



# SAN BERNARDINO COUNTY EMERGENCY MEDICAL CARE COMMITTEE



**ICEMA  
Training Rooms A & B  
1425 South "D" Street  
San Bernardino, CA 92408**

**January 17, 2013  
9:00 a.m.**

## **A G E N D A**

**I. CALL TO ORDER**

**II. APPROVAL OF MINUTES**

September 20, 2012

**III. INTRODUCTIONS**

**IV. ICEMA UPDATE**

- A. RFP - Consultant for Ground Medical Transportation System Design
- B. EMS MISS II Status Report
- C. Bed Delay

**INFO/ACTION**

**V. ICEMA MEDICAL DIRECTOR**

**INFO/ACTION**

**VI. STANDING EMS SYSTEM MANAGEMENT REPORTS**

**INFO**

- A. Quarterly Trauma Hospital Reports
- B. Base Hospital Quarterly Reports
- C. Hospital Bed Delay Reports
- D. Hospital Surveillance
- E. STEMI Reports

Reports available at [http://www.sbcounty.gov/ICEMA/sbcounty\\_reports.aspx](http://www.sbcounty.gov/ICEMA/sbcounty_reports.aspx)

**VII. OLD BUSINESS**

**ACTION/APPROVE**

- A. Utilization of PBC Trust Fund

**VIII. NEW BUSINESS**

**ACTION/APPROVE**

- A. Election of Chair and Vice Chair
- B. 2012 Annual Report - First Reading
- C. Draft Letter to EMSA - CEMSIS / NEMSIS
- D. Drug Shortage Legislation
- E. General Protocols
  - 1. New - Triage Tag Tuesday
  - 2. New - Tactical Medicine Program
  - 3. New - Aircraft Rotation Protocol
  - 4. 1090 - Criminal History Background Checks (Live Scan)
  - 5. 5050 - Medical Response to a Multi-Casualty Incident
  - 6. 5070 - Medical Response to Hazard Materials/Terrorism Incident

7. 6010 - Paramedic Vaccination Protocol
8. 6080 - Paramedic Blood Draw for Chemical Testing at the Request of a Peace Officer
9. 7010 - BLS/ALS Standard Drug and Equipment List
10. 8040 - Continuation of Care of a STEMI Patient
11. 8060 - San Bernardino County Request for Hospital Diversion Policy
12. 9010 - General Patient Care Guidelines
13. 9020 - Physician on Scene
14. 9030 - Responsibility for Patient Management Policy
15. 9040 - Reporting Incidents of Suspected Abuse Policy
16. 9050 - Organ Donor Information
17. 9060 - Local Medical Emergency Policy
18. 10160 - Axial Spinal Stabilization
19. 11010 - Adult Respiratory Emergencies
20. 11020 - Airway Obstruction - Adult
21. 11060 - Suspected Acute MI
22. 11070 - Cardiac Arrest - Adult
23. 11080 - Altered Level of Consciousness/Seizures - Adult
24. 11100 - Burns - Adult
25. 12010 - Determination of Death on Scene
26. 13010 - Poisonings
27. 13020 - Heat Related Emergencies
28. 13030 - Cold Related Emergencies
29. 14030 - Allergic Reaction - Pediatric
30. 14060 - Seizures - Pediatric
31. 14080 - Obstetrical Emergencies
32. 14090 - Newborn Care
33. 15010 - Trauma - Adult
34. 15020 - Trauma - Pediatric
35. 15040 - Glasgow Coma Scale Operational Definitions

**IX. COMMITTEE/TASK FORCE REPORTS**

**X. OTHER/PUBLIC COMMENT**

**XI. COMMITTEE MEMBER REQUESTS FOR NEXT MEETING**

**XII. NEXT MEETING DATE AND LOCATION**

**March 21, 2013**

**ICEMA**

**Training Rooms A & B**

**1425 South "D" Street**

**San Bernardino, CA**

**XIII. ADJOURNMENT**

**XIV. EMCC WORKSHOP**

- |    |   |              |
|----|---|--------------|
| A. | History of EMS and ICEMA's Role                             | Tom Lynch    |
| B. | Overview of Brown Act and Its Implications for EMCC Members | Tom Lynch    |
| C. | Data Reporting, Analysis and Quality Improvement            | Ron Holk     |
| D. | Overview of ICEMA's Performance Based Contracts Program     | George Stone |
| E. | Goals for San Bernardino County EMS System                  | Roundtable   |

*The San Bernardino County Emergency Medical Care Committee (EMCC) 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 EMCC meeting. The telephone number is (909) 388-5823, and office is located at 1425 South "D" Street, San Bernardino, CA.*



# SAN BERNARDINO COUNTY EMERGENCY MEDICAL CARE COMMITTEE



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

**September 15, 2012**

COMMITTEE	ORGANIZATION	EMS AGENCY STAFF	POSITION
<input checked="" type="checkbox"/> Jim Holbrook	EMS Training Institution	<input checked="" type="checkbox"/> Reza Vaezazizi	Medical Director
<input checked="" type="checkbox"/> Diana McCafferty	Private Ambulance Provider	<input checked="" type="checkbox"/> Tom Lynch	EMS Administrator
<input checked="" type="checkbox"/> Margaret Peterson	Hospital Administrator	<input checked="" type="checkbox"/> Denice Wicker-Stiles	Assistant Administrator
<input checked="" type="checkbox"/> Stephen Miller	Law Enforcement	<input checked="" type="checkbox"/> George Stone	PBC Program Coordinator
<input type="checkbox"/> Michael Smith	Fire Chief	<input checked="" type="checkbox"/> Jerry Nevarez	HPP Coordinator
<input checked="" type="checkbox"/> Troy Pennington	Physician -Level II	<input checked="" type="checkbox"/> Sherri Shimshy	EMS Nurse
<input checked="" type="checkbox"/> Art Andres	EMT-P - Public Sector	<input checked="" type="checkbox"/> Chris Yoshida-McMath	EMS Trauma Nurse
<input checked="" type="checkbox"/> Rick Britt	Communication	<input checked="" type="checkbox"/> Ron Holk	EMS Nurse
<input checked="" type="checkbox"/> Allen Francis	Nurse - MICN	<input checked="" type="checkbox"/> Mark Roberts	EMS Technical Consultant
<input checked="" type="checkbox"/> Roy Cox	Air Ambulance Provider	<input checked="" type="checkbox"/> Paul Easterling	EMS Specialist
<input checked="" type="checkbox"/> Art Rodriguez	EMT-P - Private Sector	<input checked="" type="checkbox"/> John Mueller	EMS Specialist
<input checked="" type="checkbox"/> Richard Catalano	Physician - Level I	<input checked="" type="checkbox"/> May Wang	Staff Analyst II
<input checked="" type="checkbox"/> Chris Hughes	City Manager	<input type="checkbox"/> Jacquie Martin	Secretary
<input type="checkbox"/> <i>Vacant</i>	Consumer Advocate		
<input checked="" type="checkbox"/> Travis Henson	Physician - ER		
Matt Baca	SBC DPH-PRP	Michael May	LLUMC
Sandy Carnes	Rancho Cucamonga FD	Mike McMath	Redlands FD
Dana DeAntonio	Colton FD	Erin Nash-Fairfax	CAL FIRE - Yucaipa
Calvin Dong	Kaiser Permanente Hospital	Sara Morning	RDCH
Melissa German	SBC DPH-PRP	Mike O'Toole	Chino Valley FD
Nancy Hernandez	LLUMC	Leslie Parham	SB County FD
Bernie Horak	SB City FD	Joe Powell	Rialto FD
Bill Jones	San Manuel FD	Joy Peters	ARMC
Ramon Lomeli	MBA	David Pratt	SBC DPH-PRP
Dave Malloy	AMR	Shawn Reynolds	LLUMC
Mike Maltby	Big Bear FD	Alanna Waitschies	STBMC
Pam Martinez	Ontario FD		

## I. CALL TO ORDER

The meeting was called to order at 9:00 a.m.

## **II. APPROVAL OF MINUTES**

The July 19, 2012, meeting minutes were reviewed. Diana McCafferty motioned to approve; Art Andres seconded.

MSC:

Ayes - 12

Noes - 0

Abstaining - 0

## **III. PRESENTATION - Health Hazard Assessment Report (Public Health)**

Melissa German, Health Education Specialist, from San Bernardino County Department of Public Health presented an overview of the Health Hazard Assessment conducted in June/July 2012. She discussed the risk score, top 10 hazards, and what entities scored.

## **IV. ICEMA UPDATE**

### **A. Update - RFP for Consultant for Ground Medical Transportation System Design**

Proposals were due on August 29, 2012, by 5:00 pm. A total of five (5) proposals were received. The review committee will meet next week to review the bids in accordance with RFP. Under advisement, the names of the members will not be released to reduce the amount of influence. ICEMA will provide a status update at each EMCC meeting.

### **B. EMS MISS I & II Status Report**

EMS MISS I & II Report included in agenda packet for reference.

AMR Redlands began inputting data on September 1, 2012. San Manual Fire, San Bernardino City Fire and Sheriff's Air are now entering data with over 4,500 calls inputted.

Tom Lynch pointed out that several fire departments have proposed that they have a different way to flow the data. A meeting will be held the first week of October to discuss and that it may cause a potential delay in implementation for some of the fire departments.

Art Andres motioned that EMCC draft a letter to the EMS Authority regarding CEMISIS versus NEMISIS.

MSC:

Ayes - 12

Noes - 0

Abstaining - 0

Jim Holbrook will forward a draft letter to Denice Wicker-Stiles to be reviewed at the next EMCC meeting.

## **V. ICEMA MEDICAL DIRECTOR**

### **A. STEMI System Update**

ECG Study - The system-wide ECG project has been delayed until ImageTrend is up and running with transport providers in early 2013. This is due to logistical issues of acquiring ECGs for an accurate review by ICEMA. That does not mean ECGs are not being reviewed as there are several providers that routinely review ECGs, including some STEMI Centers. False positive rate decreased this quarter from 35% to 28%.

### **B. Trauma System Update**

Congratulations to ARMC for its ACS Level II Trauma Center accreditation.

The first Air Utilization CQI Committee will be held in March 2013. This committee will be closed-by invitation only, to discuss operational, safety and medical issues in air utilization.

### **C. Stroke System Update**

Data in the 2nd quarter 2013 shows:

- 80% are arriving via EMS.
- 15% are walk-ins.
- 7% are EMS/IFTs meaning arrived at a receiving hospital then transferred to a Stroke Receiving Center.
- 4% unknown (undocumented).
- 27% of the records are missing information. It seems that providers using 01As are more so missing information than those using ePCRs.

### **D. Pediatric Intubation Education**

The first education module is targeted to be out October 2012. Thanks to Dr. Van Stralen and Susie Moss for dedicating time on this project.

### **E. Medication Shortage Update**

A letter from Dr. Backer, EMSA, was distributed for review by the EMCC members. Stephen Miller will meet with ICEMA staff to discuss possible legislation.

## **VI. STANDING EMS SYSTEM MANAGEMENT REPORTS**

The following reports are available for review at [http://www.sbcounty.gov/sbcounty\\_reports.aspx](http://www.sbcounty.gov/sbcounty_reports.aspx):

- Trauma Reports (Quarterly)
- Base Hospital Statistics (Quarterly)
- Bed Delay Reports
- Prehospital Data Reports

- Reddinet Assessment Reports
- STEMI Center Reports

Tom Lynch addressed bed delay, indicating resolution is a priority. Margaret Peterson suggested including California Department of Public Health (CDPH) to address surge issues.

## **VII. OLD BUSINESS**

### **A. Utilization of PBC Trust Fund**

Utilization of PBC Trust Fund is included in agenda packet for reference; there have been no additional expenditures or no requests for additional expenditures.

### **B. EMCC Workshop**

The EMCC Workshop is targeted for January 2013. Jim Holbrook suggested that the workshop be held immediately following the January EMCC meeting and that any additional topics be agendaized for discussion at the November EMCC meeting.

## **VIII. NEW BUSINESS**

### **A. PBC Contract Amendment**

An amendment to the AMR contract will go to the ICEMA Governing Board for approval next week. This amendment will return restock back to on scene resupply.

## **IX. COMMITTEE/TASK FORCE REPORTS**

None

## **X. OTHER/PUBLIC COMMENT**

None

## **XI. COMMITTEE MEMBER REQUESTS FOR NEXT MEETING**

- Draft Letter to EMSA
- EMCC Workshop Topics
- Bed Delay Update

## **XII. NEXT MEETING DATE AND LOCATION**

November 15, 2012 (Meeting Cancelled)

ICEMA

Training Rooms A & B

1425 South "D" Street

San Bernardino, CA

**XIII. ADJOURNMENT**

Meeting was adjourned at 10:40 a.m.

# Staff Report - EMCC

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## EMS Management Information & Surveillance System - MISS II (ImageTrend)

### IMAGETREND ePCR SOFTWARE - IMPLEMENTATION

Currently, 13 providers are using the ImageTrend software. ICEMA is working with an additional 8 departments at this time to migrate from HealthWare Solutions to ImageTrend. ICMEA completed an upgrade to version 5.6X on January 10, 2013.

Providers currently on ImageTrend ePCR:

- AMR - Redlands
- AMR - Rancho
- AMR - Victorville
- San Bernardino City Fire
- Desert Ambulance
- San Manuel Fire
- Marine Logistics Base - Barstow
- Running Springs Fire
- Crest Forest Fire Protection District
- Big Bear Lake Fire
- Big Bear City Fire
- Sheriff's Aviation
- Yucaipa City Fire

### CAD INTERFACES PENDING ePCR IMPLETMENTATION

- AMR - Completed
- Confire - Testing
- Ontario Fire - Testing
- San Bernardino City Fire - Testing
- Desert Ambulance - Pending

### IMAGETREND ePCR SOFTWARE

The purchase of ImageTrend Software was approved by the ICEMA's Governing Board in November 2011. ICEMA is working with hospital users in the deployment of the Hospital Dashboard. This allows users to view inbound patients and review ePCR's of patients (by hospital) based on security and permissions.

Patient Registry - ICEMA has been testing the import of ePCR data into the new Trauma, Stoke and STEMI registries. Currently, ICEMA is rolling out the Trauma, Stroke and Stemi registries in January 2013.

1/17/13  
Mark Roberts

# Staff Report - EMCC

## UTILIZATION OF PBC TRUST FUND (LIQUIDATED DAMAGES)

<i>Request for Incidental Expenditures:</i>	<b>\$5,950.30</b>
Incidental expenses related to MISS project and performance based contracts not-to-exceed \$5,950.30.	
<i>Request for Additional Expenditure:</i>	<b>\$99,700.00</b>
Additional expenditure of \$99,700.00 for three (3) additional modules from ImageTrend.	

**Current Trust Fund Balance (as of January 8, 2013): \$612,644**

### Incidental Expenses:

During the July 2012 meeting, the EMCC approved the use of liquidated damages for incidental expenses related to the MISS project or performance based contracts not-to-exceed \$5,000. Expenses are listed below:

<b>ENDORSED INCIDENTAL BUDGET</b>			<b>\$5,000</b>
<b>Expenses:</b>	<b>Vendor</b>	<b>Date</b>	<b>Amount</b>
Linksys E1200 Routers (5)	Staples	7/16/2012	\$318.00
Virtual Server storage space upgrade	ISD	11/13/2012	\$1,452.30
Thomas Brothers Map Controls	ImageTrend	12/19/2012	\$4,180.00
<b>Subtotal</b>			<b>\$5,950.30</b>
<b>Balance Remaining</b>			<b>(\$950.30)</b>

### Additional Expenses for FY 2012-13:

During the July 2012 meeting, the EMCC also approved expenditures up to \$55,000 for the costs associated with paper and toner purchases. Expenses since are listed below.

<b>ENDORSED EXPENDITURES BUDGET</b>	<b>Vendor</b>	<b>Amount</b>	<b>\$55,000.00</b>
<b>Expenses FY 2012-13 (Q1):</b>			
Paper	Staples	\$2,156.95	
Toner	Daisy Wheel	\$7,164.00	
<b>Subtotal</b>			<b>\$9,320.95</b>
<b>Expenses FY 2012-13 (Q2):</b>			
Paper	Staples	\$1,316.04	
Toner	Daisy Wheel	\$6,370.44	
<b>Subtotal</b>			<b>\$7,686.48</b>
<b>Balance Remaining</b>			<b>\$37,992.57</b>

**Electronic Patient Care Record Data System Expenses:**

During the July 2011 meeting, the EMCC endorsed a not-to-exceed \$750,000 amount for the purchase of the new EMS data system from ImageTrend. On November 15, 2011, ICEMA's Governing Board approved an ePCR project with the initial three (3) year term of a total cost of \$717,546. Expenditures of the project are shown below.

<b>APPROVED ePCR BUDGET</b>			<b>\$717,546.00</b>
	<b>Vendor</b>	<b>Amount</b>	
<b>Expenses FY 2011-12:</b>	ImageTrend - software	\$161,640.00	
	Sarcom - Coldfusion	\$8,564.25	
	ISD - hardware	\$63,732.00	
<b>Subtotal</b>			<b>\$233,936.25</b>
<b>Expenses FY 2012-13:</b>	Notebook laptop memory (75)	\$4,118.85	
	ImageTrend - Year 2 support	\$77,120.00	
	ImageTrend - software	\$128,359.80	
	ISD - hardware	\$18,659.01	
<b>Subtotal</b>			<b>\$228,257.66</b>
<b>Balance Remaining</b>			<b>\$255,352.09</b>

**Trust Fund Utilization History**

September 2009	Printer Paper and Toner	\$28,000
January 2010	150 Ruggedized Flash Drives	\$5,000
May 2010	FY 2010-11 Printer Paper and Toners (ePCR printing @ hospitals)	\$25,000
July 2010	(7) Printers for hospitals	\$5,177
October 2010	Incidental expenses	\$5,000
January 2011	FY 2010-11 Printer Paper and Toners Increase	\$15,000
May 2011	(16) Printers add or replace for hospitals	\$12,500
July 2011	FY 2011-12 Printer Paper and Toners (ePCR printing @hospitals)	\$40,000
July 2011	ePCR Data System - ImageTrend	\$750,000*
May 2012	Ground Medical Transportation System Consultant	\$150,000*
July 2012	Incidental expenses	\$5,000
July 2012	FY 2012-13 Printer Paper and Toners (ePCR printing @ hospitals)	\$55,000*

\* Endorsed amounts not fully exhausted to-date. Trust fund balance reflects all amount remain available.

ICEMA is requesting authorization to purchase three (3) additional modules from ImageTrend.

1. Critical Care State Bridge Upgrade includes:

With the Critical Care expansion module, EMS Service Bridge™ and EMS Field Bridge™ allow for the collection of over 200 additional data points related to critical care including air-related and hospital-to-hospital transport, neonatal and high risk OB data collection.

- Quickly generate complete, real-time electronic critical care patient care reports in the field and during transports

- Record and analyze for data points related to critical care
- R/X Section with Activities and Flow Sheet Management
- En route blood gases and hospital lab collection
- Airway, Airway Verification and Ventilator power tools
- Continuous infusion medication administration

2. Fire Bridge Upgrade includes:

The system will seamlessly integrate inspection information, NFIRS reports and maps for a single incident. Using ImageTrend's intuitive data entry structure, the Web-based NFIRS reports and fire inspection forms are designed to increase efficiency while reducing time in data entry.

This secure Web-based system provides for complete and accurate incident reporting with staff and equipment management from anywhere at any time.

NFIRS 5.0 Incident Reporting:

With Fire Bridge's simple, user-friendly reporting and data management capabilities, users can utilize automated forms to record and report incident information. Easy data entry shortcuts, such as drop-down selection boxes optimize data entry and minimizes errors.

Fire modules include:

NFIRS 5.0 Reporting	Locations
Certification Dashboard	Occupants
Documents	Report Writer 2.0 (Transactional)
Fire Shifts	Staff
Hydrants	Inspections

3. Inventory and Maintenance module:

The Inventory Module allows the tracking and management of physical assets on a high-level or detailed basis per patient and per EMS run. Users can assign inventory to any location, record product attributes, attach photos and more. The Maintenance feature works in conjunction with the Inventory module, and allows agencies to record and schedule maintenance for any item included in the Inventory system. Maintenance questions can be customized to each agency and category, ensuring that each maintenance record captures the important information.

The addition of the CCT and inventory module are enhancements to the EMS data collection system that provides complete documentation of care, equipment and supplies provided and used during transport by critical care air or ground transports providers. The fire and inventory modules are enhancements to the system that allow fire agencies to integrate patient care data required for NFIRS reports that eliminates duplicate entry of patient care data across multiple forms.

The total cost for the above items is \$99,700.00.

**Staff Recommendations:**

1. EMCC endorsement for expenditure of \$5,950.30 for incidental expenditures related to MISS project and performance based contracts.
2. EMCC endorsement for expenditure of \$99,700.00 for three (3) additional modules from ImageTrend.

May Wang  
1/17/13



# **SAN BERNARDINO COUNTY EMERGENCY MEDICAL CARE COMMITTEE**

**2012  
ANNUAL REPORT**



## **INTRODUCTION**

This purpose of this writing is to document the San Bernardino County Emergency Medical Care Committee (EMCC) processes for 2012. The EMCC provides a platform for the diverse groups and individuals which form the Emergency Medical Services (EMS) System in San Bernardino County. It also acts as an advisory group to the Board of Directors for Inland Counties Emergency Medical Agency (ICEMA).

The local EMS system continues to mature and is formally exploring patient outcomes and other evidence based processes. San Bernardino County Emergency Services continues to advance the care and other services to the ill or injured.

## **EMCC MEMBERSHIP**

The 2012 EMCC members were:

<b>SEAT NO.</b>	<b>MEMBER</b>	<b>POSITION</b>
1	Diana McCafferty	Private Ambulance Provider
2	Jim Holbrook	EMT-P Training Institution (Chair)
3	Margaret Peterson	Hospital Administrator (Vice - Chair)
4	Travis Henson	ED Physician - Non-Trauma
5	Chris Hughes	City Manager/Deputy City Manager/Assistant Manager
6	Vacant	Consumer Advocate
7	Michael Smith	Fire Chief
8	Stephen Miller	Law Enforcement
9	Art Andres	EMT/Paramedic - Public Sector
10	Rick Britt	Emergency Medical Dispatch/Communications
11	Allen Francis	Nurse - MICN
12	Troy Pennington	Physician - Level II Trauma
13	Roy Cox	Air Ambulance Provider
14	Richard Catalano	Physician - Level I Trauma
15	Arthur Rodriguez	EMT/Paramedic - Private Sector

The EMCC position representing Consumer Advocate continued to be unfilled during the 2012 sessions. This vacancy originated during the 2009 sessions, and ICEMA has been working to fill the position.

