



Inland Counties Emergency Medical Agency

Serving San Bernardino, Inyo, and Mono Counties

Tom Lynch, EMS Administrator

Reza Vaezazizi, MD, Medical Director

DATE: November 6, 2015

TO: EMS Providers - ALS, LALS, BLS, EMS Aircraft
Hospital CEOs, ED Directors, Nurse Managers and PLNs
EMS Training Institutions and Continuing Education Providers
Inyo, Mono and San Bernardino County EMCC Members
Medical Advisory Committee (MAC) Members
Systems Advisory Committee (SAC) Members

FROM: Tom Lynch
EMS Administrator

Reza Vaezazizi, MD
Medical Director

SUBJECT: POLICIES/PROTOCOLS FOR 30-DAY COMMENT

The following policies/protocols have been reviewed and revised by ICEMA and are now available for public comment and recommendations.

ICEMA Reference Number and Name

- 5030 - Procedure for Adoption of Protocols and Policies
- 6090 - Fireline Paramedic
- 7010 - BLS/LALS/ALS Standard Drug & Equipment List
- 7020 - EMS Aircraft Standard Drug & Equipment List
- 7040 - Medication - Standard Orders
- 8120 - Continuation of Care (San Bernardino County Only)
- 9080 - Care of Minors in the Field
- 10190 - ICEMA Approved Skills
- 11070 - Cardiac Arrest - Adult
- 11110 - Stroke Treatment - Adult
- 15030 - Trauma Triage Criteria and Destination Policy

ICEMA encourages all system participants to submit recommendations, in writing, to ICEMA during the comment period. **Written comments will be accepted until December 7, 2015, at 5:00 pm.** Comments may be sent via hardcopy, faxed to (909) 388-5850 or via e-mail to ron.holk@cao.sbcounty.gov. Comments submitted and any revisions made will be presented at the Medical Advisory Committee meeting on December 17, 2015.

TL/RV/jlm

Enclosures

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POLICIES/PROTOCOLS CHANGES FOR 30-DAY COMMENT PERIOD
November 6, 2015

Reference #	Name	Changes
NEW		
None		
1000 ACCREDITATION AND CERTIFICATION		
None		
2000 DATA COLLECTION		
None		
3000 EDUCATION		
None		
4000 QUALITY IMPROVEMENT		
None		
5000 MISCELLANEOUS SYSTEM POLICIES		
5030	Adoption of Protocols and Policies	<ul style="list-style-type: none"> Name changed to Review of Policies and Protocols. Verbiage and punctuation changes for clarity. Changes to streamline notification, public comment and committee review process.
6000 SPECIALTY PROGRAM/ PROVIDER POLICIES		
6090	Fireline Paramedic	<ul style="list-style-type: none"> Drug and equipment change in Nitroglycerine to allow either pill form or metered dose spray.
7000 STANDARD DRUG & EQUIPMENT LISTS		
7010	BLS/LALS/ALS Standard Drug & Equipment List	<ul style="list-style-type: none"> Removed requirement for 15 mm EZ-IO Needles (per MAC).
7020	EMS Aircraft Standard Drug & Equipment List	<ul style="list-style-type: none"> Removed requirement for 15 mm EZ-IO Needles (per MAC).
7040	Medication - Standard Orders	<ul style="list-style-type: none"> Sodium Bicarb - added base hospital order only. Added dose parameters for Oxygen (per MAC). Added references for Procedure - Standard Orders. Removed references to 11070 - Cardiac Arrest for Dextrose and Narcan.
8000 TRANSPORT/TRANSFERS AND DESTINATION POLICIES		
8120	Continuation of Care (San Bernardino County Only)	<ul style="list-style-type: none"> Section IV.: Timelines changed to "Guidelines". Added verbal report to the ED physician at the Specialty Care Center. Section V.: Added language to explain process when the stroke

POLICIES/PROTOCOLS CHANGES FOR 30-DAY COMMENT PERIOD
November 6, 2015

Reference #	Name	Changes
		<p>patient is outside of the tPA window.</p> <ul style="list-style-type: none"> Emphasized early contact with transporting agency if requesting CCT to avoid delay. Section VI.: Revised Buddy System table to accommodate new stroke centers as well as added Buddy's for Trauma Centers.
9000 GENERAL PATIENT CARE POLICIES		
9080	Care of Minors in the Field	<ul style="list-style-type: none"> Clarifies requirements for base hospital contact for patients being transported to a receiving hospital, grammatical changes for clarity. Forwarded by MAC.
10000 SKILLS		
10190	ICEMA Approved Skills	<ul style="list-style-type: none"> Name change to Procedure - Standard Orders. IO Infusion - Adds/clarifies approved insertion sites for pediatric and adult patients. Synchronized Cardioversion/Transcutaneous Cardiac Pacing - Lists medication references for pain and anxiety. Clarifies Transcutaneous Cardiac Pacing rate and output parameters. Clarifies Oral Endotracheal Intubation - Adult maximum attempts parameters. Clarifies additional parameters previously removed. Forwarded by MAC.
11000 ADULT EMERGENCIES		
11070	Cardiac Arrest - Adult	<ul style="list-style-type: none"> Added statement for consistency, with Destination Policy under SRC regarding sustained ROSC transport to SRC. Deleted requirements for blood glucose testing and administration. Deleted requirements for administration of Narcan.
11110	Stroke Treatment - Adult	<ul style="list-style-type: none"> mLAPSS Criteria: Age changed to "age greater than 17".
12000 END OF LIFE CARE		
None		
13000 ENVIRONMENTAL EMERGENCIES		
None		
14000 PEDIATRIC EMERGENCIES		

**POLICIES/PROTOCOLS CHANGES FOR 30-DAY COMMENT PERIOD
November 6, 2015**

Reference #	Name	Changes
None		
15000 TRAUMA		
15030	Trauma Triage Criteria and Destination Policy	<ul style="list-style-type: none"> • Name change to Trauma Triage Criteria. • Trauma Triage Criteria changes to reflect CDC, Trauma Triage Guidelines. • Section C.: Clarification made to unmanageable airway regarding RSI.
DELETIONS		
None		
Below are some of the policies/protocols designated for review in the next few months. If there are specific policies/protocols recommended for review, please contact ICEMA.		



REVIEW ADOPTION OF POLICIES AND PROTOCOLS AND POLICIES

I. PURPOSE

To establish procedures for the review of EMS system policies and patient care protocols. ~~ICEMA medical control protocols and/or policies.~~

The ICEMA Medical Director and EMS Administrator are responsible for the development and approval of policies and protocols ~~protecols and/or policies~~ that establish operating procedures and medical control according to State regulations. ICEMA recognizes that stakeholder collaboration is an essential component of protocol and policy ~~policy and protocol~~ development. ~~ICEMA and~~ accepts protocol or policy input from standing ICEMA committees ~~the Medical Advisory Committee (MAC), System Advisory Committee (SAC), standing ICEMA subcommittees, task forces, and other individuals~~ and/or other interested parties during through ~~public comment~~ a review process at the Medical Advisory Committee meeting ~~as established below.~~ ~~The EMS stakeholder review process is advisory to ICEMA for the formulation of these policies and procedures.~~ The EMS stakeholder input review ~~is advisory to ICEMA for the formulation of these policies, protocols and procedures and the final authority rests with the ICEMA Medical Director and EMS Administrator.~~

~~II.~~ AUTHORITY

~~California Health and Safety Code, Sections 1797.220 and 1798.101(1)~~

~~California Code of Regulations, Title 22, Division 9, Chapter 4 Article 2, Sections 100145, 100146, 100148, and 100170~~

III. DEFINITIONS

Medical Advisory Committee (MAC): Primary committee that advises the ICEMA Medical Director on the clinical or medical aspects of Emergency Medical Services (EMS) within the ICEMA region.

Patient Care Protocols: Medical standards that provide the framework for the medical treatment and care routinely provided to patients within the ICEMA region.

EMS System Policies ~~Policy:~~ EMS system organization, principal functions and mode of operations for providers and healthcare facilities within the ICEMA region that guide EMS system operations.

System Advisory Committee (SAC): Primary committee that advises the ICEMA EMS Administrator on the operational aspects of ~~Emergency Medical Services (EMS)~~ within the ICEMA ~~r~~Region.

IV. POLICY

- ~~ICEMA will review all EMS system policies and patient care protocols/policies, patient care policies and protocols annually or more often if as necessary/as necessary, to ensure time critical and appropriate policy-changes.~~
- ~~ICEMA will solicit input from appropriate external agencies, organizations and established advisory committees such as those listed below, as necessary:~~
 - ~~Medical Advisory Committee (MAC)~~
 - ~~System Advisory Committee (SAC)~~
 - ~~ST Elevation Myocardial Infarction QI Committee (STEMI QI)~~
 - ~~Neurovascular Stroke QI Committee (Stroke QI)~~
 - ~~Trauma Advisory Committee (TAC)
(Joint San Bernardino County and Riverside County Quality Improvement Committee).~~
- ~~ICEMA will review EMS system policies and protocols and/or policies/patient care protocols/policies, as required. The following CeChanges that to protocols and/or policies may occur without specific review from the public
 - ~~Changes in wording necessary to clarify the objective.~~
 - ~~Changes in the listed order or numbering necessary for clarity or ~~better~~ flow.~~
 - ~~Changes to assure protocol or policy/policy or protocol continuity and consistency.~~
 - ~~Changes required to comply with State and local laws and/or regulations to maintain public health and safety.~~
 - ~~Correction of typographical, grammar, spelling or formatting errors.~~
 - ~~Changes required to maintainfor medical control or to maintain system integrity.~~~~
- 3. ~~ICEMA staff shall change, develop, or delete protocols and/or policies when needed or requested~~
- 4. ~~and/or solicit input from appropriate external agencies, organizations or from established advisory committees such as those listed below:~~
 - a. ~~Medical Advisory Committee (MAC)~~
 - b. ~~System Advisory Committee (SAC)~~
 - c. ~~ST Elevation Myocardial Infarction QI Committee (STEMI QI)~~

- d. ~~Neurovascular Stroke QI Committee (Stroke QI)~~
- e. ~~Trauma System Advisory Committee (TSAC)~~
- f. ~~Trauma and Air Advisory Committee (TAAC)~~
~~Joint San Bernardino County and Riverside County Quality Improvement committee.~~
- ~~ICEMA will prepare a detailed grid of proposed policy and protocol changes for input from MAC and SAC.~~
- 4. ~~ICEMA may forward protocols and policies to MAC and/or SAC for additional review prior to public comment. MAC or SAC may assign a task force or ad hoc committee to review and make recommendations on proposed changes to its authorizing committee.~~
- ~~ICEMA shall will consider all relevant input/matter presented to it before accepting, amending or repealing/deleting any protocol or policy/EMS system policy or treatment protocol, but the authority for final determination remains with the Medical Director and EMS Administrator.~~
- ~~ICEMA will submit changes in EMS system policies and patient care protocols to public comment as noted below under Section VI - Notification and Public Comment Period.~~
- 5. ~~Policies will be released for a predetermined public comment period as noted under Section VI - Public Comment Period below.~~
- 7. ~~Upon closure of the public comment period, ICEMA will prepare a final draft of the protocols/policies (including accepted changes) with a detailed spreadsheet showing the public comment for presentation at a subsequent scheduled MAC or SAC meeting for endorsement. Spreadsheet shall include all comments received and ICEMA's response to the comments.~~
- 8. ~~Protocols and/or policies that are endorsed by MAC and/or SAC will be presented to the ICEMA Medical Director and EMS Administrator for signature and enactment.~~
- ~~Protocols and/or policies/EMS system policies and patient care protocols, approved by the Medical Director and EMS Administrator, shall become effective no later than thirty (30) days after the date of approval and incorporated into the appropriate protocol/policy manual except as noted below under Section V - Emergency Policies and Protocols.~~

IV. REQUEST FOR REVIEW OF EMS SYSTEM POLICIES/PATIENT CARE PROTOCOLS

- ~~Any interested party may request the review of EMS system policies or patient care protocols as provided in this section. Such requests shall be in writing and clearly and concisely state:~~

- The substance or nature of the requested review.
- The reason for the request.
- Any supporting documentation and/or research that would support the request.
- Upon receipt of a written request for the review of a policy or protocol, ICEMA will notify the petitioner or group in writing of the receipt of the request and then shall, within thirty (30) business days, either deny the request, in writing, indicating why the agency has reached such a decision or schedule the policy or protocol for review, in the appropriate committee(s), in accordance with this policy.
- ICEMA may grant or deny such a request or take such other action as it may determine to be warranted and will notify the petitioner in writing of such action.

