg</td>
<td>1:10,000 1mg/10ml</td>
</tr>
<tr>
<td>0.1 ml *</td>
<td>Epinephrine SC/IM</td>
<td>0.05 mg</td>
<td>1:1,000 1mg/1ml</td>
</tr>
<tr>
<td>2.5 ml</td>
<td>Epinephrine-Nebulized</td>
<td>2.5 mg</td>
<td>1:1,000 1mg/1ml</td>
</tr>
<tr>
<td>0.3 ml *</td>
<td>Glucagon IM</td>
<td>0.25 mg</td>
<td>1 unit (mg)/1 ml</td>
</tr>
<tr>
<td>0.3 ml *</td>
<td>Lidocaine 2% IV/IO</td>
<td>5 mg</td>
<td>100 mg/5 ml</td>
</tr>
<tr>
<td><strong>NONE</strong></td>
<td>Morphine Sulfate IV/IM</td>
<td><strong>NONE</strong></td>
<td>10 mg/1 ml</td>
</tr>
<tr>
<td>0.8 ml *</td>
<td>Morphine PO</td>
<td>1.5 mg</td>
<td>10 mg/5 ml</td>
</tr>
<tr>
<td>0.5 ml</td>
<td>Narcan IN/IM/IV</td>
<td>0.5 mg</td>
<td>1 mg/1 ml</td>
</tr>
<tr>
<td>5 ml</td>
<td>Narcan IV titrated increments</td>
<td>0.5 mg</td>
<td>Diluted to 1 mg/10 ml</td>
</tr>
<tr>
<td>100 ml</td>
<td>Normal Saline Fluid Bolus</td>
<td>Standard</td>
<td></td>
</tr>
<tr>
<td>5 ml</td>
<td>Sodium Bicarb IV</td>
<td>5 meq</td>
<td>1 meq/1 ml</td>
</tr>
<tr>
<td>0.1 ml</td>
<td>Versed IV</td>
<td>0.5 mg</td>
<td>5 mg/1 ml</td>
</tr>
<tr>
<td>0.2 ml</td>
<td>Versed IN/IM</td>
<td>1 mg</td>
<td>5 mg/1 ml</td>
</tr>
</tbody>
</table>

- To assure accuracy be sure the designated **concentration** of medication is used.
- * Volume rounded for ease of administration

**Document revised 7/1/2011**

**Approved:**

[Signature]  
EMS Medical Director
<table>
<thead>
<tr>
<th>VOL</th>
<th>MEDICATION</th>
<th>DOSE</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3 ml*</td>
<td>Adenosine IV fast 1st</td>
<td>1 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>0.7 ml*</td>
<td>Adenosine IV fast 2nd/3rd</td>
<td>2 mg</td>
<td>6 mg/2 ml</td>
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<tr>
<td>6 ml</td>
<td>Albuterol-Nebulized</td>
<td>5 mg</td>
<td>2.5 mg/3 ml</td>
</tr>
<tr>
<td>1.25 ml</td>
<td>Atrovent-Nebulized</td>
<td>0.25 mg</td>
<td>0.5 mg/2.5 ml</td>
</tr>
<tr>
<td>2 ml</td>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.2 mg</td>
<td>1 mg/10 ml</td>
</tr>
<tr>
<td>0.5 ml</td>
<td>Atropine (OPP) IV/IM</td>
<td>0.2 mg</td>
<td>0.4 mg/1 ml</td>
</tr>
<tr>
<td>0.2 ml</td>
<td>Benadryl IV/IM</td>
<td>10 mg</td>
<td>50 mg/1 ml</td>
</tr>
<tr>
<td>50 ml*</td>
<td>Charcoal PO</td>
<td>10 GM</td>
<td>50 GM/240 ml</td>
</tr>
<tr>
<td>20 ml</td>
<td>Dextrose IV 25%</td>
<td>5 GM</td>
<td>12.5 GM/50 ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Epinephrine IV/IO</td>
<td>0.1 mg</td>
<td>1:10,000 1mg/10ml</td>
</tr>
<tr>
<td>0.1 ml</td>
<td>Epinephrine SC/IM</td>
<td>0.1 mg</td>
<td>1:1,000 1mg/1ml</td>
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<td>Epinephrine-Nebulized</td>
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<td>0.5 ml</td>
<td>Glucagon IM</td>
<td>0.5 mg</td>
<td>1 unit (mg)/1 ml</td>
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<tr>
<td>0.5 ml</td>
<td>Lidoocaine 2% IV/IO</td>
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<td>100 mg/5 ml</td>
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<tr>
<td>0.1 ml</td>
<td>Morphine Sulfate IV/IM</td>
<td>1 mg</td>
<td>10 mg/1 ml</td>
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<tr>
<td>1.5 ml</td>
<td>Morphine Sulfate PO</td>
<td>3 mg</td>
<td>10 mg/5 ml</td>
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<tr>
<td>1 ml</td>
<td>Narcan IN/IM/IV</td>
<td>1 mg</td>
<td>1 mg/1 ml</td>
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<tr>
<td>10 ml</td>
<td>Narcan IV titrated increments</td>
<td>1 mg</td>
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<tr>
<td>200 ml</td>
<td>Normal Saline Fluid Bolus</td>
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<tr>
<td>10 ml</td>
<td>Sodium Bicarb IV</td>
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<td>1 meq/1 ml</td>
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<tr>
<td>0.2 ml</td>
<td>Versed IV</td>
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<td>5 mg/1 ml</td>
</tr>
<tr>
<td>0.4 ml</td>
<td>Versed IN/IM</td>
<td>2 mg</td>
<td>5 mg/1 ml</td>
</tr>
</tbody>
</table>

- To assure accuracy be sure the designated concentration of medication is used.

* Volume rounded for ease of administration
Broselow color: WHITE

Kg range: 15-18 kg Approx Kg: 15 kg
Approximate LBS: 30 lbs
ETT uncuffed size: 5
ETT cuffed size: 4.5
NG tube size: 10 Fr

<table>
<thead>
<tr>
<th>VOL</th>
<th>MEDICATION</th>
<th>DOSE</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 ml</td>
<td>Adenosine IV fast 1st</td>
<td>1.5 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Adenosine IV fast 2nd/3rd</td>
<td>3 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>6 ml</td>
<td>Albuterol Nebulized</td>
<td>5 mg</td>
<td>2.5 mg/3 ml</td>
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<tr>
<td>2.5 ml</td>
<td>Atrovent Nebulized</td>
<td>0.5 mg</td>
<td>0.5 mg/2.5 ml</td>
</tr>
<tr>
<td>3 ml</td>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.3 mg</td>
<td>1 mg/10 ml</td>
</tr>
<tr>
<td>0.8 ml</td>
<td>Atropine (OPP) IV/IM</td>
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<td>0.4 mg/1 ml</td>
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<td>50 mg/1 ml</td>
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<td>30 ml</td>
<td>Dextrose 25% IV</td>
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<td>0.15 mg</td>
<td>1:1,000 1 mg/1 ml</td>
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<td>Epinephrine Nebulized</td>
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<td>0.8 ml*</td>
<td>Glucagon IM</td>
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<td>0.8 ml</td>
<td>Lidocaine 2% IV slow/IO</td>
<td>15 mg</td>
<td>100 mg/5 ml</td>
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<tr>
<td>0.2 ml*</td>
<td>Morphine Sulfate IV/IM</td>
<td>1.5 mg</td>
<td>10 mg/1 ml</td>
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<td>2.3 ml*</td>
<td>Morphine Sulfate PO</td>
<td>4.5 mg</td>
<td>10 mg/5 ml</td>
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<td>Narcan IN/IM/IV</td>
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<td>1 mg/1 ml</td>
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<tr>
<td>15 ml</td>
<td>Narcan IV titrated increments</td>
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<tr>
<td>300 ml</td>
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<td>Standard</td>
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<td>15 ml</td>
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</tr>
<tr>
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<td>Versed IV slow</td>
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<td>5 mg/1 ml</td>
</tr>
<tr>
<td>0.6 ml</td>
<td>Versed IN/IM</td>
<td>3 mg</td>
<td>5 mg/1 ml</td>
</tr>
</tbody>
</table>

- To assure accuracy be sure the designated concentration of medication is used.
- Volume rounded for ease of administration

Document revised 7/1/2011
Approved:

[Signature]
EMS Medical Director
### Broselow color: BLUE

<table>
<thead>
<tr>
<th>Kg range: 19-23kg</th>
<th>Approx KG: 20 kg</th>
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<tr>
<td>ETT uncuffed size:</td>
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</tr>
<tr>
<td>ETT cuffed size:</td>
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</tr>
<tr>
<td>NG tube size:</td>
<td>12-14 Fr</td>
</tr>
</tbody>
</table>

#### Defib:
- 1st: 40 J
- 2nd: 80 J
- 3rd: 80 J

#### Cardiovert:
- 20 J
- 40 J
- 40 J

(or clinically equivalent biphasic energy dose)

### VOL | MEDICATION | DOSE | CONCENTRATION
-------|------------|------|-------------------
0.7 ml * | Adenosine IV fast 1st | 2 mg | 6 mg/2 ml |
1.3 ml * | Adenosine IV fast 2nd/3rd | 4 mg | 6 mg/2 ml |
6 ml | Albuterol - Nebulized | 5 mg | 2.5 mg/3 ml |
2.5 ml | Atrovent - Nebulized | 0.5 mg | 0.5 mg/2.5 ml |
4 ml | Atropine (Bradycardia) IV | 0.4 mg | 1 mg/10 ml |
1 ml | Atropine (OPP) IV/IM | 0.4 mg | 0.4 mg/1 ml |
0.4 ml | Benadryl IV/IM | 20 mg | 50 mg/1 ml |
100 ml * | Charcoal PO | 20 GM | 50 GM/240 ml |
40 ml | Dextrose 25% IV | 10 GM | 12.5 GM/50 ml |
2 ml | Epinephrine IV/IO | 0.2 mg | 1:10,000 1mg/10ml |
0.2 ml | Epinephrine SC/IM | 0.2 mg | 1:1000 1mg/1ml |
5 ml | Epinephrine Nebulized | 5 mg | 1:1000 1mg/1ml |
1 ml | Glucagon IM | 1 mg | 1 unit (mg)/1 ml |
1 ml | Lidocaine 2% IV slow/IO | 20 mg | 100 mg/5 ml |
0.2 ml | Morphine Sulfate IV/IM | 2 mg | 10 mg/1 ml |
3 ml | Morphine Sulfate PO | 6 mg | 10 mg/5 ml |
2 ml | Narcan IN/IM/IV | 2 mg | 1 mg/1 ml |
20 ml | Narcan IV titrated increments | 2 mg | Diluted to 1 mg/10 ml |
400 ml | Normal Saline Fluid Bolus | Standard |
20 ml | Sodium Bicarb IV | 20 mEq | 1 meq/1 ml |
0.4 ml | Versed IV slow | 2 mg | 5 mg/1 ml |
0.8 ml | Versed IN/IM | 4 mg | 5 mg/1 ml |

- To assure accuracy be sure the designated concentration of medication is used.
- Volume rounded for ease of administration
Broselow color: ORANGE

Kg range: 24-29 kg  Approx KG: 25 kg
Approximate LBS: 50 lbs
ETT uncuffed size: 6
ETT cuffed size: 5.5
NG tube size: 14-18 Fr

<table>
<thead>
<tr>
<th>VOL</th>
<th>MEDICATION</th>
<th>DOSE</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8 ml *</td>
<td>Adenosine IV fast 1st</td>
<td>2.5 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>1.7 ml *</td>
<td>Adenosine IV fast 2nd/3rd</td>
<td>5 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>6 ml</td>
<td>Albuterol-Nebulized</td>
<td>5 mg</td>
<td>2.5 mg/3 ml</td>
</tr>
<tr>
<td>2.5 ml</td>
<td>Atrovent-Nebulized</td>
<td>0.5 mg</td>
<td>0.5 mg/2.5 ml</td>
</tr>
<tr>
<td>5 ml</td>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.5 mg</td>
<td>1 mg/10 ml</td>
</tr>
<tr>
<td>1.3 ml *</td>
<td>Atropine (OPP) IV/IM</td>
<td>0.5 mg</td>
<td>0.4 mg/1 ml</td>
</tr>
<tr>
<td>0.5 ml</td>
<td>Benadryl IV/IM</td>
<td>25 mg</td>
<td>50 mg/1 ml</td>
</tr>
<tr>
<td>120 ml</td>
<td>Charcoal PO</td>
<td>25 GM</td>
<td>50 GM/240 ml</td>
</tr>
<tr>
<td>50 ml</td>
<td>Dextrose 25% IV</td>
<td>12.5 GM</td>
<td>12.5 GM/50 ml</td>
</tr>
<tr>
<td>2.5 ml</td>
<td>Epinephrine IV/IO</td>
<td>0.25 mg</td>
<td>1:10,000 1mg/10ml</td>
</tr>
<tr>
<td>0.25 ml</td>
<td>Epinephrine SC/IM</td>
<td>0.25 mg</td>
<td>1:1,000 1mg/1ml</td>
</tr>
<tr>
<td>5 ml</td>
<td>Epinephrine Nebulized</td>
<td>5 mg</td>
<td>1:1,000 1mg/1ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Glucagon IM</td>
<td>1 mg</td>
<td>1 unit (mg)/1 ml</td>
</tr>
<tr>
<td>1.3 ml *</td>
<td>Lidocaine 2% IV slow/IO</td>
<td>25 mg</td>
<td>100 mg/5 ml</td>
</tr>
<tr>
<td>0.3 ml *</td>
<td>Morphine Sulfate IV/IM</td>
<td>2.5 mg</td>
<td>10 mg/1 ml</td>
</tr>
<tr>
<td>3.8 ml *</td>
<td>Morphine Sulfate PO</td>
<td>7.5 mg</td>
<td>10 mg/5 ml</td>
</tr>
<tr>
<td>2 ml</td>
<td>Narcan IN/IM/IV</td>
<td>2 mg</td>
<td>1 mg/1 ml</td>
</tr>
<tr>
<td>20 ml</td>
<td>Narcan IV titrated increments</td>
<td>2 mg</td>
<td>Diluted to 1 mg/10 ml</td>
</tr>
<tr>
<td>500 ml</td>
<td>Normal Saline Fluid Bolus</td>
<td>Standard</td>
<td></td>
</tr>
<tr>
<td>25 ml</td>
<td>Sodium Bicarb IV</td>
<td>25 mEq</td>
<td>1 meq/1 ml</td>
</tr>
<tr>
<td>0.5 ml</td>
<td>Versed IV slow</td>
<td>2.5 mg</td>
<td>5 mg/1 ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Versed IN/IM</td>
<td>5 mg</td>
<td>5 mg/1 ml</td>
</tr>
</tbody>
</table>

- To assure accuracy be sure the designated concentration of medication is used.

* Volume rounded for ease of administration
**Broselow color: GREEN**

Kg range: 30-36 kg  Approx Kg: 35 kg  
Approximate LBS: 70 lbs  
1st 2nd 3rd

<table>
<thead>
<tr>
<th>VOL</th>
<th>MEDICATION</th>
<th>DOSE</th>
<th>CONCENTRATION</th>
</tr>
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<tbody>
<tr>
<td>1.2 ml</td>
<td>Adenosine IV fast 1st</td>
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<td>2.3 ml</td>
<td>Adenosine IV fast 2nd/3rd</td>
<td>7 mg</td>
<td>6 mg/2 ml</td>
</tr>
<tr>
<td>6 ml</td>
<td>Albuterol-Nebulized</td>
<td>5 mg</td>
<td>2.5 mg/3 ml</td>
</tr>
<tr>
<td>2.5 ml</td>
<td>Atrovent-Nebulized</td>
<td>0.5 mg</td>
<td>0.5 mg/2.5 ml</td>
</tr>
<tr>
<td>7 ml</td>
<td>Atropine (Bradycardia) IV/IO</td>
<td>0.7 mg</td>
<td>1 mg/10 ml</td>
</tr>
<tr>
<td>1.8 ml</td>
<td>Atropine (OPP) IV/IM</td>
<td>0.7 mg</td>
<td>0.4 mg/1 ml</td>
</tr>
<tr>
<td>0.7 ml</td>
<td>Benadryl IV/IM</td>
<td>35 mg</td>
<td>50 mg/1 ml</td>
</tr>
<tr>
<td>170 ml</td>
<td>Charcoal PO</td>
<td>35 GM</td>
<td>50 GM/240 ml</td>
</tr>
<tr>
<td>70 ml</td>
<td>Dextrose 25% IV</td>
<td>17.5 GM</td>
<td>12.5 GM/50 ml</td>
</tr>
<tr>
<td>3.5 ml</td>
<td>Epinephrine IV/IO</td>
<td>0.35 mg</td>
<td>1:10,000</td>
</tr>
<tr>
<td>0.3 ml</td>
<td>Epinephrine SC/IM</td>
<td>0.3 mg</td>
<td>1:1,000</td>
</tr>
<tr>
<td>5 ml</td>
<td>Epinephrine Nebulized</td>
<td>5 mg</td>
<td>1:1,000</td>
</tr>
<tr>
<td>1 ml</td>
<td>Glucagon IM</td>
<td>1 mg</td>
<td>1 unit (mg)/1 ml</td>
</tr>
<tr>
<td>1.8 ml</td>
<td>Lidocaine 2% IV slow/IO</td>
<td>35 mg</td>
<td>100 mg/5 ml</td>
</tr>
<tr>
<td>0.4 ml</td>
<td>Morphine Sulfate IV/IM</td>
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</tr>
<tr>
<td>5 ml</td>
<td>Morphine Sulfate PO</td>
<td>10 mg</td>
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<tr>
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</tr>
<tr>
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<td>Versed IM</td>
<td>7 mg</td>
<td>5 mg/1 ml</td>
</tr>
<tr>
<td>1 ml</td>
<td>Versed IN</td>
<td>5 mg</td>
<td>5 mg/1 ml</td>
</tr>
</tbody>
</table>

- To assure accuracy be sure the designated concentration of the medication is used.
- Volume rounded for ease of administration.

Document revised 7/1/2011
Approved: 

[Signature]
EMS Medical Director
**TREATMENT PROTOCOL – ABDOMINAL DISCOMFORT/GI/GU (NON-TRAUMATIC)**

**Date:** 7/1/2011  
**Document revised:** 7/1/2011  
**Approved:**

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure patent airway</td>
<td>• Monitor EKG</td>
</tr>
<tr>
<td>• O₂ Saturation prn</td>
<td>• IV/IO SQ adjust prn</td>
</tr>
<tr>
<td>• O₂ and/or ventilate prn</td>
<td>• Treat pain as per Pain Management Protocol (S-141)</td>
</tr>
<tr>
<td>• NPO</td>
<td>• 500 ml fluid bolus IV/IO for suspected volume depletion SQ</td>
</tr>
<tr>
<td>• Anticipate vomiting</td>
<td>For nausea and/or vomiting:</td>
</tr>
<tr>
<td></td>
<td>• Zofran 4mg IV/IM/ODT SQ, MR x 1 q10” SQ</td>
</tr>
</tbody>
</table>

Note: for suspected intra-abdominal catastrophe or suspected aortic aneurysm transport to facility with surgical resources immediately available. Titrate fluid to systolic BP 80.
## Airway Obstruction (Foreign Body)

### BLS
- **For a conscious patient:**
  - Reassure, encourage coughing
  - O₂ prn
- **For inadequate air exchange:**
  - Abdominal thrusts
  - Use chest thrusts in the obese or pregnant patient
- **If patient becomes unconscious or is found unconscious**
  - Begin CPR

### ALS
- **If patient becomes unconscious or has a decreasing LOC:**
  - Direct laryngoscopy and Magill forceps SO, MR prn
- **Once obstruction is removed:**
  - Monitor/EKG
  - IV/IO SO adjust prn

**Once obstruction is removed:**
- High flow O₂, ventilate prn
- O₂ Saturation prn

Note: If unable to secure airway, transport STAT.
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<td>• O₂ Saturation prn</td>
<td>• IV/IO SO adjust prn</td>
</tr>
<tr>
<td>• O₂ and/or ventilate prn</td>
<td></td>
</tr>
<tr>
<td>• Remove stinger/injection mechanism</td>
<td></td>
</tr>
<tr>
<td>• May assist patient to self medicate own prescribed EpiPen or MDI</td>
<td></td>
</tr>
<tr>
<td>ONE TIME ONLY. Base Hospital contact required prior to any repeat dose.</td>
<td></td>
</tr>
</tbody>
</table>

**Allergic Reaction: mild (rash, urticaria)**
- Benadryl 50 mg IV/IM SO

**Allergic Reaction: acute (facial/cervical angioedema, bronchospasm or wheezing):**
- Epinephrine 1:1000 0.3mg IM SO. MR x2 q10" SO
- Benadryl 50mg IM/IV SO
- Albuterol 6ml 0.083% via nebulizer SO. MR SO
- Atrovent 2.5ml 0.02% via nebulizer added to the first dose of Albuterol SO

**Anaphylaxis (shock or cyanosis):**
- Epinephrine 1:1,000 0.3mg IM per SO. MR x2 q10" SO
- 500 ml fluid bolus IV/IO for systolic BP < 90 SO.
- MR to maintain systolic BP >90 SO
- Benadryl 50mg IM/IV SO
- Albuterol 6ml 0.083% via nebulizer SO MR SO
- Atrovent 2.5ml 0.02% via nebulizer added to the first dose of Albuterol SO
- Epinephrine 1:10,000 0.1mg IV/IO BHO. MR x2 q3-5" BHO
- Dopamine 400mg/250ml @ 10-40mcg/kg/min IV/IO drip.
  Titrate systolic BP >90 BHO
# Treatment Protocol -- Altered Neurologic Function (Non Traumatic)

**BLS**

- Ensure patent airway, O\(_2\) and/or ventilate prn
- O\(_2\) Saturation prn
- Spinal stabilization prn
- Secretion problems, position on affected side
- Do not allow patient to walk
- Restrain prn

**ALS**

- Monitor EKG
- IV/IO SO adjust prn
- Monitor blood glucose prn SO

**Symptomatic opioids OD** (with respiratory rate <12):

(Use caution in opioid dependent pain management patients)

- Narcan 2mg IN/IM/IV SO. MR SO. titrate IV dose to effect
- If patient refuses transport, give additional Narcan 2mg IM SO

**Hypoglycemia**: 

Symptomatic patient with altered LOC or unresponsive to oral glucose agents:

- D\(_{50}\) 25Gm IV/IO SO if BS <60 mg/dL
- If patient remains symptomatic and BS remains <60 mg/dL MR SO
- If no IV: Glucagon 1ml IM SO if BS < 60 mg/dL

**Seizures**:

For:

A. Ongoing generalized seizure lasting >5" (includes seizure time prior to arrival of prehospital provider) SO
B. Focal seizure with respiratory compromise SO
C. Recurrent seizures without lucid interval SO
D. Eclamptic seizure of any duration SO

Give:

- Versed 0.1mg/kg slow IV/IO SO to a max dose of 5mg (d/c if seizure stops) SO, MR x1 SO

If no IV/IO:

- Versed 0.2mg/kg IM SO to max dose 10mg SO, MR x1 SO OR
- Versed 0.2mg/kg IN SO to max dose 5mg SO, MR x1 SO

**Hypoglycemia (suspected) or patient’s glucometer results read <60 mg/dL**

- If patient is awake and has gag reflex, give 3 oral glucose tabs or paste (15g total). Patient may eat or drink if able.
- If patient is unconscious, NPO

**CVA/Stroke**:

- For suspected stroke with major deficit with onset of symptoms known to be <4 hours in duration, expedite transport.
- Make initial notification early to confirm destination.
- Use the Prehospital Stroke Scale in the assessment of possible CVA patients (facial droop, arm drift and speech abnormalities).
- Only use supplemental O\(_2\) for O\(_2\) saturation <94%

**Behavioral Emergencies (S-422 and S-142)**

In symptomatic opioids OD (excluding opioid dependent pain management patients) administer Narcan IN/IM prior to IV.

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Document revised 7/1/2011
Approved: 

[Signature]

EMS Medical Director
### BLS

- Move patient to a safe environment
- Break contact with causative agent
- Ensure patent airway, O$_2$ and/or ventilate prn
- O$_2$ Saturation prn
- Treat other life threatening injuries

### ALS

- Monitor EKG
- IV/IO SQ adjust prn
- Treat pain as per Pain Management Protocol (S-141)

#### Thermal burns:
- Burns of < 10% body surface area, stop burning with non-chilled water or saline
- For burns ≥ 10% body surface area, cover with dry dressing and keep warm
- Do not allow the patient to become hypothermic

#### Chemical burns:
- Brush off dry chemicals
- Flush with copious amounts of water

#### Tar burns:
- Cool with water, transport; do not remove tar

#### In the presence of respiratory distress with bronchospasm:
- Albuterol 6ml 0.083% via nebulizer SQ, MR SQ

### BURN CENTER CRITERIA

Patients with burns involving:
- ≥ 20% 2nd or ≥ 5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (greater than 110 volts)

### Disposition:
- Consider Hyperbaric chamber for suspected CO poisoning in unconscious or pregnant patients.

Note: Base Hospital Contact and Transport (Per S-415) will be made to UCSD Base Hospital for patients meeting burn center criteria.
<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure patent airway</td>
<td>• Monitor EKG</td>
</tr>
<tr>
<td>• O₂ Saturation prn</td>
<td>• IV SO adjust prn</td>
</tr>
<tr>
<td>• O₂ and/or ventilate prn.</td>
<td>• Obtain 12 Lead EKG. If STEMI, notify base immediately and transport to appropriate STEMI center.*</td>
</tr>
<tr>
<td>• Do not allow patient to walk</td>
<td>• ASA 162mg chewable PO SO</td>
</tr>
<tr>
<td>• If systolic BP ≥ 100, may assist patient to self medicate own prescribed NTG SL (maximum 3 doses, including those patient has taken).</td>
<td>If systolic BP &gt; 100:</td>
</tr>
<tr>
<td>• May assist with placement of 12 lead.</td>
<td>• NTG 0.4mg SL SO. MR q3-5&quot; SO</td>
</tr>
<tr>
<td></td>
<td>• NTG ointment 1&quot; SO</td>
</tr>
<tr>
<td></td>
<td>• MS 2-4mg IV SO. MR to max 10mg SO. MR to max of 20mg BHO</td>
</tr>
</tbody>
</table>

**Discomfort/Pain of Cardiac Origin with Associated Shock:**

- 250ml fluid bolus IV/IO with clear lungs SO. MR to maintain systolic BP >90 SO

**If BP refractory to fluid boluses:**

- Dopamine 400mg/250ml @ 10-40mcg/kg/min IV/IO drip.
- Titrated to systolic BP > 90 BHO

**Note:**

- If discomfort/pain is relieved prior to arrival, continue treatment with NTG ointment and ASA. ASA should be given regardless of prior daily dose(s).
- If any patient has taken an erectile dysfunction medication such as Viagra, Cialis, Levitra within 48 hours, NTG is contraindicated.
- May encounter patients taking similar medication for pulmonary hypertension (Revatio, Flolan, Veletri). NTG is contraindicated in these patients as well.

*Report:

***Acute MI*** or ***Acute MI Suspected***

Bundle Branch Block (LBBB, RBBB).

Poor quality EKG, artifact, paced rhythm, atrial fibrillation or atrial flutter for exclusion from STEMI assessment.

Repeat the 12-lead EKG only if the original EKG interpretation is NOT ***ACUTE MI SUSPECTED***, and patient’s condition worsens. Do not delay transport to repeat.

Document findings on the PPR and leave EKG with patient.

Document revised 7/1/2011

Approved:

[Signature]

EMS Medical Director
A. Unstable Bradycardia with Pulse (Systolic BP<90 AND chest pain, dyspnea or altered LOC): NARROW COMPLEX Bradycardia

- Monitor EKG
- 250ml fluid bolus IV/IO with clear lungs SO MR to maintain BP > 90 SO
- Atropine 0.5mg IV/IO for pulse <60 bpm SO. MR q3-5" to max of 3mg SO

If rhythm refractory to a minimum of Atropine 1 mg:
- External cardiac pacemaker per SO

If capture occurs and systolic BP≥100, consider medication for discomfort:
- Morphine 2-10mg IV/IO prn SO

For discomfort related to pacing not relieved with Morphine and BP≥100:
- Versed 1-5mg IV/IO SO
- Dopamine 400mg/250ml at 10-40mcg/kg/min IV/IO drip, titrate to systolic BP > 90 (after max Atropine or initiation of pacing) BHO

B. Wide Complex Bradycardia

- Monitor EKG
- 250 ml fluid bolus IV/IO with clear lungs SO MR to maintain BP > 90 SO
- External cardiac pacemaker per SO

If capture occurs and systolic BP≥100, consider medication for discomfort:
- Morphine 2-10mg IV/IO prn SO

For discomfort related to pacing not relieved with Morphine and BP≥100:
- Versed 1-5mg IV/IO SO
- Dopamine 400mg/250ml at 10-40mcg/kg/min IV/IO drip, titrate to systolic BP > 90 (after initiation of pacing) BHO

If external pacing unavailable,
- May give Atropine 0.5mg IV/IO for pulse <60 SO. MR q3-5" to max of 3mg SO

B. Supraventricular Tachycardia (SVT):

- Monitor EKG
- 250ml fluid bolus IV/IO with clear lungs SO MR to maintain systolic BP ≥ 90 SO
- VSM SO MR SO
- Adenosine 6mg IV/IO, followed with 20ml NS IV/IO SO (Patients with history of bronchospasm or COPD BHO)
- Adenosine 12mg IV/IO followed with 20ml NS IV/IO SO

If no sustained rhythm change, MR x1 in 1-2" SO
### BLS

<table>
<thead>
<tr>
<th>O₂ and/or ventilate prn</th>
<th>O₂ and/or ventilate prn</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂ Sat prn</td>
<td>O₂ Sat prn</td>
</tr>
</tbody>
</table>

If patient unstable with severe symptoms OR rhythm refractory to treatment:

**Conscious (Systolic BP<90 and chest pain, dyspnea or altered LOC):**
- Versed 1-5mg IV/IO prn pre-cardioversion **BHO**
  - If age ≥ 60 consider lower dose with attention to age and hydration status
- Synchronized cardioversion at manufacturer’s recommended energy dose **BHO**, **MR BHO**

**Unconscious:**
- Synchronized cardioversion at manufacturer’s recommended energy dose **SO MR x 3 SO, MR BHO**

### ALS

**C. Unstable Atrial Fibrillation/ Atrial Flutter (Systolic BP<90 AND chest pain, dyspnea or altered LOC):**

- Monitor EKG/ O₂ Saturation prn
- 250ml fluid bolus IV/IO with clear lungs **SO MR** to maintain systolic BP > 90 **SO**

**In presence of ventricular response with heart rate ≥180:**

**Conscious:**
- Versed 1-5mg IV/IO prn pre-cardioversion **BHO**
  - If age ≥ 60 consider lower dose with attention to age and hydration status
- Synchronized cardioversion at manufacturer’s recommended energy dose **BHO**, **MR BHO**

**Unconscious:**
- Synchronized cardioversion at manufacturer’s recommended energy dose **SO MR x 3 SO, MR BHO**

**D. Ventricular Tachycardia (VT):**

- Monitor EKG
- 250ml fluid bolus IV/IO with clear lungs **SO MR** to maintain systolic BP > 90 **SO**
- Lidocaine 1.5mg/kg IV/IO **SO** MR at 0.5mg/kg IV/IO q 8-10" to max 3mg/kg (including initial bolus) **SO**
  - OR
- Amiodarone 150mg IV/IO **SO MR BHO**

If patient unstable with severe symptoms:

**Conscious (Systolic BP<90 and chest pain, dyspnea or altered LOC):**
- Versed 1-5 mg IV/IO prn pre-cardioversion **SO**
  - If age ≥ 60 consider lower dose with attention to age and hydration status
- Synchronized cardioversion at manufacturer’s recommended energy dose **SO MR x 3 SO, MR BHO**

**Unconscious:**
- Synchronized cardioversion at manufacturer’s recommended energy dose **SO MR x 3 SO, MR BHO**

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Document revised 7/1/2011
Approved: [Signature]

EMS Medical Director
### BLS

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPR</td>
<td>Begin compressions, after first 30 compressions give first ventilations.</td>
</tr>
<tr>
<td>AED</td>
<td>If available</td>
</tr>
<tr>
<td>Assist</td>
<td>Assist ventilation</td>
</tr>
<tr>
<td>O₂</td>
<td>Sat prn</td>
</tr>
</tbody>
</table>

### ALS

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. <strong>VF/ Pulseless VT:</strong></td>
<td>Begin CPR.</td>
</tr>
<tr>
<td></td>
<td>• If arrest <strong>witnessed</strong> by medical personnel, perform CPR until ready to defibrillate.</td>
</tr>
<tr>
<td></td>
<td>• If <strong>unwitnessed arrest</strong>, perform CPR x2 min.</td>
</tr>
<tr>
<td></td>
<td>• Monitor EKG</td>
</tr>
<tr>
<td></td>
<td>• Defibrillate x1 at manufacturer’s recommended energy dose <strong>SO</strong></td>
</tr>
<tr>
<td></td>
<td>• Resume CPR for 2 minutes immediately after shock</td>
</tr>
<tr>
<td></td>
<td>• Perform no more than 10 second rhythm check, and pulse check if rhythm is organized</td>
</tr>
<tr>
<td></td>
<td>• Defibrillate for persistent VF/pulseless VT prn <strong>SO</strong></td>
</tr>
<tr>
<td></td>
<td>• Continue CPR for persistent VF/pulseless VT. Repeat 2 minute cycle followed by rhythm/pulse check, followed by defibrillation/medication, if indicated</td>
</tr>
<tr>
<td></td>
<td>• <strong>IV/IO</strong> <strong>SO</strong> Do not interrupt CPR to establish IV/IO</td>
</tr>
<tr>
<td></td>
<td>- Once IV/IO established, if no pulse after rhythm/pulse check:</td>
</tr>
<tr>
<td></td>
<td>• Epinephrine 1:10,000 1mg IV/IO MR q3-5&quot; <strong>SO</strong></td>
</tr>
<tr>
<td></td>
<td>• Intubate/PAA <strong>SO</strong> Avoid interruption of CPR</td>
</tr>
<tr>
<td></td>
<td>• EtCO₂ monitoring <strong>SO</strong></td>
</tr>
<tr>
<td></td>
<td>• NG/OG prn <strong>SO</strong></td>
</tr>
<tr>
<td>If return of pulses:</td>
<td>obtain 12-Lead <strong>SO</strong></td>
</tr>
<tr>
<td>Pronouncement at scene</td>
<td><strong>BHPQ</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- For patients with an EtCO₂ reading of less than 10mm/Hg or patients in nonperfusing rhythms after resuscitative effort, consider early Base Hospital contact for disposition/pronouncement at scene.
- Flush IV/IO line with Normal Saline after medication administration. Medication should be administered as soon as possible after rhythm checks. The timing of drug delivery is less important than is the need to minimize interruptions in chest compressions.
- CPR ratio 30:2 compressions to ventilations (compression rate of 100/minute) until patient has been intubated, then the ratio becomes 10:1.
- CPR should be performed during charging of the defibrillator.
### Subject: Treatment Protocol -- Dysrhythmias

**Date:** 7/1/2011

**Document Revised:** 7/1/2011

**Approved:**

### BLS

- **Assist ventilation**
- **O2 Sat prn**

### ALS

#### F. Post Conversion VT/VF with pulse > 60 (including witnessed spontaneous conversion, AED or reported/witnessed ≥ x2 AICD).
- If initial dose already given, continue with repeat doses as appropriate.
  - Monitor EKG
  - 250 ml fluid bolus IV/IO with clear lungs [SO] RM to maintain systolic BP ≥ 90 [SO]
  - Lidocaine 1.5mg/kg IV/IO [SO] MR at 0.5mg/kg IV/IO q8-10”, to a max of 3mg/kg (including initial bolus) [SO]
  - OR
    - Amiodarone 150mg IV/IO [BHO]

#### G. Pulseless Electrical Activity (PEA):
- Perform CPR for 2”
- Perform no more than 10 second rhythm check, and pulse check if rhythm is organized
- CPR for 2” if rhythm unchanged
- IV/IO [SO] Do not interrupt CPR to establish IV/IO

Once IV/IO established, if no pulse after rhythm/pulse check:
- Epinephrine 1:10,000 1mg IV/IO MR q 3-5” [SO]
  - Intubate/PAA [SO]
  - EtCO₂ monitoring [SO]
  - NG/OG prn [SO]

If return of pulses: obtain 12-Lead [SO]

Pronouncement at scene **BHPO**

### Note:
For patients with an EtCO₂ reading of less than 10mm/Hg or for patients in nonperfusing rhythms, consider early Base Hospital contact for disposition/pronouncement at scene.

--Flush IV/IO line with Normal Saline after medication administration. Medication should be administered as soon as possible after rhythm checks. The timing of drug delivery is less important than is the need to minimize interruptions in chest compressions.

- CPR ratio 30:2 compressions to ventilations (compression rate of 100/minute) until patient has been intubated, then the ratio becomes 10:1.
- CPR should be performed during charging of the defibrillator.
### BLS

- **CPR**
  - Begin compressions, after first 30 compressions give first ventilations.
- **AED** if available
- **Assist ventilation**
- **O2 Sat prn**

### ALS

#### G. Asystole:
- Perform CPR for 2”
- **Monitor EKG**
  - Perform no longer than 10 second rhythm check, and pulse check if rhythm is organized
  - CPR for 2” if rhythm unchanged
  - IV/IO **SO** Do not interrupt CPR to establish IV/IO
  - Once IV/IO established, if no pulse after rhythm/pulse check:
    - Epinephrine 1:10,000 1mg IV/IO MR q 3-5” **SO**
      - Intubate **SO**
      - EtCO₂ monitoring **SO**
      - NG/OG prn **SO**

If return of pulses: obtain 12-Lead **SO**

Pronouncement at scene **BHPO**

---

**Note:** For patients with an EtCO₂ reading of less than 10mm/Hg or for patients in nonperfusing rhythms, consider early Base Hospital contact for disposition/pronouncement at scene.

---

- Flush IV/IO line with Normal Saline after medication administration. Medication should be administered as soon as possible after rhythm checks. The timing of drug delivery is less important than is the need to minimize interruptions in chest compressions.
- CPR ratio 30:2 compressions to ventilations (compression rate of 100/minute) until patient has been intubated, then the ratio becomes 10:1.
- CPR should be performed during charging of the defibrillator.
<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• O₂ and/or ventilate prn.</td>
<td>• IV/IO SQ adjust prn</td>
</tr>
<tr>
<td><strong>Jellyfish sting:</strong></td>
<td>• Treat pain as per Pain Management Protocol (S-141)</td>
</tr>
<tr>
<td>• Liberally rinse with alcohol or salt water or vinegar if available, for at least 30 seconds.</td>
<td></td>
</tr>
<tr>
<td>• Consider heat as tolerated (not to exceed 110 degrees). Use warm water if available, not to exceed 110 degrees.</td>
<td></td>
</tr>
<tr>
<td><strong>Stingray or Sculpin injury:</strong></td>
<td></td>
</tr>
<tr>
<td>• Heat as tolerated</td>
<td></td>
</tr>
<tr>
<td><strong>Snakebites:</strong></td>
<td></td>
</tr>
<tr>
<td>• Mark proximal extent of swelling</td>
<td></td>
</tr>
<tr>
<td>• Keep involved extremity at heart level and immobile</td>
<td></td>
</tr>
<tr>
<td>• Remove pre-existing constrictive device</td>
<td></td>
</tr>
<tr>
<td><strong>BLS</strong></td>
<td><strong>ALS</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>• Ensure patent airway</td>
<td>• Monitor EKG</td>
</tr>
<tr>
<td>• O2 Saturation prn</td>
<td>• IV/IO SQ adjust prn</td>
</tr>
<tr>
<td>• O₂ and/or ventilate prn</td>
<td><strong>Severe Hypothermia with Cardiac Arrest:</strong></td>
</tr>
<tr>
<td>• Remove excess/wet clothing</td>
<td>• Hold medications</td>
</tr>
<tr>
<td><strong>Heat Exhaustion:</strong></td>
<td>• Continue CPR</td>
</tr>
<tr>
<td>• Cool gradually</td>
<td>• If defibrillation needed, limit to 1 shock maximum</td>
</tr>
<tr>
<td>• Fanning, sponging with tepid water</td>
<td><strong>Heat Exhaustion:</strong></td>
</tr>
<tr>
<td>• Avoid shivering</td>
<td>• 500ml fluid bolus IV/IO SQ, if no rales</td>
</tr>
<tr>
<td>• If conscious, give small amounts of fluids</td>
<td><strong>Cold Exposure:</strong></td>
</tr>
<tr>
<td><strong>Heat Stroke:</strong></td>
<td>• Gentle warming</td>
</tr>
<tr>
<td>• Rapid cooling</td>
<td>• Blankets, warm packs -not to exceed 110° F</td>
</tr>
<tr>
<td>• Spray with cool water, fan. Avoid shivering</td>
<td>• Dry dressings</td>
</tr>
<tr>
<td>• Ice packs to carotid, inguinal and axillary regions</td>
<td>• Avoid unnecessary movement or rubbing</td>
</tr>
<tr>
<td><strong>Cold Exposure:</strong></td>
<td>• If alert, give warm liquids</td>
</tr>
<tr>
<td>• Gentle warming</td>
<td>• If severe, NPO</td>
</tr>
<tr>
<td>• Blankets, warm packs -not to exceed 110° F</td>
<td>• Prolonged CPR may be indicated</td>
</tr>
<tr>
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<td><strong>Severe Hypothermia with Cardiac Arrest:</strong></td>
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</table>

Document revised: 7/1/2011
Approved:

[Signature]
EMS Medical Director
# Treatment Protocol -- Hemodialysis Patient

**Date:** 7/1/2011

---

<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
</tr>
</thead>
</table>
| • Ensure patent airway  
• O₂ Saturation prn  
• Give O₂  
• Ventilate if necessary  | • Monitor EKG  
• Determine time of last dialysis  

**FOR IMMEDIATE DEFINITIVE THERAPY ONLY:**

• IV access in arm that does not have graft/AV fistula SO. Adjust prn

**If Unable & no other medication delivery route available:**

• Access Percutaneous Vas Catheter SO if present (aspirate 5 mL PRIOR to infusion)  
  **OR**  
• Access graft/AV fistula SO

**Fluid overload with rales:**

• Treat as per S-136 (CHF/Cardiac)

**Symptomatic Patient with Suspected Hyperkalemia (widened QRS complex and peaked T-waves):**

• Obtain 12-Lead EKG

If >72 hours since last dialysis:

• Continuous Albuterol 6ml 0.083% via Nebulizer SO  
• CaCl₂ 250mg IV per SQ  
• NaHCO₃ 1mEq/kg IV x1 per SQ

---

**Note:** Vas Cath contains concentrated dose of Heparin which must be aspirated PRIOR to infusion.
BLS        ALS

- 100% O₂, and/or ventilate prn
- O₂ Saturation prn
- Spinal stabilization when indicated
- Monitor EKG
- IV/IO SO adjust prn
- CPAP at 5-10cm H₂O SO

Reference Policy S-415 for Disposition of Diving Victims

Diving Victims: Any victim who has breathed sources of compressed air below the water’s surface and presents with the following:

- **Minor presentation**: minimal localized joint pain, mottling of the skin surface, localized swelling with pain; none of which are progressive.
- **Major presentation**: symptoms listed above that are severe and/or rapidly progressing, vertigo, altered LOC, progressive paresthesia, paralysis, severe SOB, blurred vision, crepitus, hematemesis, hemoptysis, pneumothorax, trunk pain, or girdle or band-like burning discomfort.

Disposition of Diving Victims:

**Major presentation:**
All patients with a “major” presentation should be transported to UCSD-Hillcrest
Trauma issues are secondary in the presence of a “Major” presentation
If the airway is unmanageable, divert to the closest BEF

**Minor presentation:**
**Major trauma candidate**: catchment trauma center
**Non-military patients**: routine
**Active Duty Military Personnel**: transport to the Military Duty Recompression Chamber if possible. The Base Hospital will contact the Duty Recompression Chamber at (619) 556-7130 to determine chamber location. Paramedics/Base Hospital shall transfer care to Diving Medical Officer (or designee) upon arrival to chamber. Hyperbaric treatment may begin in accordance with military medical protocols.

**Naval Hyperbaric chamber locations:**
- Naval Station 32nd Street and Harbor Drive

Note: If possible, obtain dive computer or records.
Hyperbaric chamber must be capable of recompression to 165 ft.
BLS

MOTHER:
- Ensure patent airway.
- O2 Saturation prn
- O2 ventilate prn
- If no time for transport and delivery is imminent (crowning and pushing), proceed with delivery.
- If no delivery, transport on left side.

Routine Delivery:
- Massage fundus if placenta delivered. (Do not wait on scene)
- Place identification bands on mother and infant.
- Document name of person cutting cord, time cut & address.

Post Partum Hemorrhage:
- Massage fundus vigorously
- Baby to breast
- Trendelenburg position

Eclampsia (seizures):
- Protect airway, and protect from injury

STAT transport for third trimester bleeding to facility with OB services.

ALS

MOTHER:
- Monitor EKG
- IV/IO SO adjust prn

Direct to Labor/Delivery area per BHO if > 20 weeks gestation.

Eclampsia (seizures):
- Versed 0.1mg/kg slow IV/IO to a max dose of 5mg (d/c if seizure stops) SO, MR x1 SO

If no IV/IO:
- Versed 0.2mg/kg IM SO to a max dose 10mg, MR x1 SO
OR
- Versed 0.2mg/kg IN SO to max of 5mg SO, MR x1 SO
### BLS

- Ensure patent airway
- O₂ Saturation prn
- O₂ and/or ventilate prn

**Ingestions:**
- Identify substance

**Skin:**
- Remove clothes
- Brush off dry chemicals
- Flush with copious water

**Inhalation/Smoke/Gas/Toxic Substance:**
- Move patient to safe environment
- 100% O₂ via mask
- Consider transport to facility with hyperbaric chamber for suspected carbon monoxide poisoning for unconscious or pregnant patient

**Contamination with commercial grade ("low level") radioactive material:**

Patients with mild injuries may be decontaminated (removal of contaminated clothing, brushing off of material) prior to treatment and transport. Decontamination proceedings SHALL NOT delay treatment and transport of patients with significant or life-threatening injuries. Treatment of significant injuries is *always* the priority.

### ALS

- Monitor EKG
- IV/IO SO adjust prn

**Ingestions:**
- Charcoal 50Gm PO if ingestion within 60 minutes and recommended by Poison Center SO. Assure patient has gag reflex and is cooperative.

**Symptomatic opioids OD with respiratory rate <12:**
*use with caution in opioid dependent pain management patients.*
- Narcan 2mg IN/IM/IV SO, MR SO, titrate IV dose to effect
- If patient refuses transport, give additional Narcan 2 mg IM SO

**Symptomatic Organophosphate poisoning:**
- Atropine 2mg IV/IM/OO SO, MR x2 q3-5" SO, MR q3-5" BHO

**Extrapyramidal reactions:**
- Benadryl 50mg slow IV/IM SO

**?Tricyclic OD with cardiac effects (e.g. hypotension, heart block, or widened QRS):**
- NaHCO₃ 1mEq/kg IV/IO SO

**In suspected cyanide poisoning:** if cyanide kit is available on site (e.g. industrial site) may administer if patient is exhibiting significant symptoms:
- Amyl Nitrite inhalation (over 30 seconds) BHPO
- Sodium Thiosulfate 25%, 12.5 grams IV BHPO OR
- Hydroxocobalamin (Cyanokit) 5g IV BHPO

---

**NOTE:** For scene safety, consider HAZMAT activation as needed.

In symptomatic opioids OD (excluding opioid dependent pain management patients) administer Narcan IN/IM prior to IV.
### BLS

**Hyperthermia from Stimulant Intoxication:**
- Initiate cooling measures

### ALS

**Symptomatic Stimulant Intoxication:**
If sudden hypoventilation, oxygen desaturation or apnea:
- High flow O₂
- Ventilate
- 500 ml fluid bolus IV/IO

**For Severe Agitation:**
- Versed 0.2mg/kg IM to max dose 10mg, MR x1
- Versed 0.2mg/kg IN to max of 5 mg, MR x1
- Versed 0.1 mg/kg IV, max 5 mg

Note: For severely agitated patient IN/IM Versed is preferred route to decrease risk of injury to patient and personnel.
## Treatment Protocol -- Pre-existing Medical Interventions

### BLS

Proceed with transport when person responsible for operating the device (the individual or another person) is able to continue to provide this function during transport.

**Previously established electrolyte and/or glucose containing peripheral IV lines:**
- Maintain at preset rates
- Turn off when indicated

**Previously applied dermal medication delivery systems:**
- Remove dermal NTG when indicated (CPR, shock) **SO**

**Previously established IV medication delivery systems and/or other preexisting treatment modalities with preset rates:**

If the person responsible for operating the device is unable to continue to provide this function during transport, contact the BH for direction.

**BH may ONLY direct BLS personnel to**
1. Leave device as found OR turn the device off; **THEN**,
2. Transport patient OR wait for ALS arrival.

**Transports to another facility or to home:**
- No wait period is required after medication administration.

- If there is a central line, the tip of which lies in the central circulation, the catheter **MUST** be capped with a device which occludes the end.

- IV solutions with added medications OR other ALS treatment/monitoring modalities require ALS personnel (or RN/MD) in attendance during transport.

Note: Consider early base hospital contact.

### ALS

**Previously established electrolyte and/or glucose containing IV solutions:**
- Adjust rate or d/c **BH**

**Previously applied topical medication delivery systems:**
- Remove dermal medications when indicated (CPR, shock) **SO**

**Pre-existing external vascular access (considered to be IV TKO):**
- To be used for definitive therapy ONLY

**Previously established and labeled IV medication delivery systems with preset rates and/or other preexisting treatment modalities:**
- d/c **BH**

**If no medication label or identification of infusing substance:**
- d/c **SO**

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Approved:

[Signature]
EMS Medical Director
**BLS**

- Ensure patent airway
- Reassurance
- O₂ Saturation prn
- O₂ and/or ventilate prn
- May assist patient to self medicate own prescribed MDI ONE TIME ONLY. Base Hospital contact required prior to any repeat dose.

**ALS**

- Monitor EKG
- EtCO₂ monitoring SO
- IV/IO SO, adjust prn
- Intubate SO prn
- NG/OG prn per SO

**Respiratory Distress ? CHF/cardiac origin:**

NTG SL:
- If systolic BP > 100 but <150:
  - NTG 0.4mg SL SO, MR q3-5” SO
- If systolic BP > 150:
  - NTG 0.8mg SL SO, MR q3-5” SO
- If systolic BP > 100
  - NTG Ointment 1” SO
- If systolic BP < 100:
  - NTG 0.4mg SL per BHPO MR BHPO

CPAP at 5-10cm H₂O SO

**Respiratory Distress ? Asthma/COPD/Respiratory Origin:**

- Albuterol 6ml 0.083% via nebulizer SO, MR SO
- Atrovent 2.5ml 0.02% via nebulizer added to first dose of Albuterol SO
- CPAP at 5-10cm H₂O SO

If severe respiratory distress or inadequate response to Albuterol/Atrovent consider:

- Epinephrine 0.3mg 1:1000 IM SO, MR x2 q10” SO

If KNOWN cardiac history or history of hypertension, or BP >150, or age >40 years and no definite history of asthma:

- Epinephrine 0.3mg 1:1000 IM BHPO MR x2 q10” BHPO

---

**Note:**
- If any patient has taken an erectile dysfunction medication such as Viagra, Cialis, and Levitra within 48 hours, NTG is contraindicated.
- May encounter patients taking similar medication for pulmonary hypertension, usually Sildenafil (trade name: Revatio, Flolan, Veletri). NTG is contraindicated in these patients as well.
- Use caution with CPAP if ?COPD, start low and titrate pressure.

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Approved:

[Signature]
EMS Medical Director
BLS / ALS

- Ensure patent airway
- \( \text{O}_2 \) and/or ventilate prn
- Advise patient not to bathe or change clothes
- Consult with law enforcement on scene for evidence collection

If the patient requires a medical evaluation:
- Transport to the closest, most appropriate facility.
- Law enforcement will authorize and arrange an evidentiary exam after the patient is stabilized.