All EMCC members are in compliance with the requirements for Ethics training as defined by Article 2.4 of Chapter 2 of Title 5 of the Government code (AB 1234).

## **MANPOWER AND TRAINING**

Both on-line and off-line medical control protocols continue to assure medical control of emergency medical care. A series of protocols, both regular updates and emergency protocols, were discussed during the 2012 EMCC sessions. The protocol changes were stimulated by changes in scientific or local system needs. Following the full system wide implementation of electronic data collection, the review of system and quality assurance measures will need to be added to the processes already instituted.

The local training institutions, Victor Valley College and Crafton Hills College, implemented student training sessions on the use of electronic patient care documentation.

The system continues, through local provider and hospital based agency processes, to move forward the educational and training needs of the basic and advanced life support personnel system wide.

As reported annually for the past ten years, due to changes in the administrative and structural process of the American Heart Association/American Red Cross and other large network training agencies, an accurate number of individuals trained in cardiopulmonary resuscitation and first aid are not and will not be available.

## **COMMUNICATIONS**

The ability to communicate system issues, including emergency room bed delay, continues to be an issue as the EMS system and population grow. The entire EMS constituency continues to explore and advance communications among all groups through various committees.

## **TRANSPORTATION**

The committee provided input related to transportation issues including proposed ambulance contract extensions and air ambulance services. Additionally, the EMCC endorsed an EMS fund expenditure of \$150,000 for an EMS system evaluation to assess the EMS system as it stands today and prepare for a potential Request for Proposal for Ambulance Service in 2014. The evaluation is anticipated to begin in mid-2013.

## **ASSESSMENT OF HOSPITALS AND CRITICAL CARE CENTERS**

San Bernardino County's EMS system continues to advance its specialty care system through implementation of the ST Elevation Myocardial Infarction (STEMI) system and other innovative system enhancements such as Stroke Centers. Through the implementation of these systems, patients are able to receive expedited medical treatment and improved outcomes.

## **MEDICAL CONTROL**

The medical control protocols and system processes continue to assure overall medical control of the EMS system. Twenty-four (24) protocols, both regular updates and new protocols, were discussed during the 2012 EMCC sessions. The protocol changes were stimulated by changes in scientific or local system needs.

The EMCC also received standing emergency medical services system management reports at each of the scheduled meetings. These standing reports included quarterly reports for Trauma systems and base hospital statistics and the monthly reports of electronic patient care reports, hospital bed delays, medication/ procedures / and type of patient summary reports, and hospital surveillance reports. These standing reports assist the overall system awareness as the system continues to advance in communication and functional systems knowledge between all groups.

Substantial agency(s) and personnel time is required to accurately collect, review, analyze, and compile reports for various discussions and decision making loops. Continuing efforts have been made toward fully implementing electronic collection system wide.

## DATA COLLECTION AND EVALUATION

The EMS system continued to document progress in data collection and analysis during the 2012 sessions through the implementation of new data software. Substantial agency(s) and personnel time were required in order to accurately collect, review, analyze, and compile reports for various discussions and decision making loops. Continuing efforts have been made toward fully implementing County wide electronic data collection. The system is moving out of the initial phase and some system outcome data exists.

The EMCC received standing emergency medical services system management reports at each of the scheduled meetings. These standing reports included quarterly reports for Trauma systems, base hospital statistics, hospital bed delays, medication/ procedures / and type of patient summary reports, and hospital surveillance reports. These standing reports assist the overall system as it continues to explore and advance in communication and systems knowledge between all groups.

Private providers continue to be further along on the continuum of data collection than public response agencies. The following San Bernardino County providers are submitting data to the ICEMA Management Information and Surveillance System (MISS) on a daily basis:

- 1) American Medical Response (AMR) Rancho
- 2) AMR Redlands
- 3) AMR Victorville
- 4) Baker EMS - Baker
- 5) Baker EMS - Needles
- 6) Barstow Fire Department
- 7) Big Bear City Fire Valley Paramedic Service
- 8) Big Bear Lake Fire Protection District
- 9) CAL FIRE - City of Yucaipa Fire Department
- 10) Crest Forest Fire Department
- 11) Desert Ambulance
- 12) Fort Irwin Fire Department
- 13) Mercy Air
- 14) Marine Corp Logistics Base - Barstow
- 15) Morongo Basin Ambulance Association
- 16) Morongo Valley Fire Department
- 17) Running Springs Fire Department
- 18) San Bernardino City Fire Department
- 19) San Bernardino County Sheriff's Aviation
- 20) San Manual Fire Department
- 21) Upland Fire Department - Air
- 22) Upland Fire Department - Ground

The following fire departments remain outside of the data collection process:

- 1) Apple Valley Fire Department
- 2) CAL FIRE - City of Highland Fire Department
- 3) Chino Valley Fire Department
- 4) Colton Fire Department\*
- 5) Combat Center Fire Department - Twentynine Palms
- 6) Loma Linda Fire Department\*

- 7) Montclair Fire Department
  - 8) Ontario Fire Department
  - 9) Rancho Cucamonga Fire Department
  - 10) Redlands Fire Department\*
  - 11) Rialto Fire Department\*
  - 12) San Bernardino County Fire Department\*
  - 13) San Bernardino County Sheriff's Search and Rescue
- \* CONFIRE Agencies

Despite a great deal of effort, the transfer and receipt of CONFIRE data was not successful but is anticipated once CONFIRE is able to implement the data system.

The ICEMA medical director and other system advisors continue to develop engineering controls necessary for patient care guided by reliable and consistent data and the system continued to document progress in data collection and analysis during the 2012 sessions.

## **PUBLIC INFORMATION AND EDUCATION**

The EMS system continues to provide quality care with the STEMI system processes and the implementation of a new Stroke receiving process. Both of the system construct highlight successful regionally based programs. The EMCC had presentations from the Crest Forest Fire Department on a multiple patient incident, ImageTrend on issues impacting the electronic documentation system and the Department of Public Health regarding a recent county wide hazard assessment.

## **CONCLUSION**

It has been the goal of the EMCC to allow broad-based system participation and discussions. It is the committee's sense that these activities have advanced the local EMS system. The EMCC applauds the EMS system and the participants as an amazing collection of the best and brightest in California.



## San Bernardino County Emergency Medical Care Committee

1425 South "D" Street  
San Bernardino CA 92415  
(909) 388-5823



(DATE)

Howard Backer, MD, MPH, FACEP, Director  
Emergency Medical Services Authority  
10901 Gold Center Drive, Suite 400  
Rancho Cordova, CA 95670

**RE: CEMSIS / NEMSIS**

Dear Dr. Backer:

The San Bernardino County Emergency Medical Services Committee (EMCC) of the Inland Counties Emergency Medical Agency (ICEMA) urges you to expedite the transition from the California Emergency Medical Services Information System (CEMSIS) to the National Emergency Medical Services Information System (NEMSIS).

The use of a California only data system results in a number of issues. These include delayed implementation of new data collection systems due to the need for software vendors to convert from NEMSIS to CEMSIS. The cost of these unfunded conversions is then shifted to each local EMS system. The ability to transmit data from the CEMSIS to NEMSIS database is also hampered by the use of a different system. We also understand that there are other EMS Authority issues including, the inability to effectively utilize the data that local EMS systems have already transmitted.

The EMCC is fully supportive of the ability to collect and analyze data as demonstrated by championing the ICEMA efforts to switch to ImageTrend, our new electronic patient care report (ePCR) software program. This robust system links, on scene, all first responder and ambulance information into one ePCR that will be transmitted in real time to receiving hospitals. The program will significantly enhance our ability to utilize data to effectively manage the ICEMA region.

San Bernardino has the twelfth largest county population in the United States. We look forward to contributing this significant volume of EMS data to California and National data caches. We believe this should be best accomplished by converting to NEMSIS in the most expeditious manner possible. The continued use of CEMSIS is counterproductive to our collective goal of utilizing data to support EMS quality improvement. Again, we urge you to facilitate this conversion as soon as possible.

Howard Backer, MD, MPH, FACEP, Director

(DATE)

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Thank you for your consideration of the San Bernardino County EMCC request. ICEMA stands ready to help with the near future conversion from CEMSIS to NEMSIS.

If you have any questions, please contact Tom Lynch, EMS Administrator.

Sincerely,

Jim Holbrook

Chair, San Bernardino County EMCC

JH/jlm

c: Cathy Chidster, President, EMSAAC  
Sam Stratton, MC, President, EMDAC  
Matt Powers, RN, Interim Chair, EMS Commission  
Tom Lynch, EMS Administrator, ICEMA  
Reza Vaezazizi, MD, Medical Director, ICEMA  
EMCC Official File



# Inland Counties Emergency Medical Agency

*Serving San Bernardino, Inyo, and Mono Counties*

*Tom Lynch, EMS Administrator*

*Reza Vaezazizi, MD, Medical Director*

**DATE:** December 14, 2012

**TO:** EMS Providers - ALS, BLS, EMS Aircraft  
Hospital CEOs, ED Directors, Nurse Managers and PLNs  
EMS Training Institutions and Continuing Education Providers  
Inyo, Mono and San Bernardino County EMCC Members  
Other Interested Parties

**FROM:** Tom Lynch  EMS Administrator

Reza Vaezazizi, MD  
Medical Director 

**SUBJECT: PROTOCOLS FOR 30-DAY COMMENT**

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The following protocols have been reviewed and revised by the Protocol Education Committee (PEC) and the Medical Advisory Committee (MAC) and are now available for public comment and recommendations.

Protocol Reference #:

- New - Triage Tag Tuesday
- New - Tactical Medicine Program
- New - Aircraft Rotation Protocol
- 1090 - Criminal History Background Checks (Live Scan)
- 5050 - Medical Response to a Multi-Casualty Incident
- 5070 - Medical Response to Hazard Materials/Terrorism Incident
- 6010 - Paramedic Vaccination Protocol
- 6080 - Paramedic Blood Draw for Chemical Testing at the Request of a Peace Officer
- 7010 - BLS/ALS Standard Drug and Equipment List
- 8040 - Continuation of Care of a STEMI Patient
- 8060 - San Bernardino County Request for Hospital Diversion Policy
- 9010 - General Patient Care Guidelines
- 9020 - Physician on Scene
- 9030 - Responsibility for Patient Management Policy
- 9040 - Reporting Incidents of Suspected Abuse Policy
- 9050 - Organ Donor Information
- 9060 - Local Medical Emergency Policy
- 10160 - Axial Spinal Stabilization
- 11010 - Adult Respiratory Emergencies
- 11020 - Airway Obstruction - Adult
- 11060 - Suspected Acute MI

- 11070 - Cardiac Arrest - Adult
- 11080 - Altered Level of Consciousness/Seizures - Adult
- 11100 - Burns - Adult
- 12010 - Determination of Death on Scene
- 13010 - Poisonings
- 13020 - Heat Related Emergencies
- 13030 - Cold Related Emergencies
- 14030 - Allergic Reaction - Pediatric
- 14060 - Seizures - Pediatric
- 14080 - Obstetrical Emergencies
- 14090 - Newborn Care
- 15010 - Trauma - Adult
- 15020 - Trauma - Pediatric
- 15040 - Glasgow Coma Scale Operational Definitions

ICEMA encourages all system participants to submit recommendations, in writing, to ICEMA during the comment period. **Written comments will be accepted until Monday, January 14, 2013, at 5:00 pm.** Comments may be sent via hardcopy, faxed to (909) 388-5850 or via e-mail to [SShimshy@cao.sbcounty.gov](mailto:SShimshy@cao.sbcounty.gov). Comments submitted and any revisions made will be presented at the January 17, 2013, Emergency Medical Care Committee (EMCC) meeting. The protocols will also be presented at the Inyo and Mono Counties EMCC meetings.

TL/RV/SS/jlm

Enclosures

c: File Copy

Protocol Changes for Public Comment  
December 14, 2012 to January 14, 2013

POLICY #	TITLE	CHANGES/COMMENTS
New	Triage Tag Tuesday	Changed start time
Draft	Draft Tactical Medicine Program	New special program
	Air Rotation Protocol draft	New policy
<b>1000 ACCREDITATION AND CERTIFICATION</b>		
1090	Criminal History Background	Possible input from legal counsel. No other changes
<b>2000 DATA COLLECTION</b>		
	NONE	
<b>3000 EDUCATION</b>		
	NONE	
<b>4000 QUALITY IMPROVEMENT</b>		
	NONE	
<b>5000 MISCELLANEOUS SYSTEM POLICIES</b>		
5050	Medical Response to a Multi-Casualty Incident	A few changes relative to documentation and the disposition of the triage tags. Renaming the ICEMA/MCI to the Med Comm Log per ICS.
5070	Medical Response to Haz-Mat	Changed made by Haz-Mat experts
<b>6000 SPECIALTY PROGRAM/ PROVIDER POLICIES</b>		
6010	Paramedic Vaccination Protocol	Need for this policy discussed, possibly delete the protocol or move to the
6080	Paramedic Blood Draw for Chemical	Possible move to administrative manual or remove due to lack of
<b>7000 STANDARD DRUG &amp; EQUIPMENT LISTS</b>		
7010	BLS/LALS/ALS Drug and Equipment list	Changes made to incorporate LALS supplies and equipment
<b>8000 TRANSPORT/TRANSFERS AND DESTINATION POLICIES</b>		
8040	Continuation of Care of STEMI	Title and minor verbiage changes and updated buddy list
8060	San Bernardino County Request for Hospital Diversion	Changed the definition of CT Diversion

Protocol Changes for Public Comment  
December 14, 2012 to January 14, 2013

POLICY #	TITLE	CHANGES/COMMENTS
<b>9000 GENERAL PATIENT CARE POLICIES</b>		
9010	General Patient Guidelines	LALS procedures added
9020	Physician on Scene	LALS procedures added
9030	Responsibility for Patient	LALS procedures added
9040	Reporting Incidents of suspected Abuse	Formatting change to the phone number on the last paragraph.
9050	Organ Donor Information	Reviewed; no changes.
9060	Local Medical Emergency	LALS procedures added
<b>1000 SKILLS</b>		
10160	Axial Spinal Immobilization	LALS procedure added
<b>1100 ADULT EMERGENCIES</b>		
11010	Adult Respiratory Emergencies	Multiple changes to formatting LALS procedure added
11020	Airway Obstruction - Adult	LALS procedure added
11060	Suspected Acute MI	LALS procedure added
11070	Cardiac Arrest - Adult	LALS procedure added
11080	Altered Level of Consciousness - Adult	Administration of Midazolam language to match the language in the pediatric seizure protocol. LALS procedure added
11100	Burns - Adult	LALS procedure added
<b>1200 END OF LIFE CARE</b>		
12010	Determination of Death	Added statement about the ePCR and the SIDS component. Added LALS
<b>1300 ENVIRONMENTAL EMERGENCIES</b>		
13010	Poisonings	LALS procedure added
13020	Heat Related Emergencies	LALS procedure added
13030	Cold Related Emergencies	LALS procedure added
<b>1400 PEDIATRIC EMERGENCIES</b>		
14030	Allergic Reactions Pediatric	Minor grammar changes LALS procedure added
14060	Pediatric Seizures	The dosages and route of midazolam was clarified the language and range
14080	OB Emergencies	made changes to Mag Sulfate order
14090	Newborn Care	LALS procedure added

Protocol Changes for Public Comment  
December 14, 2012 to January 14, 2013

POLICY #	TITLE	CHANGES/COMMENTS
<b>15000 TRAUMA</b>		
15010	Trauma Adult	LALS procedure added
15020	Trauma Pediatric	LALS procedure added
15040	Glascow Coma Scale Operational Definitions	Add in pediatric and neonate scales.
<b>POLICY DELETIONS</b>		
14100	Suspected Sudden Infant Death	Discussed making this protocol part of the Determination of Death protocol, the group was all in favor. This protocol will be deleted
Below are some of the protocols/policies designated for review in the next few months. If there are specific protocols/policies		
NONE		



## TRIAGE TAG TUESDAY

### PURPOSE

To provide opportunity for training and practice using the Cal Chief's approved triage tag throughout the continuum of care; from field to hospital, including entering patient information from the tag into the ReddiNet System.

Objectives include:

1. Develop a working knowledge and proper use of Cal Chief's approved Triage Tag.
2. Practice assessing patients in a Mass Casualty Incident (MCI) or Event (MCE) per ICEMA Protocol.
3. Ability to define each component of the triage tag and understand its intended purpose.

This training and practice will ensure that all personnel involved (field and hospital) in emergency medical patient care are competent in the use of triage tags and that all First Responders and transport providers are using a standardized triage tag that has all of the necessary components for All Risks (Chemical, Biological, Radiological and Enhanced Conventional Weapons (CBRNE), trauma, burns, etc.) events.

### AUTHORITY

Under the California Health and Safety Code, Division 2.5, 1797-. . . et. et seq, ICEMA is responsible for planning, implementing and evaluating the EMS system within its region. This includes eight system components; System Organization and Maintenance, Staffing and Training, Communications, Transportation, Public Information and Education, Assessment of Hospitals and Critical Care Centers, Data Collection and Evaluation, and Disaster.

ICEMA Protocol Reference #5050 *Medical Response to a Multi-Casualty Incident* requires the use of Cal Chiefs approved triage tags for all patient transports from MCI's.

### POLICY

On the second Tuesday of each calendar month for a 24 hour period, each patient that requires transport to a hospital will have a Cal Chief approved triage tag placed on them by field personnel. The cycle will begin at 7 a.m. ~~noon~~ on the second Tuesday of the month and conclude at 7 a.m. ~~noon~~ the following day, Wednesday.

Field personnel will be responsible for filling out the tag as completely as possible, but minimally to include:

1. Patient's personal information
2. Patient Condition
3. Record treatment provided
4. Remove the transportation receipt (stays with ambulance coordinator)
5. Document triage tag number on ePCR or O1A

Transport agency personnel will be responsible for:

1. Keeping the transportation receipt (to be sent to ICEMA within 72 hours for QI)
2. Maintain the triage tag with the patient to the destination hospital
3. Document the triage tag number on ePCR or O1A

Hospital personnel will be responsible for:

1. Receipt of patients
2. Remove the wristband section of the tag and place on patient's wrist
3. Document the triage tag number in the ReddiNet system
4. Collect all triage tags from patients after removal and hold them for ICEMA

ICEMA staff will pick up all Triage Tags collected from each transported patient by the receiving hospital within 48 hours. ICEMA will receive the transportation receipts from all transport agencies within 72 hours. ICEMA will evaluate the program each month utilizing the data collected from the field (ePCR), entries into the ReddiNet System, and from the tags themselves. ICEMA will produce reports of its findings monthly.

ICEMA will provide "Triage Tag Tuesday" self-study modules on its Ninth Brain site for First Responders, Transport Agencies, and hospital (First Receiver) staff to utilize to maintain their competency in using All Risk<sup>®</sup> Triage Tags.



## TACTICAL MEDICINE PROGRAM

### PURPOSE

To provide medical oversight and continuous quality improvement and establish policies and procedures for EMS personnel assigned to Tactical Medicine Programs within the ICEMA region.

### DEFINITION

Tactical medicine, for the purpose of this policy, is defined as the delivery of Emergency Medical Care during law enforcement special operations.

### AUTHORITY:

Penal Code Section 13514.1. California Health and Safety Code 1797.218, 1797.220, 1797.222 and 1798. California Code of Regulations Title 22, Chapter 4, Section 10145, 100169 and 100170. California POST/EMSA *Tactical Medicine Operational Programs and Standardized Training Recommendations* – March 2010

### POLICY

1. Tactical medicine programs shall be developed and utilized in accordance with the “California POST / EMSA Tactical Medicine Operational Programs and Standardized Training Recommendations” document that can be located on the EMSA website at <http://www.emsa.ca.gov/personnel/files/TacticalMedicine.pdf>.
2. Tactical medicine programs and their medical personnel (EMT, **AEMT**, EMT-P and RNs) shall be integrated into the local EMS system, in coordination with ICEMA, the local Emergency Medical Services (EMS) Agency (POST, 2010).
3. Tactical medicine programs shall be reviewed and approved by ICEMA.
4. Administration of this policy applies to Emergency Medical Technicians (EMT), **Advanced EMT (AEMT)**, Paramedics (EMT-P), and Registered Nurses (RN) providing medical services within an established EMS Agency and as part of a recognized Tactical Medical Program.

- a. The medical scope of practice for EMTs, AEMT and EMT-P (Paramedics) is consistent with Title 22, division 9 and all ICEMA protocols.
5. Tactical Medicine Programs should designate a Tactical Medicine Program Director as defined within POST and EMSA guidelines.
6. Tactical Medicine Programs should designate a physician as a Tactical Medicine Medical Director “to provide medical direction, continuous quality improvement, medical oversight, and act as a resource for medical contingency planning” (POST, 2010).
7. Tactical Medicine Operational Programs should have components pertaining to planning, medical oversight, quality improvement and training as defined in *Tactical Medicine Operational Programs and Standardized Training Recommendations* (POST, 2010; Section 2.2.1-7)
- 7.8. Tactical Medicine programs should include tactical medical personnel in mission planning and risk assessment to ensure appropriate assets are available for the identified mission as defined in *Tactical Medicine Operational Programs and Standardized Training Recommendations* (POST, 2010; Section 2.2.2)

## PROCEDURE

1. All ~~law enforcement~~ agencies that intend to provide a tactical medicine program will:
  - a. Submit an ICEMA approved application for a Specialty Program for review by ICEMA.
  - b. Submit a copy of the proposed program to include all information as listed on the application.
  - c. Provide a list of all Nurses, Paramedics and EMTs assigned to the Tactical Medicine Program.
  - d. Tactical Medical Personnel must be
    - i. All Paramedic (EMT-P) must be California State Licensed and accredited by ICEMA.
    - ii. Emergency Medical Technicians (EMT, AEMT) personnel must be California State certified.

- iii. Nurses must be licensed as a Registered Nurse (RN) in California and an approved Flight Nurse, MICN, or paramedic within the ICEMA Region.
- e. ~~Include ICEMA Representative in Continuous Quality Improvement and Medical Contingency Planning meetings and participate~~ Participate in ICEMA approved Continuous Quality Improvement process.