V. EMERGENCY POLICIES AND PROTOCOLS/PROTOCOLS/POLICIES

- If ICEMA determines that an emergency ~~protocol or policy~~ policy or protocol is necessary for the immediate preservation of the public health and safety or general welfare, a ~~protocol and/or policy~~ policy or protocol may be changed, adopted, amended or repealed as an emergency action.
- Any finding of an emergency will include a written statement describing the specific facts showing the need for immediate action. The statement and the ~~protocol or policy~~ policy or protocol shall be immediately forwarded to ~~the~~ MAC and/or SAC and EMS providers (as appropriate). The emergency ~~protocol and/or policy~~ policy or protocol will become effective no sooner than five (5) days following dissemination to ~~the committee~~ the ICEMA Medical Advisory Committee, unless there is an immediate need determined by ICEMA.
- Policies or protocols ~~Protocols and/or policies~~ adopted under the emergency provision shall remain in effect until reviewed by the appropriate committee for approximately one hundred and twenty (120) days to allow for appropriate committee review, and public comment period.

VI. NOTIFICATION AND PUBLIC COMMENT PERIOD

Consistent with a policy of encouraging the widest possible notification and distribution to interested persons, ICEMA will:

1. ~~Open all changed protocols or policies to public comment for a period of thirty (30) days, except in instances where the ICEMA EMS Administrator and ICEMA Medical Director deem it necessary to shorten the period to protect and/or improve public health and safety or maintain medical control and/or operational integrity.~~
- Post proposed changes to policies or protocols ~~protocols and/or policies~~ on the ICEMA website at ICEMA.net at least two (2) weeks prior to the MAC and/or SAC meetings. The notice of change will include a statement of the time and place of proceedings for public comment.

- E-mail notification of proposed changes to members of the ~~Emergency Medical Care Committees, Medical Advisory Committee and/or Systems Advisory Committee~~Emergency Medical Care Committee (EMCC), MAC and SAC.
- 4. ~~E mail proposed changes to each EMS provider.~~
- E-mail notification of proposed changes to any person who has filed a request for notification with ICEMA.
- 6. ~~Make copies of the proposed protocols and/or policies available to the public and stakeholders consistent with a policy of encouraging the widest possible notice distribution to interested persons.~~
- 7. ~~Any oversight in notification described above shall not invalidate any action taken by ICEMA pursuant to this policy.~~
- Conduct official public comment during the MAC and/or SAC meeting.

The provisions of this section shall not be construed in any manner to invalidate a protocol or policy due to perceived inadequacy of the notice.

When necessary to fulfill its responsibilities, ICEMA will revise and/or initiate policies or protocols without following this process. Any oversight in notification described above shall not invalidate any action taken by ICEMA pursuant to this policy.

~~VIII. CONTENTS OF PUBLIC COMMENT PERIOD NOTIFICATION~~

1. ~~The notice of proposed adoption, amendment, or repeal of a protocol or policy shall include:~~
 - a. ~~A statement of the time and place of proceedings for adoption, amendment or repeal of a protocol or policy.~~
 - b. ~~The name and telephone number of the ICEMA contact person to whom inquiries concerning the proposed action may be directed.~~
 - c. ~~A date by which comments submitted must be received in writing in order for them to be considered by ICEMA before it adopts, amends, or repeals a protocol or policy.~~
 - d. ~~The provisions of this section shall not be construed in any manner to invalidate a protocol or policy due to perceived inadequacy of the notice content if there has been substantial compliance with this requirement.~~

~~VIII. REQUEST FOR ADOPTION, AMENDMENT OR REPEAL DELETION OF PROTOCOL/~~

- ~~1. Any person interested party may request the adoption, amendment, or repeal deletion of a protocol or policy as provided in this section. Such petition requests shall be in writing and clearly and concisely state:
 - ~~a. The substance or nature of the protocol or policy, amendment or repeal requested.~~
 - ~~b. The reason for the request.~~
 - ~~c. Any supporting documentation and/or research that would support the request.~~~~
- ~~2. Upon receipt of a written request for the adoption, amendment or repeal deletion of a protocol or policy, ICEMA will notify the petitioner or group in writing of the receipt of the request and then shall, within thirty (30) business days, either deny the request, in writing, indicating why the agency has reached such a decision or schedule the protocol/policy for review, in the appropriate committee(s), in accordance with this policy.~~
- ~~3. ICEMA may grant or deny such a request or take such other action as it may determine to be warranted and will notify the petitioner in writing of such action.~~



FIRELINE PARAMEDIC

I. PURPOSE

To provide guidance and medical oversight for an ICEMA paramedic (EMT-P) deployed to function as a fireline paramedic (FEMP).

This protocol is for use by authorized FEMPs during fire suppression activities and treatment of fire suppression personnel only.

II. REQUIREMENTS

1. Must be a currently licensed paramedic in California.
2. Must be currently accredited paramedic in the ICEMA region.
3. Must be currently employed by an ICEMA approved ALS provider.
4. The FEMP will follow FIRESCOPE FEMP ICS 223-11 Position Manual and all other ICS protocols.
5. The FEMP will check in and obtain briefing from the Logistics Section Chief or the Medical Unit Leader, if established. Briefing will include current incident situation, anticipated medical needs, and local emergency medical system orientation.
6. The FEMP will provide emergency medical treatment to personnel operating on the fireline.
7. The FEMP will follow ICEMA prior to contact protocols if unable to contact the assigned base station.
8. The FEMP may not perform skills outside of the ICEMA scope of practice.

III. PROCEDURE

1. The EMS provider will notify ICEMA of the deployment of the FEMP to an incident. Use the Fireline Paramedic (FEMP) Deployment Notification form, which is on the ICEMA website at ICEMA.net.
2. The FEMP will carry inventory in the advanced life support (ALS) pack as per the below inventory list (see Section IV. Fireline EMT-P (ALS) Pack

Inventory. Inventory will be supplied and maintained by the employing provider agency. Additional items for restock should also be maintained and secured in a vehicle or in the Medical Unit trailer.

3. Incident Medical Units may not have the capability of resupplying controlled substances (narcotics). Providers should stock sufficient quantities of medical supplies and medications, especially controlled substance medications, to assure adequate supplies and medications.
4. Narcotics must be under double lock and maintained on the FEMP person or secured in his/her vehicle at all times as per the ICEMA Drug and Equipment List.
5. FEMP may carry an inventory of controlled substances (i.e., Fentanyl and Midazolam) if authorized by the employing agency’s Medical Director. The authorizing Medical Director is responsible to assure full compliance with all federal and state laws relating to purchase, storage and transportation of controlled substances. Only controlled substances approved for use in the ICEMA region may be carried and their use must be in accordance with current ICEMA patient care protocols.
6. Radio communication failure protocols will not be used. Prior to base contact protocols will be followed. If further treatment is needed, radio contact with the base hospital should be established as soon as possible.
7. Documentation of patient care must follow ICEMA protocol utilizing the ePCR, if available, or a paper O1A form. All patient care records will be reviewed by the provider agency and ICEMA for QI purposes.
8. A FEMP will be paired with a fireline EMT (FEMT) or another FEMP who will assist with basic life support (BLS) treatment and supplies.

IV. FIRELINE EMT-P (ALS) PACK INVENTORY

Minimum Requirements: The weight of the pack will dictate if the EMT-P chooses to carry additional ALS supplies.

MEDICATIONS/SOLUTIONS

Medications/Solutions	ALS
Albuterol Solution 2.5 mg Handheld Nebulizer or Multidose Inhaler	4
Atropine Sulfate 1 mg	2
Ipratropium Bromide Solution 0.5 mg Handheld Nebulizer or Multidose Inhaler	4

Medications/Solutions	ALS
Lidocaine 100 mg IV pre-load	2
Aspirin 80 mg chewable	1 bottle
Dextrose 10%/250 ml (D10W 25 gm) IV/IO Bolus	1
Diphenhydramine 50 mg	4
Epinephrine 1: 10,000 1 mg	2
Epinephrine 1: 1000 1 mg	4
Glucagon 1 mg	1
Nitroglycerin - spray <u>Spray</u> 0.4 metered dose <u>and/or tablets (tablets to be discarded 90 days after opening)</u>	1 <u>(equivalent of 10 patient doses)</u>
Saline 0.9% IV 1000 ml may be divided in two 500 ml bags or four 250 ml bags.	

CONTROLLED SUBSTANCE MEDICATIONS

Controlled Substance Medications MUST BE DOUBLED LOCKED	ALS
Midazolam	20 mg
Fentanyl (amount determined by the medical director)	200 - 400 mcg

ALS AIRWAY EQUIPMENT

Airway Equipment	ALS
Endotracheal Tubes - 6.0, 7.0 and/or 7.5 cuffed with stylet	1 each
Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight	1 each
Laryngoscope handle with batteries - or 2 disposable handles	1 each
King Airway - Size 3, 4, and 5	1 each
ET Tube holder	1
End Tidal CO2 Detector	1
Needle Cricothyrotomy Kit	1
Needle Thoracostomy Kit	1

IV/MEDICATION ADMINISTRATION SUPPLIES

IV/Medication Administration Supplies	ALS
IV administration set macro drip	2
Venaguard	2
Alcohol preps	6

IV/Medication Administration Supplies	ALS
Betadine swabs	4
Tourniquet	2
Razor	1
Tape	1
IV catheters - 14, 16, 18 and 20 gauge	2
10cc syringe	2
1 cc TB syringe	2
18 gauge needle	4
25 gauge needle	2

MISCELLANEOUS EQUIPMENT

Miscellaneous	ALS
Sharps container	1
Narcotic storage per protocol	
FEMP pack inventory sheet	1
Patient care record or ePCR (Toughbook)	
AMA forms	3

Equipment	ALS
Compact AED or compact monitor defibrillator combination	
Appropriate cardiac pads	
Pulse oximetry (optional)	
Glucometer, test strips and lancets	4

The BLS pack and supplies will be carried by the FEMT or accompanying FEMP. Personal items and supplies cannot be carried in either the ALS pack or the BLS pack.



BLS/LALS/ALS STANDARD DRUG & EQUIPMENT LIST

Each ambulance and first responder unit shall be equipped with the following functional equipment and supplies. **This list represents mandatory items with minimum quantities** excluding narcotics, which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

All ALS (transport and non-transport) and BLS transport vehicles shall be inspected annually.

MEDICATIONS/SOLUTIONS

Exchanged Medications/Solutions	BLS	LALS	ALS Non-Transport	ALS Transport
Adenosine (Adenocard) 6 mg			1	1
Adenosine (Adenocard) 12 mg			2	2
Albuterol Aerosolized Solution (Proventil) - unit dose 2.5 mg		4 doses	4 doses	4 doses
Albuterol MDI with spacer		1 SPECIALTY PROGRAMS ONLY	1 SPECIALTY PROGRAMS ONLY	1 SPECIALTY PROGRAMS ONLY
Aspirin, chewable - 81 mg tablet		2	1 bottle	1 bottle
Atropine 1 mg preload			2	2
Calcium Chloride 1 gm preload			1	1
Dextrose 10% in 250 ml Water (D10W) *		2	2	2
Diphenhydramine (Benadryl) 50 mg			1	1
Dopamine 400 mg			1	1
Epinephrine 1:1000 1 mg		2	2	2
Epinephrine 1:10,000 1 mg preload			3	3
Glucagon 1 mg		1	1	1
Glucose paste	1 tube	1 tube	1 tube	1 tube
Ipratropium Bromide Inhalation Solution (Atrovent) unit dose 0.5 mg			4	4
Irrigating Saline and/or Sterile Water (1000 cc)	2	1	1	2
Lidocaine 100 mg			3	3
Lidocaine 1 gm or 1 bag pre-mixed 1 gm/250 cc D5W			1	1
Lidocaine 2% Intravenous solution			1	1
Lidocaine 2% (Viscous) dose			1	1
Magnesium Sulfate 10 gm			1	1
Naloxone (Narcan) 2 mg preload		2	2	2
Nitroglycerine - Spray 0.4 mg metered dose and/or tablets (tablets to be discarded 90 days after opening)		2	1	2
Normal Saline for Injection (10 cc)		2	2	2

Exchanged Medications/Solutions	BLS	LALS	ALS Non-Transport	ALS Transport
Normal Saline 100 cc			1	2
Normal Saline 250 cc			1	1
Normal Saline 500 ml and/or 1000 ml		2000 ml	3000 ml	6000 ml
Ondansetron (Zofran) 4 mg Oral Disintegrating Tablets (ODT)			4	4
Ondansetron (Zofran) 4 mg IM/ IV			4	4
Phenylephrine HCL - 0.5 mg per metered dose			1 bottle	1 bottle
Procainamide 1 gm			1	2
Sodium Bicarbonate 50 mEq preload			2	2
Verapamil 5 mg			3	3

CONTROLLED SUBSTANCE MEDICATIONS

Non-Exchange Controlled Substance Medications MUST BE DOUBLE LOCKED	BLS	LALS	ALS Non-Transport	ALS Transport
Fentanyl			200-400 mcg	200-400 mcg
Midazolam			20-40mg	20-40mg