If only evidentiary exam is needed:
- Should release to law enforcement for transport to a SART facility.
## SUBJECT: TREATMENT PROTOCOL -- SHOCK

**Date: 7/1/2011**

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### BLS

**Shock:**
- O₂ Saturation prn
- O₂ and/or ventilate prn
- Control obvious external bleeding
- Treat associated injuries
- NPO, anticipate vomiting
- Remove transdermal Fentanyl and/or NTG patch

---

### ALS

**Shock:**
- Monitor EKG
- IV/IO SO

**Shock: Hypovolemic:**
- 500ml fluid bolus IV/IO SO
- MR to maintain BP > 90 SO

**Shock: (? Anaphylactic, Neurogenic):**
- 500ml fluid bolus IV/IO SO
- MR to maintain BP > 90 SO

If BP refractory to fluid boluses:
- Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip.
  - Titrate BP > 90 BHO

**Shock (? cardiac etiology):**
- 250ml fluid bolus IV/IO with clear lungs SO
- MR to maintain BP > 90 SO

If BP refractory to fluid bolus:
- Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip.
  - Titrate BP > 90 BHO

**Shock: (? Septic):**
- If history suggestive of infection and two or more of the following are present suspect sepsis and report:
  1. Temperature ≥100.4 or <96.0
  2. HR ≥90 (except for patients on beta blockers)
  3. RR ≥20
- 500ml fluid bolus IV/IO SO, MR to maintain BP > 90 SO

If BP refractory to fluid boluses:
- Dopamine 400mg/250ml @ 10-40 mcg/kg/min IV/IO drip.
  - Titrate BP > 90 BHO

---

Document revised 7/1/2011
Approved:

[Signature]

EMS Medical Director
**COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES**
**POLICY/PROCEDURE/PROTOCOL**

**SUBJECT: TREATMENT PROTOCOL -- TRAUMA**

**Date: 7/1/2011**

---

### BLS
- Ensure patent airway, protecting C-spine
- Spinal stabilization prn. (Except in penetrating trauma without neurological deficits.)
- \( O_2 \) Saturation prn
- \( O_2 \) and/or ventilate prn
- Control obvious bleeding
- Keep warm

### Abdominal Trauma:
- Cover eviscerated bowel with saline pads

### Chest Trauma:
- Cover open chest wound with three-sided occlusive dressing; release dressing if tension pneumothorax develops.

### Extremity Trauma:
- Splint neurologically stable fractures as they lie. Use traction splint as indicated.
- Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting per BHO
- Apply tourniquet in severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage.
- In Mass Casualty direct pressure not required prior to tourniquet application

### Impaled Objects:
- Immobilize & leave impaled objects in place.
  - Remove BHPO
- **Exception:** may remove impaled object in face/cheek or from neck if there is total airway obstruction.

### Neurological Trauma (head and spine injuries):
- Ensure adequate oxygenation without hyperventilating patient. Goal: 6-8 ventilations/minute

### Pregnancy of > 6mo:
- Where spinal stabilization precaution is indicated, tilt on spine board 30 degrees.

### Blunt Traumatic Arrest: Consider pronouncement at scene BHPO

---

### ALS
- Monitor EKG
- IV/IO SO
- If MTV IV/IO en route SO
- 500ml fluid bolus to maintain BP at 80
- EtCO\(_2\) monitoring, SO
- Treat pain as per Pain Management Protocol (S-141)

Crush injury with extended compression > 2 hours of extremity or torso:

#### Just prior to extremity being released:
- 500ml fluid bolus IV/IO, then TKO SO
- \( CaCl_2 \) 250mg IV/IO over 30 seconds BHPO
- \( NaHCO_3 \) 1mEq/kg IV/IO BHPO

#### Grossly angulated long bone fractures
- Reduce with gentle unidirectional traction for splinting SO

#### Severe Respiratory Distress with unilateral absent breath sounds and systolic BP < 90 in intubated or positive pressure ventilated patients:
- Needle thoracostomy SO

### Blunt Traumatic Arrest:
- Consider pronouncement at scene*

---

*Document revised 7/1/2011*

*Approved:

[Signature]

EMS Medical Director
TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-460 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Designated Pediatric Trauma Center, EXCEPT in the following situations:

1. Adult + Child:
   a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are other questions, both may be delivered to the designated adult trauma center.
   b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to pediatric trauma facility and the adult to the catchment area trauma facility.

2. Bypass/Diversion: If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to UCSD.

3. A <15 year old pregnant patient should be delivered to the UCSD.

*Reference Policy S-402 Prehospital Determination of Death
A. One person will assume responsibility for all scene medical communication

B. Only one (1) BH will be contacted during the entire incident.

C. Prehospital providers will utilize Simple Triage and Rapid Treatment (START) guidelines to determine priorities of treatment and transport

D. If staffing resources are limited, CPR need not be initiated for arrest victims, however, if CPR has been initiated prior to arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is present*:
   1) subsequent recognition of obvious death
   2) BHPO
   3) presence of Advance Health Care Directive that specifies DNR status, DNR Form/Order or Medallion
   4) lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention

E. Radio communication for multi-patient incident (MPI) need only include the following on each patient:
   1. patient number assignment (i.e., #1, #2 . . .)
   2. age
   3. sex
   4. mechanism
   5. chief complaint
   6. abnormal findings
   7. treatment initiated
   8. ETA
   9. destination
   10. transporting unit number

F. Radio Communication for multi-casualty incident (MCI) or Annex D activation need only include the following on each patient:
   1. patient number if assigned (i.e., #1, #2 . . .)
   2. triage category (Immediate, Delayed, Minor)
   3. destination
   4. transporting unit number

* Reference Policy S-402 Prehospital Determination of Death
BLS

- Assess level of pain
- Ice, immobilize and splint when indicated
- Elevation of extremity trauma when indicated

ALS

<table>
<thead>
<tr>
<th>Pain score assessment of &lt; 5:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue to monitor and reassess pain as appropriate</td>
</tr>
</tbody>
</table>

For treatment of pain score assessment of >5 with BP >100 systolic:

Titrate to pain and vital signs:

- MS 2-10mg IV to max 10mg SO
  MR to max 20mg BHCO OR
- MS 2-10mg IM SO, MR to max 20mg BHDO OR
- MS 10mg PO SO, MR to max 30mg BHCO OR

BHPO for:

- Chronic pain states
- Isolated head injury
- Acute onset severe headache
- Drug/ETOH intoxication
- Multiple trauma with GCS <15
- Suspected active labor
- Abdominal pain

For nausea and/or vomiting with MS administration:

- Zofran 4mg IV/IM/ODT SO, MR x1 q10" SO

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment. ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.

The parenteral dose relative strength of MS is three times the oral dose of MS.
<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure patent airway, O₂ and/or ventilate prn</td>
<td>Monitor EKG/ O₂ Saturation prn IV SO adjust prn</td>
</tr>
<tr>
<td>• Treat life threatening injuries</td>
<td><strong>For Severe Agitation:</strong></td>
</tr>
<tr>
<td>• Attempt to determine if behavior is related to injury, illness or drug use.</td>
<td>Versed 0.2mg/kg IM, max dose 10mg, MR x1 <strong>SO</strong></td>
</tr>
<tr>
<td>• Restrain only if necessary to prevent injury. Document distal neurovascular status q15’. Avoid unnecessary sirens.</td>
<td>OR</td>
</tr>
<tr>
<td>• Consider law enforcement support and/or evaluation of patient.</td>
<td>Versed 0.2mg/kg IN, max of 5mg <strong>SO</strong>, MR x1 <strong>SO</strong></td>
</tr>
<tr>
<td>• Law enforcement should remove taser barbs, but EMS may remove barbs if they present a needle stick danger.</td>
<td>OR</td>
</tr>
</tbody>
</table>

**Note:** For severely agitated patient IN or IM Versed is preferred route to decrease risk of injury to patient and personnel.

**Consideration for patients presenting with taser barbs:**

- Taser discharge for simple behavioral control is usually benign and does not require transport to BEF for evaluation.
- Patients, who are injured, appear to be under the influence of drugs, present with altered mental status, or symptoms of illness should have a medical evaluation performed by EMS personnel, and transported to a BEF.
- If barbs are impaled in an anatomically sensitive location such as the eye, face, neck, finger/hand or genitalia the patient should be transported to a BEF.
Upon identification of a scene involving suspected or known exposure of nerve agent:
Isolate Area
Notify dispatch of possible Mass Casualty Incident with possible Nerve Agent involvement.
DO NOT ENTER AREA

If exposed:
Blot off agent
Strip off all clothing, avoiding contact with outer surfaces.
Flush area(s) with copious amounts of water
Cover affected area(s)

If you begin to experience any signs/symptoms of nerve agent exposure, for example:
- Increased secretions (tears, saliva, runny nose, sweating)
- Diminished vision
- SOB
- Nausea, vomiting diarrhea
- Muscle twitching/weakness
NOTIFY THE INCIDENT COMMANDER (or dispatch if no IC) immediately of your exposure and declare yourself a patient

Self Treat Immediately per the following Acuity Guidelines:

**Mild:**
- Miosis, rhinorrhea, increasing dyspnea, fasciculations, sweating
- Atropine autoinjector (or 2 mg) IM
- 2-PAM CI autoinjector (or 600 mg) IM

**Moderate:**
- Miosis, rhinorrhea, dyspnea/wheezing, increased secretions, fasciculations, muscle weakness, GI effects
- Atropine Autoinjector (or 2 mg) IM, MR x1 in 5-10"
- 2-PAM CI autoinjector (or 600 mg) IM, MR x1 in 5-10"
*Diazepam autoinjector or Midazolam 5 mg IM if Diazepam autoinjector not available

**Severe:**
- Unconscious, seizures, flaccid, apnea
Initial dosing:
- Atropine autoinjector (or 2 mg) IM x3 doses in succession
- 2-PAM CI autoinjector (or 600 mg) IM x3 doses in succession
* Diazepam autoinjector, or Midazolam 10mg IM if Diazepam autoinjector not available, for seizure activity
O₂ /Intubate

Ongoing treatment:
- Atropine autoinjector (or 2 mg) IM q3-5" until secretions diminish
- 2-PAM CI autoinjector (or 600 mg) IM, MR x1 in 3-5"
For continuous seizure activity MR Midazolam 10 mg IM x1 in 10"

**Pediatric doses:**
<table>
<thead>
<tr>
<th>Weight</th>
<th>Atropine</th>
<th>2-PAM CI</th>
<th>Midazolam</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20kg</td>
<td>0.5mg</td>
<td>100mg</td>
<td>2.5mg</td>
</tr>
<tr>
<td>20-39kg</td>
<td>1mg</td>
<td>300mg</td>
<td>5.0mg</td>
</tr>
<tr>
<td>&gt;40kg</td>
<td>2mg</td>
<td>600mg</td>
<td>10mg</td>
</tr>
</tbody>
</table>

*For doses less than the amount in the Autoinjector, use the medication vial and administer with a syringe.*

Consider: For frail, medically compromised, hypertensive or patients with renal failure administer half doses of Atropine and 2-PAM CI

---

Note: *Diazepam autoinjectors available from Chempack caches only.
Diazepam, Atropine and 2-Pam CI autoinjectors are approved for self-treatment, treatment of public safety personnel, and the treatment of patients ONLY by prehospital personnel who have completed the County of San Diego approved training specific to the use of autoinjectors.

Document revised 7/1/2011
Approved:

[Signature]
EMS Medical Director
## PEDIATRIC TREATMENT PROTOCOL -- AIRWAY OBSTRUCTION

### BLS

For a conscious patient:
- Reassure, encourage coughing
- O₂ prn

For inadequate air exchange: airway maneuvers (AHA)
- Abdominal thrusts
- Use chest thrusts in the obese or pregnant patient

**NOTE:**
5 Back Blows and Chest thrusts for infants <1 year. MR prn

If patient becomes unconscious OR is found unconscious:
Begin CPR

**Once obstruction is removed:**
- O₂ Saturation prn
- High flow O₂, ventilate prn

**NOTE:** If suspected epiglottitis:
- Place patient in sitting position
- Do not visualize the oropharynx

STAT transport
Treat as per Respiratory Distress Protocol S-167.

### ALS

If patient becomes unconscious or has a decreasing LOC:
Direct laryngoscopy and Magill forceps SO. MR prn

**Once obstruction is removed:**
- Monitor EKG
- IV/IO SO adjust prn

Note: If unable to secure airway, transport STAT while continuing CPR (unconscious patient).
### BLS
- Ensure patent airway, O₂ and/or ventilate prn.
- O₂ Saturation
- Spinal stabilization when indicated.
- Secretion problems; position on affected side.
- Do not allow patient to walk.
- Restrain prn.

### ALS
- IV SO adjust prn
- Monitor EKG /blood glucose prn

#### Symptomatic opioid OD (excluding opioid dependent pain management patients):
- Narcan per drug chart IN/IV/IM SO, MR SO

#### Symptomatic opioids OD in opioid dependent pain management patients:
- Narcan titrate per drug chart IV (dilute IV dose to 10mL with NS) or IN/IM per drug chart SO, MR BIO

### Hypoglycemia (suspected) or patient’s glucometer results, if available, read <60 mg/dL (Neonate <45 mg/dL):
- If patient is awake and has gag reflex, give oral glucose paste or 1 tablet. Patient may eat or drink if able.
- If patient is unconscious, NPO

### Seizures:
- Protect airway, and protect from injury
- Treat associated injuries
- If febrile, remove excess clothing/covering

### Behavioral Emergencies:
- Restrain only if necessary to prevent injury.
- Avoid unnecessary sirens
- Consider law enforcement support

### Hypoglycemia:
Symptomatic patient unresponsive to oral glucose agents:
- D₂₅ per drug chart IV SO if BS <60mg/dL (Neonate <45 mg/dL)
- If patient remains symptomatic and BS remains <60 mg/dL (Neonate <45 mg/dL) MR SO
- If no IV: Glucagon per drug chart IM SO if BS <60 mg/dL (Neonate <45 mg/dL)

### Seizures:
For:
- A. Ongoing generalized seizure lasting >5" (includes seizure time prior to arrival of prehospital provider) SO
- B. Focal seizure with respiratory compromise SO
- C. Recurrent seizures without lucid interval SO

GIVE:
- Versed per drug chart slow IV, (d/c if seizure stops) SO MR x1 SO
- If no IV: Versed per drug chart IN/IM SO, MR x1 SO

Note: Versed not required for simple febrile seizures
## BLS
- Ensure patent airway
- O₂ Saturation prn
- O₂ and/or ventilate prn
- Remove sting/injection mechanism
- May assist patient to self medicate own prescribed EpiPen or MDI **ONE TIME ONLY.**

Base Hospital contact required prior to any repeat dose.

## ALS
- Monitor EKG
- IV/IO **SO** adjust prn

### Allergic Reaction: mild (rash, urticaria):
- Benadryl per drug chart IV/IM **SO**

### Allergic Reaction: acute (facial/cervical angioedema, bronchospasm or wheezing):
- Epinephrine 1:1000 per drug chart IM **SO** MR x2 q10" **SO**
- Benadryl per drug chart IV/IM **SO**
- Albuterol per drug chart via nebulizer **SO** MR **SO**
- Atrovent per drug chart via nebulizer added to first dose of Albuterol **SO**.

### Anaphylaxis (shock or cyanosis):
- Epinephrine 1:1000 per drug chart IM **SO** MR x2 q10" **SO**
- Fluid bolus IV/IO per drug chart **SO**. MR to maintain systolic BP \( \geq [70 + (2 \times \text{age})] \) **SO**
- Benadryl per drug chart IV/IM **SO**
- Albuterol per drug chart via nebulizer **SO** MR **SO**
- Atrovent per drug chart via nebulizer added to first dose of Albuterol **SO**.

- Epinephrine 1:10,000 per drug chart IV/IO **BHO**. MR x2 q3-5" **BHO**
### BLS

- Assess level of consciousness
- O₂ Saturation prn
- Determine peripheral pulses
- Ensure patent airway, O₂ and/or ventilate prn

- Pulseless and unconscious, use AED if available. If pediatric pads not available may use adult pads but ensure they do not touch each other when applied.

- When heart rate indicates and patient is unstable ventilate per BVM for 30 seconds, reassess HR and begin compression if indicated:
  - **Heart rate:**
    - <9 yrs HR <60 bpm
    - 9-14 yrs HR <40 bpm

**Unstable Dysrhythmia:**

Includes heart rate as above and any of the following:

- Poor Perfusion (cyanosis, delayed capillary refill, mottling)
  - OR
  - Altered LOC, Dyspnea
  - OR
  - BP <[70+ (2 x age)]
  - OR
  - Diminished or Absent Peripheral Pulses

Note: ?dehydration may cause tachycardias up to 200/min.

### ALS

- Monitor EKG
- IV/IO SO

- Fluid bolus IV/IO per drug chart with clear lungs SO. MR to maintain systolic BP ≥ [70 + (2x age)] SO

**A. Unstable Bradycardia:** Heart rate:

- Infant/Child (<9 yrs) <60 bpm
- Child (9-14yrs) <40 bpm

- Ventilate per BVM for 30 seconds, then reassess HR prior to compressions and drug therapy.

- Epinephrine 1:10,000 per drug chart IV/IO SO. MR x2 q3-5” SO. MR q3-5” BHPO

After 3rd dose of Epinephrine:

- Atropine per drug chart IV/IO SO. MR x1 in 5” SO

**B. Supraventricular Tachycardia**

- <4yrs >240bpm
- >4 yrs >200bpm

- VSM per SO. MR SO

- Adenosine per drug chart rapid IV BHPO follow with 20ml NS IVP
- Adenosine per drug chart rapid IV BHPO follow with 20ml NS IVP

- If no sustained rhythm change, MR x1 BHPO

- Versed per drug chart IV prn precordialversion per BHPO

- Synchronized cardioversion per drug chart** BHPO. MR per drug chart BHPO
BLS

- O₂ and/or ventilate prn
- CPR
  Begin compressions, after first 30 compressions give first ventilations.

- Use AED if, pulseless and unconscious, and AED is available. If pediatric pads not available may use adult pads but ensure they do not touch each other when applied.

ALS

C. **VF/pulseless VT:**

- Begin CPR. If arrest **witnessed** by medical personnel, perform CPR until ready to defibrillate. **If unwitnessed arrest,** **perform CPR** x2 **min.**
- Defibrillate per drug chart x1 **SO**
- Resume CPR for 2 minutes immediately after shock
- Perform no more than 10 second rhythm check, and pulse check if rhythm is organized
- Defibrillate per drug chart** for persistent VF/pulseless VT prn **SO**
- Continue CPR for persistent VF/pulseless VT. Repeat 2 minute cycle followed by rhythm/pulse check, followed by defibrillation/medication, if indicated

- IV/IO **SO** Do not interrupt CPR to establish IV/IO
- Once IV/IO established, if no pulse after rhythm/pulse check:
  - Epinephrine 1:10,000 per drug chart IV/IO MR x2 q3-5" **SO**
    - MR q3-5" **BHO**
  - BVM, if unable to adequately ventilate via BVM intubate **SO**
  - Avoid interruption of CPR
  - EtCO₂ monitoring **SO**
  - NG/OG prn **SO**

Note: For patients with an EtCO₂ reading of less than 10mm/Hg or patients in nonperfusing rhythms after resuscitative effort, consider early Base Hospital contact for disposition/pronouncement at scene.
- Medication should be administered as soon as possible after rhythm checks. The timing of drug delivery is less important than is the need to minimize interruptions in chest compressions.
- Flush IV line with Normal Saline after medication administration
- CPR should be performed during charging of defibrillator.
## BLS

• O₂ and/or ventilate prn

• CPR
  Begin compressions, after first 30 compressions give first ventilations.

## ALS

### D. Post conversion VT/VF with pulse ≥ 60 (including witnessed spontaneous conversion, AED, reported or witnessed ≥ 2x AICD).
If initial dose already given, continue with repeat doses as appropriate.

- Lidocaine per drug chart IV/IO SQ, MR x2 q8-10” SQ

### E. Pulseless Electrical Activity (PEA)/Asystole:

- Perform CPR x2”
- Perform no more than 10 second rhythm check, and pulse check if rhythm is organized
- CPR for 2”
- IV/IO SQ Do not interrupt CPR to establish IV/IO
- Once IV/IO established, if no pulse after rhythm/pulse check:
  - Epinephrine 1:10,000 per drug chart IV/IO. MR x2 in q3-5” SO, MR q3-5” BHO
  - BVM, if unable to adequately ventilate via BVM, intubate SQ
  - EtCO₂ monitoring SQ
  - NG/OG prn SQ
  - Pronouncement at scene BHPO

Note: For patients with an ETCO₂ reading of less than 10mm/Hg or patients in nonperfusing rhythms after resuscitative effort, consider early Base Hospital contact for disposition/pronouncement at scene.

- Medication should be administered as soon as possible after rhythm checks. The timing of drug delivery is less important than is the need to minimize interruptions in chest compressions.
- Flush IV line with Normal Saline after medication administration
- CPR should be performed during charging of defibrillator.

**Or according to defibrillator manufacturer’s recommendations
<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• O₂ and/or ventilate prn</td>
<td>• IV SO adjust prn</td>
</tr>
<tr>
<td><strong>Jellyfish Sting:</strong></td>
<td>• Treat pain as per Pain Management Protocol (S-173)</td>
</tr>
<tr>
<td>• Liberally rinse with salt water or alcohol or vinegar, if available, for at least 30 seconds.</td>
<td></td>
</tr>
<tr>
<td>• Consider heat as tolerated (not to exceed 110 degrees). Use warm water if available, not to exceed 110 degrees.</td>
<td></td>
</tr>
<tr>
<td><strong>Stingray or Sculpin Injury:</strong></td>
<td></td>
</tr>
<tr>
<td>• Heat as tolerated</td>
<td></td>
</tr>
<tr>
<td><strong>Snakebites:</strong></td>
<td></td>
</tr>
<tr>
<td>• Mark proximal extent of swelling</td>
<td></td>
</tr>
<tr>
<td>• Keep involved extremity at heart level and immobile</td>
<td></td>
</tr>
<tr>
<td>• Remove pre-existing constrictive device</td>
<td></td>
</tr>
</tbody>
</table>
**BLS**

- Ensure patent airway
- O₂ Saturation prn
- O₂ and/or ventilate prn

**Skin:**
- Remove clothes
- Brush off dry chemicals
- Flush with copious water

**Inhalation of Smoke/Gas/Toxic Substance:**
- Move patient to safe environment
- 100% O₂ via mask
- Consider transport to facility with hyperbaric chamber for suspected carbon monoxide poisoning in the unconscious or pregnant patient.

**Ingestions:**
- Identify substance

**NOTE:** For scene safety, consider HAZMAT activation as needed

**In symptomatic ?opioids OD (excluding opioid dependent pain management patients)**

- Monitor EKG
- IV/IO SQ adjust prn

**Ingestions:**
- Charcoal per drug chart PO if ingestion within 60 minutes and recommended by Poison Center SQ,
- Assure child has gag reflex and is cooperative.

**Symptomatic ?opioid OD (excluding opioid dependent pain management patients):**

- Narcan per drug chart IN/IV/IM SQ, MR SO

**Symptomatic ? opioid OD in opioid dependent pain management patients:**

- Narcan titrate per drug chart IV (dilute IV dose to 10ml with NS) or IN/IM SQ, MR BHO

**Symptomatic organophosphate poisoning:**

- Atropine per drug chart IV/IM/IO SQ, MR x2 q3-5” SQ, MR q3-5” prn BHO

**Extrapyramidal reactions:**

- Benadryl per drug chart slow IV/IM SQ

**? Tricyclic OD with cardiac effects (hypotension, heart block, widened QRS):**

- NaHCO₃ per drug chart IV x1 BHO

---

**ALS**

- Monitor EKG
- IV/IO SO adjust prn

**Ingestions:**

- Charcoal per drug chart PO if ingestion within 60 minutes and recommended by Poison Center SQ,
- Assure child has gag reflex and is cooperative.

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**Extrapyramidal reactions:**

- Benadryl per drug chart slow IV/IM SQ

**? Tricyclic OD with cardiac effects (hypotension, heart block, widened QRS):**

- NaHCO₃ per drug chart IV x1 BHO

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Approved:

[Signature]
EMS Medical Director
BLS

- Ensure patent airway.
- Suction baby's airway if excessive secretions causing increased work of breathing, first mouth, then nose, suction after fully delivered.
- O2 Saturation prn. O2 or ventilate via BVM 100% O2 prn
- Clamp and cut cord between clamps following delivery (wait 60 seconds after delivery prior to clamping and cutting cord.)
- Keep warm & dry (wrap in warm, dry blanket). Keep head warm.
- APGAR at 1’ and 5’
- Document name of person cutting cord, time cut & address of delivery.
- Place identification bands on mother and infant.

Premature and/or Low Birth Weight Infants:
- If amniotic sac intact, remove infant from sac after delivery.
- STAT transport
- When HR <100bpm, ventilate 100% O2
- If HR <60 bpm after 30 seconds of ventilation, start CPR.
- CPR need NOT be initiated if there are no signs of life AND gestational age is <20 weeks.

Meconium delivery:
- Suction if baby is not vigorous after delivery
- If mechanical suction is used, keep pressure between 80 and 100cm H2O, otherwise use bulb syringe.

Cord wrapped around neck:
- Slip the cord over the head and off the neck; clamp and cut the cord if wrapped too tightly.

Prolapsed cord:
- Place the mother in shock position with her hips elevated on pillows, or knee chest position.
  - Insert a gloved hand into the vagina and gently push the presenting part off the cord.
- Transport STAT while retaining this position. Do not remove hand until relieved by hospital personnel.

Breech Birth:
- Allow infant to deliver to the waist without active assistance (support only);
- When legs and buttocks are delivered, the head can be assisted out. If head does not deliver within 1-2 min insert a gloved hand into the vagina and create an airway for the infant.
- Transport STAT if head undelivered.

Disposition: Direct to Labor/Delivery area per BHO.

ALS

- Monitor
- Ventilate via BVM 100% O2 if HR<100 bpm

If HR remains <60 bpm after 30 seconds of ventilation:
- CPR and BVM, if unable to adequately ventilate via BVM intubate SO
- NG prn SO

If HR remains <60 bpm after 30 seconds of CPR:
- Epinephrine 1:10,000 per drug chart IV/IO SO. MR x2 q3-5” SO. MR q3-5” BHO
### BLS
- Ensure patent airway
- Dislodge any airway obstruction
- \( O_2 \) Saturation
- Transport in position of comfort
- Reassurance
- \( O_2 \) and/or ventilate prn
- May assist patient to self medicate own prescribed MDI **ONE TIME ONLY**. Base Hospital contact required to any repeat dose.

### ALS
- Monitor EKG
- IV SO adjust prn
- BVM prn, if unable to adequately ventilate via BVM intubate SO
- EtCO₂ monitoring SO
- **Respiratory Distress with bronchospasm**:
  - Albuterol per drug chart via nebulizer SO, MR SO
  - Atrovent per drug chart via nebulizer added to first dose of Albuterol SO
- **If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent** consider:
  - Epinephrine 1:1,000 per drug chart IM SO
  - MR x2 q10” SO

### Respiratory Distress with stridor at rest:
- Epinephrine 1:1,000 per drug chart via nebulizer SO
  - MR x1 SO

---

**Note:** If history suggests epiglottitis, do NOT visualize airway; utilize calming measures. Avoid Albuterol in Croup
### BLS

<table>
<thead>
<tr>
<th>Shock:</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• O₂ Saturation prn</td>
<td>• Monitor EKG</td>
</tr>
<tr>
<td>• O₂ and/or ventilate prn</td>
<td>• IV/IO SO</td>
</tr>
<tr>
<td>• Control obvious external bleeding</td>
<td>Non cardiogenic Shock:</td>
</tr>
<tr>
<td>• Determine peripheral pulses and capillary refill</td>
<td>• IV/IO fluid bolus per drug chart SO, MR SO if without rales.</td>
</tr>
<tr>
<td>• Assess level of consciousness</td>
<td>Cardiogenic Shock:</td>
</tr>
<tr>
<td>• Keep warm</td>
<td>• IV/IO fluid bolus per drug chart SO, MR BHPO to maintain systolic BP &gt; [70 + (2x age)] if without rales.</td>
</tr>
<tr>
<td>• Treat associated injuries</td>
<td></td>
</tr>
<tr>
<td>• NPO, anticipate vomiting</td>
<td></td>
</tr>
</tbody>
</table>

Document revised: 7/1/2011
Approved:

[Signature]
EMS Medical Director
# Treatment Protocol -- Trauma-Pediatrics

**Date:** 7/1/2011

**Document revised:** 7/1/2011

**Approved:**

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**BLS**

- Ensure patent airway, protecting C-spine
- Spinal stabilization (neuro deficit/blunt trauma) prn
- \( O_2 \) Saturation prn, \( O_2 \) and/or ventilate prn
- Control obvious bleeding
- Keep warm

**Abdominal Trauma:**
- Cover eviscerated bowel with saline pads

**Chest Trauma:**
- Cover open chest wound with three-sided occlusive dressing; release dressing if tension pneumothorax develops.

**Extremity Trauma:**
- Splint neurologically stable fractures as they lie.
- Use traction splint as indicated.
- Grossly angulated long bone fractures with neurovascular compromise
- May be reduced with gentle unidirectional traction for splinting BHO.
- Apply tourniquet in severely injured extremity when direct pressure or pressure dressing fails to control life-threatening hemorrhage. SO
- In Mass Casualty SO

**Impaled Objects:**
- Immobilize & leave impaled objects in place.
- Remove BHO
  
  **Exception:** may remove impaled object in face/cheek, or from neck if there is total airway obstruction.

**Neurological Trauma (Head & Spine Injuries):**
- Assure adequate airway and ventilate without hyperventilation.

**Traumatic Arrest:**
- CPR
- Consider pronouncement at scene BHO

---

**ALS**

- Monitor EKG
- IV/IO SO adjust prn
- If MTV IV/IO en route SO
- IV fluid bolus per drug chart for hypovolemic shock SO. MR to maintain systolic BP > \([70 + (2 \times \text{age})]\) SO
- Treat pain as per Pain Management Protocol S-173.

**Crush injury** with extended compression > 2 hours of extremity or torso:

**Just prior to extremity being released:**
- IV fluid bolus per drug chart BHO
- NaHCO\(_3\) drug chart IV BHO

**Grossly angulated long bone fractures:**
- Reduce with gentle unidirectional traction for splinting per SO

**Severe Respiratory Distress (with unilateral absent breath sounds AND BP < \([70 + (2 \times \text{age})]\) in intubated or positive pressure ventilated patients):**
- Needle thoracostomy BHO

**Traumatic Arrest:**
- Consider pronouncement at scene BHO

---

**Transport Guidelines:**

Routine Disposition-Pediatric patients who meet criteria outlined in T-460 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Designated Pediatric Trauma Center, EXCEPT in the following situations:

1. **Adult + Child:**
   - If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are other questions, both may be delivered to the designated adult trauma center.
   - Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to pediatric trauma facility and the adult to the catchment area trauma facility.
2. **Bypass/Diversion:** If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to UCSD.
3. **A <15 year old pregnant patient should be delivered to UCSD.**

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**Document revised 7/1/2011**

**Approved:**

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[Signature]

EMS Medical Director
BLS

- Move to a safe environment
- Break contact with causative agent
- Ensure patent airway
- O2 saturation prn
- O2 and/or ventilate prn
- Treat other life threatening injuries

Thermal Burns:
- Burns of <10% BSA, stop burning with non-chilled saline or water
- For burns of >10% BSA, cover with dry dressing and keep warm
- Do not allow patient to become hypothermic

Chemical Burns:
- Brush off dry chemicals
- Flush with copious water

Tar Burns:
- Cool with water
- Transport
- Do not remove tar.

ALS

- Monitor EKG for significant electrical injury and prn
- IV/IO SO adjust prn

For patients with >10% 2nd degree or >5% 3rd degree burns:

5-14 yo:
- 250ml fluid bolus IV/IO then TKO SO

<5 yo:
- 150ml fluid bolus IV/IO then TKO SO
- Treat pain as per Pain Management Protocol S-173

In the presence of respiratory distress with bronchospasm:
- Albuterol per drug chart via nebulizer SO MR SQ

Base Hospital Contact and Transport (Per S-415):
Will be made to UCSD Base Hospital for patients meeting burn center criteria:

BURN CENTER CRITERIA
Patients with burns involving:
- ≥ 10% BSA 2nd degree or ≥ 5% BSA 3rd degree
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet, perineum or circumferential
- significant electrical injury due to high voltage (greater than 110 volts)

Disposition:
Consider hyperbaric chamber for suspected CO poisoning in unconscious or pregnant patient.

Document revised 7/1/2011
Approved:
SUBJECT: PEDIATRIC TREATMENT PROTOCOL – ALTE (Apparent Life Threatening Event) Date: 7/1/2011

Document revised: 7/1/2011
Approved:

BLS
- Ensure patent airway
- O₂ Saturation prn
- O₂ and/or ventilate prn.

ALS
- Monitor EKG
- Obtain blood glucose prn
- IV SO prn

Note: If the parent/caretaker refuses medical care and/or transport, contact the base hospital prior to completing a refusal of care form.

Definition:
An Apparent Life-Threatening Event is defined as an episode involving an infant less than 12 months of age that is frightening to the observer and is characterized by one or more of the following:

- Apnea (central or obstructive)
- Color change (cyanosis, pallor, erythema)
- Marked change in muscle tone
- Unexplained choking or gagging

Transport:
Transport to nearest appropriate facility:

- ALS transport, if child is symptomatic
- BLS transport, if child is asymptomatic
- Private transport acceptable for asymptomatic patient IF:
  a. Transportation is available now
  b. The parents/caretaker are reliable
  c. The parents/caretaker understand the importance of evaluation

EMS Medical Director
SUBJECT: PEDIATRIC TREATMENT PROTOCOL – PAIN MANAGEMENT

BLS

- Assess level of pain
- Ice, immobilize and splint when indicated
- Elevation of extremity trauma when indicated

ALS

<table>
<thead>
<tr>
<th>Pain score assessment of &lt; 5:</th>
<th>For treatment of pain score assessment of ≥ 5 with systolic BP ≥ [70 + (2x age in years)]:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue to monitor and reassess pain as appropriate.</td>
<td>• MS IV per drug chart SO MR per drug chart BHO</td>
</tr>
<tr>
<td>OR</td>
<td>• MS IM per drug chart SO, MR per drug chart BHO</td>
</tr>
<tr>
<td>OR</td>
<td>• MS PO per drug chart SO, MR per drug chart BHO</td>
</tr>
</tbody>
</table>

BHPO for:
- Chronic pain states
- Isolated head injury
- Acute onset severe headache
- Drug/ETOH intoxication
- Multiple trauma with GCS <15
- Suspected active labor
- Abdominal pain

Note: ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.

The parenteral dose relative strength of MS is three times the oral dose of MS.
INTRODUCTION

These Protocols define the basic and advanced life support treatment and disposition standards for Prehospital Air Medical Care in San Diego County.

1. Each Advanced Life Support Air Medical Flight Crew will consist of at a minimum, one Registered Nurse and one Physician, Registered Nurse or Paramedic. Each Basic Life Support Flight Crew will consist of at a minimum one EMT.

2. Treatments are listed in sequential order for each condition. Adherence is recommended. All skills follow the criteria in the skills list.

3. All treatments may be performed by the Flight Nurse on standing order unless noted. Any treatment required which is not included in the protocols is at the discretion of the Flight Physician on scene or Base Hospital Physician at the assigned Base Hospital in direct radio communication providing medical direction. Orders not included in the protocols must be within the knowledge, skill, education level and scope of practice of the Flight Nurse.

4. Interfacility transport orders will be given by the physician providing medical control for the patient.

5. The Flight Paramedic will function within the scope of practice and protocols set forth by San Diego County Paramedic Protocols and Skills list and under control of the assigned Base Hospital. All treatments within the San Diego County Paramedic Protocols and Skills may be performed by the Flight Paramedic on standing order unless otherwise noted.

6. The Flight EMT will function within the scope of practice and protocols set forth by County of San Diego BLS Protocols and under the control of the assigned Base Hospital.

Document revised 7/1/2010
Approved:

[Signature]
EMS Medical Director
## SKILLS LIST

<table>
<thead>
<tr>
<th>SKILL</th>
<th>INDICATION</th>
<th>CONTRAINDICATION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broselow Tape</td>
<td>Calculation of pediatric drug dosages.</td>
<td>None</td>
<td>Base dosage calculation on length and weight of patient. Dose may vary per protocol.</td>
</tr>
<tr>
<td>Cardioversion: synchronized</td>
<td>Unstable SVT</td>
<td>If defibrillator unable to deliver &lt;4J/kg</td>
<td>Synchronized cardioversion at 50J, 100J, 200J (biphasic) as needed. Remove NTG patch prior to cardioversion.</td>
</tr>
<tr>
<td></td>
<td>Unstable VT</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Unconscious VT with BP&lt;80 mmHg</td>
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<tr>
<td></td>
<td>Uncontrolled Atrial Fibrillation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carotid Sinus Massage (CSM)</td>
<td>Stable VT</td>
<td>&gt;40 years old</td>
<td>Avoid carotid with weakened pulse. D/C after 5-10 sec if no conversion.</td>
</tr>
<tr>
<td>Chest Tube Insertion</td>
<td>Patients with potential or suspected tension pneumothorax</td>
<td>Contraindicated prior to placement of 2 needle thoracostomies.</td>
<td>Insert chest tube at 4th/5th ICS anterior axillary/mid axillary line. Attach Heimlich valve for transport with drainage system prn.</td>
</tr>
<tr>
<td>Communication: Radio</td>
<td>Base Hospital contact</td>
<td>None</td>
<td>Modes of communication include: mobile radios, EMS radio. Must contact assigned BH MD for orders not within protocols for prehospital patients.</td>
</tr>
<tr>
<td>Defibrillation</td>
<td>VT (pulseless)</td>
<td>None</td>
<td>Defibrillation energy settings as recommended by the defibrillator manufacturer.</td>
</tr>
<tr>
<td></td>
<td>VF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EKG monitoring</td>
<td>Any situation with potential for cardiac dysrhythmia.</td>
<td>None</td>
<td>Apply monitor before moving patient with chest pain, syncope, or in arrest when possible and document strip on record.</td>
</tr>
<tr>
<td>12 lead EKG</td>
<td>Signs and symptoms of pain/discomfort of ?cardiac origin.</td>
<td>None</td>
<td>Consider thrombolytic checklist. Document strip on record. A 12-lead positive for STEMI should immediately be communicated to the Base Hospital.</td>
</tr>
<tr>
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</tr>
<tr>
<td>End Tidal CO2 Detection Device/ Capnography</td>
<td>ET Intubation</td>
<td>None</td>
<td>Monitor after ET insertion and after each time pt is moved. Less accurate in pulseless rhythms and cold/wet patients.</td>
</tr>
<tr>
<td>Esophageal Detection Device-aspiration based (Toomey syringe or bulb device)</td>
<td>After intubation and for reconfirmation of placement.</td>
<td>None</td>
<td>Repeat as needed to reconfirm placement. May use for both ET tube and Combitube.</td>
</tr>
<tr>
<td>External Pacing</td>
<td>Symptomatic bradycardia, heart block.</td>
<td>None</td>
<td>Document rate, MA and capture.</td>
</tr>
<tr>
<td>Glucose Monitoring</td>
<td>Evaluate blood glucose level in diabetics, OD, seizure, altered LOC, ?CVA, behavioral patients.</td>
<td>None</td>
<td>Follow monitor instructions exactly.</td>
</tr>
<tr>
<td>Injection: IM</td>
<td>When IM route indicated.</td>
<td>None</td>
<td>Usual site deltoid Vastus lateralis preferred in infants.</td>
</tr>
<tr>
<td>Intubation-ET/Nasal/Stomal</td>
<td>Apnea, ineffective respirations, or airway control as indicated. Consider RSI as indicated. Replace Combitube with ET only if: ventilations inadequate or need to give ET medications.</td>
<td>Prior to Narcan in symptomatic ?OD</td>
<td>Must not interrupt ventilations for more than 30 sec. Use Broselow Tape recommendations for uncuffed tube on peds and immobilize spine. Newborn ventilate if HR&lt;100, if HR still low after 1&quot; of ventilation, intubate. Auscultate both lung fields. Document SDBREATHE Reconfirm placement of tube after each patient movement Capnography required on every intubation.</td>
</tr>
<tr>
<td>Combitube</td>
<td>Unable to intubate w/ ET</td>
<td>Gag reflex present. Patients &lt; 4.5&quot; tall. Narcotic OD prior to Narcan. Ingestion of caustic substance. Hx of esophageal disease.</td>
<td>Head in neutral position. Use SA size tube in patients 4.5 - 6'5&quot; tall. Reconfirm tube placement with each patient movement.</td>
</tr>
<tr>
<td>Magill forceps</td>
<td>Airway obstruction from foreign body with decreasing LOC or unconsciousness.</td>
<td>None</td>
<td>Once object removed, give high flow O₂. If unsuccessful consider cricothyrotomy</td>
</tr>
</tbody>
</table>

Approved:

[Signature]

EMS Medical Director
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<tr>
<td>Needle Thoracostomy</td>
<td>Signs and symptoms of tension pneumothorax - may include severe respiratory distress, cyanosis, absent breath sounds, hypotension</td>
<td>None</td>
<td>Use 12, 14g, 16 or 18g IV catheter 2-5” long into 4th or 5th ICS in anterior axillary line, on involved side. If lateral chest wall is inaccessible, use 2nd/3rd ICS midclavicular line on involved side. Tape catheter hub securely to chest wall &amp; attach to one-way Heimlich valve.</td>
</tr>
<tr>
<td>NG/OG tube</td>
<td>Uncuffed intubations, near drowning, newborn or any CPR when gastric distention interferes with respirations.</td>
<td>Severe facial trauma. Known esophageal disease</td>
<td>Caution with unconscious pt w/o gag reflex.</td>
</tr>
<tr>
<td>O_{2} Powered Nebulizer</td>
<td>Administration of Albuterol/Atrovent for bronchospasm or croup-like cough.</td>
<td>None</td>
<td>Flow rate 6 l/min. Do not use with humidifier.</td>
</tr>
<tr>
<td>Pericardiocentesis</td>
<td>Signs and symptoms of cardiac tamponade</td>
<td>None</td>
<td>Insert to L of costal margin and xiphoid. Insert catheter with 20cc syringe attached bevel up 1cm left of xiphoid tip. Direct catheter toward toward L scapula. Maintain negative pressure on syringe. When fluid encountered, aspiration of minimal fluid may result in improvement. Remove stylet and attach stopcock and stabilize. Re-aspirate as needed.</td>
</tr>
<tr>
<td>Prehospital Pain Scale</td>
<td>All patients with a traumatic or pain-related chief complaint</td>
<td>None</td>
<td>Assess for presence and intensity</td>
</tr>
<tr>
<td>Prehospital Stroke Scale</td>
<td>All adult patients with suspected Stroke/CVA</td>
<td>None</td>
<td>Assess facial droop, arm drift and speech</td>
</tr>
<tr>
<td>Pulse Oximetry</td>
<td>Monitor patients to assess oxygenation.</td>
<td>None</td>
<td>Unreliable in CO poisoning, poor perfusion states or anemia.</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Restraints</td>
<td>Threat of harm to self/others</td>
<td>None</td>
<td>Document circulation distally every 15 min. Consider chemical restraint. If patient uncontrollable or a risk to flight crew consider ground transport. See Policy S-422</td>
</tr>
<tr>
<td>Spinal Stabilization</td>
<td>Spinal pain of trauma, MOI suggests spinal injury</td>
<td>None</td>
<td>Equipment that limits spinal movement. Pregnant patients (&gt;6mo) tilt 30 degrees left lateral decubitus. Modified as necessary.</td>
</tr>
<tr>
<td>Splinting</td>
<td>Grossly angulated fractures, for transport</td>
<td>Open femur fracture</td>
<td>Use unidirectional traction. Check for distal pulses prior to and q15&quot;.</td>
</tr>
<tr>
<td>Suction: Oral-endotracheal</td>
<td>When secretions impair ventilation</td>
<td>None</td>
<td>Monitor for dysrhythmias. No longer than 30 seconds</td>
</tr>
<tr>
<td></td>
<td>Prior to spontaneous breathing of newborn</td>
<td>Spontaneous breathing</td>
<td>Suction mouth first, then nose, w/bulb syringe as head being delivered. Clamp cord only after suctioning.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Surgical Cricothyrotomy</td>
<td>Airway obstruction or facial trauma when all other means of effective ventilation have been exhausted.</td>
<td>&lt;5 yo</td>
<td>Stabilize trachea, incise skin 1” with scalpel.  Consider use of tracheal hook.  Incise cricothyroid membrane and dilate. Insert trach or ET tube. Ventilate.  Stabilize and secure. Recheck breath sounds.</td>
</tr>
<tr>
<td>Vascular Access Devices:</td>
<td></td>
<td>Devices without external ports</td>
<td>Clear air carefully to avoid embolism.  Aspirate and discard 5ml of blood prior to first use.  Blood return will not be possible in one-way valve-catheters. Needleless systems may require adaptor.</td>
</tr>
<tr>
<td>Indwelling Catheter</td>
<td>Primary venous site for patients with indwelling catheters. Use for definitive therapy ONLY</td>
<td>None</td>
<td>6 or 8.5 Fr catheter used with needle technique 14 or 16 gauge catheter. If femoral artery is punctured, do not remove catheter.</td>
</tr>
<tr>
<td>Central:</td>
<td></td>
<td>None</td>
<td>6 or 8.5 Fr catheter used with needle technique 14 or 16 gauge catheter. If femoral artery is punctured, do not remove catheter.</td>
</tr>
<tr>
<td>Femoral</td>
<td>When a peripheral line or external jugular line cannot be established and venous access is needed.</td>
<td>None</td>
<td>6 or 8.5 Fr catheter used with needle technique 14 or 16 gauge catheter. If femoral artery is punctured, do not remove catheter.</td>
</tr>
<tr>
<td>Subclavian</td>
<td></td>
<td>None</td>
<td>6 or 8.5 Fr catheter used with needle technique 14 or 16 gauge catheter. If femoral artery is punctured, do not remove catheter.</td>
</tr>
<tr>
<td>External jugular</td>
<td>When unable to establish other peripheral IV and venous access is needed.</td>
<td>None</td>
<td>Tamponade vein at end of catheter until tubing is securely attached to cannula end.</td>
</tr>
<tr>
<td>Peripheral</td>
<td>Whenever venous access indicated.</td>
<td>None</td>
<td>Watch IV rate closely.  Monitor lung sounds with fluid challenges.</td>
</tr>
<tr>
<td>Intraosseous infusion device</td>
<td>Fluid/medication administration in critical patient when other venous access unsuccessful.</td>
<td>Fractured bone</td>
<td>Splint extremity.  Observe for signs of extravasation.  Don’t insert into fracture site.</td>
</tr>
<tr>
<td>Percutaneous dialysis catheter access (e.g. Vascath)</td>
<td>Unable to start IV elsewhere when needed for administration of fluid/medications. For life threatening definitive therapy ONLY</td>
<td>None</td>
<td>Infuse at a rate to support continuous flow and prevent backflow into IV line. Needleless systems may require adaptor.  Aspirate and discard 5 ml of blood prior to first use.</td>
</tr>
<tr>
<td>Vital signs: Routine</td>
<td>All patient assessments</td>
<td>None</td>
<td>Palpate BP only when NIBP or auscultation not possible.</td>
</tr>
</tbody>
</table>

Approved:

[Signature]
EMS Medical Director
<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>INDICATIONS</th>
<th>DOSAGE / ROUTE</th>
<th>COMMENTS</th>
<th>CONTRA-INDICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADENOSINE</td>
<td>SVT</td>
<td>6mg rapid IVP follow with 20ml NS. Then 12mg rapid IVP follow with 20ml NS, MR X 1.</td>
<td>Use with extreme caution in patients with history of bronchospasm or COPD. Administer rapid IVP</td>
<td>-Second or third degree AV block Sick Sinus Syndrome (without pacemaker) -Contraindicated for patients on Dipyridamole (Persantine)</td>
</tr>
<tr>
<td>ALBUTEROL</td>
<td>Respiratory distress with bronchospasm Allergic Reaction Burns</td>
<td>6ml 0.83% via nebulizer. MR as necessary.</td>
<td>Inhalation continuous via O₂ powered nebulizer</td>
<td></td>
</tr>
<tr>
<td>AMIODARONE</td>
<td>Stable VT Unstable VT/Pulseless VT/VF</td>
<td>150 mg over 10 minutes MR X 1 in 10 minutes 300mg, followed prn by 150 mg over 10 minutes.</td>
<td>Consider Amiodarone Drip (450mg/250mL D5W) 0.5 –1 mg per minute post conversion rhythm converts after Amiodarone.</td>
<td></td>
</tr>
<tr>
<td>APRESOLINE</td>
<td>Pregnancy Induced Hypertension</td>
<td>5mg IV over 10” MR x 2 q 20’ Titrate to BP diastolic = 90-100mmHg.</td>
<td>Coronary artery disease Mitral valve disease</td>
<td></td>
</tr>
<tr>
<td>ASPIRIN</td>
<td>Pain of ? cardiac origin</td>
<td>324mg chewable PO</td>
<td>Hypersensitivity</td>
<td></td>
</tr>
<tr>
<td>ATIVAN</td>
<td>Altered Neurologic Function-Seizures Behavioral Emergencies Envenomation Injuries Obstetrical Emergencies – Seizures Combative patients</td>
<td>2-4 mg IV/IM MR to a max of 4 mg</td>
<td></td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>ATROPINE SULFATE</td>
<td>Asystole</td>
<td>1mg IVP q3-5 min <strong>OR</strong> 2mg ET (max 3mg absorbed dose)</td>
<td>May be used for second and third degree A-V blocks after trial with pacing.</td>
<td>May cause paradoxical bradycardia in transplant heart patients.</td>
</tr>
<tr>
<td></td>
<td>PEA HR &lt;60 after Epinephrine dose</td>
<td>0.5-1 mg IVP MR q3-5 min until HR&gt;60, clinical improvement or max 3mg</td>
<td>No max dose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symptomatic Bradycardia</td>
<td>2 mg IV, IM MR q3-10 min prn</td>
<td>May be given IO/IV if no IV established.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ventricular Ectopy in the presence of Bradycardia</td>
<td>0.02 mg/kg IVP</td>
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<td></td>
<td>Organophosphate poisoning</td>
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<tr>
<td></td>
<td>RSI Associated bradycardia in pediatric patients</td>
<td></td>
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</tr>
<tr>
<td>ATROVENT</td>
<td>Respiratory Distress with Bronchospasm</td>
<td>2.5ml 0.02% via nebulizer</td>
<td>Added to first dose of albuterol via continuous O₂ powered nebulizer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Severe Respiratory Distress with Bronchospasm</td>
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<tr>
<td></td>
<td>Allergic reaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Burns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BENADRYL (DIPHENHYDRAMINE)</td>
<td>Allergic reaction</td>
<td>50mg IVP 50mg IM</td>
<td>IVP - administer slowly</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>CALCIUM GLUCONATE</td>
<td>Suspected hyperkalemia in hemodialysis patient in presence of widened QRS</td>
<td>10 ml SIVP (4.6 mEq)</td>
<td></td>
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<tr>
<td></td>
<td>complex and peaked T waves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symptomatic Black Widow Spider Bites</td>
<td>10 ml SIVP (4.6 mEq)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARDIAZEM (DILTIAZEM)</td>
<td>Uncontrolled Atrial Fibrillation / Flutter</td>
<td>20 mg IV over 2 minutes, may repeat in 15 minutes</td>
<td>Hold for systolic BP &lt; 100 mmHg. (If SBP &lt; 120 begin with 10 mg dose)</td>
<td>- Sick Sinus Syndrome 2nd or 3rd degree heart blocks - Hypotension / Cardiogenic shock - Recent administration of Beta Blockers - WPW Syndrome or short PR syndrome - VTach - Peds: Not indicated</td>
</tr>
<tr>
<td></td>
<td>SVT: As second line drug after Adenosine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D50 (Dextrose 50%)</td>
<td>Symptomatic hypoglycemia in known diabetic: if BS &lt;75mg/dl</td>
<td>25GM IVP, MR prn</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>if BS unobtainable</td>
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<tr>
<td></td>
<td>Symptomatic hypoglycemia in unknown diabetic: if BS &lt;75mg/dl</td>
<td></td>
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</tr>
<tr>
<td>DOPAMINE HYDROCHLORIDE</td>
<td>Shock in presence of normovolemia Discomfort/Pain of ?cardiac origin with associated shock Anaphylaxis Bradycardia (after max Atropine)</td>
<td>400mg/250ml @ 5-40mcg/kg/min IV drip. Titrate BP= &gt;90 mmHg systolic and other signs of perfusion</td>
<td></td>
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</tr>
<tr>
<td>MEDICATION</td>
<td>INDICATIONS</td>
<td>DOSAGE / ROUTE</td>
<td>COMMENTS</td>
<td>CONTRA-INDICATIONS</td>
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</tr>
<tr>
<td>EPINEPHRINE</td>
<td>Pulseless rhythms</td>
<td>1:10,000 1mg IVP, MR q 3-5” <strong>OR</strong> 1:1,000 2mg ET, MR q 3-5” <strong>OR</strong> 1:1,000 10mg ETAD, MR q 3-5”</td>
<td>1:1000 0.5mg SC/IM, MR q 15” X2 (total 3 doses). 1:1000 0.5 mg SC/IM MRx2 q15 minutes 1:10,000 0.5 mg IVP MR q 15” to max of 1.5 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allergic reaction</td>
<td><strong>1:10,000 1mg IVP, MR q 3-5”</strong></td>
<td>1:1000 0.5mg SC/IM, MR q 15” X2 (total 3 doses).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory Distress with Bronchospasm</td>
<td><strong>1:10,000 1mg IVP, MR q 3-5”</strong></td>
<td>1:1000 0.5mg SC/IM, MR q 15” X2 (total 3 doses).</td>
<td></td>
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<tr>
<td></td>
<td>Anaphylaxis</td>
<td>1:1000 0.5mg SC/IM, MR q 15” X2 (total 3 doses).</td>
<td>1:1000 0.5mg SC/IM, MR q 15” X2 (total 3 doses).</td>
<td></td>
</tr>
<tr>
<td>EPINEPHRINE DRIP</td>
<td>Bradycardia with hypotension</td>
<td>1:1000 1 mg/250 mls NS @ 2-10 mcg/min.</td>
<td>Titrate to effect</td>
<td></td>
</tr>
<tr>
<td>ETOMIDATE</td>
<td>To facilitate endotracheal intubation</td>
<td>20mg IVP Adult</td>
<td><strong>1:1000 1mg IVP, MR q 3-5”</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Combative patients</td>
<td><strong>1:1000 1mg IVP, MR q 3-5”</strong></td>
<td><strong>1:1000 1mg IVP, MR q 3-5”</strong></td>
<td></td>
</tr>
<tr>
<td>FENTANYL (SUBLIMAZE)</td>
<td>Pain management</td>
<td>50-100 mcg IVP initial dose, may titrate to effect IM dose: 100mcg</td>
<td>Maintain SBP &gt;100 and avoid respiratory depression (BP &gt; 90 for burn patients)</td>
<td></td>
</tr>
<tr>
<td>GLUCAGON</td>
<td>Unable to start IV in patient with symptomatic hypoglycemia</td>
<td>1mg (1ml) IM/SC. 1-2 additional doses may be given every 25 minutes if no response</td>
<td>1mg (1ml) IM/SC. 1-2 additional doses may be given every 25 minutes if no response</td>
<td></td>
</tr>
<tr>
<td>MEDICATION</td>
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</tr>
<tr>
<td>Beta Blocker and Calcium Channel Blocker overdoses</td>
<td>2 mg IVP repeat as necessary&lt;br&gt;1 mg IVP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esophageal foreign body obstruction</td>
<td>TKO IV drip, adjust per protocol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTRAVENOUS SOLUTIONS&lt;br&gt;NORMAL SALINE (NS) OR DEXTROSE 5% WATER (D5W)</td>
<td>Definitive therapy or need anticipated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labetolol</td>
<td>Hypertensive Urgency&lt;br&gt;Hypertension with CNS bleed&lt;br&gt;Afib/SVT - Stable&lt;br&gt;Pregnancy Induced Hypertension</td>
<td>20mg IVP slow, MR with 40mg and 80mg at 10 min intervals until symptoms are alleviated, 20% reduction in MAP, or total 300 mg given.&lt;br&gt;2 mg/min IV drip titrate to BP&lt;br&gt;20 mg followed by 40 mg prn then 80 mg prn at q 10” intervals until rate controlled.&lt;br&gt;20mg IVP slow, MR with 40mg and 80mg at 10 min intervals until diastolic BP&lt;100mm Hg.</td>
<td>Asthma&lt;br&gt;Cardiogenic shock&lt;br&gt;Bradycardia&lt;br&gt;Heart block&lt;br&gt;BP &lt;100mmHg</td>
<td></td>
</tr>
<tr>
<td>MEDICATION</td>
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</tr>
<tr>
<td>LIDOCAINE (XYLOCAINE)</td>
<td>VF/ pulseless VT, Stable VT/ Wide complex tachycardia, Oral or Nasal intubation with RSI</td>
<td>Bolus 1-1.5 mg/kg IV / IO. Repeat 0.5-0.75 mg/kg every 5 - 10 minutes up to 3mg/kg for refractory VF. ET Dose is 2 - 4mg/kg. 0.5 – 0.75mg/kg up to 1 – 1.5 mg/kg. Repeat 0.5 to 0.75 mg/kg every 5 -10 min with max total dose of 3 mg/kg. 1-1.5 mg/kg IVP/IO, given 1 minute prior to intubation attempts</td>
<td>Adult doses should be given in increments rounded to the nearest 25mg amount. In the presence of shock, CHF or liver disease, the repeat bolus is recommended at 10&quot; intervals.</td>
<td></td>
</tr>
<tr>
<td>LIDOCAINE DRIP</td>
<td>Post Conversion</td>
<td>1-4 mg/min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIDOCAINE JELLY</td>
<td>Intubation or Nasopharyngeal airway</td>
<td>5ml</td>
<td>Apply to ET tube or nasal airway</td>
<td></td>
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<tr>
<td></td>
<td>(2%) optional</td>
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<tr>
<td>MANNITOL</td>
<td>In the presence of a severe head injury with the presence or development of the following symptoms: • Laterlizing motor signs • Focal sz w/ dec. LOC • Asymmetrical pupillary responses, not due to direct ocular trauma or by history</td>
<td>20% solution in 0.45%NS, 500ml, 0.5 grams/kg over 10-15 min</td>
<td>Systolic BP &lt; 90 mmHg</td>
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<tr>
<td>MEDICATION</td>
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<td>DOSAGE / ROUTE</td>
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</tr>
<tr>
<td>Metoprolol (Lopressor)</td>
<td>Chest pain, Acute MI</td>
<td>5mg SIVP q10min x3 doses</td>
<td>Hold for HR&lt;60 or SBP&lt;100</td>
<td></td>
</tr>
<tr>
<td>MORPHINE SULFATE (MS)</td>
<td>Chest Pain suspected cardiac origin</td>
<td>2-5mg IVP prn 3-5min titrate until pain free or respiratory compromise</td>
<td>Maintain systolic BP &gt;90</td>
<td></td>
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<tr>
<td></td>
<td>Pain management</td>
<td>2-5 mg increments IVP titrated until pain is relieved. 5-10 mg IM/SQ may repeat every 15 minutes as necessary</td>
<td>Maintain systolic BP&gt;100 (burn patients systolic BP&gt;90) and avoid respiratory depression</td>
<td></td>
</tr>
<tr>
<td>NARCAN (NALOXONE HCL)</td>
<td>Symptomatic ? Opioid OD with airway management issues</td>
<td>2 mg IV/IM/DirectIVP, MR to max 10mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NITROGLYCERINE</td>
<td>Pain or discomfort of ?cardiac origin</td>
<td>0.4 mg, SL MR q 5 minutes if SBP &gt;90mmHg. (no max dose)</td>
<td>Use with caution in patients with borderline hypotension, suspected CVA, right sided MI or if other vasodilators given.</td>
<td>Suspected intracranial bleed Current use of Viagra, Cialis, Levitra Shock CPR</td>
</tr>
<tr>
<td></td>
<td>Respiratory distress with rales</td>
<td>0.4 mg SL MR x3 for max dose of 1.6mg, for SBP&gt;100mmHg.</td>
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</tr>
<tr>
<td>NITROGLYCERINE</td>
<td>Pain or discomfort of ?cardiac origin</td>
<td>50 mg/250 NS IV @ 5 -10mcg/min. Increase q 5-10 minutes prn titrate to effect, maintaining SBP&gt;90.</td>
<td>For hypertension (DBP &gt; 120 or SBP &gt;220 may start drip at 20mcg/min and titrate more rapidly. Up to 100 mcg/min may be needed) May be started prior to completion of 3 doses of SL NTG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory Distress with rales</td>
<td>Start at 5 -10mcg/min, titrate until symptom-free, maintaining SBP&gt;100.</td>
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<tr>
<td>MEDICATION</td>
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<tr>
<td>PHENERGAN</td>
<td>Nausea or vomiting</td>
<td>12.5 mg-25 mg IV/IM</td>
<td>IV Phenergan should be mixed in at least 10cc saline and injected slowly (over 5 – 10 minutes) to prevent tissue necrosis</td>
<td></td>
</tr>
<tr>
<td>PITOCIN</td>
<td>Postpartum hemorrhage</td>
<td>20 units /1000 ml NS IV infusion @ max 250 ml per hour</td>
<td>May administer prior to delivery of placenta</td>
<td></td>
</tr>
<tr>
<td>SODIUM BICARBONATE (NaHCO₃)</td>
<td>Pulseless rhythms</td>
<td>1 mEq/kg IVP MR 0.5 mEq/kg IV q 10” up to 1 mEq/kg IVP X 1</td>
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<td></td>
<td>Prolonged immersion in near drowning</td>
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<td></td>
<td>Tricyclic OD with widened QRS</td>
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<td></td>
<td>Hyperkalemia in hemodialysis patient</td>
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<td></td>
<td>Crush Injury</td>
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<tr>
<td>SOLUMEDROL</td>
<td>Allergy / Anaphylaxis Respiratory distress</td>
<td>125mg IVP</td>
<td>Head injury GCS ≤ 12 Allergy to cortisone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spinal Cord Injury</td>
<td>30 mg/kg IV over 15-30 min, then 5.4 mg/kg IV drip over the next 23 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUCCINYLCHOLINE</td>
<td>Neuromuscular blocking agent.</td>
<td>1-1.5mg/kg rapid IVP, MR OR 3-4mg/kg IM (not to exceed max dose of 150mg).</td>
<td>Use caution in known or suspected hyperkalemia.</td>
<td></td>
</tr>
<tr>
<td>MEDICATION</td>
<td>INDICATIONS</td>
<td>DOSAGE / ROUTE</td>
<td>COMMENTS</td>
<td>CONTRA-INDICATIONS</td>
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</tr>
<tr>
<td>TERBUTALINE</td>
<td>Bronchospasm</td>
<td>0.25mg IM or SC</td>
<td>For patients &gt; 55 yrs old with reactive airway disease instead of epinephrine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Premature Labor, Prolapsed Cord</td>
<td>0.25 mg SC, MR after 15 - 30 minutes if needed, up to 0.5 mg every 4 hours</td>
<td></td>
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</tr>
<tr>
<td>VECURONIUM</td>
<td>Neuromuscular Blockade</td>
<td>0.1 mg/kg IVP, MR</td>
<td>Sedation and/or analgesia must also be used.</td>
<td>Unconfirmed airway</td>
</tr>
<tr>
<td>VERSED (MIDAZOLAM)</td>
<td>Sedation/Amnesia</td>
<td>2.5mg MR IV X2</td>
<td>Attention to volume status and age.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post RSI sedation</td>
<td>0.1 mg/kg IVP, MR, MR X 1 in 10 minutes. OR 0.2 mg/kg IM, to max of 10 mg MR X 1 in 10 minutes</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Seizure</td>
<td>2-5 mg slow IVP, to max 5 mg</td>
<td></td>
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<tr>
<td></td>
<td>Behavioral emergency</td>
<td>0.1mg/kg IV to a max of 5 mg over 2 minutes</td>
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<tr>
<td></td>
<td>Cardiac Pacing</td>
<td></td>
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<tr>
<td>ZOFRAN (ONDANSETRON)</td>
<td>Nausea or vomiting</td>
<td>4 mg IVP/IM/PO. May repeat dose every 30 minutes to max of 12mg</td>
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<tr>
<td>BLS</td>
<td>ALS</td>
<td></td>
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<tr>
<td>Ensure patent airway</td>
<td>IV TKO, adjust prn to maintain systolic BP &gt;90, sustain mentation and pink, dry skin</td>
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<tr>
<td>O₂ and/or ventilate prn</td>
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<tr>
<td>NPO</td>
<td>Monitor EKG.</td>
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<tr>
<td>Anticipate vomiting</td>
<td>Nausea/vomiting, <strong>consider:</strong></td>
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<tr>
<td></td>
<td>Zofran 4mg IM or IVP over 3 minutes, MR x2 q15”</td>
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<tr>
<td></td>
<td>Phenergan 12.5-25 mg IV/IM</td>
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</tbody>
</table>

Approved:

[Signature]

EMS Medical Director
SUBJECT: AIR MEDICAL TREATMENT PROTOCOL -- AIRWAY OBSTRUCTION (FOREIGN BODY)

BLS

For a conscious patient:
- Reassure, encourage coughing.
- O2 prn
- Abdominal thrusts (chest thrusts in obesity/pregnancy)

If patient becomes unconscious:
- Abdominal thrusts prn

If patient is unconscious when found:
- Attempt to ventilate. (Reposition prn)
- Abdominal thrusts prn

Once obstruction is removed:
- High flow O2, ventilate prn

ALS

If patient becomes unconscious or has a decreasing LOC:
- Direct laryngoscopy and Magill forceps
- CPR x2 minutes
- Attempt to visualize foreign body

If unsuccessful in removing a complete airway obstruction:
Surgical Cricothyrotomy/Comitube

Once obstruction is removed:
- Monitor O2 saturation
- Monitor EKG
- Intubate prn
- IV TKO
- Bring expelled foreign body to the hospital

NOTE: Stat transport while continuing abdominal thrusts/CPR.

Approved:

EMS Medical Director
## BLS

<table>
<thead>
<tr>
<th>Ensure patent airway</th>
<th>Monitor O2 Saturation prn</th>
</tr>
</thead>
<tbody>
<tr>
<td>0₂ and/or ventilate prn.</td>
<td>IV TKO; adjust prn</td>
</tr>
<tr>
<td>Remove sting/injection mechanism</td>
<td>Monitor EKG</td>
</tr>
<tr>
<td><strong>May assist patient to self-administer own prescribed medication</strong></td>
<td><strong>Intubate/Cricothyrotomy for laryngeal edema</strong></td>
</tr>
<tr>
<td><strong>ONE TIME ONLY.</strong></td>
<td><strong>Base Hospital contact required prior to any repeat dose.</strong></td>
</tr>
</tbody>
</table>

### Latex Sensitive Patients

Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive. Pediatric patients with a long or complex medical history (such as spina bifida, cerebral palsy, or neurologic disorders) frequently exhibit latex sensitivity. Questions regarding the management of latex sensitive patients should be referred to the Base Hospital. See Management of Latex Sensitive Patients (Equipment List) S-105)

## ALS

<table>
<thead>
<tr>
<th>Monitor O2 Saturation prn</th>
<th><strong>Allergic Reaction with no peripheral shutdown or airway obstruction:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>IV TKO; adjust prn</td>
<td><em>In the presence of respiratory distress with bronchospasm:</em></td>
</tr>
<tr>
<td>Monitor EKG</td>
<td></td>
</tr>
<tr>
<td>Intubate/Cricothyrotomy for laryngeal edema</td>
<td></td>
</tr>
<tr>
<td><strong>Epinephrine 1:1,000, 0.5mg IM or SC, MR q15” (max 1.5mg)</strong></td>
<td><strong>For patients &gt;55 years of age or know cardiovascular disease, consider:</strong></td>
</tr>
<tr>
<td><strong>Terbutaline 0.25mg SC/IM in place of Epinephrine</strong></td>
<td><strong>Benadryl 25-50mg slow IVP or 50mg IM MR x1</strong></td>
</tr>
<tr>
<td><strong>Solumedrol 125mg IV</strong></td>
<td><strong>Dopamine 400mg/250ml @ 5-20 mcg/kg/min. Titrate BP to 100mmHg systolic</strong></td>
</tr>
</tbody>
</table>

### Allergic Reaction/Anaphylaxis with peripheral shutdown or upper airway obstruction:

IV wide open

*Epinephrine 0.5mg 1:10,000 IVP, MR q15” (max 1.5mg) OR* 

*Benadryl 25-50mg slow IVP or 50mg IM MR x1* 

*Solumedrol 125mg IVP* 

*Dopamine 400mg/250ml @ 5-20 mcg/kg/min. Titrate BP to 100mmHg systolic**

*If respiratory distress with bronchospasm treat with Albuterol/Atrovent as above***

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**Approved:**

[Signature]

EMS Medical Director
## ALTERED NEUROLOGIC FUNCTION

### BLS
- Ensure patent airway, O2 and/or ventilate prn.
- Spinal immobilization when indicated.
- Secretion problems, position on affected side.
- Do not allow patient to walk.
- Restrain prn.

### ALS
- Identify and treat cause.
- Intubate prn, consider RSI.
- Monitor EKG, Pulse Oximetry
- IV TKO, adjust prn
- Venous/capillary sampling

### Symptomatic suspected Opioid OD with airway management problems

**Excluding opioid dependant pain management patient:**
- Narcan 2 mg IVP/DIVP/IM, MR to a max of 10mg
- Note: Consider holding Narcan if pt is hemodynamically stable with a manageable airway

**For patient refusing transport**
- Give additional 2 mg IM

**For opioid- dependant pain management patient:**
- Narcan titrate 0.1mg up to 2 mg IVP/direct IVP or IM MR

### Hypoglycemia:
- **Altered LOC**
  - D50 25Gm if BS ≤75mg/dl or BS unobtainable, MR
  - D50 25Gm if BS >75mg/dl if sample result?
- Glucagon 1 ml IM (if no IV) in patient with altered LOC & BS ≤75mg/dl or unobtainable

### Seizures:
- a. Generalized seizures lasting >5”.
- b. Focal seizures with respiratory compromise
- c. Recurrent seizures without lucid interval
- d. Prolonged focal seizure.

Give:
- Ativan 2-4 mg IVP or IM MR up to 4 mg
<table>
<thead>
<tr>
<th>Behavioral Emergencies:</th>
<th>Behavioral Emergencies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrain patient as appropriate for transport.</td>
<td>Consider:</td>
</tr>
<tr>
<td>Full spinal precautions if trauma is expected.</td>
<td>• Ativan 2-4 mg IV/IM MR q 5min prn AND/OR</td>
</tr>
<tr>
<td>If LOC is diminished, use prone or lateral position.</td>
<td>• Versed 1-5mg slow IVP q10min prn</td>
</tr>
<tr>
<td>Avoid unnecessary sirens.</td>
<td>• Etomidate 10mg IV x1 for emergency sedation (this will require additional sedation with Ativan or Versed before the patient again becomes agitated)</td>
</tr>
<tr>
<td>Consider law enforcement support.</td>
<td>Hypertensive Crisis:</td>
</tr>
<tr>
<td>For patients under 72 hour hold, encourage their participation in the transport without restraints.</td>
<td>BP systolic &gt;220 or diastolic &gt;120 with a headache, chest pain, shortness of breath, EKG changes, or signs and symptoms of a CVA</td>
</tr>
<tr>
<td>Consider ground transport if combative, a danger to the crew and unsafe for flight. (See Policy S-422)</td>
<td>Consider:</td>
</tr>
<tr>
<td></td>
<td>• Labetolol 20mg slow IVP with additional doses of 40mg and then 80mg repeated in 10 min intervals until:</td>
</tr>
<tr>
<td></td>
<td>• Symptoms are alleviated</td>
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<tr>
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<td>• OR 20% reduction in MAP is achieved</td>
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<td></td>
<td>• OR a maximum of 300mg is administered</td>
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<td></td>
<td>With associated cardiac symptoms, consider using Nitro drip in addition to Labetolol.</td>
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</tbody>
</table>

**CVA**

If GCS ≤ 8 consider RSI
If stroke is suspected as possible hemorrhagic in origin, keep SBP between **140-160mmHg**.

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Note: For Pregnancy Induced Hypertension - see A-233
**BLS**

- Move to a safe environment.
- Remove physical contact with burning agent.
- Ensure patent airway, O₂ and/or ventilate prn.
- Treat other life threatening injuries.

**THERMAL BURNS:**
Burns of < 5% body surface area, apply clean, cool saline dressings to help alleviate pain and protect the wound.

For burns of > 10% body surface area, cover with dry dressings and keep warm. Cover all other burns with dry, sterile sheets. Do not pack burns in ice or break blisters.

Do not allow the patient to become hypothermic.

**CHEMICAL BURNS:**
Flush liquid chemicals with copious amounts of water.

Brush off dry chemicals, then flush with copious amounts of water.

**TAR BURNS:** Cool with water, transport; do not remove tar.

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**ALS**

- Monitor O₂ Saturation
- Intubate prn
- Monitor EKG prn
- IV TKO prn, adjust prn

For patients meeting Burn Center criteria:

- IV of warmed NS 500 ml/hr
- MS titrate until pain is relieved, for SBP>90mmHg.

**OR**

Fentanyl 50-100mcg IVP initial dose, MR titrating to effect with SBP>90

*In the presence of respiratory distress with bronchospasm:*

Albuterol 6 ml 0.083% via Nebulizer, MR Atrovent 2.5 ml 0.02% added to first dose of Albuterol via Nebulizer.

---

Note: Base Hospital Contact and Transport (per S-415):
Will be made to UCSD Base Hospital for patients meeting burn center criteria.

Note: Every effort should be made to maintain as clean of an environment as possible, and when practical, the use of additional protective gear should be utilized.

**BURN CENTER CRITERIA**
Patients with burns involving:
- 20% second degree or ≥5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (greater than household current/110 volts)

**Disposition:**
Hyperbaric chamber for suspected CO poisoning.

---

**Approved:**

[Signature]
EMS Medical Director
## BLS

- Ensure patent airway
- O2 and/or ventilate prn.
- Do not allow patient to walk
- May assist patient to self-medicate
- Nitroglycerine SL if systolic BP>110 mm Hg

## ALS

- Monitor EKG/Pulse Oximetry
- IV TKO OR
  - 2 large bore IV’s TKO, adjust rate prn if ?aortic aneurysm
- Treat dysrhythmias
- NTG 0.4 mg SL if SBP>90 mm Hg MR q 5 minutes until pain free or SBP falls below 90. Note: There is no MAX dose.
- ASA 324mg chewable po
- Metoprolol 5mg IV q10min x3 doses

### Consider
- NTG 50mg/250 ml NS IV drip, start at 5-10 mcg/min titrate to pain relief
- MS 2-5 mg IVP, then 2mg increments q3-5” until pain free or respiratory depression occurs. Keep SBP>90.

### Discomfort /pain of ?cardiac origin with associated hypotension:
- Fluid challenge to max 200 ml with clear lungs, MR prn

#### Consider:
- Dopamine 400 mg/250 ml NS, 5-40 mcg/kg/min, titrate BP to 100-120 mm Hg systolic.

### Discomfort/pain of ?cardiac origin with associated hypertension:
- SBP >220 mm Hg, DBP >120mm Hg:
  - May start NTG drip at 20mcg/min and titrate more rapidly up to 100mcg/min.
Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

**BLS**

- Monitor EKG/ Monitor O2 Saturation
- IV TKO, adjust prn
- Intubate prn

**ALS**

<table>
<thead>
<tr>
<th>O2 and/or ventilate prn.</th>
<th>Monitor EKG/ Monitor O2 Saturation</th>
<th>IV TKO, adjust prn</th>
<th>Intubate prn</th>
</tr>
</thead>
</table>

**A. Unstable Bradycardia with Pulse:**

- If bradycardia is severe and patient is unconscious, begin chest compressions.
- Atropine Sulfate 0.5-1mg IVP for pulse ≤40bpm MR q3-5 min until HR ≥60, clinical condition improves, or to a total of 3mg

**If ineffective, consider:**

- External Pacing
  - Consider:  Sedation with Versed 0.1mg/kg IVP to max 5mg for discomfort associated with pacing.
- Dopamine 400mg in 250ml at 5-20mcg/kg/min IV, titrate to SBP=100mmHg (after max Atropine)
- Epinephrine 1:1000, 1mg in 250ml NS at 2-10 mcg/min IV drip titrate to SBP of 100

**B. Supraventricular Tachycardia (SVT):**

- VSM/CSM if <40 years of age, MR
- Adenosine 6mg rapid IVP, followed with 20ml NS IVP, **if ineffective within 1-2 min,**
- Adenosine 12mg rapid IVP followed with 20ml NS IVP, MR x1 in 1-2"
- Labetolol 20 mg followed by 40 mg if needed, followed by 80 mg if needed at q 10" intervals until rate controlled. Hold for systolic <100 mmHg.
  - If no conversion, Diltiazem 20mg IVP over 20 min, hold for SBP<100mmHg. MR 20mg in 15 min (If SBP <120mmHg, begin with 10mg dose)
  - **OR**
  - Amiodarone 150mg IV over 10 min. MR in 20 min. Follow with Amiodarone drip (450mg/250ccD5W) @ 1mg/min, monitoring for hypotension and bradycardia.
- Consider:
  - Etomidate 0.1mg/kg IVP to max dose of 20mg prn precardioversion
  - Synchronized cardioversion at 50J (or clinically equivalent biphasic energy dose), MR at 100, 200 prn.

**C. Uncontrolled Atrial Fibrillation/Atrial Flutter**

- Diltiazem 20mg IVP over 20 min, hold for SBP<100mmHg. MR 20mg in 15 min (If SBP <120mmHg, begin with 10mg dose)
- In the presence of uncontrolled ventricular response with rate ≥180, hypotension and decreasing LOC:
  - Etomidate 0.1mg/kg IVP to max dose of 20mg prn precardioversion
  - Cardioversion at 50, 100, 200J (or clinically equivalent biphasic energy dose)
Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

### BLS

<table>
<thead>
<tr>
<th>O₂ and/or ventilate prn.</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>D. Ventricular Tachycardia (VT) with adequate perfusion:</strong></td>
<td></td>
</tr>
<tr>
<td>Amiodarone 150 mg over 10&quot; MR X 1 in 20 minutes, followed by an infusion at 1mg/min. Note: If Amiodarone is ineffective or patient becomes unstable, proceed to Synchronized Cardioversion</td>
<td></td>
</tr>
<tr>
<td>Etomidate 0.1mg/kg IVP to max dose of 20mg prn precardioversion</td>
<td></td>
</tr>
<tr>
<td>Synchronized cardioversion at 100J, (or clinically equivalent biphasic energy dose), MR at 200, 300, 360 prn</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPR</th>
<th>Ventilate</th>
<th>IV TKO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E. VF/Pulseless VT:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defibrillate prn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intubate and ventilate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epinephrine 1:10,000, 1mg IVP, MR q3-5&quot;</td>
<td></td>
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<tr>
<td><strong>OR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epinephrine 1:1000, 2mg ET, MR q3-5&quot;</td>
<td></td>
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</tr>
</tbody>
</table>

| Amiodarone 300 mg IVP, followed prn by 150 mg IVP over 10 minutes. |
| **OR** |
| Lidocaine 1.5mg/kg slow IVP, MR x 1 in 3-5" or Lidocaine 3mg/kg ET, MR x 1 in 3-5" |

| Magnesium Sulfate 2 Gm SIVP over 2-3 min (Torsades de Pointes, hypomagnesemic state or recurrent VF) |
| **Consider:** |
| NaHCO₃ 1mEq/kg IVP for suspected hyperkalemia, prolonged arrest, tricyclic OD or suspected acidosis |
| Calcium Gluconate 10 ml (4.6mEq) slow IV for suspected hyperkalemia |

---

Approved:

[Signature]  
EMS Medical Director
Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

### BLS

#### F. Post Conversion VT/VF, AICD conversion with pulse >50bpm:

For the return of spontaneous perfusing rhythm, consider an IV infusion of the anti-arrhythmic considered to be responsible for the conversion:
- Amiodarone 1 mg/min IV drip
- Lidocaine 1-4 mg/min IV drip

### ALS

#### G. Pulseless Electrical Activity (PEA)

<table>
<thead>
<tr>
<th>CPR</th>
<th>Ventilate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR</td>
<td>Monitor EKG.</td>
</tr>
<tr>
<td></td>
<td>Intubate</td>
</tr>
<tr>
<td></td>
<td>IV TKO, adjust prn.</td>
</tr>
<tr>
<td></td>
<td>Attempt to determine cause and treat.</td>
</tr>
</tbody>
</table>

- Epinephrine 1:10,000, 1mg IVP, MR q3-5".
  - OR
  - Epinephrine 1:1000, 2mg ET, MR q3-5".

  For HR<60/min:
  - Atropine Sulfate 1mg IVP, MR x2 to a max. of 3mg absorbed dose.
    - OR
    - Atropine Sulfate 2mg ET, MR x2 to a max of 3mg absorbed dose.

**Consider:**
- If ? Hyperkalemia:
  - NaHCO₃ 1mEq/kg IVP, then 0.5 mEq/kg IVP q10".
- Calcium Gluconate 10 ml (4.6 mEq) slow IVP
- If ? Hypovolemia, Fluid challenge
- If ? Tension Pneumothorax, consider needle thoracotomy/chest tube insertion.
- If ? Pericardial Tamponade, consider pericardiocentesis and fluid challenge

---

**Approved:**

[Signature]

EMS Medical Director
Treat dysrhythmias ONLY if they have potential to or are causing symptoms of decreased cardiac output.

**BLS**

<table>
<thead>
<tr>
<th>O₂ and/or ventilate prn.</th>
<th>CPR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H. Asystole:</strong></td>
<td></td>
</tr>
<tr>
<td>CPR</td>
<td></td>
</tr>
<tr>
<td>Monitor EKG.</td>
<td></td>
</tr>
<tr>
<td>Intubate</td>
<td></td>
</tr>
<tr>
<td>IV TKO, adjust prn.</td>
<td></td>
</tr>
<tr>
<td>Epinephrine 1:10,000, 1mg IVP, MR in 3-5&quot;.</td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>Epinephrine 1:1000, 2mg ET, MR in 3-5&quot;.</td>
<td></td>
</tr>
<tr>
<td>Atropine Sulfate 1mg IVP, MR q3-5&quot;x2 to max 3 mg</td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>Atropine Sulfate 2mg ET, MR q3-5&quot;x2 to max 3mg absorbed dose</td>
<td></td>
</tr>
<tr>
<td>Discontinue resuscitative efforts if no response noted per policy A-406</td>
<td></td>
</tr>
</tbody>
</table>

**ALS**
## BLS

<table>
<thead>
<tr>
<th><strong>JELLYFISH STING:</strong></th>
<th>O\textsubscript{2} and/or ventilate prn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rinse with alcohol; do not rub or apply pressure.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>STINGRAY OR SCULPIN INJURY:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat as tolerated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SNAKEBITES:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark the wound and margin of swelling with time of envenomation. Monitor any increase in swelling.</td>
</tr>
</tbody>
</table>

| Keep involved extremity below level of heart and splint, if possible. |
| May apply cool, wet dressing to wound. **Do not apply ice.** |

## ALS

<table>
<thead>
<tr>
<th><strong>Snakebites:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat allergic reaction per A-222.</td>
</tr>
</tbody>
</table>

| Consider appropriate pain management with Morphine or Fentanyl |

<table>
<thead>
<tr>
<th><strong>Symptomatic Black Widow Spider Bites:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat allergic reaction per A-222.</td>
</tr>
</tbody>
</table>

| Ativan 1-2 mg IV or IM |
| Calcium Gluconate 10 ml (4.6mEq) SIVP |

| Consider appropriate pain management with Morphine or Fentanyl |

### Other Treatments

- Monitor EKG/Pulse Oximeter prn
- Intubate prn
- IV TKO prn, adjusted prn

---

Approved:

[Signature]

EMS Medical Director
<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure patient airway.</td>
<td>Monitor EKG/Pulse Oximeter.</td>
</tr>
<tr>
<td>0₂ and/or ventilate prn.</td>
<td>Intubate prn.</td>
</tr>
<tr>
<td>Remove excess/wet clothing.</td>
<td>IV TKO, adjust prn.</td>
</tr>
</tbody>
</table>

**Heat Exhaustion:**
- Cool gradually:
  - A. Fanning, sponging with tepid water.
  - B. Avoid shivering.
  - C. If conscious, give small amounts of fluids.

**Heat Stroke:**
- Rapid cooling:
  - A. Ice packs to carotids, femorals and axillae.
  - B. Cover patient immediately with wet sheets.
  - C. Fan, avoid shivering.

**Cold Exposure:**
- Gentle warming:
  - A. Blankets, warm packs -not to exceed 110 F.
  - B. Dry dressings.
  - C. Avoid unnecessary movement or rubbing.
  - D. If alert, give warm liquids.
  - E. If severe, NPO.
  - F. Prolonged CPR may be indicated.

**Severe hypothermia with cardiac arrest:**
- Hold medications
- Continue CPR
- If defibrillation needed, limit to 3 shocks maximum

Note: Consider fluid resuscitation in young healthy adults in high heat/high exertion situations even if BP is within normal limits.

Approved:

[Signature]

EMS Medical Director
SUBJECT: AIR MEDICAL TREATMENT PROTOCOL -- HEMODIALYSIS PATIENT

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure patent airway, give O₂, ventilate if necessary.</td>
<td>Monitor EKG/Pulse Oximeter</td>
</tr>
<tr>
<td></td>
<td>Intubate prn</td>
</tr>
<tr>
<td></td>
<td>IV TKO in arm that does not have graft/AV fistula if possible, adjust rate prn</td>
</tr>
<tr>
<td></td>
<td>Suspected Hyperkalemia (widened QRS complex and peaked T-waves):</td>
</tr>
<tr>
<td></td>
<td>NaHCO₃ up to 1mEq/kg IVP</td>
</tr>
<tr>
<td></td>
<td>Calcium Gluconate 10 ml (4.6mEq) IVP</td>
</tr>
</tbody>
</table>

**NOTE:** Access percutaneous venous access catheter (Vascath) or dialysis graft for definitive therapy only when no other vascular access is available. Consider patient's hospital of choice for transport.

Approved:

[Signature]

EMS Medical Director
### BLS

- 100% O₂, and/or ventilate prn.
- Spinal immobilization when indicated.
- Remove wet clothing, apply blankets.

### ALS

- Monitor EKG
- Monitor O₂ saturation
- Consider NG tube placement
- Intubate with inline spinal stabilization as indicated
- IV TKO, adjust prn
- NaHCO₃ up to 1mEq/kg IVP

#### Near drowning Victims:
- May require PEEP with ET ventilation. Start at 5cm water pressure and observe for improvements in oxygen saturations. If patient in cardiac arrest in conjunction with profound hypothermia, strongly consider transport while providing ACLS care.

#### Diving Victims:
- Any victim who has been breathing from compressed air sources below the water's surface and presents with the following:
  - **Minor presentation:** minimal localized joint pain, mottling of the skin surface, localized swelling with pain; none of which are progressive.
  - **Major presentation:** symptoms listed above that are severe and/or rapidly progressing, vertigo, altered LOC, progressive paresthesia, paralysis, severe SOB, blurred vision, crepitus, hæmatemesis, hæmoptysis, pneumothorax, trunk pain, or girdle or band-like burning discomfort.

#### Disposition of Diving Victims:
- **Major presentation:**
  - All patients with a “major” presentation should be transported to UCSD-Hillcrest. Trauma issues are secondary in the presence of a “Major” presentation. If the airway is unmanageable, divert to the closest BEF.
  - Major trauma candidate: catchment trauma center
  - Non-military patients: routine
  - Active duty military personnel: transport to the Military Duty Recompression Chamber if possible. The Base Hospital will contact the Duty Recompression Chamber at (619) 556-7130 to determine chamber location. Paramedics/Base hospitals shall transfer care to the Diving medical Officer (or designee) upon arrival to the chamber. Hyperbaric treatment may begin in accordance with military medical protocols.

#### Naval Hyperbaric Chamber Locations
- North Island Naval Air Station
- Naval Station 32nd Street and Harbor Drive
- Naval Special Warfare – Coronado

#### Note:
- If possible, obtain dive computer or records. If decompression sickness or air embolism is suspected, transport patient at cabin altitude as low as possible to a facility with hyperbaric chamber capacity.
- Hyperbaric Chambers must be capable of recompression to 165 ft.

---

**Approved:**

[Signature]

EMS Medical Director
## OBSTETRICAL EMERGENCIES

### SUBJECT: AIR MEDICAL TREATMENT PROTOCOL --

### Date: 7/01/2007

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure patent airway. O₂ via NC or non-rebreather mask, ventilate prn</td>
<td>IV x2 TKO, adjust prn.</td>
</tr>
<tr>
<td>If no time for transport and delivery is imminent (crowning and pushing), proceed with delivery.</td>
<td>Fetal Monitoring</td>
</tr>
<tr>
<td>Transport in lateral position unless otherwise indicated by patient condition.</td>
<td>Monitor EKG/Pulse Oximeter</td>
</tr>
<tr>
<td><strong>Routine Delivery:</strong> Massage fundus if placenta delivered. (Do not wait on scene).</td>
<td>Intubate PRN</td>
</tr>
<tr>
<td>Place ID bands on Mother and Infant</td>
<td>FHT via Doppler q10-15 min</td>
</tr>
<tr>
<td><strong>Post Partum Hemorrhage:</strong> Massage fundus.</td>
<td>For Nausea:</td>
</tr>
<tr>
<td>Baby to breast.</td>
<td>Zofran 4mg IV over 2-5 minutes, MR once</td>
</tr>
<tr>
<td>Trendelenburg position.</td>
<td>Phenergan 12.5-25 mg IV</td>
</tr>
<tr>
<td><strong>Eclampsia (Seizures):</strong> Protect airway, and protect from injury.</td>
<td>Post Partum Hemorrhage:</td>
</tr>
<tr>
<td>Spinal immobilization when indicated.</td>
<td>-Pitocin 20 units/1000cc IV adjust rate prn, titrate up to wide open to effect.</td>
</tr>
<tr>
<td><strong>STAT transport for third trimester bleeding.</strong></td>
<td>-If no IV access, Pitocin 10 u IM</td>
</tr>
</tbody>
</table>

### Prolapsed Cord:
- Insert gloved hand into vagina and apply enough pressure on presenting part to keep it from pressing on the cord, continue until care assumed at hospital.
- Magnesium Sulfate 4GM IV over 20 minutes
- Consider Terbutaline 0.25mg SC

### Pregnancy Induced Hypertension (BP syst >160, diast >100 with HA or visual changes)
- Labetalol initial dose 20mg slow IV over 2 min, repeat with 40mg and 80mg at 10 min intervals until DBP<100.

### Eclampsia (Seizures):
- Seizure precautions
- Ativan 2-4 mg IV/IM
- Magnesium Sulfate 4GM IV over 4 minutes, then maintenance drip at 2-4g/hr.

### Premature Labor
- Foley catheter prn
- Consider:
  - Magnesium Sulfate 4GM IV over 20 minutes, then maintenance drip at 1-4g/hr
  - Terbutaline 0.25mg SC, MR q 15-30” prn up to 0.50mg every 4 hours.

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**Approved:**

[Signature]

EMS Medical Director
<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
</tr>
</thead>
</table>
| Ensure patent airway. O\textsubscript{2} via NC or non-rebreather mask, ventilate prn | **Uterine Inversion:**  
Consider:  
Terbutaline 0.25mg SC  
Magnesium sulfate 1-4G/hr drip |

| Pulmonary Embolism |  
High flow oxygen  
IV x2 TKO, adjust prn.  
Monitor EKG/Pulse Oximeter |  
Consider Morphine 2-5mg IVP or Fentanyl 50-100mcg  
IVP for pain, MR prn for SBP >100mmHg |

**Approved:**

[Signature]

EMS Medical Director
### BLS

- Ensure patent airway. O₂ and/or ventilate prn
- **Skin**: remove clothes and brush off, or rinse substance with copious amount of water.
- **Inhalation/Smoke/Gas/Toxic Substance**: move patient to safe environment. 100% O₂ via mask. Consider transport to a facility with Hyperbaric chamber.
- **Contamination with commercial grade (“low level”) radioactive material**: Patients with mild injuries may be decontaminated (removal of contaminated clothing, brushing off material) prior to treatment and transport. Decontamination proceedings SHALL NOT delay treatment and transport of patients with significant or life-threatening injuries. Treatment of significant injuries is always the priority.
- Protect from injury.
- Restrain patient as appropriate for transport.

### ALS

- Monitor EKG
- Monitor O₂ Saturation
- Intubate prn
- IV TKO, adjust prn
- **Ingestions**: Assure pt has a gag reflex and is cooperative.
- **Symptomatic ?Opioid OD (excluding Opioid dependent pain management patients) with airway management problems**: Narcan 2 mg IVP/direct IVP/IM: MR to a max of 10mg. If patient refuses transport, give additional Narcan 2 mg IM. Note: The ETT dose for Narcan is 2x the IV dose followed by a NS flush.
- **Symptomatic ? Opioid OD in Opioid dependent pain management patients with airway management problems**: Narcan titrate 0.1 mg up to 2 mg IVP/direct IVP or IM MR
- **Organophosphate poisoning**: Atropine 2mg IVP/IM. MR q3-10" prn titrate to symptoms
- **Extrapyramidal reactions**: Benadryl 25-50mg slow IV, or 25-100mg IM
- ?Tricyclic OD with cardiac effects (i.e. widened QRS): NaHCO₃ drip, (50mEq NaHCO₃ in 1L 0.9NS) @200cc/hr.
- ?Calcium Channel Blocker or Beta Blocker OD: Glucagon 2 mg IVP, repeat PRN

---

Approved:

![Signature]

EMS Medical Director
# AIR MEDICAL TREATMENT PROTOCOL --

## PRE-EXISTING MEDICAL INTERVENTIONS

### BLS

- Previously established electrolyte and/or glucose peripheral IV lines:
  - Maintain at preset rates.
  - Turn off when indicated.

- Previously applied dermal medication delivery systems:
  - Remove dermal NTG when indicated (CPR, shock)

- Previously established medication delivery systems and/or other preexisting treatment modalities with preset rates (non interfacility transport):
  - Proceed with transport when person responsible for operating the device (the individual or another person) is able to continue to provide this function during transport.
  - If the person responsible for operating the device is unable to continue to provide this function during transport, contact the BH for direction.

- BH may ONLY direct BLS personnel to
  1. Leave device as found OR turn the device off;
  2. Transport patient OR wait for ALS arrival.

### ALS

- Previously established electrolyte and/or glucose containing IV solutions:
  - Adjust rate or D/C prn

- Previously applied topical medication delivery systems:
  - Remove dermal NTG or other dermal medications prn

- Pre-existing internal/external vascular access:
  - Use at all times as primary access for definitive therapy ONLY.

- Previously established medication delivery systems and/or other preexisting treatment modalities:
  - Adjust or D/C prn
  - If no medication label or identification of infusing substances may D/C.

- IV solutions with added medications OR other ALS treatment/monitoring modalities require ALS personnel (or RN/MD) in attendance during transport.

### Interfacility Transports:

- No wait period is necessary for routine oral/dermal medications or completed aerosol treatments.

- Check for prior IV, IM, SQ, and non-routine PO medication delivery to assure minimum wait period of 30".

- If there is a central line, the tip of which lies in the central circulation, the catheter MUST be capped with a device which occludes the end.

---

**Approved:**

[Signature]

EMS Medical Director
## RESPIRATORY DISTRESS

### BLS
- Ensure patent airway
- Reassurance.
- \(O_2\) and/or ventilate prn.
- Hyperventilation:
  - Coaching/reassurance.
- Remove patient from causative environment.

### ALS
- Monitor EKG
- Monitor \(O_2\) Saturation.
- Intubate prn, Consider RSI
- IV TKO, adjust rate prn

### Toxic Inhalants (CO exposure, smoke, gas, etc):
- Consider transport to facility with hyperbaric chamber.

### Known asthmatics:
- Consider oral hydration

### Respiratory Distress with croup-like cough:
- Aerosolized Saline or Water via oxygen powered nebulizer/mask.

### Respiratory Distress with rales (?cardiac origin):
- NTG 0.4mg SL MRx3 (max 1.6mg) if SBP \(\geq 100\)mmHg
- If BP drops precipitously, d/c SL NTG and begin IV Nitro drip 10-20 \(\mu\)g/min, titrate to symptoms

### Respiratory Distress with Bronchospasm (?respiratory etiology):
- Albuterol 6ml (0.083\%) via \(O_2\) powered nebulizer, MR
- Atrovent 2.5 ml 0.02 \% added to first dose of Albuterol via Nebulizer.
- Epinephrine 1:1,000 0.5mg IM or SC, MR q15” to max 1.5mg
  - For patients >55 years of age or suspected cardiovascular disease, consider:
    - Terbutaline 0.25mg SC/IM in place of Epinephrine

### COPD
- Albuterol 2.5mg in 3ml HHN, MR prn
- Atrovent 2.5 ml 0.02 \% may be added to first dose of Albuterol via Nebulizer
- Solumedrol 125mg IV
- Magnesium Sulfate 2g SIVP over 2 min

### Pulmonary Embolism
- Consider Morphine 2-5mg or Fentanyl 50-100 mcg IVP for pain, MR maintaining SBP \(>100\)mmHg

---

Approved:

[Signature]

EMS Medical Director
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL
SUBJECT: AIR MEDICAL TREATMENT PROTOCOL --
SEXUAL ASSAULT

BLS/ALS

Ensure patent airway.

0₂ and/or ventilate prn.

Do not allow patient to bathe or change clothes.

Consult with Law Enforcement on scene for evidence collection.

If the patient requires a medical evaluation, transport to the closest, most appropriate facility. Law Enforcement will authorize and arrange an evidentiary exam after the patient is stabilized. If only evidentiary exam is needed, may release to law enforcement for transport to a SART facility

Approved:

[Signature]
EMS Medical Director
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL
SUBJECT: AIR MEDICAL TREATMENT PROTOCOL -- SHOCK
Date: 7/01/2007

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shock:</strong>&lt;br&gt;O₂ and/or ventilate prn.&lt;br&gt;Control obvious external bleeding.&lt;br&gt;Treat associated injuries.&lt;br&gt;NPO, anticipate vomiting.&lt;br&gt;Trendelenburg&lt;br&gt;Remove transdermal NTG</td>
<td><strong>Monitor EKG</strong>&lt;br&gt;<strong>Monitor O₂ Saturation</strong>&lt;br&gt;Intubate prn&lt;br&gt;<strong>Shock (noncardiac):</strong>&lt;br&gt;2 IV's wide open&lt;br&gt;<strong>Shock: Normovolemia (anaphylactic shock, neurogenic shock, septic shock):</strong>&lt;br&gt;IV titrate to BP&lt;br&gt;Dopamine 400mg/250ml, 5-40 mcg/kg/min, titrate to BP &gt;90mmHg systolic&lt;br&gt;<strong>Shock (?cardiac etiology):</strong>&lt;br&gt;IV TKO&lt;br&gt;<strong>Consider:</strong>&lt;br&gt;Fluid challenge 200ml with clear lungs, MR prn for SBP 90-100mmHg&lt;br&gt;Dopamine 400mg/250ml, 5-20 mcg/kg/min, titrate BP=90-100 mmHg systolic&lt;br&gt;<strong>Spinal Cord Injury:</strong>&lt;br&gt;Fluid bolus 250-500cc, MR to max 2000cc.&lt;br&gt;<strong>Consider:</strong>&lt;br&gt;• Solumedrol 30 mg/kg IV over 15-30 min, then 5.4mg/kg/hr for 23 hours for patients with GCS ≥13 (contraindicated in Head injury)&lt;br&gt;• Dopamine 400mg/250ml, 5-40 mcg/kg/min, titrate to BP &gt;90mmHg systolic</td>
</tr>
</tbody>
</table>

**Treat cause of Shock:**

- Tension Pneumothorax - Needle Thoracostomy or Chest Tube Insertion
- Cardiac Tamponade - Pericardiocentesis
- Dysrhythmias - per Protocol

---

**Approved:**

[Signature]

EMS Medical Director
### BLS

- Ensure patent airway, protecting C-spine.
- Spinal immobilization prn.
- O₂ and/or ventilate prn.
- Control obvious bleeding.

#### Abdominal Trauma:
- Cover eviscerated bowel with saline pads.

#### Chest Trauma:
- Cover open chest wound with three-sided occlusive dressing; release dressing if ?tension pneumothorax develops.

#### Musculo-Skeletal Trauma:
- Splint neurologically stable fractures as they lie. Use traction splint as indicated.
- Grossly angulated long bone fractures with neurovascular compromise may be reduced with gentle unidirectional traction for splinting prn.

- Control hemorrhage with direct pressure and/or elevation of the extremity.
- If amputation of extremity is involved, wrap the amputated part in saline-moistened gauze and place in watertight bag, then in container with ice. Do not soak amputated part directly in water or ice.

#### Impaled Objects:
- Immobilize & leave impaled objects in place.
- Remove per BHPO

**Exception:** may remove impaled object in face/cheek, or from neck if there is total airway obstruction

#### Pregnancy of >6mo:
- Where spinal immobilization precaution is indicated, tilt on spine board 30 degrees, left lateral decubitus.

### ALS

- IV TKO adjust prn
- Bilateral IV's wide open for hypovolemic shock
- Monitor EKG
- Monitor O₂ Saturation
- Intubate prn, consider RSI prn

- Refer to Pain Management protocol when necessary.

#### Crush Injury:
- IV, adjust rate prn (Fluid bolus prior to extremity released)
- Consider: NaHCO₃ 1mEq/kg IVP

- Grossly angulated long bone fractures may be reduced with gentle unidirectional traction for splinting

#### Impaled Objects:
- Immobilize & leave impaled objects in place.

**Exception:** may remove impaled object in face/cheek or neck if ventilation compromised.
Neurological Trauma (Head and Spine Injuries):
Ensure adequate oxygenation without hyperventilating patient.
Transport head injured patients with head of bed elevated to 15 degrees when practical.

Neurological Trauma (Head Injuries):
If GCS < 8:
Intubate – RSI, Ventillate to maintain an ETCO$_2$ of 35mmHg
Mannitol 0.5Gm/kg IV over 10-15 min

Criteria for use
- Lateralizing signs
- Focal seizures with decreased LOC
- Asymmetrical pupilliary responses not due to direct ocular trauma or history.

Consider NG/OG tube

For seizures subsequent to head injury:
- Ativan 2-4mg IV or IM

Spinal Cord Injury:
Fluid bolus 250-500cc, MR to max 2000cc.

Consider:
- Solumedrol 30 mg/kg IV over 15-30 min, then 5.4mg/kg/hr for 23 hours for patients with GCS ≥ 13 (contraindicated in Head injury)
- Dopamine 400mg/250ml, 5-40 mcg/kg/min, titrate to BP > 90mmHg systolic

Severe Respiratory Distress(with absent breath sounds, hypotension, cyanosis or tracheal deviation)
Needle Thoracostomy or Chest Tube Insertion prn

Severe Respiratory Distress (with complete airway obstruction):
Surgical cricothyrotomy/Combitube.

Traumatic Arrest:
CPR,
D/C per BHPO.

Traumatic Arrest
2 IV’s wide open enroute
Consider NG enroute
Discontinue resuscitative efforts per policy A-406

Note: Preserve and transport amputations with patient.