## TRAINING

Designated Tactical Emergency Medical Support (TEMS) personnel shall successfully complete all initial and ongoing recommended training provided by an approved tactical medicine training program as listed in the "California POST / EMSA *Tactical Medicine Operational Programs and Standardized Training Recommendations* document.

## DRUG AND EQUIPMENT LISTS

Equipment and supplies carried and utilized by Tactical Emergency Medical Support (TEMS) personnel shall be consistent with the items listed in the California POST / EMSA *Tactical Medicine Operational Programs and Standardized Training Recommendations* document. Equipment and supplies shall be based on the appropriate level of personnel utilized for the particular tactical medicine program (TEMS BLS or TEMS ALS).

The Tactical Medicine program standard list of drugs and equipment carried by TEMS BLS or TEMS ALS medical personnel must be reviewed and approved by ICEMA prior to issue or use by EMT or EMT-P personnel.

ICEMA Drug and Equipment list for Reference Tactical Medicine Operational Equipment Recommendations

Medications	BLS	ALS
<del>Acetaminiphen</del> Acetaminophen		
Albuterol 2.5mg with Atrovent 0.5mg MDI		1
Aspirin 81mg		1 bottle
Atropine Sulfate 1mg preload		1
Dextrose 50% 25gm preload		1
Diphenhydramine 50mg		2
Epinephrine (1:1000) 1mg		2
Epinephrine (1:10,000)1mg preload		2
Glucagon 1mg		1
Naloxone 2mg preload		2
Nerve Agent Antidote (DuoDote)		1
Nitroglycerine 0.4 metered dose or tablets (tablets to be discarded 90 days after opening)		1
Normal Saline 500ml		2
Ondansetron 4mg IV/IM/oral tabs		4

**CONTROLLED SUBSTANCE MEDICATIONS**

Controlled Substance Medications MUST BE DOUBLED LOCKED	BLS	ALS
Midazolam – vials of 10mg/2cc, 2mg/2cc, or 5mg/5cc		20 mgs
Morphine Sulfate vials of 10mgs		20 mgs

**EQUIPMENT**

Airway Equipment	BLS	ALS
<del>Adult non-rebreather mask</del>		
Chest seal and Flutter Valve		1
End Title CO2 (device may be integrated into bag)		1
Endotracheal Tubes – 6.0 and/or 6.5, 7.0 and/or 7.5, and 8.0 and/or 8.5 with stylet		1 each
ET Tube holder		1
King LTS-D Size 4 and 5	1 each if approved	1 each
Laryngoscope Kit		1
Nasal cannula		
Nasopharyngeal Airways Adult	1set	1set

Airway Equipment	BLS	ALS
Needle Cricothyrotomy Device		<u>1</u>
Needle Thoracostomy Kit		<u>1</u>
Oxygen source		
Suction (hand held)	<u>1</u>	<u>1</u>
Ventilation Bag collapsible (BVM)	<u>1</u>	<u>1</u>

## IV/MONITORING EQUIPMENT

IV/Needle/Syringes	BLS	ALS
AED (with waveform monitoring preferred)	<u>1</u>	<u>1</u>
AED Pads	<u>1</u>	<u>1</u>
Blood Pressure Cuff	<u>1</u>	<u>1</u>
IO Device and Needles		<u>1</u>
IV Needles 14-20 Gauge		<u>1 of each</u>
IV Start Kit		<u>1</u>
IV Tubing		<u>1</u>
Pulse Ox (optional)		
Saline Flush		<u>2</u>
Saline Lock		<u>2</u>
Stethoscope	<u>1</u>	<u>1</u>
Syringes 3cc,5cc,10cc		<u>1 each</u>

## DRESSING AND SPLINTING

Dressing/Splints	BLS	ALS
CoTCCC – Recommended Tourniquet system	<u>1</u>	<u>1</u>
Elastic compression dressing	<u>1</u>	<u>1</u>
Latex free gloves	<u>1</u>	<u>1</u>
<u>N95 Mask</u>	<u>1</u>	<u>1</u>
Occlusive dressing	<u>1</u>	<u>1</u>
Roller bandage	<u>1</u>	<u>1</u>
Splint – semi-ridged moldable	<u>1</u>	<u>1</u>
Sterile gauze pads	<u>1</u>	<u>1</u>
Tape	<u>1</u>	<u>1</u>
Trauma dressing	<u>1</u>	<u>1</u>
Trauma shears	<u>1</u>	<u>1</u>
Triangle bandage	<u>1</u>	<u>1</u>
<u>Hemostatic Agent (Optional)</u>		

## MISCELLANEOUS EQUIPMENT

Equipment	BLS	ALS
Litter	<u>1</u>	1
Patient care record	<u>1</u>	<u>1</u>
PPE	<u>1</u>	1
Triage tags	<u>10</u>	<u>10</u>
<u>Tactical Light</u>	<u>1</u>	<u>1</u>
<u>Eyeware</u>	<u>1</u>	<u>1</u>
Rescue Blanket	<u>1</u>	<u>1</u>
<u>Self-heating Blanket</u>	<u>1</u>	<u>1</u>



## COMM CENTER AIRCRAFT ROTATION POLICY

### PURPOSE

To establish EMS Aircraft dispatch rotation criteria for San Bernardino County Communication Center. (COMM Center)

### AUTHORITY

Division 2.5, Chapter 4 and 5, California Code of Regulations.

### POLICY

1. All EMS Aircraft requests from the field in San Bernardino County will be dispatched by the San Bernardino County Communications Center.
2. At time of dispatch, COMM Center will inform the EMS Aircraft of destination based on the following:
  - a. Destination will alternate between ARMC and LLUMC ~~in as determined by ICEMA. predetermined number as agreed upon by ICEMA and COMM Center manner approved by ICEMA.~~ as determined by ICEMA.
  - b. The destination may be changed by the EMS providers based on patient requirements for specialty centers as described in the ICEMA Destination Protocol Reference \*\*.
  - c. Cancellation or destination change of an EMS Aircraft will not alter the rotation of dispatched aircraft.
  - d. Approved Diversion will alter the rotation of EMS aircraft (Protocol Reference #8060, San Bernardino County Requests for Hospital Diversion Policy.)
3. An EMS Aircraft going to another destination other than the one assigned by Comm Center, ~~for medical reasons other than trauma,~~ will notify COMM Center and the receiving facility. Notification maybe made by ground or air crews, whichever is the most expeditious for information to be given to the receiving facility.
4. Changes to EMS Aircraft rotation may be reviewed for potential QI issues.

**PROTOCOL NAME**

**REFERENCE:**  
**Page 2 of 22**



## CRIMINAL HISTORY BACKGROUND CHECKS (LIVESCAN)

### PURPOSE

To provide information for Department of Justice (DOJ) and Federal Bureau of Investigation (FBI) background checks for individuals applying for certification/recertification as an Emergency Medical Technician (EMT) recognized in the State of California by the ICEMA Medical Director.

### AUTHORITY

Section 1797.107, Health and Safety Code; California Code of Regulations, Title 22, Chapter 10, 100347.

### GENERAL INFORMATION

Effective July 1, 2010 all Emergency Medical Technicians (EMTs) must have a criminal background check (LiveScan) on file with the certifying entity.

### LiveScan Forms

Live Scan forms can be printed from the ICEMA website. **It is important that the information be entered onto the form exactly as outlined in the instructions. Failure to do so will require LiveScan resubmission and additional fees.**

Forms are also available at the LiveScan agencies. If printing from the ICEMA website, applicant must print three (3) completed copies: one for the Live Scan agency, one for ICEMA and one for the applicant.

### Fees

Currently, fees include a \$36 DOJ fee and a \$17 FBI fee. Additionally, each LiveScan agency charges a "rolling fee" that varies but averages approximately \$20. Applicant is required to pay these fees to the LiveScan agency when submitting fingerprints. Be sure to confirm methods of payment (personal checks, money orders, or cash); there are differences as to what agencies will accept. Also, remember to bring a picture ID.

### Live Scan Agencies

A complete listing is available on the ICEMA website and is listed by county and includes hours of operation, cost, whether an appointment is necessary, and acceptable methods of payment.

### **Confidentiality**

Privacy and confidentiality of criminal history record information is the responsibility of ICEMA. Once a response is received from LiveScan, ICEMA is obligated to destroy that information immediately, once a decision is made on certification status. In addition, only preauthorized EMS Agency staff is permitted to review this information. All submitted material will be held in strict confidence.

### **Conviction History**

Conviction of a crime does not necessarily mean that an applicant will be denied certification. The appropriate EMS staff, along with the County legal department, if appropriate, will review each individual case where the applicant has a criminal conviction. Decisions will be based on applicable State statutes and regulations and a careful review of documentation. If an applicant is denied, he/she has the right to request a hearing. In addition to certification actions, an EMT certificate may be suspended or revoked based upon criminal history information. Applicants with a criminal conviction or who are involved in an active prosecution can expect a delay in the processing of their application. Submitting a letter explaining the case and copies of court documents can help in the decision process. For further information please see *Protocol #1070, EMT Investigations and Disciplinary Actions*.

### **What to Submit with Your Certification Application**

Applicants must submit a copy of the Live Scan form with their certification paperwork. For additional certification information, please see *Protocol #1030, EMT Certification/Recertification Requirements*.



## MEDICAL RESPONSE TO A MULTI-CASUALTY INCIDENT

### PURPOSE

1. To outline and coordinate the responses by EMS system participants to Multi-Casualty Incidents (MCI).
2. To standardize definitions, as outlined in the Firescope Field Operations Guide (FOG) and the responsibilities of each participating entity.

### PRINCIPLES

1. Field responses to a MCI will follow the procedures/guidelines consistent with the Incident Command System (ICS) as outlined in Firescope.
2. Hospitals shall receive as much advanced notice as possible to prepare for arriving patients.

### SCOPE

A Multi-Casualty Incident (MCI) is any incident where personnel on scene have requested additional responses to care for all victims.

- Incident requires five or more ambulances; and/or
- Incident involves ten or more patients; and/or
- Requires utilization of triage tags; and/or
- May require patient distribution to more than one hospital.

### PROCEDURE

#### General Operational Procedures:

1. First arriving resource with the appropriate communications capability shall declare an MCI; establish command, name the incident and request hospital bed availability through Coordinated Communication Center (CCC). This resource shall remain in command until relieved by the public safety agency having jurisdictional authority.
2. All operation functions and procedures on scene will be in accordance with Firescope.

3. The Incident Commander (IC) will assign the first available resource to triage. Adults shall be triaged according to START as outlined in Firescope. Pediatric patients shall be triaged according to JumpSTART (see definitions) developed by California Emergency Medical Services for Children.
4. The IC or designee shall establish communications with the CCC on the Med Comm Talk Group for situation update and to obtain hospital bed availability.
5. The Medical Communications Coordinator (Med Comm), when initially communicating with the CCC, will provide the following information:

Name of Incident type, location and agency in charge.

6. Patients should generally be transported to the appropriate hospitals as provided to the Med Comm by the CCC.
7. The Med Comm shall notify the CCC with the following information for all patients departing the scene:

a. Transport method (air, ground, bus)

b. Transport agency and unit

c. Number of patients (adult and pediatric)

d. Classification of patients (Immediate, Delayed, Minor)

e. Destination (in accordance with CCC destination availability)

8. Transporting units shall make attempts to contact the receiving hospital en-route to provide patient(s) report using the incident name to identify the patient and provide the following information:

a. Incident name

b. Transporting ~~agency name~~ and unit number

c. Age/sex

d. Mechanism of injury

e. Chief complaint and related injuries that may need specialty services, e.g. respiratory, neuro, vascular or decontamination

f. Glasgow Coma Scale

g. \_\_\_\_\_ETA

9. If the destination is changed enroute from that provided by the Med Comm, the transporting unit shall notify the CCC through its dispatch, ~~or directly to the hospital,~~ and shall make ~~attempts to contact~~ to the revised receiving hospital ~~enroute~~. The CCC will notify the original destination that the transporting unit has been diverted by the base station physician or that the patient condition has deteriorated.
10. ~~The base station has the option to inform scene personnel making initial contact to call CCC for determination of bed availability.~~

### **Special Operational Procedures - Use of Non-Emergency Vehicles**

The Patient Transportation Unit Leader (PTUL), in coordination with the IC, may utilize non-emergency vehicles to transport patients triaged as "minor." The Med Comm will work with the receiving facilities to coordinate the destinations. In such cases, the following conditions shall apply:

1. Non-emergency vehicles may be requested through the CCC or by special arrangement made on scene by the PTUL; however, in the event arrangements are made on scene, the PTUL shall notify the CCC.
2. If resources allow at least one ALS team (minimum of one paramedic and one ~~EMT-EMT~~) with appropriate equipment will accompany each non-emergency transport vehicle.
3. Generally, the ratio of patients to ALS team should not exceed 15:1.
4. In the event of deterioration of a patient en-route, the non-emergency unit shall immediately call for an ALS emergency ambulance and transfer care for transport to the closest emergency department.

### **Responsibilities of the County Communications Center (CCC)**

1. Upon field notification of an MCI, the CCC shall immediately poll hospitals via the ReddiNet for bed availability.
2. The CCC shall advise other 9-1-1 dispatch centers of the MCI, including the name and location.
3. The CCC shall dispatch all air resources for the MCI.
4. The CCC shall notify the EMS Agency when five or more ambulances are requested.

5. The CCC will confirm patient departure from scene with Med Comm by providing the departure time.
6. The CCC will advise receiving hospitals of the number/categories of patients en route via ReddiNet or other approved method.
7. The CCC will notify all involved hospitals when the MCI is concluded.

### **Responsibilities of the Receiving Hospital**

1. All hospitals shall respond immediately to the ReddiNet poll.
2. A receiving facility may not change the destination of a patient.
3. A designated Trauma Hospital Base Station physician may change a patient destination only if a patient condition deteriorates.
4. Hospitals shall enter all required information into the ReddiNet, including, but not limited to, names, age, ~~and sex,~~ and triage tag number of patients transported from the MCI.
5. Each hospital that received patients from the MCI shall participate in after action reviews as necessary.

### **Medical Control**

1. EMS ~~p~~Personnel shall operate within ICEMA “prior to contact” protocols for both medical and trauma patient(s).
2. If base station consultation is necessary, medical control refers to a specific patient(s) and not to the incident as a whole (operational aspects).
3. ~~Medical Control has the option of referring the agency establishing radio contact to the CCC for bed availability.~~

### **Field Documentation**

1. The Med Comm maintains responsibility to ensure the following:
  - a. Utilization of the Med Com log ~~approved ICEMA/MCI patient care report.~~  
This form will include:
    - 1.i. ~~\_\_\_\_\_~~ Name and location of the Incident

2.ii. \_\_\_\_\_ Triage tag number for each patient and their hospital destination

3.iii. \_\_\_\_\_ Brief description of the Incident

b. \_\_\_\_\_ Completion of as much information as available will be documented on the triage tag, ~~an individual patient care report for each deceased individual at the incident.~~

c. \_\_\_\_\_ A completed individual patient care report for all patients with a chief complaint who “refuse treatment” and desire to sign a release of liability or AMA.

2. Each transporting unit is responsible for generating a patient care report for each patient transported excluding patients transported by non-emergency vehicles. Those transported in non-emergency vehicles will be identified by triage tags. This should include patient tracking tag/number and will indicate the incident name and location.

## **ADDENDUM**

### **Firescope Operations Procedures of a Multi-Casualty Incident**

#### **Operational System Description**

The Multi-Casualty organizational module is designed to provide for the necessary supervision and control of essential functions required during a Multi-Casualty Incident. The primary functions will be directed by the Medical Group Supervisor, if activated (or Operations), who reports to the Multi-Casualty Branch Director, if activated, or in most cases, the Incident Commander. Resources having direct involvement with patients are supervised or coordinated by one of the functional leaders or coordinators.

The Medical Branch structure in the ICS system is designed to provide the Incident Commander with a basic, expandable modular system for managing the incident. The system is designed to be set up consistent in all incidents involving mass casualties and has the ability to expand the incident organization as needed.

**Initial Response Organization:** Initial response resources are managed by the Incident Commander, who will handle all Command and General Staff responsibilities. The resources will respond based on the **operational procedures** (as outlined in this protocol).

**Reinforced Response Organization:** In addition to the initial response, the Incident Commander establishes a Triage Unit Leader, a Treatment Unit Leader, Patient Transportation Unit Leader and Ambulance Coordinator. Also patient treatment areas are established.

**Multi-Group Response:** All positions within the Medical Group are now filled. The Air Operations Branch may be designated to provide coordination between the Ambulance Coordinator and the Air Operations Branch. The Extrication Group is established to free entrapped victims.

**Multi-Branch Incident Organization:** The complete incident organization shows the Multi-Casualty Branch and other Branches. The Multi-Casualty Branch now has multiple Medical Groups (geographically separate) but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals.

### **Operational Principles**

1. First arriving resource with the appropriate communications capability shall declare an MCI, establish command, name the incident, and request bed availability. This resource will remain in command until relieved by the public safety agency having jurisdictional authority.
2. The IC will assign the first available resource to triage. Victims shall be triaged according to START/JumpSTART criteria, and ICS shall be implemented according to Firescope.
3. The IC will assign the resource with the appropriate communications capability to establish communications with CCC situation update and to obtain bed availability.
4. Treatment areas are set up based upon needs and available resources according to classification of patients (immediate, delayed and minor.) The Treatment Unit Leader will notify Patient Transportation Unit Leader when a patient is ready for transportation and of any special needs (e.g. Burns, Pediatrics, etc.)
5. Patients are transported to the appropriate facilities based upon patient condition, bed availability, and transport resources. The Patient Transportation Unit Leader and the Medical Communications Coordinator will work together to transport the patients using the appropriate methods to the most appropriate destinations.
6. The Patient Transportation Unit Leader/Medical Communications Coordinator will determine all patient destinations.
7. The Incident Commander will designate a staging area (s). Transportation personnel should stay with their vehicle to facilitate rapid transport, unless reassigned by the Incident Commander or his designee.
8. The Patient Transportation Unit Leader will then call for an ambulance or other designated transportation vehicle to respond to the loading area.

9. The Patient Transportation Unit Leader, in coordination with the Incident Commander, may put in a request through the Communications Center for busses to transport minor or uninjured patients.
10. The Patient Transportation Unit Leader will copy the information from the triage tag onto a Patient Transportation Log, and confirm destination with the ambulance crew.
11. The Patient Transportation Unit Leader will notify Medical Communications Coordinator of patient departure.
12. The transporting unit should contact the receiving facility en route with a patient report, using the Incident name to identify the patient.



## MEDICAL RESPONSE TO HAZARDOUS MATERIALS/TERRORISM INCIDENT

### PURPOSE

To supplement the Operational Area Plan Hazardous Material Response Policy. To provide a more detailed medical perspective and serve as a guide to dispatch centers, EMS response agencies, (both public and private) and acute care hospitals and to outline a plan of coordinated medical response to victims of hazardous materials incidents and suspected or actual acts of terrorism for decontamination, protective measures and treatment.

### DEFINITIONS

**“Exclusion Zone” or “Hot Zone”** is that area immediately around the spill where contamination does or could occur. It is the innermost of the three zones of a hazardous materials site. It is the zone where mitigation measures take place. Special protection is required for all personnel operating in this zone. All personnel exiting this zone will require decontamination.

**“Contamination Reduction Zone” or “Warm Zone”** is that area between the Exclusion Zone and the Support Zone. This zone contains the Contamination Reduction Corridor where the decontamination team decontaminates the personnel leaving the Exclusion Zone. This zone may require a lesser degree of protective equipment than the Exclusion Zone. This area separates the contaminated area from the clean area and acts as a buffer to reduce contamination of the clean area. No contamination should pass through to the clean area.

**“Support Zone” or “Cold Zone”** is the clean area outside of the Contamination Control Line. Special protective clothing is not required. This is the area where resources are assembled to support the hazardous materials operation.

### PROCEDURE

#### Operational Principles for First Responders

1. There is a direct relationship between the type and amount of material and the resultant illness. Exposure may lead to injury and death. Risk to personnel is directly related to the type of contaminant and length of exposure.
2. A single small release, with any degree of personal carelessness, could disable an entire emergency medical system.
3. On-scene personnel safety takes priority over any immediate rescue/resuscitation

concerns.

4. Prehospital health care providers will be unable to respond to other emergencies until decontamination of involved equipment and personnel is accomplished.

### **Response and Activation**

1. Immediate notification to the County Interagency Hazardous Materials Emergency Response Team through appropriate dispatch center. Suspected terrorist activity should also be reported to the appropriate public safety agency having primary investigative authority.
2. Information (if known) to be provided to responding agencies:
  - a. ~~\_\_\_\_\_~~ Name of substance (this could include basic information such as container information, placards, color/size/odor descriptions and should be obtained from a safe distance); do not make an effort to smell any chemical. If you smell the chemical you have been exposed. ~~as this could result in an adverse exposure to response personnel.~~
  - a. b. \_\_\_\_\_ Physical state of material (liquid, gas, solid, powder, etc.).
  - b.c. \_\_\_\_\_ What is the product doing? E.G. melting, bubbling, off-gassing, still leaking.
  - e.d. \_\_\_\_\_ Extent of contamination.
  - d.e. \_\_\_\_\_ Lay of the land.
  - e.f. \_\_\_\_\_ Wind direction, other weather conditions.
  - f.g. \_\_\_\_\_ Staging area, sic. Up-wind, upstream, uphill.
  - g.h. \_\_\_\_\_ Alternate travel route.
  - h.i. \_\_\_\_\_ Consider activation of MCI if appropriate.

### **Hospital Notification**

1. Hospitals should immediately be made aware of any hazardous materials/terrorism incident through the ReddiNet system or by phone. This early alert will allow the hospital(s) to prepare for the eventuality of receiving patients from the incident.
2. This notification should be made even if it appears no victims have received exposure or contamination. In some cases, individuals may arrive at local hospitals without going through decontamination. These victims have the potential for

exposure risk and contamination of personnel and facilities and would result in the lengthy shutdown of a facility while specialized decontamination teams render the facility safe.

3. Consider requesting additional Hazmat and/or Decon equipment from local Fire jurisdiction to assist with larger numbers of walk-ins.

### **First Responding Ambulance**

1. If an ambulance is the first responder, upon suspicion of a hazardous material release, the crew should:
  - a. Advise the appropriate dispatch center of the situation. This information will minimize unnecessary and inadvertent exposure to other public safety personnel and equipment.
  - a.b.
  - b.c. The ambulance crew shall await arrival of appropriate resources prior to rendering any treatment.
2. Medical responders will always work in the Support Zone. They should never enter the Exclusion or Contamination Reduction Zones.
3. The IC will determine the level of personal protective equipment (PPE) needed in each zone.
4. Only personnel who are wearing proper personal protective equipment (PPE) shall make contact with victims in the Exclusion or Contamination Reduction Zones
5. The Incident Commander or designee will make all decisions regarding the mode of transportation for injured persons.