AIRWAY/SUCTION EQUIPMENT

Exchanged Airway/Suction Equipment	BLS	LALS	ALS Non-Transport	ALS Transport
BAAM Device			1	2
CPAP circuits - all manufacture's available sizes	<u>1 (if CPAP is carried)</u>	<u>1 (if CPAP is carried)</u>	1 each	2 each
End-Tidal CO2 device - Pediatric and Adult (may be integrated into bag)			1 each	1 each
Endotracheal Tubes cuffed - 6.0 and/or 6.5, 7.0 and/or 7.5 and 8.0 and/or 8.5 with stylet			2 each	2 each
Endotracheal Tubes, uncuffed - 2.5, 3.0, 3.5 with stylet			2 each	2 each
Endotracheal Tubes, uncuffed - 4.0 or 4.5, 5.0 or 5.5 with stylet			2 each	2 each
ET Tube holders - pediatric and adult		1 each	1 each	2 each
King LTS-D Adult: Size 3 (yellow) Size 4 (red) Size 5 (purple)	2 each SPECIALTY PROGRAMS ONLY	1 each	1 each	2 each
King Ped: 12-25 kg: Size 2 (green) 25-35 kg: Size 2.5 (orange)	2 each SPECIALTY PROGRAMS ONLY	1 each	1 each	2 each
Mask - Adult & Pediatric non-rebreather oxygen mask	2 each	2 each	2 each	2 each
Mask - Infant Simple Mask	1	1	1	1
Nasal cannulas - pediatric and adult	2 each	2 each	2 each	2 each
Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr			1 each	1 each
Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr			1 each	1 each

Exchanged Airway/Suction Equipment	BLS	LALS	ALS Non-Transport	ALS Transport
Nasopharyngeal Airways - (infant, child, and adult)	1 each	1 each	1 each	1 each
Needle Cricothyrotomy Device - Pediatric and adult or Needles for procedure 10, 12, 14 and/or 16 gauge			1 each 2 each	1 each 2 each
One way flutter valve with adapter or equivalent			1	1
Oropharyngeal Airways - (infant, child, and adult)	1 each	1 each	1 each	1 each
Rigid tonsil tip suction	1		1	1
Small volume nebulizer with universal cuff adaptor		2	2	2
Suction Canister	1		1	1
Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr	1 each		1 each	1 each
Ventilation Bags - Infant 250 ml Pediatric 500 ml (or equivalent) Adult	1 1 1	1 1 1	1 1 1	1 1 1
Water soluble lubricating jelly		1	1	1

Non-Exchange Airway/Suction Equipment	BLS	LALS	ALS Non-Transport	ALS Transport
Ambulance oxygen source -10 L /min for 20 minutes	1			1
Flashlight/penlight	1	1	1	1
Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight			1 each	1 each
Laryngoscope handle with batteries - or 2 disposable handles			1	1
Magill Forceps - Pediatric and Adult			1 each	1 each
Manual powered suction device		1		
Portable oxygen with regulator - 10 L /min for 20 minutes	1	1	1	1
Portable suction device (battery operated)	1		1	1
Pulse Oximetry device	(SEE OPTIONAL EQUIPMENT SECTION, PG. 5)	1	1	1
Stethoscope	1	1	1	1
Wall mount suction device	1 (BLS TRANSPORT ONLY)			1

IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT

Exchanged IV/Needles/Syringes/Monitor Equipment	BLS	LALS	ALS Non- Transport	ALS Transport
Conductive medium or Pacer/Defibrillation pads			2 each	2 each
Disposable Tourniquets		2	2	2
ECG electrodes			20	20
EZ-IO Needles and Driver 15 mm, 25 mm, and 45 mm			2 each 1 each	2 each 1 each
EZ-IO Driver			1 each	1 each
EZ-IO Needles: 25 mm 45 mm			2 each 1 each	2 each 1 each
Glucose monitoring device with compatible strips and OSHA approved single use lancets		1	1	1
3-way stopcock with extension tubing			2	2
IV Catheters - sizes 14, 16, 18, 20, 22, 24		2 each	2 each	2 each
Macro drip Administration Set		3	3	3
Microdrip Administration Set (60 drops /cc)		1	1	2
Mucosal Atomizer Device (MAD) for nasal administration of medication		2	2	4
Pressure Infusion Bag (disposable)		1	1	1
Razors		1	2	2
Safety Needles - 20 or 21 gauge and 23 or 25 gauge		2 each	2 each	2 each
Saline Lock Large Bore Tubing Needleless		2	2	2
Sterile IV dressing		2	2	2
Syringes w/wo safety needles - 1 cc, 3 cc, 10 cc catheter tip		2 each		
Syringes w/wo safety needles - 1 cc, 3 cc, 10 cc, 20 cc, 60 cc catheter tip			2 each	2 each

Non-Exchange IV/Needles/Syringes/Monitor Equipment	BLS	LALS	ALS Non- Transport	ALS Transport
12-lead ECG Monitor and Defibrillator with TCP and printout			1	1
Blood pressure cuff - large adult or thigh cuff, adult, child and infant (one of each size)	1	1	1	1
Capnography monitor and supplies, may be integrated in the cardiac monitor			1	1
Needle disposal system (OSHA approved)		1	1	1
Thermometer - Mercury Free with covers	1	1	1	1

OPTIONAL EQUIPMENT/MEDICATIONS

Non-Exchange Optional Equipment/Medications	BLS	LALS	ALS Non-Transport	ALS Transport
AED/defib pads - Adult (1), Pediatric (1)	1 each	1 each		
Ammonia Inhalants			2	2
Automatic CPR device (FDA approved)	1	1	1	1
Automatic ventilator (ICEMA approved)			1	1
Backboard padding	1	1	1	1
Buretrol			1	1
Chemistry profile tubes			3	3
CPAP - (must be capable of titrating pressure between 2 and 15 cm H ₂ O)	<u>1 (optional)</u>	<u>1 (optional)</u>	<u>1</u>	<u>1</u>
CyanoKit (Specialty Program Only)			1	1
EMS Tourniquet	1		1	1
Endotracheal Tubes, cuffed - 2.5, 3.0, 3.5 with stylet			SPECIALTY PROGRAMS ONLY	SPECIALTY PROGRAMS ONLY
Endotracheal Tubes, cuffed - 4.0 or 4.5, 5.0 or 5.5 with stylet			SPECIALTY PROGRAMS ONLY	SPECIALTY PROGRAMS ONLY
Gum Elastic intubation stylet			2	2
Hemostatic Dressings *	1	1	1	1
IO Needles - Manual, Adult and Pediatric, Optional		Pediatric sizes only or EZ-IO needles and drivers	1 each	1 each
IV infusion pump			1	1
IV warming device		1	1	1
Manual IV Flow Rate Control Device			1	1
Manual powered suction device	1	1	1	1
Multi-lumen peripheral catheter			2	2
Needle Thoracostomy Kit (prepackaged)			2	2
Pitocin			20 units	20 units
Pulse Oximetry device	1			
Translaryngeal Jet Ventilation Device			1	1
Vacutainer			1	1

* Hemostatic Dressings

- Quick Clot®, Z-Medica®
Quick Clot®, Combat Gauze® LE
Quick Clot®, EMS Rolled Gauze, 4x4 Dressing, TraumaPad®
- Celox®
Celox® Gauze, Z-Fold Hemostatic Gauze
Celox® Rapid, Hemostatic Z-Fold Gauze

Note:

- The above products are “packaged” in various forms (i.e., Z-fold, rolled gauze, trauma pads, 4”x4”pads) and are authorized provided they are comprised of the approved product.

- Hemostatic Celox Granules, or granules delivered in an applicator, are not authorized.

DRESSING MATERIALS/OTHER EQUIPMENT/SUPPLIES

Exchanged Dressing Materials/Other Equipment/Supplies	BLS	LALS	ALS Non-Transport	ALS Transport
Adhesive tape - 1 inch	2	2	2	2
Air occlusive dressing	1	1	1	1
Ankle and wrist restraints, soft ties acceptable	1		1	1
Antiseptic swabs/wipes		10	10	10
Bedpan or fracture pan	1(BLS TRANSPORT UNITS ONLY			1
Urinal	1(BLS TRANSPORT UNITS ONLY			1
Cervical Collars - Rigid Pediatric and Adult all sizes or Cervical Collars - Adjustable Adult and Pediatric	2 each 2 each	2 each 2 each	2 each 2 each	2 each 2 each
Cold Packs	2	2	2	2
Emesis basin or disposable bags and covered waste container	1	1	1	1
Head immobilization device	2	2	2	2
OB Kit	1	1	1	1
Pneumatic or rigid splints capable of splinting all extremities	4	2	2	4
Provoidine/Iodine swabs/wipes or antiseptic equivalent		4	10	10
Roller bandages - 4 inch	6	3	3	6
Sterile bandage compress or equivalent	6	2	2	6
Sterile gauze pads - 4x4 inch	4	4	4	4
Sterile sheet for Burns	2	2	2	2
Universal dressing 10x30 inches	2	2	2	2

Non-Exchange Dressing Materials/Other Equipment/Supplies	BLS	LALS	ALS Non-Transport	ALS Transport
800 MHz Radio		1	1	1
Ambulance gurney	1(BLS TRANSPORT UNITS ONLY			1
Bandage shears	1	1	1	1
Blood Borne Pathogen Protective Equipment - (nonporous gloves, goggles face masks and gowns meeting OSHA Standards)	2	1	2	2
Drinkable water in secured plastic container or equivalent	1 gallon			1 gallon
Long board with restraint straps	1	1	1	1
Pediatric immobilization board	1	1	1	1
Pillow, pillow case, sheets and blanket	1 set			1 set

Non-Exchange Dressing Materials/Other Equipment/Supplies	BLS	LALS	ALS Non-Transport	ALS Transport
	(BLS TRANSPORT UNITS ONLY)			
Short extrication device	1	1	1	1
Straps to secure patient to gurney	1 set (BLS TRANSPORT UNITS ONLY)			1 set
Traction splint	1	1	1	1
Triage Tags - CAL Chiefs or ICEMA approved	20	20	20	20



EMS AIRCRAFT STANDARD DRUG & EQUIPMENT LIST

Each Aircraft shall be equipped with the following functional equipment and supplies. This list represents mandatory items with minimum quantities, to exclude narcotics, which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

MEDICATIONS/SOLUTIONS	AMOUNT
Adenosine (Adenocard) 6 mg	1
Adenosine (Adenocard) 12 mg	2
Albuterol Aerosolized Solution (Proventil) - unit dose 2.5 mg	3 doses
Aspirin, chewable - 81 mg tablet	1 bottle
Atropine 1 mg preload	2
Calcium Chloride 1 gm preload	1
Dextrose 10% in 250 ml Water (D10W) *	2
Diphenhydramine (Benadryl) 50 mg	1
Dopamine 400 mg	1
Epinephrine 1:1,000	2
Epinephrine 1:10,000	2
Glucagon 1 mg	1
Glucopaste	1 tube
Ipratropium Bromide Inhalation Solution (Atrovent) unit dose 0.5 mg	3
Lidocaine 100 mg	3
Lidocaine 1 gm or 1 bag pre-mixed 1 gm/250 cc D5W	1 gm
Lidocaine 2% Intravenous solution	1
Lidocaine 2% (Viscous)	1 dose
Magnesium Sulfate 10 gms	1
Naloxone (Narcan) 2 mg preload	2
Nitroglycerin - Spray 0.4 mg metered dose and/or tablets (tablets to be discarded 90 days after opening.)	1
Normal Saline for Injection (10 cc)	2
Normal Saline 250 ml	1
Normal Saline 500 ml and/or 1000 ml	2000 ml
Ondansetron (Zofran) 4 mg Oral Disintegrating Tablets (ODT)	4
Ondansetron (Zofran) 4 mg IM/ IV	4
Phenylephrine HCL - 0.5 mg per metered dose	1 bottle
Procainamide 1 gm	1
Sodium Bicarbonate 50 mEq preload	2
Verapamil 5 mg	3

CONTROLLED SUBSTANCE MEDICATIONS-MUST BE DOUBLE LOCKED	AMOUNT
Fentanyl	200-400 mcg
Midazolam	20-40 mg

AIRWAY/SUCTION EQUIPMENT	AMOUNT
Aircraft Oxygen source -10 L /min for 20 minutes	1
BAAM Device	1
C-PAP circuits - all manufacture's available sizes	1 each
End-tidal CO2 device - pediatric and adult (may be integrated into bag)	1 each
Endotracheal tubes, uncuffed - 2.5, 3.0, 3.5 with stylet	2 each
Endotracheal Tubes, uncuffed - 4.0 or 4.5, 5.0 or 5.5 with stylet	2 each
Endotracheal Tubes cuffed - 6.0 and/or 6.5, 7.0 and/or 7.5 and 8.0 and/or 8.5 with stylet	2 each
ET Tube holders - pediatric and adult	1 each
Flashlight/penlight	1
King LTS-D Adult: Size 3 (yellow) Size 4 (red) Size 5 (purple)	1 each
King Ped: 12-25 kg: Size 2 (green) 25-35 kg: Size 2.5 (orange)	1 each
Laryngoscope handle with batteries - or 2 disposable handles	1
Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight	1 each
Magill Forceps - Pediatric and Adult	1 each
Nasal Cannulas - infant, pediatric and adult	2 each
Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr	1 each
Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr	1 each
Nasopharyngeal Airways - infant, child, and adult	1 each
Needle Cricothyrotomy Device (Approved) - Pediatric and adult <i>or</i>	1 each
Needles for procedure 10, 12, 14 and/or 16 gauge	2 each
Non Re-Breather O ₂ Mask - Pediatric and Adult, Infant Simple Mask	2 each
One way flutter valve with adapter or equivalent	1
Oropharyngeal Airways - infant, child, and adult	1 each
Portable Oxygen with regulator - 10 L /min for 20 minutes	1
Portable suction device (battery operated) <i>and/or</i> Wall mount suction device	1 each
Pulse Oximetry device	1
Small volume nebulizer with universal cuff adaptor	1
Stethoscope	1
Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr	1 each
Ventilation Bags - Infant 250 ml, Pediatric 500 ml and Adult 1 L	1 each
Water soluble lubricating jelly	1
Ridged tonsil tip suction	1

IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT	AMOUNT
12-Lead ECG Monitor and Defibrillator with TCP and printout	1
800 MHz Radio	1
Blood pressure cuff - large adult or thigh cuff, adult, child and infant	1 set
Capnography monitor and supplies, may be integrated in the cardiac monitor	1
Conductive medium <i>or</i> Adult and Pediatric Pacer/Defibrillation pads	2 each
ECG - Pediatric and Adult	20 patches
EZ IO Needles and Driver 15 mm , 25 mm, and 45 mm	2 each 1 each
3-way stopcock with extension tubing	2
IO Needles - Manual, Adult and Pediatric, <u>Optional</u>	1 each
IV Catheters - sizes 14, 16, 18, 20, 22, 24	2 each
Glucose monitoring device	1
Macro drip Administration Set	3
Micro drip Administration Set (60 drops/ml)	1
Mucosal Atomizer Device (MAD) for nasal administration of medication	4
Needle disposal system (OSHA approved)	1
Pressure infusion bag	1
Safety Needles - 20 or 21 gauge and 23 or 25 gauge	2 each
Saline Lock	2
Syringes w/wo safety needles - 1 ml, 3 ml, 10 ml, 20 ml	2 each
Syringe - 60 ml catheter tip	2
Thermometer - Mercury free with covers	1

DRESSING MATERIALS/OTHER EQUIPMENT SUPPLIES	AMOUNT
Adhesive tape - 1 inch	2
Air occlusive dressing	1
Aircraft stretcher or litter system with approved FAA straps that allows for Axial Spinal Immobilization	1
Ankle and wrist restraints, soft ties acceptable	1
Antiseptic swabs/wipes	
Bandage shears	1
Blanket or sheet	2
Blood Borne Pathogen Protective Equipment - (nonporous gloves, goggles face masks and gowns meeting OSHA Standards)	2
Cervical Collars - Rigid Pediatric & Adult all sizes <i>or</i>	1 each
Cervical Collars - Adjustable Adult and Pediatric	1 each
Emesis basin or disposable bags and covered waste container	1
Head immobilization device	1
OB Kit	1
Pneumatic or rigid splints capable of splinting all extremities	4
Providence/Iodine swabs/wipes or antiseptic equivalent	
Roller bandages - 4 inch	3
Sterile bandage compress or equivalent	6
Sterile gauze pads - 4x4 inch	4

DRESSING MATERIALS/OTHER EQUIPMENT SUPPLIES	AMOUNT
Sterile Sheet for Burns	2
Traction splint	1
Universal Dressing 10x30 inches	2

OPTIONAL EQUIPMENT/MEDICATIONS	Amount
Ammonia Inhalants	2
Automatic ventilator (Approved)	1
Backboard padding	1
BLS AED/defib pads	1
Chemistry profile tubes	3
CyanoKit (Specialty Program Only)	SPECIALTY PROGRAMS ONLY
D5W in bag	1
Endotracheal tubes, cuffed - 2.5, 3.0, 3.5 with stylet	SPECIALTY PROGRAMS ONLY
Endotracheal Tubes, cuffed - 4.0 or 4.5, 5.0 or 5.5 with stylet	SPECIALTY PROGRAMS ONLY
Hemostatic Dressing *	1
IV infusion pump	1
IV warming device	1
Manual powered suction device	1
Medical Tourniquet	1
Needle Thoracostomy Kit (prepackaged)	2
Pediatric immobilization board	1
Pitocin	2
Translaryngeal Jet Ventilation Device	1
Vacutainer	1

* Hemostatic Dressings

- Quick Clot®, Z-Medica®
 - Quick Clot®, Combat Gauze® LE
 - Quick Clot®, EMS Rolled Gauze, 4x4 Dressing, TraumaPad®
- Celox®
 - Celox® Gauze, Z-Fold Hemostatic Gauze
 - Celox® Rapid, Hemostatic Z-Fold Gauze

Note:

- The above products are “packaged” in various forms (i.e., Z-fold, rolled gauze, trauma pads, and 4”x4” pads) and are authorized provided they are comprised of the approved product.
- Hemostatic Celox Granules, or granules delivered in an applicator, are not authorized.



MEDICATION - STANDARD ORDERS

Adenosine (Adenocard) - Adult (ALS)

Stable narrow-complex SVT or Wide complex tachycardia:

Adenosine, 6 mg rapid IVP followed immediately by 20 cc NS bolus, and
Adenosine, 12 mg rapid IVP followed immediately by 20 cc NS bolus if patient
does not convert. May repeat one (1) time.

Reference #s 7010, 7020, 11050

Albuterol (Proventil) Aerosolized Solution - Adult (LALS, ALS)

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

Reference #s 6090, 7010, 7020, 11010, 11100

Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Adult (LALS, ALS - Specialty Programs Only)

Albuterol MDI, four (4) puffs every ten (10) minutes for continued shortness of
breath and wheezing.

Reference #s 6090, 6110, 7010, 7020, 14010, 14030, 14070

Albuterol (Proventil) - Pediatric (LALS, ALS)

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

Reference #s 7010, 7020, 14010, 14030, 14070

Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Pediatric (LALS, ALS - Specialty Programs Only)

Albuterol MDI, four (4) puffs every ten (10) minutes for continued shortness of
breath and wheezing.

Reference #s 6090, 6110, 7010, 7020, 14010, 14030, 14070

Aspirin, chewable (LALS, ALS)

Aspirin, 325 mg PO chewed (one (1) adult non-enteric coated aspirin) or four (4)
chewable 81 mg aspirin.

Reference #s 2020, 6090, 6110, 7010, 7020, 11060

Atropine (ALS)

Atropine, 0.5 mg IV/IO. May repeat every five (5) minutes up to a maximum of 3 mg or 0.04 mg/kg.

Organophosphate poisoning:

Atropine, 2 mg IV/IO, repeat at 2 mg increments every five (5) minutes if patient remains symptomatic.

Reference #s 6090, 6110, 7010, 7020, 11040, 12020, 13010

Calcium Chloride (ALS)*Calcium Channel Blocker Poisonings:*

Calcium Chloride, 1 gm (10 cc of a 10% solution) IV/IO, base hospital order only.

Reference #s 2020, 7010, 7020, 13010

Dextrose - Adult (LALS, ALS)

Dextrose 10% /250 ml (D10W 25 gm) IV/IO Bolus

Reference #s 2020, 6090, 6110, 7010, 7020, 8010, 11050, ~~11070~~, 11080, 13020, 13030

Dextrose - Pediatric (LALS, ALS)

Hypoglycemia - Neonates (0 - 4 weeks) with blood glucose < 35 mg/dL or pediatric patients (greater than 4 weeks) with glucose < 60 mg/dL:

Dextrose 10%/250 ml (D10W 25 gm) 0.5 gm/kg (5 ml/kg) IV/IO

Reference #s 2020, 7010, 7020, 13020, 13030, 14040, 14050, 14060

Diphenhydramine - Adult (ALS)

Diphenhydramine, 25 mg IV/IO

Diphenhydramine, 50 mg IM

Reference #s 6090, 6110, 7010, 7020, 11010, 13010

Diphenhydramine - Pediatric (ALS)

Diphenhydramine, 1 mg/kg slow IV/IO, not to exceed adult dose of 25 mg, **or**

Diphenhydramine, 2 mg/kg IM not to exceed adult dose of 50 mg IM

Reference #s 7010, 7020, 14030

Dopamine - Adult (ALS)

Dopamine, infusion of 400 mg in 250 ml of NS IV/IO, titrated between 5 - 20 mcg/kg/min to maintain signs of adequate tissue perfusion.

Reference #s 7010, 7020, 8010, 8040, 10140, 11070, 11090, 14080

Dopamine - Pediatric (ALS)

Post resuscitation continued signs of inadequate tissue perfusion:

9 to 14 years Dopamine, 400 mg in 250 ml of NS to infuse at 5 - 20 mcg/kg/min IV/IO titrated to maintain signs of adequate tissue perfusion.

Reference #s 7010, 7020, 14040

Epinephrine (1:1000) - Adult (LALS, ALS)

Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Anaphylactic Shock/Severe Allergic Reactions:

Epinephrine, 0.3 mg IM

Epinephrine (1:10,000) - Adult (ALS)

For Persistent severe anaphylactic shock:

Epinephrine (1:10,000), 0.1 mg slow IVP/IO. May repeat every five (5) minutes as needed to total dosage of 0.5 mg.

Cardiac Arrest, Asystole, PEA:

Epinephrine, 1 mg IV/IO

Reference #s 2020, 6090, 6110, 7010, 7020, 11010, 11070, 12020

Epinephrine (1:1000) - Pediatric (LALS, ALS)

Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Anaphylactic Shock/Severe Allergic Reactions:

Epinephrine, 0.01 mg/kg IM not to exceed adult dosage of 0.3 mg.

Reference #s 2020, 6090, 7010, 7020, 11010, 14010, 14030

Epinephrine (1:10,000) - Pediatric (ALS)

Anaphylactic Shock (no palpable radial pulse and depressed level of consciousness):

Epinephrine (1:10,000), 0.01 mg/kg IV/IO, no more than 0.1 mg per dose. May repeat to a maximum of 0.5 mg.

Cardiac Arrest:

1 day to 8 years Epinephrine (1:10,000), 0.01 mg/kg IV/IO (do not exceed adult dosage)

9 to 14 years Epinephrine (1:10,000), 1.0 mg IV/IO

Newborn Care:

Epinephrine (1: 10,000), 0.01mg/kg IV/IO if heart rate is less than 60 after one (1) minute after evaluating airway for hypoxia and assessing body temperature for hypothermia.

Epinephrine (1:10,000), 0.005 mg/kg IV/IO every ten (10) minutes for persistent hypotension as a base hospital order or in radio communication failure.

Post resuscitation continued signs of inadequate tissue perfusion:

1 day to 8 years Epinephrine (1:10,000), 0.5 mcg/kg/min IV/IO drip

Reference #s 2020, 7010, 7020, 14030, 14040, 14090

Fentanyl - Adult (ALS)

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every ten (10) minutes titrated to pain, not to exceed 200 mcg.

Isolated Extremity Trauma, Burns:

Fentanyl, 50 mcg slow IV/IO push over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg IV/IO, **or**

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every ten (10) minutes titrated to pain, not to exceed 200 mcg.

Pacing, synchronized cardioversion:

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat in five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IN. May repeat 50 mcg every ten (10) minutes titrated to pain, not to exceed 200 mcg.

Reference #s 2020, 6090, 6110, 7010, 7020, 7030, 10190, 11060, 11100, 13030, 15010

Fentanyl - Pediatric (ALS)

Fentanyl, 0.5 mcg/kg slow IV/IO over one (1) minute. May repeat in five minutes titrated to pain, not to exceed 100 mcg.

Fentanyl, 1 mcg/kg IM/IN, may repeat every ten (10) minutes titrated to pain not to exceed 200 mcg.

Reference #s 2020, 6110, 7010, 7020, 7030, 11060, 13030, 14070, 15020

Glucose - Oral - Adult (BLS, LALS, ALS)

Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

Reference #s 7010, 7020, 11080, 11090, 11110, 13020

Glucose - Oral - Pediatric (BLS, LALS, ALS)

Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

Reference #s 7010, 7020, 14050, 14060

Glucagon - Adult (LALS, ALS)

Glucagon, 1 mg IM/SC/IN, if unable to establish IV. May administer one (1) time only.

Betablocker Poisoning:

Glucagon, 1 mg IV/IO (base hospital order only)

Reference #s 6090, 6110, 7010, 7020, 11080, 13010, 13030

Glucagon - Pediatric (LALS, ALS)

Glucagon, 0.025 mg/kg IM/IN, if unable to start an IV. May be repeated one (1) time after twenty (20) minutes for a combined maximum dose of 1 mg.

Reference #s 7010, 7020, 13030, 14050, 14060

Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol Adult (ALS)

Atrovent, 0.5 mg nebulized. Administer one (1) dose only.

Reference #s 7010, 7020, 11010, 11100

Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol Adult (ALS - Specialty Programs Only)

When used in combination with Albuterol MDI use Albuterol MDI dosing.

Reference #s 6090, 6110, 7010, 7020, 11010, 11100

Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol - Pediatric (ALS)

1 day to 12 months Atrovent, 0.25 mg nebulized. Administer one (1) dose only.

1 year to 14 years Atrovent, 0.5 mg nebulized. Administer one (1) dose only.

