AGENDA

ICEMA
MEDICAL ADVISORY COMMITTEE

December 17, 2015

1300

Purpose: Information Sharing

Meeting Facilitator: Phong Nguyen

Timekeeper: Danielle Ogaz

Record Keeper: Danielle Ogaz

	AGENDA ITEM	PERSON(S)	DISCUSSION/ACTION
I.	Welcome/Introductions	Phong Nguyen	
II.	Approval of Minutes	All	Discussion/Action
III.	Discussion/Action Items		
	A. Standing EMS System Updates		
	1. Review of Action Items 2. Trauma Program 3. STEMI Program: STEMI Data • Chest Pain Society Accreditation 4. Stroke Program: Stroke Data 5. CQI Report Update • Core Measures • Intubation and Capnography Data Task Force 6. SAC Update	1. Phong Nguyen 2. Chris Yoshida-McMath 3. Chris Yoshida-McMath 4. Chris Yoshida-McMath 5. Phong Nguyen • Ron Holk • Pam Martinez/ Joe Powell 6. Phong Nguyen	1. Discussion/Action 2. Discussion 3. Discussion 4. Discussion 5. Discussion 6. Discussion
	B. EMS Trends		
	1. TXA Study Update 2. Paramedicine Step I Research Update 3. Cardiac Arrest Survival Enhancement Project (CARES/ART)	1. Reza Vaezazizi/ Michael Neeki 2. Michael Neeki 3. Reza Vaezazizi	1. Discussion 2. Discussion 3. Discussion
	C. ePCR User Interface Task Force	Ron Holk	Discussion
	D. Needle Cricothyrotomy	Reza Vaezazizi	Discussion/Action
	E. Use of Fentanyl Outside of Protocol	Ron Holk	Discussion/Action
	F. Protocol Update	Ron Holk	Discussion
	1. 5040 - Radio Communication Policy		
	2. 6070 - Cardiovascular STEMI Receiving Centers Criteria and Destination Policy		
	3. 6100 - Neurovascular Stroke Receiving Centers Criteria and Destination Policy		

	4. 8130 - Destination Policy		
	G. Protocol Review	Ron Holk	Discussion/Action
	1. 5030 - Procedure for Adoption of Protocols and Policies		
	2. 6090 - Fireline Paramedic		
	3. 7010 - BLS/LALS/ALS Standard Drug & Equipment List		
	4. 7020 - Aircraft Standard Drug & Equipment List		
	5. 7040 - Medication – Standard Orders		
	6. 8120 - Continuation of Care (San Bernardino County Only)		
	7. 9080 - Care of Minors in the Field		
	8. 10190 - ICEMA Approved Skills		
	9. 11070 - Cardiac Arrest - Adult		
	10. 11110 - Stroke Treatment - Adult		
	11. 15030 - Trauma Triage Criteria and Destination Policy		
	H. 2016 Meeting Dates	All	Discussion
V.	Public Comment	All	Discussion
VI.	Round Table/Announcements	All	Discussion
VII.	Future Agenda Items	All	Discussion
VIII.	Next Meeting Date: February 25, 2016	All	Discussion
IX.	Adjournment	Phong Nguyen	Action
X.	Closed Session		
	A. Case Reviews		

MINUTES

MEDICAL ADVISORY COMMITTEE

October 22, 2015

1300

AGENDA ITEM		DISCUSSION/FOLLOW UP	RESPONSIBLE PERSON(S)
I.	WELCOME/INTRODUCTIONS	Meeting called to order at 1301.	Michael Neeki
II.	APPROVAL OF MINUTES	The August 27, 2015, minutes were approved. Motion to approve. MSC: Kevin Parkes/Joy Peters APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	
III.	DISCUSSION ITEMS		
	A. Standing EMS System Updates		
	1. Review of Action Items	Action items were incorporated into the agenda.	Michael Neeki
	2. Trauma Program	The next TSAC/TAC combo meeting is scheduled for February 24, 2016, at 1600, at ICEMA. The TSAC portion of the meeting is open to all of the EMS community but the TAC portion is a closed session for peer review.	Chris Yoshida-McMath
	3. STEMI Program: STEMI Data	No new updates. The next STEMI meeting is November 19, 2015, at 1300 at ICEMA.	Chris Yoshida-McMath
	4. Stroke Program: Stroke Data	No new updates. The next Stroke meeting is November 10, 2015, at 1300, at ICEMA.	Chris Yoshida-McMath
	5. CQI Report Update	Nothing to report.	Ron Holk
	• Core Measures	Nothing to report.	Ron Holk
	• Intubation and Capnography Data Task Force	Findings from the Task Force indicate that capnography and intubation use is much higher than indicated by the data reported in the Core Measures. Task Force recommendations are to be forwarded to the ePCR User Interface Task Force.	Pam Martinez/Joe Powell

		Motion to dissolve the Core Measures Intubation and Capnography Data Task Force. MSC: Lance Brown/Kevin Parkes APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	
	6. SAC Update	The October 14, 2015, meeting was canceled due to the lack of quorum. Meeting cancellation process was discussed and referred to SAC. The Redirection Pilot Program was extended through the end of November and will be reviewed at the next APOD Task Force meeting.	Kevin Parkes
	B. EMS Trends		
	1. TXA Study Update	To date, TXA has been administered 47 times, including 14 blunt traumas, 27 penetrating traumas, 2 blunt/penetrating traumas and 4 that were not traumas. California Prehospital Antifibrinolytic Study notes administration of TXA 147 times in hospital and 47 times in EMS. Riverside County is participating and data is currently being reviewed. Review data analysis meeting on November 17, 2015. A reminder was sent to the EMS Coordinators regarding documentation checklist to improve ePCR documentation.	
	2. Paramedicine Step I Research Update	A total of 352 surveys have been submitted to ARMC with approximately15% sampling of participating EMS providers.	
	3. Cardiac Arrest Survival Enhancement Project (CARES/ART)	Loma Linda and Colton Fire Departments have completed initial ART training; one (1) additional class will be conducted. Initial feedback from the training is positive. Further discussion needed regarding MAC's expectations for commonly used ACLS medications. CARES Registry is moving to a State	

		subscription model. Hospitals will need to report hospital data. Further information will be provided to MAC when available. There are currently 10 organizations reporting to CARES in California.	
	C. Task Force Report: ICEMA Protocol Survey	The survey regarding protocol changes was not completed. ICEMA may revisit protocol format changes in the future. Motion to discharge Protocol Survey Task Force. MSC: Susie Moss/Lance Brown APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	Henry Perez
	D. Review of MAC Membership	Leslie Parham will represent EMS Officers and Joe Powell will represent Public Transport Providers approved by Cal Chiefs.	Ron Holk
	E. ePCR Task Force	The ePCR User Interface Task Force was discussed. See objectives, positions and selection rules (attached). ICEMA acknowledged the effort made by participants in the ePCR Working Group. The objective is to provide guidance and suggestions to MAC on the ePCR user interface. Rules of participation and task force membership were discussed. Motion to form an ePCR User Interface Task Force according to proposed list and rules. MSC: Moss/Sallenbach Motion was retracted by Moss after further discussion. Motion to form an ePCR User Interface Task Force according to the proposed membership list and participation rules. Current ePCR Working Group to forward suggested taskforce membership for MAC review and endorsement. MSC: Kevin Parkes/Debbie Bervel APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	
	F. Routine use of Narcan and Glucose	The science regarding the use of glucose and Narcan in cardiac arrest was discussed.	