### **On Site Treatment**

1. Within the Exclusion and Contamination Reduction Zones

Self-contamination potential and restrictions caused by PPE make definitive treatment within these zones difficult. Only those Public Safety Responders trained in providing medical care in a hazardous environment, and limited to basic life support procedures should provide medical treatment within these zones. This treatment should be followed by rapid transportation to the Containment Reduction Zone/ Decon. Any ambulatory victims need to be directed to an Ambulatory Decon

Area/Line for decontamination. It is possible some of these people can decontaminate themselves.

2. The Safe Zone

Paramedic medical interventions should begin only after the decontamination process. Treatment should be in accordance with prevailing medical standards of care and by consultation with the base hospital station, if indicated. One hospital should act as the coordinating hospital using resources such as Regional Poison Control Center and/or Toxic Information Center.

**Medical Transportation**

1. Ground Ambulance Preparation

- a. If a victim is contaminated, there will be no ambulance transport until gross decontamination is performed.
- b. If transport is deemed necessary by the IC or designee then:
  - i. A plastic sheet should be placed on the ambulance floor prior to transport.
  - ii. Adequate ventilation should be provided to avoid accumulation of toxic chemical levels in the ambulance.

2. Helicopter Consideration

- a. A decision to utilize helicopter services should be decided by the collaboration of the Incident Commander, or designee and the flight crew.
- b. Guidelines outlined in 1b. above should be applied to preparing a helicopter prior to transporting patients.
- c. Air transport of patients should be considered as a last resort.

**Determination of Destination Hospital and Related Preparation**

1. Destination Hospital

The destination hospital should be determined by the standard of the closest and most appropriate. When information indicates the hazardous material possesses a

significant threat to hospital personnel, consideration should be given in consultation with the Base ~~Hospital~~ Station Physician to triage the patients to a single hospital. This decision should be made based on the potential danger to attending staff, threatened facility closure and the ability of the hospital to handle such cases.

2. Preparation by Receiving Hospital(s)

- a. Internal preparation according to hospital policies and procedures.
- b. Anticipate walk-in contaminated patients.
- c. Anticipate the need for fine detail decontamination (e.g. fingernail beds and ear canals of persons who were field decontaminated). Check for contact lenses.
- d. In the event contaminated victims arrive at the hospital, the hospital should be prepared to decontaminate victims in a pre-designated area outside of the Emergency Department. Some accessories may include:
  - i. Temperature controlled water hose (low pressure).
  - ii. ~~Kiddie pool or other~~ A acceptable catch basin.
  - iii. Expendable or easily decontaminated gurney.
  - iv. Towels and sheets for patient.
  - v. Movable screens for privacy.
  - vi. Plastic lined garbage receptacles for contaminated clothes and equipment. Personal effects of victims involved in a terrorist event should be bagged and labeled as possible evidence for collection by law enforcement.
  - vii. Consider requesting assistance from local Hazmat Teams for additional assistance.
  - viii. A current contract with a State licensed hazardous materials contractor to dispose of contaminated materials and properly perform area decontamination should already be in place.

1. Assignment of a Mobile Intensive Care Nurse/Emergency Department Physician or designee to ReddiNet, if available, throughout the duration of the incident.
2. Collaboration of Base ~~Hospital~~ Station Physician and the Incident Commander/Technical Reference Team Leader as to the best method of decontamination.
3. Provide to paramedics, online information regarding prodromal symptoms that may be expected as a result of exposure to hazardous materials or WMD agents.
4. Anticipate walk-in contaminated patients and initiate appropriate action.
5. Assist in consultation and determination of destination.

#### **Decontamination of Prehospital Equipment and Personnel**

Proper protection of equipment and supplies should minimize equipment and personnel out of service due to any contamination that may occur during transport. If the vehicle and equipment are contaminated during transport, they should not return to service until adequately decontaminated by qualified personnel. In addition, the following procedure should be followed:

1. Personal protective garments should be discarded in designated receptacles at hospital facilities as soon as practical.
2. Decontamination should take place under the direction of designated hazardous materials personnel.
3. Decontamination should take place in an area where wastewater can be contained.
4. No medical vehicle, associated hardware, or supplies shall be released for service until clearance is received from designated hazardous materials personnel.



## PARAMEDIC VACCINATION POLICY

### POLICY STATEMENT

The decision to activate this policy will be incident dependent, time limited and based on guidance from the ICEMA Medical Director and/or designee, and in collaboration with the local Health Officer as deemed necessary or essential for successful vaccination programs in emergency situations.

### AUTHORITY

Under a declared Public Health Emergency by the local Public Health Officers within the ICEMA region (Inyo, Mono and San Bernardino Counties), Health and Safety Code § 101080.

### PURPOSE

To develop a program that utilizes ICEMA accredited paramedics (EMT-P) during an H1N1 Public Health Emergency to administer H1N1 and/or seasonal flu vaccine injections.

### OBJECTIVE

Train paramedics to administer H1N1 and/or seasonal flu vaccinations to qualified EMS healthcare workers quickly and efficiently. Qualified EMS healthcare workers are defined as those EMS personnel who have direct patient care responsibilities.

### TRAINING

1. H1N1 flu prophylaxis and vaccination training for the EMT-P will be provided by EMS provider agencies and consist of a self-directed review of EZIZ or EMSA developed training modules that cover:
  - a.—Infectious Diseases and Influenza
  - b.—Principles of Vaccinations
  - c.—Medication Profile – Vaccinations
  - d.—Review of anaphylaxis
  - e.—Required Documentation
  - f.—Related Policies, Protocols and Procedures
  - g.—Role of EMS in a Public Health Emergency Vaccination Program
  - h.—Vaccine handling and storage

2. All records will be maintained by the CE provider for four (4) years, and shall include:
  - a. Complete outlines for the course given, including a brief overview, instructional objectives, comprehensive topical outline, method of evaluation and a record of participant performance.
  - b. Record of time, place and date each course is given and the number of CE hours granted.
  - c. An ICEMA approved roster signed by course participants to include name and license number of the individuals.
3. After completing the training and successfully passing a written exam, the EMT-P will be certified to administer H1N1 prophylaxis flu medications and/or seasonal flu vaccinations within the ICEMA Region. EMT-P's will not be allowed to administer the vaccine until rosters are sent to ICEMA. The rosters may be faxed or emailed to ICEMA.

#### **QUALITY IMPROVEMENT**

ICEMA, Public Health or EMS Agency Supervisory staff will monitor EMT-Ps to ensure that individuals receiving medications/vaccinations are being assessed for any adverse effects or allergic reactions at each vaccination location.

Proper use of personal protective equipment (PPE) by the vaccinators will be monitored by the supervisors at each vaccination location.



## PARAMEDIC BLOOD DRAW FOR CHEMICAL TESTING AT THE REQUEST OF A PEACE OFFICER

### Specialty Program

#### PURPOSE

To allow ICEMA accredited paramedics, not employed by fire departments, to withdraw blood samples at the request of a sworn peace officer for the purpose of chemical testing from persons suspected of driving under the influence.

**Per California Vehicle Code 23158 (k): paramedics employed by fire departments are not allowed to draw blood for a peace officer.**

#### AUTHORITY

Title 22; Division 9, Chapter 4, Section 100145.

Vehicle Code Section 23158

Vehicle Code section 23158, sub. (d),

Notwithstanding any other provision of law, no ... certified paramedic ... shall incur any civil or criminal liability as a result of the administering of a blood test in a reasonable manner in a hospital, clinical laboratory, medical clinic environment, jail, or law enforcement facility, according to accepted venipuncture practices, without violence by the person administering the test, and when requested in writing by a peace officer to administer the test.

#### POLICY

Upon completion of an agreement with the employing ALS agency and with the approval of ICEMA, allow paramedics to draw blood at the request of law enforcement for chemical testing.

**At no time will the request for blood draw for alcohol level take precedence over the medical treatment of the patient.**

#### PROCEDURE

An EMT-P, at the request of law enforcement, may draw blood for chemical testing if the following conditions are met:

1. The employing ALS agency received ICEMA approval following submittal for a Specialty/Optional Scope Program to draw blood at the request of law enforcement.
2. The request must be in writing from the Peace Officer.

3. Blood Draw Kits will be supplied by the law enforcement agency.
4. The procedure will be performed based on standard practice, pursuant to the directions on the supplied kit (benzalkonium chloride) and documented as such. The obtained sample will be the property of the arresting officer.
5. A patient care record must be completed for all requests and include, at a minimum, the following information:
  - a. Patient name
  - b. Sex
  - c. Date and time
  - d. Name of requesting Peace Officer
  - e. Brief medical history including medications and allergies.
  - f. Vital signs
  - g. Brief narrative including the kit number, skin preparation used, and location of the blood draw.
  - h. If a second needle stick is required, the site and skin preparation will be documented.
  - i. The patient's consent for the procedure and the Peace Officer's request for the procedure will also be documented with the name and badge number of the Peace Officer.
6. Base Station contact is not required unless there is a medical necessity.

### **CONTRAINDICATIONS**

1. Patient history of an allergy to the antiseptic used in the Kit, or to Betadine. The EMT-P must refuse the request to draw and inform the Peace Officer of the situation.
2. If the patient is on anti-coagulant therapy, direct pressure will be held on the site for at least one (1) full minute. A pressure dressing will be applied.
3. No blood draws will be performed on patients with hemophilia.

4. No blood draws will be performed on combative persons.
5. If the patient refuses the blood draw for any reason, the paramedic will document and stop procedure immediately. The medic is not allowed to draw blood on a struggling or restrained patient. The patient must be cooperative.

## TRAINING

Paramedics will be required to participate in a training program focusing on proper preparation of the blood draw site and required documentation.

Additional documentation:

1. A log will be kept of all blood draws for DUI by the paramedic employer for QI purposes.
2. The EMT-P should provide his or her name and any other information needed to complete the *Blood Draw Request Form* from the law enforcement agency.



## BLS/ALS STANDARD DRUG & EQUIPMENT LIST

Each ambulance and first responder unit will 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	L-ALS Non-Transport	ALS Non-Transport	ALS Transport
Adenosine (Adenocard) 6 mg			1	1
Adenosine (Adenocard) 12 mg			2	2
<del>Adrenaline (Epinephrine) 1:1000 1 mg</del>		<del>2</del>	<del>2</del>	<del>2</del>
<del>Adrenaline (Epinephrine) 1:10,000 1 mg preload</del>			<del>3</del>	<del>3</del>
Albuterol Aerosolized Solution (Proventil) – unit dose 2.5mg		4 doses	4 doses	4 doses
Aspirin, chewable – 81mg tablet		2	1 bottle	1 bottle
<del>Atropine 1 mg preload</del>			<del>42</del>	<del>42</del>
Calcium Chloride 1 gm preload			1	1
Dextrose 25% 2.5 gm preload			2	2
Dextrose 50% 25 gm preload		2	2	2
Diphenhydramine (Benadryl) 50 mg			1	1
Dopamine 400 mg			1	1
<del>Epinephrine 1:1000 1 mg</del>		<del>2</del>	<del>2</del>	<del>2</del>
<del>Epinephrine 1:10,000 1 mg preload</del>			<del>3</del>	<del>3</del>
Glucagon 1 mg		1	1	1
Glucose paste	1 tube	1 tube	1 tube	1 tube
Ipratropium Bromide Inhalation Solution (Atrovent) unit dose 0.5mg		4	4	4
Irrigating Saline and/or Sterile Water (1000cc)	2	1	1	2
Lidocaine 100 mg			3	3
Lidocaine 1gm or 1 bag pre-mixed 1gm/250cc D5W			1	1
Lidocaine 2% (Viscous) bottle			1	1
Magnesium Sulfate 10 gm			1	1
Naloxone (Narcan) 2 mg preload (needle less)		2	2	2
Nitroglycerine – Spray 0.4mg metered dose and/or tablets (tablets to be discarded 90 days after opening)		2	1	2

Exchanged Medications/Solutions	BLS	L-ALS Non-Transport	ALS Non-Transport	ALS Transport
Normal Saline for Injection (10cc)		2	2	2
Normal Saline 100cc			1	2
Normal Saline 250cc			1	1
Normal Saline 500 ml and/or 1000ml		2000 ml	3000 ml	6000 ml
Ondansetron (Zofran) 4mg Oral Disintegrating Tablets (ODT)			4	4
Ondansetron (Zofran) 4 mg IM/ IV			4	4
Phenylephrine HCL - 0.5mg 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 <b>MUST BE DOUBLE LOCKED</b>	BLS	L-ALS Non-Transport	ALS Non-Transport	ALS Transport
Midazolam –			20-40mg	20-40mg
Morphine Sulfate – vials of 10mg			20-60mg	30-60mg

### AIRWAY/SUCTION EQUIPMENT

Exchanged Airway/Suction Equipment	BLS	L-ALS Non-Transport	ALS Non-Transport	ALS Transport
Adult non-rebreather mask	2	2	2	2
BAAM Device			1	2
End Title CO2 device – Pediatric and Adult (may be integrated into bag)			1	1
CPAP circuits- all manufacture's available sizes			1 each	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	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	2 each
Infant Simple Mask	1	1	2	2
King LTS-D Adult: Size 3 (yellow) Size 4 (red) Size 5 (purple)		SPECIALTY PROGRAMS ONLY 2 each	1 each	1 each
King Ped: 12-25 kg: Size 2 (green) 25-35 kg: Size 2.5 (orange)		SPECIALTY PROGRAMS ONLY 2 each	1 each	2 each

<b>Exchanged Airway/Suction Equipment</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
		1 each		
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
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
Pediatric non-rebreather O2 mask	2	2	2	2
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 250ml, Pediatric 500ml (or equivalent) Adult	1 each 1 each	1 each 1 each	1 each 1 each	1 each 1 each
Water soluble lubricating jelly		1	1	1
Yankauers tonsil tip	1		1	1

<b>Non-Exchange Airway/Suction Equipment</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
Ambulance Oxygen source –10L/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 – 10L/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
Stethoscope	1	1	1	1
Wall mount suction device	1			1

## IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT

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

Non-Exchange IV/Needles/Syringes/Monitor Equip	BLS	L-ALS Non-Transport	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	1	1	1	1
Needle disposal system (OSHA Approved)		1	1	1
Thermometer - Mercury Free with covers	1	1	1	1

## OPTIONAL EQUIPMENT/MEDICATIONS

<b>Non-Exchange Optional Equipment/Medications</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
AED/defib pads	2	2		
Ammonia Inhalants			2	2
Approved Automatic CPR device	1	1	1	1
Approved Automatic ventilator			1	1
Backboard padding	1	1	1	1
Buretrol			1	1
Capnography monitor and supplies, may be integrated in the cardiac monitor			1	1
Chemistry profile tubes			3	3
Gum Elastic intubation stylet			2	2
Hemostatic combat gauze	1		1	1
IO Needles - Manual, Adult and Pediatric, Optional			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
EMS Tourniquet	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

**DRESSING MATERIALS/OTHER EQUIPMENT/SUPPLIES**

<b>Exchanged Dressing Materials/Other Equip/Supplies</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
Adhesive tape – 1 inch	2	2	2	2
Air occlusive dressing (Vaseline gauze)	1	1	1	1
Ankle & wrist restraints, soft ties acceptable	1		0	1
Antiseptic swabs/wipes		10	10	10
Bedpan or fracture pan	1			1
Urinal	1			1
Cervical Collars – Rigid Pediatric & Adult or Cervical Collars – Adjustable Adult & 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 & covered waste	1	1	1	1

<b>Exchanged Dressing Materials/Other Equip/Supplies</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
container				
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		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

<b>Non-Exchange Dressing Materials/Other Equip/Supplies</b>	<b>BLS</b>	<b>L-ALS Non-Transport</b>	<b>ALS Non-Transport</b>	<b>ALS Transport</b>
Ambulance gurney	1			1
Bandage Shears	1	1	1	1
Blood Borne Pathogen Protective Equipment - (nonporous gloves, goggles face masks & 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 & blanket	1 set			1 set
Short extrication device	1	1	1	1
Straps to secure patient to gurney	1 set			1 set
Traction splint	1	1	1	1
Triage Tags- CAL Chiefs or ICEMA approved	20	<del>30</del> 20	20	20



## INTERFACILITY TRANSFER OF STEMI PATIENT CONTINUATION OF CARE OF A STEMI PATIENT

**THIS POLICY IS FOR HOSPITAL TO HOSPITAL STEMI TRANSPORT ONLY AND SHALL NOT BE USED FOR ANY OTHER REQUESTS FROM OTHER ENTITIES.**

### **PURPOSE**

To develop a system of care that is consistent with standards of achieving a door to balloon time of less than ninety (90) minutes. This system of care consists of STEMI Receiving Centers (SRC), STEMI Referral ~~Hospitals~~Facilities—(~~SRF~~SRH), EMS Field Providers, ICEMA and EMS leaders combining their efforts to achieve this goal.

### **INITIAL TREATMENT GOALS**

Patients arriving at ~~SRF~~SRH by non-EMS:

- <30 minutes at ~~SRF~~SRH ED (door in/door out)
- ECG obtained within ten minutes of patient arrival
- Consider transferring all STEMI patients who are candidates for primary PCI.
- First hospital DOOR-to-STEMI BALLOON < 90 minutes

### **TIMELINES**

- <30 minutes at ~~SRF~~SRH (door in/door out)
- <30 minutes to complete paramedic inter-facility transport
- <30 minutes at SRC before balloon inflation

If there are significant delays (~~>60 minutes~~) in transport to a SRC ~~or if weather or road conditions present an unacceptable risk to patient/transporting crew, then~~ administration of lytic agents ~~should~~may be considered in patients ~~that meet thrombolytic eligibility~~. The goal ~~for door to thrombolytics is <30 minutes.~~

### **PROCEDURE FOR ~~EMERGENT~~—~~INTERHOSPITAL~~—~~TRANSFER~~A CONTINUATION OF CARE OF A STEMI PATIENT TO STEMI CENTERS**

CONTACT SRC EMERGENCY DEPARTMENT (ED) PHYSICIAN DIRECTLY WITHOUT CALLING FOR AN INPATIENT BED ASSIGNMENT. Refer to attachment SRC-SRH Buddy System Table.

- The ED physician will be the accepting physician at the SRC.
- The SRC ED physician will contact the SRC interventional cardiologist panel per SRC facility protocol. SRC ED physicians and cardiologists have agreed to accept STEMI patients at all times irrespective of payer source unless the SRC is on internal disaster diversion in accordance with ICEMA Diversion Protocols.

1. Simultaneously call 9-1-1 and utilize following verbiage to dispatch:

**“This is a STEMI ~~INTERFACILITY TRANSFER~~ CONTINUTATION OF CARE  
from \_\_\_\_\_ to \_\_\_\_\_.”  
Hospital STEMI Hospital**

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

2. Consider use of air ambulance if ground transportation is > 60 minutes. Requests for air ambulance shall be made to 9-1-1 and normal dispatching procedures will be followed; however, air ambulance STEMI patients will be transported to the SRC identified by the transferring ED.
3. Assess **stability** of airway and breathing, and intubate those at risk for respiratory failure prior to or during transport.
4. Patient must be kept NPO.
5. Provide continuous cardiac monitoring.
6. Send all required transfer paperwork including diagnostic lab, x-ray, physician and nursing notes with the transport team. However, do not delay transfer waiting for charting or lab results; these may be faxed to SRC later.

#### **NOTE – CRITICAL CARE TRANSPORTS**

Paramedics may transport patients on Dopamine, Lidocaine and Procainamide drips only. Heparin and integrillin drips are not within the paramedic scope of practice and require a critical care transport nurse to be in attendance. At times, SRF may consider sending one of its nurses with the transporting paramedic unit if deemed necessary due to patient's condition. Nurse staffed critical care transport units may be available; however, they are subject to availability and delays. Unless medically necessary, avoid using medication drips that are outside of the paramedic scope of practice to avoid any delays in transferring of STEMI patients. Requests of nurse staffed critical care transfers must be made directly to the ambulance transporter.



## STEMI REFERRAL HOSPITAL (SRH) - STEMI RECEIVING CENTER (SRC) BUDDY SYSTEM

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



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## SAN BERNARDINO COUNTY REQUESTS FOR HOSPITAL DIVERSION POLICY

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### **PURPOSE**

To define policy and procedures for hospitals to request temporary diversion of Advanced Life Support (ALS) Ambulances.

### **AUTHORITY**

Health and Safety Code, Division 2.5, Chapter 6, Section 1798(a), 1798.2, 1798.102; California Code of Regulations (CCR), Title 22, Division 9, Chapter 4, 100169.

### **PRINCIPLES**

1. A request for diversion of Advanced Life Support (ALS) ambulances should be a temporary measure.
2. Final authority relating to destination of ALS ambulances rests with the base station physician.
3. The approved EMS system diversion policy applies to the 9-1-1 emergency system and is not intended for utilization to determine destination for interfacility transports, including higher level of care transports.
4. A hospital's request to divert in the approved categories shall be made by the emergency department attending physician or by the trauma surgeon for trauma hospital diversion, in consultation with the hospital CEO or delegated responsible administrative representative. The consultation with the administrative officer must be documented and available for review.
5. Hospitals must maintain a hospital diversion policy that conforms to the ICEMA Diversion Protocol. The policy should include plans to educate all appropriate staff on proper utilization of diversion categories, internal procedures for authorizing diversion and procedures for notification of system participants.
6. ICEMA may perform unannounced site visits to hospitals on temporary diversion status to ensure compliance with the ICEMA Diversion Policy.
7. ICEMA may randomly audit base station records to ensure diverted patients are transported to the appropriate destination.

8. When possible, ICEMA staff will contact the hospital to determine the reasons for internal disaster diversion.
9. ICEMA reserves the right and responsibility to advise any hospital that the diversion is not appropriate for a 9-1-1 system and may remove the hospital from diversion through the ReddiNet.

## POLICY

A request for diversion of ALS ambulances may be made for the following approved categories:

### 1. Neuro/CT Diversion

~~(DOES NOT APPLY FOR TRAUMA CENTERS FOR TRAUMA DIVERSION)~~

The hospital's CT scanner is not functioning and, therefore, is not the ideal destination for the following types of patients:

- a. New onset of altered level of consciousness for traumatic or medical reasons. \*\* Does not apply to trauma centers for trauma diversion. Refer to ICEMA Policy Reference #15030 Trauma Triage and Destination
- b. Suspected stroke. \*\* Does not apply to neurovascular stroke receiving centers. Refer to ICEMA Policy Reference #6100 Stroke "NSRC" Receiving Centers.