Reference #s 7010, 7020, 14010, 14030, 14070

Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol - Pediatric (ALS - Specialty Programs Only)

When used in combination with Albuterol MDI use Albuterol MDI dosing.

Reference #s 6090, 6110, 7010, 7020, 14010, 14030, 14070

Lidocaine - Adult (ALS)

Intubation, King Airway, NG/OG, for suspected increased intracranial pressure (ICP):

Lidocaine, 1.5 mg/kg IV/IO

VT/VF:

Initial Dose: Lidocaine, 1.5 mg/kg IV/IO

May administer an additional 0.75 mg/kg IV/IO, repeat once in five (5) to ten (10) minutes for refractory VF.

VT/VF Infusion:

Lidocaine, 2 mg/min IV/IO drip

V-Tach, Wide Complex Tachycardia – with Pulses:

Lidocaine, 1.5 mg/kg slow IV/IO

May administer an additional 0.75 mg/kg IV/IO, repeat once in five (5) to ten (10) minutes for refractory VF

Initiate infusion of Lidocaine 2 mg/min IV/IO drip.

Reference #s 2020, 6090, 7010, 7020, 8010, 8040, 10030, 10080, [10190](#), 11050, 11070, 15010

Lidocaine - Pediatric (ALS)

Intubation, King Airway, NG/OG, for suspected increased intracranial pressure (ICP):

Lidocaine, 1.5 mg/kg IV/IO

Cardiac Arrest:

1 day to 8 years Lidocaine, 1.0 mg/kg IV/IO

9 to 14 years Lidocaine, 1.0 mg/kg IV/IO

May repeat Lidocaine at 0.5 mg/kg after five (5) minutes up to total of 3.0 mg/kg.

Reference #s 2020, 7010, 7020, 14040

Lidocaine 2% (Intravenous Solution) - Pediatric and Adult (ALS)

Pain associated with IO infusion:

Lidocaine , 0.5 mg/kg slow IO push over two (2) minutes, not to exceed 40 mg total.

Reference #s 2020, 7010, 7020, 10140, 10190

Magnesium Sulfate (ALS)

Polymorphic Ventricular Tachycardia:

Magnesium Sulfate, 2 gm in 100 ml of NS IV/IO over five (5) minutes for polymorphic VT if prolonged QT is observed during sinus rhythm post-cardioversion.

Eclampsia (Seizure/Tonic/Clonic Activity):

Magnesium Sulfate, 4 gm diluted with 20 ml NS, IV/IO slow IV push over three (3) to four (4) minutes.

Magnesium Sulfate, 2 gm in 100 cc of NS at 30 cc per hour IV/IO to prevent continued seizures.

Reference #s 2020, 7010, 7020, 8010, 14080

Midazolam (Versed) - Adult (ALS)

Seizure:

Midazolam, 2.5 mg IV/IO/IN. May repeat in five (5) minutes for continued seizure activity, **or**

Midazolam, 5 mg IM. May repeat in ten (10) minutes for continued seizure activity.

Assess patient for medication related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

Pacing, synchronized cardioversion:

Midazolam, 2 mg slow IV/IO push or IN

Reference #s 6090, 6110, 7010, 7020, 10110, 10120, 10190, 11080, 13020, 14080

Midazolam (Versed) - Pediatric (ALS)

Seizures:

Midazolam, 0.1 mg/kg IV/IO with maximum dose 2.5 mg. May repeat Midazolam in five (5) minutes, **or**

Midazolam, 0.2 mg/kg IM/IN with maximum dose of 5 mg. May repeat Midazolam in ten (10) minutes for continued seizure. IN dosage of Midazolam is doubled due to decreased surface area of nasal mucosa resulting in decreased absorption of medication.

Assess patient for medication related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

Reference #s 7010, 7020, 14060

Naloxone (Narcan) - Adult (LALS, ALS)

Resolution of respiratory depression related to suspected narcotic overdose:

Naloxone, 0.5 mg IV/IO/IM/IN, may repeat Naloxone 0.5 mg IV/IO/IM/IN every two (2) to three (3) minutes if needed.

Do not exceed 10 mg of Naloxone total regardless of route administered.

Reference #s 6110, 7010, 7020, ~~11070~~, 11080

Naloxone (Narcan) - Pediatric (LALS, ALS)

Resolution of respiratory depression related to suspected narcotic overdose:

1 day to 8 years	Naloxone, 0.1 mg/kg IV/IO
9 to 14 years	Naloxone, 0.5 mg IV/IO

May repeat every two (2) to three (3) minutes if needed. Do not exceed the adult dosage of 10 mg IV/IO/IM/IN.

Reference #s 7010, 7020, 14040, 14050

Nitroglycerin (LALS, ALS)

Nitroglycerin, 0.4 mg sublingual/transmucosal

One (1) every three (3) minutes as needed. May be repeated as long as patient continues to have signs of adequate tissue perfusion. **If a Right Ventricular Infarction is suspected, the use of nitrates requires base hospital contact.**

Nitroglycerin is contraindicated if there are signs of inadequate tissue perfusion or if sexual enhancement medications have been utilized within the past forty-eight (48) hours.

Reference #s 6090, 6110, 7010, 7020, 11010, 11060

Ondansetron (Zofran) - Patients four (4) years old to Adult (ALS)*Nausea/Vomiting:*

Ondansetron, 4 mg slow IV/IO/ODT

All patients four (4) to eight (8) years old: May administer a total of 4 mgs of Ondansetron prior to base hospital contact.

All patients nine (9) and older: May administer Ondansetron 4 mg and may repeat twice, at ten (10) minute intervals, for a total of 12 mgs prior to base hospital contact.

May be used as prophylactic treatment of nausea and vomiting associated with narcotic administration.

Reference #s 6110, 7010, 7020, 9120, 10100, 15010, 15020

Oxygen (non-intubated patient per appropriate delivery device)*General Administration (Hypoxia):*

Titrate Oxygen at lowest rate required to maintain SPO₂ at 94%.

Do not administer supplemental oxygen for SPO₂ > 95%

Chronic Obstructive Pulmonary Disease (COPD):

Titrate Oxygen at lowest rate required to maintain SPO₂ at 90%

Do not administer supplemental oxygen for SPO₂ > 91%

Reference #s 6140, 9010, 9120, 11010, 11020, 11040, 11050, 11060, 11080, 11090, 11100, 13010, 13020, 13030, 14010, 14020, 14030, 14050, 14060, 14070, 14080, 14090, 15010, 15020

Phenylephrine HCL (ALS)

Phenylephrine, 0.5 mg metered dose may be repeated once prior to additional attempt

Reference #s 7010, 7020, 10050, 10190

Procainamide (ALS)

SVT, V-Tach or Wide Complex Tachycardias:

Procainamide, 20 mg/min IV/IO; may repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by more than 50% or maximum dose of 17 mg/kg administered. If arrhythmia suppressed, begin infusion of 2 mg/min.

Reference #s 7010, 7020, 8010, 8040, 11050

Sodium Bicarbonate (ALS) (base hospital order only)

Tricyclic Poisoning:

Sodium Bicarbonate, 1 mEq/kg IV/IO

Reference #s 2020, 7010, 7020, 13010

Verapamil (ALS)

SVT if adenosine is ineffective:

Verapamil, 5 mg slow IV/IO over three (3) minutes, may repeat every fifteen (15) minutes to a total dose of 20 mg.

Reference #s 7010, 7020, 11050



CONTINUATION OF CARE (San Bernardino County Only)

I. PURPOSE

To develop a system that ensures the rapid transport of patients at the time of symptom onset or injury, to receiving the most appropriate definitive care. This system of care consists of public safety answering point (PSAP) providers, EMS providers, referral hospitals (RH), Specialty Care Centers (Trauma, Cardiovascular ST Elevation Myocardial Infarction (STEMI) or Stroke), ICEMA and EMS leaders combining their efforts to achieve this goal.

This policy shall only be used for:

- Rapid transport of trauma, STEMI and stroke patients from RH to Specialty Care Center.
- Specialty Care Center to Specialty Care Center when higher level of care is required.
- EMS providers transporting unstable patients requiring transport to a Specialty Care Center to stop at any closest receiving hospital for airway stabilization, and continue on to a Specialty Care Center.

It is not to be used for any other form of interfacility transfer of patients.

II. DEFINITIONS

Neurovascular Stroke Receiving Centers (NSRC): A licensed general acute care hospital designated by ICEMA's Governing Board as a NSRC.

Referral Hospital (RH): Any licensed general acute care hospital that is not an ICEMA designated TC, SRC or NSRC.

Specialty Care Center: An ICEMA designated Trauma, STEMI or Stroke Center.

STEMI Receiving Centers (SRC): A licensed general acute care hospital designated by ICEMA's Governing Board as STEMI Receiving Center with emergency interventional cardiac catheterization capabilities.

Trauma Center (TC): A licensed general acute care hospital designated by ICEMA's Governing Board as a trauma hospital in accordance with State laws, regulations and ICEMA policies.

III. INCLUSION CRITERIA

- Any patient meeting ICEMA Trauma Triage Criteria, (refer to ICEMA Reference #15030 - Trauma Triage Criteria and Destination Policy) arriving at a non-trauma hospital by EMS or non-EMS transport.
- Any patient with a positive STEMI requiring EMS transport to a SRC (refer to ICEMA Reference #6070 - Cardiovascular ST Elevation Myocardial Infarction Receiving Centers Criteria and Destination Policy).
- Any patient with a positive mLAPSS or stroke scale requiring EMS transport to a NSRC (refer to ICEMA Reference #6100 - Neurovascular Stroke Receiving Centers Criteria and Destination Policy).

IV. INITIAL TREATMENT GOALS AT RH

- Initiate resuscitative measures within the capabilities of the facility.
- Ensure patient stabilization is adequate for subsequent transport.
- Do not delay transport by initiating any diagnostic procedures that do not have direct impact on immediate resuscitative measures.

➤ TIMELINES/GUIDELINES

- < 30 minutes at RH (door-in/door-out).
 - < 30 minutes to complete ALS continuation of care transport.
 - < 30 minutes door-to-intervention at Specialty Care Center.
- RH shall contact the appropriate Specialty Care Center ED physician directly without calling for an inpatient bed assignment. Refer to Section IV - SRH-SRC Buddy System Table.
- EMS providers shall make Specialty Care Center base hospital contact.
- The Specialty Care Centers shall accept all referred trauma, stroke and STEMI patients unless they are on Internal Disaster as defined in ICEMA Reference #8060 - Requests for Hospital Diversion Policy (San Bernardino County Only).
- The Specialty Care Center ED physician is the accepting physician at the Specialty Care Center and will activate the internal Trauma, STEMI, or Stroke Team according to internal TC, SRC or NSRC policies or protocols.

- RH ED physician will determine the appropriate mode of transportation for the patient.
- Simultaneously call 9-1-1 and utilize the following script to dispatch:

“This is a Continuation of Care run from ____ hospital to ____ Trauma, STEMI or Stroke Center”

Dispatchers will only dispatch transporting paramedic units without any fire apparatus.

- RH ED physician will provide a verbal report to the ED physician at the Specialty Care Center.
- RH must send all medical records, test results, radiologic evaluations to the Specialty Care Center. DO NOT DELAY TRANSPORT - these documents may be FAXED to the Specialty Care Center.

V. SPECIAL CONSIDERATIONS

- If the patient has arrived at the RH via EMS field personnel, the RH ED physician may request that the transporting team remain and immediately transport the patient once minimal stabilization is done at the RH.
- If a suspected stroke patient is outside of the tPA administration window (greater than 4.5 hours from “last seen normal”), contact nearest stroke center to determine the best destination. Then follow the 9-1-1 script.
- EMT-Ps may only transport patients on Dopamine, Lidocaine and Procainamide drips. Heparin and Integrillin drips are not within the EMT-P scope of practice and require a “critical care transport” nurse to be in attendance. Unless medically necessary, avoid using medication drips that are outside of the EMT-P scope of practice to avoid any delays in transferring of patients.
- The RH may consider sending one of its nurses or physician with the transporting ALS unit if deemed necessary due to the patient’s condition or scope of practice.
- Nurse staffed ALS units (ground or air) may be used; but may create a delay due to availability. Requests for a nurse staffed ALS unit must be made directly to the Critical Care Transport (CCT) provider by landline. Requests for Critical Care Transport (CCT) (ground or air ambulance) must be made directly with the EMS provider’s dispatch center. The request for CCT should be made as early as possible or simultaneously upon patient’s arrival so availability of resource can be determined.

- Specialty Care Center diversion is not permitted except for Internal Disaster. However, Specialty Care Center base hospitals are allowed to facilitate redirecting of EMS patients to nearby SRCs, NSRCs or TCs when the closest Specialty Care Center is over capacity to avoid prolonged door-to-intervention times. Specialty Care Center base hospitals shall ensure physician to physician contact when redirecting patients.