		MAC requested that ICEMA review possible changes to ICEMA Reference #11070 - Cardiac Arrest for review at the December meeting.	
	G. Protocol Review		
	1. 7040 - Medication - Standard Orders	MAC requested the following changes for further review at the December meeting. • Delete references to stable/unstable. • Add titrate to SPO_2 < 94%.	
	2. 9080 - Care of Minors in the Field	Motion to endorse. MSC: Lance Brown/Susie Moss APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	
	3. ICEMA Approved Skills	Changed name to Procedure - Standard Orders. Motion to endorse. MSC: Leslie Parham/Joy Peters APPROVED Ayes: Debbie Bervel, Lance Brown, Susie Moss, Michael Neeki, Leslie Parham, Joy Peters, Kevin Parkes, Todd Sallenbach	
IV.	PUBLIC COMMENT	None	All
V.	ROUND TABLE/ ANNOUNCEMENTS	None	All
VI.	FUTURE AGENDA ITEMS	$ETCO_2$ Device - Colorimetric	
VII.	NEXT MEETING: December 17, 2015		
VIII.	ADJOURNMENT	Meeting closed at 1433.	Michael Neeki
IX.	CLOSED SESSION		
	A. Case Review	None	

Attendees:

NAME	MAC POSITION	EMS AGENCY STAFF	POSITION
☐ VACANT ☐ Jeff Grange - LLUMC	Trauma Hospital Physicians (2)	☒ Reza Vaezazizi, MD	Medical Director
☐ Phong Nguyen - RDCH ☒ Todd Sallenbach - HDMC (Chair)	Non-Trauma Base Physician s (2)	☐ Tom Lynch	EMS Administrator
☐ Aaron Rubin - Kaiser	Non-Base Hospital Physician	☐ Denice Wicker-Stiles	Assist. Administrator
☒ Michael Neeki - Rialto FD	Public Transport Medical Director	☐ George Stone	Program Coordinator
☐ Sam Chua - AMR	Private Transport Medical Director	☒ Ron Holk	EMS Nurse Specialist
☒ Debbie Bervel - SB City FD	Fire Department Medical Director	☒ Chris Yoshida-McMath	EMS Nurse Specialist
☒ Joy Peters - ARMC	EMS Nurses	☐ Danielle Ogaz	EMS Specialist
☐ Joe Powell - Rialto FD	EMS Officers		
☒ Leslie Parham	Public Transport Medical Rep (Paramedic/RN)		
☒ Susie Moss	Private Transport Medical Rep (Paramedic/RN)		
☒ Lance Brown	Specialty Center Medical Director		
☐ Joanna Yang - LLUMC	Specialty Center Coordinator		
☐ Troy Pennington	Private Air Transport Medical Director		
☐ Stephen Patterson - Sheriff's Air Rescue	Public Air Transport Medical Director		
☐ Micheal Guirguis - SB Comm Center	PSAP Medical Director		
☐ Andrew Stevens	Inyo County Representative		
☐ Rosemary Sachs	Mono County Representative		
☒ Kevin Parkes	SAC Liaison		
☐ Andrea Thorp	Pediatric Critical Care Physician		

GUESTS	AGENCY
Sandy Carnes	Rancho Cucamonga FD
Carly Crews	SB City FD
Henry Perez	Colton FD
Lisa Higuchi	AMR
Pam Martinez	Ontario FD
Miranda Mulhull	SB County FD
Bob Tyson	Redlands FD
Christopher Linke	AMR
Andrea Wisham	LLUMC
Dawen Brokie	LLUMC

EPCR TASKFORCE

OCTOBER 22, 2015 MAC

PURPOSE

- To provide guidance and suggestions on the user interface of the ePCR form.

SUGGESTED POSITIONS

- Field Public/Fire Medic
- Field Private Medic
- EMS CQI/Coordinator-Public
- EMS CQI/Coordinator-Private
- Hospital Representative-PLN's
- MAC Representative-Facilitator
- IT Representative

SELECTION RULES

- Must currently use the ICEMA EPCR system
- No duplication of members from the same provider agency or hospital
- Send letters of recommendation to Ron Holk, RN @ ICEMA by Friday, November 15, 2015.
- The final slate of members will be presented at the December 17, 2015 MAC meeting.

POLICIES/PROTOCOLS CHANGES

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		
5040	Radio Communication Policy	• Clarification of base hospital contact for minors being transported to a receiving hospital. • Adds references to other protocols/policies. • Changes reference to base hospital. • Removed Patient Destination. • Added policy references.
6000 SPECIALTY PROGRAM/ PROVIDER POLICIES		
6070	Cardiovascular STEMI Receiving Centers Criteria and Destination Policy	• Renamed Cardiovascular ST Elevation Myocardial Infarction Receiving Centers Designation Policy. • Focuses on the STEMI Receiving Center designation process. • Added designation requirement Accreditation from the Society of Cardiovascular Patient Care. • Destination information moved to Destination Policy (ICEMA Reference # 8130).
6100	Neurovascular Stroke Receiving Centers Criteria and Destination Policy	• Renamed Neurovascular Stroke Receiving Centers Designation. • Focuses on the Stroke Receiving Center designation process. • Destination information moved to Destination Policy (ICEMA Reference # 8130).
7000 STANDARD DRUG & EQUIPMENT LISTS		
None		

POLICIES/PROTOCOLS CHANGES

8000 TRANSPORT/TRANSFERS AND DESTINATION POLICIES		
8130	Destination Policy	• Revised Purpose statement. • Added two (2) definitions - ROSC and Specialty Care Center. • Section V.: Removed protocol and incorporated into purpose. • Renamed Section VIII.: Specialty Care Services to Specialty Care Centers. • Section VIII.: Added all destination information for STEMI and stroke patients.
9000 GENERAL PATIENT CARE POLICIES		
None		
10000 SKILLS		
None		
11000 ADULT EMERGENCIES		
None		
12000 END OF LIFE CARE		
None		
13000 ENVIRONMENTAL EMERGENCIES		
None		
14000 PEDIATRIC EMERGENCIES		
None		
15000 TRAUMA		
None		
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.		
None		

RADIO COMMUNICATION POLICY

I. PURPOSE

To define the requirements for communication reports between EMS field personnel and hospitals. The purpose of communication between EMS field personnel and hospitals is to relay essential information to allow the hospital to prepare for the patient, and as necessary, to allow a ~~B~~base ~~Station~~ hospital to provide Medical Control and consultation to the EMS field personnel~~ALS provider~~. ~~The communication report should be brief, concise, and include only the information that impacts the care of the patient in the field, and when the patient initially arrives in the hospital. It should not include unnecessary information, or impede the EMS providers focus on patient care. The communications report is not intended to be the complete patient report nor is it equivalent to the "face-to-face" report to the Emergency Department staff at the hospital. Communication reports should be given to the hospital by EMS while on scene, or as soon as possible after departing the scene. Transport of unstable patients or patients meeting Trauma Triage Criteria shall not be delayed for a communications report. ALS providers may only accept orders from Base Stations within the ICEMA region. Patient names shall not be given over the radio except at the request of the base station physician, and with the prior approval of the patient. Base Station Physicians may give any medically appropriate order within the prehospital provider's scope of practice.~~

II. PROCEDURE

A. General Guidelines

- The communication report should be brief, concise, and include only the information that impacts the care of the patient in the field, and when the patient initially arrives in the hospital.
- It should not include unnecessary information, or impede the EMS field personnel's focus on patient care.
- The communications report is not intended to be the complete patient report nor is it equivalent to the "face-to-face" report to the Emergency Department (ED) staff at the hospital.
- Communication reports should be given to the hospital by EMS field personnel while on scene, or as soon as possible after departing the scene.

- Transport of unstable patients or patients meeting Trauma Triage Criteria shall not be delayed for a communications report.

- EMS field personnel may only accept orders from base hospitals within the ICEMA region.

- Patient names shall not be given over the radio except at the request of the base hospital physician, and with the prior approval of the patient.

- Base hospital physicians may give any medically appropriate order within the EMS field personnel's scope of practice.

B. Basic Life Support (BLS) Units

BLS communication reports contain minimal information since BLS units:

- Cannot be diverted; and

- Cannot carry out medical control orders.

BLS communications reports contain:

- The EMS unit identifier, and that it is a BLS report;

- The patient's age, sex, chief complaint/injury, and estimated time of arrival (ETA);

- Vital signs, Glasgow Coma Scale, and other pertinent signs/ symptoms and information.

C. Advanced Life Support (ALS) Units

Receiving Hospital:

Receiving hospital communication reports are ~~designed~~ for~~:~~ ~~I~~informing the receiving hospital (base ~~station~~ hospital or otherwise) of incoming patients **not** requiring medical control orders or consultation.

Receiving hospital communications reports contain:

- The EMS unit identifier, that it is a receiving hospital report, and the EMS field personnel~~provider~~'s name/certification level;

- The patient's age, sex, chief complaint/injury and ETA;

- Information that impacts patient care.

Base Hospital:

Base ~~Station~~ hospital communication reports are for:

- Requesting consultation or medical control orders from a base ~~Station~~hospital;
- Informing or consulting with a s~~S~~pecialty ~~B~~base hospital ~~Station~~ (Trauma, STEMI, stroke center, etc.).
- Patients receiving ALS interventions:
  - Who do not improve; or
  - Who are not being transported by ambulance; or
  - Prior to terminating resuscitative efforts.
  - Unsuccessful procedures per ICEMA Reference #10190 - Procedure - Standard Orders.
- All patients under nine (9) years old that are not transported by ambulance (parent or guardian refusal). Base hospital contact shall be made while the EMS field personnel~~provider~~ is on scene (if safe) per ICEMA Reference #9080 - Care of Minors in the Field.
- Interfacility transfers needing medications and/or a destination change per ~~protocol~~ICEMA Reference #8010 - Interfacility Transfer Guidelines.
- Multi~~ple -~~Casualty Incidents (MCI) per ~~protocol #5050~~ICEMA Reference #5050 - Medical Response to a Multi-Casualty Incident.