TRANSPORT GUIDELINES:
Routine Disposition-Pediatric patients who meet criteria outlined in T-461 "Identification of the Pediatric Trauma Center Candidate" should be delivered to the Children's Hospital Emergency Department, EXCEPT in the following situations:
1. Adult + Child:
   a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility (peds-Childrens; adult-Sharp). If both patients are critical, or if there are other questions, both may be delivered to Sharp.
   b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to Childrens and the adult to the catchment area trauma facility.
2. Bypass/Diversion: If Children's Hospital Trauma Center is "on bypass", pediatric trauma candidates should be delivered to the closest appropriate (i.e. catchment area) facility.
PROCEDURE:

To direct prehospital personnel during an incident with multiple patients that does not require the activation of Annex D.

**BLS/ALS**

A. First in radio person will assume responsibility for all scene communication.

B. Only one (1) BH will be contacted during the entire incident including during transport.

C. Prehospital providers will utilize Simple Triage and Rapid Transport (START) guidelines to determine priorities of treatment and transport.

D. If staffing resources are limited, CPR need not be initiated for arrest victims, however if CPR has been initiated prior to ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is noted:
   a) subsequent recognition of obvious death **SO**
   b) per **BHPO**
   c) presence of valid DNR Form/Order Medallion **SO**
   d) lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention.
   *** ALS discontinue resuscitation based on Policy A-406

E. Split the aeromedical team, contact BH to confirm destination prior to leaving scene or ASAP enroute. **SO**. (If the aeromedical team is split, each paramedic and/or nurse may still perform ALS duties as per the protocols and their scope of practice).  *In the event that patients are transported by other than aeromedical team, medical modalities initiated by the aeromedical team can be continued per S-135."

F. Radio communication must include the following on each patient:
   1. patient number assignment (i.e., #1, #2 . . .)
   2. age
   3. sex
   4. mechanism
   5. chief complaint
   6. abnormal findings
   7. treatment initiated

G. Assisting medical transporting responders who arrive on scene should refrain from actions which delay rapid transport.

Approved:

[Signature]
EMS Medical Director
<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess level of pain using standardized pain scale provided below.</td>
<td>Continue to monitor and reassess pain as appropriate.</td>
</tr>
<tr>
<td>Ice, immobilize and splint when indicated.</td>
<td><strong>For treatment of pain with ( BP \geq 100 \text{ mmHg} ):</strong></td>
</tr>
<tr>
<td>Elevation of extremity trauma when indicated.</td>
<td>MS 2-5 mg IV/IM, MR q3-5min, titrating for effect and maintaining SBP&gt;100 and avoiding respiratory depression. <strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td>Fentanyl 50-100mcg IV/IO MR, titrating for effect and maintaining SBP&gt;100 and avoiding respiratory depression. IM dose is 100mcg.</td>
</tr>
</tbody>
</table>

Note: These orders may be implemented after the flight crew assesses the level of pain and determines if patient agrees to treatment.
ALL patients with a traumatic or pain-associated chief complaint will have an assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.

![San Diego County Pain Assessment Scale](image)

Approved:

[Signature]

**EMS Medical Director**
## BLS

For a **conscious** patient:
- Reassure, encourage coughing.
- O2 prn.
- 5 abdominal thrusts only if complete airway obstruction, MR prn (Chest thrusts in obesity/pregnancy).

If patient becomes unconscious OR has a decreasing LOC:
- 5 abdominal thrusts. MR prn.

If patient is unconscious when found:
- Attempt to ventilate (Reposition prn).
- 5 abdominal thrusts prn.

**NOTE:**
- 5 chest thrusts and back blows for infants <1 year, MR prn.

**Once obstruction is removed:**
- High flow O2, ventilate prn.

**NOTE:** If suspected epiglottitis; put patient in sitting position, keep patient calm.
- Do not visualize the oropharynx
- Consider humidified O2
- STAT transport.

## ALS

If patient becomes unconscious or has a decreasing LOC:
- Direct laryngoscopy and Magill forceps, MR prn.

If unsuccessful in removing a complete airway obstruction:
- Surgical Cricothyrotomy (>5 yo) or Combitube (>15 yo).

Once obstruction is removed:
- Monitor EKG, Pulse Oximeter
- IV TKO

For epiglottitis, if airway deterioration is anticipated, Endotracheal intubation using the flex-guide introducer is highly recommended.

### Transport:

STAT transport while continuing thrusts.

## Approved:

![Signature]

EMS Medical Director
## SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- ALTERED NEUROLOGIC FUNCTION

**BLS**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure patent airway, O₂ and/or ventilate prn.</td>
<td></td>
</tr>
<tr>
<td>Spinal immobilization when indicated.</td>
<td></td>
</tr>
<tr>
<td>Secretion problems, position on affected side.</td>
<td></td>
</tr>
<tr>
<td>Do not allow patient to walk.</td>
<td></td>
</tr>
<tr>
<td>Restrain prn.</td>
<td></td>
</tr>
</tbody>
</table>

**ALS**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and treat cause.</td>
<td></td>
</tr>
<tr>
<td>Intubate prn, consider RSI</td>
<td></td>
</tr>
<tr>
<td>Monitor EKG, Pulse Oximeter</td>
<td></td>
</tr>
<tr>
<td>IV TKO, adjust rate prn.</td>
<td></td>
</tr>
<tr>
<td>Venous/capillary blood sampling.</td>
<td></td>
</tr>
<tr>
<td>Suspected Opiate OD with airway management problems</td>
<td></td>
</tr>
<tr>
<td>Narcan 0.1mg/kg IV/IM/IO in symptomatic opioid OD, excluding opioid dependent pain management patients, MR</td>
<td></td>
</tr>
<tr>
<td>Note: ET dose is 2x IV dose.</td>
<td></td>
</tr>
</tbody>
</table>

### Hypoglycemia (suspected):

- If patient is awake and has gag reflex, give 1 packet
- If patient is not conscious, NPO

### Seizures:

- Protect airway, and protect from injury
- Treat associated injuries
- Spinal immobilization prn.
- If febrile remove excess clothing.

### Behavioral Emergencies:

- Restrain only if necessary to prevent injury.
- If LOC is diminished, use prone or lateral position.
- Consider law enforcement support.

### Hypoglycemia:

- For <5kg: D₂₅ 1:1 with sterile water
- For 5-15kg: D₂₅
- For >15kg: D₅₀

- Give 0.5Gm/kg IVP if BS ≤75mg/dl, MR1-2x every 25 min
- Glucagon 0.5mg IM if no IV access

### Seizures:

- Ativan 0.1 mg/kg slow IVP or IM, MR up to 4 mg

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**Approved:**

[Signature]

EMS Medical Director
**COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES**  
**POLICY/PROCEDURE/PROTOCOL**  
**SUBJECT: AIR MEDICAL TREATMENT PROTOCOL --**  
**PEDIATRIC ALS-ALLERGIC REACTION**

**BLS**
- Ensure patent airway.
- \( O_2 \) and/or ventilate prn.
- Remove sting/injection mechanism.
- May assist patient with meds, but may NOT administer.

**ALS**
- Monitor \( O_2 \) Saturation prn
- Monitor EKG prn
- Intubate/Cricothyrotomy (>5yo) for laryngeal edema.
- IV TKO, adjust rate prn.

**Allergic reaction with no peripheral shutdown or airway obstruction:**

*In the presence of respiratory distress with bronchospasm:*
- Albuterol 2.5mg (0.083%) via HHN, MR.
- Atrovent 2.5 mls may add to first Albuterol treatment
- Epinephrine 1:1000 0.01mg/kg IM or SC (max dose 0.3mg), MR x2 q15min
- Benedryl 1mg/kg deep IM or SIVP, max 50mg
- Solumedrol 1-2mg/kg IVP

**Allergic Reaction/Anaphylaxis with peripheral shutdown or upper airway obstruction:**

- Epinephrine 1:10,000 0.01mg/kg IV (max dose 0.3mg), MR x2 for a total max dose 0.9mg
- OR
  - Epinephrine 0.1mg/kg 1:1,000 ET, MR
  - Benedryl 1mg/kg deep IM or SIVP (not to exceed 50mg).
  - Solumedrol 1-2mg/kg IVP.

*In the presence of respiratory distress with bronchospasm, treat with Albuterol/Atrovent as above*

---

**Latex Sensitive Patients**
- Should be managed in a latex safe environment without compromising patient care. Prehospital personnel should inform the receiving facility personnel at the time of transfer if they become aware that the patient is latex sensitive.
- Pediatric patients with a long or complex medical history (such as spina bifida, cerebral palsy, or neurologic disorders) frequently exhibit latex sensitivity.
- Questions regarding the management of latex sensitive patients should be referred to the Base Hospital.
- See Management of Latex Sensitive Patients (Equipment List) S-105

**Approved:**

[Signature]

EMS Medical Director
# Pediatric Air Medical Treatment Protocol -- Dysrhythmias

## Subject
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL
SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL --
DYSRHYTHMIAS

## Page
Date: 7/01/2007

## Approved
EMS Medical Director

---

## BLS
- Assess level of consciousness
- Determine peripheral pulses
- Ensure patent airway, ventilate prn
- CPR when heart rate indicates and patient is unstable:

### Unstable Bradycardia:
May include one or more of the following:
- A. Heart rate:
  - Infant (<1 yr) <80 bpm
  - Child (1-8 yrs) <60 bpm
  - (9-14 yrs) <40 bpm
- B. Poor Perfusion (cyanosis, delayed capillary refill, mottling)
- C. Altered LOC, Dyspnea or BP [70+ (2 x age)]
- D. Diminished or absent peripheral pulses

Begin chest compressions if, despite oxygenation and ventilation, the HR remains <60/min.

### NOTE: Dehydration may cause tachycardias up to 200/min.

## ALS
- Monitor EKG/ Pulse Oximeter
- IV TKO, adjust rate prn
- (May consider intraosseous if unable to start IV line)
- Intubate prn
- Insert OG prn

### Unstable Bradycardia:
(see definition in left column)

- Epinephrine 1:10,000, 0.01mg/kg IVP/IO, MR q3-5"
- OR
- Epinephrine 1:1000, 0.2mg/kg ET, MR q3-5"

If age ≥30days: (after 2nd Epinephrine dose):
- Atropine 0.02mg/kg IV/IO/ET q5" to a max of 1mg (child) or 2mg (adolescent) absorbed dose (Minimum dose 0.1mg).

### Supraventricular tachycardia (Infants >220bpm
- VSM/CSM
- Adenosine 0.1mg/kg (max 6mg) rapid IVP, follow with 2-3ml NS IVP
- If not effective, Adenosine 0.2mg/kg (max 12mg) rapid IVP, follow with 2-3ml NS IVP
- OR
- Versed 0.1mg/kg slow IVP/IO max dose 5mg prn sedation precardioversion.
- Synchronized cardioversion 0.5-1j/kg, MR with 2j/kg if initial dose is not effective
### DYSRHYTHMIAS

**BLS**

- **O₂, ventilate prn**

**ALS**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Action</th>
</tr>
</thead>
</table>
| **Unstable Ventricular Tachycardia** | - Versed 0.1mg/kg slow IVP/IO max dose 5mg prn sedation precardioversion.  
|                                  | - Synchronized cardioversion 0.5-1j/kg, MR with 2j/kg if initial dose is not effective |
|                                  | Amiodarone 5mg/kg IV infusion over 20-60 min, MR for total 15mg/kg. If successful, continuous drip Amiodarone 5-10 mcg/kg/min OR Lidocaine 1mg/kg SIVP, MR 0.5mg/kg and follow with Lidocaine drip 1-4mg/min |
| **VF/pulseless VT:**             | **CPR**                                                                 |
|                                  | Defibrillate 2joules/kg, 4j/kg, 4j/kg                                  |
|                                  | IV NS 20cc/kg bolus IVP/IO, MR                                         |
|                                  | Epinephrine 1:10,000, 0.01mg/kg IVP/IO MR q3-5min                       |
|                                  | OR Epinephrine 1:1000, 0.1mg/kg ET followed with 3-5cc NS, MR q3-5".    |
|                                  | Amiodarone 5mg/kg IV/IO/ET bolus, MR dose to max 15mg/kg               |
|                                  | OR Lidocaine 1.0mg/kg IVP/IO, MR x1 at 0.5mg/kg in 5-10 min to a maximum of 3mg/kg absorbed dose (including initial bolus). OR Lidocaine 2-3mg/kg ET, MRx1 in 5-10 min to a maximum of 3mg/kg absorbed dose (including initial bolus). |

**Post conversion VT/VF (if not already given):**

- For the return of spontaneous perfusing rhythm, consider an IV infusion of the anti-arrhythmic considered to be responsible for the conversion:
  - Amiodarone 5-10 mcg/kg/min IV/IO drip
  - Lidocaine 20-50mg/kg/min IV/IO drip

Discontinue resuscitative efforts based on policy A-406

Approved:

![Signature]

EMS Medical Director
SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- DYSRHYTHMIAS

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR</td>
<td><strong>PEA:</strong></td>
</tr>
<tr>
<td>Ventilate</td>
<td>CPR</td>
</tr>
<tr>
<td></td>
<td>Determine etiology and treat appropriately</td>
</tr>
<tr>
<td></td>
<td>IV NS 20cc/kg bolus IVP/IO, MR</td>
</tr>
<tr>
<td></td>
<td>Epinephrine 1:10,000, 0.01mg/kg IVP/IO, MR q3-5”</td>
</tr>
<tr>
<td></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td>Epinephrine 1:1000, 0.1mg/kg ET, flush with 3-5cc NS, MR q3-5&quot;.</td>
</tr>
<tr>
<td></td>
<td>Consider: NaHCO₃ 1mEq/kg IVP/IO SIVP for suspected hyperkalemia.</td>
</tr>
<tr>
<td></td>
<td>If a stable rhythm is restored but hypotension persists, administer Epinephrine 1:10,000, 0.005mg/kg IO/IVP MR q10”</td>
</tr>
<tr>
<td></td>
<td><strong>OR Consider:</strong></td>
</tr>
<tr>
<td></td>
<td>Dopamine 2-20 mcg/kg/min of standard concentration</td>
</tr>
<tr>
<td><strong>Asystole:</strong></td>
<td></td>
</tr>
<tr>
<td>CPR</td>
<td>IV NS 20cc/kg bolus IVP/IO, MR</td>
</tr>
<tr>
<td></td>
<td>Epinephrine 1:10,000, 0.01mg/kg IVP/IO, MR q3-5”</td>
</tr>
<tr>
<td></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td>Epinephrine 1:1000, 0.1mg/kg ET diluted in 3-5cc NS, MR q3-5”.</td>
</tr>
</tbody>
</table>

Discontinue resuscitative efforts based on policy A-406

Approved:

[Signature]
EMS Medical Director
# PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- ENVENOMATION INJURIES

## BLS

<table>
<thead>
<tr>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂ and/or ventilate prn.</td>
</tr>
<tr>
<td>JELLYFISH STING: Rinse with alcohol; do not rub or apply pressure.</td>
</tr>
<tr>
<td>STINGRAY OR SCULPIN INJURY: Heat as tolerated.</td>
</tr>
<tr>
<td>SNAKEBITES: Mark the wound and margin of swelling with time of envenomation. Monitor any increase in swelling. Keep involved extremity below heart level and splint if possible.</td>
</tr>
<tr>
<td>May apply cool, wet dressing to wound. Do not apply ice.</td>
</tr>
</tbody>
</table>

## ALS

<table>
<thead>
<tr>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor EKG/ Pulse Oximeter prn</td>
</tr>
<tr>
<td>Intubate prn</td>
</tr>
<tr>
<td>IV TKO prn, adjust rate prn</td>
</tr>
<tr>
<td>Consider appropriate pain management with Morphine or Fentanyl:</td>
</tr>
<tr>
<td>- Morphine 0.1-0.2 mg/kg IV/IO, MR q3-5min, titrating for effect, max dose 20mg</td>
</tr>
<tr>
<td>- Fentanyl (&gt;2 years of age) 2-3 mcg/kg IV/IO, MR titrating for effect</td>
</tr>
<tr>
<td>SNKEBITES: Treat allergic reactions according to A-262</td>
</tr>
<tr>
<td>- Consider pain management as above</td>
</tr>
<tr>
<td>Symptomatic Black Widow Spider Bites: Ativan 0.1mg/kg slow IVP or IM MR to max of 2mg. Calcium Gluconate 1.1-1.5 ml/kg SIVP (max 10ml) Consider pain management as above</td>
</tr>
</tbody>
</table>

---

Approved:

[Signature]

EMS Medical Director
**BLS**

<table>
<thead>
<tr>
<th>Ensure patent airway.</th>
<th>Monitor EKG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂ and/or ventilate prn</td>
<td>IV TKO, adjust rate prn.</td>
</tr>
<tr>
<td><strong>Ingestions:</strong></td>
<td><strong>Monitor O₂ Saturation prn</strong></td>
</tr>
<tr>
<td>Identify ingested substance</td>
<td><strong>Intubate prn</strong></td>
</tr>
<tr>
<td>Consider transport</td>
<td><strong>Ingestions:</strong></td>
</tr>
<tr>
<td>LEFT side for ingestions.</td>
<td>Assure child has gag reflex and is cooperative.</td>
</tr>
<tr>
<td><strong>Skin:</strong></td>
<td><strong>Symptomatic opioid OD (excluding opioid-dependent pain management patients)</strong></td>
</tr>
<tr>
<td>Remove clothes and brush off, or rinse substance with copious amounts of water.</td>
<td><strong>with airway management problems:</strong></td>
</tr>
<tr>
<td><strong>Inhalation of Smoke/Gas/Toxic Substance:</strong></td>
<td>Narcan 0.1mg/kg up to a maximum dose of 2 mg direct IVP/IV/IM/O, MR</td>
</tr>
<tr>
<td>Move patient to safe environment.</td>
<td><strong>Symptomatic opioid OD in opioid-dependent pain management patients with airway management problems:</strong></td>
</tr>
<tr>
<td><strong>Tricyclic OD:</strong></td>
<td>Narcan 0.1mg/kg titrate 0.1mg increments up to a maximum dose of 2 mg direct IVP/IV/O (dilute IV dose to 10 ml with NS), or IM.</td>
</tr>
<tr>
<td>Hyperventilate</td>
<td><strong>Organophosphate poisoning:</strong></td>
</tr>
<tr>
<td>Identify ingested substance.</td>
<td>Atropine 0.05mg/kg IVP/IM/O, MR q3-10&quot; prn <strong>OR</strong></td>
</tr>
<tr>
<td>Protect from injury.</td>
<td><strong>Extrapyramidal reactions:</strong></td>
</tr>
<tr>
<td>Restrain patient as appropriate for transport</td>
<td>Benadryl 1mg/kg slow IVP/O/IM, not to exceed 50mg.</td>
</tr>
<tr>
<td><strong>Tricyclic OD with cardiac effects (i.e. widened QRS):</strong></td>
<td><strong>Calcium Channel Blocker or Beta Blocker OD:</strong></td>
</tr>
<tr>
<td>NaHCO₃ 50mEq in 500cc 0.9NS @ 100cc/hr</td>
<td>Glucagon 2.0 mg IVP, repeat PRN</td>
</tr>
</tbody>
</table>

**ALS**

<table>
<thead>
<tr>
<th>Monitor EKG.</th>
<th>Monitoring EKG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV TKO, adjust rate prn.</td>
<td>Adjust IV rate prn.</td>
</tr>
<tr>
<td>Monitor O₂ Saturation prn</td>
<td>Monitor O₂ Saturation prn</td>
</tr>
<tr>
<td><strong>Ingestions:</strong></td>
<td><strong>Intubate prn</strong></td>
</tr>
<tr>
<td>Assure child has gag reflex and is cooperative.</td>
<td><strong>Ingestions:</strong></td>
</tr>
<tr>
<td>Symptomatic opioid OD (excluding opioid-dependent pain management patients)</td>
<td><strong>Symptomatic opioid OD in opioid-dependent pain management patients with airway management problems:</strong></td>
</tr>
<tr>
<td><strong>with airway management problems:</strong></td>
<td>Narcan 0.1mg/kg up to a maximum dose of 2 mg direct IVP/IV/IM/O, MR</td>
</tr>
<tr>
<td>Symptomatic opioid OD in opioid-dependent pain management patients with airway management problems</td>
<td>Narcan 0.1mg/kg titrate 0.1mg increments up to a maximum dose of 2 mg direct IVP/IV/O (dilute IV dose to 10 ml with NS), or IM.</td>
</tr>
<tr>
<td><strong>Organophosphate poisoning:</strong></td>
<td><strong>Extrapyramidal reactions:</strong></td>
</tr>
<tr>
<td>Atropine 0.05mg/kg IVP/IM/O, MR q3-10&quot; prn <strong>OR</strong></td>
<td>Benadryl 1mg/kg slow IVP/O/IM, not to exceed 50mg.</td>
</tr>
<tr>
<td><strong>Calcium Channel Blocker or Beta Blocker OD:</strong></td>
<td>Glucagon 2.0 mg IVP, repeat PRN</td>
</tr>
</tbody>
</table>

Approved:

\[Signature\]

EMS Medical Director
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL

SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- NEWBORN DELIVERIES

BLS

BABY:
- Keep warm and dry. (WRAP IN WARM DRY BLANKET)
- Ensure patent airway.
- O₂, ventilate 100% O₂ prn.
- Apply an identification band/bracelet.
- Document time of delivery.

Routine Delivery:
- Suction baby's airway first mouth then nose when head is delivered and prn.
- Clamp and cut cord between clamps following delivery.
- APGAR at 1" and 5".

Meconium Delivery:
- Additional vigorous suctioning and BVM ventilation may be necessary.
- If mechanical suction is used keep pressure between 80 and 100 cm H₂O otherwise use bulb syringe.

Cord wrapped around neck:
- Slip the cord over the head and off the neck; clamp and cut the cord if wrapped too tightly.

Prolapsed Cord:
- Place the mother in shock position with her hips elevated on pillows, or knee chest position. Insert a gloved hand into the vagina and gently push the presenting part off the cord. TRANSPORT STAT WHILE RETAINING THIS POSITION. DO NOT REMOVE HAND UNTIL RELIEVED BY HOSPITAL PERSONNEL.

Breech Birth:
- Allow infant to deliver to the waist without active assistance (support only); when legs and buttocks are delivered, the head can be assisted out. If head does not deliver within 4-6 min, insert a gloved hand into the vagina and create an airway for the infant. Transport STAT if head undelivered.

Premature and/or Low Birth Weight Infants:
- STAT transport.
- When HR <100 bpm, ventilate 100% O₂.
- If HR <80 bpm, ventilate, then CPR.
- CPR need NOT be initiated if there are no signs of life AND:
  a) weight <500 Gm OR,
  b) gestational age is <24 weeks, OR,
  c) eyelids are fused closed.

Disposition: Direct to Labor/Delivery area
Note: If time allows, place identification bands on mother and infant

Approved:

[Signature]
EMS Medical Director
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL
SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- RESPIRATORY DISTRESS
Date: 7/01/2007

BLS

Ensure patent airway.
Dislodge any airway obstruction.
Transport in position of comfort.
Reassurance.

O2 and/or ventilate prn.

Hyperventilation:
Coaching/reassurance.
Remove patient from causative environment.

Toxic Inhalants (CO exposure, Smoke, Gas, etc):
Move patient to a safe environment
100% O2 via mask
Consider transport to facility with hyperbaric chamber.

Respiratory Distress with Croup-like Cough:
Aerosolized Epinephrine via oxygen powered nebulizer/mask.

ALS

Monitor EKG
Monitor O2 saturation prn.
Intubate prn, consider RSI.
IV TKO, adjust rate prn.

Respiratory Distress with Bronchospasm(?respiratory etiology):
Albuterol 2.5mg in 3ml via O2 powered nebulizer MR.
Atrovent 2.5ml, 0.02% via O2 powered nebulizer with first dose Albuterol.

If severe respiratory distress with bronchospasm or inadequate response to Albuterol/Atrovent consider:

Epinephrine 0.01mg/kg 1:1,000 IM or SC (max 0.3mg), MR x2 for max 0.9mg
Solumedrol 1-2mg/kg IV.
Consider:
Magnesium Sulfate 25-50 mg/kg IV over 20 minutes to max of 2 Gm.

Respiratory Distress due to ?Pneumothorax
Needle thoracostomy or chest tube insertion.

Complete Airway Obstruction (as last resort effort):
Surgical cricothyrotomy (>5yo).

NOTE: If history suggests epiglottitis, do NOT visualize airway. If airway deterioration is anticipated, Endotracheal intubation using the flex-guide introducer is highly recommended.
## SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL -- SHOCK (non traumatic)

<table>
<thead>
<tr>
<th>BLS</th>
<th>ALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess level of consciousness</td>
<td>IV TKO, Adjust prn</td>
</tr>
<tr>
<td>Ensure patent airway, O₂ and assist ventilation.</td>
<td>Monitor EKG</td>
</tr>
<tr>
<td>Determine peripheral pulses and capillary refill.</td>
<td>Monitor O₂ Saturation</td>
</tr>
<tr>
<td>Control hemorrhage</td>
<td>Intubate prn</td>
</tr>
<tr>
<td>Protect from injury</td>
<td>Fluid challenge: 20 ml/kg IV for shock.</td>
</tr>
<tr>
<td></td>
<td>MR if no known history of heart disease.</td>
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<td><strong>Consider:</strong></td>
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<tr>
<td>Dopamine 2-20mcg/kg/min IV drip, adjust to maintain BP.</td>
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</tbody>
</table>

Approved:

[Signature]

EMS Medical Director
<table>
<thead>
<tr>
<th><strong>BLS</strong></th>
<th><strong>ALS</strong></th>
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</thead>
<tbody>
<tr>
<td>Ensure patent airway, protecting C-spine.</td>
<td>IV TKO, adjust prn, Monitor EKG/ Pulse Oximeter</td>
</tr>
<tr>
<td>Spinal immobilization prn.</td>
<td>Intubate prn; consider RSI for GCS ≤8.</td>
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<tr>
<td>O2 and/or ventilate prn.</td>
<td>Refer to Pain Management protocol when appropriate</td>
</tr>
<tr>
<td>Control obvious bleeding</td>
<td></td>
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<tr>
<td><strong>Abdominal Trauma:</strong></td>
<td><strong>Crush Injury:</strong></td>
</tr>
<tr>
<td>Cover eviscerated bowel with saline pads.</td>
<td>IV, adjust prn (Bolus of 20ml/kg when extremity released)</td>
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<tr>
<td></td>
<td>Consider: NaHCO₃ 1mEq/kg IVP</td>
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<tr>
<td></td>
<td><strong>Hypovolemic Shock</strong></td>
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<td></td>
<td>NS 20ml/kg IV bolus, MR prn</td>
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<td></td>
<td><strong>Grossly angulated long bone fractures may be reduced with gentle unidirectional traction for splinting</strong></td>
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<tr>
<td><strong>Chest Trauma:</strong></td>
<td><strong>Impaled Objects:</strong></td>
</tr>
<tr>
<td>Cover open chest wound with three-sided occlusive dressing; release dressing if? tension pneumothorax develops.</td>
<td>Immobilize &amp; leave impaled objects in place. May remove impaled object in face/cheek or neck if ventilation compromised.</td>
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<tr>
<td><strong>Musculo-Skeletal Trauma:</strong></td>
<td><strong>Neurological Trauma (Head Injuries):</strong></td>
</tr>
<tr>
<td>Splint neurologically stable fractures as they lie. Use traction splint as indicated</td>
<td>If GCS ≤8: Intubate -RSI, Ventilate to maintain an ETCO₂ of 35mmHg Mannitol 0.5gm/kg IV over 10-15 min</td>
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<td><strong>Criteria for use:</strong></td>
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<td></td>
<td>• Lateralizing motor signs</td>
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<td></td>
<td>• Focal seizures associated with decreasing LOC</td>
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<td></td>
<td>• Asymmetrical pupillary responses, not due to direct ocular trauma or history</td>
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<td></td>
<td><strong>Consider:</strong></td>
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<td></td>
<td>NG/OG</td>
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<td></td>
<td>For seizures subsequent to head injury:</td>
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<tr>
<td></td>
<td>-Ativan 0.1mg/kg  IV or IM, MR to max 4mg</td>
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<tr>
<td></td>
<td><strong>Spinal Cord Injury:</strong></td>
</tr>
<tr>
<td></td>
<td>NS 20ml/kg IV fluid challenge, MR</td>
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<td></td>
<td>Dopamine at 5-20mcg/kg/min titrate to BP systolic 100mm Hg</td>
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<tr>
<td></td>
<td><strong>Consider:</strong></td>
</tr>
<tr>
<td></td>
<td>Solumedrol 30mg/kg IV slowly with GSC&gt;12 (contraindicated in head injury)</td>
</tr>
<tr>
<td></td>
<td><strong>Severe Respiratory Distress (absent breath sounds, hypotension, or cyanosis):</strong></td>
</tr>
<tr>
<td></td>
<td>Needle thoracostomy or chest tube insertion</td>
</tr>
</tbody>
</table>

*Preserve and transport amputations with patient*
<table>
<thead>
<tr>
<th>Traumatic Arrest:</th>
<th>Severe Respiratory Distress (with complete airway obstruction):</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR</td>
<td>Surgical cricothyrotomy (&gt;5y.o.)</td>
</tr>
<tr>
<td>D/C per BHPO</td>
<td>Traumatic Arrest:</td>
</tr>
<tr>
<td></td>
<td>2 IV's 20ml/kg, MR.</td>
</tr>
<tr>
<td></td>
<td>NG/OG enroute</td>
</tr>
<tr>
<td></td>
<td>Discontinue resuscitative efforts per policy A-406</td>
</tr>
</tbody>
</table>

**TRANSPORT GUIDELINES:**

Routine Disposition-Pediatric patients who meet criteria outlined in T-461 "Identification of the Pediatric Trauma Center Candidate” should be delivered to the Children's Hospital emergency department, EXCEPT in the following situations:

1. **Adult + Child:**
   a. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should first deliver the more critical patient to the appropriate facility (peds-Children’s; adult-Sharp). If both patients are critical, or if there are other questions, both may be delivered to Sharp.
   b. Field personnel should consider splitting the team using additional ALS transport vehicles, or aeromedical resources to transport the pediatric patient to Children's and the adult to the catchment area trauma facility.

2. **Bypass/Diversion:** If the designated pediatric trauma center is "on bypass", pediatric trauma candidates should be delivered to the Level I adult designated trauma facility (UCSD).
# BLS

- Move to a safe environment.
- Remove contact with burning agent.
- Ensure patent airway, O₂ and/or ventilate prn.
- Treat other life threatening injuries.

## THERMAL BURNS:

- Burns of <5% BSA apply clean, cool saline dressings to help alleviate pain and protect the wound.
- For burns of ≥ 10% BSA, cover with dry dressing and keep warm. Cover all other burns with dry, sterile sheets. Do not pack burns in ice or break blisters.
- Do not allow patient to become hypothermic.

## CHEMICAL BURNS:

- Flush liquid chemicals with copious amounts of water. Brush off dry chemicals, then flush with copious amounts of water.

## TAR BURNS:

- Cool with water, transport; do not remove tar.

---

# ALS

- Monitor EKG
- Monitor O₂ Saturation
- Intubate prn
- IV of warmed NS 20cc/kg/hr
- Burns without respiratory involvement:
  - MS 0.1-0.2 mg/kg increments IVP/IM or SC, maintain SBP >90.
  - OR
  - Fentanyl (>2yo) 2-3 mcg/kg IVP, MR titrating as needed for effect with SBP>90.

*In the presence of respiratory distress with bronchospasm:*

- Albuterol 2.5mg 3ml 0.083% via Nebulizer MR
- Atrovent 2.5ml 0.02% added to first dose of Albuterol

---

**Note:** Base hospital Contact and Transport (Per S-415) Will be made to UCSD Base Hospital for patients meeting burn center criteria. Every effort should be made to maintain as clean of an environment as possible, and when practical, the use of additional protective gear should be utilized.

**BURN CENTER CRITERIA: Patients with burns involving:**

- ≥10% 2nd or 5% 3rd degree of BSA
- suspected respiratory involvement or significant smoke inhalation in a confined space
- significant injury of the face, hands, feet or perineum or circumferential
- significant electrical injury due to high voltage (> than household current/110 volts)

**Disposition:** Hyperbaric chamber for suspected CO poisoning.

---

Approved:

[Signature]

EMS Medical Director
## SUBJECT: PEDIATRIC AIR MEDICAL TREATMENT PROTOCOL – PAIN MANAGEMENT

### BLS
- Assess level of pain
- Immobilize/splint when indicated
- Ice/elevation when indicated

### ALS
- Continue to monitor and reassess pain as appropriate.

**For treatment of pain:**
- MS 0.1-0.2 mg/kg IV/IO, MR q3-5 min, max dose 20mg, titrating for effect and maintaining SBP>90. May be given IM/SC 0.1-0.2 mg/kg, MR q15min to max dose 20mg.
- **OR**
  - Fentanyl (>2yo) 2-3 mcg/kg IV/IO, per pediatric drug chart. MR, titrating for effect and maintaining SBP>90

Note: These orders may be implemented after the paramedic assesses the level of pain and determines if patient agrees to treatment.

ALL patients with a traumatic or pain-associated chief complaint will have a paramedic assessment of level of pain using a standardized pain scale. All patients will be offered treatment for pain, unless contraindicated, and level of pain relief will be assessed after each treatment is given and prior to the end of the run.

The parenteral dose relative strength of MS is 1/3 the oral dose of MS.

---

**San Diego County Pain Assessment Scale**

![Image of pain assessment scale with emotions from no pain to severe pain.

---

Approved:

[Signature]

EMS Medical Director
I. **Authority**: Health and Safety Code, Division 2.5, Sections 1797.208 and 1797.214.

II. **Purpose**: To establish the minimum Paramedic Training Program student eligibility requirements.

II. **Policy**:

A. To be eligible to enter an approved Paramedic training program, an individual shall meet all the following requirements:

1. Possess a high school diploma or GED certificate.
2. Possess a current health care provider or professional rescue CPR card (AHA/ARC).
3. Possess a current EMT or Advanced EMT (AEMT) certificate.
4. Have the equivalent of at least six months experience in the provision of emergency care in the prehospital setting as an EMT or AEMT.
5. Pass, by predetermined standards, a pre-entrance examination.
6. Meet requirements of affiliated clinical or field agencies which may include but not be limited to:
   a. DOJ Criminal background check
   b. FBI background check
   c. DMV ambulance driver’s license with current and valid Medical Examiner’s certification

Document revised 7/1/2010

Approved:

[Signatures]

Administration
EMS Medical Director
d. Immunizations

e. Drug screens

B. The minimum requirements identified in this policy shall not preclude paramedic training programs from requiring additional prerequisites, admission procedures, etc. as part of the application process.
I. **Authority:** Health and Safety Code, Section 1797.208, Division 2.5.

II. **Purpose:** To establish a mechanism for application and approval/reapproval of Paramedic training programs in San Diego County.

III. **Policy:**

A. All Paramedic training programs must meet requirements as set forth in the California Code of Regulations, Title 22, Division 9, Chapter 4.

B. All Paramedic training programs must go through the process of licensing and accreditation through the Commission on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP) and maintain such accreditation for reaccreditation in San Diego County.

C. All Paramedic training programs must have approval from the County of San Diego Emergency Medical Services (EMS) prior to the program being offered.

D. Program approval shall be for two years following the effective date of approval, and may be renewed every two years subject to the procedure for program approval.

E. All approved Paramedic training programs shall be subject to periodic review by EMS and may also be reviewed by the State of California EMS Authority. This review may involve periodic review of all program materials, and periodic on-site evaluations.

F. Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable
IV. Procedure:

A. To receive initial program approval, all requesting Paramedic training programs shall submit proof of accreditation and all materials requested on the “CHECK LIST: PARAMEDIC TRAINING PROGRAM APPLICATION” (see attached).

B. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time after receipt of all required documentation. This period of time shall not exceed three months.

C. EMS shall establish the effective date of program approval in writing upon the satisfactory documentation of compliance with all program requirements.

IV. Program Renewal

A. Submit approval from CoAEMSP with letter of intent to continue to offer Paramedic training.

B. Submit any changes in staff or training location.
<table>
<thead>
<tr>
<th>Materials to be Submitted</th>
<th>Enclosed</th>
<th>To Follow</th>
<th>For County Use Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Documentation of eligibility for program approval. 100148(i)</td>
<td></td>
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<tr>
<td>2. A statement verifying that the course content is equivalent to the U.S. Department</td>
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<tr>
<td>of Transportation EMT-P National Standard Curriculum. 100153(b1)</td>
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<tr>
<td>3. Letter to paramedic training approving authority requesting approval. 100153(a)</td>
<td></td>
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<tr>
<td>4. Check list for paramedic program approval.</td>
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<tr>
<td>5. Completed application form for program approval.</td>
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<tr>
<td>6. Program Medical Director qualification form and job description. 100149(a)</td>
<td></td>
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<tr>
<td>7. Program Course Director qualification form and job description. 100149(b)</td>
<td></td>
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<tr>
<td>8. Program Principal Instructor(s) qualification form and job description. 100149(c)</td>
<td></td>
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<tr>
<td>9. Teaching Assistant(s). 100149(d)</td>
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<tr>
<td>Submit names and subjects assigned to each Teaching Assistant and job description.</td>
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<tr>
<td>10. Field Preceptor(s). Submit names, qualifications and job description. 100149(e)</td>
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<tr>
<td>11. Hospital Clinical Preceptor(s). Qualifications form and job description. 100149(f)</td>
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<tr>
<td>12. Copy of written agreements with (one or more) hospital(s) to provide clinical</td>
<td></td>
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<tr>
<td>experience. 100151(c)</td>
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<tr>
<td>13. Provisions for supervised hospital clinical training including student evaluation</td>
<td></td>
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<tr>
<td>criteria, and copy of standardized forms for evaluating EMT-P students and</td>
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<tr>
<td>monitoring of preceptors by the training program. 100153(b5)</td>
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<tr>
<td>14. Copy of written agreement with (one or more) paramedic service provider(s) to</td>
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<tr>
<td>provide field experience. 100152(b)</td>
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<td>Check One</td>
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<tr>
<td><strong>Materials to be Submitted</strong></td>
<td><strong>Enclosed</strong></td>
<td><strong>To Follow</strong></td>
<td><strong>For County Use Only</strong></td>
</tr>
<tr>
<td>15. Provisions for supervised field internship including student evaluation criteria and copy of standardized forms for evaluating EMT-P students and monitoring of preceptors by the training program. 100153(b6)</td>
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<tr>
<td>16. Course curriculum, including:</td>
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</tr>
<tr>
<td>A. Course outline</td>
<td></td>
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<tr>
<td>B. Statement of course objectives</td>
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<tr>
<td>C. At least 6 sample lesson plans</td>
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<tr>
<td>D. Performance objectives for each skill</td>
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<tr>
<td>E. At least 10 samples of written questions used in periodic testing</td>
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<tr>
<td>F. Final skills exam</td>
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<tr>
<td>17. Completed course content checklist</td>
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<td></td>
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<tr>
<td>18. Class schedules: Places and dates, estimate if necessary. 100153(b7)</td>
<td></td>
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<tr>
<td>19. Copy of course completion record. 100161</td>
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<tr>
<td>20. Copy of liability insurance on students.</td>
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<tr>
<td>21. Copy of fee schedule.</td>
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<tr>
<td>22. Description of how program provides adequate facilities, equipment, examination security and student record-keeping. 100152</td>
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</tbody>
</table>
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

APPLICATION FORM

EMT-P TRAINING PROGRAM

1. Name of Institution/Agency ____________________________
   Street ____________________________
   City ____________________________   Zip Code ______
   Telephone Number ________________   Extension _____________

2. Personnel:
   Program Medical Director ____________________________
   Course Director ____________________________
   Principal Instructor(s) ____________________________
   Teaching Assistants
   Name __________________________________________
   Subjects Assigned _______________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
Clinical Preceptors:

<table>
<thead>
<tr>
<th>Name</th>
<th>Hospital Affiliation</th>
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<tbody>
<tr>
<td></td>
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Field Preceptors

Name: ___________________________ Agency: ____________
Paramedic License: _____________-Date of original licensure: ___________
Preceptor class Y N (circle one)
________________________________________________________________________
Name: ___________________________ Agency: ____________
Paramedic License: _____________-Date of original licensure: ___________
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Name: ___________________________ Agency: ____________
Paramedic License: _____________-Date of original licensure: ___________
Preceptor class Y N (circle one)
3. Course Hours:

Total: ________________

Didactic and Skills Lab: ______________________

Hospital Clinical Training: ______________________

Field Internship: ______________________

4. Texts ______________________

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COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
EMT-P TEACHING QUALIFICATIONS

Check One:

____ Program Director
____ Principal Instructor
____ Clinical Preceptor

____ Field Preceptor
____ Teaching Assistant

1. Name: ____________________________________________

2. Occupation: _______________________________________

3. Professional or Academic Degrees Held: 4. Professional License/Cert

     Number(s):

     a. __________________
     b. __________________
     c. __________________

5. California Teaching Credentials Held:

     a. Type: ____________     Expiration Date: ____________
     b. Type: ____________     Expiration Date: ____________

6. Emergency Care-Related Education within the last 5 years:

     Course Title     School     Course_____ Length     Date Completed

     a. __________________
     b. __________________
     c. __________________

7. Emergency Care-Related Experience within the last 5 years:

     Position     Duties     Organization_______    Dates

     a. __________________
     b. __________________
     c. __________________

Approvals:

________________________________     __________________     ____________
Medical Director                 Course Director               Date
**Authority:** Health and Safety Code, Division 2.5, Sections 1797.208, 1797.210.

**Purpose:** To assist with the clinical and field internship placement of paramedics trained in agencies outside of San Diego County and to enable the quality management of paramedic internships.

**Policy:**

A. All paramedic students trained in agencies outside of San Diego County, who will seek an internship with a San Diego County Paramedic Agency will submit the completed Application for Internship Placement form accompanied by the following documentation as well as obtain an out-of-county trained intern number for use in the QCS:

1. Proof of completion of didactic portion of the paramedic-training program.
2. Proof of five medically supervised intubations during clinical training.
3. Proof of completion of the Paramedic Local Accreditation class.
4. Copy of current ACLS card.
5. Current CPR card.

B. All Out-of-County Paramedic Training Agencies seeking to place students in San Diego shall contact County of San Diego, EMS Branch to notify of potential student placement in San Diego County.

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**Approved:**

[Signatures]

[Name:] [Signature]

[Name:] [Signature]

Administration
EMS Medical Director
1. Call the County of San Diego, EMS office, (619-285-6429) to speak with the Training Agency Coordinator to verify availability for internship placement in the County.

2. Supply a fully executed copy of a contract with the provider agency/hospital that will be accommodating the paramedic intern. This contract will outline the process for monitoring the paramedic intern as well as the process that will be followed should it be necessary to terminate the internship.

3. List on training agency letterhead, the name(s) of the student(s), the Provider agency/hospital in which the internship will be done, the name(s) of the preceptor(s) and the training agency contact information for all instructors who will be involved with intern(s) placed in San Diego County.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.56, 1797.213, and 1797.214.

II. **Purpose:** To define the process of Mobile Intensive Care Nurse (MICN) authorization and reauthorization.

III. **Policy:** To become authorized as a MICN in San Diego County, the following requirements must be met:

   A. Authorization process:

      1. The candidate for initial authorization must:

         a. Be a Registered Nurse currently licensed in the State of California.

         b. Possess a current ACLS course completion card.

         c. Have received instruction in the following subjects pertinent to the MICN role (recommended minimum 30 hours of training).

            (1) The MICN in the emergency medical service (EMS) system.

            (2) Field assessment and reporting.

            (3) Shock.

            (4) Pharmacology.

            (5) Respiratory emergencies.

            (6) Cardiac emergencies.

            (7) Neurological emergencies.

            (8) Soft tissue emergencies.

            (9) Musculoskeletal emergencies.

            (10) Other medical emergencies.

            (11) Obstetric emergencies.

Approved:

[Signature]  [Signature]

Administration  Medical Director
(12) Pediatric emergencies.

(13) Geriatric emergencies.

(14) Behavioral emergencies.

(15) Multiple trauma and triage.

(16) Sudden Infant Death Syndrome (SIDS)

(17) County of San Diego Policies, Procedures and Protocols.

d. Complete and submit proof of an internship consisting of:

(1) A Base Hospital orientation which includes the observation of paramedic functions on a minimum of three Paramedic responses which demonstrate advanced life support (ALS) skills.

(2) Observation of medical direction of patient care via direct voice communication with field personnel by a MICN/Base Hospital Physician for a minimum of 10 Paramedic calls under the supervision of the Base Hospital Nurse Coordinator or designee.

e. Successfully pass the MICN authorization examination, by predetermined standards, approved by the County of San Diego EMS Medical Director. If unsuccessful, the candidate may repeat the exam twice. If unsuccessful after three test sessions, the candidate must complete a remedial course of instruction prior to retest.
f. Submit an application form containing a statement that the individual is not precluded from authorization for reasons defined in Section 1798.200 of the Health and Safety Code, proof of internship, documentation of successful completion of MICN Exam, and the established fee for testing and/or authorization.

2. Authorization periods shall end on either March 31 or September 30 of each year, up to, but not exceeding, 2 full years from the date of issue.

B. Reauthorization Process:

1. To be eligible for reauthorization, a currently authorized MICN shall:
   a. Submit a completed County of San Diego EMS application form and pay the established fee.
   b. Provide documentation of attendance of 24 hours of multi-disciplinary prehospital continuing education, approved by a Base Hospital or the County of San Diego EMS Agency, every 2 years. The course objectives for these courses shall be directly related to the MICN role. Course content may include, but is not limited to, case-based presentations, trends in prehospital care, protocol and policy review, and current concepts in prehospital care. Participation in courses with nationally standardized curricula, such as ACLS, PALS, PEPP or TNCC, do not qualify for MICN reauthorization credit.

Approved:

[Signatures]

Administration
Medical Director
2. Individuals who have let their MICN authorization lapse shall be eligible for reauthorization upon completion of the following:
   a. For a lapse of less than 90 days, the applicant must meet the requirements of Section III. B.1, a & b of this policy.
   b. For a lapse of greater than 90 days, but less than one year, the applicant must additionally meet the requirements of Section III. A. 1. d. (2). of this policy.
   c. For a lapse of greater than one year, the applicant must additionally meet the requirement in Section III. A. 1. e. of this policy.

3. The EMS Branch reserves the right to require periodic mandatory training on new skills, protocols and policies or remedial training as a condition of continued authorization.

4. The EMS Branch reserves the right to withdraw or retract authorization pending resolution of disciplinary issues.

C. Discipline

Disciplinary proceedings, including the right to withdraw or retract authorization pending resolution of disciplinary issues, will be at the discretion of the County of San Diego EMS Medical Director, according to the circumstances of the case.

Approved:

[Signatures]

Administration

Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.185 and 1797.214.

II. **Purpose:** To establish a mechanism for a paramedic to become accredited to practice in San Diego County.

III. **Definition:** Accreditation is authorization by the Medical Director of the County of San Diego Emergency Medical Services (EMS) agency to practice paramedic skills within a specific jurisdiction as required by a specific local EMS agency. Accreditation allows local EMS agencies to ensure that paramedics are trained in the optional skills and oriented to the local system.

IV. **Policy:** A paramedic must be accredited by the County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (EMS) in order to practice as a paramedic in San Diego County.

   A. In order to be eligible for initial accreditation an individual shall:

      1. Possess a current, valid California paramedic license.
      2. Complete and submit an application for accreditation to EMS.
      3. Successfully complete an accreditation workshop as prescribed by EMS. This workshop shall not be less than six (6) hours nor exceed 12 hours in length, and will include:

         a. Orientation to the local EMS system policies, procedures and protocols, radio communications, hospital/facility destination policies/practices, and other unique system features.
      b. Training and/or testing in any optional procedures authorized by the County of
San Diego EMS Medical Director, in which the individual has not been trained or tested.

4. Provide documentation of training or testing from another jurisdiction for local optional scope items.

5. Pay the established accreditation fee to EMS.

6. Possess a current Advanced Cardiac Life Support (ACLS) course completion card.

B. Initial accreditation shall be effective for two years, or until the expiration date of the California paramedic license, whichever is earlier.

1. If the paramedic accreditation applicant does not complete accreditation requirements within thirty calendar days, then the applicant must complete a new application and pay a new fee to begin another thirty-day period.

2. A paramedic may apply for initial accreditation no more than three times in a twelve-month period.

C. Provisional Accreditation

1. Paramedics who have completed all requirements for initial accreditation other than the orientation requirement (IV.A.3. above) may be accredited on a provisional basis for up to 90 days pending the completion of the San Diego County Accreditation Workshop.

2. Provisional accreditation may be extended only with special authorization from the County of San Diego EMS Medical Director.

3. Provisional accreditation status shall be allowed only once for a paramedic.
4. Individuals with provisional accreditation must:
   a. Work solely within the California paramedic Scope of Practice.
   b. Work as a second paramedic, only with a fully accredited (non-provisional) San Diego County paramedic.

D. Continued accreditation (re-accreditation)

Accreditation to practice shall be continuous as long as EMS requirements are met. These requirements are as follows:

1. Possession of a valid California paramedic license, and
2. Maintenance of current ACLS training (every two years).

E. Accreditation Lapse

Individuals who have allowed their paramedic accreditation to lapse for greater than one year shall, in addition to the requirements listed above in Section IV. D, successfully complete the examination portion of the Accreditation Workshop and pay the established accreditation fee to EMS.

F. EMS shall notify individuals applying for accreditation of the decision to accredit within 30 days of submission of a complete application.

G. EMS shall submit the names and dates of accreditation of all individuals it accredits to the EMS Authority, within twenty working days of accreditation.

H. During an interfacility transfer, an individual who is accredited as a paramedic in one jurisdiction may utilize the paramedic scope of practice in another jurisdiction according to the policies and procedures established by the accrediting local EMS agency.
I. During a mutual aid response into another jurisdiction, a paramedic may utilize the paramedic scope of practice according to the policies and procedures established by the accrediting local EMS agency.

J. EMS reserves the right to require periodic mandatory training on new skills, training on new or revised protocols, or remedial training as a condition of continued accreditation.

K. EMS reserves the right to withdraw or restrict accreditation pending resolution of disciplinary issues, in accordance with state disciplinary regulations and local policy.

Document revised 7/1/2010
Approved: 

[Signatures]

Marcela Metz  
Administration

[Signature]

EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.214, 1797.220, California Code of Regulations, Title 22, Chapter 11.

II. **Purpose:** To establish a mechanism by which providers of continuing education may be designated an “authorized provider” of emergency medical services (EMS) continuing education (CE) in San Diego County.

III. **Definition:** Authorized Emergency Medical Services (EMS) Provider of Continuing Education (CE) – Authorized EMS Provider of CE means an individual or organization who meets the requirements of California Code Of regulations (CCR), Title 22, Chapter 11, and is approved to conduct continuing education courses, classes, activities or experiences, and to issue earned continuing education hours to EMS Personnel for the purposes of maintaining certification/licensure or re-establishing lapsed certification or licensure within the state of California.

IV. **Policy:** The County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (County EMS) will approve, for the purposes of recertification, relicensure, reaccreditation, or reauthorization, those CE activities sponsored by providers who are designated by EMS as authorized providers of CE and who comply with San Diego County policies, procedures, and guidelines for EMS CE providers.

   A. In order to become designated as an authorized provider of EMS CE in San Diego County, applicants must:

      1. Complete an application form and submit it, with appropriate documentation and fees, to County EMS at least sixty days prior to the date of the first educational activity. San Diego County Base Hospitals are exempt from the fee. The form
must indicate whether the applicant is applying for approval to offer courses for basic life support (BLS) personnel and/or advanced life support (ALS) personnel or both.

2. Agree to comply with all guidelines pertaining to authorized EMS CE providers. For all providers, these guidelines are described in the County of San Diego EMS Guidelines for Authorized Emergency Medical Services Continuing Education Provider manual, available at the County EMS office.