VI. SPECIALTY CARE CENTER - REFERRAL HOSPITAL BUDDY SYSTEM TABLE

NEUROVASCULAR STROKE RECEIVING CENTERS (NSRC)	NEUROVASCULAR STROKE REFERRAL HOSPITALS (NSRH)
Arrowhead Regional Medical Center	<ul style="list-style-type: none"> • <u>Barstow Community Hospital</u> • <u>Colorado River Medical Center</u> • <u>Community Hospital of San Bernardino</u> • <u>Hi Desert Medical Center</u> • Desert Valley Hospital • Kaiser Fontana Medical Center • St. Bernardine Medical Center • St. Mary Medical Center
Desert Regional Medical Center	<ul style="list-style-type: none"> • Colorado River Medical Center • Hi-Desert Medical Center
<u>Kaiser Hospital Foundation - Fontana</u>	<ul style="list-style-type: none"> • <u>Barstow Community Hospital</u> • <u>Victor Valley Global Medical Center</u> • <u>Desert Valley Hospital</u>
<u>Kaiser Hospital Foundation - Ontario</u>	<ul style="list-style-type: none"> • <u>Chino Valley Medical Center</u> • <u>Montclair Community Hospital</u>
Loma Linda University Medical Center	<ul style="list-style-type: none"> • <u>Bear Valley Community Hospital</u> • <u>Community Hospital of San Bernardino</u> • J.L. Pettis VA Hospital (Loma Linda VA) • <u>Mountains Community Hospital</u> • <u>St. Bernardine Medical Center</u> • St. Mary Medical Center • Victor Valley Global Medical Center • Weed Army Community Hospital at Fort Irwin
Pomona Valley Hospital Medical Center	<ul style="list-style-type: none"> • Chino Valley Medical Center • Montclair Hospital Medical Center
Redlands Community Hospital	<ul style="list-style-type: none"> • <u>Bear Valley Community Hospital</u> • <u>J.L. Pettis VA Hospital (Loma Linda VA)</u> • <u>Mountains Community Hospital</u> • Community Hospital of San Bernardino • St. Bernardine Medical Center
San Antonio Community <u>Regional</u> Hospital	<ul style="list-style-type: none"> • Chino Valley Medical Center • Kaiser Ontario Medical Center • <u>Desert Valley Hospital</u> • <u>Montclair Hospital Medical Center</u> • <u>St. Mary Medical Center</u> • <u>Victor Valley Global Medical Center</u>

STEMI RECEIVING CENTER (SRC)	STEMI REFERRAL HOSPITAL (SRH)
Desert Valley Hospital	<ul style="list-style-type: none"> • Barstow Community Hospital • Victor Valley Global Medical Center • Weed Army Community Hospital at Fort Irwin
Loma Linda University Medical Center	<ul style="list-style-type: none"> • Arrowhead Regional Medical Center • Bear Valley Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Redlands Community Hospital
Pomona Valley Hospital Medical Center	<ul style="list-style-type: none"> • Chino Valley Medical Center • Montclair Hospital Medical Center
San Antonio Community Regional Hospital	<ul style="list-style-type: none"> • Chino Valley Medical Center • Kaiser Ontario Medical Center • Montclair Hospital Medical Center
St. Bernardine Medical Center	<ul style="list-style-type: none"> • Colorado River Medical Center • Community Hospital of San Bernardino • Kaiser Fontana Medical Center • Mountains Community Hospital
St. Mary Medical Center	<ul style="list-style-type: none"> • Barstow Community Hospital • Bear Valley Community Hospital • Hi-Desert Medical Center • Robert E. Bush Naval Hospital-29 Palms • Victor Valley Global Medical Center

TRAUMA CENTER (TC)	REFERRAL HOSPITAL (SRH)
<u>Arrowhead Regional Medical Center</u>	<ul style="list-style-type: none"> • <u>Barstow Community Hospital</u> • <u>Chino Valley Medical Center</u> • <u>Desert Valley Medical Center</u> • <u>Kaiser Fontana</u> • <u>Kaiser Ontario</u> • <u>Mammoth Hospital</u> • <u>Montclair Hospital Medical Center</u> • <u>Northern Inyo Hospital</u> • <u>Southern Inyo Hospital</u> • <u>St. Bernardine Medical Center</u>
<u>Loma Linda University Medical Center</u>	<ul style="list-style-type: none"> • <u>Bear Valley Community Hospital</u> • <u>Colorado River Medical Center</u> • <u>Hi Desert Medical Center</u> • <u>Mountains Community Hospital</u> • <u>Redlands Community Hospital</u> • <u>J. L. Pettis VA Hospital (Loma Linda VA)</u> • <u>Robert E. Bush Naval Hospital-29 Palms</u> • <u>St. Mary Medical Center</u> • <u>Victor Valley Global Medical Center</u> • <u>Weed Army Hospital</u>
<u>Loma Linda University Children's Hospital</u>	<ul style="list-style-type: none"> • <u>Regional Pediatric Trauma Center</u>

VII. REFERENCES

<u>Number</u>	<u>Name</u>
6070	Cardiovascular ST Elevation Myocardial Infarction Receiving Centers Criteria and Destination Policy
6100	Neurovascular Stroke Receiving Centers Criteria and Destination Policy (San Bernardino County Only)
8060	Requests for Hospital Diversion Policy (San Bernardino County Only)
15030	Trauma Triage Criteria and Destination Policy



CARE OF MINORS IN THE FIELD

I. PURPOSE

To provide guidelines for EMS personnel for treatment and/or transport of minors in the field.

AUTHORITY

~~California Welfare and Institutions Code Section 625, Civil Code, sections 25, 34, and 62~~

II. DEFINITIONS

Consent: Except for circumstances specifically prescribed by law, a minor is not legally competent to consent to, or refuse medical care.

Voluntary consent: Treatment and/or transport of a minor shall be with the verbal or written consent of the parent or legal representative.

Involuntary consent: In the absence of a parent or legal representative, emergency treatment and/or transport may be initiated without consent.

Minor: Any person under eighteen (18) years of age.

Minor not requiring parental consent: A person who is decreed by the court as an emancipated minor, has a medical emergency and parent is not available, is married or previously married, is on active duty in the military, is pregnant and requires care related to the pregnancy, is twelve (12) years or older and in need of care for rape and/or sexual assault, is twelve (12) years or older and in need of care for a contagious reportable disease or condition, or for substance abuse.

Legal Representative: A person who is granted custody or conservatorship of another person.

Emergency: An unforeseen condition or situation in which the individual has need for immediate medical attention, or where the potential for immediate medical attention is perceived by EMS personnel or a public safety agency

III. PROCEDURE

Treatment and/or Transport of Minors

- In the absence of a parent or legal representative, minors with an emergency condition shall be treated and transported to the medical facility most appropriate to the needs of the patient.
 - In the absence of a parent or legal representative, minors with a non-emergency condition require EMS field personnel to make reasonable effort to contact a parent or legal representative before initiating treatment and/or transport. If a parent or legal representative cannot be reached and minor is transported, EMS field personnel shall make every effort to inform the parent or legal representative of where the minor has been transported, and request that law enforcement accompany the minor patient to the hospital.
1. ~~For all ill or injured minors under the age of nine (9) years, Base Station contact is required before leaving scene.~~
 2. ~~In the absence of a parent or legal representative, minors with an emergency condition shall be treated and transported to the medical facility most appropriate to the needs of the patient.~~
 3. ~~In the absence of a parent or legal representative, minors with a non-emergency condition require EMS personnel to make reasonable effort to contact a parent or legal representative before initiating treatment and/or transport. If a parent or legal representative cannot be reached and minor is transported, EMS personnel shall make every effort to inform the parent or legal representative of where the minor has been transported, and request that law enforcement accompany the minor patient to the hospital.~~

Minors Not Requiring Immediate Treatment and/or Transport

- A minor evaluated by EMS field personnel and determined not to be injured, to have sustained only minor injuries, or to have an illness or injury not requiring immediate treatment and/or transportation, may be released to:
 - Parent or legal representative.
 - Designated care giver over eighteen (18) years of age.
 - Law enforcement.
 - EMS field personnel shall document on the patient care record to whom the minor was released.

Minor Attempting to Refuse Indicated Care

1. ~~Contact Base Station.~~

- Attempt to contact parent or legal representative for permission to treat and/or transport.
- ~~Contact~~ If parent or legal representative cannot be contacted, contact law enforcement and request minor to be taken into temporary custody for treatment and/or transport ~~(only necessary in the event parents or legal representative cannot be contacted).~~

Base Hospital Contact

- Base hospital contact is required, prior to EMS field personnel leaving the scene, for the following situations:
 - ~~Minors under the age of nine (9) who are not being transported to the hospital.~~
 - Minors under the age of nine (9) whose parents or guardians are refusing care.
 - Minors who in the opinion of EMS field personnel, do not require treatment or transport.
- See ICEMA Reference #5040-~~Radio Communication~~#8130 - Destination Policy.

IV. REFERENCE

<u>Number</u>	<u>Name</u>
<u>5040</u>	<u>Radio Communication Policy</u>
<u>8130</u>	<u>Destination Policy</u>



ICEMA APPROVED SKILLS PROCEDURE - STANDARD ORDERS

~~I. POLICY~~

~~To provide a list of ICEMA approved skills and affected scope of practice.~~

~~II. AUTHORITY~~

~~California Health and Safety Code, Sections 1797.214~~

~~California Code of Regulations, Title 22, Division 9, Chapters 2, 3, and 4~~

~~III. SKILLS~~

12-lead Electrocardiography (EMT-P)

- ECG should be performed prior to medication administration.
- ECG should be performed on any patient whose medical history and/or presenting symptoms are consistent with an acute coronary syndrome.

Axial Spinal ImmobilizationStabilization (EMT, AEMT and EMT-P)

- Should be placed if patient meets the indicators , per ICEMA Reference #15010 - Trauma - Adult (Neuro Deficits present, Spinal Tenderness present, Altered Mental status, Intoxication, or Distracting Injury).
- An AEMT and/or EMT-P may remove if placed by BLS crew and it does not meet indicators.

Continuous Positive Airway Pressure Device (CPAP) - Adult (EMT, AEMT and EMT-P)

- Start at lowest setting and increase slowly until patient experiences relief or until a maximum of 15 cm H₂O is reached.

External Jugular Vein Access (AEMT and EMT-P)

- Not indicated for patients eight (8) years of age and younger.
- Patient condition requires IV access and other peripheral venous access attempts are unsuccessful.

Intraosseous Infusion (AEMT pediatric patients only and EMT-P)

- EMT-Ps may administer Lidocaine slowly per ICEMA Reference #7040 - Medication - Standard Orders, ~~for to control infusion~~ pain control.
- Approved insertion sites:
 - Eight (8) years of age or younger (LALS and ALS):
 - Proximal Tibia - Anterior medial surface of tibia, 2 cm below tibial tuberosity.
 - Nine (9) years of age and older (ALS only):
 - Proximal Tibia - Anterior medial surface of tibia, 2 cm below tibial tuberosity.
 - Distal Tibia - Lower end of tibia, 2 cm above the medial malleolus.
 - Humeral Head (EZ IO only).
 - Anterior distal femur, 2 cm above the patella - Base Station hospital contact only.
- Leave site visible and monitor for extravasation.

King Airway Device (Perilaryngeal) - Adult (EMT Specialty Program, AEMT, and EMT-P)

- Use of King Airway adjunct may be performed only on those patients who meet **all** of the following criteria:
 - Unresponsive, agonal respirations (less than six (6) breaths per minute) or apneic.
 - Patients 15 years or older.
 - Anyone over four (4) feet in height.
- Additional considerations:
 - Medications may **not** be given via the King Airway.
 - King Airway adjunct should not be removed unless it becomes ineffective.

King Airway Device (Perilaryngeal) - Pediatric (less than 15 years of age) (EMT Specialty Program, AEMT, and EMT-P)

- Use of King Airway adjunct may be performed only on those patients who meet all of the following criteria:
 - Unresponsive, agonal respirations (less than six (6) breaths per minute) or apneic.
 - No gag reflex.
 - Pediatric patients meeting the following criteria:
 - 35 - 45 inches or 12 - 25 kg: size 2
 - 41 - 51 inches or 25 - 35 kg: size 2.5
- ~~Patients less than 15 years of age.~~
- Additional Considerations:
 - Medications may NOT be given via the King Airway.
 - King Airway adjunct should not be removed unless it becomes ineffective.
~~—May initially be contraindicated with suspected ALOC.~~

Nasogastric/Orogastric Tube (EMT-P)

- Use viscous Lidocaine gel per ICEMA Reference #7040 - Medication - Standard Orders, for conscious patients.
- Required for all full arrest patients.

Nasotracheal Intubation (EMT-P)

- Absolute contraindication: Apnea.
- Base hospital contact required: Facial trauma, anticoagulant therapy, airway burns, failed CPAP.
- Prophylactic-Immediately prior to intubation, consider Lidocaine prophylactically per ICEMA Reference #7040 - Medication - Standard Orders, for suspected head/brain injury.
- Administer Phenylephrine per ICEMA Reference #7040 - Medication - Standard Orders.

- Monitor end-tidal CO₂ and wave form capnography.
- Monitor pulse oximetry.
- Contact base hospital if unable to place ET after a maximum of three (3) nasotracheal intubation attempts or in unable to adequately ventilate patient via BVM.