Base ~~Station~~ hospital communications reports ~~are to~~shall contain:

- The EMS unit identifier, that it is a b~~B~~ase ~~Station~~ hospital report, and the EMS field personnel~~provider~~'s name/certification level;
- The severity of the patient, and if the patient is a "specialty care" patient (Trauma, STEMI, stroke, etc.);
- Patient age, sex, general appearance, weight in kilos, and level of responsiveness (or Glasgow Coma Scale when appropriate);
- Chief complaint/injuries, and mechanism of injury/patient situation;

- Vital signs, cardiac monitor reading, and remarkable physical exam findings;
- Pertinent medical history;
- Prior to contact treatment initiated and patient response;
- Information that impacts patient care;
- ETA.

Base ~~Stations~~ hospitals will provide:

- Contact time, and the name of the Mobile Intensive Care Nurse (MICN) (and ~~B~~base ~~Station~~ hospital ~~P~~physician when present)~~;~~.
- Consultation and medical control orders appropriate to the patient condition.
- Acknowledgement of prior to contact medications and patient response.

~~**PATIENT DESTINATION**~~

~~Patient/guardian/family/law enforcement requests for a given hospital with Emergency Department capability should be honored. Exceptions may include:~~

~~a) Patient condition and/or protocol require transport to a closer or more appropriate (Specialty) hospital.~~

~~b) All patients on a 5150 hold must go to the closest facility for medical clearance prior to transfer to a psychiatric facility.~~

~~c) Requested hospital is on internal disaster.~~

~~d) Requested hospital is significantly beyond the primary transport area of the transporting department or division.~~

~~In cases where the patient/guardian is demanding transport to a facility against the judgment of the paramedic, Base Station contact will be made, and patient destination becomes the responsibility of the Base Station Physician. If the patient/guardian continues to demand transport to a facility against the judgment of the Base Station Physician, they must be informed of the risks of their decision, up to and including death. The patient/guardian may sign a Release of Liability to go to their hospital~~

~~choice. The Patient Care Report will document the circumstances of the refusal.~~

D. EMS Aircraft~~HELICOPTER~~ Transports

In San Bernardino County, the San Bernardino County Communications Center (Comm Center) will assign the destination hospital for trauma patients when a request for EMS aircraft~~a helicopter~~ is received.

- When possible, Comm Center will notify ~~both~~ the ground and air transportation ~~EMS units and the responding helicopter of~~provider of the assigned destination hospital.
- Trauma b~~B~~ase hospital c~~C~~ontact should be made as soon as practical by the ground EMS field personnel or the flight ~~air~~crew.
- Whenever possible, **Trauma b~~B~~ase hospital contact will be made with the Trauma ~~Hospital~~Center that will actually be receiving the patient.**
- Upon arrival of the EMS aircraft~~helicopter~~, the ground EMS field personnel will give a patient report to the flight ~~air~~crew, and include:
  - The assigned destination hospital (if known);
  - If Trauma ~~B~~base hospital contact has been made (and with which Trauma ~~B~~base hospital); and
  - If the assigned destination hospital was changed (and the reason for the change).
- The ~~helicopter~~flight ~~air~~crew will contact the actual receiving Trauma Center~~Hospital~~ to:
  - Request a landing pad assignment;
  - Provide a patient report, or update on patient condition; and
  - Inform them if Trauma ~~B~~base hospital contact was originally made with a different Trauma ~~B~~base hospital.

If the original Trauma ~~B~~base hospital contact was made with a different Trauma ~~B~~base hospital, the actual receiving Trauma Center~~Hospital~~ will notify the original Trauma Base of the change in destination.

E. Interfacility Transfer~~TRANSPORT GUIDELINES (ALS) PROTOCOL 8010~~ (ICEMA Reference #8010 - Interfacility Transfer Guidelines)

Interfacility transport patients with a deteriorating condition significant enough to require medication administration and/or a destination change require ~~B~~base ~~Station~~ hospital contact.

- EMS field personnel~~Paramedics~~ may initiate prior to contact protocols, and shall make ~~B~~base ~~Station~~ hospital contact. The ~~B~~base ~~Station~~ hospital will be notified of the status change of the patient, the medications administered prior to contact and any need for further orders or destination changes.

- The ~~B~~base ~~Station~~ hospital shall notify both the referral hospital~~sending facility~~ and the original receiving hospital~~facility~~ of a destination change.

- The ~~B~~base ~~Station~~ hospital will include an evaluation of any destination change in the~~ir~~ base hospital ~~ICEMA~~ CQI report.

III. REFERENCES

Number	Name
5050	Medical Response to a Multi-Casualty Incident
8010	Interfacility Transfer Guidelines
9080	Care of Minors in the Field
10190	Procedure - Standard Orders

CARDIOVASCULAR ST ELEVATION MYOCARDIAL INFARCTION RECEIVING CENTERS DESIGNATION POLICY ~~CRITERIA AND DESTINATION POLICY~~

I. PURPOSE

A Cardiovascular ST Elevation Myocardial Infarction (STEMI) Receiving Center (SRC) will be the preferred destination for patients who access the 9-1-1 system meeting the defined criteria and show evidence of a STEMI on a 12-lead electrocardiogram (ECG). These patients will benefit from rapid interventions via cardiac catheterization interventions.

~~II. DEFINITIONS~~

~~**STEMI Base Hospital** - A licensed general acute care hospital that has emergency interventional cardiac catheterization capabilities that also function as a base hospital.~~

~~**STEMI Receiving Center (SRC)** - A licensed general acute care hospital that has emergency interventional cardiac catheterization capabilities.~~

~~**STEMI Referring Hospital (SRH)** - A licensed general acute care hospital that does not have emergency interventional cardiac catheterization capabilities.~~

II~~I~~. POLICY

The following requirements must be met for a hospital to be designated as a SRC by ICEMA:

- An ICEMA approved receiving hospital which is a full service general acute care hospital.
- Licensure as a Cardiac Catheterization Laboratory (Cath Lab).
- Intra-aortic balloon pump capability.
- Cardiovascular surgical services permit.
- An alert/communication system for notification of incoming STEMI patients, available twenty-four (24) hours per day, seven (7) days per week (i.e., in-house paging system).
- Provide continuing education (CE) opportunities twice per year for emergency medical services (EMS) field personnel in areas of 12-lead ECG acquisition and interpretation, as well as assessment and management of STEMI patients.

III~~V~~. STAFFING REQUIREMENTS

The hospital will have the following positions filled prior to becoming a SRC:

- Medical Directors

  The hospital shall designate two (2) physicians as co-directors of its SRC program. One (1) physician shall be a board certified interventional cardiologist with active Percutaneous Coronary Intervention (PCI) privileges. The co-director shall be a board certified emergency medicine physician with active privileges to practice in the emergency department.

- Nursing Coordinator

  The hospital shall designate a SRC Nursing Coordinator who is trained or certified in Critical Care nursing.

- On-Call Physician Consultants and Staff

  A daily roster of the following on-call physician consultants and staff that must be promptly available within thirty (30) minutes of notification.

  - Cardiologist with PCI privileges.
  - Cardiovascular Surgeon.
  - Cardiac Catheterization Laboratory Team.
  - Intra-aortic balloon pump nurse or technologist.

- Emergency Department Liaison Nurse

  The non-base hospital shall designate an SRC Emergency Department Liaison Nurse who has a minimum of two (2) years emergency department experience to facilitate communication and education between the Cath Lab, emergency department and EMS field personnel.

IV. INTERNAL HOSPITAL POLICIES

The hospital shall develop internal policies for the following situations:

- Fibrinolytic therapy protocol to be used only in unforeseen circumstances when PCI of a STEMI patient is not possible.

Acknowledgement that STEMI patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8060 - Requests for Hospital

Diversion Policy (San Bernardino County Only) (applies to physical plant breakdown threatening significant patient services or immediate patient safety issues, i.e., bomb threat, earthquake damage, hazardous material or safety and security of the hospital). A written notification describing the event must be submitted to ICEMA within twenty-four (24) hours.