3. Provider applicants must designate the certification level(s) of their intended CE participants (ALS or BLS). Approval may be granted for only one certification level (BLS versus ALS/BLS) if the applicant cannot document their ability and resources to provide CE at all levels. This approval level may be adjusted after initial approval provided that the authorized provider can demonstrate that it has the requisite equipment and materials to provide this education in accordance with the guidelines.

B. County EMS shall approve or disapprove the CE request within 60 days of receipt of the completed request.

1. Within fourteen working days of receipt of a request for approval, County EMS will notify the CE provider that the request has been received, and shall specify what information is missing, if any.

2. If the request is approved, County EMS will issue a CE provider number.

3. If the request is denied, County EMS will notify the applicant in accordance with in accordance with applicable provisions of CCR, Title 22, Chapter 11.
C. Designation as an authorized provider shall be for a four-year period, after which each provider must reapply. To maintain continuous approval the renewal application must be submitted at least sixty days prior to the CE provider expiration date.

D. Authorized providers are subject to periodic reviews of course outlines, attendance records, instructor qualifications, or other material pertaining to courses presented by the provider for CE credit. County EMS staff will conduct these reviews.

E. Noncompliance with any criterion required for CE provider approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of state or local regulations may result in denial, probation, suspension or revocation of CE provider approval by County EMS, in accordance with CCR, Title 22, Chapter 11.
I. **Authority:** Health & Safety Code Section 1797.214, 1797.220,

II. **Purpose:** To identify the scope and role of the San Diego County emergency medical services (EMS) continuing education (CE) program for prehospital personnel.

III. **Policy:**

A. The CE program for prehospital personnel shall be recognized as an important link in the San Diego County system-wide quality improvement process, and will receive oversight from the EMS Medical Director (or designee).

B. The CE program shall be implemented in accordance with Title 22, Division 9, Chapter 11 of the California Code of Regulations.

C. Within the requirements of San Diego policies regarding Paramedic accreditation, EMT-B certification, and MICN authorization, the County of San Diego, EMS branch will accept CE activities approved by other California local EMS agencies (or through their approved providers of CE), for recertification/authorization/accreditation purposes or re-establishing lapsed certification or licensure.

D. The County of San Diego, EMS Branch shall publish and maintain the Guidelines for Authorized Providers of Continuing Education for Personnel in San Diego County manual and make that manual available to approved providers and potential providers. The manual shall identify the requirements for the provider designation and renewal process, guidelines for qualifications of program personnel, specific guidelines for course approval, and other material specific to designated CE providers.

E. EMS shall maintain a list of current approved CE providers, including the contact person for the program, approval issue date and expiration date, and assigned provider number.
F. CE activities offered by San Diego EMS approved providers, in accordance with San Diego guidelines, shall be considered to be "approved" by County of San Diego EMS.

G. In addition to approval for CE activities presented by approved providers, EMS may, at its discretion, award CE credits for other activities not presented by approved providers. These include (but are not limited to) the following:

1. Nationally Recognized Curricula. - Programs offered using nationally recognized curricula, such as the Red Cross/Heart Association CPR-C program, Prehospital Trauma Life Support (PHTLS), or ACLS may be utilized for recertification/licensure purposes regardless of the provider's CE Providership status. It will be the responsibility of the participant to maintain a course completion record and course outline that indicates the total hours of the individual's participation (in activities relevant to the individual's level) for audit purposes.

2. National Standard Curriculum refers to the curricula developed under the auspices of the United States Department of Transportation, National Highway Traffic Safety Administration for the specified level of training of EMS Personnel.

H. The EMS Branch will not pre-authorize course outlines from non-approved CE Providers to determine their possible acceptance for recertification purposes. Nationally recognized curricula presented by non-providers may be accepted and approved by the County, but individual courses, conferences, or other activities will not be recognized if they are not sponsored and approved by an authorized provider.

I. EMTs who have attended courses from non-providers (except in the case of a course using a nationally recognized course curriculum) must submit ALL OF THE FOLLOWING AT THE TIME OF RECERTIFICATION/REACCREDITATION if they wish
recertification credit:

1. Title of course, name of instructor, location, and telephone number of presenter.

2. Date of course, course outline, course learning objectives and a copy of course evaluation form.

3. The number of hours of information/experience relevant to EMT activities.

   The EMT should be informed that there is no guarantee of acceptance of these courses for recertification. EMTs are reminded that extra activities may be required for recertification if the hours from a non-provider are rejected by the EMS Branch.

J. EMS will NOT review individual courses offered by non-approved providers for Paramedic CE credit. Paramedics wishing credit for activities sponsored by organizations located in California counties other than San Diego County should contact that county’s local EMS agency. Paramedics should contact the California EMS Authority for information on approval for courses offered by providers from out of state.

K. EMS maintains the authority to approve continuing education activities, which may exceed the scope of the CE Guidelines Manual published by EMS. Any such determination by EMS is solely at its discretion.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.196, 1797.208 and 1797.214.

II. **Purpose:** To establish the minimum requirements for Public Safety (PS) Automated External Defibrillator (AED) Training Program student eligibility.

III. **Policy:** To be eligible to enter an approved PS AED Training Program, an individual shall meet all the following requirements:

   A. Successfully complete an approved Public Safety First-Aid Course.

   B. Possess a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.206, 1797.208 and 1797.214, California Code of Regulations, Title 22, Chapter 1.5, Sections 100020, 100021.

II. **Purpose:** To establish standardized Public Safety (PS) Automated External Defibrillator (AED) curriculum and program approval requirements.

III. **Policy:**

   A. San Diego County Emergency Medical Services (EMS) shall approve PS AED Training Programs.

   B. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time, not to exceed thirty (30) days, after receipt of all required documentation.

   C. Program approval shall be renewed every four (4) years.

IV. **Procedure:**

   A. The requesting training agency shall submit to EMS the following materials to be considered for program approval:

      1. Outline and objectives for the minimum four (4) hour PS AED training course, to include:

         a. Proper use, maintenance and periodic inspection of the automated external defibrillator (AED).

         b. The importance of defibrillation, advanced life support (ALS), adequate airway care, and internal emergency response system, if applicable.

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Approved:

[Signatures]

Administration

Medical Director
c. Overview of the EMS system, the local EMS system’s medical control policies, 9-1-1 access, and interaction with EMS personnel.

d. Assessment of an unconscious patient, to include evaluation of airway, breathing, and circulation to determine cardiac arrest.

e. Information relating to AED safety precautions to enable the individual to administer a shock without jeopardizing the safety of the patient or rescuers or other nearby persons.

f. Recognition that an electrical shock has been delivered to the patient and that the AED is no longer charged.


h. The appropriate continuation of care following a successful defibrillation.

Approved:

[Signatures]

Administration  Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.208, 1797.210, 1797.214, 1797.220, 1798.102 and 1798.104.

II. **Purpose:** To establish the requirements for Public Safety (PS) Automated External Defibrillator (AED) accreditation in San Diego County.

III. **Policy:** Public Safety personnel must be accredited by San Diego County Emergency Medical Services (EMS) in order to use the Automated External Defibrillator (AED) skill in San Diego County.

   A. To become PS AED accredited in San Diego County, the following criteria must be met:
      1. Possess a current CPR card (Health Care Provider/Professional Rescuer or equivalent).
      2. Possess documentation of successful completion of an approved Public Safety First Aid Course.
      3. Possess a valid PS AED Course Completion record from an approved PS AED Training Program.
      4. Be affiliated with an approved PS AED agency in San Diego County.

   B. The following continuing education (CE) requirements must be met to maintain PS AED accreditation:
      1. Demonstrate skills proficiency annually, at a minimum.
      2. Adherence to the CE requirements rests on the Physician Medical Director or designee to which the accredited PS AED is assigned.

   C. Deactivation/Reactivation Process:

Approved:

[Signatures]

Administration

Medical Director
1. PS AED accreditation will become inactive for:
   a. Failure to comply with CE requirements.
   b. Failure to maintain current CPR card.
   c. No longer affiliated with a PS AED agency.

2. The Physician Medical Director or designee shall be responsible for notifying EMS of PS AED personnel who are placed in inactive status on the first day of the following month.

3. Inactive status due to CE delinquency: The employing agency shall be responsible for notifying the employee and assuring inactive status until the CE delinquency is resolved and verified by the Physician Medical Director or designee.

4. Inactive status due to failure to maintain certification(s):
   a. Employing agency shall monitor status of employee certification(s).
   b. Employing agency shall notify the Physician Medical Director or designee of the agency of inactive status due to lapse in certification(s).
   c. The employing agency shall be responsible for notifying the employee and assuring inactive status until certification issue(s) resolved.

5. Reactivation Process:
   a. A PS AED on inactive status may be reactivated by fulfilling the following requirements:

Approved:

[Signatures]

Administration  Medical Director
1) Inactive status due to CE delinquency -- shall be resolved to the satisfaction of the Physician Medical Director or designee.

2) Inactive status due to failure to maintain current First Aid/CPR certification--submit proof of current PS First Aid/CPR certification/training to employer.

b. The Physician Medical Director or designee shall be responsible for notifying EMS of PS AED personnel who are removed from inactive status on the first day of the following month.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.206,
1797.208, 1797.214 and 1797.218.

II. **Purpose:** To establish a standardized Perilaryngeal Airway Adjunct Skills curriculum
and program approval requirements.

III. **Policy:**

A. County of San Diego, Emergency Medical Services (EMS) shall approve EMT
Perilaryngeal Airway Adjunct Skills training programs prior to the program being
offered. To receive program approval, requesting training agencies and CE
providers must apply for approval to EMS and submit all materials listed in the
sections below.

B. Program approval or disapproval shall be made in writing by EMS to the requesting
training program within a reasonable period of time, not to exceed 30 days after
receipt of all required documentation.

C. All approved EMT Perilaryngeal Airway Adjunct skills training programs shall be
subject to periodic review including, but not limited to:

1. Periodic review of all program materials.
2. Periodic on-site evaluation by EMS.

D. Noncompliance with any criterion required for program approval, use of any
unqualified teaching personnel, or noncompliance with any other applicable provision
of the above may result in withdrawal, suspension or revocation of program approval
by EMS.

Document revised 7/1/2010
Approved:

[Signatures]
Administration
Medical Director
IV. **Definition:** “Perilaryngeal Airway Adjuncts” includes Supraglottic Airway Devices and/or Esophageal Tracheal Airway (ETAD) Devices.

V. **Procedure:**

The requesting training agency or CE provider shall submit to EMS documentation of current program approval and also submit the following materials in order to be considered for PAA program approval:

A. Curriculum course outline and objectives for the seven hour Perilaryngeal airway training program, to include:
   1. Anatomy and physiology of the respiratory system.
   2. Assessment of the respiratory system.
   3. Review of basic airway management techniques, which includes manual and mechanical.
   4. The role of the Perilaryngeal airway adjuncts in the sequence of airway control.
   5. Indications and contraindications of the Perilaryngeal airway adjuncts.
   6. The role of pre-oxygenation in preparation for the Perilaryngeal airway adjuncts.
   7. Perilaryngeal airway device insertion and assessment of placement.
   8. Methods for prevention of basic skills deterioration.
   9. Alternatives to the Perilaryngeal airway adjuncts.
NOTE: If only one device is taught – course must be a minimum of five hours. If prior training for one device has been completed, an additional two hour device-specific training can be completed. If more than one device is being taught in a single session – 2 hours per additional device must be added to the minimum five hour primary course for a single device.

B. A standardized competency-based written and skills examination for airway management which shall include the use of basic airway equipment and techniques and use of the Perilaryngeal airway adjuncts.

C. List of equipment to be used for skills training.

D. Documentation of access to equipment and staff for skills training in sufficient quantities to meet 1:10 teacher/student ratio.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.107, 1797.170, 1797.214 and 1797.220.

II. **Purpose:** To establish the minimum requirements for Optional Skills Training Program student eligibility.

III. **Policy:**

To be eligible to enter an approved Optional Skills Training Program, an individual shall meet the following requirements:

1. Possess current State of California EMT-Basic Certification and accreditation within the County of San Diego.

2. Possess a current CPR card (Health Care Provider/Professional Rescuer or equivalent).

3. Must be sponsored by an approved local ALS or BLS prehospital provider agency.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.208 and 1797.214.

II. **Purpose:** To establish a mechanism for application and approval of EMT training programs in San Diego County.

III. **Policy:**

A. All EMT training programs must meet the requirements of the California Code of Regulations, Title 22, Division 9, Chapter 2, pertaining to EMT training program approval, and the County of San Diego, Emergency Medical Services (EMS) requirements listed in the attached training program application.

B. All EMT training programs must have approval of EMS prior to the program being offered. To receive program approval, requesting training agencies must apply for approval to EMS and submit all materials listed on the “Check List: Emergency Medical Technician Training Program Application”.

C. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time after receipt of all required documentation. This period of time shall not exceed three (3) months.

D. EMS shall establish the effective date of program approval, in writing, upon the satisfactory documentation of compliance with all program requirements.
E. Program approval shall be for four (4) years following the effective date of approval and may be renewed every four (4) years, subject to the procedure for program approval specified in Section C above.

F. All approved EMT training programs shall be subject to periodic review including, but not limited to:

1. Periodic review of all program materials.
2. Periodic on-site evaluation by EMS.

G. All approved training programs shall notify EMS, in writing, in advance, when possible, and in all cases, within thirty (30) days of any change in course content, hours of instruction, course director, and program director or program clinical coordinator.

H. All approved training programs shall report, in writing, the name and address of each person receiving a course completion record and the date of course completion to EMS within fifteen (15) days of course completion.

I. Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of the above may result in withdrawal, suspension or revocation of program approval by EMS subject to the provision that an approved EMT training program shall have a reasonable opportunity to comply with these regulations, but in no case shall the time exceed sixty (60) days from date of written notice to withdraw program approval.
COUNTY OF SAN DIEGO EMS AGENCY

APPLICATION FORM

EMERGENCY MEDICAL TECHNICIAN TRAINING PROGRAM

1. Name of Institution Agency ________________________________________________
   Street __________________________________________________________________
   City ___________________________________________________________________
   Contact Person __________________________________________________________
   Telephone Number ____________________________ Extension _________________

2. Personnel:
   * Program Director ( ) _________________________________________________
   * Clinical Coordinator ( ) ______________________________________________
   * Principal Instructor(s) ( ) _____________________________________________
   ** Teaching Assistants ( ) _____________________________________________

3. Course Hours:
   Didactic/Lab (min. 100 hrs.) ( )  EMT Course ( )  Refresher ( ) (min. 24 hrs.)
   Clinical (min. 10 hrs.) ( ) N/A

4. Units of Credit: __________________________________________________________

5. Text: __________________________________________________________________

* Provide qualifications on appropriate forms for each person.
** Provide list of names and lecture subjects.
<table>
<thead>
<tr>
<th>MATERIALS TO BE SUBMITTED</th>
<th>ENCLOSED</th>
<th>TO FOLLOW</th>
<th>FOR COUNTY USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Letter to EMT approving authority requesting approval. 100066(a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Check list for EMT Program approval.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Application Form for Program Approval.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. Program Director Qualification Form. 100070(a)</td>
<td></td>
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<tr>
<td>5. Program Clinical Coordinator Qualification Form 100070(c)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. Principal Instructor Qualification Form. 100070(d)</td>
<td></td>
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</tr>
<tr>
<td>7. Teaching Assistant(s) 100070(e) Submit names and subjects assigned to each Teaching Assistant.</td>
<td></td>
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</tr>
<tr>
<td>8. Copy of written agreement with (1 or more) Acute Care Hospital(s) to provide clinical experience. 100068 and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Copy of written agreement with (1 or more ambulance agency(ies) to provide field experience. 100068</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10. Statement verifying usage of the United States Department of Transportation's EMT-Basic National Standard Curriculum, DOT HS 808 149, August 1994. 100075 (a)</td>
<td></td>
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</tr>
<tr>
<td>11. EMT Course description (100066), including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Statement of course objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. At least six (6) sample lesson plans</td>
<td></td>
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<tr>
<td>c. Course outline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Performance objectives for each skill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. At least ten (10) samples of written questions and at least six (6) samples of Skills Examinations used in periodic testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Final Examination (written and skills).</td>
<td></td>
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</tr>
<tr>
<td>12. Refresher course description (100066), including:</td>
<td></td>
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<td></td>
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<tr>
<td>a. Statement of course objectives</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>b. At least six (6) sample lesson plans</td>
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<td>c. Course outline</td>
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<tr>
<td>f. Samples of Final Examination ten (10) written and six (6) skills questions.</td>
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<tr>
<td>13. Class schedules; places and dates (estimate if necessary)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. EMT Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Refresher Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Copy of Course Completion Certificate 100077 (basic and refresher)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Copy of liability insurance on students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Table of contents listing the required information on this application, with corresponding page numbers. 100066(b) (11)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Reference to specific Article within California Code of Regulations, Title 22, Division 9, Chapter 2.
COUNTY OF SAN DIEGO EMS AGENCY

EMT INSTRUCTOR QUALIFICATIONS

Institution: ____________________________

Check One

Program Director _____
Clinical Coordinator ___
Principal Instructor _____
Teaching Assistant _____

1. Name: ____________________________________________

2. Occupation: _______________________________________

3. Professional or Academic Degrees Held:

   a. __________________________
   a. __________________________

   b. __________________________
   b. __________________________

   c. __________________________
   c. __________________________

4. Professional License Number(s):

   a. __________________________
   a. __________________________

   b. __________________________
   b. __________________________

   c. __________________________
   c. __________________________

5. Emergency care related education within the last five (5) years:

   Course Title                               School                               Course Length  Date Completed

   a. __________________________________________
   b. __________________________________________
   c. __________________________________________

6. Emergency care related experience (academic or clinical) within the last (5) years:

   Position                                 Duties                               Organization  Dates

   a. __________________________________________
   b. __________________________________________
   c. __________________________________________

7. On the attached pages, initial to the left each subject this person is assigned to teach.

Approvals:

___________________________            ____________________________
Program Director                 Clinical Coordinator
COUNTY OF SAN DIEGO EMS AGENCY
APPLICATION FORM
EMERGENCY MEDICAL TECHNICIAN TRAINING PROGRAM

List of equipment available in sufficient quantities to meet 1:10 student ratios for skills training (attached).

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Number Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. CPR mannequins, adult and baby</td>
<td></td>
</tr>
<tr>
<td>b. Airway management equipment</td>
<td></td>
</tr>
<tr>
<td>1. O₂ cylinders</td>
<td></td>
</tr>
<tr>
<td>2. Flowmeter</td>
<td></td>
</tr>
<tr>
<td>3. O₂ masks and nasal cannula</td>
<td></td>
</tr>
<tr>
<td>4. Suction equipment</td>
<td></td>
</tr>
<tr>
<td>5. Suction tubing</td>
<td></td>
</tr>
<tr>
<td>6. Rigid and flexible suction catheters</td>
<td></td>
</tr>
<tr>
<td>7. Pocket mask</td>
<td></td>
</tr>
<tr>
<td>8. Bag-valve-mask resuscitator</td>
<td></td>
</tr>
<tr>
<td>9. Demand-valve-mask resuscitator (optional)</td>
<td></td>
</tr>
<tr>
<td>10. Oral and nasal airways of various sizes</td>
<td></td>
</tr>
<tr>
<td>11. Combitube</td>
<td></td>
</tr>
<tr>
<td>12. Endotracheal tube</td>
<td></td>
</tr>
<tr>
<td>c. Traction Splint</td>
<td></td>
</tr>
<tr>
<td>d. Extrication device</td>
<td></td>
</tr>
<tr>
<td>e. Backboard, head immobilizer cervical collars</td>
<td></td>
</tr>
<tr>
<td>f. Obstetrical mannequin and OB kit</td>
<td></td>
</tr>
<tr>
<td>g. Tourniquets</td>
<td></td>
</tr>
<tr>
<td>h. Various bandages and splints</td>
<td></td>
</tr>
<tr>
<td>i. IV tubing and solution – Normal Saline</td>
<td></td>
</tr>
<tr>
<td>j. Antishock garment</td>
<td></td>
</tr>
<tr>
<td>k. Cardiac monitor (optional)</td>
<td></td>
</tr>
<tr>
<td>l. Blood pressure cuffs and stethoscopes</td>
<td></td>
</tr>
<tr>
<td>m. Intubation mannequins</td>
<td></td>
</tr>
<tr>
<td>n. AED equipment for training</td>
<td></td>
</tr>
<tr>
<td>o. Examples of medications in current scope</td>
<td></td>
</tr>
</tbody>
</table>

II. **Purpose:** To establish the requirements for EMT certification/recertification in the County of San Diego.

III. **Policy:**
   
   A. To be eligible for certification as an EMT in San Diego County, the candidate must meet the following criteria:
      
      1. **Initial Certification:**
         
         a. Must be 18 years of age or older.
         
         b. Must hold a valid EMT Course Completion Record from an approved EMT course.
         
         c. Must hold a current EMT National Registry Card.
         
         d. Must possess a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).
         
         e. Must submit to a California Department of Justice Live scan and Federal Bureau of Investigation criminal background check (separate from any agency requirement).
         
         f. Application for certification must be made within two (2) years of being issued an EMT Course Completion record.
      
      2. **Recertification:**
         
         
         b. Successfully complete an approved refresher course within the two (2) years prior to application for recertification, or

---

Document revised 7/1/2010

Approved:

[Signatures]

**Marilyn Metz**
Administration

**Barry Yacenda**
EMS Medical Director
c. Complete 24 hours of approved continuing education (CE) within two (2) years prior to application for recertification.

d. Present a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).

e. Submit to a California Department of Justice Live scan and Federal Bureau of Investigation criminal background check if not yet completed for County of San Diego EMS.

f. Submit a complete skills competency verification form.

3. Lapse in Certification:

a. For a lapse within six months, the individual shall comply with the original requirements for re-certification.

b. For a lapse of six months or more, but less than twelve months, the individual shall comply with the original requirements for recertification and complete an additional twelve hours of continuing education for a total of 36 hours of training.

c. For a lapse of twelve months or more, but less than 24 months, the individual shall comply with the original requirements for recertification and complete an additional twenty-four hours of continuing education, for a total of 48 hours of training, and present a current National Registry Card.

d. For a lapse of greater than twenty-four months the individual shall complete an entire EMT course and comply with the original requirements for initial certification.

B. Notification responsibilities:

Document revised 7/1/2010
Approved:

[Signatures: Administration, EMS Medical Director]
The EMT shall be responsible for notifying County of San Diego EMS of her/his proper and current mailing and residential address and shall notify County of San Diego EMS in writing within thirty (30) calendar days of any and all changes of the mailing and residential address, giving both the old and the new address, and California Emergency Medical Services Authority (EMSA) EMT central registry number.

C. An application for certification or recertification shall be denied without prejudice and does not require an administrative hearing, when an applicant does not meet the requirements for certification or recertification, including but not limited to:

1. Failure to pass certification or recertification examination.

2. Lack of sufficient continuing education or documentation of a completed refresher course.

3. Failure to furnish additional information or documents requested by the certifying entity.

4. Failure to pay any required fees.

D. The denial shall be in effect until all requirements for certification or recertification are met. If a certificate expires before recertification requirements are met, the certificate shall be deemed a lapsed certificate and subject to the provision pertaining to lapsed certificates. An individual who is a member of the reserves and is deployed for active duty with a branch of the Armed Forces of the United States, whose California EMT certificate expires during the time the individual is on active duty or less than six (6) months from the date the individual is deactivated/released from active duty, may be given an extension of the expiration date of the individual’s EMT certificate for up to six
(6) months from the date of the individual’s EMT certificate upon compliance with the following provisions:

1. Provide documentation from the respective branch of the Armed Forces of the United States verifying the individual’s dates of activation and deactivation/release from duty.

2. If there is no lapse in certification, meet the requirements for recertification. If there is a lapse, meet the requirements of a lapsed certification.

3. Provide documentation showing that the CE activities submitted for the certification renewal period were taken not earlier than thirty (30) calendar days prior to the effective date of the individual’s EMT certificate that was valid when the individual was activated for duty and not later than six (6) months from the date of deactivation/release from duty.

4. For an individual whose active duty requires the use of EMT skills, credit may be given for documented training that meets the requirements of Chapter 11, EMS CE Regulations (Division 9, Title 22, California Code of Regulations) while the individual was on active duty. The documentation shall include verification from the individual’s Commanding Officer attesting to the classes attended.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.107, 1797.171, 1797.200, 1797.208, 1797.218 and 1798.

II. **Purpose:** To establish a mechanism for application and approval of Advanced Emergency Medical Technician (AEMT) training programs in San Diego County.

III. **Policy:**

A. AEMT training programs must meet the requirements of the California Code of Regulations, Title 22, Division 9, Chapter 3, pertaining to AEMT training program approval, and the County of San Diego, Emergency Medical Services (EMS) requirements listed in the attached training program application.

B. Students accepted into AEMT training will already have a year’s experience as an EMT, preferably with 911 responses, as a minimum requirement for enrollment in AEMT course.

C. AEMT training programs must have approval of EMS prior to the program being offered. To receive program approval, requesting training agencies must apply for approval to EMS and submit all materials listed on the “Advanced Emergency Medical Technician (AEMT) Training Program Application”.

D. Program approval or disapproval shall be made in writing by EMS to the requesting training program within a reasonable period of time after receipt of all required documentation. This period of time shall not exceed three (3) months.

E. EMS shall establish the effective date of program approval, in writing, upon the satisfactory documentation of compliance with all program requirements.

F. Program approval shall be for four (4) years following the effective date of
approval and may be renewed every four (4) years, subject to the procedure for program approval specified in Section C above.

G. Approved AEMT training programs shall be subject to periodic review including, but not limited to:

1. Periodic review of all program materials.

2. Periodic on-site evaluation by EMS.

H. Approved training programs shall notify EMS, in writing, in advance, when possible, and in all cases, within thirty (30) days of any change in course content, hours of instruction, course director, and program director or program clinical coordinator.

I. Approved training programs shall report, in writing, the name and address of each person receiving a course completion record and the date of course completion to EMS within fifteen (15) days of course completion.

J. Noncompliance with any criterion required for program approval, use of any unqualified teaching personnel, or noncompliance with any other applicable provision of the above may result in withdrawal, suspension or revocation of program approval by EMS subject to the provision that an approved AEMT training program shall have a reasonable opportunity to comply with these regulations, but in no case shall the time exceed sixty (60) days from date of written notice to withdraw program approval.
COUNTY OF SAN DIEGO EMS AGENCY
APPLICATION FORM
ADVANCED EMERGENCY MEDICAL TECHNICIAN TRAINING PROGRAM

1. Name of Institution/Agency ________________________________________________
   Street __________________________________________________________________
   City ___________________________________________________________________
   Contact Person __________________________________________________________
   Telephone Number ____________________________ Extension _________________

2. Personnel:
   * Program Medical Director ( ) _____________________________________________
   * Course Director ( ) _________________________________________________
   * Principal Instructor(s) ( ) ____________________________________________
   ** Teaching Assistants ( ) _____________________________________________
   * Field Preceptors ( ) ________________________________________________
   * Hospital Clinical Preceptors ( ) _______________________________________

3. Course Hours (min. 88 hr.):
   Didactic/Lab (min. 48 hrs.) ( )
   Clinical (min. 16 hrs.) ( )
   Field (min. 24 hrs.) ( )

4. Units of Credit: _________________________________________________________

5. Text: __________________________________________________________________

* Provide qualifications on appropriate forms for each person.
** Provide list of names and lecture subjects.
<table>
<thead>
<tr>
<th>MATERIALS TO BE SUBMITTED</th>
<th>ENCLOSED</th>
<th>TO FOLLOW</th>
<th>FOR COUNTY USE ONLY</th>
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</thead>
<tbody>
<tr>
<td>1. Letter to AEMT approving authority requesting approval. 100113*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Check list for AEMT Program approval.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Completed application Form for Program Approval.</td>
<td></td>
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</tr>
<tr>
<td>4. Program Medical Director Qualification Form. 100109(a) *</td>
<td></td>
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</tr>
<tr>
<td>5. Program Course Director Qualification Form 100109(b) *</td>
<td></td>
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<td></td>
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<tr>
<td>6. Principal Instructor Qualification Form 100109(c) *</td>
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<tr>
<td>7. Teaching Assistant(s) 100109(d) Submit names and subjects assigned to each Teaching Assistant.</td>
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</tr>
<tr>
<td>8. Field Preceptor(s) Qualification Form. 100109(e) *</td>
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<tr>
<td>9. Hospital Clinical Preceptor(s) Qualification Form 100109(f) *</td>
<td></td>
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<tr>
<td>10. Copy of written agreement with (1 or more) Acute Care Hospital(s) to provide clinical experience. 100111*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. Copy of written agreement with (1 or more Advanced EMT or Paramedic agency(ies) to provide field experience. 100112(b)*</td>
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<tr>
<td>12. Statement verifying usage of the State AEMT Model curriculum, EMSA #133.</td>
<td></td>
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<tr>
<td>13. Basic course description, including: 100113*</td>
<td></td>
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<tr>
<td>a. Statement of course objectives</td>
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<tr>
<td>b. At least six (6) sample lesson plans</td>
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<td></td>
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</tr>
<tr>
<td>c. Course outline (if different than the State AEMT Basic curriculum format).</td>
<td></td>
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<tr>
<td>d. Performance objectives for each skill</td>
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<td>17. Table of contents listing the required information on this application, with corresponding page numbers.</td>
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</tbody>
</table>

* Reference to specific Article within California Code of Regulations, Title 22, Division 9, Chapter 3.
COUNTY OF SAN DIEGO EMS AGENCY
AEMT INSTRUCTOR QUALIFICATIONS

Institution: __________________________

Check One
Course Director _____
Principal Instructor _____
Teaching Assistant _____
Field Preceptor _____
Hospital Preceptor _____

1. Name: __________________________________________

2. Occupation: ______________________________________

3. Professional or Academic Degrees Held: 4. Professional License Number(s):

a. __________________________
a. __________________________
b. __________________________
b. __________________________
c. __________________________
c. __________________________

5. Emergency care related education within the last five (5) years:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>School</th>
<th>Course Length</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
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<td></td>
</tr>
</tbody>
</table>

6. Emergency care related experience (academic or clinical) within the last (5) years:

<table>
<thead>
<tr>
<th>Position</th>
<th>Duties</th>
<th>Organization</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. On the attached pages, initial to the left each subject this person is assigned to teach.

Approvals:

_________________________            ____________________________
Medical Director                 Course Director
List of equipment available in sufficient quantities to meet 1:10 student ratios for skills training (attached).

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Number Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. CPR mannequins, adult and baby</td>
<td></td>
</tr>
<tr>
<td>b. Airway management equipment</td>
<td></td>
</tr>
<tr>
<td>1. O&lt;sub&gt;2&lt;/sub&gt; cylinders</td>
<td></td>
</tr>
<tr>
<td>2. Flow meter</td>
<td></td>
</tr>
<tr>
<td>3. O&lt;sub&gt;2&lt;/sub&gt; masks and nasal cannula</td>
<td></td>
</tr>
<tr>
<td>4. Inhalers/spacers/T-tubes/nebulizers</td>
<td></td>
</tr>
<tr>
<td>5. Suction equipment</td>
<td></td>
</tr>
<tr>
<td>6. Suction tubing</td>
<td></td>
</tr>
<tr>
<td>7. Rigid and flexible suction catheters</td>
<td></td>
</tr>
<tr>
<td>8. Pocket mask</td>
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<tr>
<td>9. Bag-valve-mask resuscitator</td>
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</tr>
<tr>
<td>10. Demand-valve-mask resuscitator (optional)</td>
<td></td>
</tr>
<tr>
<td>11. Oral and nasal airways of various sizes</td>
<td></td>
</tr>
<tr>
<td>11. Perilaryngeal Airway Adjuncts</td>
<td></td>
</tr>
<tr>
<td>c. Tourniquets</td>
<td></td>
</tr>
<tr>
<td>d. Various bandages and splints</td>
<td></td>
</tr>
<tr>
<td>e. IV tubing and solution – Normal Saline</td>
<td></td>
</tr>
<tr>
<td>f. Capillary Finger-stick blood draw equipment</td>
<td></td>
</tr>
<tr>
<td>g. IV catheters</td>
<td></td>
</tr>
<tr>
<td>h. IV saline locks</td>
<td></td>
</tr>
<tr>
<td>i. Vacutainers &amp; Blood tubes</td>
<td></td>
</tr>
<tr>
<td>j. Blood glucose testing equipment</td>
<td></td>
</tr>
<tr>
<td>k. Blood pressure cuffs and stethoscopes</td>
<td></td>
</tr>
<tr>
<td>l. Intubation mannequins</td>
<td></td>
</tr>
<tr>
<td>m. AED equipment for training</td>
<td></td>
</tr>
<tr>
<td>n. Examples of medications in AEMT scope</td>
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</table>
I. **Authority**: Health and Safety Code, Sections 1797.170, 1797.175, 1797.210 and 1798.

II. **Purpose**: To establish the requirements for Advanced Emergency Medical Technician (AEMT) certification/recertification in San Diego County.

III. **Policy**:

A. To be eligible for certification as an AEMT in San Diego County, the candidate must meet the following criteria:

1. **Initial Certification**:
   
   a. Possess a current EMT certificate issued in the State of California.
   
   b. Must hold a valid AEMT course completion record from an approved AEMT training program.
   
   c. Pass, by pre-established standards developed and/or approved by the AEMT certifying authority, a competency-based written and skills certifying examination.
   
   d. Completion of a statement that the individual is not precluded from certification for reasons defined in Section 1798.200 of the Health and Safety Code.
   
   e. Completion of an AEMT certification application form.
   
   f. Must submit to a Live-scan criminal background check from the California Department of Justice and FBI Criminal background check for County of San Diego, EMS Branch (separate from any agency requirement), if not previously submitted.
   
   g. Must submit a photograph for identification purposes.
   
   h. Application for certification must be made within one (1) year of being issued an
AEMT Course Completion record.

i. For out-of-county applicants, AEMTs will successfully complete an accreditation workshop as prescribed by County of San Diego EMS. This workshop shall not be less than six (6) hours nor exceed 12 hours in length, and will include:

(1) Orientation to the local EMS system policies, procedures and protocols, radio communications, hospital/facility destination policies/practices, and other unique system features.

(2) Training and/or testing in any AEMT-specific procedures authorized by the County of San Diego EMS Medical Director, in which the individual has not been trained or tested.

2. Recertification:

a. Hold a current AEMT certificate in the State of California.

b. Successfully complete an approved refresher course within the two (2) years prior to application for recertification, or

c. Complete 36 hours of approved continuing education (CE) within two (2) years prior to application for recertification.

d. Present a current CPR Card (Health Care Provider/Professional Rescuer or equivalent).

e. Submit to a Live-scan from the California Department of Justice and FBI criminal background check if not yet completed for County of San Diego EMS.

f. Submit a complete skills competency verification form.

3. Lapse in Certification:
a. For a lapse within six months, the individual shall comply with the original requirements for re-certification.

b. For a lapse of six (6) months or more, but less then twelve (12) months, the individual shall comply with the original requirements for recertification and complete an additional twelve (12) hours of continuing education for a total of forty-eight (48) hours of training.

c. For a lapse of twelve (12) months or more, but less than twenty-four (24) months, the individual shall comply with the original requirements for recertification and complete an additional twenty four (24) of continuing education, for a total of sixty (60) hours of training, and the individual shall pass the written and skills certification exam mentioned previously in section A.

d. For a lapse of greater than twenty-four months the individual shall complete the entire AEMT training course and comply with the original requirements for initial certification.

4. Notification responsibilities:

The AEMT shall be responsible for notifying County of San Diego EMS of her/his proper and current mailing and residential address and shall notify County of San Diego EMS in writing within thirty (30) calendar days of any and all changes of the mailing and residential address, giving both the old and the new address, and AEMT registry number.

5. AEMT Certification Denial:

An application for certification or recertification shall be denied without prejudice and
does not require an administrative hearing, when an applicant does not meet the requirements for certification or recertification, including but not limited to:

a. Failure to pass a certification or recertification examination,

b. Lack of sufficient continuing education or documentation of a completed refresher course,

c. Failure to furnish additional information or documents requested by the certifying entity

d. Failure to pay any required fees

The denial shall be in effect until all requirements for certification or recertification are met. If a certificate expires before recertification requirements are met, the certificate shall be deemed a lapsed certificate and subject to the provision pertaining to lapsed certificates.
I. Authority: California State Board of Pharmacy Business and Professions Code, Section 4119 and 4126.5, California Code of Regulations, Title 22, Division 2.5, Chapter 3, Section 1797.172, and Chapter 5, Section 1798 through 1798.6, and Title 21, Chapter II of the Code of Federal Regulations, Sections 1301.11; 1301.12; 1301.75; 1301.76; 1301.91; 1301.92; 1304.03; 1304.04; 1304.11; 1304.21; 1304.22; 1307.02; 1307.21; 1305.05

II. Purpose: To ensure accountability for all controlled substances and devices issued to advanced life support (ALS) units.

III. Policy: All Advanced Life Support (ALS) Agencies in the County of San Diego will have a physician registrant to purchase controlled substances with a Drug Enforcement Administration (DEA) Form 222 from a pharmacy, or pharmaceutical supply agency, thereby retaining ownership, accountability and responsibility of those controlled substances. ALS Agencies which do not have a Medical Director may use the County of San Diego EMS Medical Director to assist with the purchase of controlled substances (per Policy S-416) if said agency signs a Memorandum of Agreement with the County of San Diego, for the purchase of Dangerous Drugs and Devices. All ALS agencies will develop policies compliant with Title 21 CFR regulations concerning the procurement, receipt, distribution and waste management of controlled substances managed under their DEA registration number.

IV. Definitions:

Controlled Substances: Pharmaceutical drugs categorized as Schedule II, III or IV by the DEA.

ALS Units – Ambulances or other emergency vehicles (e.g. engines, trucks etc.) upon
V. **Procedure:**

A. Initial Stocking and resupply of ALS Units:

1. Controlled substances will be ordered by the agency physician registrant and assigned to its ALS Units according to Drug Enforcement regulations.

2. All controlled substances will be issued in tamper evident containers and must be kept under double lock and key system.

3. All ALS agencies will maintain a stock supply of controlled substances at a central location at which all that agency's ALS units must resupply.

4. If any ALS agency wishes to have more than one location from which to stock ALS units, each location will have a separate DEA registration.

5. All locations in an ALS agency shall be under the control of the agency person who is designated to manage the narcotics program at the agency for the Medical Director.

6. All ALS agencies will maintain a secure, double locked location in which to keep the stock supply of the controlled substances. Access to this supply will be strictly limited.

7. All ALS agencies will be subject to at least yearly inspection of the location of the controlled substances and the logs in the storage location, by the physician registrant or designee.

B. Controlled Substance Record keeping by ALS Agency registrants:

1. All ALS agencies will keep a controlled substance log in the secure location that will
document:

a. Receiving of the controlled substances.

b. Distribution of controlled substances to the units for restock

c. Daily count of controlled substances

2. All registered agencies shall maintain the following logs on site for DEA review at any time (n. b. inventory records must be kept separately from the logs):

a. Initial inventory (documented at the initial registration of the agency)
   (1) A physical count of all controlled substances in stock, to include on the vehicles is to be taken.
   (2) Enter this count on an inventory record.

b. A biennial inventory is then taken each two years beginning within two years of the initial stocking date.

3. All original controlled substance purchase invoices and executed DEA-222 forms must be kept separately from the daily and maintenance logs.

4. The following logs must be maintained at the agency for a period of not less than 2 years.

a. Controlled Drug Usage Record

b. Controlled Drug Inventory Record

c. Records for Schedule II narcotics (Morphine Sulfate, and Morphine Immediate Release Oral Liquid) must be maintained separately from Schedule IV drugs (Midazolam).

C. Record–keeping on ALS Units:

Document revised 9/1/2010
Approved:

[Signature]
EMS Medical Director
1. Each ALS Unit shall maintain a standardized written record of controlled drug inventory. That record shall be available to the physician registrant for routine inspection, and shall be maintained by the agency for a period of three (3) years in compliance with the State Board of Pharmacy.

2. Drugs shall be inventoried by the ALS Personnel at the beginning and at the conclusion of each shift, and documentation shall include the signatures of the person(s) performing the inventory and noted on the controlled drug inventory.

3. Any time a controlled substance is administered, the name of the drug, the dose administered, the date of administration, the patient name, the name of the licensed person who is administering the medication, the receiving facility and the QCS run number, if available, shall be documented on the controlled drug inventory.

4. Any medication that has not been completely used must be disposed of in the presence of two medical personnel.

5. Agency personnel must document any disposed narcotic on the appropriate agency form. This form must document:
   a. The amount of the medication given to the patient
   b. The amount of the medication disposed
   c. The signatures of the two medical personnel who witnessed the disposal.

D. Management of Inventory Discrepancies

1. Any discrepancy between the written ALS Unit controlled drug inventory and the count of on board or stock supply drugs shall be noted on the controlled drug inventory sheet and shall be signed by the ALS Team first noting the discrepancy.

Document revised 9/1/2010
Approved:

[Signature]
EMS Medical Director
That discrepancy shall be verbally reported immediately to the agency person responsible for the narcotics at the agency.

2. Any discrepancy between the inventory and the actual amounts of the narcotics in the stock supply must be reported immediately to the physician registrant, followed by written report to the EMS Branch within 24 hours.

3. Any discrepancy between the inventory and the actual amounts of the narcotics in the stock supply must be reported to the DEA immediately using form P-106 on the DEA Diversion website (www.deadiversion.usdoj.gov).

4. Any agency personnel having knowledge of drug diversion must report this situation to the DEA.

E. Controlled Drug Inspection/Audit of ALS Units:

1. Periodic unannounced inspections or audits of controlled drugs and/or controlled drug inventory shall be conducted no less than once each year by the physician registrant or designee.

2. The EMS Medical Director or designee may perform announced or unannounced periodic inspections to document compliance with this policy at any time.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.172 and 1798.

II. **Purpose:** To identify the scope of practice of Paramedics in San Diego County.

III. **Policy:**

A. A Paramedic may perform any activity identified in the scope of practice of an EMT-1 in Chapter 2 of the California Code of Regulations, Division 9, Title 22.

B. A Paramedic student, or a currently licensed Paramedic affiliated with an approved Paramedic service provider, while caring for patients in a hospital as part of his/her training or continuing education, under the direct supervision of a physician, registered nurse, or physician's assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, may, in accordance with the County of San Diego Emergency Medical Services Branch (EMS) Policies, Procedures and Protocols, perform the following procedures and administer the following medications:

1. Perform defibrillation.

2. Perform synchronized cardioversion.

3. Visualize the airway by use of the laryngoscope and remove foreign body(ies) with forceps.

4. Perform pulmonary ventilation by use of the lower airway multi-lumen adjuncts, Perilaryngeal airway, and by adult oral endotracheal intubation (adult and pediatric*).

5. Institute intravenous (IV) catheters, needles or other cannulae (IV lines) in peripheral veins, institute saline locks, and monitor and administer medications through pre-existing vascular access.

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Approved:

[Signature]

EMS Medical Director
6. Administer intravenous glucose solutions or isotonic salt solutions.

7. Obtain venous blood samples.

8. Perform Valsalva maneuver.

9. Perform nasogastric intubation* and gastric suction*.


11. Monitor thoracostomy tubes.


12. Monitor and adjust IV solutions containing Potassium equal to or less than 20mEq/L.

13. Perform blood glucose monitoring test.

14. Administer, using prepackaged products when available, the following medications utilizing the listed routes: intravenous, intramuscular, intraosseous*, subcutaneous transcutaneous, rectal, sublingual, endotracheal, oral or topical.

   a. 25% and 50% dextrose;
   b. Activated charcoal;
   c. Adenosine;
   d. Albuterol;
   e. Aspirin;
   f. Atropine sulfate;
   g. Atrovent (ipratropium bromide); *
   h. Calcium chloride;
   i. Diazepam

Approved:

[Signature]

EMS Medical Director
j. Diphenhydramine;

k. Dopamine hydrochloride;

l. Epinephrine;

m. Furosemide;

n. Glucagon;

o. Lidocaine hydrochloride;

p. Midazolam;

q. Morphine sulfate;

r. Naloxone hydrochloride;

s. Nitroglycerine preparations (excluding IV);

t. Sodium bicarbonate;

u. Pralidoxime chloride (2 PAM Chloride) – requires completion of specialized training.

(*Note: Items identified with an asterisk* are included as a local optional paramedic intervention, pursuant to CCR Title 22, Div 9, Sec 100145,c, 2)

15. Perform any prehospital emergency medical care treatment procedure(s) or administer any medication(s) on a trial basis when approved by the medical director of the local EMS agency. Study procedure shall be as defined in Title 22, Division 9, Chapter 4 of the California Code of Regulations.

Approved:

[Signature]
EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1798 and 1797.220.

II. **Procedure:**

A. When the patient is determined to be "obviously dead", resuscitation measures shall not be initiated.

   1. The "obviously dead" are victims who, in addition to absence of respiration and cardiac activity, have suffered one or more of the following:
      
      a. Decapitation
      
      b. Evisceration of heart or brain
      
      c. Incineration
      
      d. Rigor Mortis
      
      e. Decomposition

   2. Adult blunt traumatic cardiac arrest, with ALL of the following:

      a. No visible signs of life (no spontaneous movement, apneic, pulseless.)
      
      b. Cardiac rhythm of asystole
      
      c. Mechanism of injury consistent with injuries

   3. The EMT shall describe the incident and victim's condition on the Prehospital Patient Record clearly stating the reasons that life support measures were not initiated

B. All patients with absent vital signs, shall be treated with resuscitative measures, unless they are "obviously dead (A.1.) or adult with blunt trauma arrest (A.2.). The Base Hospital Physician may make pronouncement of death by radio communication.
C. In multi-patient incidents, where staffing resources are limited, CPR need not be initiated for arrest victims, however, if CPR has been initiated prior to the arrival of ALS personnel or briefly during assessment, discontinue only if one of the following occurs or is present:

1. Subsequent recognition of obvious death
2. Per BHPO
4. Lack of response to brief efforts in the presence of any other potentially salvageable patient requiring intervention.

D. Except for signs of obvious death, if CPR has been initiated, BLS should be continued while contact is established with the Base Hospital.

1. Once the patient has been pronounced by the Base Hospital Physician, the EMT shall discontinue resuscitative efforts and she/he may contact the Medical Examiner.
2. The EMT shall describe the incident and the patient's condition on the Prehospital Patient Record, clearly stating the circumstances under which resuscitative efforts were terminated, to include the name of the Base Hospital Physician who pronounced the patient, and all available EKG monitoring documentation.
3. Patients placed in an ambulance or undergoing ambulance transport in CPR status may be pronounced by a Base Hospital Physician Order (BHPO). Criteria to pronounce may include:
   a. Medical futility
b. Latent discovery of a valid DNR

c. Development of obvious signs of death

d. Social concerns on scene such as large gatherings, unattended children, highly visible public settings, sensitive family contacts or crew safety or inclement weather, which may require transport of a patient who would otherwise be pronounced on scene.

4. Disposition of patients pronounced in an ambulance:

a. Deliver the deceased to the closest appropriate BEF and have the deceased logged in as an Emergency Department (ED) patient.

b. Turn over will be given to the ED staff. The Prehospital Patient Record (PRP) and all personal belongings will be left with the deceased.

c. The receiving facility will assume responsibility for the deceased and contact the Medical Examiner and Life Sharing Community Organ Donation, if appropriate, and provide any necessary social services for the family.

E. For patients with valid "Do Not Resuscitate" orders, follow procedures as established in County of San Diego EMS Policy S-414.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1798 and 1798.6.

II. **Purpose:** To establish a mechanism for prehospital patient care when a Physician-on-Scene offers assistance to the Paramedic.

III. **Policy:**

The Paramedic may only follow orders from a Base Hospital Physician or authorized RN (MICN).

IV. **Procedure:**

A. Paramedics to facilitate immediate consultation with Base Hospital Physician by providing radio or phone contact.

B. Base Hospital Physician shall relay information of Attachment A to Physician-on-Scene.

C. If Physician-on-Scene chooses to take total responsibility for the patient:

1. Base Hospital Physician may request proof of State of California licensure to be shown to paramedics.

2. Base Hospital Physician must approve or deny a Physician-on-Scene's request to take total responsibility for patient.

3. The Paramedic may assist the Physician-on-Scene with EMT level skills.

4. Drugs and equipment may be made available for the Physician-on-Scene's use.

D. Paramedic/MICN shall document Physician-on-Scene's name and on scene involvement on the patient care record.

Document revised 7/1/2010
Approved:

Medical Director
NOTE TO PHYSICIAN ON INVOLVEMENT WITH EMT-PARAMEDICS

An ALS support team (EMT-Paramedic) operates under standard policies and procedures developed by the local EMS agency and approved by their Medical Director under the authority of Division 2.5 of the California Health and Safety Code. The drugs they carry and procedures they can do are restricted by law and local policy.

If s/he wants to assist, this can only be done through one of the alternatives listed. These alternatives have been endorsed by CMA, State EMS Authority, CCLHO and BMQA.

Assistance rendered in the endorsed fashion, without compensation, is covered by the protection of the "Good Samaritan Code" (see Business and Professions Code, Sections 2144, 2395-2398 and Health and Safety Code, Section 1799.104).

ENDORSED ALTERNATIVES FOR PHYSICIAN INVOLVEMENT

After identifying yourself to the paramedic by name as a physician licensed in the State of California, and consulting with the Base Hospital physician and, if requested, showing proof of identity, you may choose to do one of the following:

1. Offer your assistance with another pair of eyes, hands, or suggestions, but let the life support team remain under base hospital control; or,

2. Take total responsibility for the care given by the life support team and physically accompany the patient until the patient arrives at a hospital and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedure. (Whenever possible, remain in contact with the base station physician.)

The California Health and Safety Code, Division 2.5, Chapter 5, Section 1798.6 (a) states as follows:

Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic or other prehospital emergency personnel, at the scene of the emergency who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency.

A key phrase in this is "...who is most medically qualified specific to the provision of rendering emergency care." The most medically qualified person certainly ought to be the base hospital physician, who is familiar with the county EMS system and paramedic procedures and protocols, and consequently, by extension, the base hospital nurse on the radio. The paramedic on scene is viewed as an extension of the base hospital physician, acting as his eyes and ears, and functions under his directions and orders.

Almost always, physicians on scene would be less qualified specific to the provision of rendering emergency care, and the paramedic/base hospital nurse/base hospital physician would be legally in charge of the scene.

It is certainly in everyone's best interest to have a smoothly operating team at the scene, and it is imperative that any physician on scene, expressing in whatever manner that he wants to be in command medically, be immediately put in radio contact with the base hospital physician.
ATTACHMENT A (continued)

The following is some suggested dialogue for the base hospital physician...

"Doctor, my name is ................. I am the base hospital physician at ..............Hospital and we are in medical control of the paramedic unit at your scene.

"Generally, the medics can most efficiently get the patient under treatment and into the emergency care system under our radio direction, and if that is alright with you, I can give them that direction by radio. Would that be alright with you?

"If so, let me speak to the medics on the radio and I will get things under way with them. Perhaps, if you wish, you could stand by to lend an extra pair of eyes and hands but remember that the paramedics are closely limited by state law and county policies on what specific procedures they can do, and state law allows them to take orders only from the base hospital.

IF THE PHYSICIAN INSISTS ON TAKING MEDICAL CONTROL

"Doctor, I understand that you wish to take total responsibility for the care given by the life support team. To do so, requires that you are licensed in the state of California and can show your license to the medics on scene. You must also accompany the patient until he arrives at the hospital and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedure. Is that your wish and intention?

"If so, I would ask that you state your name for the radio record and show the paramedics your California license. Could you also briefly tell me if you are on the staff of any local hospitals and what your training or specialty is, particularly with reference to the care of this patient.

"Please be advised again, that the state law does not allow the paramedics to take orders from anyone other than the base hospital physician, but they can assist you with basic life support.

...(It is the base hospital physician's option to make the equipment and drugs available to the on scene physician if he approves of his scene control.)

"Doctor, based on the information you have given me on the radio record, I am turning over medical control of the scene to you. You may request medications and drugs from the paramedics and they will assist you with basic life support. I will be standing by on the radio in case a problem arises and you need to discuss something further with me. If you would put the medics back on the radio, I will so advise them. Thank you.

....