Needle Cricothyrotomy (EMT-P)

- Absolute contraindication: Transection of the distal trachea.
- Monitor end-tidal CO₂ and wave form capnography.
- Monitor pulse oximetry.
- Contact base hospital if unable to ventilate adequately and transport immediately to the closest hospital for airway management.

Needle Thoracostomy (EMT-P)

- In blunt chest trauma consider bilateral tension pneumothorax if pulse oximetry (SpO₂) reading remains low with a patent airway or with poor respiratory compliance.

Oral Endotracheal Intubation - Adult (EMT-P)

- Consider-Immediately prior to intubation, consider Lidocaine prophylactically per ICEMA Reference #7040 - Medication - Standard Orders, for head injury.
- Monitor end-tidal CO₂ with capnography and wave form capnography.
- Monitor pulse oximetry.
- After-If unable to place ET after a maximum of three (3) unsuccessful intubation attempts (an attempt is considered made when tube passes the gum line) and, if all procedures to establish an adequate airway fail, consider Needle Cricothyrotomy.
- Document verification of tube placement (auscultation, visualization, capnography)

Oral Endotracheal Intubation - Pediatric (less than 15 years of age) (EMT-P)

- Uncuffed tubes for patients under eight (8) years old.

- Base hospital contact is required after two (2) failed intubation attempts (an attempt is considered made when tube passes the gum line).
- If all procedures to establish an adequate airway fail, consider Needle Cricothyrotomy.
- Monitor end-tidal CO₂ and wave form ~~with~~ capnography.
- Monitor pulse oximetry.
- Document verification of tube placement. Run a continuous strip of capnography readings during movement of patient to verify tube placement.

Synchronized Cardioversion (EMT-P)

- Consider Midazolam per ICEMA Reference #7040 - Medication - Standard Orders, for anxiety.
- Consider Fentanyl per ICEMA Reference #7040 - Medication - Standard Orders, for pain.
- If rhythm deteriorates to v-fib, turn off the sync button and defibrillate.
- Select initial energy level setting at 100 joules or a clinically equivalent biphasic energy level per manufacture guidelines. Procedure may be repeated at 200, 300 and 360 joules or a clinically equivalent biphasic energy level per manufacture guidelines.
- In Radio Communication Failure or with base hospital order, repeated cardioversion attempts at 360 joules or clinically equivalent biphasic energy level per manufacturer's guidelines may be attempted.

Transcutaneous Cardiac Pacing (EMT-P)

- Start at a rate of sixty (60) and adjust output to the lowest setting to maintain capture. Assess peripheral pulses and confirm correlation with paced rhythm.
- Reassess peripheral pulses. Adjust output to compensate for loss of capture.
- Increase rate (**not to exceed 100**) to maintain adequate tissue perfusion.
- Consider Midazolam per ICEMA Reference #7040 - Medication - Standard Orders, for anxiety
- Consider Fentanyl per ICEMA Reference #7040 - Medication - Standard Orders, for pain.

- ~~Consider medication for pain and anxiety.~~
- Contact the base hospital if rhythm persists or for continued signs of inadequate tissue perfusion.

Vagal Maneuvers (EMT-P)

- ~~Use with caution for~~ Relative contraindications for patients with hypertension, suspected STEMI, or suspected head/brain injury.
- Reassess cardiac and hemodynamic status. Document rhythm before, during and after procedure.
- If rhythm does not covert within ten (10) seconds, follow ICEMA Reference #11050 -Tachycardias - Adult.

IV. REFERENCE

<u>Number</u>	<u>Name</u>
7040	Medication - Standard Orders
15010	Trauma - Adult (15 years of age or older)



CARDIAC ARREST - ADULT

I. FIELD ASSESSMENT/TREATMENT INDICATORS

Cardiac arrest in a non-traumatic setting.

II. BLS INTERVENTIONS

- Assess patient, begin CPR according to current AHA Guidelines, and maintain appropriate airway.
 - Compression rate shall be 100 per minute utilizing 30:2 compression-to-ventilation ratio for synchronous CPR prior to placement of advanced airway.
 - Ventilatory volumes shall be sufficient to cause adequate chest rise.
- Place patient on AED. CPR is **not** to be interrupted except briefly for rhythm assessment.

III. LIMITED ALS (LALS) INTERVENTIONS

- Initiate CPR while applying the AED.
- Establish advanced airway when resources are available, with minimal interruption to chest compressions. After advanced airway established, compressions would then be continued at 100 per minute without pauses during ventilations.
- Establish peripheral intravenous access and administer a 500 ml bolus of normal saline (NS).
- Refer to ICEMA Reference #12010 - Determination of Death on Scene.
- ~~• Obtain blood glucose level, if indicated administer:
 - Dextrose per ICEMA Reference #7040 Medication Standard Orders.
 - May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #7040 Medication Standard Orders if indicated.~~

- ~~● If suspected narcotic overdose with severely decreased respiratory drive administer:
 - ~~➤ Naloxone per ICEMA Reference #7040 Medication Standard Orders.~~~~

NOTE: Base hospital contact is required to terminate resuscitative measures.

IV. ALS INTERVENTIONS

- Initiate CPR while applying the cardiac monitor.
- Determine cardiac rhythm and defibrillate if indicated. Begin a two (2) minute cycle of CPR.
- Obtain IV/IO access.
- Establish advanced airway when resources are available, with minimal interruption to chest compressions. After advanced airway established, compressions would then be continued at 100 per minute without pauses during ventilations. Ventilations should be given at a rate of one (1) breath every six (6) to eight (8) seconds.
- Utilize continuous quantitative waveform capnography, for confirmation and monitoring of endotracheal tube placement and for assessment of ROSC and perfusion status. Document the shape of the wave and the capnography number in mmHG.
- Insert NG/OG Tube to relieve gastric distension per ICEMA Reference #10190 - ICEMA Approved Skills.
- ~~● Obtain blood glucose level. If indicated administer:
 - ~~➤ Dextrose per ICEMA Reference #7040 Medication Standard Orders.~~
 - ~~➤ May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #7040 Medication Standard Orders if indicated.~~~~
- ~~● If suspected narcotic overdose with severely decreased respiratory drive administer:
 - ~~➤ Naloxone per ICEMA Reference #7040 Medication Standard Orders.~~~~

- If sustained ROSC is achieved, obtain a 12-lead ECG and contact a STEMI base hospital ~~for destination decision~~ and transport to a SRC, refer to ICEMA Reference #8130 - Destination Policy.
- Utilize continuous waveform capnography, to identify loss of circulation.
- For continued signs of inadequate tissue perfusion after successful resuscitation, administer:
 - Dopamine per ICEMA Reference #7040 - Medication - Standard Orders to maintain signs of adequate tissue perfusion.
- Base hospital physician may order additional medications or interventions as indicated by patient condition.

Ventricular Fibrillation/Pulseless Ventricular Tachycardia

- Defibrillate at 360 joules for monophasic or biphasic equivalent per manufacture. If biphasic equivalent is unknown use maximum available.
- Perform CPR for two (2) minutes after each defibrillation, without delaying to assess the post-defibrillation rhythm.
- Administer Epinephrine per ICEMA Reference #7040 - Medication - Standard Orders during each two (2) minute cycle of CPR after every defibrillation unless capnography indicates possible ROSC.
- Reassess rhythm after each two (2) minute cycle of CPR. If VF/VT persists, defibrillate as above.
- After two (2) cycles of CPR, consider administering:
 - Lidocaine per ICEMA Reference #7040 - Medication - Standard Orders.
- If patient remains in pulseless VF/VT after five (5) cycles of CPR, consult base hospital.

Pulseless Electrical Activity (PEA) or Asystole

- Assess for reversible causes and initiate treatment.
- Continue CPR with evaluation of rhythm every two (2) minutes.
- Administer fluid bolus of 300 ml NS IV, may repeat.

- Administer Epinephrine per ICEMA Reference #7040 - Medication - Standard Orders during each two (2) minute cycle of CPR after each rhythm evaluation.

Termination of Efforts in the Prehospital Setting

- The decision to terminate efforts in the field should take into consideration, first, the safety of personnel on scene, and then family and cultural considerations.
- Consider terminating resuscitative efforts in the field if ALL of the following criteria are met:
 - No shocks were delivered.
 - No ROSC after a minimum of ten (10) minutes of advance cardiac life support (ACLS).
- Base hospital contact is required to terminate resuscitative measures. A copy of the ECG should be attached to the patient care report for documentation purposes.

V. REFERENCES

<u>Number</u>	<u>Name</u>
7040	Medication - Standard Orders
8130	Destination Policy
10190	ICEMA Approved Skills
12010	Determination of Death on Scene



STROKE TREATMENT - ADULT

I. FIELD ASSESSMENT/TREATMENT INDICATORS

Patient exhibiting signs/symptoms of a possible stroke. These signs may include: speech disturbances, altered level of consciousness, parasthesias, new onset seizures, dizziness unilateral weakness and visual disturbances.

II. LIMITED ALS (LALS)/ALS INTERVENTIONS

- Vascular access.
- Obtain blood glucose.
- **Modified Los Angeles County Prehospital Stroke Screen (mLAPSS):** A screening tool used by EMS field personnel to assist in identifying patients who may be having a stroke.

mLAPSS Criteria: The patient is *mLAPSS positive*, if “yes” on Criteria #1 - ~~5~~ 4 and exhibits unilateral weakness on Criteria #6.

mLAPSS Criteria	Yes	No	
1. Age over 40 years? <u>Age over 17 years?</u>			
2. No prior history of seizure disorder?			
3. New onset of neurologic symptoms in last 24 hours?			
4. Patient was ambulatory at baseline prior to event?			
5. Blood glucose between 60 and 400?			
6. Exam (<i>look for obvious asymmetry</i>):	<u>Normal-Bilaterally</u>	<u>Right</u>	<u>Left</u>
• Facial Smile/Grimace	<input type="checkbox"/>	<input type="checkbox"/> Droop <input type="checkbox"/> Normal	<input type="checkbox"/> Droop <input type="checkbox"/> Normal
• Grip	<input type="checkbox"/>	<input type="checkbox"/> Weak Grip <input type="checkbox"/> Normal	<input type="checkbox"/> Weak Grip <input type="checkbox"/> Normal
	<input type="checkbox"/>	<input type="checkbox"/> No Grip <input type="checkbox"/> Normal	<input type="checkbox"/> No Grip <input type="checkbox"/> Normal
• Arm Weakness	<input type="checkbox"/>	<input type="checkbox"/> Drifts Down <input type="checkbox"/> Normal	<input type="checkbox"/> Drifts Down <input type="checkbox"/> Normal
		<input type="checkbox"/> Falls Down Rapidly	<input type="checkbox"/> Falls Down Rapidly

		<input type="checkbox"/> Normal	<input type="checkbox"/> Normal
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- Ask when “last seen normal” or without stroke symptoms.
- If “last seen normal” plus transport time is greater than twelve (12) hours, transport to the closest receiving hospital.
- If “last seen normal” plus transport time is less than twelve (12) hours, or a “wake-up stroke”, transport to closest NSRC.
- In San Bernardino County, if Stroke Scale is positive, initiate “Stroke Alert”, contact NSRC base hospital and transport immediately.
- If mLAPSS negative and stroke is still suspected, contact NSRC base hospital.
- Obtain and document on scene family phone number.
- Consider 12-lead ECG (ALS only).
- **Thrombolytic Assessment:** If time is available, and the patient or family can provide the information, assess the patient using the criteria listed below and report to ED personnel:

Thrombolytic Assessment Criteria	Yes	No
Onset greater than 4 hours?		
History of recent bleeding?		
Use of anticoagulant?		
Major surgery or serious trauma in the previous fourteen (14) days?		
Sustained systolic blood pressure above 185 mm Hg?		
Recent stroke or intracranial hemorrhage?		



TRAUMA TRIAGE CRITERIA ~~AND~~ DESTINATION POLICY

I. PURPOSE

To establish Trauma Triage Criteria that is consistent with the American College of Surgeons standards that will help identify trauma patients in the field, and based upon their injuries, direct their transport to an appropriate Trauma Center (TC).