- Prompt acceptance of STEMI patients from other SRHs that do not have PCI capability. STEMI diversion is not permitted except for internal disaster. Refer to ICEMA Reference #8120 - Continuation of Care (San Bernardino County Only). However, STEMI base hospitals are allowed to facilitate redirecting of STEMI patients to nearby SRCs when the closest SRC is over capacity to avoid prolonged door to intervention time. SRC and base hospitals shall ensure physician to physician contact when redirecting patients.

- Cath Lab Team activation policy which requires immediate activation of the team upon EMS notification when there is documented STEMI patient en route to the SRC, based on machine algorithm interpretation.

V~~I~~. DATA COLLECTION

All required data elements shall be collected and entered in an ICEMA approved STEMI registry on a regular basis and submitted to ICEMA for review.

VI~~I~~. CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRAM ~~(CQI)~~

SRC shall develop an on-going CQI program which monitors all aspect of treatment and management of suspected STEMI patients and identify areas needing improvement. The program must, at a minimum, monitor the following parameters:

- Morbidity and mortality related to procedural complications.

- Detail review of cases requiring emergent rescue Coronary Artery Bypass Graph (CABG).

- Tracking of door-to-dilation time and adherence to minimum performance standards set by this policy.

- Detailed review of cases requiring redirection of EMS STEMI patients to other SRCs as a result of SRC over capacity and prolonged delay of door-to-intervention time.

- Active participation in each ICEMA STEMI CQI Committee and STEMI regional peer review process. This will include a review of selected medical records as determined by CQI indicators and presentation of details to peer review committee for adjudication.

VII~~I~~. PERFORMANCE STANDARD

SRCs must achieve and maintain a door-to-balloon (D2B) time of less than or equal to ninety (90) minutes in 75% of primary PCI patients with a STEMI, in accordance with D2B: An Alliance for Quality Guidelines. If this standard is not achieved, the SRC may be required to submit an improvement plan to ICEMA addressing the deficiency with steps being taken to remedy the problems.

VIII~~X~~. DESIGNATION

- The SRC applicant shall be designated after satisfactory review of written documentation and an initial site survey by ICEMA or its designees and completion of an agreement between the hospital and ICEMA.

- ~~Documentation of current accreditation from The Society of Chest Pain Centers as "Chest Pain Center with PCI" shall be accepted in lieu of a formal site visit by ICEMA.~~Accreditation by the Society of Cardiovascular Patient Care.

- Initial designation as a SRC shall be in accordance with terms outlined in the agreement.

- Failure to comply with the agreement, criteria and performance standards outlined in this policy may result in probation, suspension or rescission of SRC designation.

~~X. PATIENT DESTINATION~~

- ~~The SRC should be considered as the destination of choice if all of the following criteria are met:~~

  - ~~Identified STEMI patients based on machine interpretation of field 12-lead ECG, verified by EMT-Ps and approved by a base hospital physician.~~

  - ~~Total transport time to the STEMI base hospital is thirty (30) minutes or less. Base hospital physician may override this requirement and authorize transport to the SRC with transport time of greater than thirty (30) minutes.~~

  - ~~STEMI base hospital contact is **mandatory** for all patients identified as possible STEMI patient. The STEMI base hospital confirms a SRC as the destination.~~

- ~~The STEMI base hospital is the only authority that can direct a patient to a SRC. The destination may be changed at STEMI base hospital discretion.~~
- ~~The STEMI base hospital, if different from the SRC, will notify the SRC of patient's pending arrival as soon as possible, to allow timely activation of Cardiac Cath Lab Team at the SRC.~~
- ~~If the patient chooses to bypass the recommended SRC, EMS field personnel must obtain an AMA and notify the STEMI base hospital.~~

• ~~The following factors should be considered with regards to choice of destination for STEMI patients. STEMI base hospital contact and consultation is mandatory in these and similar situations:~~

- ~~Patients with unmanageable airway, unstable cardiopulmonary condition, or in cardiopulmonary arrest should be transported to the closest receiving hospital.~~
- ~~Patients with malignant ventricular fibrillation, ventricular tachycardia, second degree type II heart block and third degree heart blocks should be considered for transport to the closest receiving hospital.~~
- ~~Patients with obvious contraindication to thrombolytic therapy should be strongly considered for transport to the closest SRC.~~
- ~~Patients with hemodynamic instability as exhibited by blood pressure less than 90 systolic and/or signs of inadequate tissue perfusion should be transported to the closest receiving hospital.~~
- ~~Patients with *sustained* ROSC should be strongly considered for transport to the closest SRC. STEMI base hospital contact must be made.~~

I~~X~~. REFERENCES

Number	**Name**
8060	Requests for Hospital Diversion Policy (San Bernardino County Only)
8120	Continuation of Care (San Bernardino County Only)

NEUROVASCULAR STROKE RECEIVING CENTERS
DESIGNATION POLICY~~CRITERIA AND DESTINATION POLICY~~

(San Bernardino County Only)

I. PURPOSE

To provide developing guidelines to rapidly transport stroke patients who access the 9-1-1 system to a designated Neurovascular Stroke Receiving Center (NSRC) when indicated. Patients transported to NSRC will benefit from rapid assessment, intervention and treatment at a dedicated stroke specialty center. Patients will meet the defined criteria for triage as an acute ischemic or hemorrhagic cerebral vascular event.

~~II. DEFINITIONS~~

~~**Interventional Neuroradiologic Capabilities**: A licensed general acute care hospital with qualified interventional radiologists and/or neurosurgeons able to administer inter-arterial tissue plasminogen activator and/or perform mechanical clot retrieval.~~

~~**mLAPSS**: Modified Los Angeles County Prehospital Stroke Screening Scale.~~

~~**Neurovascular Stroke Base Hospital**: A licensed general acute care hospital that has The Joint Commission (TJC) or Healthcare Facilities Accreditation Program (HFAP) Primary Stroke Center accreditation and designated as a base hospital.~~

~~**Neurovascular Stroke Receiving Centers (NSRC)**: A twenty-four (24) hours per day, seven (7) days per week licensed general acute care hospital that has successfully completed and maintains TJC or HFAP accreditation as a Primary Stroke Center and enters into an agreement with ICEMA, for patients triaged as having a cerebral vascular event requiring hospitalization for treatment, evaluation and/or management of this event.~~

~~**Neurovascular Stroke Referral Hospital (NSRH)**: A licensed general acute care hospital that refers possible stroke patients to NSRC.~~

III~~I~~. POLICY

The following requirements must be met for a hospital to be an ICEMA designated NSRC:

- An ICEMA approved receiving hospital which is a full service general acute care hospital.
- Accreditation as a Primary Stroke Center by TJC or HFAP and proof of re-accreditation every two (2) years.

- An alert/communication system for notification of incoming stroke patients, available twenty-four (24) hours per day, seven (7) days per week (i.e., in-house paging system).

- Provide continuing education (CE) opportunities twice per year for NSRC, NSRH and emergency medical services (EMS) field personnel in areas of pathophysiology, assessment, triage and management for stroke patients and report annually to ICEMA.

- Lead public stroke education efforts at the appropriate educational level and report annually to ICEMA.

III~~V~~. STAFFING REQUIREMENTS

The hospital will have the following positions filled prior to becoming a NSRC:

- Medical Directors

  The hospital shall designate two (2) physicians with hospital privileges as co-directors of its NSRC program. One (1) physician shall be board certified or board eligible by the American Board of Medical Specialties or American Osteopathic Association, neurology or neurosurgery board. The co-director shall be a board certified or board eligible emergency medicine physician.

- Nursing Coordinator

  The hospital shall designate a NSRC Nursing Coordinator who has experience in critical care or emergency nursing, and has advanced education in stroke physiology or at least has two (2) years dedicated stroke patient management experience. Certification in critical care or emergency nursing is preferred.

- On-Call Physicians Specialists/Consultants

  A daily roster of the following on-call physician consultants and staff must be promptly available within thirty (30) minutes of notification of "Stroke Alert" twenty-four (24) hours per day, seven (7) days per week.

  - Radiologist experienced in neuroradiologic interpretations.

  - On-call Neurologist and /or tele-neurology services available twenty-four (24) hours per day; seven (7) days per week.

  - If neurosurgical services are not available in-house, the hospital must have a rapid transfer agreement in place with a hospital that provides this service. The agreement must be on file with the ICEMA.

NSRCs must promptly accept rapid transfer requests from NSRCs. Additionally, the hospital must have a rapid transport agreement in place with an ICEMA permitted transport provider for that exclusive operation area (EOA).