### 2. Trauma Hospital Diversion (*for use by designated trauma hospitals only*)

- a. The general surgeon for the trauma service and other designated trauma team resources are fully committed and are NOT immediately available for incoming patients meeting approved trauma triage criteria.
- b. The request for trauma diversion should only be applicable if the general surgeon and back-up general surgeon are committed. The ability to request trauma hospital diversion cannot be used in cases of temporary unavailability of subspecialists.
- c. **WHEN ALL DESIGNATED TRAUMA HOSPITALS ARE ON TRAUMA DIVERSION, TRAUMA CENTERS SHALL ACCEPT ALL TRAUMA PATIENTS.**

**Designated trauma hospitals may not divert patients meeting trauma triage criteria to a non-designated hospital except in instances of Internal Disaster Diversion.**

**3. Internal Disaster Diversion**

Requests for Internal Disaster Diversion shall apply only to physical plant breakdown threatening the emergency department or significant patient services.

*Examples of internal disaster diversion include bomb threats, explosions, power outage and a nonfunctional generator, fire, earthquake damage, hazardous materials exposure, incidents involving the safety and/or security of a facility.*

**INTERNAL DISASTER DIVERSION SHALL NOT BE USED FOR STAFFING ISSUES**

- a. Internal Disaster Diversion shall stop all 9-1-1 transports into the facility.
- b. The hospital CEO or AOD shall be notified and that notification shall be documented in the ReddiNet.
- c. If the hospital is also a designated base station, the hospital should consider immediately transfer of responsibility for on-line control to another base station based upon prearranged written agreement and notification to the 9-1-1 provider.
- d. Internal disaster diversion status shall be entered immediately into the ReddiNet.
- e. If capability exists, hospital shall notify all primary 9-1-1 dispatching agencies.
- f. Within seventy-two (72) hours, hospital shall advise ICEMA and the State Department of Health Services in writing (e-mail is acceptable) of the reasons for internal disaster and how the problem was corrected. The written notification shall be signed by the CEO or delegated responsible individual.

**EXCEPTIONS TO NEURO AND TRAUMA DIVERSION ONLY**

1. Basic Life Support (BLS) ambulances shall not be diverted.
2. Ambulances on hospital property shall not be diverted.

3. Patients exhibiting unmanageable problems, e.g., unmanageable airway, uncontrolled hemorrhage, cardiopulmonary arrest, in the field shall be transported to the closest emergency department regardless of diversion status.



## GENERAL PATIENT CARE GUIDELINES

### PURPOSE

To provide guidelines for providing the minimum standard of care for all patient contacts.

### AUTHORITY

Title 22, Division 9, Chapter 4, Sections 1001, 100146 and 100147 of the California Health and Safety Code.

### DEFINITIONS

**Patient:** An individual with a complaint of pain, discomfort or physical ailment. An individual regardless of complaint, with signs and/or symptoms of pain, discomfort, physical ailment or trauma. These signs/symptoms include, but are not limited to:

1. Altered level of consciousness.
2. Sign and/or symptoms of skeletal or soft tissue injuries.
3. Altered ability to perceive illness or injury due to the influence of drug, alcohol or other mental impairment.
4. Evidence that the individual was subject to significant force.

**Patient Contact:** Determined to be achieved when any on duty BLS, L-ALS, or ALS field provider comes into the presence of a patient as defined above.

### BLS INTERVENTIONS

1. Obtain a thorough assessment of the following:
  - a. Airway, breathing and circulatory status.
  - b. Subjective assessment of the patients' physical condition and environment.
  - c. Objective assessment of the patients' physical condition and environment.
  - d. Vital signs.

- e. Prior medical history and current medications.
  - f. Any known medication allergies or adverse reactions to medications, food or environmental agents.
2. Initiate care using the following tools as clinically indicated or available:
    - a. Axial spinal immobilization.
    - b. Airway control with appropriate BLS airway adjunct.
    - c. Oxygen.
    - d. Assist the patient into a physical position that achieves the best medical benefit and maximum comfort.
    - e. Automated External Defibrillator (AED).
    - f. Consider the benefits of early transport and/or intercept with ALS personnel if clinically indicated.
  3. Assemble necessary equipment for ALS procedures under direction of EMT-P.
    - a. Cardiac monitoring
    - b. IV/IO
    - c. Endotracheal Intubation
  4. Under EMT-P supervision, assemble pre-load medications as directed, excluding controlled substances.

#### **LIMITED ALS INTERVENTIONS**

1. Evaluation and continuation of all BLS care initiated.
2. Augment BLS assessment with an advanced assessment including, but not limited to the following:
  - a. Qualitative lung assessment.
  - b. Blood glucose monitoring

3. Augment BLS treatment measures with LALS treatments as indicated by LALS protocols.
4. Initiate airway control as needed with the appropriate LALS adjunct.
5. Initiate vascular access as clinically indicated.

#### ALS INTERVENTIONS

1. Evaluation and continuation of all BLS and/or LALS care initiated.
2. Augment BLS and/or LALS assessment with an advanced assessment including but not limited to the following:
  - b. Qualitative lung assessment.
  - c. Cardiac monitor.
  - d. Blood glucose monitoring.
3. Augment BLS and/or LALS treatment with advanced treatments as indicated or available.
4. Initiate airway control as needed with the appropriate ALS adjunct.
5. Initiate vascular access as clinically indicated.



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## PHYSICIAN ON SCENE

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### PURPOSE

To establish criteria for an A-EMT, and EMT-Paramedic during situations in which a physician is physically present at the scene of a 9-1-1 response.

### AUTHORITY

Division 9, Chapter 4, Article 2, Section 100147 and Article 8, Section 100175 of the California Code of Regulations.

### POLICY

Medical responsibility for patient care is the responsibility of the Base Station physician. Within the ICEMA Region, an A-EMT, or EMT-P may only follow medical orders given by the Base Station physician or MICN.

### PROCEDURE

In the event that an A-EMT, or EMT-P arrives at the scene of a medical or a trauma emergency and a physician on scene wishes to direct the care of the patient and assume medical responsibility for the patient, the following conditions apply:

1. The physician must be informed that Base Station contact must be made, and the final decision regarding the assumption of medical responsibility for patient care will be made by the Base Station physician.
2. The physician must show proper identification and a current California physician's license.
3. The physician must agree to sign the patient care record agreeing to take full responsibility for the care and treatment of the patient(s) involved in the incident and accompanies the patient(s) in the ambulance to the medical facility most appropriate to receive the patient(s). This statement is available on the ICEMA e-PCR and on the back of the first (white) copy of the ICEMA Standard Run Report Form (01A). Prehospital EMS agencies using software not totally integrated with ICEMA software must provide a form stating the above and obtaining physician signature.
4. Care of the patient must be transferred to a physician at the receiving facility.

**A-EMT and EMT-P RESPONSIBILITIES**

The A-EMT or EMT-P has the following responsibilities in the event that the physician on scene assumes responsibility for patient care:

1. Notify Base Hospital that a physician has requested to take over patient~~is taking charge of the patient(s)~~.
2. Maintain control of drugs and equipment from the L-ALS or ALS unit. Inform the physician of drugs and equipment available.
3. Offer assistance to the physician on scene. The A-EMT or EMT-P may only perform procedures that are within the ICEMA scope of practice.
4. Document on patient care record all necessary information and obtain physician signature.



## RESPONSIBILITY FOR PATIENT MANAGEMENT POLICY

### PURPOSE

To define the responsibility for patient care management in the prehospital setting. Within the ICEMA region, in the event both public and private emergency medical care personnel arrive on the scene with the same qualifications, patient care management responsibility will rest with the first to arrive.

### AUTHORITY

Health & Safety Code, Division 2.5, Chapter 5, Section 1798.6 (a & c).

- a) Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic or other prehospital emergency personnel, at the scene of the emergency who is most medically qualified specific to the provision of rendering emergency medical care.
- b) If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency.
- (c) Authority for the management of the scene of an emergency shall be vested in the appropriate public safety agency having primary investigative authority. Public safety officials shall consult emergency medical services personnel or other authoritative health care professionals at the scene in determination of relevant risks.

### PROCEDURE

1. An A-EMT or EMT-P may transfer patient management responsibility to an EMT-I for transportation, **without Base Station direction**, only under the following conditions:
  - a. When the patient does not meet criteria for Base Station contact and has not received ALS care.
  - b. When operating under the MCI Protocol, Reference #5050.

- c. When operating under the Local Medical Emergency Protocol, Reference #9060.
2. The Base Station should be contacted if at any time transfer of patient management responsibility is in question or for any patient not meeting the above criteria.
3. In the event of radio communication failure, a L-ALS or ALS unit may not transfer patient management responsibility to an EMT-I for transportation.



## REPORTING INCIDENTS OF SUSPECTED ABUSE POLICY

### PURPOSE

Prehospital personnel are required to report incidents of suspected neglect or abusive behavior towards children, dependant adults or elders. These reporting duties are individual, and no supervisor or administrator may impede or inhibit such reporting duties and no person making such report shall be subject to any sanction for making such report.

When two or more persons who are required to report are present at scene, and jointly have knowledge of a suspected abuse, and when there is agreement among them, the telephone report may be made by a member of the team selected by mutual agreement and a single written report may be made and signed by the selected member of the reporting team. Any member who has knowledge that the member designated to report has failed to do so, shall thereafter make the report.

Information given to hospital personnel does not fulfill the required reporting mandated from the state. The prehospital caregivers must make their own report.

### CHILD ABUSE/NEGLECT

Suspicion of Child abuse/neglect is to be reported by prehospital personnel by telephone to the Child Abuse Hotline immediately or as soon as possible. Be prepared to give the following information:

1. Name of person making report.
2. Name of child.
3. Present location of child.
4. Nature and extent of the abuse/neglect.
5. Location where incident occurred, if known.
6. Other information as requested.

**San Bernardino County:** 1-800-827-8724 24-hour number or 1-909-384-9233

**Inyo County:** 1-760-872-1727 M-F 8am - 5pm or 911 after hours

**Mono County:** 1-800-340-5411 M-F 8am - 5pm or 1-760-932-7755 after hours

The phone report must be followed within 36 hours by a written report on the “**Suspected Child Abuse Report**” form. Mail this to:

**San Bernardino County:** CPS  
412 W. Hospitality Lane  
San Bernardino, CA 92408

**Inyo County:** CPS  
162 Grove St. Suite “J”  
Bishop, Ca. 93514

**Mono County** Department of Social Services  
PO Box 576  
Bridgeport, Ca. 93517

The identity of any person who files a report shall be confidential and disclosed only between child protective agencies, or to counsel representing a child protection agency, or to the district attorney in a criminal prose.

#### **DEPENDENT ADULT AND ELDER ABUSE/NEGLECT**

Suspicion of Dependent Adult and Elder Abuse/Neglect should be reported as soon as possible by telephone. Be prepared to give the following information:

1. Name of person making report.
2. Name, address and age of the dependent adult or elder.
3. Nature and extent of person’s condition.
4. Other information, including information that led the reporter to suspect either abuse or neglect.

**San Bernardino County:** 1-877-565-2020 24-hour number

**Inyo County:** 1-760-872-1727 M-F 8am - 5pm or 911 after hours

**Mono County:** 1-800-340-5411M-F 8am - 5pm or 1-760-932-7755 after hours

The phone report must be followed by a written report within 48 hours of the telephone report on the **“Report of Suspected Dependent Adult/Elder Abuse”** form. Mail this report to:

**San Bernardino County:** Department of Aging/Adult Services  
881 West Redlands Blvd. *Attn:* Central Intake  
Redlands, CA 92373  
Fax number 1-909-388-6718

**Inyo County:** Social Services  
162 Grove St. Suite “J”  
Bishop, Ca. 93514

**Mono County:** Department of Social Services  
PO Box 576  
Bridgeport, Ca. 93517

The identity of all persons who report shall be confidential and disclosed only by court order or between elder protective agencies.

**San Bernardino County Department of Aging and Adult Services Long-Term Care Ombudsman Program**

Ombudsmen are independent, trained and certified advocates for residents living in long-term care facilities. Certified Ombudsmen are authorized by Federal and State law to receive, investigate and resolve complaints made by or on behalf of residents living in skilled nursing or assisted living facilities for the elderly. Ombudsmen work with licensing and other regulatory agencies to support Resident Rights and achieve the best possible quality of life for all long-term care residents. Ombudsman services are confidential and free of charge.

<p><b>Administrative Office</b> <b>Receives All Reports of Abuse</b> <b>686 E. Mill St.</b> <b>San Bernardino, CA 92415-0640</b> <b>909-891-3928 Office</b> <b>1-866-229-0284 Reporting</b> <b>Fax 909-891-3957</b></p>	<p><b>The State CRISIS line number:</b>  <b>1-800-231-4024</b>  <b>This CRISIS line is available to take calls and refer complaints 24 hours a day, 7 days a week.</b></p>
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~~Administrative Office~~

~~Receives All Reports of Abuse~~

~~686 E. Mill St.~~

~~San Bernardino, Ca 92415-0640~~

~~909-891-3928 Office~~

~~1-866-229-0284 Reporting~~

~~Fax 909-891-3957~~

~~The State CRISIS line number:~~

~~1-800-231-4024~~

~~This CRISIS line is available to take calls and refer complaints 24 hours a day, 7 days a week.~~



## ORGAN DONOR INFORMATION

### PURPOSE

To comply with state legislation requiring emergency medical services (EMS) field personnel to search for organ donor information on adult patients for whom death appears imminent.

### AUTHORITY

California Health and Safety Code, Section 7152.5, b (3) and c, d and e.

### DEFINITIONS

**Reasonable Search:** A brief attempt by EMS field personnel to locate documentation that may identify a patient as a potential organ donor, or one who has refused to make an anatomical gift. This search shall be limited to a wallet or purse that is on or near the individual to locate a driver's license or other identification card with this information. A reasonable search shall not take precedence over patient care/treatment.

**Imminent Death:** A condition wherein illness or injuries are of such severity that in the opinion of EMS field personnel, death is likely to occur before the patient arrives at the receiving hospital.

### POLICY

Existing law provides that any individual who is at least eighteen (18) years of age may make an anatomical gift and sets forth procedures for making that anatomical gift, including the presence of a pink dot on their drivers license indicating enrollment in the California Organ and Tissue Donor Registry.

1. When EMS field personnel encounter an unconscious adult patient for whom it appears death is imminent, a reasonable search of the patient's belonging should be made to determine if the individual carries information indicating status as an organ donor. This search shall not interfere with patient care or transport. Any inventory of victim's personal effects should be on the patient care record and signed by the person who receives the patient.
2. All EMS field personnel shall notify the receiving hospital if organ donor information is discovered.

3. Any organ donor document discovered should be transported to the receiving hospital with the patient unless the investigating law enforcement officer requests the document. In the event that no transport is made, any document should remain with the patient.
4. EMS field personnel should briefly note the results of the search, notification of hospital and witness name(s) on the patient care report.
5. No search is to be made by field personnel after the patient has expired.



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## LOCAL MEDICAL EMERGENCY POLICY

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### PURPOSE

To provide guidelines to prehospital care providers and personnel regarding the treatment and transportation of patients during a declared Local Medical Emergency.

### POLICY

Prehospital care providers and personnel shall follow the procedures and guidelines outlined below regarding the treatment and transportation of patients during a declared Local Medical Emergency.

### DEFINITION

**Local Medical Emergency:** For the purposes of this policy, a Local Medical Emergency shall exist when a “local emergency”, as that term is used in government Code Section 8630, has been proclaimed by the governing body of a city or the county, or by an official so designated by ordinance.

### ENACTMENT OF PROTOCOL

The following procedures shall apply during a Local Medical Emergency:

1. A public safety agency of the affected jurisdiction shall notify the County Communications Center of the proclamation of a local emergency, and shall provide information specifying the geographical area that the proclamation affects.
2. The Communications Center shall notify:
  - a. The County Health Officer/Designee.
  - b. ICEMA.
  - c. The County Sheriff's Department.
  - d. Area prehospital provider agencies.
  - e. Area hospitals.

3. This protocol shall remain in effect for the duration of the declared Local Medical Emergency or until rescinded by the County Health Officer (Operational Area Medical Coordinator) or his/her designee.

### **MEDICAL CONTROL**

1. ALS, Limited ALS, and BLS personnel may function within their Scope of Practice as established in the standard Practice Protocols without Base Station contact.
2. No care will be given unless the scene is secured and safe for EMS personnel.
3. An MCI will be initiated by either Comm Center or ICEMA. Patient destination will be determined as part of the MCI.
4. Transporting agencies may utilize BLS units for patient transport as dictated by transport resource availability. In cases where no ambulance units are available, personnel will utilize the most appropriate method of transportation at their disposal.
5. Patients too unstable to be transported outside the affected area should be transferred to the closest secured appropriate facility.
6. County Communications Center should be contacted on the MED NET frequency for patient destination by the transporting unit.
7. Base Station contact criteria outlined in protocol #5040, Radio Communication, may be suspended by the ICEMA Medical Director. EMS provider agencies will be notified. Receiving facilities should be contacted with following information once enroute:
  - a. ETA.
  - b. Number of patients.
  - c. Patient status: Immediate, delayed or minor.
  - d. Brief description of injury.
  - e. Treatment initiated.

### **DOCUMENTATION**

First responder and transporting agencies may utilize approved triage tags as the minimum documentation requirement. The following conditions will apply:

1. One corner to be kept by the jurisdictional public safety agency. A patient transport log will also be kept indicating time, incident number, patient number (triage tag), and receiving facility.
2. One corner to be retained by the transporting agency. A patient log will also be maintained indicating time, incident number, patient number (triage tag) and receiving facility.
3. Remaining portion of triage tag to accompany patient to receiving facility which is to be entered into the patient's medical record.
4. All Radio Communication Failure reports may be suspended for duration of the Local Medical Emergency.

All refusals of treatment and/or transport will be documented as scene safety allows.

#### **COUNTY COMMUNICATIONS CENTER**

County Communications Center will initiate a MCI according to ICEMA policies. This information will be coordinated with appropriate fire/rescue zone dispatch centers and medical unit leaders in the field as needed.

#### **RESPONSIBILITIES OF THE RECEIVING FACILITIES**

1. Receiving facilities upon notification by the County Communications Center of a declared Local Medical Emergency will provide hospital bed availability and Emergency Department capabilities for immediate and delayed patients.
2. Receiving facilities will utilize ReddiNet to provide the County Communications Center and ICEMA with hospital bed capacity status every four (4) hours, upon request, or when capacities are reached.
3. It is strongly recommended that receiving facilities establish a triage area in order to evaluate incoming emergency patients.
4. In the event that incoming patients overload the service delivery capacity of the receiving hospital, it is recommended that the hospital consider implementing their disaster plan.
5. Saturated hospitals may request evacuation of stable in-patients. Movement of these patients should be coordinated by County Communications Center and in accordance with Armed Services Medical Regulation Office (ASMRO) system categories.



## AXIAL SPINAL STABILIZATION

### FIELD ASSESSMENT/TREATMENT INDICATORS

Any patient in which axial spinal stabilization is clinically indicated, including but not limited to the following:

1. Patient meets Mechanism of injury as described in Protocol reference #15030, Trauma Triage Criteria and Destination Policy
2. Soft tissue damage associated with trauma and/or blunt trauma above the clavicles
3. Unconscious patients where the mechanism of injury is unknown.
4. All intubated neonatal and pediatric patients.
5. Cervical pain or pain to the upper 1/3 of the thoracic vertebrae. Spinal tenderness or pain, with or without movement of the head or neck, distal numbness, tingling, weakness or paralysis.
6. Altered mental status.
7. Appear to be under the influence of alcohol or other drugs (even if the patient is alert and oriented).
8. Additional sites of significant distracting pain or is experiencing emotional distress.
9. Less than four (4) years of age with appropriate injuries requiring axial spinal stabilization.
10. Unable to adequately communicate with the EMS personnel due to a language barrier or other type of communication difficulty.
11. Any other condition that may reduce the patient's perception of pain.

ALS and or LALS personnel may remove patients placed in axial spinal stabilization by Emergency Medical Responders and BLS personnel if the patient does not meet **any** of the above indicators after a complete assessment and documentation on the patient care record:

**INTERVENTIONS**

1. Apply manual axial stabilization.
2. Assess and document distal function before and after application.
3. For pediatric patients: If the level of the patient's head is greater than that of the torso, use an approved pediatric spine board with a head drop or arrange padding on the board to keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.
4. For patients being placed on a board, consider providing comfort by placing padding on the backboard.
5. Any elderly or other adult patient who may have a spine that is normally flexed forward should be stabilized in patient's normal anatomical position.
6. When a pregnant patient in the third trimester is placed in axial spinal stabilization, place in the left lateral position to decrease pressure on the Inferior Vena Cava.
7. Certain patients may not tolerate normal stabilization positioning due to the location of additional injuries. These patients may require stabilization in their position of comfort. Additional materials may be utilized to properly stabilize these patients while providing for the best possible axial spinal alignment.

**~~LIMITED ALS INTERVENTIONS~~**

~~Limited ALS personnel may remove patients placed in axial spinal stabilization by Emergency Medical Responders and BLS personnel if the patient does not meet any of the above indicators after a complete assessment and documentation on the patient care record.~~



## ADULT RESPIRATORY EMERGENCIES

### CHRONIC OBSTRUCTIVE PULMONARY DISEASE

#### FIELD ASSESSMENT/TREATMENT INDICATORS

Chronic Symptoms of chronic pulmonary disease, wheezing, cough, pursed lip breathing, decreased breath sounds, Accessory muscle use, anxiety, ALOC or cyanosis.

#### BLS INTERVENTIONS

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated, obtain O<sub>2</sub> saturation on room air, or on home O<sub>2</sub> if possible.

#### LIMITED ALS INTERVENTIONS

1. Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain O<sub>2</sub> saturation on room air or on home O<sub>2</sub> if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat times two (2).