~~II. DEFINITIONS~~

~~**Adult Patients:** A person appearing to be >15 years of age.~~

~~**Pediatric Patients:** A person appearing to be <15 years of age.~~

~~**Critical Trauma Patients (CTP):** Patients meeting ICEMA's Critical Trauma Patient Criteria.~~

~~**Trauma Center:** A licensed general acute care hospital designated by ICEMA's Governing Board as a trauma hospital in accordance with State laws and regulations.~~

~~**Pediatric Trauma Center:** A licensed acute care hospital which usually treats (but is not limited to) persons <15 years of age, designated by ICEMA's Governing Board, meets all relevant criteria, and has been designated as a pediatric trauma hospital, according to California Code of Regulations, Title 22, Division 9, Chapter 7, Section 100261.~~

~~**Inadequate Tissue Perfusion:** Evidenced by the presence of cold, pale, clammy, mottled skin, and/or capillary refill time >2 seconds. Pulse rate will increase in an attempt to pump more blood. As the pulse gradually increases (tachycardia), it becomes weak and thready. Blood pressure is one of the last signs to change (hypotension). Altered level of consciousness may also be an indicator to inadequate tissue perfusion, especially in the very young.~~

III. POLICY

A. Transportation For Patients Identified as a CTP

~~Adult patients will be transported to the closest Trauma Center.~~

~~Pediatric patients will be transported to a Pediatric Trauma Center when there is less than a 20 minute difference in transport time to the Pediatric Trauma Center versus the closest Trauma Center.~~

~~Helicopter transport shall not be used unless ground transport is expected to be greater than 30 minutes and EMS aircraft transport is expected to be significantly more expeditious than ground transport. If an EMS aircraft is dispatched, adherence to ICEMA Reference #8070—Aircraft Rotation Policy (in San Bernardino County) is mandatory.~~

~~Patients with an unmanageable airway shall be transported to the closest receiving hospital for airway stabilization. Trauma base hospital contact shall be made.~~

~~Hospital Trauma Diversion Status: Refer to ICEMA Reference #8060—San Bernardino County Hospital Diversion Policy.~~

~~Multi-Casualty Incident: Refer to ICEMA Reference #5050—Medical Response to a Multi-Casualty Incident Policy.~~

~~CTP meeting physiologic or anatomic criteria with associated burns will be transported to the closest Trauma Center.~~

AB. **Trauma Triage Criteria of the CTP**

Measure vitals and Level of Consciousness (LOC).

A patient shall be transported to the closest Trauma Center (TC) if any one physiologic criteria is present following a traumatic event. Trauma base hospital contact shall be made when any one of the following physiologic and/or anatomic criteria is present following a traumatic event (Trauma base hospital contact shall be made):

1. Physiologic Indicators:

- **Glasgow Coma Scale (GCS)/~~Level of Consciousness (LOC)~~**
 - **Adult and Pediatric**
 - ~~GCS ≤ 13~~
 - ~~LOC > 3 minutes~~
 - ~~nausea/vomiting in the setting of significant head trauma~~
 - ~~**Pediatric**~~
 - ~~GCS ≤ 13~~
 - ~~any LOC~~
 - ~~nausea/vomiting in the setting of significant head trauma~~
- **Respiratory**

- Adult and Pediatric
 - ~~▪ requiring assistance with ventilation or~~
 - ~~▪ hypoxic = O₂ saturation that is consistently < 90% and a~~
 - ~~▪ RR < 10 or > 29~~
 - ~~▪ (RR < 20 for infant < 1 year old) or need for ventilatory support~~

- ~~➤ **Pediatric**~~
 - ~~▪ requiring assistance with ventilation or~~
 - ~~▪ hypoxic = O₂ saturation that is consistently < 90% and a~~
 - ~~▪ < 10 years: RR < 12 or > 40~~
 - ~~▪ < 1 year: RR < 20 or > 60~~

- **Hypotension**

- **Adult**
 - ~~▪ exhibits inadequate tissue perfusion~~
 - BP < 90 mmHG
 - tachycardia
- **Pediatric**
 - exhibits inadequate tissue perfusion
 - abnormal vital signs (according to age)

2. **Anatomic Indicators:**

- **Penetrating injuries to head, neck, torso and extremities proximal to the knee or elbow**

- ~~➤ head~~
- ~~➤ neck~~
- ~~➤ chest~~
- ~~➤ abdomen/pelvis extremity proximal to the knee or elbow~~

- **Blunt chest trauma resulting in chest wall instability or deformity (e.g., flail chest or ecchymosis)**

- ~~➤ ecchymosis~~
- ~~➤ unstable chest wall~~
- ~~➤ flail chest~~

- **Two (2) or more proximal long bone fractures (femur, humerus)**

- **Crushed, degloved, mangled or pulseless extremity**

- Amputation proximal to the wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis
- ~~Severe tenderness to:~~
 - ~~head~~
 - ~~neck~~
 - ~~torso~~
 - ~~abdomen~~
 - ~~pelvis~~
- ~~Paralysis:~~
 - ~~traumatic~~
 - ~~loss of sensation~~
 - ~~suspected spinal cord injury~~
- ~~Abdomen:~~
 - ~~tenderness with firm and rigid abdomen on examination~~
- ~~Amputations:~~
 - ~~above the wrist~~
 - ~~above the ankle~~
- ~~Fractures:~~
 - ~~evidence of two or more proximal long bone fractures (femur, humerus)~~
 - ~~open fractures~~
 - ~~two or more long bone fractures~~
- ~~Skull Deformity~~
- ~~Major Tissue Disruption~~
- ~~Suspected Pelvic Fracture~~

A patient shall be transported to the closest TC if any one (1) anatomic criteria is present following a traumatic event. Trauma base hospital contact shall be made.

If physiologic or anatomic criteria is not met, assess mechanism of injury and evidence of high-energy impact.

3. Mechanism of Injury:

- Falls:

- Adults: > 20 feet (one story is equal to 10 feet)
- Pediatric: > 10 feet or two (2) to three (3) times the child's height

- High-risk auto crash

- Intrusion, including roof: > 12 inches occupant site
- Ejection (partial or complete) from automobile
- Death in the same passenger compartment
- Vehicle telemetry data consistent with a high-risk injury

- Auto versus pedestrian/bicyclist thrown, run over, or with significant (> 20 mph) impact

- Motorcycle crash > 20 mph

If a patient has one or more of the following mechanisms of injury **with** any of the above physiologic or anatomic criteria transport to the closest TC~~Trauma Center~~.

If there are no associated physiologic or anatomic criteria ~~and the potential CTP~~ meets one or more of the following mechanisms of injury, contact a Trauma base hospital for physician consultation to determine the patient destination. In some cases, a Trauma base hospital may direct a patient a non-trauma receiving hospital.

- ~~High Speed Crash:~~

- ~~initial speed > 40 mph~~
- ~~major auto deformity > 18 inches~~
- ~~intrusion into passenger space compartment > 12 inches~~
- ~~unrestrained passenger~~
- ~~front axle rearward displaced~~
- ~~bent steering wheel/column~~

~~➤ — starred windshield~~

● ~~Vehicle Rollover:~~

- ~~➤ — complete rollover~~
- ~~➤ — rollover multiple times~~
- ~~➤ — unrestrained~~
- ~~➤ — restrained with significant injuries or high rate of speed~~

● ~~Motorecycle Crash:~~

- ~~➤ — 20 mph and/or~~
- ~~➤ — separation of rider from the bike with significant injury~~

● ~~Non-Motorized Transportation (e.g., bicycles, skate boards, skis, etc.):~~

- ~~➤ — with significant impact > 20 mph and/or~~
- ~~➤ — pedestrian thrown > 15 feet or run over~~

● ~~Pedestrian:~~

- ~~➤ — auto pedestrian with significant impact > 10 mph~~
- ~~➤ — pedestrian thrown > 15 feet or run over~~

● ~~Blunt Trauma to:~~

- ~~➤ — head~~
- ~~➤ — neck~~
- ~~➤ — torso~~

● ~~Extrication:~~

- ~~➤ — 20 minutes with associated injuries~~

● ~~Death of Occupant:~~

- ~~➤ — in same passenger space~~

● ~~Ejection:~~

- ~~partial or complete ejection of patient from vehicle~~

● ~~Falls:~~

- ~~Adult~~
 - ~~≥ 15 feet~~
- ~~Pediatric~~
 - ~~3 times the child's height or > 10 feet~~
- ~~Submersion with Trauma~~

Assess special patient or system considerations

4. Age and Co-Morbid Factors

Assess special patient or system considerations.

If the patient does not meet any of the above criteria, make Trauma base hospital contact to determine if a ~~TC~~Trauma Center should be the destination for the following patients:

- Older adults > 65 years of age
 - Risk of Injury/death increases after age 65
 - SBP < 110 might represent shock after age 65
 - Low impact mechanism (e.g., ground level falls might result in severe injury)
- Children
 - Should be triaged preferentially to pediatric capable trauma centers
 - Pediatric patients will be transported to a Pediatric Trauma Center when there is less than a 20 minute difference in transport time to the Pediatric Trauma Center versus the closest TC
- Anti-coagulants and bleeding disorders
 - Patients are at high risk for rapid deterioration
- Burns (Refer to ICEMA Reference #8030 - Burn Criteria Destination Policy)
 - Without other trauma mechanism triage to closest receiving hospital or burn center
 - With trauma mechanism, triage to TC. Make Trauma base hospital contact.
- Pregnancy > 20 weeks

- EMS Provider Judgement

- ~~pediatric < 9 years of age~~
- ~~adult > 65 years of age~~
- ~~history of respiratory, cardiac, liver disease, or diabetes~~
- ~~history of hematologic or immunosuppressive conditions~~
- ~~isolated extremity injury with neurovascular compromise (time sensitive injury)~~
- ~~pregnant (> 20 weeks in gestation)~~
- ~~inability to communicate, e.g., language, psychological and/or substance impairment~~

C. Exceptions

The patient meets Trauma Triage Criteria ~~is identified as a CTP or a potential CTP~~, but presents with the following:

- **Unmanageable Airway:**
 - If an adequate airway cannot be maintained with a BVM device and the paramedic (EMT-P) is unable to indicate or if indicated, perform a successful needle cricothyrotomy:
 - Transport to the closest receiving hospital, when the patient requires intubation. RSI should be performed in a hospital setting and not on scene
 - Refer to ICEMA Reference #8120 - Continuation of Care for rapid transport to the nearest TC.
 - ~~an adequate airway cannot be maintained with a BVM device; and~~
 - ~~the paramedic is unable to intubate or if indicated, perform a successful needle cricothyrotomy.~~
- **Severe Blunt Force Trauma Arrest:**
 - Refer to ICEMA Reference #12010 - Determination of Death on Scene.
 - Severe blunt force trauma, pulseless, without signs of life and cardiac electrical activity less than 40 bpm).
 - If indicated, pronounce on scene.
 - If patient does not meet determination of death criteria, transport to closest receiving hospital.
- **Penetrating Trauma Arrest:**
 - Refer to ICEMA Reference #12010 - Determination of Death on Scene.

- If the patient does not meet the “*Obvious Death Criteria*” in the ICEMA Reference #12010 - Determination of Death on Scene, contact the Trauma base hospital for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma with documented asystole in at least two (2) leads, and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient.
- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without Trauma base hospital contact.
- If indicated, transport to the closest receiving hospital.
- **Burn Patients:**
 - Refer to ICEMA Reference #8030 - Burn Criteria and Destination Policy.
 - Burn patients meeting Trauma Triage CriteriaCTP, **transport to the closest TCTrauma Center.**
 - Burn patients not meeting Trauma Triage CriteriaCTP, **transport to the closest receiving hospital or a Burn Center.**
- **EMS Aircraft Indications:**

If EMS aircraft is dispatched, adherence to ICEMA Reference #8070 - Aircraft Rotation Policy (San Bernardino County Only) is mandatory.

- An EMS aircraft may be dispatched for the following events:
 - MCI
 - Prolonged extrication time (> 20 minutes)
 - **Do Not Delay Patient Transport** waiting for an en route EMS aircraft
 - **Utilize the hospital as the landing zone or rendezvous point**

- **EMS Aircraft Transport Contraindications:**

- The following are contraindications for EMS aircraft patient transportation:
 - Patients contaminated with Hazardous Material who cannot be decontaminated and who pose a risk to the safe operations of the EMS aircraft and crew.
 - Violent patients with psychiatric behavioral problems and uncooperative patients under the influence of alcohol and/or mind altering substances who may interfere with the safe operations of an EMS aircraft during flight.
 - Stable patients.
 - Ground transport is < 30 minutes.
 - Traumatic cardiac arrest.
 - Other safety conditions as determined by pilot and/or crew.

- **Remote Locations:**

- Remote locations may be exempted from specific criteria upon written permission from the ICEMA Medical Director.

D. Considerations

- Scene time should be limited to 10 minutes under normal circumstances.
- ~~Burn patients with associated trauma, should transported to the closest Trauma Center. Trauma base hospital contact shall be made.~~

E. Radio Contact

- If not contacted at scene, the receiving ~~TC~~Trauma Center must be notified as soon as possible in order to activate the trauma team.
- Patients ~~CTP~~ meeting all Trauma Triage Criteria (physiologic, anatomic, mechanism of injury, and/or age and co-morbid factors), a Trauma base hospital shall be contacted in the event of patient refusal of assessment, care and/or transportation.
- ~~In Inyo and Mono Counties, the assigned base hospital should be contacted for CTP~~ consultation and destination.

F. Hospital Trauma Diversion Status

Refer to ICEMA Reference # 8060 - San Bernardino County Hospital Diversion Policy.

G. Multi-Casualty Incident

Refer to ICEMA Reference #5050 - Medical Response to a Multi-Casualty Incident Policy.

III.V. REFERENCES

<u>Number</u>	<u>Name</u>
5050	Medical Response to a Multi-Casualty Incident Policy
8030	Burn Criteria and Destination Policy
8060	San Bernardino County Hospital Diversion Policy
8070	Aircraft Rotation Policy (San Bernardino County Only)
12010	Determination of Death on Scene