IV. INTERNAL HOSPITAL POLICIES

The hospital shall develop internal policies for the following situations:

- Stroke Team alert response policy upon EMS notification of a "Stroke Alert".
- Rapid assessment of stroke patient by Emergency and Neurology Teams.
- Prioritization of ancillary services including laboratory and pharmacy with notification of "Stroke Alert".
- Arrangement for priority bed availability in Acute Stroke Unit or Intensive Care Unit (ICU) for "Stroke Alert" patients.
- Acknowledgement that stroke patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8060 - Requests for Hospital Diversion Policy (applies to physical plant breakdown threatening significant patient services or immediate patient safety issues, i.e., bomb threat, earthquake damage, hazardous material or safety and security of the hospital.) A written notification describing the event must be submitted to ICEMA within twenty-four (24) hours.
- Emergent thrombolytic and tele-neurology (if waiver is approved) protocol to be used by Neurology, Emergency, Pharmacy and Critical Care Teams.
- Readiness of diagnostic computed tomography (CT) and magnetic resonance imaging (MRI), upon notification of Stroke Team.

V~~I~~. DATA COLLECTION

Data will be reported to the ICEMA Medical Director on a monthly basis using an ICEMA approved registry.

VI~~I~~. CONTINUOUS QUALITY IMPROVEMENT PROGRAM

NSRC shall develop an on-going CQI program which monitors all aspects of treatment and management of stroke patients and identify areas needing improvement. The program must, at a minimum, monitor the following parameters:

- Morbidity and mortality related to procedural complications.

- Tracking door-to-intervention times and adherence to minimum performance standards.

  ICEMA will determine current performance indicators. Any specific or additional performance indicators will be determined in collaboration with the Stroke CQI Committee.

- Active participation in ICEMA Stroke CQI Committee activities.

VII~~I~~. PERFORMANCE STANDARDS

Compliance with the American Stroke Association Performance Measures as a Primary Stroke Center.

VIII~~X~~. DESIGNATION

- The NSRC applicant shall be designated by ICEMA after satisfactory review of written documentation, a potential site survey and completion of an agreement between the hospital and ICEMA.

- Documentation of current accreditation as a Primary Stroke Center by TJC or HFAP shall be accepted in lieu of a formal site visit by ICEMA.

- Initial designation as a NSRC shall be in accordance with terms outlined in the agreement.

- Failure to comply with the agreement, criteria and performance standards outlined in this policy may result in probation, suspension or rescission of the NSRC designation.

~~X. PATIENT DESTINATION~~

- ~~The NSRC should be considered as the destination of choice if all of the following criteria are met:~~

  - ~~Stroke patients eligible for transport to NSRC (suspected stroke patients) will be identified using the mLAPSS triage criteria.~~

  - ~~Identified acute stroke patients with "last seen normal" time plus transport time equaling greater than twelve (12) hours, or if "last seen normal" time is unknown, transport to the closest receiving hospital.~~

  - ~~Identified stroke patients with "last seen normal" time less than twelve (12) hours, or a "wake-up stroke", transport to closest NSRC.~~

- ~~NSRC base hospital contact is **mandatory** for all patients identified as a possible stroke patient.~~
- ~~The NSRC base hospital is the only authority that can direct a patient to a NSRC. The destination may be changed at NSRC base hospital discretion.~~
- ~~The NSRC base hospital, if different from the NSRC, will notify the NSRC of the patient's pending arrival as soon as possible, to allow timely notification of Stroke Team.~~

• ~~The following factors should be considered in determining choice of destination for acute stroke patients. NSRC base hospital contact and consultation is mandatory in these situations:~~

- ~~Patients with unmanageable airway, unstable cardiopulmonary condition, or in cardiopulmonary arrest should be transported to the closest receiving hospital.~~
- ~~Patients with obvious contraindication to thrombolytic therapy should be strongly considered for transport to closest NSRC.~~
- ~~Patients with hemodynamic instability and exhibiting signs of inadequate tissue perfusion should be transported to the closest receiving hospital.~~

IX~~I~~. REFERENCE

Number	**Name**
8060	Requests for Hospital Diversion Policy (San Bernardino County Only)

DESTINATION POLICY

I. PURPOSE

To ensure the transportation of 9-1-1patients to the most appropriate receiving facility that has the staff and resources to deliver definitive care to the patient. Destination may be determined by ~~appropriate protocol or specialty care needs~~Ppatient's need for specialty care services, such as those provided by designated trauma, STEMI, stroke centers.

~~II. AUTHORITY~~

~~California Health and Safety Code, Division 2.5, Chapter 4, Section 1797.220~~

~~California Code of Regulations, Title 22 Chapters 4, 7 and 8~~

II~~I~~. DEFINITIONS

Aircraft Dispatch Center (ADC): An ICEMA designated dispatch center which dispatches and coordinates air ambulance and/or air rescue aircraft response to the scene of a medical emergency within the ICEMA region.

Adult Patient: A person who is or is appearing to be older than 15 years of age.

Burn Patient: Patients meeting ICEMA's burn classifications minor, moderate or major, per ICEMA Reference #11100 - Burn - Adult (15 years of age or older) and #14070 - Burn - Pediatrics.

Critical Trauma Patient (CTP): Patients meeting ICEMA's trauma triage criteria per ICEMA Reference #15030 – Trauma Triage Criteria and Destination Policy.

Neurovascular Stroke Receiving Center (NSRC): A licensed acute care hospital designated by ICEMA's Governing Board as a receiving hospital for patients triaged as having a cerebral vascular event requiring hospitalization for treatment, evaluation and /or management of stroke.

Neurovascular Stroke Base Hospital: Facilities that have been designated by ICEMA's Governing Board as a Neurovascular Receiving Hospital that also function as a base hospital.

Pediatric Patient: A person who is or is appearing to be under 15 years of age.

Pediatric Trauma Center: A licensed acute care hospital which usually treats (but is not limited to) persons under 15 years of age, designated by ICEMA's Governing Board that 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.

ROSC: Return of spontaneous circulation

Specialty Care Center: ICEMA designated trauma, STEMI, or stroke receiving centers.

ST Elevation Myocardial Infarction (STEMI): A medical term for a type of myocardial infarction that results in an elevation of the ST Segment on a 12-lead electro-cardiogram (ECG).

STEMI Base Hospital: Facilities that have emergency interventional cardiac catheterization capabilities that also function as a base hospital.

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

STEMI Referring Hospital: Facilities that do not have emergency interventional cardiac catheterization capabilities.

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.

III~~V~~. POLICY

If the patient's condition is stable, the most appropriate destination may be the facility associated with their healthcare plan and primary care physician.

If a patient requires specialty care at an ICEMA designated STEMI, Stroke, Trauma or other approved specialty center, the EMS provider may bypass closer facilities for another facility having the specialty services needed by the patient. Destination for specialty patients requires contact with an appropriate specialty base hospital.

~~All d~~Destination decisions should be based on patient condition or patient, guardian, family or law enforcement request. ~~and/or family request.~~ Patients unable to, or without a preference should be taken to the closest hospital unless their condition requires specialty services as described below.

If directed by the base hospital physician, an EMS transport provider may bypass a closer facility.

IV. GENERAL CONSIDERATIONS

- Closest Hospital
  - All patients requiring immediate medical attention for life threatening conditions.
  - Patients without destination preference.
- Patient Request
  - Patient requests should be honored if possible and appropriate.
  - Patient requests for specific destination may be accommodated if patient is medically stable and the destination is not significantly beyond the primary response area of the EMS transportation provider. ~~outside of the unit's response area.~~
  - If a patient choses to bypass the recommended SRC, EMS field personnel must obtain an AMA and notify the STEMI base hospital.

~~• Protocol~~

~~➢ Destination may be determined by considering special care needs such as Trauma, STEMI or Stroke listed in the appropriate protocol.~~

- Higher Level of Care
  - May be dictated by patient condition and base hospital direction.
  - Allows ALS providers to bypass a closer facility in favor of a facility that has the capability of a specialty response to the patient's condition.
- Base Hospital
  - Final authority for destination determination is the base hospital.
  - Base hospital physician may override prior destination decisions made by the paramedic (EMT-P) or protocol.

IV~~VI~~. PSYCHIATRIC HOLDS

- All patients with a medical complaint on a psychiatric hold (5150) ~~who require~~require medical evaluation and treatment and shall be transported to the closest acute care hospital for medical clearance.
- Any acute care hospital is capable of medically clearing psychiatric patients.

- Patients on a psychiatric hold with no medical complaints or conditions may be released to law enforcement for transport directly to a psychiatric facility that has the capacity to accept the patient.