#### ALS INTERVENTIONS

1. Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain O<sub>2</sub> saturation on room air or on home O<sub>2</sub> if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat ~~twice~~ times two (2).
3. Place patient on For agencies utilizing Continuous Positive Airway Pressure (CPAP) as per protocol.
  - a. ~~Obtain and document O<sub>2</sub> saturation levels every 5 minutes.~~
  - b. ~~Apply and begin CPAP @ "0" cms. Instruct patient to inhale through nose and exhale through mouth.~~
  - c. ~~Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against increasing pressure.~~

- ~~d. CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.~~
  - ~~e. Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form.~~
4. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.
  5. Base station physician may order additional medications or interventions as indicated by patient condition.

### **ACUTE ASTHMA/BRONCHOSPASM**

#### **FIELD ASSESSMENT/TREATMENT INDICATORS**

~~History of prior attacks, associated with wheezing, diminished breath sounds, or cough. A history of possible toxic inhalation, associated with wheezing, diminished breath sounds, or cough. Suspected allergic reaction associated with wheezing, diminished breath sounds or cough.~~

History of prior attacks, possible toxic inhalation or allergic reaction, associated with wheezing, diminished breath sounds or cough.

#### **BLS INTERVENTIONS**

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated, humidified oxygen preferred.

#### **LIMITED ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, obtain O<sub>2</sub> saturation on room air if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat times two (2).
3. For signs of inadequate tissue perfusion, initiate IV bolus of 300cc NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus.
4. If no response to Albuterol, give Epinephrine 0.3mg (1:1,000) SC. Contact Base Station for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
5. May repeat Epinephrine 0.3mg (1:1,000) SQ after 15 minutes.

6. Base station physician may order additional medications or interventions as indicated by patient condition.

### ALS INTERVENTIONS

1. Maintain airway with appropriate adjuncts, obtain O<sub>2</sub> saturation on room air if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat twice ~~times two (2)~~.
3. For signs of inadequate tissue perfusion, initiate IV bolus of 300cc NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus.
4. Place patient on ~~For agencies utilizing~~ Continuous Positive Airway Pressure (CPAP) as per protocol.
  - a. ~~Obtain and document O<sub>2</sub> saturation levels every 5 minutes.~~
  - b. ~~Apply and begin CPAP @ "0"cms. Instruct patient to inhale through nose and exhale through mouth.~~
  - c. ~~Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against increasing pressure.~~
  - d. ~~CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.~~
  - e. ~~Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form~~
5. If no response to Albuterol, give Epinephrine 0.3mg (1:1,000) SC. Contact Base Station for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
6. May repeat Epinephrine 0.3mg (1:1,000) SQ after 15 minutes.
7. For suspected allergic reaction, consider Diphenhydramine 25mg IV, or 50mg IM.
8. For persistent severe anaphylactic shock, administer Epinephrine 0.1mg (1:10,000) ~~IV~~ slow IV push. May repeat as needed to total dosage of 0.5mg.

9. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.
10. Base station physician may order additional medications or interventions as indicated by patient condition.

### **ACUTE PULMONARY EDEMA/CHF**

#### **FIELD ASSESSMENT/TREATMENT INDICATORS**

History of cardiac disease, including CHF, and may present with rales, occasional wheezes, jugular venous distention and/or peripheral edema.

#### **BLS INTERVENTIONS**

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated. For pulmonary edema with high altitude as a suspected etiology, descend to a lower altitude and administer high flow oxygen with a non re-breather mask.
3. ~~3.~~ Be prepared to support ventilations as clinically indicated.

#### **LIMITED ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, Obtain O<sub>2</sub> saturation on room air if possible
2. Nitroglycerine 0.4mg sublingual/transmucosal with signs of adequate tissue perfusion. May be repeated as long as patient continues to have signs of adequate tissue perfusion. Do not use or discontinue NTG in presence of hypotension (SBP <100).
3. Nebulized Albuterol 2.5 mg, with Atrovent 0.5 mg may repeat times two (2), if nitro is not working.

#### **ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, Obtain O<sub>2</sub> saturation on room air if possible
2. Nitroglycerine 0.4mg sublingual/transmucosal one every three (3) minutes as needed with signs of adequate tissue perfusion. 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 station contact is contraindicated.**

3. Place patient on ~~For agencies utilizing~~ Continuous Positive Airway Pressure (CPAP) as per protocol.
  - a. ~~Obtain and document O<sub>2</sub> saturation levels every 5 minutes.~~
  - b. ~~Apply and begin CPAP @ "0"cms. Instruct patient to inhale through nose and exhale through mouth.~~
  - c. ~~Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against the increasing pressure.~~
  - d. ~~CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.~~
  - e. ~~Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form.~~
4. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.
5. Base station physician may order additional medications or interventions as indicated by patient condition.
6. In radio communication failure (RCF), the following medications may be utilized.
  - a. Dopamine 400mg in 250cc NS titrated between 5 – 20mcg/min to maintain adequate tissue perfusion.
  - b. ~~Furosemide 40mg 100mg IV or 2 times the daily dose to maximum of 100mg IV.~~
  - e.b. Nebulized Albuterol 2.5mg with Atrovent 0.5mg after patient condition has stabilized.



## AIRWAY OBSTRUCTION - ADULT

### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Universal sign of distress.
2. Alteration in respiratory effort and/or signs of obstruction.
3. Altered level of consciousness.

### BLS INTERVENTION - RESPONSIVE

1. Assess for ability to speak or cough (e.g. "Are you choking?").
2. If unable to speak, administer abdominal thrusts (if the rescuer is unable to encircle the victim's abdomen or the patient is in the late stages of pregnancy, utilize chest thrusts) until the obstruction is relieved or patient becomes unconscious.
3. After obstruction is relieved, reassess and maintain ABC's.
4. Administer oxygen therapy; if capable obtain O2 saturation, per Protocol Reference #10170, Pulse Oximetry.
5. If responsive, place in position of comfort. If uninjured but unresponsive with adequate respirations and pulse, place on side in recovery position.

### BLS INTERVENTION - UNRESPONSIVE

1. Position patient supine (for suspected trauma, maintain in-line axial spinal stabilization).
2. Begin immediate CPR at a 30:2 ratio for two (2) minutes.
3. Each time the airway is opened to ventilate, look for an object in the victim's mouth and if found, remove it.
4. If apneic and able to ventilate, provide one (1) breath every five (5) to six (6) seconds.
5. If available, place AED per Protocol Reference #10130.

**LIMITED ALS INTERVENTION – UNRESPONSIVE**

1. If apneic and able to ventilate, establish advanced airway.
2. Establish vascular access as indicated.

**ALS INTERVENTION – UNRESPONSIVE**

1. If apneic and able to ventilate, establish advanced airway.
2. If obstruction persists, visualize with laryngoscope and remove visible foreign body with Magill forceps and attempt to ventilate.
3. If obstruction persists and unable to ventilate, consider Needle Cricothyrotomy per Protocol Reference #10070.



## SUSPECTED ACUTE MI

### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Chest Pain (Typical or Atypical).
2. Syncopal episode.
3. History of previous AMI, Angina, heart disease, or other associated risk factors.

### BLS INTERVENTIONS

1. Recognition of signs/symptoms of suspected AMI.
2. Reduce anxiety, allow patient to assume position of comfort.
3. O<sub>2</sub> as clinically indicated.
4. Obtain Oxygen saturation.
5. May assist patient with self-administration of Nitroglycerin and/or Aspirin.

### LIMITED ALS INTERVENTIONS

1. Aspirin 162mg.
2. Consider early vascular access.
3. For patients with chest pain, signs of inadequate tissue perfusion and clear breath sounds, give 300ml NS bolus, may repeat.
4. Nitroglycerin 0.4mg sublingual/transmucosal, may repeat in three (3) minute intervals if signs of adequate tissue perfusion are present. Nitroglycerin is contraindicated (signs of inadequate tissue perfusion or recent use of sexual enhancement medications).
5. Consider establishing a saline lock enroute on same side as initial IV.
6. Complete thrombolytic checklist, if time permits.
7. Contact Base Station.

**ALS INTERVENTIONS**

1. Aspirin 162mg.
2. Consider early vascular access.
3. For patients with chest pain, signs of inadequate tissue perfusion and clear breath sounds, give 300ml NS bolus, may repeat.
4. 12 Lead Technology:
  - a. Obtain 12 lead ECG. Do not disconnect 12 lead cables until necessary for transport.
  - b. If signs of inadequate tissue perfusion or if inferior wall infarct is suspected, obtain a right-sided 12 lead (V4R).
  - c. If right ventricular infarct (RVI) is suspected with signs of inadequate tissue perfusion, consider 300ml NS bolus, may repeat. Early consultation with Base Station or receiving hospital in rural areas is recommended. (Nitrates are contraindicated in the presence of RVI or hypotension).
  - d. With documented ST segment elevation in two (2) or more contiguous leads, contact Base Station for destination decision while preparing patient for expeditious transport. Reference Protocol #6070, Cardiovascular Stemi Receiving Centers. In Inyo and Mono Counties the assigned Base Station should be contacted for STEMI consultation.
  - e. Repeat 12 lead at regular intervals, but do not delay transport of patient. If patient is placed on a different cardiac monitor for transport, transporting provider should obtain an initial 12 lead on their cardiac monitor and leave 12 lead cables in place throughout transport.
5. Nitroglycerin 0.4mg sublingual/transmucosal, may repeat in three (3) minute intervals if signs of adequate tissue perfusion are present. 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. Utilize Morphine Sulfate for pain control when Nitroglycerin is contraindicated.
6. Morphine Sulfate 2mg IV, may repeat every three (3) minutes to total 10mg. Consider concurrent administration of Nitroglycerin with Morphine Sulfate if there is no pain relief from the initial Nitroglycerin administration. Contact Base Station for further Morphine Sulfate orders.

7. Consider establishing a saline lock as a secondary IV site.
8. Make early STEMI notification to the receiving STEMI center.
9. In Radio Communication Failure (RCF) may give up to an additional 10mg Morphine Sulfate in 2mg increments with signs of adequate tissue perfusion.



## CARDIAC ARREST - ADULT

### FIELD ASSESSMENT/TREATMENT INDICATORS

Cardiac arrest in a non-traumatic setting.

### BLS INTERVENTIONS

1. Assess patient, begin CPR according to current AHA Guidelines, and maintain appropriate airway
  - a. Compression rate shall be 100/minute utilizing 30:2 compression-to-ventilation ratio for synchronous CPR prior to placement of advanced airway.
  - b. Ventilatory volumes shall be sufficient to cause adequate chest rise.
2. If available, place AED and follow Protocol Reference #10130. CPR is **not** to be interrupted except briefly for rhythm assessment.

### LIMITED ALS INTERVENTIONS

1. Initiate CPR while applying the AED.
2. Establish advanced airway when resources are available, with minimal interruption to CPR. After advanced airway established, compressions would then be continued at 100 per minute without pauses during ventilations.
3. Establish peripheral intravenous access and administer a 300ml bolus, with signs and symptoms of inadequate tissue perfusion, may repeat fluid bolus.
4. Reference Protocol #12010 ~~AEMT~~ Determination of Death policy.

### Utilize the following treatment modalities while managing the cardiac arrest patient:

1. Obtain blood glucose, if indicated; administer Dextrose 50% 25gms IV.
2. Naloxone 2.0mg IM/IN for suspected opiate overdose.

**NOTE**

Base station contact is required to terminate resuscitative measures.

**ALS INTERVENTIONS**

1. Initiate CPR while applying the cardiac monitor.
2. Determine cardiac rhythm and defibrillate if indicated. Begin a two minute cycle of CPR.
3. Obtain IV/IO access.
4. Establish advanced airway when resources are available, with minimal interruption to CPR. After advanced airway established, compressions would then be continued at 100/min without pauses during ventilations. Ventilations should be given at a rate of one (1) breath every six (6) to eight (8) seconds.
5. Utilize continuous quantitative waveform capnography, if available, for confirmation and monitoring of endotracheal tube placement and for assessment of ROSC. For agencies with waveform capnography document the shape of the wave and the capnography number in mmHG.

**Ventricular Fibrillation/Pulseless Ventricular Tachycardia**

1. Defibrillate at 360 joules for monophasic or biphasic equivalent per manufacture. If biphasic equivalent is unknown use maximum available.
2. Perform CPR for two (2) minutes after each defibrillation, without delaying to assess the post-defibrillation rhythm.
3. Administer Epinephrine 1.0mg IV/IO during each two (2) minute cycle of CPR after every defibrillation unless capnography indicates possible ROSC.
4. Reassess rhythm after each two (2) minute cycle of CPR. If VF/VT persists, defibrillate as above.
5. After two (2) cycles of CPR, consider administering Lidocaine 1.5mg/kg IV/IO. May repeat at 0.75mg/kg every five (5) minutes to maximum dose of 3.0mg/kg.
6. If patient remains in pulseless VF/VT after five cycles of CPR, consult Base Station.

**Pulseless Electrical Activity (PEA) or Asystole**

1. Assess for reversible causes and initiate treatment.
2. Continue CPR with evaluation of rhythm every two (2) minutes.
3. Administer fluid bolus of 300ml NS IV, may repeat.
4. Administer Epinephrine 1.0mg IV/IO during each two (2) minute cycle of CPR after each rhythm evaluation.

**Utilize the following treatment modalities while managing the cardiac arrest patient:**

1. Insert NG/OG Tube to relieve gastric distension per Protocol Reference #10080.
2. Obtain blood glucose. If indicated, administer Dextrose 50% 25gms IV.
3. Naloxone 2.0mg IV/IO/IM for suspected opiate overdose.

**Termination of Efforts in the Prehospital Setting**

1. 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.
2. Consider terminating resuscitative efforts in the field if ALL of the following criteria are met:
  - a. No shocks were delivered.
  - b. No ROSC after a minimum of ten (10) minutes of ACLS.
3. Base Station contact is required to terminate resuscitative measures. A copy of the ECG should be attached to the PCR for documentation purposes.

**NOTE**

1. If ROSC is achieved, obtain a 12 lead ECG.
2. Utilize continuous waveform capnography, if available, to identify loss of circulation.
3. For continued signs of inadequate tissue perfusion after successful resuscitation a Dopamine infusion of 400mg in 250ml of NS may be initiated at 5-10 mcg/kg/min IV to maintain signs of adequate tissue perfusion.

4. Base Station physician may order additional medications or interventions as indicated by patient condition.



## ALTERED LEVEL OF CONSCIOUSNESS/SEIZURES - ADULT

### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Patient exhibiting signs/symptoms of a possible altered level of consciousness.
2. Suspected narcotic dependence, overdose, hypoglycemia, traumatic injury, shock and alcoholism.
3. Tonic/clonic movements followed by a brief period of unconsciousness (post-ictal).
4. Suspect status epilepticus for frequent or extended seizures.

### BLS INTERVENTIONS

1. Oxygen therapy as clinically indicated.
2. Position patient as tolerated. If altered gag reflex in absence of traumatic injury, place in left lateral position.
3. Place patient in axial spinal stabilization if trauma is suspected.
4. If patient history includes insulin or oral hypoglycemic medications, administer Glucose sublingual.

### LIMITED ALS INTERVENTIONS (ADULT)

1. Obtain vascular access.
2. Obtain blood glucose. If hypoglycemic administer:
  - a. Dextrose 25 Grams (50cc) IV of 50% solution, or
  - b. Glucagon 1mg IM/SC/IN, if unable to establish IV. May give one (1) time only.
  - c. May repeat blood glucose. Repeat Dextrose if extended transport time.
3. If suspected narcotic overdose administer:

- a. Naloxone 2mg IM/IN.
- b. Repeat Naloxone 2mg IM/IN every 2-3 minutes if needed.
4. Assess and document response to therapy.
5. Base Station may order additional medication dosages and fluid bolus.

### ALS INTERVENTIONS

1. Obtain vascular access and place on monitor.
2. Obtain blood glucose. If hypoglycemic administer:
  - a. Dextrose 25 Grams (50cc) IV/IO of 50% solution, or
  - b. Glucagon 1mg IM/SC/IN, if unable to establish IV. May give one (1) time only.
  - c. May repeat blood glucose. Repeat Dextrose if extended transport time.
3. For tonic/clonic type seizure activity administer:
  - a. ~~Midazolam 5-10mg IM or 2.5-5mg IV/IO/IN. May repeat in 5 minutes for continued seizure activity. Maintain the initial route of administration of the medication throughout the treatment of the patient~~  
Midazolam 2.5 mg IN/IV/IO may repeat one time in 5 minutes for continued seizure activity. If seizure continues contact Base Station for further orders.  
Midazolam 5 mg IM if continued seizure activity may repeat one time in 10 minutes for continued seizure activity. If seizure activity continues contact Base Station for further orders.
  - b. ~~Repeat Midazolam for extended or recurrent seizure activity.~~
4. If suspected narcotic overdose administer:
  - a. Naloxone 2mg IV/IM/IN.
  - b. Repeat Naloxone 2mg IV/IM/IN every 2-3 minutes if needed. Do not exceed 10mgs of Naloxone total regardless of route given.

5. Assess and document response to therapy.
6. Base Station may order additional medication dosages and fluid bolus.



## BURNS – ADULT 15 Years of Age and Older

Burn patient requires effective communication and rapid transportation to the closest receiving hospital.

In Inyo and Mono Counties, the assigned base station should be contacted for determination of appropriate destination.

### FIELD ASSESSMENT/TREATMENT INDICATORS

Burn Criteria and Destination Policy #8030

### ADULT TREATMENT PROTOCOL: BURNS Base Station Contact Shaded in Gray

BLS INTERVENTIONS	LIMITED ALS INTERVENTIONS	ALS INTERVENTIONS
<ul style="list-style-type: none"> <li>• Break contact with causative agent (stop the burning process)</li>   <li>• Remove clothing and jewelry quickly, if indicated</li>   <li>• Keep patient warm</li>   <li>• Estimate % TBSA burned and depth using the “Rule of Nines”               <ul style="list-style-type: none"> <li>○ An individual’s palm represents 1% of TBSA and can be used to estimate scattered, irregular burns</li> </ul> </li>   <li>• Transport to ALS intercept or to the closest receiving hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated</li> <li>• <u>King Airway contraindicated in airway burns.</u></li>   <li><b>Airway Stabilization:</b>            Burn patients with respiratory compromise or potential for such, will be transported to the closest most appropriate receiving hospital for airway stabilization.</li> <li>• Monitor ECG</li> <li>• IV Access: Warm IV fluids when avail</li>   <li><i>Unstable:</i>            BP&lt;90mmHG and/or signs of inadequate tissue perfusion, start 2<sup>nd</sup> IV access.           <ul style="list-style-type: none"> <li>○ IV NS 250ml boluses, may repeat to a maximum of 1000ml.</li> </ul> </li>   <li><i>Stable:</i>            BP&gt;90mmHG and/or signs of adequate tissue perfusion.           <ul style="list-style-type: none"> <li>○ IV NS 500ml/hour</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated</li>   <li><b>Airway Stabilization:</b>            Burn patients with respiratory compromise or potential for such, will be transported to the closest receiving hospital for airway stabilization</li> <li>• Monitor ECG</li> <li>• IV/IO Access: Warm IV fluids when avail</li>   <li><i>Unstable:</i>            BP&lt;90mmHG and/or signs of inadequate tissue perfusion, start 2<sup>nd</sup> IV access.           <ul style="list-style-type: none"> <li>○ IV NS 250ml boluses, may repeat to a maximum of 1000ml.</li> </ul> </li>   <li><i>Stable:</i>            BP&gt; 90mmHG and/or signs of adequate tissue perfusion.           <ul style="list-style-type: none"> <li>○ IV NS 500ml/hour</li> </ul> </li> <li>• Treat pain as indicated</li> </ul>

BLS Continued

**MANAGE SPECIAL CONSIDERATIONS:**

**Thermal Burns:** Stop the burning process. Do not break blisters. Cover the affected body surface with dry, sterile dressing or sheet.

**Chemical Burns:** Brush off dry powder, if present. Remove any contaminated or wet clothing. Irrigate with copious amounts of saline or water.

**Tar Burns:** Cool with water, do not remove tar.

**Electrical Burns:** Remove from electrical source (without endangering self) with a nonconductive material. Cover the affected body surface with dry, sterile dressing or sheet.

**Eye Involvement:** Continuous flushing with NS during transport. Allow patient to remove contact lenses if possible.

Limited ALS Continued

- Transport to appropriate facility:  
*Minor Burn Classification:* transport to the closest most appropriate receiving hospital.  
*Moderate Burn Classification:* transport to the closest most appropriate receiving hospital.  
*Major Burn Classification:* transport to the closest most appropriate Burn Center (San Bernardino County contact ARMC).

*CTP with associated burns:* transport to the most appropriate trauma hospital.

- Burn patients with associated trauma, in which the burn injury poses the greatest risk of morbidity or mortality, should be **considered** for transport to the closest most appropriate Burn Center. Trauma base station contacted shall be made.

**MANAGE SPECIAL CONSIDERATIONS:**

**Electrical Burns:** Place AED according to ICEMA protocols.

- Electrical injuries that result in cardiac arrest shall be treated as medical arrests.

ALS Continued

**IV Pain Relief:** Morphine Sulfate 5mg IV slowly and may repeat every 5 minutes to a maximum of 20mg when the patient maintains a BP>90mmHG and signs of adequate tissue perfusion. Document BP's every 5 minutes while medicating for pain and reassess the patient.

**IM Pain Relief:** Morphine Sulfate 10mg IM. Document vital signs and reassess the patient.

- Transport to appropriate facility:  
*CTP with associated burns:* transport to the closest trauma hospital.

- Burn patients with associated trauma, should be transported to the closest Trauma Center. Trauma base station contacted shall be made
- Insert nasogastric/orogastric tube as indicated
- Refer to Burn Classification table.

**MANAGE SPECIAL CONSIDERATIONS:**

**Electrical Burns:** Monitor for dysrhythmias, treat according to ICEMA protocols.

- Electrical injuries that result in cardiac arrest shall be treated as medical arrests.