If you cannot establish the competence of the on scene physician to your satisfaction, you should not turn over medical control. You may reference the previous information in a manner such as...

"California Health and Safety Code section 1798.6 specifically states that authority for patient health care management in an emergency shall be vested in that licensed ... professional...who is most medically qualified specific to the provision of rendering emergency medical care. In this case, while I want to thank you for your offer of assistance, I'm afraid I do not feel that I can reasonably turn over the scene management to you and I must request that you allow the paramedics to proceed with the emergency care of the patient. If you wish to discuss this with me or my base hospital medical director, Dr ..........., you may phone us later at our hospital at phone number .......... Could you please put the medics back on the radio so I may give them the orders necessary for the patient's care. Again, we would appreciate any cooperation you could give the medics.
I. **Authority**: Health and Safety Code, Division 2.5, Section 1798 and 1798.2; California Code of Regulations, Division 9, Title 22, Section 100145.

II. **Purpose**: To document the procedure for Paramedic activity during and reporting of communications failure.

III. **Policy**:

A. In the event that an Paramedic at the scene of an emergency attempts direct voice contact with a physician or mobile intensive care nurse (MICN) but cannot establish or maintain that contact and reasonably determines that a delay in treatment may jeopardize the patient, the Paramedic may initiate any Paramedic activity authorized by the EMS Medical Director in accordance with the County of San Diego Treatment Protocols, "Standing Orders for Communications Failure", until such direct communication may be established and maintained or until the patient is brought to a general acute care hospital. Direct voice communication with the base hospital shall be attempted at the scene or en route.

B. In each instance where advanced life support procedures are initiated in accordance with Section A of this Policy, immediately upon ability to make voice contact, the Paramedic who has initiated such procedures shall make a verbal report to the contacted Base Hospital Physician or MICN. A "Report of ALS Services Provided Without Base Hospital Contact" form (Attachment A) shall be completed and filed with the contacted Base Hospital Physician, when possible, immediately upon delivery of
the patient to a hospital, but in no case shall the filing of such documentation be delayed more than twenty-four (24) hours. If no contact is made, the form is filed with the assigned Base Hospital. The Base Hospital Physician shall evaluate this report and forward the report to the County of San Diego EMS Medical Director within seventy-two (72) hours of receipt of report from Paramedic(s).
COUNTY OF SAN DIEGO OFFICE OF EMERGENCY MEDICAL SERVICES

ATTACHMENT A

Report of ALS Services Provided without Base Hospital Contact: In accordance with Health & Safety Code, Division 2.5 Section 1798, any incident wherein advanced life support was rendered in the absence of direct communication with a Base Hospital must be verbally reported to the Base Hospital Physician or MICN immediately upon ability to make voice contact, and the following report must be completed; if more than one patient was treated, a separate form must be completed for each patient. Complete reports must be submitted to a Base Hospital Physician at the hospital to which you are regularly assigned within twenty-four (24) hours of the incident.

Date of incident: _______ PM Agency: ____________________________ Unit:

Paramedics - (Patient Care): ____________________ (Radio):

Base Hospital (if contact made): __________________________ Run Number:

Assigned Base Hospital: __________ EMS Form Number: _______ (Copy must be attached)

Completely describe the nature of the communication problem including suspected cause, exact geographic location, remedial actions taken, alternate modes attempted:

Detail the conditions and patient assessment that led you to believe the patient was in jeopardy of losing his/her life without ALS Treatment:

What specific ALS treatment was given without medical control?
What was the patient's condition on arrival at the hospital?

List witnesses at scene (first responders, other medical personnel)

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<th>Person reported to:</th>
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<td>Written report:</td>
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We, the above paramedics affirm that the statements made on the report are complete and true to the best of our knowledge.

Signature: _______________ Cert #: _____ Date: _______________

Signature: _______________ Cert #: _____ Date: _______________

Written report received by: (signature)

  Date & Time received: _______________ Base Hospital: ________________________

Base Hospital Physician Review:
Please attach copies of the following when submitting this report to the Division of Emergency Medical Services.
A. All documentation provided by service provider agency and paramedics
B. Copy of the MICN report form and copy of paramedic tape (if contact was made).
C. Copy of EMS Prehospital Patient Record

Forward copies of all documentation with 72 hours to:
EMS Medical Director, County of San Diego
Emergency Medical Services Branch
6255 Mission Gorge Road
San Diego, CA 92120
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES

For Office Use Only

Date and time report received:

Date: ________________  Time:

Report received by:
(  ) EMS Medical Director
(  ) EMS Chief
(  ) EMS Paramedic Coordinator

Reviewer's Comments:

Recommended Action:

A.  Receive and file - no further action required ( )
B.  Forward summary of communication problems to County Communications for review and recommendations ( )
C.  Return to Base Hospital for further information ( ) Detail:

D.  Return to Base Hospital for the following recommended action(s): ( )

E.  Forward to service provider agency for review ( )
F.  Other: ( )

Signature of Reviewer:

Date: ____________  Title: ____________________________

Medical Director Review:
Recommended action(s):

EMS Medical Director  

Date:

The Office of EMS will review and distribute its findings to the appropriate individuals listed below within thirty (30) days of receipt of this report.

Distribution  File

( ) ( ) Special Incident

( ) ( ) EMT-Paramedic - Name:

( ) ( ) EMT-Paramedic - Name:

( ) ( ) Base Hospital - Name: ________________________

( ) ( ) Receiving Hospital - Name:

( ) ( ) Service Provider Agency - Name:

( ) ( ) Other: ___
I. **Authority**: Health and Safety Code, Division 2.5, Section 1798.

II. **Procedure**:

A. When the patient is determined to be “obviously dead,” resuscitation shall not be initiated per Policy S-402.

1. The “obviously dead” are victims who, in addition to absence of respirations and cardiac activity, have suffered one or more of the following:
   a. Decapitation
   b. Evisceration of heart or brain
   c. Incineration
   d. Rigor Mortis
   e. Decomposition

2. The prehospital personnel shall describe the incident and victim’s condition on the Prehospital Patient Record, clearly stating the reasons that life support measures were not initiated.

B. It is not the responsibility of aeromedical prehospital personnel to pronounce the death of a patient in the prehospital care setting. However, there may be situations where the flight nurse is called upon to determine death on scene.

1. If despite resuscitation efforts, the patient remains pulseless and apneic, for the following type of chief complaint or mechanism of injury, the flight nurse may determine death on scene:
   a. Medical CPR
   b. Traumatic CPR
     1) Blunt Injury
     2) Penetrating Injury

Approved:

[Signature]

EMS Medical Director
SUBJECT: DETERMINATION OF DEATH

2. Special Considerations:
   a. In cases of obvious death, a monitor need not be used to determine death.
   b. If a monitor is used, a patient with a rhythm of ventricular fibrillation requires a Base Hospital Physician Order for determination of death.
   c. If victims of hypothermia, electrocution, lightning strikes and drowning do not meet “obvious death” criteria, determination of death requires a Base Hospital Physician Order.
   d. In any situation where there may be doubt as to the clinical findings of the patient, basic life support (BLS/CPR) must be initiated.

C. When a “death has been determined,” no basic or advanced life support shall be initiated or continued.
   1. The flight nurse is authorized to discontinue CPR or advanced life support (ALS) care initiated at the scene.
   2. The appropriate law enforcement agency must be notified.
   3. In situations where no other emergency medical services (EMS) personnel or authorized personnel are available, the flight crew will remain on scene until released by law enforcement.
   4. The flight crew will document on the prehospital patient record and the flight record the patient’s name, if known, the criteria for determination of death, the time the death was determined and resuscitative efforts discontinued.

Approved:

EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.88 and 1798.

II. **Purpose:** To provide guidelines for transportation of patients.

III. **Policy:**

A. Patients will be transported from the scene of the incident to the most accessible and appropriate facility staffed, equipped, and prepared to administer care appropriate to the needs of the patient.

B. Trauma center candidates who meet trauma triage criteria will be transported to the most appropriate trauma center.

C. Patients who are assessed as having a STEMI by using a 12-lead EKG shall be transported to the appropriate STEMI Receiving Center (SRC).

D. Transport to other than the most accessible facility will be ordered if it is in the best interest of the patient, based on the medical judgment of the Base Hospital.

E. If facility of preference requested by a patient or patient's adult family member is beyond a reasonable distance from the incident scene or is not medically in the best interest of the patient, refer to Policy P-412.

F. Prehospital personnel accompanying patient(s) to a receiving facility will remain with the patient(s) until medical management is assumed by the receiving facility's medical staff, and will provide staff with a verbal report.

G. In the event that there is a delay in the turnover of the patient to the receiving facility medical staff, subsequent medical interventions, once at the facility, will be at the discretion of the receiving facility.

H. The Emergency Medical Services Prehospital Patient Record (PPR), including field cardiac rhythm strips, will be left with the patient. This is particularly important for
those patients who are in acute status, STEMI patients, or are major trauma victims.
 SUBJECT: VARIATION FROM SAN DIEGO COUNTY PROTOCOLS FOR ADVANCED LIFE SUPPORT  

Date: 7/01/2010

I. Authority: Health and Safety Code, Sections 1797.90, 1797.202, 1797.220, 1798 (et.seq.)

II. Purpose: To identify the process by which a Base Hospital Physician may issue medical orders that vary from standard San Diego County ALS protocols.

III. Policy:

A. Base Hospital Physicians may issue medical treatment orders which vary from San Diego County ALS treatment protocols under the following criteria:

1. The order must be within the California Scope of Practice for Paramedics (Title 22, Section 100145) and included in the San Diego County ALS protocols, or within the San Diego County expanded Scope of Practice for Paramedics (SD County policy P-401).

2. The order must be transmitted to field personnel by the Base Hospital Physician or authorized mobile intensive care nurse (MICN) via direct voice contact.

3. Variation from protocol must be deemed necessary by the Base Hospital Physician to prevent serious morbidity or mortality.

B. The Paramedic nor and/or the MICN shall not be subject to disciplinary actions for carrying out or declining orders that vary from protocol that meet the above criteria.

C. All variations from protocol shall be reported to the EMS Medical Director and the Prehospital Audit Committee for evaluation and tracking.

IV. Procedure:

A. The Base Hospital Physician, after determining that a variation from protocol (a "Variation") is necessary to prevent serious morbidity or mortality, shall:

Document revised 7/1/2010
Approved:

[Signature]
EMS Medical Director
1. Transmit the order personally to the field personnel or instruct the MICN to transmit the order via direct voice communication, and

2. Sign the MICN run sheet or otherwise document the order, and

3. Complete "Notification of Variation from Advanced Life Support Treatment Protocol" (Attachment A) and submit it to the Base Hospital Medical Director, Base Hospital Nurse Coordinator or designee within twenty-four 24 hours of the occurrence of the incident.

B. The MICN shall:

1. Receive the verbal order with explanation of rationale from the Base Hospital Physician and acknowledge that the order is a Variation from ALS protocol, and

2. Transmit the order to field personnel (if the physician has not already done so), and state that "this Variation from ALS protocol was ordered by Dr. _____________ ", and

3. Obtain the physician's signature or otherwise document the source of the order, and

4. Initiate a Notification of Variation from ALS Treatment Protocol form for the Base Hospital Physician to complete.

C. The Paramedic shall:

1. Receive the order with explanation of rationale if needed directly from the Base Hospital Physician or MICN via direct voice communication, and

2. Acknowledge that the order received is a variation from San Diego County ALS protocol, and the Base Hospital Physician who gave the order and
3. Document on EMS Prehospital Patient Record the order for the Variation, and the name of the Base Hospital Physician (and the name of the MICN transmitting the order, if applicable) ordering the Variation.

D. The Base Hospital Medical Director or Base Hospital Nurse Coordinator shall gather all pertinent data relevant to the incident. This information will be documented on the Notification form and in the prehospital Quality Assurance Network Quality Collector System (QCS) computer on the Confidential Prehospital Quality Assurance Form and on the MD Variation form.

E. The Base Hospital Medical Director shall review the Variation to determine if it was necessary to prevent serious morbidity or mortality, and was consistent with San Diego County Scope of Practice for Paramedics or the State of California Paramedic Scope of Practice. The Base Hospital Medical Director shall document this determination, and any necessary educational efforts with the field, medical physician or nursing personnel involved, on the Notification form, and cause a copy of this form (and attachments) to be submitted to the County of San Diego EMS Medical Director for review and analysis (including review for the Prehospital Audit Committee).
COUNTY OF SAN DIEGO
QCS CONFIDENTIAL PREHOSPITAL QUALITY ASSURANCE REPORT (1.4)
MD VARIATION DETAIL

Run Number:  
Base Hospital: Incident: (date) (time)  
MICN: Crew Members: 1 -  
Agency: Unit: 2 -  
BH Physician: Agency Role: 3 -

Base Hospital Nurse Coordinator

Incident Description:

BHNC Signature: Date:

Base Hospital Physician

Specific Order:

Physician Comment:

Base Hospital Medical Director

[ ] This Variation was Deemed Necessary to Prevent Serious Morbidity or Mortality
[ ] This Variation was within the CA/COSD Paramedic Scope of Practice

Base Hospital Medical Director Action: □ No action indicated  
□ Trend issue

BHMD Comments:

[ ] MD Variation Reviewed by BHMD Date:

BHMD Signature: Date:

[ ] Case Ready for EMS Review Date:
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.220 and 1798.102.

II. **Purpose:** To establish the primary responsibilities of all participants in the San Diego County’s Emergency Medical Services System for reporting to the Medical Director of the County of San Diego Emergency Medical Services (EMS), issues of patient care management.

III. **Policy:**

A. The County of San Diego, Health & Human Services Agency, Emergency Medical Services Branch (EMS) shall maintain agreements with Base Hospitals and EMS provider agencies requiring:

1. Reporting issues in medical management of patients to the EMS Medical Director, including, but not limited to:
   a. Actions outside of the scope of practice of prehospital personnel
   b. Actions or errors that actually or potentially result in untoward patient outcomes, such as errors in administration of medications, invasive procedures, defibrillation/cardioversion, or other patient treatments.

2. Reporting actions or behaviors that endanger the welfare of patients or adversely affect the public regard for prehospital emergency services.

3. Reporting EMS personnel or EMS provider agency trends indicating on-going frequency of errors or non-compliance with established policies, protocols or standards of patient care.

B. EMS shall establish a Quality Improvement program in compliance with Policy S-004.

C. Base Hospitals will implement their own Quality Improvement program in compliance with Policy S-004. Patient care issues will be reported to the County of San Diego EMS through the Prehospital Audit Committee process.

D. Each EMS provider agency will implement its own Quality Improvement program in compliance with Policy S-004. Patient care issues will be reported to the agency’s designated Base Hospital or the County of San Diego, EMS Medical Director.

EMS prehospital personnel are expected to report significant issues in medical management of a patient to their agency, Base Hospital and/or County of San Diego EMS Medical Director.

Approved:

[Signature]  Administration

[Signature]  EMS Medical Director
I. **Authority**: Health and Safety Code, Division 2.5, Sections 1797.172 and 1798.4, Title 22, Section 100141.

II. **Purpose**: To establish policy for special paramedic operations and patient care while assigned to extraordinary special assignments or missions.

III. **Policy**:

A. This policy applies only to those currently certified Paramedics formally appointed and assigned by an approved Paramedic service provider agency which has been designated by the County of San Diego, Emergency Medical Services (EMS) Branch to provide personnel for special assignments or missions exclusively at the request of security/law enforcement/other services approved by the EMS Medical Director.

B. This policy is operative only for the duration of a specific special assignment or mission of the agencies specified in "A" above.

C. Paramedics on special assignment will not be required to make Base Hospital contact to treat patients due to the operational requirements of the special assignment/mission that prohibit the practical employment or presence of telemetry communications equipment.

1. The Paramedics will experience communications failure by default due to the nature of a special assignment/mission.

2. Paramedics shall establish base hospital radio contact at the earliest opportunity afforded by the circumstances of the special assignment/mission should it become necessary to engage in ALS level treatment.
D. Paramedics engaged in a special assignment or mission may, as the mission dictates, treat patients in accordance with the following:

1. Paramedic Treatment Protocol P-110 ALS Adult Standing Orders and P-111 Adult Standing Orders for Communications Failure.

2. Paramedic Treatment Protocol P-405 Communications Failure.

3. A report must be filed as specified in Policy P-405 Attachment "A" should any patient receive ALS treatment in connection with a special assignment/mission when communication failure occurs.

E. Paramedics engaged in a special assignment/mission will be permitted to operate and engage in patient care without a second Paramedic partner or authorized Mobile Intensive Care Unit (MICU) as the logistics of the special assignment/mission dictate.

F. Paramedics are responsible to maintain sufficient equipment and medical supplies necessary to treat a victim that meets the requirements of this special assignment protocol.

G. The transport of victim(s) to receiving hospitals shall at all times be consistent with existing state and county policy except as security and other considerations require with respect to special assignments for the U.S. Secret Service and U.S. State Department exclusively.
I. Authority: Health and Safety Code, Division 2.5, Section 1798 and; Child Abuse: California Penal Code, Article 2.5; and, Elder Abuse: Welfare and Institutions Code Chapter II, Part 3, Division 9.

II. Purpose: To establish a policy for identification and reporting of incidents of suspected child, dependent adult or elder abuse/neglect.

III. Policy: All prehospital care personnel are required to report incidents of suspected neglect of, or abusive behavior toward children, dependent adults or elders.

IV. Reporting Procedure:

A. Child Abuse/Neglect:

1. Suspicion of Child Abuse/Neglect is to be reported by prehospital personnel by telephone to the Child Abuse Hotline, (858) 560-2191, immediately or as soon as possible. Be prepared to give the following information:

   a. Name of person making report;
   b. Name of child;
   c. Present location of the child;
   d. Nature and extent of the abuse/neglect;
   e. Information that led reporting person to suspect child abuse/neglect;
   f. Location where incident occurred, if known; and
   g. Other information as requested.

2. Phone report must be followed within thirty-six (36) hours by a written report on “Suspected Child Abuse Report” form #SS8572. The mailing address for this report is: Health and Human Services Agency (HHSA),
Children’s Services Child Abuse Hotline, P.O. Box 711341, San Diego, CA 92111. Fax of this report may be transmitted to (858) 694-5240 or (858) 694-5241 between the hours of 8:00am and 5:00pm.

3. Copies of form SS8572 can be accessed on the County of San Diego, Emergency Medical Services website: [www.sandiegocountyems.com](http://www.sandiegocountyems.com).

4. The identity of all persons who report under this article shall be confidential and disclosed only between child protective agencies, or to counsel representing a child protective agency, or to the district attorney in a criminal prosecution or by court order.

B. Dependent Adult and Elder Abuse/Neglect:

1. Suspicion of Dependent Adult and Elder Abuse/Neglect should be reported as soon as possible by telephone to the Adult Protective Services at HHSA Aging and Independent Services (800) 510-2020. Be prepared to give the following information:
   a. Name of person making report;
   b. Name, address, and age of the dependent adult or elder;
   c. Nature and extent of person’s condition; and,
   d. Other information, including information that led the person to suspect abuse/neglect.

2. Telephone report must be followed by a written report within thirty-six (36) hours of the telephone report using "Report of Suspected Dependent Adult/Elder Abuse" form SOC 341. The mailing address for this report is:
SUBJECT: REPORTING OF SUSPECTED CHILD, DEPENDENT ADULT, OR ELDER ABUSE/NEGLECT

Adult Protective Services, 5560 Overland Avenue, San Diego, CA 92123.

The report may be faxed to (858) 495-5247.


4. The identity of all persons who report shall be confidential and disclosed only by court order or between elder protective agencies.

C. When two or more persons who are required to report are present at scene, and jointly have knowledge of a suspected instance of child, dependent adult, or elder abuse/neglect, and when there is agreement among them, the telephone report may be made by a member of the team selected by mutual agreement and a single report may be made and signed by such selected member of the reporting team. Any member who has knowledge that the member designated to report has failed to do so, shall thereafter make such report.

D. The reporting duties are individual, and no supervisor or administrator may impede or inhibit such reporting duties and no person making such report shall be subject to any sanction for making such report. However, internal procedures to facilitate reporting and apprise supervisors and administrators of reports may be established provided they are consistent with the provisions in this article.

Document revised 4/01/2011
Approved:

[Signature]
EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Section 1798.

II. **Purpose:** To establish a procedure for a patient or designated decision maker (DDM) to refuse care (assessment, treatment, or transport) or request an alternate disposition by EMS personnel.

III. **Definitions:**

A. **AMA** - The refusal of treatment or transport, by an emergency patient or his/her designated decision maker, against the advice of the medical personnel on scene or of the base hospital.

B. **Designated decision maker (DDM)** - An individual to whom a person has legally given the authority to make medical decisions concerning the person's health care (i.e., through a Durable Power of Attorney for Health Care).

C. **Emergency Patient** - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:
   1. Has a chief complaint or suspected illness or injury; or
   2. Is not oriented to person, place, time, or event; or
   3. Requires or requests field treatment or transport; or
   4. Is under the age of 18 and is not accompanied by a parent or legal guardian.

D. **Release** - A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.
IV. **Policy:**

A. All emergency patients will be offered treatment and/or transport following a complete assessment.

B. **Against Medical Advice (AMAs)**

1. Adults have the right to accept or refuse any and all prehospital care and transportation, provided that the decision to accept or refuse these treatments and transportation is made on an informed basis and provided that these adults have the mental capacity to make and understand the implications of such a decision.

2. The decisions of a Designated Decision Maker (DDM) shall be treated as though the patient was making these decisions for him/herself.

3. For those emergency patients who meet base hospital contact criteria (S-415) and wish to sign AMA, prehospital personnel shall use their best efforts to make base hospital contact prior to the patient leaving the scene and prior to the responding unit leaving the scene. In the event that the patient leaves the scene prior to base hospital contact, field personnel shall still contact the base hospital for quality improvement and trending purposes only.

4. The EMT, AEMT or paramedic should contact the base hospital and involve the MICN and/or base hospital physician in any situation in which the treatment or transport refusal is deemed life threatening or “high risk” by the EMT, AEMT or paramedic.

5. Field personnel shall document, if possible, the following for all patients released AMA:
   a. Who activated 9-1-1 and the reason for the call.
b. All circumstances pertaining to consent issues during a patient encounter.

c. The presence or absence of any impairment of the patient/DDM such as by alcohol or drugs.

d. The ability of the patient/DDM to comprehend and demonstrate an understanding of his/her illness or injury.

e. The patient/DDM has had the risks and potential outcome of non-treatment or non-transport explained fully by the EMT, AEMT or Paramedic, such that the patient/DDM can verbalize understanding of this information.

f. The reasons for the AMA, the alternate plan, if any, of the patient/DDM and the presence of any on-scene support system (family, neighbor, or friend [state which]).

g. That the patient/DDM has been informed that they may re-access 9-1-1 if necessary.

h. The signature of the patient/DDM on the AMA form, or, if the prehospital personnel are unable to have an AMA form signed, the reason why a signed form was not obtained.

i. Consideration should be given to having patient/family recite information listed in sections IV.B.5. d-g above, to the MICN/BHP over the radio or telephone.

C. Patient Refusal of Transport to Recommended Facility

Should the situation arise wherein a patient refuses transport to what is determined by the base hospital to be the most accessible emergency facility equipped, staffed and prepared to administer care appropriate to the needs of the patient, but the patient requests transport to
an alternate facility:

1. Field personnel should discuss with the base hospital the patient’s or DDM’s rationale for their choice of that alternate facility.

2. Inform the patient or DDM of base hospital’s rationale for its selected destination.

3. If the patient still refuses transport to the selected destination, follow procedures for the patient to refuse treatment and/or transport “against medical advice” (AMA). However, if, in the judgment of the base hospital, the patient’s refusal of transport would create a life-threatening or high-risk situation, and the patient continues to refuse the recommended destination, document the AMA and transport the patient to the requested facility if possible.

4. Arrange for alternate means of transportation to the facility of choice if appropriate.

D. Downgrade

1. Following a complete paramedic assessment and base hospital report (as required per County of San Diego EMS Policy S-415), the base hospital may authorize a downgrade in the transportation and treatment needs of an ALS-dispatched patient from advanced life support (i.e., paramedic treatment and transport) level of prehospital care to BLS (EMT treatment and transport) level of care and that unit can continue to transport the patient to any destination. All downgrades shall be reviewed by the agency’s internal Quality Improvement program.

2. If the patient’s condition deteriorates during the transport, the paramedic shall contact the base hospital authorizing the downgrade, initiate appropriate ALS treatment...
protocols, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.

3. If the paramedics have transferred care to a BLS service provider and the patient’s condition deteriorates during the BLS transport, the EMT shall contact a base hospital, inform the base hospital that the patient had been downgraded from ALS to BLS, and deliver the patient to the most appropriate facility at the direction of the base hospital. The Base Hospital shall generate a report to the Prehospital Audit Committee documenting the incident.

E. Release

If the patient and EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services, and the patient does not require the services of the prehospital system, the patient may be released at scene. For those patients who meet base hospital contact criteria (S-415), field personnel shall attempt to contact the base prior to the patient leaving the scene.
SUBJECT: RESUSCITATION  

I. Authority: Health and Safety Code, Division 2.5, Section 1798.

II. Purpose: To establish guidelines for Emergency Medical Technicians (EMT’s) (all levels) in San Diego County to determine appropriateness of either:

A. Discontinuing or withholding resuscitative measures, or;

B. Obtaining a Base Hospital Physician Order for pronouncement of patients in cardiac arrest while in the prehospital setting.

III. Definition:

A. Emergency Medical Technician shall apply to all EMT-I’s, EMT/PS-D’s, EMT-P’s licensed, certified, and/or accredited to function in San Diego County.

B. Do not Resuscitate (DNR) means no chest compressions, no defibrillation, no assisted ventilation, no endotracheal intubation, and no cardiotonic drugs. The patient is to receive full treatment other than resuscitative measures (e.g., for airway obstruction, pain, dyspnea, major hemorrhage, etc.).

C. Absent vital signs: absence of respirations and absence of a carotid pulse.

D. DNR Medallion: metal or permanently imprinted insignia, belonging to the patient that is imprinted with the words “Do Not Resuscitate, EMS.”

E. DNR Form: Any completed “Do Not Resuscitate Form.”

F. Advance Health Care Directive: An individual health care instruction or a power of attorney for health care.

IV. Procedure:

Approved:

[Signature]

EMS Medical Director
A. All patients with absent vital signs who are not “obviously dead,” (refer to Policy S-402) shall be treated with resuscitative measures, unless one of the following circumstances apply:

1. An EMT may withhold CPR if presented with one of the following:
   a. DNR Medallion.
   b. A completed DNR Form stating, “Do not resuscitate,” “No code,” or “No CPR.”
   c. A written, signed order in the patient’s medical record.
   e. Upon receipt of a Base Hospital Physician Order.

2. An EMT may discontinue CPR if presented with one of the following:
   a. A DNR Medallion.
   b. A completed DNR Form stating, “Do not resuscitate,” “No code,” or “No CPR.”
   c. A written, signed order in the patient’s medical record.
   e. Upon receipt of a Base Hospital Physician Order.

B. **Documentation**

Reason for withholding or terminating CPR shall be documented in the patient care record. DNR orders shall include the name of the physician or designee (e.g. Physician Assistant, Nurse Practitioner), and the date of the order. If patient
transport is initiated, the DNR Form (original or copy), DNR Medallion, or a copy of the valid DNR Order from the patient’s medical record shall accompany the patient.

C. **Considerations**

1. In the event any patient expires in an ambulance either before or during transport, the following should be considered:
   a. Unless specifically requested, the patient should not be returned to a private residence or skilled nursing facility, continue to the destination hospital.
   b. If between hospitals, return to the originating hospital if time is not excessive. If transport time would be excessive, divert to the closest hospital with a basic emergency facility (BEF).
   c. In rural areas in cases where the Medical Examiner has not waived the case, the transporting agency and the Medical Examiner shall arrange for a mutually acceptable rendezvous location where the patient may be taken and left in the custody of law enforcement, so that the transporting unit may return to service.

Approved:

[Signature]

EMS Medical Director
I. **Authority:** Health & Safety Code, Division 2.5, Section 1797.88; 1798. Title XXII, Section 100170, Civil Section 25.8.

II. **Purpose:** To identify conditions under which EMT, AEMTs and paramedics shall, when encountering an emergency patient, contact a base hospital for notification, medical direction, or to give report; or (for EMTs) contact a receiving hospital to verify appropriate transport destination and give report.

III. **Definitions:**

A. **Aid Unnecessary** - Calls in which the person for whom 9-1-1 was called does not meet the definition of “emergency patient,” and has agreed to make alternate transportation arrangements if necessary.

B. **Call Canceled** - Calls to which EMS personnel were responding but the response was canceled prior to encountering an emergency patient or potential patient.

C. **Complete Patient Report** - A problem-oriented verbal communication which includes:

1. Acuity.
2. Age.
3. Gender.
4. Chief complaint(s).
5. Vital signs (including $O_2$ saturation when possible).
6. Pertinent history, allergies, medications.
7. Pertinent findings of the primary and secondary survey.
8. Field treatment and response.
9. Anticipated destination facility.
10. Estimated time of arrival.

D. Initial Notification - A brief communication by the field personnel to provide the acuity, age, gender, and chief complaint of the patient to the base hospital to assist in determining appropriate patient destination. This communication is intended to verify resource capability and availability of the facility that will receive the patient.

E. Release - A call outcome that occurs when the patient and the EMS personnel (including the base hospital if a base was contacted) agree that the illness/injury does not require immediate treatment/transport via emergency/9-1-1 services and the patient does not require the services of the prehospital system.

F. Emergency Patient - Any person for whom the 9-1-1/EMS system has been activated and who meets the following criteria:
   1. Has a chief complaint or suspected illness or injury; or
   2. Is not oriented to person, place, time, or event; or
   3. Requires or requests field treatment or transport; or
   4. Is a minor who is not accompanied by a parent or legal guardian and is ill or injured or appears to be ill or injured

G. Elopement - The departure from the scene of a patient, in which the patient has refused to comply with established procedures for refusing care or transportation.

H. Minor - A person under the age of 18 and who is not emancipated

I. Designated decision maker (DDM) - An individual to whom a person has legally given the authority to make medical decisions concerning the person’s health care (i.e., a parent, legal guardian, an “attorney in fact” through a Durable Power of Attorney for Health Care, or an
IV. Policy:

A. EMT, AEMTs - Hospital contact is required for all patients who are transported to the Emergency Department of a hospital.

1. EMT, AEMTs shall contact the intended facility as soon as possible to verify their destination and to provide a complete patient report.

2. EMT, AEMTs shall call:
   a. A base hospital if they have a question regarding the appropriate treatment or disposition of any patient.
   b. A designated trauma center for those patients who meet trauma center criteria (T-460).
   c. UCSD base for those patients meeting Burn Center criteria (S-124).

B. Paramedics - Base hospital contact is required by paramedics in the following situations (except in cases of elopement - see III. D.):

1. Any emergency patient transport by paramedics, including transports by paramedic ambulance to a BLS destination following downgrade to BLS.
2. Any emergency patient treatment involving ALS medications or skills (except EKG monitoring)
3. Any emergency patient assessment involving abnormal vital signs, or an altered level of consciousness.
4. Any suspicion that the emergency patient (or designated decision maker [DDM]) is impaired by alcohol or drugs.
5. The emergency patient/DDM is unable to comprehend or demonstrate an understanding of his/her illness or injury.

6. The emergency patient meets criteria as a trauma center candidate (T-460).

7. The emergency patient is > 65 years of age and has experienced an altered/decreased level of consciousness, significant mechanism of injury, or any fall.

8. An emergency patient who is a minor is ill or injured or is suspected to be ill or injured.

9. Whenever paramedics have a question regarding appropriate treatment or disposition of the patient.

C. Any other communications between the patient, DDM, family member or care giver and prehospital personnel regarding refusal of care or care that is in variance with San Diego County prehospital treatment protocols or the San Diego County Resuscitation policy (S-414) (such as an Advance Health Care Directive, Living Will, Comfort Care communication, verbal notification from family member or care giver, DPAHC without attorney-in-fact present, etc.), shall be immediately referred to the base hospital for evaluation. The base hospital shall evaluate this information and determine the plan of treatment and transport for the patient.

D. Treatment and transport decisions for emergency patients in involuntary or protective custody (i.e., under arrest by law enforcement, placed on a “5150” hold, or serving a prison term) are to be made by the authority under which they are being held.

E. Paramedics shall contact a base hospital as soon as possible to verify destination. Paramedics will first attempt to call their regularly assigned base hospital unless the
emergency patient meets one of the following criteria:

1. Adult Trauma: For all adult emergency patients who appear to meet trauma center candidate criteria in T-460, paramedics shall first attempt to call the trauma base in the catchment area of the incident.

2. Pediatric Trauma: Paramedics shall first attempt to contact the designated pediatric trauma base for pediatric trauma center candidates (T-460).

3. Burns: Paramedics shall first attempt to contact the UCSD base for all emergency patients that meet burn center disposition criteria (S-124).

F. A complete patient report is required as soon as reasonably possible for all emergency patients transported. However, an initial notification may be made to a base hospital prior to the complete patient report without interfering with the paramedic’s ability to implement standing orders. Standing orders for medications may not be implemented following the initiation of a complete patient report.

G. MICNs shall relay patient information received from the patient report to the appropriate receiving facility personnel.

H. Treatment and/or Transport of a Minor:

1. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured shall be with the verbal consent of the natural parent, legal guardian, or any adult authorized in writing by the legal guardian pursuant to Section 25.8 of the Civil Code (Attachment A).

2. Treatment or transport of a conscious minor who is ill or injured or suspected to be ill or injured, where the natural parents, legal guardian, or authorized persons are not
present, will be under the direction of the Base Hospital. Transport shall be to the
most accessible appropriate receiving or specialty care center.

3. Treatment or transport of a minor who is unconscious or suffering from a life
threatening disease, illness, or injury in the absence of a natural parent, legal
guardian or authorized person (Attachment A) may be initiated without parental
consent.

I. Base Hospital contact is NOT REQUIRED on individuals who meet the following criteria:

1. Obvious death (S-402).

2. Discontinuation of CPR with a Prehospital DNR order or DPAHC on scene (S-414).

3. Release of a minor on scene who is neither ill nor injured, nor suspected to be ill or
injured, may be permissible without Base Hospital contact if:
   a. Parent or legal guardian so requests
   OR
   b. A responsible adult other than parent or legal guardian (i.e. school nurse, law
      enforcement, or person of similar standing) so requests.
   c. The field EMT, AEMT or Paramedic shall document the circumstances and
      identification of the person accepting responsibility for the minor.

4. Patients who wish to be released and do not meet base hospital contact criteria.

5. Dispatched as a BLS call where ALS treatment or intervention is not anticipated nor
required.
I. **Authority:** California Health and Safety Code, Division 2.5, Chapter 4, Section 1797.202 and California Business and Professions Code, Division 2, Chapter 9, California Pharmacy Law. Section 4000, et seq.

II. **Purpose:** To provide a policy for agencies to procure, store and distribute medical supplies and pharmaceuticals identified in the Inventory.

III. **Definition:** Dangerous Drugs and Devices: Any drug or device unsafe for self-use (e.g. IV solutions and medications carried on the MICU Inventory). Drugs and devices bearing the legend, “Caution, federal law prohibits dispensing without prescriptions” or words of similar import.

IV. **Policy:**

   A. Each agency shall have a mechanism to procure, store and distribute its own medical supplies and pharmaceuticals under the license and supervision of an appropriate physician. An appropriate physician is considered to be one of the following:

      1. The Medical Director of the agency.
      2. The County of San Diego Emergency Medical Services (EMS) Medical Director.
      3. The Medical Director of a contracted base hospital.

   B. Mechanisms of procurement may include the following:

      1. Procurement of pharmaceuticals and medical supplies through a legally authorized source such as a pharmaceutical distributor or wholesaler.

Approved:

[Signature]

EMS Medical Director
2. Procurement of pharmaceuticals and medical supplies from a hospital that determines it has the legal authority to resell pharmaceuticals and supplies to an agency.

C. Each agency shall have procedures in place for the procurement, transport, storage and distribution of Dangerous Drugs and Devices.

D. If agency requests the County of San Diego, EMS Medical Director to assume responsibility for providing medical authorization for procuring Dangerous Drugs and Devices, these policies shall be reviewed and approved by the County of San Diego, EMS Medical Director and shall include the following:

1. Identification (by title) of individuals responsible for procurement and distribution.

2. A determination of reasonable quantities of supplies and pharmaceuticals that must be maintained to resupply agencies.

3. Maintenance of copies of all drug orders, invoices, and logs associated with Dangerous Drugs and Devices for a minimum of three years.

4. Procedures for completing a monthly inventory of Dangerous Drugs and Devices, which includes:
   a. Ensuring medications are stored in original packaging.
   b. Checking medications for expiration dates, rotating supplies for use prior to expiration, and exchanging for current medications.
   c. Properly disposing of expired medications that cannot be exchanged.
   d. Distributing to agencies.

Approved:

[Signature]

EMS Medical Director
e. Returning medications to pharmaceutical distributor if notified of a recall.

5. Storage of drugs (other than those carried on a vehicle) that complies with the following:
   a. Drugs must be stored in a locked cabinet or storage area.
   b. Drugs may not be stored on the floor. (Storage of drugs on pallets is acceptable.)
   c. Antiseptics and disinfectants must be stored separately from internal and injectable medications.
   d. Flammable substances (e.g., alcohol) must be stored in a metal cabinet, in accordance with local fire codes.
   e. Storage area is maintained within a temperature range that will maintain the integrity, stability and effectiveness of drugs.

6. Agencies shall develop, implement and maintain a quality assurance and improvement program that includes a written plan describing the program objectives, organization, scope, and mechanisms for overseeing the procurement, transport, storage, distribution and administration of Dangerous Drugs and Devices.

E. Agencies under the license and supervision of the County of San Diego, EMS Medical Director shall have a written agreement with the County of San Diego, Emergency Medical Services that is specific to the procurement, transport, storage, distribution and administration of Dangerous Drugs and Devices.

Approved:

[Signature]
EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.52, 1797.170 and 1797.204.

II. **Purpose:** To identify specific type of Public Safety-Defibrillation equipment to be used in San Diego County.

III. **Policy:**

A. An approved PS-D Program shall use only automated external defibrillation (AED) equipment capable of generating an event record.

B. In areas where PS-D responders have the potential to interface with Advanced Life Support (ALS) units, procedures shall be established which allow for this interface.

C. Equipment shall be programmed to comply with current San Diego County treatment protocols.

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Approved:

EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Section 1798 and 1798.6.

II. **Purpose:** To assure effective transfer of patient care information between first responders utilizing defibrillation equipment, and transport personnel at the scene of an emergency.

III. **Policy:** Patient care information shall be communicated between first responders and transport personnel at the time of transfer.

IV. **Procedure:**

A. Transfer shall be to an equal or higher level of care only.

B. Prior to actual transfer of patient care responsibilities, the first responder will provide a verbal report to the transport personnel containing the following information:

   1. Patient age.
   2. Witnessed/unwitnessed arrest.
   3. Approximate time from collapse.
   4. Initiation of CPR prior to first responder arrival.
   5. Initial monitored rhythm. (shockable vs non-shockable rhythm)
   6. Number of defibrillatory shocks delivered and joules of each shock.

B. Once verbal report has been completed, the first responder shall assist the transport personnel in the transfer process as needed.

Approved:

Medical Director
I. **Authority:** Health & Safety Code, Division 2.5, Section 1798; California Code of Regulations, Title 22, Section 100075, 100159

II. **Purpose:** To establish criteria for the use of restraints in the field or during transport.

III. **Policy:**

A. When field personnel apply restraints, the safety of the patient, community, and responding personnel shall be of paramount concern.

B. Whenever patient restraints have been applied in the field, prehospital personnel shall document in the Prehospital Patient Record the following:

1. The reason the restraints were needed (including previous attempts to control patient prior to restraint use), and;

2. the type of restraint used, the extremity(ies) restrained, the time the restraints were applied, and

3. which agency applied the restraints, and;

4. information and data regarding the monitoring of circulation to the restrained extremities, and;

5. information regarding the monitoring of the patient’s respiratory status while restrained.

C. Restraints are to be used only for patients who are violent or potentially violent, or who may harm self or others.

D. Prehospital personnel must consider that aggressive or violent behavior may be a symptom of a medical condition.

E. The method of restraint used shall allow for adequate monitoring of vital signs and shall not restrict the ability to protect the patient's airway or compromise the neurological or circulatory status of the restrained extremity(ies).

F. If the patient has been restrained by a law enforcement officer (such as handcuffs, plastic ties, or “hobble” restraints, the following criteria must be met:

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**Approved:**

[Signature]

EMS Medical Director
1. Restraints must provide sufficient slack in the restraint device to allow the patient to straighten the abdomen and chest and to take full tidal volume breaths.

2. Restraints applied by law enforcement require the officer's continued presence to ensure patient and scene management safety. The officer shall accompany the patient in the ambulance. In the unusual event that this is not possible, the officer should follow by driving in tandem with the ambulance on a pre-determined route. Prior to leaving the scene, prehospital personnel shall attempt to discuss an appropriate method to alert the officer of any problems that may develop during the transport requiring the officer's immediate presence.

3. Law enforcement personnel shall attempt, when possible, to modify their restraints to a medically accepted standard prior to transport.

   This policy is not intended to negate the use by law enforcement personnel of appropriate restraint equipment that is approved by their respective agencies to establish scene management control.

G. Restraints or protective devices that have been applied by medical personnel prior to transport may be continued during the transport per instructions from those medical personnel.

IV. Procedure:

A. Restraint equipment applied by prehospital personnel must be either padded leather restraints or soft restraints (i.e. posey, velcro or seatbelt type). The method of restraint must provide for quick release.

B. The following forms of restraint shall not be used by EMS prehospital care personnel:

   1. Any restraint device requiring a key to remove.
   2. Backboard, stretcher or flat used as a "sandwich" restraint.
   3. Devices that restrain a patient's hand(s) and/or feet behind the patient
   4. Methods or materials applied in a manner that could cause vascular or neurological damage to the patient.

Approved:

[Signature]
EMS Medical Director
5. Hard plastic ties ("flex-cuffs"). Aeromedical personnel (only) may use hard plastic restraints provided
that appropriate provider agency policies regarding the application and monitoring of the extremities
restrained, and the use of alternate restraint methods (such as pharmaceutical restraints) are in place.

C. Patients shall not be restrained in a prone position. Prehospital personnel must ensure that the patient's
position does not compromise the patient’s respiratory/circulatory systems, or does not preclude any
necessary medical intervention to protect the patient's airway should vomiting occur.

D. Restrained extremities shall be evaluated for pulse, movement, sensation and color at least every 15 minutes.
The results of each evaluation shall be documented in the Prehospital Patient Record.
COUNTY OF SAN DIEGO EMERGENCY MEDICAL SERVICES
POLICY/PROCEDURE/PROTOCOL

SUBJECT: UTILIZATION OF ATROPINE, DIAZEPAM, MIDAZOLAM & 2-PAM CL FOR TREATMENT OF NERVE AGENT EXPOSURE
Date: 10/01/08

I. Authority: Health & Safety Code, Division 2.5, Section 1798; California Code of Regulations, Title 22, Division 9, Section 100145 (2); and County of San Diego Multi-casualty Plan, Annex B & Annex D

II. Purpose: To identify the procedure for administration of Atropine, 2-PAM Cl (Pralidoxime), Diazepam and Midazolam for treatment of nerve agent exposure in a suspected terrorist event.

III. Definitions:

Chempack Cache – a strategically placed supply of medications used in the treatment of nerve gas exposure.

Metropolitan Medical Response System (MMRS) - systematic medical response to nuclear, biological or chemical acts of terrorism.

Metropolitan Medical Strike Team (MMST) - a designated team specially trained and equipped to manage incident scenes of nuclear, biological or chemical acts of terrorism.

Nerve Agent - a chemical that has biological effects by inhibiting the enzyme acetyl cholinesterase, thus allowing the neurotransmitter acetylcholine to accumulate and over-stimulate organs and the nervous system causing sudden loss of consciousness, seizures, apnea and death. Nerve agents include Tabun (GA), Sarin (GB), Soman (GD) and VX.

Terrorism - the unlawful use of force or violence against persons or property or to coerce a government or civilian population in the furtherance of political or social objectives.

Weapons of Mass Destruction (WMD) - devices specially designed and
utilized by terrorists to cause mass illness, injury, death and hysteria on a population.

IV. **Policy:**

A. In a suspected or confirmed terrorist event in response to a release of Nerve Agent when signs and symptoms are exhibited, an autoinjector or injection device of Atropine, 2-PamCl, Diazepam (if available) and Midazolam may be administered. Diazepam autoinjector use requires MMST physician prescription.

B. The primary use of predeployed medication will be for treatment or self-treatment of public safety personnel. Secondary use will be for treatment of patients.

C. Atropine and 2-PamCl will be stored and available for use on designated first responder vehicles, hazmat units and deployable cache stockpiles per the MMRS plan.

D. Only prehospital personnel who have completed County of San Diego approved training specific to use of the Atropine, 2-PamCl and Diazepam autoinjectors are authorized to utilize the Autoinjectors.

E. If medications are used, and this is in response to a wide-spread incident consider activation of MMST through the EMS Duty Officer and Station M.

F. All uses of the medication and activation of the MMRS plan will be reviewed by the MMST Program Management Team with summary reports to the Medical Director and County EMS Prehospital Audit Committee.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170 and 1798, 1797.202 and 1797.214.

II. **Purpose:** To identify the scope of practice of an EMT in San Diego County.

III. **Policy:**

A. During training, while at the scene of an emergency, and 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 first aid to patients.
3. Obtain diagnostic signs, including but not limited to, temperature, blood pressure, pulse, respiratory rate, level of consciousness and pupil status.
4. Perform cardiopulmonary resuscitation; including the use of mechanical adjuncts to basic cardiopulmonary resuscitation (e.g. use of chest compression devices).
5. Use the following adjunctive airway breathing aids:
   a. Oropharyngeal airway.
   b. Nasopharyngeal airway.
   c. Suction devices.
   d. Basic oxygen delivery devices, manual and mechanical ventilating devices designed for prehospital use.
   e. Perilaryngeal Airway Adjuncts if authorized by the local EMS Agency.
6. Use various types of stretchers and body immobilization devices.
7. Provide initial prehospital emergency care for patients with trauma.
8. Administer or assist patient to administer oral glucose or sugar solutions.

9. Assist patient to take his or her own prescribed Nitroglycerine.

10. Extricate entrapped persons.

11. Perform basic field triage.

12. Transport patients.

13. Assist paramedics to set up for advanced life support procedures excluding any medications except Normal Saline.

14. Manage patients within their scope of practice.

B. A supervised EMT student or certified EMT may monitor and transport patients with peripheral lines delivering IV fluids under the following circumstances:

1. The patient’s condition is not critical and is deemed stable by the transferring physician or base hospital physician.

2. The fluid infusing is a glucose solution or isotonic balanced salt solution, including Ringer’s Lactate.

3. The IV is infusing at a pre-set rate of flow; turn off device only with base hospital direction.

4. No other advanced life support equipment is attached to the patient that will require monitoring that is outside the scope of practice of the EMT.

5. The patient has not received additional treatment by paramedics that are outside the scope of practice of the EMT if in the prehospital setting.

C. A supervised EMT student or certified EMT may monitor and transport patients, as described in B.1. above, with nasogastric (N.G.) tubes, gastrostomy tubes, heparin
locks, Foley catheters, tracheostomy tubes, and/or indwelling vascular access lines, excluding arterial lines and uncapped central lines or other items approved by local EMS Agency.

D. A supervised EMT student or a certified EMT may assist patients with the administration of physician prescribed devices, including but not limited to, patient operated medication pumps and self-administered emergency medications, including epinephrine devices.

E. An EMT may perform defibrillation on an unconscious, pulseless patient who is apneic or has agonal respirations when authorized by an EMT AED service provider, according to established policies.

F. An EMT student or certified EMT may utilize additional skills and/or medications included as part of pilot study as determined by the EMS Medical Director in accordance with Section 1797.214 of the Health and Safety Code, Division 2.5.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.107 and 1798, 1797.171 and 1797.56.

II. **Purpose:** To identify the scope of practice of Advanced Emergency Medical Technician (AEMT) in San Diego County.

III. **Policy:**

A. An Advanced EMT may perform any activity identified in the scope of practice of an EMT, described in policy B-450.

B. During training, while at the scene of an emergency, and during transport of the sick or injured, a supervised Advanced EMT student or certified Advanced EMT may in accordance with the County of San Diego EMS Branch, Policies, Procedures, and Protocols perform the following procedures and administer the following medications:

1. Perform pulmonary ventilation by use of a perilaryngeal airway adjunct.
2. Institute intravenous (IV) catheters in peripheral veins.
3. Administer IV glucose solutions or isotonic balanced salt solutions.
4. Obtain venous and/or capillary blood samples for laboratory analysis.
5. Use blood glucose measuring device.
6. Administer the following medications:
   a. Sublingual nitroglycerine
   b. Oral aspirin
   c. Intramuscular glucagon
   d. Inhaled beta-2 agonists (bronchodilators)
   e. Oral activated charcoal
f. Intramuscular or intranasal naloxone

g. Intramuscular or subcutaneous epinephrine

h. Intravenous administration of 50% dextrose

C. A supervised AEMT student or certified AEMT may utilize additional skills and/or medications included as part of pilot study as determined by the EMS Medical Director in accordance with Section 1797.214 of the Health and Safety Code, Division 2.5.
I. **Authority:** Division 2.5, Health and Safety Code, Sections 1798, 1798.102 and 1798.163.

II. **Purpose:** To establish criteria for identification of trauma center candidates to be transported to a designated trauma center.

III. **Definitions:**

A. **Adult** – Any trauma candidate known or appearing to be 15 years of age or older.

B. **Pediatric** – Any trauma candidate known or appearing to be 14 years of age or less.

IV. **Policy:**

A. The base hospital physician/MICN shall use the following criteria to identify a trauma center candidate and the most appropriate destination for transport (see Trauma Decision Tree Algorithm attachment T-460(a)-01):

1. Physiologic Criteria: Glasgow Coma Score (GCS) < 14, Abnormal Vital Signs, Appearance, Work of Breathing and/or Circulation.


3. Mechanism of Injury: Patients sustaining a significant mechanism of injury, which may be indicative of severe underlying injury.

B. Transportation:

1. The adult patient who is identified as a trauma candidate will be transported to the most appropriate designated adult trauma center.

2. The pediatric patient who is identified as a trauma candidate will be
transported to the designated pediatric trauma center (Children’s).

3. If there is a single ambulance (air/ground) with both a pediatric trauma center candidate AND an adult trauma center candidate, the ambulance should deliver the more critical patient to the appropriate facility. If both patients are critical, or if there are questions, both may be delivered to the designated adult trauma center. Field personnel should consider splitting the team using additional ALS transport vehicles, or air medical resources to transport the pediatric patient to a pediatric designated trauma facility and the adult to the catchment area trauma facility.

4. If the designated pediatric trauma center is “on bypass”, pediatric trauma candidates should be delivered to the Level 1 adult designated trauma facility (UCSD).

C. The Trauma Decision Tree Algorithm (attached) is an educational guideline to assist in identification of the trauma candidate and does not exclude a patient from identification and transportation to a designated trauma center if in the judgment of the base hospital, it is in the patient’s best interest.

D. All Prehospital Personnel will be trained in trauma triage as part of standard agency/facility orientation curriculum and upon any changes in trauma triage criteria.

Approved:

[Signature]
EMS Medical Director
TRAUMA DECISION TREE ALGORITHM

Assess vital signs and LOC

GCS <14 or Systolic BP <90 (Adult), <60 (Peds) or Respiratory Rate <10 or ≥29; <20 in Infant (under 1 year)

Peds: Abnormal Appearance &/or Abnormal Work of Breathing &/or Abnormal Circulation

- Flail Chest
- Combination trauma with burns
- Two or more proximal long-bone fractures
- Child Abuse-Known or suspected with significant injury
- All penetrating injuries to head, neck, torso, or extremities proximal to elbow/knee

Call Trauma Base, Transport to appropriate trauma center

- Amputation proximal to wrist/ankle
- Suspected pelvic fractures
- Limb paralysis
- Crush injury, degloved, or mangled
- Neuro/vascular deficit of extremities

Assess anatomy of injury

YES

Evaluate for evidence of mechanism of injury &/or high energy impact.