V~~II~~. DIVERSION (Refer to ICEMA Reference #8060 - Requests for Hospital Diversion Policy - San Bernardino County Only)

- Diversion of ALS ambulances is limited by ICEMA, refer to ICEMA Reference #8060 - Requests for Hospital Diversion Policy (San Bernardino County Only).

- Ambulance diversion to another acute care hospital is not allowed in the ICEMA region based on hospital census or staffing.

- A patient may be directed to a hospital on diversion if it is in the best interest of the patient and the hospital has not declared an internal disaster.

- The base hospital determines final destination of Advanced Life Support (ALS) or Limited Advanced Life Support (LALS) patients.

- Basic Life Support (BLS) ambulances may not be diverted from their intended destination unless the hospital is on internal disaster.

VI~~II~~. SPECIALTY ~~SERVICES~~ CARE CENTERS

Specialty Care Center base hospital contact is **mandatory** for patients going to trauma, STEMI or stroke centers; and are the only authority that may change destination to another receiving hospital, trauma, STEMI or stroke center.

- SRCs: ~~Refer to ICEMA Reference #6070 - Cardiovascular STEMI Receiving Centers.~~

  - ~~A~~ SRC is the preferred destination for STEMI identified patients based on machine interpretation of field 12-lead ECG, verified by EMT-Ps and approved by base hospital physician. ~~patients who access the 9-1-1 system meeting defined criteria and show evidence of a ST elevation myocardial infarction (STEMI) on a 12-lead electrocardiogram (ECG). These patients will benefit from rapid interventions via cardiac catheterization interventions.~~

  - Once a patient with a STEMI has been identified, contact STEMI base hospital for destination decision and prepare patient for expeditious transport. Total transport time to the SRC is thirty (30) minutes or less. Base hospital physician may override this requirement and authorize transport to SRC with transport time greater than thirty (30) minutes.

- ~~Once a patient with STEMI has been identified, contact a STEMI base hospital for destination decision and prepare the patient for expeditious transport.~~ In Inyo and Mono Counties, the assigned base hospital should be contacted for STEMI consultation.

- In addition, patients with the following factors should be transported to the closest SRC. STEMI base hospital contact and consultation is required:

  - Obvious contraindication to thrombolytic therapy.

  - Cardiopulmonary arrest with sustained ROSC. Refer to ICEMA Reference #11070 - Cardiac Arrest - Adult.

- STEMI Patients with the following factors should be transported to the closest paramedic receiving hospital. STEMI base hospital contact and consultation is required:

  - Unmanageable airway, unstable cardiopulmonary condition, or in cardiopulmonary arrest.

  - Malignant ventricular fibrillation, ventricular tachycardia, second degree type II heart block and third degree heart block.

  - Hemodynamic instability as exhibited by systolic blood pressure less than 90 and/or signs of inadequate tissue perfusion.

- ~~Consider transporting patients that suffer out-of-hospital cardiac arrest, with or without return of spontaneous circulation (ROSC), to the closest STEMI receiving hospital, after contact with a STEMI base hospital for destination determination.~~

- NSRCs: Refer to ICEMA Reference #11110 - Stroke Treatment - Adult (15 years of age and older).

  - Suspected stroke patients eligible for transport to NSRC will be identified using the mLAPSS triage criteria.

  - Once a patient with a stroke has been identified, contact a NSRC base hospital for destination decision and prepare the patient for expeditious transport. In Inyo and Mono Counties, the assigned base hospital should be contacted for stroke consultation.

  - If NSRC base hospital, is different from the NSRC, notify the NSRC of the patient's pending arrival as soon as possible to allow timely notification of the stroke team.

- ~~A NSRC should be considered as the destination of choice for all patient meeting Stroke triage criteria.~~Identified acute stroke patients with "last seen normal" time plus transport time less than twelve (12) hours, or a "wake-up" stroke, transport to closest NSRC.

- The following factor should be considered in determining choice of destination for acute stroke patients. NSRC base hospital contact and consultation is mandatory:

  - Patients with obvious contraindication to thrombolytic therapy should be strongly considered for transport to closest NSRC.

- Identified acute stroke patients with "last seen normal" time equaling greater than twelve (12) hours or if "last seen normal time" is unknown, transport to closest paramedic receiving hospital.

- Patients with the following factors should be transported to the closest receiving hospital. NSRC base hospital contact and consultation is required:

  - Unmanageable airway, unstable cardiopulmonary condition, or in cardiopulmonary arrest.

  - Hemodynamic instability and exhibiting signs of inadequate tissue perfusion.

- ~~Once a patient with a stroke has been identified, contact a NSRC base hospital for destination decision and prepare the patient for expeditious transport. In Inyo and Mono Counties, the assigned base hospital should be contacted for stroke consultation.~~

- Trauma: (Refer to ICEMA Reference #15030 -Trauma Triage Criteria and Destination Policy.)

  - Adult patients meeting trauma triage criteria shall be transported to the closest Trauma Center.

  - Transport pediatric patients meeting trauma triage criteria shall be transported to a pediatric Trauma Center when there is less than a twenty (20) minute difference in transport time between the pediatric Trauma Center and the closest Trauma Center.

  - Transport patients meeting the physiologic and/or anatomic criteria to the closest Trauma Center.

  - Patients meeting the mechanism of injury and either the physiologic or anatomic criteria will be transport to the closest Trauma Center.

- If there are no associated physiologic or anatomic criteria and the potential trauma patient meets one or more of the mechanisms of injury contact a trauma base hospital to determine patient destination. Patient may be directed to a non-trauma receiving hospital.

- Make trauma base hospital contact to determine if a Trauma Center should be the destination for patients not meeting the trauma triage criteria but meeting age and/or co-morbid factors.

- Patients with unmanageable airway or traumatic cardiac arrest should be transported to the closest receiving hospital if indicated. Trauma base hospital contact shall be made.

- Burn: (Refer to ICEMA Reference #15030 - Trauma Triage Criteria and Destination Policy.)

  - Burn patients meeting the physiologic or anatomic criteria for CTP shall be transported to the closest Trauma Center.

  - Burn patients meeting minor or moderate classifications shall be transported to the closest receiving hospital.

  - Burn patients meeting major burn classification may be transported to the closest burn center (in San Bernardino County contact Arrowhead Regional Medical Center).

  - Pediatric burn patients identified as a CTP should always be transported to the closest Trauma Center with or without burn capabilities. When there is less than twenty (20) minutes difference in transport time, a pediatric Trauma Center is the preferred destination.

  - Burn patients with respiratory compromise, or potential for such, will be transported to the closest acute care receiving hospital for airway stabilization.

VII~~X~~. INTERFACILITY TRANSFER (Refer to ICEMA Reference #8010 - Interfacility Transfer Guidelines)

- Patients will go to the designated destination facility regardless of patients' prior condition. Patients may only be diverted if patients' condition deteriorates significantly while in the care of EMS.

- Advanced EMTs and EMT-Ps may start prior-to- contact protocols before contacting the base hospital for change of destination if the patient's condition deteriorates significantly.

VIIIX. EMS AIRCRAFT ROTATION AND DESTINATION (San Bernardino County Only)

- All EMS Aircraft requests from the field in San Bernardino County will be dispatched by the ICEMA designated Aircraft Dispatch Center (ADC).
- The destination may be changed by the EMS providers based on patient requirements for specialty centers.
- Refer to ICEMA Reference #8070 - Aircraft Rotation Policy (San Bernardino County Only).