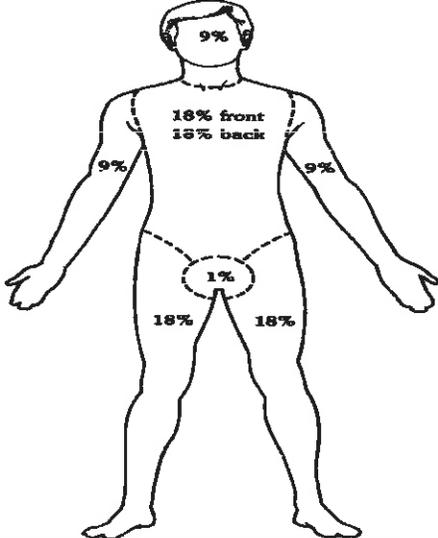
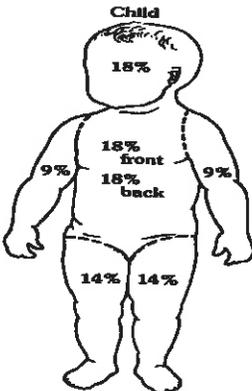
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**REFERENCE PROTOCOLS**

<b><u>Protocol Number</u></b>	<b><u>Protocol Name</u></b>
9010	General Patient Care Guidelines
10150	External Jugular Vein Access
10030/10040	Oral Endotracheal Intubation
10080	Insertion of Nasogastric/Orogastric Tube
10060	Needle Thoracostomy
10140	Intraosseous Infusion IO
10050	Nasotracheal Intubation
10070	Needle Cricothyrotomy
10160	Axial Spinal Stabilization
10010/10020	King Airway Device
11070	Adult Cardiac Arrest
15030	Trauma Triage Criteria and Destination Policy
12010	Determination of Death on Scene

**BURN CLASSIFICATIONS**

ADULT BURN CLASSIFICATION CHART	DESTINATION	
<p><b>MINOR – ADULT</b></p> <ul style="list-style-type: none"> <li>• &lt; 10% TBSA</li> <li>• &lt; 2% Full Thickness</li> </ul>	<p>CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL</p>	
<p><b>MODERATE – ADULT</b></p> <ul style="list-style-type: none"> <li>• 10 - 20% TBSA</li> <li>• 2 - 5% Full Thickness</li> <li>• High Voltage Injury</li> <li>• Suspected Inhalation Injury</li> <li>• Circumferential Burn</li> <li>• Medical problem predisposing to infection (e.g., diabetes mellitus, sickle cell disease)</li> </ul>	<p>CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL</p>	
<p><b>MAJOR – ADULT</b></p> <ul style="list-style-type: none"> <li>• &gt;20% TBSA burn in adults</li> <li>• &gt; 5% Full Thickness</li> <li>• High Voltage Burn</li> <li>• Known Inhalation Injury</li> <li>• Any significant burn to face, eyes, ears, genitalia, or joints</li> </ul>	<p>CLOSEST MOST APPROPRIATE BURN CENTER</p> <p>In San Bernardino County, contact: Arrowhead Regional Medical Center (ARMC)</p>	
<p>“Rule of Nines”</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p><b>Adult</b></p>  </div> <div style="text-align: center;"> <p><b>Child</b></p>  </div> </div>		



## DETERMINATION OF DEATH ON SCENE

### PURPOSE

To identify situations when an EMT or EMT-P may be called upon to determine death on scene.

### POLICY

An EMT or EMT-P may determine death on scene if **pulselessness and apnea** are present with any of the following criteria. The EMT-P is authorized to discontinue BLS CPR initiated at scene if a patient falls into the category of obvious death. If any ALS procedures are initiated, only the Base Station physician/designee may determine death in the field. In any situation where there may be doubt as to the clinical findings of the patient, BLS/CPR must be initiated and the Base Station contacted, per Protocol Reference #12020, Withholding Resuscitate Measures Policy. When death is determined, the County Coroner must be notified along with the appropriate law enforcement agency.

### DETERMINATION OF DEATH CRITERIA

1. Decomposition.
2. Obvious signs of rigor mortis such as rigidity or stiffening of muscular tissues and joints in the body, which occurs anytime after death and usually appears in the head, face and neck muscles first.
3. Obvious signs of venous pooling in dependent body parts, lividity such as mottled bluish-tinged discoloration of the skin, often accompanied by cold extremities.
4. Decapitation.
5. Incineration of the torso and/or head.
6. Massive crush injury
7. Penetrating injury with evisceration of the heart, and/or brain.
8. Gross dismemberment of the trunk.

**PROCEDURE**

1. If the patient does not meet the Determination of Death criteria, appropriate interventions must be initiated.
2. Resuscitation efforts shall not be terminated enroute per Government code 27491. The patient will be transported to the closest facility where determination of death will be made by hospital staff.
3. Most victims of electrocution, lightning and drowning should have resuscitative efforts begun and transported to the appropriate Hospital/Trauma Center.
4. Hypothermic patients should be treated per Protocol Reference #13030, Cold Related Emergencies under Severe Hypothermia.
5. A DNR report form must be completed, if applicable per Protocol Reference #12020.

A copy of the patient care record report must be made available for the ~~coroner~~ **Coroner**. This will be transmitted to them, when posted, if the disposition is marked "Dead on Scene" and the Destination is marked "Coroner, San Bernardino County" on the ePCR. If unable to ~~post~~ print a printed copy of the electronic patient care record, O1A or a completed *Coroners Worksheet of Death* must be left at the scene. ~~Completed~~ The completed ePCR or O1A must be posted or faxed to the Coroner before the end of the shift.

**LIMITED ALS PROCEDURE**

- ~~1. All patients in ventricular fibrillation should be resuscitated and transported unless otherwise determined by the Base Station Physician/designee.~~
- ~~2. Traumatic cardiac arrest in the setting of severe blunt force trauma, documented asystole in at least two (2) leads and no reported Vital signs (palpable pulses and/or spontaneous respirations) during EMS encounter with the patient meet Determination of Death Criteria.~~
3. All terminated Limited ALS resuscitation efforts must have an AED event record attached to the patient care record report.

4. All conversations with the Base Station must be fully documented with the name of the Base Station Physician who determined death, times and instructions on the patient care record report.

### **ALS PROCEDURE**

1. All patients in ventricular fibrillation should be resuscitated and transported unless otherwise determined by the Base Station Physician/designee.
2. Traumatic cardiac arrest in the setting of severe blunt force trauma, documented asystole in at least two (2) leads and no reported vital signs (palpable pulses and/or spontaneous respirations) during EMS encounter with the patient meet Determination of Death Criteria.
3. All terminated ALS resuscitation efforts must have an ECG attached to the patient care record report.
4. All conversations with the Base Station must be fully documented with the name of the Base Station Physician who determined death, times and instructions on the patient care record report.

### **SUSPECTED SUDDEN INFANT DEATH SYNDROME INCIDENT**

Purpose It is imperative that all prehospital personnel in ICEMA be able to assist the caregiver and local police agencies during a suspected SIDS Incident.

### **PROCEDURE**

1. Follow individual department/agency policies at all times.
2. Ask open-ended questions about incident.
3. Explain what you are doing, the procedures you will follow, and the reasons for them.
4. If you suspect a SIDS death, explain to the parent/caregiver what SIDS is and, if this is a SIDS related death nothing they did or did not do caused the death.
5. Provide the parent/caregiver with the number of the California SIDS Information Line:

1-800-369-SIDS (7437).

6. Provide psychosocial support and explain the emergency treatment and transport of their child.
7. Assure the parent/caregiver that your activities are standard procedures for the investigation of all death incidents and that there is no suspicion of wrongdoing.
8. Document observations.



## POISONINGS

### PRIORITIES

1. Assure the safety of EMS personnel.
2. Assure and maintain ABCs.
3. Determine degree of physiological distress.
4. Obtain vital signs, history and complete physical assessment including the substance ingested, the amount, the time substance was ingested and the route.
5. Bring ingested substance to the hospital with patient.
6. Expeditious transport.

### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Altered level of consciousness.
2. Signs and symptoms of substance ingestion, inhalation, injection or surface absorption.
3. History of substance poisoning.

### DEFINITIVE CARE

1. Assure and maintain ABCs.
2. Place patient on high flow oxygen as clinically indicated.
3. Contact poison control (1-800-222-1222).
4. Obtain accurate history of incident:
  - a. Name of product or substance.
  - b. Quantity ingested, and/or duration of exposure.
  - c. Time elapsed since exposure.

- d. Pertinent medical history, chronic illness, and/or medical problems within the last twenty-four (24) hours.
  - e. Patient medication history.
5. Monitor vital signs.
  6. Expeditious transport.

#### LIMITED ALS SUPPORT PRIOR TO BASE STATION CONTACT

1. Assure and maintain ABC's.
2. Oxygen therapy as clinically indicated, obtain oxygen saturation on room air, unless detrimental to patient condition.
3. Obtain vascular access at a TKO rate or if signs of inadequate tissue perfusion, administer 500cc fluid challenge and repeat until perfusion improves.
4. For pediatric patients with signs of inadequate tissue perfusion give 20cc/kg IVP and repeat until perfusion improves.

~~Obtain vascular access at a TKO rate or if hypotensive administer 500cc fluid challenge to sustain a systolic B/P greater than 90mmHg. For pediatric patients with a systolic B/P less than 80mmHg give 20cc/kg IVP and repeat as indicated.~~

4. ~~Charcoal 50gms for adult (pediatrics 1gm/kg). Administer P.O. if alert with a gag reflex. Charcoal is contraindicated with caustic ingestions.~~

#### PARAMEDIC SUPPORT PRIOR TO BASE STATION CONTACT

1. Assure and maintain ABC's.
2. Oxygen therapy as clinically indicated, obtain oxygen saturation on room air, unless detrimental to patient condition.
3. Monitor cardiac status.
4. Obtain vascular access at a TKO rate or if signs of inadequate ~~perfusion~~ administer tissue rperfusion, administer 500cc fluid challenge and repeat until perfusion improves. :

5. For pediatric patients with signs of inadequate tissue perfusion –give 20cc/kg IVP and repeat until perfusion improves. .
6. For phenothiazine “poisoning”, administer diphenhydramine 25mg IVP or 50mg IM for ataxia and/or muscle spasms.
7. For known organophosphate poisoning, give atropine 2mg IVP, repeat at 2mg increments if patient remains symptomatic (ie: excessive salivation, lacrimation, urination, diarrhea, vomiting, constricted pupils).

**BASE STATION MAY ORDER THE FOLLOWING**

- \*1. For tricyclic poisonings, administer sodium bicarbonate 1mEq/kg IVP for tachycardia, widening QRS or ventricular arrhythmias.
  - \*2. For calcium channel blocker poisonings, administer calcium chloride 1gm (10cc of a 10% solution), if hypotension or bradycardic arrhythmias persist.
  - \*3. For betablocker poisonings, administer glucagon 1mg IVP.
  - \*4. Repeat atropine in 2 - 4mg increments until symptoms are controlled.
- \*May be done during radio communication failure.



## HEAT RELATED EMERGENCIES

### MINOR HEAT ILLNESS SYNDROMES

#### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Environmental conditions.
2. Increased skin temperature.
3. Increased body temperature.
4. General weakness.
5. Muscle cramps.

### HEAT EXHAUSTION (Compensated)

1. All or some of the symptoms above.
2. Elevated temperature.
3. Vomiting.
4. Hypotension.
5. Diaphoresis.
6. Tachycardia.
7. Tachypnea.

### HEAT STROKE (Uncompensated)

1. All or some of the symptoms above.
2. Hyperthermia.
3. ALOC or other signs of Central nervous system dysfunction.
4. Absence or decreased sweating.

5. Tachycardia.
6. Hypotension.

### **BLS INTERVENTIONS**

1. Remove patient from heat source, place in a position of comfort and begin cooling measures.
2. Oxygen as clinically indicated.
3. Rehydrate with small amounts of appropriate liquids as tolerated.
4. Axial-spinal stabilization if indicated.

### **HEAT EXHAUSTION**

#### **FIELD ASSESSMENT/ TREATMENT INDICATORS**

1. Dehydration.
2. Elevated temperature, vomiting, hypotension, diaphoresis, tachycardia and tachypnea.
3. No change in LOC.

### **BLS INTERVENTIONS**

1. Remove patient from heat source, position with legs elevated and begin cooling measures.
2. Oxygen as clinically indicated.
3. Rehydrate with small amounts of appropriate liquids as tolerated. Do not give liquids if altered level of consciousness.
4. If patient has signs of Heat Stroke begin rapid cooling measures including cold packs placed adjacent to large superficial vessels.
5. Evaporative cooling measures.

**LIMITED ALS INTERVENTIONS**

1. Obtain vascular access.
    - a. Adult: Fluid bolus with 500cc NS. Reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion. BP remains less than 90mmHg.
    - b. Pediatric patients less than nine (9) years of age: Initial 20cc/kg IV bolus; Reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion may repeat until palpable pulse obtained.
  2. Obtain blood glucose and provide treatment as clinically indicated.
  3. Seizure precautions refer to Protocol Reference #11080 AEMT, Altered Level of Consciousness/Seizures.
- ~~Contact Base Station for destination and further treatment orders.~~

**ALS INTERVENTIONS**

1. Obtain vascular access.
  - a. Adult: Fluid bolus with 500cc NS. May repeat if continued signs of inadequate tissue perfusion. BP is less than 90mmHg.
  - b. Pediatric patients less than nine (9) years of age: Initial 20cc/kg IV/IO bolus; Reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion may repeat until palpable pulse obtained.
2. Assess blood glucose and provide treatment as clinically indicated.
3. Base Station may order additional medication dosages and additional fluid boluses.
4. Obtain rhythm strip for documentation with copy to receiving hospital.
5. For tonic/colonic type seizure activity in adults administer:
  - ~~Midazolam 5mg IM or 2.5IV/IO/IN. May repeat in 5 minutes for continued seizure activity. Maintain the initial route of administration of the medication throughout the treatment of the patient~~
  - a. Midazolam 2.5 mg IN/IV/IO may repeat one time in 5 minutes for continued seizure activity. If seizure continues contact Base Station for further orders.

b. Midazolam 5 mg IM if continued seizure activity may repeat one time in 10 minutes for continued seizure activity. If seizure activity continues contact Base Station for further orders.

~~-c.~~

a. ~~Midazolam 5mg IM/IN or 2.5 mg IV/IO/IN~~

b. ~~May repeat Midazolam for extended or recurrent seizure activity every 10 minutes as needed.~~

6. For tonic/clonic type seizure activity in pediatrics administer:

For seizure activity, administer Midazolam 0.2mg/kg IM/IN with maximum IM/IN dose of 5 mg or 0.1 mg/kg IV/IO with maximum dose 2.5 mg IV/IO. May repeat Midazolam every 10 minutes if necessary not to exceed adult dosage. Maintain the initial route of administration of the medication throughout the treatment of the patient



## COLD RELATED EMERGENCIES

### FIELD ASSESSMENT/TREATMENT INDICATORS

#### MILD HYPOTHERMIA

1. Decreased core temperature.
2. Cold, pale extremities.
3. Shivering, reduction in fine motor skills.
4. Loss of judgment and/or altered level of consciousness or simple problem solving skills.

#### SEVERE HYPOTHERMIA

1. Severe cold exposure or any prolonged exposure to ambient temperatures below 36 degrees with the following indications:
  - a. Altered LOC with associated behavior changes.
  - b. Unconscious.
  - c. Lethargic.
2. Shivering is generally absent.
3. Blood pressure and heart sounds may be unobtainable.

#### SUSPECTED FROSTBITE

1. Areas of skin that are cold, white, and hard to touch.
2. Capillary refill greater than two (2) seconds.
3. Pain and/or numbness to affected extremity.

### BLS INTERVENTIONS

1. Remove from cold/wet environment; remove wet clothing and dry patient.

2. Begin passive warming.
3. Insulate and apply wrapped heat packs, if available, to groin, axilla and neck. This process should be continuous.
4. Maintain appropriate airway with oxygen as clinically indicated (warm, humidified if possible).
5. Assess carotid pulse for a minimum of 1-2 minutes. If no pulse palpable, place AED if available, per Protocol Reference #10130. If no shock advised, begin CPR.
6. Insulate to prevent further heat loss.
7. Elevate extremity if frostbite is suspected.
8. Do not massage affected extremity.
9. Wrap affected body part in dry sterile gauze to prevent further exposure and handle with extreme care.

#### LIMITED ALS INTERVENTIONS

1. Advanced airway as clinically indicated.
2. Consider blood glucose determination and provide treatment as clinically indicated.
- ~~3.~~ Obtain vascular access and administer fluid bolus.
  - a. Nine (9) years and older: 300ml warmed NS, may repeat.
  - b. Birth to eight (8) years: 20ml/kg warmed NS, may repeat.
- ~~2. Contact Base Station.~~

#### ALS INTERVENTIONS

1. Obtain vascular access.
2. Cardiac Monitor.
3. Consider blood glucose determination and provide treatment as clinically indicated.

4. For complaints of pain in affected body part:
  - a. Pediatric – Morphine Sulfate 0.1 mg/kg IV not to exceed 2mg increments, for a total of 5mg or Morphine Sulfate 0.2mg/kg IM, for a total of 10mg IM, titrated for pain relief.
  - b. Adult – Morphine Sulfate 2mg IV, may repeat in 2mg increments, not to exceed 10mg IV, or Morphine Sulfate 10mg IM may repeat IM dosage one time for pain relief.
5. In Radio Communication Failure, the EMT-P may repeat above dosage ~~administer a repeat dosage~~ of Morphine Sulfate.
6. Advanced airway as clinically indicated.
7. Obtain vascular access and administer fluid bolus.
  - a. Nine (9) years and older: 500ml warmed NS, may repeat.
  - b. Birth to eight (8) years: 20ml/kg warmed NS, may repeat.
8. Obtain rhythm strip for documentation.
9. For documented VF, Pulseless V-Tach:
  - i. Defibrillate one (1) time at manufacturer recommended dose. Do not defibrillate again until patient has begun to warm.
10. For documented asystole:
  - a. Begin CPR.
  - b. May give additional fluid bolus

~~Contact Base Station.~~



## ALLERGIC REACTIONS - PEDIATRIC (Less than 15 years of age)

### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Signs and Symptoms of an Acute Allergic Reaction.
2. History of Exposure to Possible Allergen.

### BLS INTERVENTIONS

1. Recognize s/s of respiratory distress for age.
2. Reduce anxiety, assist patient to assume POC.
3. Oxygen administration as clinically indicated, (humidified oxygen preferred).
4. Assist patient with self-administration of prescribed Epinephrine device.
5. Assist patient with self-administration of prescribed Diphenhydramine.

### LIMITED ALS INTERVENTIONS – ADULT

~~Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.~~

~~Epinephrine (1:1,000) 0.3mg SQ. Contact Base Station for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.~~

~~Nebulized Albuterol 2.5mg with Atrovent 0.5mg via handheld nebulizer for wheezing. May repeat times two (2).~~

~~Establish peripheral intravenous access. If patient's systolic blood pressure <90mm Hg, then given a bolus of 500ml normal saline. May repeat the fluid bolus as needed to sustain a BP of >90 mm Hg systolic. Monitor lung sounds and decrease flow rate as needed.~~

### LIMITED ALS INTERVENTIONS – PEDIATRIC (Less than 15 years of age)

1. Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
2. Nebulized Albuterol 2.5 mg with Atrovent 0.5mg - may repeat twice.
  - a. 1 day to 12 months – Atrovent 0.25mg
  - b. 1 year to 14 years – Atrovent 0.5mg
3. If no response to Albuterol and Atrovent, consider Epinephrine (1:1,000) 0.01mg/kg SC not to exceed adult dosage of 0.3mg. (with Base Station contact).
4. For symptomatic hypotension with poor perfusion, consider fluid bolus of 20ml/kg of NS not to exceed 300ml NS and repeat as indicated.
5. Establish additional IV access if indicated.
6. Base Station may order additional medication dosages and additional fluid boluses.

#### ALS INTERVENTIONS

1. Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible
2. Nebulized Albuterol 2.5 mg with Atrovent may repeat ~~twice~~ times two (2).
  - a. 1 ~~d~~Day to 12 months – Atrovent 0.25mg
  - b. 1 year to 14 years – Atrovent 0.5mg
3. If no response to Albuterol and Atrovent, consider Epinephrine (1:1,000) 0.01mg/kg SC not to exceed adult dosage of 0.3mg.
4. For symptomatic hypotension with poor perfusion, consider fluid bolus of 20ml/kg of NS not to exceed 300ml NS and repeat as indicated.
5. Diphenhydramine 1mg/kg slow IV or 2 mg/kg IM, not to exceed adult dose of 25mg IV/IO or 50mg IM.
6. Establish additional IV access if indicated.

7. For anaphylactic shock (e.g., no palpable radial pulse and a depressed level of consciousness), administer epinephrine dose 0.01mg/kg (1:10,000) IV/IO, no more than 0.1mg per dose. May repeat to a maximum of 0.5 mg.
8. Base Station may order additional medication dosages and additional fluid boluses.



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## SEIZURE - PEDIATRIC (Less than 15 years of age)

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### FIELD ASSESSMENT/TREATMENT INDICATORS

1. Tonic/clonic movements followed by a brief period of unconsciousness (post-ictal).
2. Suspect status epilepticus for frequent or extended seizures.
3. History of prior seizures, narcotic dependence or diabetes.
4. Febrile seizures (patients under four (4) years of age).
5. Traumatic injury.

### BLS INTERVENTIONS

1. Protect patient from further injury; axial-spinal stabilization if indicated.
2. Assure and maintain airway patency after cessation of seizure, with oxygen therapy as indicated.
3. Airway management as indicated (OPA/NPA, BVM Ventilation).
4. Position patient in left lateral position in absence of traumatic injury; watch for absent gag reflex.
5. Remove excess clothing and begin cooling measures if patient is febrile.
6. Protect patient during transport by padding appropriately.

### ALS INTERVENTIONS

1. Establish advanced airway as needed.
2. Obtain vascular access and place on cardiac monitor if indicated.
3. If clinically indicated, obtain a Blood Glucose level and provide treatment.
4. For seizure activity, administer Midazolam 0.2mg/kg IM/IN with maximum IM/IN dose of 10 mg or 0.1 mg/kg IV/IO with maximum dose ~~2-5~~ 5mg IV/IO. May

Repeat Midazolam in five (5) minutes if necessary not to exceed adult dosage. Do not change routes of administration to prevent accidental over dosage of medicine. Maintain the initial route of administration of the medication throughout the treatment of the patient

5. Assess and document response to therapy.
6. Base Station may order additional medication dosages or a fluid bolus.



## OBSTETRICAL EMERGENCIES

### UNCOMPLICATED DELIVERY

#### BLS INTERVENTIONS

1. Administer Oxygen as clinically indicated.
2. Prepare for delivery.
3. Massage fundus if placenta delivered.

### COMPLICATED DELIVERY

#### BLS INTERVENTIONS

1. Excessive vaginal bleeding prior to delivery:
  - a. Attempt to control ~~contain~~ bleeding. Do not place anything into vagina.
  - b. Place in Trendelenberg position.
2. Prolapsed Cord:
  - a. Elevate h ~~Hips elevated~~.
  - b. Gently push presenting part of head away from cord.
  - c. Consider knee/chest position for mother.
3. Post-Partum Hemorrhage:
  - a. Massage fundus to control bleeding.
  - b. Encourage immediate breast feeding.
  - c. Place in t ~~Trendelenburg~~ position.
4. Cord around infant's neck:
  - a. Attempt to slip cord over head.