- Ejection from/off vehicle
- Vehicle rollover with unrestrained patient
- Death in same passenger compartment
- Auto vs. bicyclist/pedestrian thrown, run over, or with significant (≥20mph) impact

Call Trauma Base, Transport to appropriate trauma center

- Fall >3 times patient’s height or ≥15 feet
- Exposure to blast or explosion
- Motorcycle crash ≥ 20 mph

NO

Evaluate for co-morbid & other mechanism factors

YES

Contact Trauma Base Station; Consider transport to appropriate trauma center or a specific resource hospital (i.e. burns)

- Age <5 or ≥55 years
- Pregnancy ≥20 weeks
- Bleeding disorders
- Anticoagulants or Antiplatelets (i.e. Coumadin or Plavix, except ASA)
- LOC reported
- Severe cardiac and/or respiratory disease

- EMS Provider Judgment
- End-Stage Renal Disease requiring dialysis
- Extrication time ≥20 minutes
- Intrusion into occupied passenger space ≥12 inch frontal
- Intrusion into occupied passenger space ≥8 inch side

NO

Re-evaluation with medical direction and transport to the appropriate facility

WHEN IN DOUBT, TAKE PATIENT TO APPROPRIATE TRAUMA CENTER
I. **Authority:** Health and Safety Code, Sections 1798. and 1798.170.

II. **Purpose:**

To identify hospitals that may receive 9-1-1 patients with symptoms of acute stroke.

III. **Policy:**

A. Patients with a documented onset of acute stroke symptoms within the previous 4 hours shall be taken to a hospital with a basic emergency facility that has the following qualifications:

1. Identification of an individual to coordinate stroke care activities, with appropriate neurology input.

2. A team to respond to acute stroke patients. A protocol for the use of intravenous thrombolytic medication, including a demonstrated ability to administer.

3. Ability to obtain and read a CT scan of the head promptly (goal within 45 minutes of order).

4. Written care protocols for evaluation and care of the acute stroke patient.

5. Care pathways for stroke patients including, e.g., cardiac rhythm monitoring and blood pressure monitoring and treatment.

6. In-house rehabilitation services or transfer plan for rehabilitation.

7. A registry or other method for tracking acute stroke patients as defined above.

8. Performance measures for stroke care, and a quality improvement system for stroke care.

B. Identified hospitals shall note on the prehospital Quality Assurance Network Collector...
System (QCS) computer resource screen if they are unable to receive acute stroke patients (e.g. CT scanner down, resource lack).

C. The County of San Diego Emergency Medical Services Branch may confirm availability of the services and may conduct on site visits to ensure compliance with established criteria. Certification as a Primary Stroke Center by the Joint Commission on the Accreditation of Healthcare Organizations is evidence of compliance.
I. **Authority:** Health and Safety Code, Section 1797.204, 1797.206, 1797.218. County of San Diego, Ambulance Ordinance, No 8787

II. **Purpose:** To establish guidelines for the use of air medical resources within the San Diego County EMS system.

III. **Policy:** The San Diego County EMS system shall include the utilization of authorized air medical resources.

A. Any public safety agency on scene or a Base Hospital may call for air medical support.

   Considerations for utilization of air medical transport include:

   1. A delay in ground transport could pose an immediate threat to the patient's health and safety,
   2. The difference between ground vs. air transport time and patient condition,
   3. Length of extrication time,
   4. The skill level of the transporting ground unit personnel,
   5. Any specific operational problems precluding effective use of surface transport such as:
      a. weather
      b. traffic
      c. access/egress routes
      d. local resource capabilities during time unit will be out of service
      e. multi-casualty incidents.
   6. Utilization of Air Ambulance
      a. For a patient whose condition warrants rapid transport to medical facility.
      b. For a patient whose condition requires advanced skills, not available on a paramedic unit.
c. For multiple patient incidents when ground transport resources are inadequate.

7. Utilization of ALS rescue aircraft
   a. Utilize for rescue/rendezvous purposes primarily. Patient care shall be transferred after rescue efforts to the provider on scene with the most appropriate level of care required by patient condition.
   b. ALS Rescue Aircraft shall only transport patients in coordination and conjunction with Air Ambulance agencies.

8. Utilization of Auxiliary Rescue Aircraft
   a. Utilize for rescue/rendezvous purposes only and shall not be for transportation to a medical facility.
   b. Patient care shall be transferred after rescue efforts to the provider on scene with the most appropriate level of care required by patient condition.
   c. ALS or BLS ground transport providers shall not transport the patient via Auxiliary rescue aircraft to a medical facility.

B. It is solely the requesting party’s responsibility to cancel EMS air medical resources.
I. **Authority:** Health & Safety Code, Division 2.5 Section 1797.202, 1797.204, 1798.

II. **Purpose:** To identify minimum patient documentation standards for transferal of prehospital patient information, to meet legal patient documentation requirements, enhance the continuum of care, and provide for EMS system oversight and management.

III. **Definitions:**

A. Prehospital Patient Record (PPR): That document approved and required by the County and completed either electronically or on paper, that officially records prehospital patient information.

B. Patient Response: A response to an individual who meets any of the following criteria:
   1. Is an emergency patient (refer to S-412 for definition) or a patient for whom base hospital contact was made.
   2. Meets obviously dead criteria or who has a DNR or equivalent documentation.
   3. Transported by a Basic Life Support (BLS) or Critical Care Transport (CCT) unit.

IV. **Policy:**

A. A PPR shall be completed for every patient response:
   1. Each agency making patient contact shall complete a PPR which includes personnel from that agency who participated in that patient's care (assessment, treatment, advice, transport). If an agency responds more than one vehicle, the agency may combine information onto a single PPR listing patient care personnel, or submit individual PPRs for each vehicle responding.
2. In addition to the above, agencies may submit PPR's for all non-patient responses for statistical analysis by the EMS Branch.

3. In all incidents involving more than one patient one form will be completed for each patient except when the County’s mass casualty plan (Annex D) is activated (See Policy S-140).

B. The PPR shall be completed in accordance with instructions provided in the County’s Prehospital Patient Record Instruction Manual.

C. When patient care is transferred, field personnel shall give a verbal patient care report to the receiving caregiver. This verbal report will relay pertinent history, vital signs, intervention, and response to treatment such that care may be transferred.

V. **Data Collection and Evaluation:**

Data collected by the Emergency Medical Services Branch from the Prehospital Patient Records and base hospital reports shall be stored by the County of San Diego, EMS Branch and used for overall system evaluation.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170 and 1797.204.

II. **Purpose:** To establish a data base to effectively evaluate San Diego County's EMT/PS-D System.

III. **Policy:**

   A. Data essential to the evaluation of the EMT/PS-D System in San Diego County shall be collected by the Division of Emergency Medical Services in conjunction with Base Hospitals and provider agencies.

   B. Minimum data to be collected for each EMT/PS-D patient shall include:

   1. Age.
   2. Sex.
   3. Place of occurrence.
   5. The initial monitored rhythm.
   6. Total number of defibrillatory shocks.
   7. Time in minutes from call received to first analysis.
   8. Outcome.
   9. Any bystander CPR and by whom.

   C. The above patient data will be sent to Division of Emergency Medical Services quarterly by the fifth day of the following months: January, April, July, October.

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Approved:

[Signature]

Administration

[Signature]

Medical Director
D. Data collected by the Division of Emergency Medical Services from the EMS Prehospital Patient Record shall be stored by the Division of Emergency Medical Services, and used for overall system evaluation, while maintaining patient confidentiality.

1. The Division of Emergency Medical Services shall distribute routine reports, summarizing data received, to provider agencies and Base Hospitals. Format of these reports will be developed by the Division of Emergency Medical Services in conjunction with the provider agencies and the Base Hospitals.

2. Requests for data for specific research projects must be submitted to the Division of Emergency Medical Services by the first of the month in which the data is required.
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1797.220 and 1798.

II. **Purpose:** To establish guidelines in transferring and acquiring EMT/PS-D patient care data.

III. **Policy:** Transfer of patient data shall occur in accordance with policies and procedures mutually established between provider agencies, Base Hospitals and the Division of Emergency Medical Services.

IV. **Procedure:**

   A. Each provider agency shall develop a procedure for relinquishing the EMT/PS-D event record to the assigned Base Hospital to include:

      1. The event record, and EMT/PS-D form shall be sent to the BHDMD or designee within 24 hours of the run.
      2. Event record shall be forwarded to the assigned Base Hospital representative within seven (7) days of incident.
      3. Event record will be handled in accordance with Base Hospital medical records policy.
      4. Event record is utilized for quality assurance and continuing education purposes only per San Diego County policy D-721.

   B. Transfer of patient data may occur between the Base Hospitals, provider agencies and Division of Emergency Medical Services for continuing education and quality assurance purposes.

Approved:

[Signatures]

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I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170 and 1797.204.

II. **Purpose:** To establish a data base to effectively evaluate San Diego County's Esophageal Tracheal Airway Device (ETAD or "Combitube®") System.

III. **Policy:** Data essential to the evaluation of the ETAD System in San Diego County shall be collected by the Division of Emergency Medical Services (EMS) in conjunction with base hospitals and provider agencies.

   A. Minimum data to be collected for all patients that meet criteria for ETAD insertion shall include:

   1. Age of patient.
   2. Sex.
   3. Type of call - medical or trauma.
   4. Person and agency providing care.
   5. Number of attempts (successful vs. unsuccessful).
   6. Explanation if patient met criteria, and there was no ETAD insertion.
   7. Base hospital
   8. Time interval between BLS and ALS arrival.
   9. Field complication (if any) with insertion.
   10. Was ETAD replaced in field with ET?
       a. why?
       b. by whom?
       c. when?
   11. Field \( O_2 \) saturation acquired by pulse oximeter (if available).
   12. ABGs on ED arrival (if available).

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Approved:

[Signatures]

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Patient status (survived/expired).

B. The above patient data shall be sent to the controlling base hospital within 48 hours for entry into the QA Net.

C. Data collected shall be used for system and patient care improvements, assuring confidentiality of patient records.

D. The Division of Emergency Medical Services shall distribute quarterly reports, summarizing data received, to provider agencies and base hospitals.
I. **Authority:** Health and Safety Code, Sections 1797.204, 1797.220, 1798.2, 1798.100, 1798.102, and 1798.104.

II. **Purpose:** To establish a mechanism for designation of an acute care hospital as a Paramedic Base Hospital.

III. **Policy:**

A. To be designated as a Paramedic Base Hospital in San Diego County, the requesting institution must:

1. Comply with California Code of Regulations, Title 22, Division 9, Chapter 4.
2. Enter into a contract with the County of San Diego, Health and Human Services Agency, Emergency Medical Services Branch (County EMS) to perform as a Base Hospital.
3. Comply with the County of San Diego's Base Hospital Contract.

B. County EMS shall review the Contract with each Paramedic Base Hospital every three years. The Base Hospital Contract may be changed, renewed, canceled, or otherwise modified when necessary according to provisions for such in the Contract.

C. County EMS may deny, suspend, or revoke the approval of a Paramedic Base Hospital for failure to comply with applicable policies, procedures, protocols, or regulations in accordance with provisions for such in the Contract.

D. Additional Paramedic Base Hospitals may be added to the Emergency Medical Services System on the basis of demonstrated local need.
1. Demonstrated local need shall include, but not be limited to an assessment of:
   a. Base Hospital call volumes.
   b. Base Hospital ALS unit and prehospital personnel assignments.
   c. Current system effectiveness.

2. County EMS, shall review the need for supplemental Base Hospitals annually.

3. Changes in the EMS System as it relates to the number of Base Hospitals shall be forwarded to the Board of Supervisors for approval.

IV. Procedure:

A. County EMS develops a Request for Proposal (RFP) for Base Hospital Designation based on previously identified need and established Base Hospital criteria for submittal to Board of Supervisors for approval.

B. County EMS evaluates proposals, including independent review process and on-site evaluation.

C. County EMS recommends to the Board of Supervisors the addition of Base Hospital in accordance with established County Policies and State Regulations.

D. County EMS shall approve the newly designated Base Hospital's implementation plan. The implementation plan shall include, but is not limited to, the following:
   1. Evidence of a continuous quality improvement process that can incorporate into the Local and State EMS Plans, inclusive of policies, procedures and protocols.
2. Evidence of the ability to provide initial and continuing prehospital education
to all categories of prehospital personnel.

3. Community outreach programs.

4. Orientation of the community to the hospital’s new role.

5. Evidence of ability to collect and manage data.

6. Communications systems to include all satellite and other base facilities.

7. Time line of scheduled implementation.
I. **Authority:** Division 2.5, Health and Safety Code, Section 1798.100 through 105.

II. **Purpose:** To establish a mechanism for termination of Paramedic Base Hospital designation.

III. **Policy:**

A. Termination for Cause:

1. County of San Diego, Health and Human Services Agency Emergency Medical Services Branch (EMS Branch) may immediately terminate the Base Hospital Contract if a Base Hospital's license to operate as a general acute care hospital is revoked or suspended.

2. County of San Diego may immediately suspend its Contract upon written notice if a Base Hospital is in gross default of material obligation under its agreement, which default adversely affects patient care.

3. For any other material breach of its agreement, County of San Diego may terminate a Base Hospital Contract for cause, if the cause is not cured within 15 days after a written notice specifying the cause is delivered. Such cause shall include, but not be limited to:

   a. Failure to comply with material terms and conditions of the Base Hospital Contract, after notice of the failure has been given.

   b. Failure to make available sufficient personnel as required by the Contract.

   c. Gross misrepresentation or fraud.

   d. Substantial failure to cooperate with the County's monitoring of Base Hospital
services.

e. Substantial failure or refusal to cooperate with quality assurance and audit
f. findings and recommendations within a reasonable time.

4. If, within the fifteen (15) days after delivery of the written notice of cause, the material breach has not been cured to the reasonable satisfaction of the County's representative, then the County may terminate the Base Hospital Contract effective as of a date specified in a written notice of termination delivered thereafter.

5. If, after notice of termination of the Base Hospital contract for cause, which is not voluntarily withdrawn as stated above, it is determined for any reason that the Base Hospital was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience agreement.

B. Termination for Convenience:

Either the County or the Base Hospital may terminate the Base Hospital contract, upon thirty (30) days written notice to the other party, as a termination for convenience.

C. Upon the de-designation of a Base Hospital, the local EMS Agency shall be responsible for system redesign decisions.
I. **Authority:** Health & Safety Code, Division 2.5, Chapter 2.5, Section 1797.198, 1797.199

II. **Purpose:** To establish a process for the administration and disbursement of fiscal resources in the Trauma Care Fund to trauma centers based upon submission of trauma registry data.

III. **Definitions:**

A. **Trauma Care Fund Inclusion Criteria**
   1. ICD-9 code ranging between 800 to 959.9, and
   2. Trauma center admission to the hospital, and
   3. Evaluated by a trauma or burn surgeon in the emergency department or resuscitation area, or
   4. Trauma related death and ICD-9 code ranging between 800 to 959.9, or
   5. Interfacility transfer in/out for a higher level of trauma care and ICD-9 code ranging between 800 to 959.9

B. **Trauma Care Fund Exclusion Criteria:**
   1. Had isolated burn without penetrating or blunt injury, or
   2. Were discharged from the Emergency Department or Trauma resuscitation area, or
   3. Trauma consult patients who were not admitted to the trauma service.

IV. **Policy**

A. The Trauma Care Fund has been established as a means to administer and distribute monies from the State Treasury Trauma Care Fund which have distributed to the Local Emergency Medical Services Agency based upon trauma registry data.

B. The County shall distribute all monies received into the trauma care fund to eligible trauma centers, except for 1% that will be allocated to the County for administrative costs.

C. The County will use specified methodology or a competitive grant based system for distribution of the funds based on established criteria.

D. If additional State Treasury Trauma Fund monies are available after the initial distribution, the County shall submit a request to the EMS Authority.

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**Approved:**

Administrator
Medical Director
for additional funding. The County will develop a methodology for distribution of any additional monies received into the Trauma Care Fund. The Trauma Administrators Committee will function as an advisory committee to the County on distribution of the Trauma Care Fund.

E. An application will be made to the EMS Authority for any additional trauma centers, which are designated within the County after July 1 and before January 1 of any fiscal year in which funds are distributed.

F. If a designated trauma center de-designates prior to June 30 during a fiscal year in which it has received Trauma Care Funds, the trauma center will pay back to the County a pro rata portion of the funds it has received. The returned monies will then be distributed to the remaining trauma centers. If no designated trauma centers remain within the County, the County will return the monies to the EMS Authority.

G. A contract will be completed for each designated trauma center receiving monies from the Trauma Care Fund. The contract will include:

1. Trauma registry data transmission to the County for the purposes of Trauma Care Fund distribution.

2. Invoice mechanism will be used for the distribution of allocated trauma care funds.

3. Distribution methodology for any remaining monies in the Trauma Care Fund.

4. Report to the County on how the funds were used to support trauma services.

5. The trauma center shall demonstrate that it is appropriately submitting data to the trauma registry, and participate in audit process by EMS on annual basis.

6. The funds shall not be used to supplant existing funds designated for trauma services, including medical staff coverage or training ordinarily provided by the trauma hospital.

H. The County will conduct an annual audit of the Trauma Care Fund Contract within two years of a distribution. The audit will include monitoring for compliance with:

1. Data submission requirements

Approved:

[Signatures]

Administrator

Medical Director
2. Distribution methodology

3. Appropriate spending of Trauma Care Fund monies on trauma services.

I. The County will provide trauma registry data to the Emergency Medical Services Authority within 45 days of each request.

J. The County will utilize the standardized reporting criteria of trauma patients to the State Trauma Registry by July 1, 2003 or as determined by the EMS Authority.

K. The County will provide to the EMS Authority an annual fiscal year report by December 31 following any fiscal year in which Trauma Care Funds were distributed.

Approved:

[Signatures]

Administrator

Medical Director
I. **Authority:** Division 2.5 Health & Safety Code, Section 1798.161, 1798.163

II. **Purpose:** To designate catchment service areas for each designated trauma center.

III. **Definitions:**

   Trauma Catchment Area – Geographic Area with defined boundaries assigned to a designated trauma center for purposes of care of patients identified as trauma candidates.

IV. **Policy:**

   A. The adult patient who is identified as a trauma candidate will be transported to the most appropriate adult trauma center assigned per geographic designation per policy T-460: Identification and Transportation of the Trauma Center Candidate, the Trauma Catchment Area Boundary Guidelines and the San Diego Trauma Catchment Maps.

   B. The pediatric patient who is identified as a trauma candidate will be transported to the most appropriate pediatric trauma center per geographic designation per policy T-460: Identification and Transportation of the Trauma Center Candidate, the Trauma Catchment Area Boundary Guidelines and the San Diego Trauma Catchment Maps.

   C. The pediatric patient who is identified as a trauma candidate will be transported to the designated pediatric trauma center. When the pediatric trauma center is on bypass, including age specific bypass, the pediatric patient will be transported to a Level I trauma center (UCSD).
I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6.Section 1798.165 and 1799.205.

II. **Purpose:** To define the role and requirements of a designated pediatric trauma center.

III. **Definitions:**

   Pediatric Trauma Center – a facility which has been designated by the San Diego County Emergency Medical Services Branch to provide comprehensive care to the injured pediatric patient <15 years of age, who meets major trauma candidate criteria.

IV. **Policy:**

   A Pediatric Trauma Center shall:
   
   A. Meet or exceed compliance standards set forth within the San Diego County Pediatric Trauma Center Agreement.
   
   B. Participate in the Committee on Pediatric Emergency Medicine (COPEM), providing expertise in pediatric trauma care issues.
   
   C. Participate in injury prevention and community education activities related to children.

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Approved:

[Signature]
Administrator

[Signature]
Medical Director
SUBJECT: TRAUMA CARE COORDINATION WITHIN THE TRAUMA SYSTEM

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.200 and 1798.163

II. Purpose: To define the coordination of trauma care within the San Diego County Emergency Medical Services (EMS) System, and with neighboring jurisdictions.

III. Policy

The Health & Human Services Agency, Emergency Medical Services Branch is required to assure coordination of trauma care services and trauma system compliance with state and local regulations. This shall be accomplished through the following System design that assures:

A. Adequate numbers of trauma centers to meet the needs of the population and incidents of trauma in the county.

B. A coordinated response for the provision of advanced life support (ALS) and trauma care services within and around San Diego County through ALS inter-county agreements with neighboring and remote EMS jurisdictions.

C. Active duty military personnel and their dependants involved in traumatic incidents are integrated into the San Diego County Trauma System.

D. System oversight to assure that patients needing trauma services receive such services, including:
   1. Transportation of trauma patients to designated trauma facilities.
   2. Required personnel and resources to provide the appropriate level of service are available at designated trauma facilities.
   3. Trauma team activation criteria are defined and provided at designated trauma facilities.
   4. The trauma registry is maintained for the purpose of monitoring system operations.
   5. A quality monitoring system that assures compliance with all applicable state laws, regulations and local policies, procedures and contractual arrangements.
   6. Public awareness and education on injury prevention.

Approved:

[Signature]
Administrator

[Signature]
Medical Director
I. Authority: Division 2.5 Health and Safety Code, Section 1798.164, 1798.165

II. Purpose: To define the process and procedure for designating a Trauma Center to the Trauma Care System.

III. Definitions:

IV. Policy

A. The need for additional designated Trauma Centers shall be determined by the Health & Human Services Agency, Emergency Medical Services Branch. An additional Trauma Center may be added to the Trauma Care System on the basis of demonstrated local need, which shall include, but not be limited to an assessment of:

1. Prehospital response times
2. Population shifts/increases
3. Current system effectiveness
4. Available prehospital/hospital resources

B. The Board of Supervisors shall approve recommendations as to the number of Trauma Centers.

C. The designation of an additional trauma center will occur via a competitive bid process.

D. Upon designation, each trauma center will pay an initial and thereafter annual fee of $40,000.00 per year to the County of San Diego, Emergency Medical Services Branch.

Approved:

[Signatures]

Administrator

Medical Director
E. The designation of a trauma center for purposes of the Emergency Medical Services System of the County of San Diego confers upon the facility, the recognition that it has the commitment, personnel and resources necessary to provide optimum medical care for the trauma patient.

F. Each trauma center shall meet the criteria set forth in the trauma center agreement and demonstrate a continuous ability and commitment to comply with policies, protocols and procedures developed by the Emergency Medical Services Branch.

G. Each trauma center shall undergo an annual performance evaluation based upon the trauma center agreement. Results of the evaluation shall be made available to the facility.

H. All designated trauma centers shall participate in the quality improvement process per the Quality Assurance Manual.

V. Procedure:

A. Health & Human Services Agency, Emergency Medical Services Branch develops and distributes a Request for Proposal (RFP) for Trauma Center Designation.

B. Health & Human Services Agency, Emergency Medical Services Branch evaluates the proposals, including independent review process and on-site evaluation and makes recommendations to the Board of Supervisors.
I. **Authority:** Division 2.5, Health and Safety Code, Section 1798.163.

II. **Purpose:** To establish a policy and procedure for de-designation of a trauma center.

III. **Policy**

   A. **Termination for Cause:**

      1. County may immediately terminate its Trauma Center Agreement if a trauma center's license to operate as a general acute care hospital is revoked or suspended.

      2. County may immediately suspend its Agreement upon written notice if a trauma center is in gross default of material obligation under its Agreement, which default could adversely affect patient care provided by Contractor.

      3. For any other material breach of its agreement, County may terminate a trauma center contract for cause, per the language of the Agreement. Such cause shall include, but not be limited to:

         a. Failure to comply with material terms and conditions of the trauma center contract, after notice of the failure has been given.

         b. Failure to make available sufficient, qualified personnel and hospital resources to provide immediate care for trauma patients as required by Section C of the contract.

         c. Failure to provide timely surgical coverage for trauma patients as required by Section C of the contract.

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[Signature]
Administrator

[Signature]
Medical Director
d. Failure to provide physicians, surgeons, and other medical, nursing and ancillary staff who possess that degree of skill and learning ordinarily possessed by reputable medical personnel in like or similar localities and under similar circumstances for the provision of trauma center medical services.

e. Gross misrepresentation or fraud.

f. Substantial failure to cooperate with the County's monitoring of trauma center services and base hospital services.

g. Substantial failure or refusal to cooperate with quality assurance and audit findings and recommendations within a reasonable time.

B. Termination for Convenience:

Either the County or the Trauma Center may terminate the trauma center contract, as a termination for convenience per the language of the Agreement.

C. Upon the de-designation of a trauma center, the local EMS Agency shall be responsible for system redesign decisions.

Approved:

[Signatures]

Administrator

Medical Director
I. **Authority:** Division 2.5, Health and Safety Code, Section 1798.163.

II. **Purpose:** To establish criteria for trauma center bypass.

III. **Policy:**

   A. The in-house trauma surgeon is responsible for determining bypass status of his/her Trauma Center and will utilize the following criteria for making this determination. The Trauma Center may go on bypass status if one of the following criteria is met:

   1. Time (30 minutes) is needed to obtain a backup trauma surgeon, neurosurgeon or anesthesiologist because the primary physician is occupied with another trauma patient.

   2. Time (1 hour) is needed to identify a second operating room because the primary room is being utilized and another is not readily available.

   3. Two or more trauma patients with major injuries are being resuscitated in the trauma room (1 hour).

   4. The hospital is closed due to internal disaster.

   5. The trauma center is activated during an external disaster (Annex D).

   6. Time (1 hour) the CT scanner is being serviced or is broken. The trauma center can accept penetrating injuries excluding head or neck.

   B. When a trauma center is on bypass, the patient should be redirected to another trauma center, taking into consideration transport time, the patient’s medical needs and the institution’s available resources.

   C. Trauma center personnel will immediately enter both the initiation and reasons/conditions for bypass into the San Diego County Quality Assurance Network Collector system (QCS). At the time of change in condition of trauma center bypass status, trauma center personnel shall update the QCS.

   D. The trauma center will provide reviews of variations from this policy to the Medical Audit Committee via the EMS Branch as requested for purposes of trauma system quality assurance.

   E. A trauma center should use its best efforts to limit bypass to less than 5% of the total available hours on a monthly basis.

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**Approved:**

[Signature]

Administrator

[Signature]

Medical Director
I. **Authority:** Health & Safety Code, Division 2.5, Section 1798.163

II. **Purpose:** To identify the trauma center resources, which must be available for trauma team activation

III. **Definitions:**

**Immediately Available** – means unencumbered by conflicting duties or responsibilities; responding when notified without delay; and being within the specified resuscitation area of the trauma center when the patient is delivered.

**Promptly Available** – means responding without delay when notified and requested to respond to the hospital; and being physically available to the specified area of the trauma center within a period of time that is medically prudent (within 30 minutes, 24 hours per day, 7 days per week).

IV. **Policy**

A. The following resources shall be available for trauma center candidates requiring full trauma team activation:

1. **Immediately Available:**
   a. Qualified Trauma Surgeon
   b. Emergency Department Physician
   c. Trauma Resuscitation Nurse responsible for the supervision of nursing care during the resuscitation phase
   d. Registered Nurse currently trained in trauma patient care to perform care duties, scribe, etc
   e. Respiratory Therapy

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**Approved:**

[Signature]
Administrator

[Signature]
Medical Director
f. Radiology

g. Laboratory

h. Operating Room

i. Pharmacy

2. Promptly Available:

Trauma Consultants as requested by the Trauma Surgeon

B. Trauma center candidates not requiring full trauma team activation require, at a minimum, the following resources with a physical evaluation by the Trauma Surgeon:

1. Qualified Trauma Surgeon

2. Emergency Department Physician

3. Registered Nurse currently trained in trauma patient care.

C. The use of a tiered trauma response is encouraged in an effort to conserve resources and reduce the cost of trauma care.

D. All departments involved in the delivery of trauma care must have equipment and supplies for all ages of patients as approved by the Medical Director of the Service in collaboration with the Trauma Medical Director.
I. **Authority:** Health & Safety Code, Division 2.5, Health and Safety Code, Section 1798.163.

II. **Purpose:** To establish the criteria for trauma consultation with community physicians.

III. **Policy**

A San Diego County Trauma Center shall provide:

A. Medical consults with community physicians and providers regarding the immediate management of trauma patients.

B. Trauma care information, education and follow-up to other medical care providers in their service area on a routine basis. The Trauma Program Medical Director or designee shall meet with satellite hospital personnel for this purpose when necessary.

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**Approved:**

[Signatures]

Administrator  
Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1798.163 and 1798.172

II. **Purpose:** To establish guidelines for transfer of stable trauma patients to their health plan’s facility.

III. **Policy**

A. It is the intent of the trauma system to transfer stable trauma patients to their health plan provider’s facility when requested, as long as such transfer is medically prudent and in the best interest of the patient. All requests/discussions concerning transfer status of the patients will be made physician to physician. Transfer agreement will be based on patient condition and appropriateness of receiving facility resources.

B. Unless otherwise decided by the trauma surgeon of record, no patient requiring acute care admission will be transferred to a hospital that is not a designated trauma center in less than twenty-four hours.

C. The decision as to transfer of post-operative, intensive care or other acute care patients lies solely with the trauma surgeon of record.

D. Hospitals which have accepted transfer of a trauma patient from a designated trauma center shall:

1. Provide the information required to complete the trauma registry on that patient to the transferring trauma center.

2. Participate in system and trauma center quality improvement activities for that patient who has been transferred.

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[Signature]
Administrator

[Signature]
Medical Director
E. Trauma center candidates cared for at San Diego County designated trauma centers may require extensive diagnostic evaluation or immediate treatment. Trauma center evaluation does not necessitate pre-approval by the patient’s insurer.
I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6 Section 1798.163

II. **Purpose:** To establish minimum standards for County of San Diego Trauma System’s injury prevention activities/programs.

III. **Policy:**

The Health & Human Services, Emergency Medical Services (EMS) Branch will provide epidemiological injury information in support of efforts by trauma centers, injury prevention coalitions and public health initiatives to implement targeted injury prevention goals. The County of San Diego’s Trauma System injury prevention program includes:

A. Each designated trauma center will participate in injury prevention activities.

B. Prevention activities may be autonomous or collaborative with existing organizations/agencies and/or other designated trauma centers (individually or as a system).

C. Injury prevention topics will be based upon:

   1. Identification of injury trends through utilization of the trauma registry.
   2. Community mortality data provided by the Medical Examiners Office.
   3. Community identified injury risks (may be seasonal).

D. Prevention activities/programs will be based upon identified need and includes objective goals and outcome evaluation.

E. EMS will develop and publish epidemiological data on an annual basis, providing injury information and the etiology of injury based on trauma registry and other data sources.

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**Approved:**

[Signatures]

Administrator  
Medical Director
I. **Authority:** Health & Safety Code, Division 2.5 Chapter 6, Section 1798.163, California Code of Regulations, Title 22, Division 9, Section 100255 (r).

II. **Purpose:** To establish minimum standards for designated trauma centers to participate in public information and education about the trauma system.

III. **Policy**

   A. Each designated trauma center will participate in providing the public/community with information and education regarding the San Diego County Trauma System.

   B. Public Information and Education programs may be autonomous or collaborative with existing organizations/agencies and/or with other designated trauma centers.

   C. Public Information and Education may be incorporated into Injury Prevention Programs and other public information venues.

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Approved:

[Signatures]

Administrator

Medical Director
I. **Authority:** Health & Safety Code, Division 2.5, Sections 1789.163, 1798.165

II. **Purpose:** To provide a guideline for the utilization of the trauma terminology in marketing and advertising by a trauma care provider within the San Diego Emergency Medical Services (EMS) System.

III. **Policy**

The Emergency Medical Services Branch has the responsibility to authorize use of the term “Trauma” in marketing and advertising by any health or trauma care provider.

A. In accordance with Section 1798.165 of the Health & Safety Code, “No health care provider shall use the terms; trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle or similar terminology in its signs or advertisements, or in printed materials and information it furnishes to the general public, unless the use is authorized by the local EMS agency”.

B. Requests for such authorizations are to be submitted to the EMS Coordinator for Trauma at the Emergency Medical Services Branch.

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Approved:

[Signature]
Administrator

[Signature]
Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1797.220, 1798, 1798.2, 1798.100 and 1798.104, California Code of Regulations Title 22, Division 9, Chapter 2, Section 100063.1.

II. **Purpose:** To establish a standard mechanism for approval and designation as a Public Safety Automated External Defibrillator (PS AED) Base Hospital.

III. **Policy:**
   A. To be designated as a PS AED Base Hospital in San Diego County, the requesting institution shall be currently designated as a Base Hospital complying with all requirements, policies, procedures and protocols for a Base Hospital in San Diego County.

   B. A PS AED Base Hospital may delegate any or all of the following to a specified satellite hospital or provider agency if approved by the Base Hospital Medical Director:
      1. Field care audits.
      2. Structured training sessions.
      3. Defibrillation skill proficiency demonstrations.

Approved:

[Signature]

Administration

Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204, 1798 and 1798.102.

II. **Purpose:** To establish minimum requirements for quality control and assurance of appropriate patient care.

III. **Policy:**

A. The Public Safety (PS) Automated External Defibrillator (AED) provider agency physician or the EMT Automated External Defibrillator (AED) agency coordinator shall establish policies and procedures to review runs to include the following:

1. Written documentation of compliance/noncompliance of protocols on each run; information to be obtained from the event record.

2. All shockable rhythms to identify trends or deficiencies and follow-up according to Base Hospital quality assurance process.

B. Prehospital issues reportable to Prehospital Audit Committee (PAC).

1. Malfunctions of the AED machine.

2. Functioning outside of the scope of practice.

3. Variation of policies/protocols.

4. Deviations from safety guidelines.

C. The following deviations and deficiencies shall be reported verbally to San Diego County Emergency Medical Services within 48 hours with written documentation to follow.

1. Functioning outside of the scope of practice.

Approved:

[Signature]

Administration

[Signature]

Medical Director
2. Deviations from safety guidelines resulting in injury.

D. The PS AED provider agency physician or the EMT AED agency coordinator and agency shall establish policies to deal with event record storage, retrieval, and disposal. The event record is to be utilized for quality assurance and continuing education purposes only.

Approved:

[Signature]

Administration

[Signature]

Medical Director
I. **Authority:** Health & Safety Code, Division 2.5, Sections 1797.204, 1797.206, 1797.218, 1797.220; California Code of Regulations, Division 9, Chapter 4, Article 5.

II. **Purpose:** To approve and designate Paramedic service providers in San Diego County.

III. **Definitions:**

A. Advanced Life Support (ALS) response: Any medical aid call in which Paramedics are dispatched to the scene on a ground transporting unit, and/or any call that has been screened or prioritized in accordance with an approved dispatch plan as necessitating an advanced life support level of response.

B. Approved Dispatch Plan: A dispatch plan approved by the County of San Diego, Emergency Medical Services (EMS) Branch (EMS Branch).

C. Local Jurisdiction: A local jurisdiction is the County, a city, water district, fire protection district, or county service area.

IV. **Policy:**

A. To be designated as a Paramedic service provider in San Diego County, a local jurisdiction or air ambulance provider designated as a primary response air ambulance in accordance with the San Diego County Ambulance Ordinance, shall:

1. Enter into a written agreement with the EMS Branch to perform as a Paramedic service provider.

2. Provide ALS service on a continuous 24-hour basis.

3. Provide emergency medical responses in accordance with the following requirements:
a. Ground ALS Response: Ensure that at least two Paramedics are initially responded to each ALS response, and that a ground transport vehicle is simultaneously dispatched to all ALS responses, unless an alternate dispatch plan which has been approved by the EMS is in effect. In systems which respond ALS first responder units, the ALS first responder shall be equipped in accordance with EMS Policy P-806 "ALS First Responder Inventory".

b. Air Ambulance Response: Ensure that all primary response air ambulances are staffed in accordance with the provisions of the San Diego County Ambulance Ordinance, maintaining a minimum staffing level of one registered nurse and one Paramedic as flight crew.

4. Require that Paramedics establish base hospital contact as outlined in San Diego County Emergency Medical Services Policy S-415.

5. Require that paramedics maintain a current CPR card (Healthcare Provider/Professional Rescuer or equivalent).

6. Require that all Paramedics working as a part of the EMS system maintain San Diego County Paramedic Accreditation (Policy P-305).

7. Integrate with a first responder system.

8. Enter into mutual aid agreement with adjoining Paramedic agencies whenever possible.

9. Establish the following planned response times:

   a. Provide for a planned maximum ground ALS response time of no more than
30 minutes 90% of the time in rural areas and no more than 10 minutes 90% of the time in urban areas. In systems that incorporate ALS First Responders, the provider shall plan for a maximum ALS First Responder arrival time of 8 minutes 90% of the time with a maximum ALS ground transport response time of 12 minutes 90% of the time.

10. Cooperate with the paramedic training agencies in providing paramedic field internship placements.

11. Provide orientation for first responder agencies to advanced life support functions and role.

12. Designate an agency paramedic coordinator.

13. Submit prehospital patient records via approved San Diego County EMS Form 104 or via electronic means.(as per Policy S-601).

14. Agree to participate in community education programs to teach the public 911 access and CPR.

15. Submit to the EMS Branch evidence of compliance with the California Code of Regulations, Title 22, Division 9, Chapter 4, Article 5.

16. Participate in the County of San Diego EMS Quality Improvement Plan based on state and county regulations and policies.

17. Assess the current knowledge of their paramedics in local policies, procedures and protocols and skills competency.

18. Contract with a designated base hospital to provide medical direction and

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Approved:

[Signatures]

Administration

Medical Director
supervision to assigned air medical Paramedic personnel (designated primary response air ambulance providers only).

B. The County of San Diego shall:

1. Approve paramedic curriculum and training programs.

2. Provide standard for accreditation/authorization and reaccreditation/reauthorization of Paramedics and MICNs in the County.

3. Contract with designated base hospitals to provide immediate medical direction and supervision of assigned prehospital personnel.

4. Provide prehospital patient record forms or alternate electronic reporting mechanism.

5. Review agreements with each Paramedic service provider every two years.
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** To secure and return reusable equipment to the prehospital care provider.

III. **Policy:**

   A. All participants in the EMS system shall facilitate the return of properly labeled equipment to the owner agency.

   B. All agencies in the EMS system agree to buy and stock enough equipment so as not to be dependent upon another agency for immediate item replacement/exchange when faced with normal average workloads.

IV. **Procedure:**

   A. Prehospital Agency Responsibilities:

      1. Agencies shall permanently label all reusable equipment in the following manner:

         a. Agency name and telephone number.

         b. "Return to Emergency Department." (optional)

      2. Agencies shall make their best effort to recover equipment within seven (7) days.

      3. Prehospital personnel shall log equipment as required by their agency.

   B. Hospital Responsibilities:

      1. Hospitals shall provide a logbook or similar mechanism to assist in keeping track of equipment left in the hospital.

      2. Hospitals shall be responsible for security on reusable prehospital equipment left in the hospital for up to seven (7) days, when the provider agency has clearly labeled equipment with agency name and telephone number.

      3. Hospitals shall not release equipment to any agency but the owner agency, unless

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Approved:

[Signatures]

*Adminstrator*

*Medical Director*
there is prior approval by the owner agency.

4. Hospitals shall make every attempt to remove visible contaminants prior to placing equipment in a common storage area.

Approved:

[Signatures]

Administration

Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.201, 1797.204, 1797.218, and 1797.224.

II. **Purpose:** To encourage the establishment of new advanced life support (ALS) services in low population density areas that have demonstrated hardship in establishing services at the community standard of care.

III. **Definitions:**

A. Alternate Advanced Life Support (ALS): ALS provided in low population density areas utilizing a Paramedic staffing option other than the current community standard in San Diego County.

B. Community Standard: two (2) -paramedics on each advanced life support unit with twenty-four (24) hour per day coverage and a response time of ten (10) minutes or less (urban) and fifteen (15) minutes or less (rural) 90% of the time.

C. Low population density area: service area wherein a population does not exceed 750 residents per square mile and is not less than 100 residents per square mile, or where sufficient non-resident or other usage can be demonstrated to justify the service.

D. Hardship is one or more of the following situations:

1. Financial hardship such that service at the community standard of care is impossible.

2. A local system or organizational hardship such that:

   a. Service cannot be made generally available throughout the service area within
established response time guidelines utilizing a community standard service
configuration; or

b. Service cannot be made available through eligible provider at the community
standard without compromising other public safety mission requirements; or

c. No new provider can or will enter the service area and provide service at the
community standard.

IV. Procedure:

A. Application Process:

1. Submit a letter of intent to establish ALS services, in writing, to the County of San
Diego Health and Human Services Agency, EMS Branch.

2. Conduct a competitive bid process pursuant to Health and Safety Code, Division
2.5, Section 1797.224, and in accordance with local policies.

3. Following a competitive bid process, submit to the EMS Branch:

   a. Copy of all proposals or responses received.

   b. Statement of need of ALS services in defined area.

   c. Data which supports a claim of hardship in establishing ALS services in
      accordance with established current community standards.

   d. Description of alternate ALS model proposed.

   e. Description of financial viability for alternate program.

   f. Other special issues unique to the community which may directly or indirectly
impact the ability to provide ALS services at the community standard of care.

4. Within 90 days of receipt of above documents, the EMS Branch will:
   a. Review all documents.
   b. Conduct a community survey (on an as needed basis).
   c. Make a determination of the need for alternate ALS to the specified community.
   d. Notify the applicant(s) of the final decision and any recommendations or suggestions for implementation.

B. Designation Process:

1. To be designated as an alternate Paramedic service provider in San Diego County, a local jurisdiction (a local jurisdiction is the County, a city, water district, fire protection district, or county service area), which has been approved by the County of San Diego to provide alternate ALS services must:
   a. Comply with California Code of Regulations, Title 22, Division 9, Chapter 4.
   b. Enter into an Agreement with the County of San Diego, Health and Human Services Agency, Emergency Medical Services to perform as an alternate Paramedic service provider agency.
   c. Comply with all responsibilities of the contractor as outlined in Exhibit A.

2. The County of San Diego, Department of Health, EMS Branch shall review the Agreement with the alternate Paramedic service provider every two (2) years. The
Agreement may be changed, renewed, canceled, or otherwise modified when necessary according to provisions for such in the Agreement.

3. The County of San Diego, EMS Branch may deny, suspend, or revoke the approval of an alternate Paramedic service provider agency for failure to comply with applicable policies, procedures, protocols, or regulations in accordance with provisions for such in the Agreement.
EXHIBIT A

RESPONSIBILITIES OF THE CONTRACTOR

1. To provide Paramedic Services within the boundaries of its local jurisdiction, and within adjoining areas as specified by Agreements with adjoining Paramedic Service Providers.

2. To participate in the Advanced Life Support (ALS) Program in accordance with Title 22 of the California Code of Regulations, Division 9, Chapter 4.

3. To develop and operate Paramedic Services in accordance with California Code of Regulations, Title 22, Division 9, Chapter 4. The CONTRACTOR may subcontract all or a portion of these services. However, the CONTRACTOR is responsible for insuring that any and all subcontractors provide services in accordance with California Code of Regulations, Title 22, Division 9, Chapter 4.

4. To maintain and operate at least one fully equipped, supplied and staffed Paramedic Unit seven days a week, twenty-four (24) hours a day, in accordance with the Policies, Procedures and Protocols established by San Diego County.

5. To staff each unit with at least one (1) Paramedic at all times. For the purpose of this Agreement, a Paramedic is an individual certified in the State of California as a Paramedic, and accredited by the County of San Diego Emergency Medical Services Medical Director to operate as a Paramedic in San Diego County, pursuant to Section 1797 et seq. of the Health and Safety Code.

6. To staff each unit with at least one (1) EMT at all times. For the purpose of this Agreement, an EMT is an individual certified in the State of California to operate as an EMT, pursuant to Section 1797 et seq. of the Health and Safety Code.
7. To provide the citizens of the local jurisdiction with information on the 9-1-1 system and where and how to obtain Cardiopulmonary Resuscitation (CPR) training.

8. To ensure that all Paramedic personnel comply with the continuous accreditation requirements of the COUNTY.

9. To provide suitable facilities for housing the Paramedic unit(s).

10. To cooperate with the approved Paramedic training programs in providing field internship locations for paramedic interns.

11. To develop mutual aid and/or call-up plans for providing Paramedic Service in an area in the event the ambulance assigned to the area is not operable, or is away from the area for other reasons. Automatic response plans may be developed by the local jurisdiction with concurrence of adjoining Paramedic services.

12. To notify the Chief, Division of Emergency Medical Services, or designee, immediately whenever any condition exists which adversely affects the local jurisdiction's ability to meet the conditions of this Agreement.

13. To appoint an Agency Paramedic Coordinator, to serve as liaison between the Agency, the County, base hospitals, receiving hospitals, BLS provider agencies and public safety agencies operating within the service area.

14. To provide orientation for first responder agencies to advanced life support functions and role.

15. To provide for a planned maximum response time of no more than fifteen (15) minutes in rural areas and no more than ten (10) minutes in urban areas.

16. To participate in local Emergency Medical Service planning activities, including disaster management.
17. To comply with all applicable State statutes and regulations and County standards, policies, procedures and protocols, including a mechanism to assure compliance.

18. To implement and maintain a Quality Assurance program.

19. To take immediate corrective action where there is a failure to meet "Responsibilities of the CONTRACTOR".
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.204, 1797.218, and 1797.220.

II. **Purpose:** To offer a mechanism for designated paramedic service agencies in San Diego County to provide advanced life support (ALS) assessment and initial treatment to patients by paramedics prior to the arrival of a transporting unit.

III. **Definitions:**

A. An ALS first responder unit is defined as a non-transporting emergency response vehicle utilized by a designated paramedic service provider which is staffed by at least one (1) paramedic and one (1) EMT, and which complies with the operational criteria outlined in this policy.

B. An ALS transporting unit is defined as an emergency response vehicle utilized for patient transport which is staffed with at least one (1) paramedic and one (1) EMT and which complies with the operational criteria as outlined in County of San Diego Emergency Medical Services (EMS) policy P-801.

C. A BLS transporting unit is defined as a response vehicle utilized for emergent or non-emergent patient transport which is staffed with two (2) EMTs and which complies with the operational criteria as outlined in County of San Diego EMS policy B-833.

IV. **Policy:**

A. Staffing for an ALS first responder unit in San Diego County shall include at a minimum one (1) paramedic and one (1) EMT. ALS first responder units shall be equipped with standardized inventory as specified in County of San Diego EMS policy P-806.

B. The closest/most appropriate, available ALS transporting unit shall be dispatched simultaneously with the ALS first responder unit if the response meets established
criteria for dispatch of an ALS unit.

C. If ALS care is initiated and an ALS transporting unit remains unavailable, the ALS first responder unit paramedic shall accompany the patient to the hospital in a BLS transporting unit.

D. Each ALS first responder unit will be assigned to a Base Hospital for medical control, by the local EMS agency.

E. Approved service provider agencies shall have a current ALS service provider agreement with the County of San Diego EMS.

V. Procedure:

A. Application/Approval Process:

Application for use of ALS first responder unit(s) shall be submitted in writing to the Medical Director, County of San Diego EMS and shall include:

1. Identification, location, and average response times of the transporting ALS unit assigned to the geographical area.

2. Identification, location, and average response times of the proposed ALS first responder unit(s).

3. Description of the proposed ALS first responder unit staffing, to include level(s) of training.

4. A statement indicating what optional equipment (if any) will be included in the inventory of the ALS first responder unit.

B. Operational Requirements:

When the ALS first responder unit arrives on scene prior to the transporting ALS unit, the ALS First Responder paramedic shall:
1. Assess and treat the patient.

2. If the First Responder paramedic does not accompany the patient to the hospital, transfer of care and information shall occur at the earliest most appropriate time to facilitate continuity of care and prevent any delay in care.

3. First Responder paramedics shall submit completed prehospital patient records in accordance with policy S-601.
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** To identify standardized inventory for all First Responder Units. Individual agencies may increase inventory to include all ALS medications, including controlled substances.

III. **Policy:** Essential equipment and supplies to be carried on each ALS first responder unit shall include at a minimum the following:

A. **Airway Adjuncts:**

   Airways-assorted sizes
   Aspiration based endotracheal tube placement verification device 1 each
   Bag-Valve-Mask Device 1 each size
   Esophageal Tracheal Airway Device (Combitube): Reg, Small Adult 1 each
   OR
   Perilaryngeal Airway (King airway) sizes: 3, 4, 5 1 each
   Intubation tubes: sizes: 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9 1 each
   Laryngoscope - blade: curved and straight sizes 2, 3, 4 1 each
   Laryngoscope - handle 2 each
   Magill tonsil forceps 1 each
   O₂ Cannula 2 each
   O₂ Masks 2 each
   O₂ powered nebulizer 1 each
   Stylet (pediatric, adult) 1 each
   Suction catheters (5, 6, 8, 10, 12, 14, 18 fr) 1 each
   Suction catheters, tonsil tip (Yankauer) 2 each
   Water soluble lubricant 1
   Quantitative (Capnography) End Tidal CO₂ 1 each
   End-tidal CO₂ detector (pediatric and adult) (optional item) 1 each

B. **Vascular Access/Monitoring Equipment**

   Armboard: short 2 each
   Blood glucose monitoring device 1 each
   Blood pressure cuff - adult 1 each
   Blood pressure cuff - pediatric 1 each
   IV administrations sets: Macrodrip, Microdrip 1 each
   IV tourniquets 2 each
   Needles:
   IV cannula - 14 gauge 2 each
   IV cannula - 16 gauge 2 each
   IV cannula - 18 gauge 2 each
   IV cannula - 20 gauge 2 each
   IV cannula - 22 gauge 2 each
   IV cannula - 24 gauge 2 each
   IM – 21 Gauge 1” 3
   IO – Jamshidi-type – 18 gauge 2
   IO – Jamshidi-type (or approved device) needle – 15 gauge 2

Approved:

[Signatures]

Administration

[Signature]

Medical Director

[Signature]
### ALS First Responder Inventory

**Syringes:** 1ml, 3ml, 5ml, 10ml, 20ml  
2 each  
Stethoscope  
1 each

**C. Splinting Devices:**  
Extrication Collars, Rigid  
1 ea size  
Restraints, soft or leather  
1 set

**D. Packs:**  
Cold packs  
2 each  
Drug Box  
1 each  
Hot packs (warming, not to exceed 110 degrees F)  
1 each  
Personal Protective Equipment (masks, gloves, gowns, shields)  
2 sets  
Trauma Box/Pack  
1 each

**E. Other:**  
Thermometer-oral, rectal  
1 each

**F. Communication Items:**  
Agency radio  
1 each  
Communication Failure Protocol (laminated)  
1 each  
EMS radio  
1 each

**G. Replaceable Medications:**  
Minimum  
Adenosine 6mg/2ml vial  
30 mg total  
Albuterol 2.5mg/3ml or 0.083%  
4 vials  
ASA 81 mg/tab  
4 tabs  
Atropine sulfate 1mg/10ml  
3 each  
Atrovent 2.5ml (one unit dose vial) or 0.02%  
2 each  
Dextrose, 50% 50 ml  
1 each  
Diphenhydramine(Benadryl) 50mg/2ml  
1 each  
Epinephrine: 1:1,000 1 mg  
2 each  
Epinephrine: 1:10,000 1 mg  
4 each  
Lidocaine 100 mg  
2 each  
Midazolam (Versed) 5mg/ml  
10 mg  
Morphine 10 mg/ml  
10 mg  
Naloxone HCL (Narcan) 1mg/ml  
4mg  
Nitroglycerine spray/tabs 0.4 mg  
1 container  
Nitropaste w/ papers  
1 tube  
Ondansetron (Zofran) 4mg/2ml  
1 each  
Oral Glucose  
3 tabs or 15g

**IV Solutions**  
Normal Saline - 1000 ml bag  
2 each  
Normal Saline - 250 ml bag  
2 each

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**Approved:**  
[Signature]  
Administration  
[Signature]  
Medical Director
H. Other Equipment
   Broselow Tape  1 each
   Cardiac Monitor/Defibrillator  1
   Mucosal Atomizer Device (MAD)  1
   Pediatric Drug Chart (laminated)  1 set
   Spinal Immobilization devices (1 min. 30", 1 min. 60") with straps  1 each
   Standing Orders (Adult and Pediatric) [laminated]  1 set

I. Optional equipment:
   End-tidal CO2 detector
   Ondansetron (Zofran) PO/ODT  4mg
   Tourniquets  2
   Tympanic thermometer

Approved:

[Signatures]

Marcela Nair
Administration

Barry Urban
Medical Director
I. **Authority**: Health & Safety Code, Division 2.5, 1797.204.