IXXI. REFERENCE

Number	Name
5050	Medical Response to a Multi-Casualty Incident Policy
6070	Cardiovascular STEMI Receiving Centers.
8010	Interfacility Transfer Guidelines
8060	Requests for Hospital Diversion Policy (San Bernardino County Only).
8070	Aircraft Rotation Policy (San Bernardino County Only)
11070	Cardiac Arrest - Adult
11100	Burn - Adult (15 years of age or older)
11110	Stroke Treatment - Adult
14070	Burn - Pediatrics
15030	Trauma Triage Criteria and Destination Policy

POLICIES/PROTOCOLS FOR 30-DAY COMMENT FORM

ICEMA Reference #s: 5030, 6090, 7010, 7020, 7040, 8120, 9080, 10190, 11070, 11110, 15030

DEADLINE TO SUBMIT COMMENTS: December 7, 2015, at 5:00 pm

PROTOCOL #	AGENCY	COMMENT	RESPONSE
5030 - Procedure for Adoption of Protocols and Policies	SARH	Reducing public comment period down to 2 weeks is too short. 30 days is appropriate, especially when you have providers going on vacations and could possible miss a whole comment time frame. When informing providers of changes, ICEMA should include all EMS Educators, PLNS, ED Directors, and EMS Coordinators.	This period is necessary to ensure that protocol changes can be made in a timely and appropriate manner and to ensure that the most current treatments are available for use. Agreed, this is consistent with ICEMA's policy of encouraging the widest possible notification and distribution. Proposed changes to ICEMA policies and treatment protocols will be available on the ICEMA website, e-mailed to members of EMCC, MAC and SAC and to others that have requested a notification which, in practice, includes PLNs, ED Directors, EMS Coordinators and Educators.
	SBCo FD	Notification and public comment period: (Removed from policy) *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.* The importance of public comments is immeasurable as the boots on the ground, who	Changes to administrative policies may be made to satisfy legislative requirements or as a matter of the regulatory process and are not subject to public comment. Changes in wording to clarify objective, order and numbering, changes for continuity and/or consistency and changes to comply with state and/or local laws are not subject to public comment. ICEMA will continue to solicit input and public comment for all patient care protocols and EMS system policies. Listed EMS providers and their personnel are notified of proposed changes two (2) weeks prior to the MAC and/or SAC meeting. ICEMA recognizes the value of stakeholder collaboration in policy and protocol

POLICIES/PROTOCOLS FOR 30-DAY COMMENT FORM

ICEMA Reference #s: 5030, 6090, 7010, 7020, 7040, 8120, 9080, 10190, 11070, 11110, 15030

DEADLINE TO SUBMIT COMMENTS: December 7, 2015, at 5:00 pm

PROTOCOL #	AGENCY	COMMENT	RESPONSE
		actually function under these protocols, bring valuable insight and knowledge to the protocol process. Please re-instate the public comment period/grid.	development and will continue to accept input from all interested parties through a formal review process. Since both MAC and SAC are open public meetings, stakeholders are encouraged to present their comments during the respective meeting.
	ICEMA	EMS providers should be notified of proposed changes.	Agreed, change added.
6090 - Fireline Paramedic		None	
7010 - BLS/LALS/ ALS Standard Drug & Equipment List	SBCo FD	We suggest the end-tidal CO2 devices be moved to the "optional" airway equipment section.	Colorimetric devices provide a near instantaneous indication of correct endotracheal tube placement. While capnography is required in the ICEMA region it may not be as readily available at the time of intubation.
7020 - Aircraft Standard Drug & Equipment List	SB City FD	With the deletion of IO needle 15 mm due to "hubbing", what is the plan of education? It had been discussed to have Teleflex complete education to ensure consistency.	EMS providers are expected to provide appropriate education prior to removing the smaller needles.
7040 - Medication - Standard Orders	SARH	Could we leave in the Dextrose and the Narcan, so the medics can consider this intervention as an option? Doesn't this go back to ACLS and the "H's & T's" with treatable causes? Please clarify use of Fentanyl; we have many EMS providers that are confused on the use of this.	Use of Dextrose in cardiac arrest has been associated with increased mortality and neurologic morbidity. The benefit of administering narcan in cardiac arrest is inclusive. MAC opted to remove both as requirements in ICEMA Reference 11070. The MSO is not considered a treatment protocol. It is intended to provide drug/route/dose information and should be used as a reference with other protocols. It is not intended to be used as a standalone protocol.

POLICIES/PROTOCOLS FOR 30-DAY COMMENT FORM

ICEMA Reference #s: 5030, 6090, 7010, 7020, 7040, 8120, 9080, 10190, 11070, 11110, 15030

DEADLINE TO SUBMIT COMMENTS: December 7, 2015, at 5:00 pm

PROTOCOL #	AGENCY	COMMENT	RESPONSE
		Add chest pain to 7040- for Fentanyl use, and take away "medication introduction" dosage, make it specific, or there will be confusion.	Conditions listed are the exceptions to the general dosing/route information. Will remove Isolated Extremity Trauma, Burns as a condition for consistency.
	SB City FD	For consistency, medications for poisonings with base hospital order only are listed different. Sodium bicarbonate has the statement listed in bold and underlined by medication name. Calcium chloride has the statement next to dose and route separated by a comma. Glucagon has the statement next to dose and route in parenthesis. Atropine dose not state in 7040 that repeat doses are with base hospital order only as it does in protocol 13010.	Agreed, changes made. Removed repeat doses of atropine when used in organophosphate poisoning from base hospital orders only.
8120 - Continuation of Care (San Bernardino County Only)	SARH	The buddy system pairing is confusing- Why would another hospital bypass a closer Stroke Receiving Center to go further out to their "buddy hospital". And why would we take a closer Stroke Receiving Center away from a non-stroke hospital; for example, CVMC is crossed out as SARH being their buddy, this relationship should continue. And why would St. Mary's got to SARH when they are passing up ARMC & LLUMC? These other Stroke Receiving Centers are much closer. The Trauma Center buddy system does not have SARH in it at all, please add.	These were the following considerations: distance, mode of travel, number of assigned RH to NSRC, RH to NSRC repetition. Buddies are paired not only for "relationships" but to facilitate transfers, consultation, and education. NRSC's should not be discouraged from maintaining current relationships, rapid transfer agreements and normal transfer flow. CVMV added to SARH. SARH has been added.
	SB City FD	Under "Specialty Care Center - Referral Hospital Buddy System Table" Trauma Center, San Antonio Regional Hospital has not been matched to a trauma center.	SARH has been added.

POLICIES/PROTOCOLS FOR 30-DAY COMMENT FORM

ICEMA Reference #s: 5030, 6090, 7010, 7020, 7040, 8120, 9080, 10190, 11070, 11110, 15030

DEADLINE TO SUBMIT COMMENTS: December 7, 2015, at 5:00 pm

PROTOCOL #	AGENCY	COMMENT	RESPONSE
9080 - Care of Minors in the Field		None	
10190 - ICEMA Approved Skills	SARH	ICEMA Approved Skills- I think the word "Skills" is a better reflection of this protocol because ICEMA doesn't approve of every "Standard Order the California Medic can perform". "ICEMA approved means specific to our region". For example- Riverside medic can give Amiodarone, it's in their scope of practice but it's not an ICEMA approved intervention. What is the dosage for Lidocaine infusion with the IO, it's not in 7040 for IO "pain control". Vagal maneuvers (EMT-P) "Use with caution for" is a good statement, should be left in. Starting the sentence with "Relative" is ambiguous.	Skills normally describe a series of prescribed steps necessary for successful performance. References in this policy describe the conditional parameters for using the procedure not the steps necessary for successful completion. Treatment protocols provide the authorization for specific skills and medications. The MSO and PSO provide operational parameters. It is listed under Lidocaine 2% (Intravenous Solution) Relative and absolute contraindications are common medical terms. Relative contraindication means that caution should be used when considering a procedure.
	SBCo FD	Reference # 10190; *Skills;* In order to maintain educational parameters across the county; please re-instate the detailed skills format in this protocol or in individual protocols. The gray area is vast especially for those new to the county and when educators are proctoring skills. There is nothing to reference from our governing body stating what is preferred in the eyes of the county.	ICEMA endorses the standards of practice for skills that are published by NHTSA and National Registry of EMTs, and taught as part of the curriculum in paramedic colleges. The ICEMA reference Procedures - Standard Orders provide guidelines that are specific to the ICEMA region.
	SBCo FD	*Nasotracheal intubation: (Page 4 of 6),* The bullet above Needle Cric, "Contact base hospital if unable to place ET after a maximum of three (3) Nasotracheal intubation attempts or	Agree, change made

POLICIES/PROTOCOLS FOR 30-DAY COMMENT FORM

ICEMA Reference #s: 5030, 6090, 7010, 7020, 7040, 8120, 9080, 10190, 11070, 11110, 15030

DEADLINE TO SUBMIT COMMENTS: December 7, 2015, at 5:00 pm

PROTOCOL #	AGENCY	COMMENT	RESPONSE
		"in" (is written, should this read "if") unable to adequately ventilate patient via BVM." Grammar change only.	
	SB City FD	ECG, per protocol 11060 treatment indicators are for patients with chest pain (typical or atypical), syncopal episodes, history of previous AMI, Angina, heart disease, or other associated risk factors. Verbiage should be added to Procedure protocol to match.	Agreed, verbiage added
	SB City FD	Intraosseous infusion title change to insertion?	Agreed, change made
	SB City FD	Consider adding measurements to size for adult King airway device as there is for pediatric.	This is a function of training and judgement. Size recommendations are available from the manufacturer and should be part of the training process.
	SB City FD	Consider adding minimum size of nares to accommodate 7.0 tube.	Choosing size for Nasotracheal intubation is a function of paramedic training and judgement.
11070 - Cardiac Arrest - Adult	SBCo FD	*Check and treat with Dextrose/Narcan requirements have been deleted?* Is there a rationale to this change? Are we no longer referencing the H's and T's algorhythm in the potential causes of arrest?	Both were deleted as a requirement pursuant to MAC recommendation. The usefulness of these medications in cardiac arrest has not been demonstrated and current research does not indicate a clear value. Indications for both are covered in other protocols.
11110 - Stroke Treatment - Adult			
15030 - Trauma Triage Criteria and Destination Policy	SBCo FD	Trauma Triage Criteria: Under Hypotension heading; *Pediatric subheading, states abnormal vital signs (according to age).* What parameters are set from ICEMA regarding the "norms" for comparison?	This is a function of paramedic training and judgement.

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 ~~protocols 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 ~~duringthrough 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~~

II~~I~~. 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~~R~~egion.

I~~V~~II. POLICY

- ICEMA will review all EMS system policies and patient care protocols~~/policies, patient care policies and protocols annually or more often ifas 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~~spatient care protocols~~/policies,~~ as required. ~~The following C~~cChanges that ~~to protocols and/or policies~~ may occur without specific ~~review from the public~~input from ~~or specific~~ committees~~.~~ ~~Changes~~ include, but are not limited to:

  - 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 maintain~~for 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.

- E-mail notification of 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 policyie, 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~~ Spray 0.4 metered dose and/or tablets (tablets to be discarded 90 days after opening)	1 (equivalent of 10 patient doses)
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	1 (if CPAP is carried)	1 (if CPAP is carried)	1 each	2 each
End- ~~Title~~ 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
Macrodrip Administration Set Microdrip Administration Set (60 drops /cc)		3 1	3 1	3 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 21gauge and 23 or 25 gauge		2 each	2 each	2 each
Saline Lock Large Bore Tubing Needless		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_2O)	1 (optional)	1 (optional)	1	1
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 Urinal	1(BLS TRANSPORT UNITS ONLY 1(BLS TRANSPORT UNITS ONLY			1 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
Provodine/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-~~title~~ 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 *or* Needles for procedure 10, 12, 14 and/or16 gauge	1 each 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) *and/or* 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 *or* 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, Optional	1 each
IV Catheters - sizes 14, 16, 18, 20, 22, 24	2 each
Glucose monitoring device	1
Macrodrip Administration Set Microdrip Administration Set (60 drops/ml)	3 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 *or* Cervical Collars - Adjustable Adult and Pediatric	1 each 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
Provodine/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 SPO_2 at 94%.
Do not administer supplemental oxygen for SPO_2 > 95%

Chronic Obstructive Pulmonary Disease (COPD):

Titrate Oxygen at lowest rate required to maintain SPO_2 at 90%
Do not administer supplemental oxygen for SPO_2 > 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).

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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	• Barstow Community Hospital • Colorado River Medical Center • Community Hospital of San Bernardino • Hi Desert Medical Center • ~~Desert Valley Hospital~~ • ~~Kaiser Fontana Medical Center~~ • St. Bernardine Medical Center • St. Mary Medical Center
Desert Regional Medical Center	• Colorado River Medical Center • Hi-Desert Medical Center
Kaiser Hospital Foundation - Fontana	• Barstow Community Hospital • Victor Valley Global Medical Center • Desert Valley Hospital
Kaiser Hospital Foundation - Ontario	• Chino Valley Medical Center • Montclair Community Hospital
Loma Linda University Medical Center	• Bear Valley Community Hospital • Community Hospital of San Bernardino • J.L. Pettis VA Hospital (Loma Linda VA) • Mountains Community Hospital • St. Bernardine Medical Center • ~~St. Mary Medical Center~~ • ~~Victor Valley Global Medical Center~~ • Weed Army Community Hospital at Fort Irwin
Pomona Valley Hospital Medical Center	• Chino Valley Medical Center • Montclair Hospital Medical Center
Redlands Community Hospital	• Bear Valley Community Hospital • J.L. Pettis VA Hospital (Loma Linda VA) • Mountains Community Hospital • ~~Community Hospital of San Bernardino~~ • ~~St. Bernardine Medical Center~~
San Antonio ~~Community~~Regional Hospital	• Chino Valley Medical Center • ~~Kaiser Ontario Medical Center~~ • Desert Valley Hospital • Montclair Hospital Medical Center • St. Mary Medical Center • Victor Valley Global Medical Center

STEMI RECEIVING CENTER (SRC)	STEMI REFERRAL HOSPITAL (SRH)
Desert Valley Hospital	• Barstow Community Hospital • Victor Valley Global Medical Center • Weed Army Community Hospital at Fort Irwin
Loma Linda University Medical Center	• Arrowhead Regional Medical Center • Bear Valley Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Redlands Community Hospital
Pomona Valley Hospital Medical Center	• Chino Valley Medical Center • Montclair Hospital Medical Center
San Antonio ~~Community~~Regional Hospital	• Chino Valley Medical Center • Kaiser Ontario Medical Center • Montclair Hospital Medical Center
St. Bernardine Medical Center	• Colorado River Medical Center • Community Hospital of San Bernardino • Kaiser Fontana Medical Center • Mountains Community Hospital
St. Mary Medical Center	• 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)
Arrowhead Regional Medical Center	• Barstow Community Hospital • Chino Valley Medical Center • Desert Valley Medical Center • Kaiser Fontana • Kaiser Ontario • Mammoth Hospital • Montclair Hospital Medical Center • Northern Inyo Hospital • San Antonio Regional Hospital • Southern Inyo Hospital • St. Bernardine Medical Center
Loma Linda University Medical Center	• Bear Valley Community Hospital • Colorado River Medical Center • Hi Desert Medical Center • Mountains Community Hospital • Redlands Community Hospital • J. L. Pettis VA Hospital (Loma Linda VA) • Robert E. Bush Naval Hospital-29 Palms • St. Mary Medical Center • Victor Valley Global Medical Center • Weed Army Hospital
Loma Linda University Children's Hospital	• Regional Pediatric Trauma Center

VII. REFERENCES

Number	Name
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

Number	Name
~~5040~~	~~Radio Communication Policy~~
8130	Destination Policy

~~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.~~
- ECG should be performed on any patient whose medical history and/or presenting symptoms are consistent with acute coronary syndrome including typical or atypical chest pain, syncopal episode, prior AMI, heart disease, or other associated risk factors.

Axial Spinal Immobilization~~Stabilization~~ (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 H_2O 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~~ Insertion (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 CO_2 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 i~~n~~f unable to adequately ventilate patient via BVM.

Needle Cricothyrotomy (EMT-P)

- Absolute contraindication: Transection of the distal trachea.
- Monitor end-tidal CO_2 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 (SpO_2) 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 CO_2 ~~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 CO_2 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~~

~~Number~~	~~Name~~
~~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

Number	Name
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?~~Age over 17 years?			
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 (*look for obvious asymmetry):*	Normal-Bilaterally	Right	Left
• Facial Smile/Grimace	☐	☐ Droop ☐ Normal	☐ Droop ☐ Normal
• Grip	☐	☐ Weak Grip ☐ Normal	☐ Weak Grip ☐ Normal
	☐	☐ No Grip ☐ Normal	☐ No Grip ☐ Normal
• Arm Weakness	☐	☐ Drifts Down ☐ Normal	☐ Drifts Down ☐ Normal
		☐ Falls Down Rapidly	☐ Falls Down Rapidly

		□ Normal	□ Normal

- 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~~I~~. 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.~~

~~A~~B. 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 – O_2 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 – O_2 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

- **Motorcycle 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 Criteria~~CTP~~, **transport to the closest TC~~Trauma Center~~.**

➢ Burn patients not meeting Trauma Triage Criteria~~CTP~~, **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

Number	Name
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

ICEMA
MEDICAL ADVISORY COMMITTEE

2016 MEETING DATES

February 25, 2016
April 28, 2016
June 23, 2016
August 25, 2016
October 27, 2016
December 22, 2016

1:00 p.m.

ICEMA
Training Rooms A & B
1425 South "D" Street
San Bernardino, CA

The ICEMA Medical Advisory Committee (MAC) meeting facility is accessible to persons with disabilities. If assistive listening devices or other auxiliary aids or services are needed in order to participate in the public meeting, requests should be made through the Inland Counties Emergency Medical Agency at least three (3) business days prior to the MAC meeting. The telephone number is (909) 388-5823, and the office is located at 1425 South "D" Street, San Bernardino, CA 92408.