II. **Purpose**: To identify minimum inventory for ALS Wildland Packs to be carried on Brush Rigs that may be sent out on a Strike Team. Individual agencies may increase inventory to include all ALS medications and equipment.

III. **Definitions**:
- **ALS Wildland Packs** – Minimal inventory kits containing ALS medications and equipment that can be used by paramedics who staff apparatus sent out on a Fire Strike Team.

- **Wildland Strike Team** – Personnel and units sent to other areas to fight Wildland fires

IV. **Policy**:
Essential equipment and supplies to be carried on each Wildland Fire Strike Team unit shall include at a minimum the following:

A. **Airway Adjuncts**:
   - Bag-valve-mask ventilation assist
   - CO₂ Detection Device **OR**
   - Quantitative (Capnography) End Tidal CO₂ device
   - Esophageal/Tracheal Airway Device **OR**
   - Perilaryngeal Airway (King) Size 3, 4, 5
   - Water-soluble lubricant
   - Nasopharyngeal Airway Assists
   - Oropharyngeal Airway Assists
   - Oxygen Powered Nebulizer

   **Minimum**
   - 1 each
   - 1 each (adult/pediatric)
   - 1
   - 1 each (small/regular adult)
   - 1
   - 1 each (26-36 mm)
   - 1 each (90-110 mm)
   - 1 each

B. **Vascular Access/Monitoring Devices**
   - Arm boards
   - IV start Kits
   - IV Access Needles
   - Needles
   - Normal Saline IV w/tubing
   - Syringes

   **Minimum**
   - 1 each (long/short)
   - 2
   - 2 each size (16-24)
   - 2 21G
   - 2000 ml
   - 1 each size (1ml, 5ml, 10ml)

C. **Replaceable Medications**
   - Albuterol
   - Atropine Sulfate
   - Atrovent
   - ASA
   - Dextrose (50%)

   **Minimum**
   - 8 vials or 1 MDI
   - 2 mg
   - 2 vials
   - 4 tablets (81mg)
   - 1 Preload Syringe

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Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
D. Other essential equipment
- AED/SAD with patient leads/pads: 1
- Agency AMA form: 5
- BP Cuff: 1
- Glucometer and lancets
- Goggles: 2 pair
- Gloves (non-latex): 8 pair
- Mucosal Atomizer Device (MAD): 1
- Penlight: 1
- Sharps container
- Stethoscope: 1
- Trauma Shears: 1 pair
- Laminated copies of:
  - Communication Failure Protocol (P-111)
  - ALS Adult Standing Orders (P-110)

E. Optional equipment
- Tourniquets
I. Authority: Health and Safety Code, Division 2.5, Sections 1797.204, 1797.218, 1797.220 and 1798.

II. Purpose: To approve Advanced Emergency Medical Technician (AEMT) service agencies in the San Diego County.

III. Definitions:
   A. An AEMT unit is defined as an AEMT emergency response vehicle utilized by a designated AEMT service provider which is staffed by at least one (1) A-EMT.

IV. Policy:
   A. AEMT units shall be equipped with standardized EMT service provider inventory as specified in the County of San Diego EMS policies. Units shall also be equipped with approved AEMT equipment and supplies.
   B. The closest/most appropriate, available ALS transporting unit shall be dispatched simultaneously with the AEMT unit if the response meets established criteria for dispatch of an ALS unit.
   C. If (AEMT) care is initiated and there is a delay in response of an ALS transporting unit, the AEMT shall proceed with transport of the patient to the hospital if it is medically in the best interest of the patient.
   D. Each AEMT unit will be assigned to a Base Hospital for medical control, by the local EMS agency.
   E. Approved AEMT service provider agencies shall have a current service provider agreement with the County of San Diego EMS Branch.

Document revised 7/1/2010
Approved:

[Signatures]
Administration
Medical Director
V. **Procedure:**

A. **Application/Approval Process:**

Application for use of AEMT unit(s) shall be submitted in writing to the Medical Director, County of San Diego Emergency Medical Services and shall include:

1. Identification, location, and average response times of the transporting ALS unit assigned to the geographical area.
2. Identification, location, and average response times of the proposed AEMT unit(s).
3. Description of the proposed AEMT unit staffing, to include level(s) of training.
4. A statement indicating what AEMT- specific equipment (if any) will be included in the inventory of the unit.

B. **Operational Requirements:**

When the AEMT unit arrives on scene prior to the transporting ALS unit, the AEMT shall:

1. Assess and treat the patient.
2. If the AEMT does not accompany the patient to the hospital, transfer of care and information to the paramedic assuming care of the patient shall occur at the earliest most appropriate time to facilitate continuity of care and prevent any delay in care.
3. AEMT’s shall submit completed prehospital patient records in accordance with policy S-601.

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Document revised 7/1/2010

Approved:

\[Signature\]  
Administration

\[Signature\]  
Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Sections 1797.170, 1797.201, 1797.204 and 1797.220.

II. **Purpose:** To establish a standard mechanism for approval and designation as a Emergency Medical Technician (EMT) or Public Safety (PS) Automated External Defibrillator (AED) provider in San Diego County.

III. **Policy:** San Diego County Emergency Medical Services (EMS) shall approve and designate EMT and PS AED Providers who meet established criteria.

IV. **Procedure:**

A. Submit a written request for approval to the EMS Medical Director to include:

1. Description of intended use and population served.

2. For PS AED providers only, Agreement with a Base Hospital or Physician for medical control.

3. Agreement to meet and provide the following:

   a. Provide orientation of AED authorized personnel to the AED program in the agency, including County and agency policies and procedures.

   b. Ensure initial training (PS only) and, thereafter, continued competency of AED authorized personnel.

   c. Ensure maintenance of AED equipment.

   d. Authorize personnel and maintain a current listing of all AED service provider
authorized personnel and provide a listing to EMS.

e. Collect and report to EMS required data as per Policy D-620.

B. EMS shall review all information submitted. Agencies shall be notified in writing of approval or disapproval within thirty (30) days from receipt of request.

C. Approved EMT and PS AED provider agencies shall enter into a Memorandum of Agreement with San Diego County for EMT or PS AED services.

D. An EMT or PS AED service provider approval may be revoked or suspended for failure to maintain the requirements of applicable state and local regulations and policies.

Approved:

[Signature]
Administration

[Signature]
Medical Director
Subject: Perilaryngeal Airway Adjuncts Service Provider Designation

I. Authority: Health and Safety Code, Division 2.5, Sections 1797.170, 1797.204 and 1797.22.

II. Purpose: To establish a standard mechanism for approval and designation as a Perilaryngeal Airway Adjuncts (PAA) provider in San Diego County.

III. Policy: The County of San Diego Emergency Medical Services (EMS) shall approve and designate PAA providers which meet established criteria.

IV. Definition: For the purpose of this policy the term “Perilaryngeal Airway Adjuncts” includes both the Esophageal Tracheal Airway (ETAD) and King Airway devices.

V. Procedure:

A. Documentation of current PAA program approval from EMS.

B. Enter into a Memorandum of Agreement with EMS for PAA services within the particular area of jurisdiction.

C. Comply with the California Code of Regulations Title 22, Division 2, Chapter 2, Section 100064 (b).

Document revised 7/1/2010
Approved:

[Signature]
EMS Medical Director
I. **Authority:** California Vehicle Code, Section 2512(c); Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** To establish the process by which agencies desiring to provide ambulance service in San Diego County would obtain an Ambulance Provider's Permit.

III. **Procedure:**

A. **Application Process, Privately Owned Companies:**

1. Submit a completed application, which contains the following information:

   a. Names and addresses of the applicant registered owner(s), partner(s), officer(s), director(s), and all shareholders that hold or control 10% or more of the stock of the applicants.

   b. Applicant’s training and experience in the transportation and care of patients.

   c. Name(s) under which the applicant has engaged, does, or proposes to engage in ambulance service.

   d. Description of each ambulance including: the make, model, year of manufacture, vehicle identification number, current state license number, the current odometer reading of the vehicle and the color scheme, insignia, name monogram and other distinguishing characteristics of the vehicle.

   e. Statement that the applicant owns or has under his/her control, in good mechanical condition, required equipment to consistently provide quality ambulance service, and that the applicant owns or has access to suitable facilities for maintaining his/her equipment in a clean and sanitary condition.

   f. Description of the company’s program for maintenance of the vehicles.

   g. Comprehensive list of on-board communication devices (e.g. radio frequencies and cellular phone numbers).

   h. Description of all posting locations, noting hours of operation, from which ambulance services will be offered.

   i. A list of all ambulance drivers and attendants which identifies each persons’ EMT certification number and issuing county; CPR certifications, California Drivers License and Ambulance Drivers Certificate, with expiration dates of each.

   j. Description of the company’s orientation program for attendants, dispatchers and drivers.

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Approved:

[Signature]

*Administration*

[Signature]

*EMS Medical Director*
k. Statement of legal history of all the persons identified in A.1.a above.

l. Evidence of insurance for general and professional liability, and worker’s compensation in amounts as specified in the San Diego County Ambulance Ordinance.

m. An affirmation that the applicant possesses and maintains currently valid California Highway Patrol Inspection certificates for each vehicle listed in the application, and a copy of the license issued by the Commissioner of the California Highway Patrol.

n. A completed set of fingerprint cards for each of the persons identified in A.1.a above.

2. Agency and inspection fees shall be submitted to the Permit Officer/EMS Chief at the time of application.

3. Within thirty (30) days of receipt of an application, the Permit Officer/EMS Chief shall review all materials submitted and make a determination regarding the issuance of the applied for permit, pending required inspections.

B. Application Process, Not for Profit/Volunteer

1. Submit a completed application as identified in Section A.1 above.

2. Not for profit/volunteer agencies are exempted from the fee requirements identified in Section A.2 above.

C. Application Process, Governmental Agencies

Governmental agencies which operate an ambulance twenty-four (24) hours per day with full time paid employees are exempted from the application and fee requirements identified in this policy.

D. Application Process, Renewal, Privately Owned Companies and Not for Profit/Volunteer

1. Submit a completed application, which verifies the information identified in Section A.1 (a-n).

2. Submit appropriate, required fees.

3. Upon approval of the renewal application, the Permit Officer/EMS Chief shall schedule an inspection of all agency service units.

E. Denial/Revocation of Permit and Appeal Process

1. Any false or misleading statements made by the principals, in the application, reports or other documents filed with the Permit Officer/EMS Chief.

2. The applicant is not the legal owner or operator of the service.

Approved:

[Signatures]

Administration                      EMS Medical Director
3. The applicant was previously the holder of a permit that has been suspended.

4. The applicant acted in the capacity of a permitted person or firm under this Division without having a valid permit.

5. The applicant pled guilty, or was found guilty of a felony or crime involving moral turpitude.

6. The applicant violated any provisions of this ordinance.

Appeal Process

a. The Permit Officer/EMS Chief shall notify the applicant in writing of the denial within 30 days of the receipt of the application.

b. The denial shall be written and sent to the last known address of the applicant, or hand delivered to the applicant, and shall set forth the reasons for the denial or revocation.

c. The applicant may request a hearing from the Permit Officer/EMS Chief by:
   1) The request will be in writing.
   2) The request must be filed with the Permit Officer/EMS Chief within ten (10) days of the hand delivery of the denial, or fifteen (15) days of mail delivery.

d. The Permit Officer/EMS Chief must schedule the hearing no later than twenty (20) days after the receipt of the request from the agency.

e. The decision of the Permit Officer/EMS Chief is final.
I. Authority: San Diego County Code of regulatory Ordinances, Division 10 chapter 4.

II. Purpose: To establish the procedure for the resolution of appeals regarding either the denial of issuance of a permit, or the suspension/revocation of an existing Permit.

III. Procedure:

A. Denial of Issuance of Permit:

Whenever the Permit Officer denies an application for a Permit, the applicant may request a hearing on the denial.

1. All requests for a hearing shall be submitted in writing to the Permit Officer within ten (10) days of personal delivery of notice of denial of application. If the notice of denial is mailed, applicant has an additional five (5) days to file a hearing request.

2. A hearing shall be held not more than twenty (20) days from the date of receipt of the applicant's written request for a hearing.

3. The applicant shall have the burden of proof during the hearing.

4. The Permit Officer shall issue a decision on all appeals within two (2) working days of the hearing.

5. The applicant shall be notified in writing of the decision.

6. The applicant may appeal the denial after the hearing with the Permit Officer.

B. Suspension/Revocation of Permit:

Whenever the Permit Officer suspends or revokes a current permit, the permittee may request a hearing on the suspension or revocation.

1. All requests for an appeal hearing shall be submitted to the Clerk of the Board of Supervisors in writing within ten (10) days of notification of suspension of revocation.

2. The Clerk of the board of Supervisors shall assign the appeal to a Hearing Officer selected by the Clerk of the Board of Supervisors on a rotating basis from a list of qualified Hearing Officer approved by the Board of Supervisors.

3. A Hearing Officer shall schedule a date for the hearing within ten (10) days after the date of assignment of the appeal by the Clerk of the Board of Supervisors.

4. The hearing shall be held no more than thirty (30) days from the time of assignment by the Clerk of the board of Supervisors to the Hearing Officer.

Approved:

[Signatures]

Administration

Medical Director
5. The hearing Officer is authorized to issue subpoenas, to administer oaths and to conduct the hearing on the appeal.

6. The Permit Officer and the appellant may present evidence relevant to the denial, suspension, revocation, or other decision of the Permit Officer.

7. The Hearing Officer shall receive evidence and shall rule on the admissibility of evidence and on questions of law.

8. At the hearing any person may present evidence in opposition to, or in support of appellant's case.

9. The Hearing Officer shall issue a decision on all appeals at the close of the hearing.

10. The Hearing Officer shall within five (5) days of the announcement of a decision file with the clerk of the Board of Supervisors written findings of fact and conclusion of law and the decision.

11. The decision of the Hearing Officer is final when filed with the Clerk of the Board of Supervisors.

12. The effect of a decision to suspend or revoke a permit shall be stayed while an appeal to the Board of Supervisors is pending or until the time for filing such appeal has expired.

C. Exception to Hearing Procedure:

When in the opinion of the Permit Officer, there is a clear and immediate threat to the Safety and protection of the public; the Permit Officer may suspend a permit without a hearing.

1. The Permit Officer shall prepare a written notice of suspension.

2. The notice of suspension shall be either sent by certified mail or be personally delivered.

3. The Permittee may request a hearing from the Permit Officer within five (5) days of receipt of the notice.

4. The hearing shall be held not more than fifteen (15) days from the date of receipt of the request.

5. Following the hearing, the Permittee affected may appeal the decision in the manner indicated in Section III. B., (1-11) above.

6. The decision shall not be stayed during pendency of such hearing or appeal.
I. **Authority:** California Vehicle Code, Section 2512(c); Health and Safety Code, Division 2.5, Section 1797.204.

II. **Purpose:** To define the minimum requirements for ambulance vehicles in San Diego County in the areas of vehicle design, safety equipment, and emergency equipment and supplies.

III. **Policy:** Every ambulance intended for operation in San Diego County shall meet the following minimum requirements:

   A. All ambulances permitted for use in San Diego County shall conform to Federal Specification KKK-A-1822-C as promulgated by the U.S. General Services Administration with the following exceptions:

      1. **Critical Care Units and Specialty Vehicles** may be exempt from Section 3.4.11 Vehicle Physical Dimension Requirements and Section 3.5 Vehicle Weight Ratings and Payload and Section 3.10.8 Doors, provided that it can be demonstrated to the Permit Officer that such exemption does not compromise safety.

      2. **Emergency Lighting.** Ambulances permitted for use in San Diego County are exempted from Section 3821 Emergency Lighting Configuration and Section 3.8.2.3 Switching Arrangements. They will, however, comply with minimum requirements of the California Vehicle Code (CVC) and Regulations promulgated by the State of California and administered by the California Highway Patrol (CHP).

      3. **Color, Paint and Finish.** Ambulances permitted to operate in San Diego County are exempt from Section 3.16.2 Color, Paint and Finish and Section 3.16.2.1 Color Standards and Tolerances, provided, however, they must comply with California law.

      4. **Emblems and Markings.** Ambulances permitted to operate in San Diego County are exempt from Section 3.16.4 Emblems and Markings, provided, however, they comply with California law and regulations.

      5. **Standard Equipment.** Ambulances permitted to operate in San Diego County are exempt from Section 3.152 Standard Mandatory Miscellaneous Equipment, Section 3.15.3 Optional Equipment, and Section 3.15.4 Medical Surgical, and Biomedical Equipment, provided they comply with California regulation and local policy.

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Approved:

[Signature]

Administration

[Signature]

EMS Medical Director
6. **Exemptions.** The Permit Officer is authorized to grant additional exemptions from Federal KKK-A-1822C specifications in the following situations:
   
a. Declared disaster and disaster recovery periods.

b. Ambulances in service prior to the effective date of this policy will be granted an exemption for the service life of the ambulance upon submission of documentation that the manufacturer of the ambulance carries at least $1,000,000 product liability insurance.

c. **Specialty Vehicles** such as neonatal transfer units, multiple casualty units and special terrain vehicles may be exempted from specific Sections KKK-A-1822-C provided that the exemptions are shown to be in the interest of patient care and do not unnecessarily compromise safety. Such vehicles may not be placed in service until a permit is issued.

B. **Required Documentation:**

1. A current and valid San Diego County ambulance license (or facsimile) in the driver compartment.

2. A current and valid San Diego County ambulance license decal affixed to the lower portion right rear of the ambulance.

3. Proof of passage of the annual inspection performed by the CHP within the preceding twelve (12) months.

4. Vehicle registration and proof of insurance as required by law.

C. **Emergency Care Equipment and Supplies:** The following items shall be carried on all Ground ambulances as a minimum:

1. Essential equipment and supplies as required by the California Code of Regulations, Title 13, Section 1103.2(a) 1-19 (Attachment A).

2. Equipment necessary to comply with California Occupational Safety and Health Administration (CAL-OSHA) standards for exposure to blood borne pathogens.

3. **Communication Items:**
   
<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Dispatch Device</td>
<td>1 each</td>
</tr>
<tr>
<td>Regional Communication System (RCS) 800 MHz programmed with appropriate EMS fleet map</td>
<td>1 each</td>
</tr>
</tbody>
</table>

---

Approved:

[Signature]

Administration

[Signature]

EMS Medical Director
I. **Authority:** Health and Safety Code, Sections 1797.220, 1797.222, 1798.172, San Diego County Code of Regulatory Ordinances, Division 10, Chapter 6.

II. **Purpose:** To identify minimum staffing and equipment requirements for ground critical care transport (CCT) services in San Diego County.

III. **Definitions:**

A. **CCT Service Provider:** Any agency that routinely provides for hire the ambulance, personnel and/or equipment utilized to provide CCT services.

B. **CCT Service:** The provision of non 9-1-1 ambulance services utilizing personnel, equipment, medications that provide a higher level of care than that of an ambulance staffed by emergency medical technicians (EMT-B or EMT-P) alone.

C. **Ground CCT vehicle – ground ambulance providing non 9-1-1 patient care and transport service that is staffed by a registered nurse or physician in addition to EMT-B’s.**

IV. **Procedure:**

A. Ground CCT ambulances shall comply with all requirements established for BLS ambulances.

B. Each CCT provider agency shall designate a medical director.

1. The medical director shall maintain a valid license as a physician in California.

2. The medical director shall be responsible for all medical protocols and procedures followed by the CCT provider agency’s staff.

Approved:

[Signatures]

Administrator

EMS Medical Director
3. The medical director for the CCT service shall ensure that a comprehensive, written quality assurance (QA)/quality improvement (QI) program is in place to evaluate the medical/nursing care provided to all patients. This QA/QI program shall integrate with the countywide prehospital QA/QI program. Any incidents that result in a negative patient outcome shall be reported to the San Diego County EMS Medical Director within 10 working days.

4. The CCT provider agency medical director shall ensure that all nursing/medical staff on a CCT collectively possess the skills and knowledge to provide a level of care commensurate with the specific and anticipated needs of the patient. The CCT provider agency medical director shall be accountable for all medical procedures performed on board the CCT by agency staff.

C. Staffing – CCT providers agencies shall adopt policies requiring the following:

1. All nursing/medical personnel shall maintain current appropriate licensure/certification.

2. CCT provider agencies shall routinely staff all CCT vehicles with at least one (1) registered nurse or physician and two (2) certified or licensed patient care attendants. Two medical personnel shall remain with the patient during the transport.

3. The nurse shall meet the following qualifications:
   a. Possess a current California R.N. license.

Approved:

[Signatures]
Administrator
EMS Medical Director
b. Demonstrate clinical competence in resuscitation skills appropriate for age of transported patients (e.g. ACLS, PALS, PEPP, ENPC, NRP).

c. Possess two (2) years recent experience in critical care setting (ICU/CCU/ED/CCT).

d. Complete a formal orientation program to the CCT provider agency’s policies, equipment, medical protocols.

4. A CCT provider agency shall provide service that is available 24 hours a day/7 days a week.

5. Nothing in this policy is intended to limit a CCT provider agency from utilizing or maintaining additional staff on board the CCT.

D. Equipment/Medication

1. All CCT ambulances providing service shall carry, as a minimum, the equipment/medication items listed in S-836.

2. Agencies which provide pediatric and/or neonatal transport shall carry the pediatric inventory listed in S-836 (denoted by italics).

3. CCT providers shall ensure that transport personnel are thoroughly trained in the safe operation of all patient care equipment utilized on board the CCT.

4. Nothing in this policy is intended to limit a CCT provider agency from utilizing or maintaining additional equipment or medications on board the CCT, as long as patient care personnel are fully trained on the safe and effective use of that equipment or medication.

Approved:

Administrator

EMS Medical Director
I. **Authority:** Health and Safety Code, Division 2.5, Section 1797.220, 1797.222, 1798.172; San Diego County Code of Regulatory Ordinances, Title 6, Division 10, Chapter 7.

II. **Purpose:** Identify a minimum standardized inventory on all Basic Life Support and Critical Care Transport Units.

III. **Policy:** Essential equipment and supplies are required by California Code of Regulations, Title 13, Section 1103.2(a)1-20 and/or San Diego County Code of Regulatory Ordinances, Division 10, Chapter 8. Each Basic Life Support or Critical Care Transporting Unit in San Diego County shall carry as a minimum, the following as listed. Additional equipment, medications and supplies may be stocked as needed.

### Basic Life Support Requirements:

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance cot and collapsible stretcher</td>
<td>1 each</td>
</tr>
<tr>
<td>Straps to secure the patient to the cot or stretcher</td>
<td>1 set</td>
</tr>
<tr>
<td>Ankle and Wrist Restraints</td>
<td>1 set</td>
</tr>
<tr>
<td>Linens (Sheets, pillow, pillow case, blanket, towels)</td>
<td>2 sets</td>
</tr>
<tr>
<td>Oropharyngeal Airways</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>2</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Newborn</td>
<td>1</td>
</tr>
<tr>
<td>Pneumatic or rigid splints</td>
<td>4</td>
</tr>
<tr>
<td>Bag-valve-mask w/reservoir and clear resuscitation mask</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen Cylinder w/wall outlet (H or M)</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen tubing</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen Cylinder - portable (D or E)</td>
<td>2</td>
</tr>
<tr>
<td>Oxygen administration mask</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>4</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>2</td>
</tr>
<tr>
<td>Nasal cannulas (clear plastic) Adult</td>
<td>4</td>
</tr>
</tbody>
</table>
SUBJECT: CRITICAL CARE TRANSPORT UNIT INVENTORY  

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal airways (assorted sizes)</td>
<td>1 set</td>
</tr>
<tr>
<td>Nebulizer for use w/sterile H₂O or saline</td>
<td>2</td>
</tr>
<tr>
<td>Glucose Paste/Tablets</td>
<td>1 tube or 10 tablets</td>
</tr>
<tr>
<td>Bandaging supplies</td>
<td></td>
</tr>
<tr>
<td>4&quot; sterile bandage compresses</td>
<td>12</td>
</tr>
<tr>
<td>3x3 gauze pads</td>
<td>4</td>
</tr>
<tr>
<td>2&quot;, 3&quot;, 4&quot; or 6&quot; roller bandages</td>
<td>6</td>
</tr>
<tr>
<td>1&quot;, 2&quot; or 3&quot; adhesive tape rolls</td>
<td>2</td>
</tr>
<tr>
<td>Bandage shears</td>
<td>1</td>
</tr>
<tr>
<td>10&quot;x 30&quot; or larger universal dressing</td>
<td>2</td>
</tr>
<tr>
<td>Emesis basin (or disposable bags)</td>
<td>1</td>
</tr>
<tr>
<td>Covered waste container</td>
<td>1</td>
</tr>
<tr>
<td>Portable suction equipment (30 L/min, 300 mmHg)</td>
<td>1</td>
</tr>
<tr>
<td>Suction device - fixed (30 L/min, 300 mmHg)</td>
<td>1</td>
</tr>
<tr>
<td>Suction Catheter - Tonsil tip</td>
<td>3</td>
</tr>
<tr>
<td>Suction Catheter (6, 8, 10, 12, 14, 18)</td>
<td>1 set</td>
</tr>
<tr>
<td>Head Immobilization device</td>
<td>2 each</td>
</tr>
<tr>
<td>Spinal Immobilization devices (1 min. 30&quot;, 1 min. 60&quot;) with straps**</td>
<td>1 each</td>
</tr>
<tr>
<td>Cervical collars - rigid</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>3</td>
</tr>
<tr>
<td>Pediatric</td>
<td>2</td>
</tr>
<tr>
<td>Infant</td>
<td>2</td>
</tr>
<tr>
<td>Traction splint *</td>
<td></td>
</tr>
<tr>
<td>Adult or equivalent</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric or equivalent</td>
<td>1</td>
</tr>
<tr>
<td>Blood pressure manometer &amp; cuff</td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1</td>
</tr>
<tr>
<td>Infant</td>
<td>1</td>
</tr>
<tr>
<td>Neonatal (Mandatory only for neonatal CCT)</td>
<td>1</td>
</tr>
<tr>
<td>Obstetrical Supplies to include:</td>
<td>1 kit</td>
</tr>
<tr>
<td>gloves, umbilical tape or clamps, dressings, head coverings</td>
<td></td>
</tr>
<tr>
<td>ID bands, towels, bulb syringe, clean plastic bags, sterile scissors or scalpel</td>
<td></td>
</tr>
<tr>
<td>Warm pack, or warming device (not to exceed 110° F)</td>
<td>1</td>
</tr>
<tr>
<td>Potable water (1 gallon) or Saline (2 liters)</td>
<td>1</td>
</tr>
<tr>
<td>Bedpan</td>
<td>1</td>
</tr>
<tr>
<td>Urinal</td>
<td>1</td>
</tr>
<tr>
<td>Disposable gloves - non-sterile</td>
<td>1 box</td>
</tr>
<tr>
<td>Disposable gloves – sterile</td>
<td>4 pairs</td>
</tr>
<tr>
<td>Cold packs</td>
<td>2</td>
</tr>
<tr>
<td>Sharps container (OSHA approved)</td>
<td>1</td>
</tr>
<tr>
<td>Agency Radio</td>
<td>1</td>
</tr>
<tr>
<td>EMS Radio</td>
<td>1</td>
</tr>
</tbody>
</table>

Approved:

[Signature]  [Signature]

Administrator  Medical Director
Optional Item:
Positive Pressure Breathing Valve, Maximum flow 40 Liters/min.  1

Critical Care Transport Requirements:
All supplies and equipment in Basic Life Support Requirements in addition to the following:

A. Airway Adjuncts: Minimum
   - Aspiration based endotracheal tube placement verification devices 2
   - End Tidal CO₂ Detection Devices (<15kg, ≥15kg) 2 each
   - Esophageal Tracheal Airway Device (Combitube): Reg, Sml Adult** 2 each
   - ET Adapter 1 setup
   - Feeding Tube - 8 French 1
   - Mask - Bag-valve-mask - Neonate size
     (Mandatory only for neonate CCT) 1

B. Vascular Access/Monitoring Equipment
   - Armboard: Long 1
   - Armboard: Short 1
   - Blood Glucose Monitoring Device** 1
   - Infusion pump & supplies 1
   - Intraosseous kit 1
   - IV Administration Sets: Macrodrip 2
     Microdrip 1
   - IV Tourniquets 2
   - Needles: IV Cannula - 14 Gauge 2
     IV Cannula - 16 Gauge 2
     IV Cannula - 18 Gauge 2
     IV Cannula - 20 Gauge 2
     IV Cannula - 22 Gauge 2
     IV Cannula - 24 Gauge 2
     IM - 21 Gauge X 1" 2
     S.C. 25 Gauge X 3/8" 2
   - Syringes: 1 ml, 3 ml, 10 ml, 20 ml 2 each

C. Monitoring
   - Conductive Defibrillator pads 2 pkgs
   - Defibrillator/ Scope Combination 1
   - Defibrillator Paddles (4.5 cm, 8.0 cm) or hands-free defibrillator pads (adult and pediatric) 1 pair each
   - Electrodes 1 box
   - Electrode Wires 1 set
   - External pacing equipment and supplies 1 set
   - Oxygen Saturation Monitoring Device ** 1
     Adult probe 1
     Infant/Pediatric probe 1

Approved:

[Signature]
Administrator

[Signature]
Medical Director
**SUBJECT: CRITICAL CARE TRANSPORT UNIT INVENTORY**

**Date: 07/01/07**

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### D. Packs
- **Drug Box**: 1
- **Personal Protective Equipment (masks, gloves, gowns, shields)**: 1 set

### E. Other Equipment
- **Broselow Tape**: 1
- **(8 or 10 French feeding tube mandatory for neonatal CCT)**: 1
- **Thermometer - Oral, Rectal**: 1 each
- **Water Soluble Lubricant**: 1

**Optional items:**
- **Endotracheal Tubes**: Sizes:
  - 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5: 1 each
  - 6, 6.5, 7, 7.5, 8, 8.5, 9: 1 each
- **Laryngoscope - Handle**: 2
- **Laryngoscope - Blade**: curved and straight sizes 0-2: 1 each
  - curved and straight sizes 3-4: 1 each
- **Magill Tonsil Forceps**: small and large: 1 each
- **Stylet**: 6 and 14 French, Adult: 1 each

### F. Replaceable Medications:
- **Adenosine**: 6 mg/2 ml vial: 6 vials
- **Albuterol**: 2.5 mg/3 ml or 0.083%: 6 vials
- **ASA, chewable**: 80 mg: 6
- **Atropine Sulfate**: 1 mg/10 ml: 3
- **Atropine Sulfate**: multidose vial 0.4 mg/ml: 1
- **Atrovent**: 2.5 ml (1 unit dose vial) or 0.02%: 2
- **Bacteriostatic water**: 30 ml: 1
- **Calcium Chloride**: 1 GM/10 ml: 1
- **Dextrose, 50%**: 25 GM/50 ml: 2
- **Diphenhydramine HCL**: 50 mg/2 ml: 2
- **Dopamine HCL**: 400 mg: 1
- **Epinephrine**: 1:1,000 multidose vial: 1
- **Epinephrine**: 1:1,000 (1 mg/1 ml vial): 3
- **Epinephrine**: 1:10,000 (1 mg/10 ml vial): 3
- **Furosemide**: 20 mg/40 mg/100 mg vial: 100mg total
- **Glucagon**: 1 ml (1 unit): 1
- **Lidocaine HCL**: 100 mg/5 ml (2%): 3
- **Lidocaine (1GM or 2GM)**: 1
- **Magnesium Sulfate**: 5 GM: 5 G
- **Naloxone HCL (Narcan)**: 2 mg/1 ml: 2 each
- **Nitroglycerin**: 0.4 mg: 1 container
- **Nitroglycerin topical**: 2%: 1 tube
- **Normal Saline for injection**: 10ml vial: 1

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**Approved:**

[Signature]

Administrator

[Signature]

Medical Director
**SUBJECT: CRITICAL CARE TRANSPORT UNIT INVENTORY**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxytocin (Pitocin)</td>
<td>10 units/1 ml x 2</td>
</tr>
<tr>
<td>Procainamide</td>
<td>1 GM x 1</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>10 mEq x 1</td>
</tr>
<tr>
<td>Sodium Bicarbonate 50 mEq/50 ml</td>
<td>2 x 1</td>
</tr>
<tr>
<td>Solumedrol 125mg vial</td>
<td>1 x 1</td>
</tr>
<tr>
<td>Verapamil HCL 5 mg</td>
<td>2 x 2</td>
</tr>
<tr>
<td>Anticonvulsant (e.g. Valium, Versed or Ativan) QS</td>
<td>1 x 1</td>
</tr>
<tr>
<td>Anticonvulsant reversal agent</td>
<td>1 x 1</td>
</tr>
</tbody>
</table>

**IV Solutions:**
- Normal Saline 1000 ml bag x 1
- Normal Saline 250 ml bag x 1
- D5W 250 ml bag x 1

**Note:** Pediatric required supplies denoted by italics and are required inventory for units transporting pediatric and neonatal patients.

- *One splint may be used for both adult & pediatric e.g. Sager Splint*
- **Unit may remain in service until item replaced or repaired.**

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Approved:

Administrator: [Signature]
Medical Director: [Signature]
I. Authority:  San Diego County Code of Regulatory Ordinances, Division 10, Chapter 3.

II. Purpose:  To establish the process by which agencies desiring to provide non-emergency medical transport wheel chair/gurney van services in San Diego County would obtain a Non-Emergency Medical Transport Service Provider's Permit.

III. Policy:  Any agency desiring to provide non-emergency medical transport service in San Diego County shall obtain a San Diego County Non-Emergency Medical Transport Provider's Permit.

A. Agencies who presently operate non-emergency medical transport services which are currently permitted by the Metropolitan Transit Development Board (MTDB), North County Transit District (NCTD), or any other municipality and are in compliance with the requirements of these agencies will be issued a San Diego County Non-Emergency Medical Transport Provider's Permit without further investigation or fee upon submission of a copy of a current certificate of compliance.

B. Social service agencies who contract with any organization or entity that is permitted by entities defined in Section III A. shall be issued a San Diego County Non-Emergency Transport Provider's Permit without further investigation or fee.

IV. Procedure:

Application Process, Non-Exempted Agencies By Endorsement of the MTDB Permit

A. Submit a completed application which contains the following information:

1. Copy of completed and approved MTDB paratransit application.

2. Copy of approved MTDB vehicle inspection reports and vehicle medallion numbers.

3. Names and addresses of the applicant, registered owner(s), partner(s), officer(s), director(s) and all shareholders who control 10% or more of the stock of the applicant.

4. Name under which the applicant has, does or proposes to engage in non-emergency medical transport service.

5. A resume specifying the education, training and experience of the applicant in the business of providing transportation services.
6. A description of each gurney van and/or wheelchair van including the make, model, year of manufacture, vehicle identification number, the current odometer reading of the vehicle and the color scheme, insignia, name, monogram or other distinguishing characteristics of the vehicle.

7. A description of the company's program for maintenance of the vehicles.

8. Proof of ability to staff each vehicle with person(s) possessing at least a current American Red Cross Standard First Aid Certification, or equivalent.

9. A Certificate of Consent to Self Insure issue by the California State Director of Industrial Relations, or a Certificate of Worker's Compensation Insurance as required.

10. Proof of liability insurance as required.

11. A statement of the legal history of the applicant, registered owner(s), partner(s), officer(s), director(s) and controlling shareholder, including criminal convictions and civil judgments.

B. Permit by direct application to the County.
   1. Completed County non-emergency vehicle permit application.
   2. Applicant’s name and business address.
   3. (Refer to Section A. #3 through 10 above.)

C. Submit appropriate required fee to the Permit Officer at the time of application.

D. Within thirty (30) days of receipt of an application, the Permit Officer will:
   1. Make a determination regarding the issuance of the applied for permit.
   2. Once application is accepted, schedule inspection and permitting of all service units.

Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
SUBJECT: NON-EMERGENCY MEDICAL TRANSPORT WHEEL CHAIR/GURNEY VAN SERVICE REQUIREMENTS

I. Authority: San Diego County Code of Regulatory Ordinances, Division 10, and Section 610.702.

II. Purpose: To define the minimum requirements for non-emergency medical transport wheel chair/gurney van service in San Diego County in the areas of vehicle design, safety equipment and supplies.

III. Policy: Every non-emergency medical transport service vehicle intended for operation by an approved provider in San Diego County shall meet the following minimum requirements:

A. All non-emergency medical transport service vehicles, shall at all times:
   1. Comply with all applicable federal, state, and local licensing requirements.
   2. Be configured, licensed, and maintained pursuant to all federal and state laws, and local policies.
   3. Have an exterior color scheme and company name/logo sufficiently distinctive so as to not cause confusion with vehicles from other agencies or medical transport services, as determined by the Permit Officer.

B. Required documentation:
   1. A current and valid San Diego County Non-Emergency Medical Transportation Service license decal affixed to the lower portion right rear of the vehicle.
   2. Proof of passage of the mechanical inspection performed by the County specified contracted provider within the preceding six (6) months. Agencies currently permitted by regulatory entities identified in the San Diego County Code of Regulatory Ordinances, Division 10, Chapter 3, Section 610.301 (a.b.c.) shall present proof of passage of a mechanical inspection within the preceding twelve (12) months.
   3. Prove and maintain in full force and effect liability insurance including, but not limited to, comprehensive auto liability, each with a combined single limit of not less that $1,000,000 per occurrence, and general liability with a limit of not less that $1,000,000 per claim.
   4. Proof of Workers Compensation or a Certificate of Consent to Self-Insure issued by the California State Director of Industrial Relations, applicable to all employees. The Permittee must maintain in full force and effect such coverage during the term of the Permit.

Approved:

[Signatures]

Administration  EMS Medical Director
C. Personnel Standards:

1. Each driver shall possess at least a current American Red Cross Standard First Aid Certification or equivalent.

2. Each driver shall be at least eighteen (18) years old and possess a valid California Driver’s License, designated class III/C or higher.

3. No person shall act in the capacity of a non-emergency medical transportation driver or Attendant if such person is required by law to register as a sex offender or has been convicted of any criminal offense involving force, duress, threat, or intimidation within the last five (5) years.

4. All drivers shall wear clean uniforms that identify the employer or sponsoring agency, and have visible identification of name.

5. Each driver shall wear, in a manner clearly visible on their person a driver identification card issued by the Metropolitan Transit Development Board (MTDB).

D. Required Equipment and Supplies:

The following items shall be carried on all non-emergency transport service vehicles as a minimum:

1. A fire extinguisher of the dry chemical or carbon dioxide type with an aggregate rating of at least five (5) B/C units and a current inspection card affixed to it.

2. A minimum of at least three (3) red emergency reflectors.

3. A first-aid kit containing medical items to adequately attend to minor medical problems.

4. A map of the County of San Diego published within the past two (2) years, which shall be displayed to any passenger upon request.

5. Each vehicle shall be equipped with a rear view mirror affixed to the right side of the vehicle, as an addition to those rear view mirrors otherwise required by the California Vehicle Code.

6. Each vehicle shall be equipped with a rear view mirror affixed in such a way as to allow the driver to view the passengers in the passenger compartment.

Approved:

[Signature]
Administration

[Signature]
EMS Medical Director
7. Each vehicle identified in #6 above shall have at least one (1) oxygen tank floor mount-securely mounted, for each oxygen cylinder present on the vehicle.

8. Each vehicle shall have a vehicle body number visible on the left front, right front and rear portion of the vehicle.

9. Each vehicle shall have an operational 2-way agency communication device.

10. Each vehicle shall carry wheel chair seat belts for each wheel chair position in the vehicle.

11. Each vehicle shall have the appropriate number of approved wheel chair restraint mechanisms.

12. Each vehicle shall have floor mounts for the wheel chair tie downs – securely mounted.

13. Each vehicle shall have seat belts for all seats used by ambulatory clients.

14. Each vehicle shall have a minimum of one (1) blanket on board.

15. Each vehicle shall carry all equipment necessary to comply with California Occupational Safety and Health Administration (CAL OSHA) standards for exposure to blood borne and air borne pathogens.

16. Each vehicle shall carry one (1) extra wheel chair.

Approved:

[Signatures]

Administration  EMS Medical Director
I. **Authority:** Health and Safety Code 1797.160, 1797.204 and 1797.220, 1797.214 California Vehicle Code, Article 2, Section 2512(c) San Diego County Code of Regulatory Ordinances, Division 10.

II. **Purpose:** To assure minimum requirements for basic life support (BLS) ambulance services operating in San Diego County.

III. **Policy:** To be eligible to provide BLS ambulance service in San Diego County, an agency (public or private) shall:

A. Maintain appropriate licensure as required by the California Highway Patrol.

B. Maintain appropriate permit as required by the San Diego County Code of Regulatory Ordinances, Division 10, Chap. 2.

C. Staff each transporting unit responding to call for service with a minimum of two (2) Emergency Medical Technicians (EMT) currently certified in the State of California.

D. Be in accordance with the County of San Diego Emergency Medical Service (EMS) policies and procedures.

E. Must operate within the standards defined within the San Diego County Ambulance Ordinance, when applicable.

F. Cooperate with the EMT training agencies in providing field experiences.

G. Establish internal quality assurance mechanisms based on policies/procedures as cited by the County of San Diego EMS, including participation in Countywide monitoring activities (see policy S-004).

H. Submit completed prehospital reports in accordance with policy S-601.
I. Meet all requirements as identified in California Code of Regulations, Article I, Section 1100.3, California Vehicle Code, Article 2, Section 2512 (b), (c) and (d), and San Diego County Code of Regulatory Ordinances, Division 10, Chapter 6.
I. **Authority:** Health and Safety Code Sections 1797.201 and 1797.206; California Code of Regulations, Title 22, Division 9, Chapter 8.

II. **Purpose:** To establish criteria for classification of prehospital EMS aircraft service providers operating within the emergency medical services (EMS) system of the County of San Diego.

III. **Policy:** All prehospital EMS aircraft operating within San Diego County shall be classified by the County of San Diego Emergency Medical Services (EMS) prior to operation. Reclassification shall occur if there is a transfer of ownership or a change in the aircraft's category. Classifications shall be as follows:

   A. Air ambulance - any aircraft specially constructed, modified or equipped, and used for primary purpose of responding to emergency calls and transporting critically ill or injured patients whose medical flight crew has a minimum of two (2) attendants certified or licensed in advanced life support (ALS), one of whom is an RN.

   B. Rescue aircraft - an aircraft whose usual function is not prehospital emergency patient transport, but which may be utilized for prehospital emergency patient transport when use of an air or ground ambulance is inappropriate or unavailable.

      1. ALS rescue aircraft - a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified or licensed in ALS.

      2. BLS rescue aircraft - a rescue aircraft whose medical flight crew has at a minimum one (1) attendant certified as an EMT with at least eight (8) hours of aeromedical patient transport training.
3. Auxiliary Rescue Aircraft – a rescue aircraft which does not have a medical flight crew, or whose medical flight crew do not meet the minimum requirements listed for the BLS rescue aircraft.
I. **Authority:** Health and Safety Code, Sections 1797.204, 1797.206, and 1797.218.

II. **Purpose:** To provide for the coordination of EMS aircraft response within San Diego County.

III. **Definitions:**

   **Air Ambulance:** any rotor aircraft specially constructed, modified or equipped, and used for the primary purposes of responding to emergency calls and transporting critically ill or injured patients whose ambulance flight crew has at a minimum of two (2) attendants certified or licensed in advanced life support, one of whom is an RN.

   **Alert** - condition wherein a requesting agency has requested that an air ambulance be placed on standby in anticipation of a response.

   **Estimated Time of Arrival (ETA)** - the estimated sum of scramble, pre-flight, launch, and in-flight response time to a scene.

   **Launch** - condition wherein a requesting agency has requested that an air ambulance respond to an incident.

   **Responding** - condition wherein the air ambulance flight crew is leaving quarters, preparing the helicopter for flight and flying to the incident scene.

   **Response Time** - the actual sum of scramble, preflight, launch, and in-flight response time to a scene.

IV. **Policy:** All EMS air ambulance service providers operating within San Diego County shall be dispatched by a center designated by the Division of EMS. The County of San Diego, Division of EMS shall select a provider using the customary procurement process.

   A. To be designated as an air ambulance dispatch center, the dispatch agency shall:

      1. Be staffed 24 hours a day, 7 days a week.

      2. Possess radio capabilities allowing for constant communication with aircraft.

      3. Maintain a toll free dedicated telephone line to allow access by all requesting agencies.
4. Answer the phone "Air Ambulance Service".

5. Provide, upon request, tapes needed for quality assurance purposes, within thirty (30) days of incident.

6. Possess communication capabilities with all receiving hospitals.

7. Maintain a flight log to include, at a minimum:
   a. time of request
   b. requesting agency
   c. location of incident
   d. time dispatched
   e. crew on board
   f. time of lift off
   g. time arrived on scene
   h. time of lift off from scene
   i. time arrived at receiving hospital
   j. reason for aborted flight.

8. Comply with the Division of Emergency Medical Services in the quality assurance process.

B. The County of San Diego may revoke or suspend authorization of an EMS aircraft designated dispatch center for failure to comply with applicable policies, procedures, protocols and regulations.

V. Procedure:

A. Dispatch centers requesting air ambulance dispatch designation must submit a written request to the County of San Diego, Division of EMS with the following minimum information:

   1. Communication capabilities with all hospitals, all public safety agencies, BLS and ALS ground units, and air ambulance units.

Approved:

[Signatures]

Administration  Medical Director
2. Documentation of compliance with applicable Federal and State Air Regulations.

B. County of San Diego, Division of EMS may revoke/suspend designation of dispatch center for failure to comply with applicable policies, procedures, protocols and regulations.

VI. Responsibilities of Agency:

A. The designated air ambulance dispatch agency provides the following services:

1. Establishes the identity of the caller, confirms the location of the incident, the contact person's name, ground contact, radio frequency and other pertinent information.

2. Determines the closest most appropriate available air ambulance.

3. Informs the requesting agency of the ETA of the air ambulance.

4. Requests launch or standby as appropriate from the closest most appropriate provider.

5. Maintains an updated list of all landing pads in the county.

6. Maintains a system status plan approved by the Division of EMS and adheres to the dispatch procedure established in Section V of this policy.

7. Provides the Division of EMS and participating air ambulance providers with system reports for each month.

8. These system reports shall illustrate the dispatch times, response times and other patient service times captured by the air ambulance dispatch center.

VII. Dispatch Procedure:

A. Air ambulance services request:

1. Requesting agencies contact the air ambulance dispatch center on the designated phone line to request an air ambulance launch or standby providing incident address, Thomas Bros. map page, or GPS coordinates and nature of incident, landing zone, ground contact unit, and coordination radio frequency.
2. The air ambulance dispatch center selects the closest most appropriate unit and advises the requesting agency of the air ambulance agency, unit number, response location and pertinent hospital receiving information.

3. The air ambulance dispatch center provides information to the selected air ambulance provider and obtains an ETA.

4. The air ambulance dispatch center tracks helicopter status as (ALERTED) when a standby is requested and (RESPONDING) when a launch is initiated.

5. The air ambulance dispatch center tracks disposition of the response as (CANCELLED) or (TRANSPORT) as advised by the air ambulance provider at the close of each response.

B. Air ambulance unit selection for responses:

1. The air ambulance provider contacts the air ambulance dispatch center with each "on and off duty" status of helicopter units, providing unit numbers, hours and location.

2. The air ambulance provider contacts the designated air ambulance dispatch provider with units "out of service" status or post-to-post moves within the County for various reasons including fueling, maintenance, special events, etc.

3. The air ambulance dispatch center selects the closest, most appropriate air ambulance provider based on proximity to the incident. In the instance where multiple providers are at the same post, the air ambulance provider not having handled the last response will be selected.

C. Other communications:

1. Pre-launch communication "requests for service" will be made to the air ambulance dispatch center, which then turns the request over to the dispatch center of the selected provider.

Approved:

[Signature]

Administration

[Signature]

Medical Director
2. Post-launch communications pertaining to a response in progress should be made directly between the responding air ambulance agency and the requesting agency.

D. Posting locations:

1. Air ambulance provider will contact the air ambulance dispatch center with each "on and off duty" status of helicopter units, providing unit numbers, hours and location.

2. "Move up" locations may also be used at the discretion of the provider for periods of six hours or less provided that they are at a licensed helipad or airport and that appropriate indoor rests and toilet facilities are provided for flight crews. Itinerant units will not be allowed.

E. Disputes:

1. Selection made by the air ambulance dispatch center at the time of service shall be final.

2. Air ambulance providers who believe that a dispatch error has occurred shall present their complaints in writing to the Division of EMS Ambulance Permit Officer or designee, within two weeks of the incident.

3. The Ambulance Permit Officer or designee shall investigate disputed calls within two weeks of receipt and may at his/her discretion compensate an appealing air ambulance provider agency with an "extra turn or turns" in rotation. No other compensation shall be made and the decision of the Permit Officer is final.

VIII. Fees:

A. Dispatch Fee:

1. A dispatch fee shall be assessed for each dispatch resulting in a transport. Air ambulance providers shall be billed monthly. The amount of the dispatch fee shall be determined by the Board of Supervisors and shall reasonably cover the cost of providing the dispatch service.
2. Fees shall be due and payable to "Division of EMS" or its designee 30 days after the date of invoice.

3. Failure to remit fees within the 30 day period shall result in immediate suspension from the air ambulance dispatch program until fees have been paid.

4. Failure to remit fees within 60 days after the date of the invoice shall result in permanent termination from the air ambulance dispatch program.

Approved:

[Signatures]

Administration                                    Medical Director
I. **Authority:** Health and Safety Code, Sections 1797.204, 1797.206 and 1797.218.

II. **Purpose:** To define the process for authorization of air ambulance service provider agencies operation by the County of San Diego Emergency Medical Services (EMS).

III. **Policy:** All air ambulance service provider agencies operating within the County of San Diego EMS system shall be authorized by EMS prior to operation, and must operate within the standards defined within the San Diego County Ambulance Ordinance.

   A. To be authorized to provide EMS air ambulance support the provider shall:

      1. Provide services on a continuous twenty-four (24) hour basis, and
      2. Maintain medical flight crews as provided for by each aircraft classification, and
      3. Function under local medical control, and
      4. Comply with the Emergency Medical Services Quality Assurance/Quality Improvement process, and
      5. Submit prehospital reports as per County of San Diego Division of EMS Policy S-601, and
      6. Participate in community education programs and first responder orientation when requested, and
      7. Submit to EMS evidence of compliance with California Code of Regulations, Title 22, Division 9, Chapter 8, Section 100302 (Medical Flight Crew Personnel Training) and 100306 (Space and Equipment), and
      8. Enter into a written agreement with the County as an air ambulance service provider, and

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Document revised 11/1/2010

Approved:

[Signature]

Administration

[Signature]

Medical Director
9. Submit to EMS verification of dispatch capability, 24 hours a day, 7 days a week, capable of maintaining constant communication with the aircraft, and

10. Comply with all applicable Federal and State Air Regulations.

B. The County of San Diego may revoke or suspend authorization of an air ambulance provider for failure to comply with applicable policies, procedures, protocols and regulations.

IV. Procedures:

A. Agencies requesting authorization must submit a written request to the County of San Diego EMS to include, but not be limited to:

1. Number and type of aircraft to be authorized.

2. Patient capacity of each aircraft.

3. Level of patient care to be provided by each aircraft.

4. Proposed staffing for each aircraft.

5. Statement of demonstration need.

B. Once authorized; the provider agency shall notify the local EMS Agency of

1. Any foreseen or unforeseen change in or disruption of service (i.e., decrease in number of aircraft available, staffing patterns or patient care capabilities).

2. Documentation of satisfactory compliance with personnel requirements, equipment and supplies.