- b. If unable to slip cord over the head, deliver the baby through the cord.
  - c. If unable to deliver the baby through the cord, double clamp cord, then cut cord between clamps.
5. Breech presentation and head not delivered within 3-4 minutes:
  - a. Administer O2~~Hi-flow O2 on patient.~~
  - b. Place in tTrendelenburg position.
  - c. Code 3 to closest appropriate facility.
6. Pregnancy induced hypertension and Eclampsia:
  - a. Initiate and maintain sSeizure precautions.
  - b. Attempt to reduce stimuli.
  - c. Limit fluid intake.
  - d. Monitor and document B/P.
  - e. Consider left lateral position.

### LIMITED ALS INTERVENTIONS

1. Obtain IV access, and maintain IV rate as appropriate.
2. Excessive vaginal bleeding or post-partum hemorrhage.
  - a. Give fluid challenge of 500ml, if signs of inadequate tissue perfusion persist may repeat fluid bolus.
  - b. Maintain IV rate at 150ml/hr.
  - c. Establish 2nd large bore IV enroute.
3. Pregnancy Induced Hypertension / Eclampsia.
  - a. IV TKO, limit fluid intake.

- b. Obtain O2 saturation on room air, if possible.
- c. Place in left lateral position, and obtain BP after five (5) minutes.
4. Consider immediate notification of Base Station physician.

### ALS INTERVENTIONS

1. Obtain IV access, and maintain IV rate as appropriate.
2. Excessive vaginal bleeding or post-partum hemorrhage.
  - a. Administer Give fluid challenge of 500ml, if signs of inadequate tissue perfusion persist may repeat fluid bolus.
  - b. Maintain IV rate at 150ml/hr.
  - c. Establish 2nd large bore IV enroute.
3. Pregnancy Induced Hypertension / Eclampsia.
  - a. Administer IV TKO, Limit fluid intake.
  - b. Obtain O2 saturation on room air, if possible.
  - c. Place in left lateral position, and obtain B/P after five (5) minutes.
  - d. Obtain rhythm strip with copy to receiving hospital.
  - d. ~~For patients that are hypertensive (150/100 or greater) give Magnesium Sulfate 4gms diluted with 20ml NS, IV/IO slowly over 3 to 4 minutes. Start infusion of 2 grams in 100cc of NS at 30cc/hour to prevent seizures.~~
  - e. For tonic/clonic activity:  
Midazolam 2.5mg IV/IO may repeat in five (5) minutes for a maximum dose of 5mg IV/IO, or Midazolam 5mg IM may repeat in five (5) minutes for a maximum dose of 10mg IM if unable to establish vascular access.
    - i. Magnesium Sulfate 4gms diluted with 20ml NS, IV/IO over 3-4 minutes
    - ii. Start infusion of 2 grams in 100cc of NS at 30cc/hour to prevent continued seizures.





## NEWBORN CARE

### FIELD ASSESSMENT/TREATMENT INDICATORS

Field delivery with or without complications.

### BLS INTERVENTIONS

1. When head is delivered, suction mouth then the nose, and check to see that cord is not around baby's neck.
2. Dry infant and provide warm environment. Prevent heat loss (remove wet towel).
3. Place baby in supine position at or near the level of the mother's vagina. After pulsation of cord has ceased double clamp cord at approximately 7" and 10" from baby and cut between clamps.
4. Maintain airway, suction mouth and nose.
5. Provide tactile stimulation to facilitate respiratory effort.
6. Assess breathing if respirations <20 or gasping, provide tactile stimulation and assisted ventilation if indicated.
7. Circulation:
  - a. Heart Rate <100 ventilate BVM with 100% O<sub>2</sub> for 30 seconds and reassess. If heart rate is still <100/min, begin CPR with ventilations at a 3:1 ratio of compressions to ventilations (approximately 100 compressions and 30 ventilations/min).
  - b. If available, utilize Waveform Capnography to assess efficacy of compressions and ventilations.
8. If central cyanosis is present, utilize supplemental O<sub>2</sub> at 10 to 15L/min using oxygen tubing close to infant's nose and reassess. If no improvement is noted after thirty (30) seconds assist ventilation with BVM.
9. Obtain Apgar scoring at one (1) and five (5) minutes. Do not use Apgar to determine need to resuscitate.

**APGAR SCORE**

<b>SIGN</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>Heart Rate</b>	Absent	< 100/minute	> 100/minute
<b>Respirations</b>	Absent	<20/irregular	>20/crying
<b>Muscle Tone</b>	Limp	Some Flexion	Active Motion
<b>Reflex Irritability</b>	No Response	Grimace	Cough or Sneeze
<b>Color</b>	Blue or pale	Blue Extremities	Completely Pink

**LIMITED ALS INTERVENTIONS**

1. Obtain vascular access via IV if indicated.
2. Obtain Blood Glucose by heel stick.
3. Contact Base Station if hypovolemia is suspected. Base Station may order 10 ml/kg IV NS over 5 minutes. If unable to contact Base Station and transport time is extended give 10ml/kg IV NS over 5 minutes, may repeat.

**ALS INTERVENTIONS**

1. Obtain vascular access via IV/IO if indicated.
2. Consider advanced airway per Protocol Reference #10040 if BVM is ineffective or tracheal suctioning is required. Place orogastric tube after advanced airway is in place. Reassess placement after every intervention.
3. Obtain Blood Glucose by heel stick, if <35 hypoglycemic, give D25 0.5gms/kg IV.
4. Evaluate airway for hypoxemia and assess body temperature for hypothermia then consider Epinephrine 0.01mg/kg IV/IO (1:10,000) if Heart Rate <60 after one (1) minute.
5. Contact Base Station if hypovolemia is suspected. Base Station may order 10ml/kg IV NS over 5 minutes. If unable to contact Base Station and transport time is extended give 10ml/kg IV NS over 5 minutes, may repeat.
6. For persistent hypotension despite adequate ventilation and fluid resuscitation, Base Station may order Epinephrine 0.005mg/kg (1:10,000) IV/IO every 10 minutes. If unable to contact Base Station and transport time is extended give indicated dosage and contact Base Station as soon as possible (PALS dose is >0.003mg/kg (1:10,000) IV/IO for pressor dosage. No change to above dosage.



## TRAUMA - ADULT (15 Years of Age and Older)

Any critical trauma patient (CTP) requires effective communication and rapid transportation to the closest trauma center. If not contacted at scene, the receiving trauma center must be notified as soon as possible in order to activate the trauma team.

In Inyo and Mono Counties, the assigned base station should be contacted for determination of appropriate destination.

### FIELD ASSESSMENT/TREATMENT INDICATORS

Trauma Triage Criteria and Destination Policy #15030.

### ADULT TREATMENT PROTOCOL: TRAUMA Base Station Contact Shaded in Gray

BLS INTERVENTIONS	LIMITED ALS INTERVENTIONS	ALS INTERVENTIONS
<ul style="list-style-type: none"> <li>• Ensure thorough initial assessment</li> <li>• Ensure patent airway, protecting cervical spine</li> <li>• Axial spinal stabilization as appropriate</li> <li>• Oxygen and/or ventilate as needed, O<sub>2</sub> saturation (if BLS equipped)</li> <li>• Keep patient warm</li> <li>• For a traumatic full arrest, an AED may be utilized, if indicated</li> <li>• Transport to ALS intercept or to the closest receiving hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated  <i>Unmanageable Airway:</i>            Transport to the closest most appropriate receiving hospital when the patient requires advanced airway:            An adequate airway cannot be maintained with a BVM device           <ul style="list-style-type: none"> <li>• Apply AED</li> </ul> </li>   <li>• IV Access: Warm IV fluids when avail  <i>Unstable:</i> BP&lt;90mmHG and/or signs of inadequate tissue perfusion, start 2<sup>nd</sup> IV access.  <i>Stable:</i> BP&gt;90mmHG and/or signs of adequate tissue perfusion.</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated.  <i>Unmanageable Airway:</i>            -If an adequate airway cannot be maintained with a BVM device;  <b>AND</b>            -The paramedic is unable to intubate or if indicated, perform a successful needle cricothyrotomy,  <b>Then</b>, transport to the closest receiving hospital and follow Continuation of Trauma Care, Protocol Reference #8100.</li> <li>• Monitor ECG.</li> <li>• IV/IO Access: Warm IV fluids when avail  <i>Unstable:</i> -BP&lt;90mmHG and/or signs of inadequate perfusion, start 2<sup>nd</sup> IV access.  <i>Stable:</i> -BP&gt;90mmHG and/or signs of adequate tissue perfusion.</li> </ul>



<p><b><u>BLS Continued</u></b></p> <p><b>Chest Trauma:</b> If a wound is present, cover it with an occlusive dressing. If the patient's ventilations are being assisted, dress wound loosely, (do not seal). Continuously reevaluate patient for the development of tension pneumothorax.</p> <p><b>Flail Chest:</b> Stabilize chest, observe for tension pneumothorax. Consider assisted ventilations.</p> <p><b>Fractures:</b> Immobilize above and below the injury. Apply splint to injury in position found except:</p> <ul style="list-style-type: none"> <li>• <b>Femur:</b> Apply traction splint if indicated.</li> <li>• <b>Grossly angulated long bone with distal neurovascular compromise:</b> Apply gentle unidirectional traction to improve circulation.</li> <li>• <b>Check and document distal pulse before and after positioning.</b></li> </ul> <p><b>Genital Injuries:</b> Cover genitalia with saline soaked gauze. If necessary, apply direct pressure to control bleeding. Treat amputations the same as extremity amputations.</p>	<p><b><u>Limited-ALS Continued</u></b></p> <p><b>Fractures:</b></p> <p><b>Isolated Extremity Trauma:</b> Trauma <u>without multisystem mechanism.</u> Extremity trauma is defined as those cases of injury where the limb itself and/or the appendicular skeleton (shoulder or pelvic girdle) may be injured – e.g. dislocated shoulder, hip fracture or dislocation.</p> <ul style="list-style-type: none"> <li>○ Administer IV NS 250ml bolus one time.</li> </ul>	<p><b><u>ALS Continued</u></b></p> <p><b>Chest Trauma:</b> Perform needle thoracostomy for chest trauma with symptomatic respiratory distress.</p> <p><b>Fractures:</b></p> <p><b>Isolated Extremity Trauma:</b> Trauma <u>without multisystem mechanism.</u> Extremity trauma is defined as those cases of injury where the limb itself and/or the appendicular skeleton (shoulder or pelvic girdle) may be injured - e.g., dislocated shoulder, hip fracture or dislocation.</p> <p><b>IV Pain Relief:</b></p> <ul style="list-style-type: none"> <li>-Morphine Sulfate 5mg IV slowly and may repeat every 5 minutes to a maximum of 20mg when the patient maintains a</li> <li>-BP&gt;90mmHG and signs of adequate tissue perfusion. Document BP's every 5 minutes while medicating for pain and reassess the patient.</li> <li>-Consider Ondansetron 4mg slow IVP/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.</li> </ul> <p><i><b>NOTE:</b> Patients in high altitudes should be hydrated with IV NS prior to IV pain relief to reduce the incidents of nausea, vomiting, and transient hypotension, which are side effects associated with administering IV Morphine.</i></p> <ul style="list-style-type: none"> <li>-Administer IV NS 250ml bolus one time.</li> </ul>
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<u>BLS Continued</u>	<u>Limited-ALS Continued</u>	<u>ALS Continued</u>
<p><b>Head and Neck Trauma:</b> Place brain injured patients in reverse Trendelenburg (elevate the head of the backboard 15-20 degrees), if the patient exhibits no signs of shock.</p> <ul style="list-style-type: none"> <li>• <b>Eye:</b> Whenever possible protect an injured eye with a rigid dressing, cup or eye shield. Do not attempt to replace a partially torn globe – stabilize it in place with sterile saline soaked gauze. Cover uninjured eye.</li> <li>• <b>Avulsed Tooth:</b> Collect teeth, place in moist, sterile saline gauze and place in a plastic bag.</li> </ul> <p><b>Impaled Object:</b> Immobilize and leave in place. Remove object if it interferes with CPR, or if the object is impaled in the face, cheek or neck and is compromising ventilations.</p> <p><b>Pregnancy:</b> Where axial spinal stabilization precaution is indicated, the board should be elevated at least 4 inches on the right side for those patients who have a large pregnant uterus, usually applies to pregnant females <math>\geq</math> 24 weeks of gestation.</p> <p><b>Traumatic Arrest:</b> CPR if indicated. May utilize an AED if indicated.</p> <p><b>Determination of Death on Scene:</b> Refer to Protocol #12010 Determination of Death on Scene.</p>	<p><b>Impaled Object:</b> Remove object upon trauma base physician order, if indicated.</p> <p><b>Traumatic Arrest:</b> Continue CPR as appropriate.</p> <ul style="list-style-type: none"> <li>• Apply AED and follow the voice prompts.</li> </ul> <p><b>Determination of Death on Scene:</b> Refer to Protocol # 12010 AEMT, Determination of Death on Scene.</p>	<p><b>IM Pain Relief:</b></p> <ul style="list-style-type: none"> <li>-Morphine Sulfate 10mg IM.</li> </ul> <p>Document vital signs and reassess the patient.</p> <ul style="list-style-type: none"> <li>-Consider Ondansetron 4mg IM/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.</li> </ul> <p><b>Head and Neck Trauma:</b> Immediately prior to intubation, consider prophylactic Lidocaine 1.5 mg/kg IV for suspected head/brain injury.</p> <ul style="list-style-type: none"> <li>• <b>Base Station Orders</b></li> </ul> <div style="background-color: #e0e0e0; padding: 5px;"> <ul style="list-style-type: none"> <li>-When considering nasotracheal intubation (<math>\geq</math>15 years of age) and significant facial trauma, trauma to the face or nose and/or possible basilar skull fracture are present, trauma base hospital contact is required.</li> </ul> </div> <p><b>Impaled Object:</b> Remove object upon trauma base physician order, if indicated.</p> <p><b>Traumatic Arrest:</b> Continue CPR as appropriate. Follow Protocol #11070 Cardiac Arrest - Adult.</p> <p><b>Determination of Death on Scene:</b> Refer to Protocol #12010 Determination of Death on Scene.</p>

	<p><u>Limited-ALS Continued</u></p> <p><b>-Severe Blunt Force Trauma Arrest:</b> <b>IF INDICATED:</b> transport to the closest receiving hospital.</p> <p><b>-Penetrating Trauma Arrest:</b> <b>IF INDICATED:</b> transport to the closest receiving hospital.</p> <p>If the patient does not meet the "Obvious Death Criteria" in the "Determination of Death on Scene" Protocol #12010 AEMT, contact the trauma base station 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.</p> <ul style="list-style-type: none"> <li>• Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without trauma base station contact.</li> </ul> <p><b>Precautions and Comments:</b></p> <ul style="list-style-type: none"> <li>○ Electrical injuries that result in cardiac arrest shall be treated as medical arrests.</li> <li>○ Consider cardiac etiology in older patients in cardiac arrest with low probability of mechanism of injury.</li> <li>○ If the patient is not responsive to trauma-oriented resuscitation, consider medical etiology and treat accordingly.</li> <li>○ <b>Unsafe scene may warrant transport despite low potential for survival.</b></li> <li>○ Whenever possible, consider minimal disturbance of a potential crime scene.</li> </ul> <p><b>Base Station Orders</b> May order additional</p> <ul style="list-style-type: none"> <li>• fluid boluses.</li> </ul>	<p><u>ALS Continued</u></p> <p><b>-Severe Blunt Force Trauma Arrest:</b> <b>IF INDICATED:</b> transport to the closest receiving hospital.</p> <p><b>-Penetrating Trauma Arrest:</b> <b>IF INDICATED:</b> transport to the closest receiving hospital.</p> <p>If the patient does not meet the "Obvious Death Criteria" in the "Determination of Death on Scene" Protocol #12010, contact the trauma base station 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.</p> <ul style="list-style-type: none"> <li>• Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without trauma base station contact.</li> </ul> <p><b>Precautions and Comments:</b></p> <ul style="list-style-type: none"> <li>○ Electrical injuries that result in cardiac arrest shall be treated as medical arrests.</li> <li>○ Consider cardiac etiology in older patients in cardiac arrest with low probability of mechanism of injury.</li> <li>○ <b>Unsafe scene may warrant transport despite low potential for survival.</b></li> <li>○ Whenever possible, consider minimal disturbance of a potential crime scene.</li> </ul> <p><b>Base Station</b> May order additional</p> <ul style="list-style-type: none"> <li>• medications,</li> <li>• fluid boluses.</li> </ul>
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**REFERENCE PROTOCOLS**

<b><u>Protocol Number</u></b>	<b><u>Protocol Name</u></b>
8100	Continuation of Trauma Care
9010	General Patient Care Guidelines
10150	External Jugular Vein Access
10030/10040	Oral Endotracheal Intubation
10080	Insertion of Nasogastric/Orogastric Tube
10060	Needle Thoracostomy
10140	Intraosseous Infusion IO
10050	Nasotracheal Intubation
10070	Needle Cricothyrotomy
10160	Axial Spinal Stabilization
10010/10020	King Airway Device
11070	Adult Cardiac Arrest
15030	Trauma Triage Criteria and Destination Policy
12010	Determination of Death on Scene



## TRAUMA - PEDIATRIC (Less Than 15 Years of Age)

Any critical trauma patient (CTP) requires effective communication and rapid transportation to the closest trauma center. If not contacted at scene, the receiving trauma center must be notified as soon as possible in order to activate the trauma team.

In Inyo and Mono Counties do not have trauma center designations and the assigned base station should be contacted for determination of appropriate destination.

### FIELD ASSESSMENT/TREATMENT INDICATORS

Trauma Triage Criteria and Destination Policy #15030

### PEDIATRIC TREATMENT PROTOCOL: TRAUMA Base Station Contact Shaded in Gray

BLS INTERVENTIONS	LIMITED ALS INTERVENTIONS	ALS INTERVENTIONS
<ul style="list-style-type: none"> <li>• Ensure thorough initial assessment</li> <li>• Ensure patient airway, protecting cervical spine</li> <li>• Axial spinal stabilization as appropriate</li> <li>• Oxygen and/or ventilate as needed, O<sub>2</sub> saturation (if BLS equipped)</li> <li>• Keep patient warm and reassure</li> <li>• For a traumatic full arrest, an AED may be utilized, if indicated</li> <li>• Transport to ALS intercept or to the closest receiving hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated</li> </ul> <p><i>Unmanageable Airway:</i></p> <p>Transport to the closest most appropriate receiving hospital when the patient requires an advance airway:</p> <ul style="list-style-type: none"> <li>-An adequate airway cannot be maintained with a BVM device.</li> </ul> <ul style="list-style-type: none"> <li>• Apply AED</li> <li>• IV Access: Warm IV fluids when avail</li> </ul> <p><i>Unstable:</i></p> <ul style="list-style-type: none"> <li>-Vital signs (age appropriate) and/or signs of inadequate tissue perfusion, start 2<sup>nd</sup> IV access.</li> <li>-Administer 20ml/kg NS bolus IV, may repeat once.</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced airway as indicated.</li> </ul> <p><i>Unmanageable Airway:</i></p> <ul style="list-style-type: none"> <li>-If an adequate airway cannot be maintained with a BVM device; <b>AND</b></li> <li>-The paramedic is unable to intubate or if indicated, perform a successful needle cricothyrotomy,</li> </ul> <p><b>Then,</b> transport to the closest receiving hospital and follow Continuation of Trauma Care Protocol Reference #8100.</p> <ul style="list-style-type: none"> <li>• Monitor ECG</li> <li>• IV/IO Access: Warm IV fluids when avail</li> </ul> <p><i>Unstable:</i></p> <ul style="list-style-type: none"> <li>-Vital signs (age appropriate) and/or signs of inadequate tissue perfusion, start 2<sup>nd</sup> IV access.</li> <li>-Administer 20ml/kg NS bolus IV/IO, may repeat once.</li> </ul>



**BLS Continued**

**Fractures:** Immobilize above and below the injury. Apply splint to injury in position found except:

- **Femur:** Apply traction splint if indicated.
- **Grossly angulated long bone with distal neurovascular compromise:** Apply gentle unidirectional traction to improve circulation.
- **Check and document distal pulse before and after positioning.**

**Genital Injuries:** Cover genitalia with saline soaked gauze. If necessary, apply direct pressure to control bleeding. Treat amputations the same as extremity amputations.

**L-ALS Continued**

**Fractures:**

**Isolated Extremity Trauma:** Trauma without multisystem mechanism.

Extremity trauma is defined as those cases of injury where the limb itself and/or the appendicular skeleton (shoulder or pelvic girdle) may be injured – e.g. dislocated shoulder, hip fracture or dislocation.

- Administer 20ml/kg NS bolus IV one time.

**ALS Continued**

**Fractures:**

**Isolated Extremity Trauma:** Trauma without multisystem mechanism.

Extremity trauma is defined as those cases of injury where the limb itself and/or the appendicular skeleton (shoulder or pelvic girdle) may be injured – e.g. dislocated shoulder, hip fracture or dislocation.

**IV Pain Relief:**

- Morphine Sulfate 0.1mg/kg IV/IO slowly, do not exceed 5mg increments, may repeat every 5 minutes to a maximum of 20mg IV/IO when the patient maintains age appropriate vital signs and adequate tissue perfusion.
- Documents vital signs every 5 minutes while medicating pain and reassess the patient.
- For patients 4 years old and older, consider Ondansetron 4mg slow IVP/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.
- Administer 20ml/kg NS bolus IV/IO one time.

***NOTE:** Patients in high altitudes should be hydrated with IV NS prior to IV pain relief to reduce the incidents of nausea, vomiting, and transient hypotension, which are side effects associated with administering IV Morphine.*

**IM Pain Relief:** Morphine Sulfate 0.2mg/kg IM, 10mg IM maximum. Document vital signs and reassess the patient.

- For patients 4 years old and older, consider Ondansetron 4mg slow IM/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.

BLS Continued

**Head and Neck Trauma:** Place brain injured patients in reverse Trendelenburg (elevate the head of the backboard 15-20 degrees), if the patient exhibits no signs of shock.

- **Eye:** Whenever possible protect an injured eye with a rigid dressing, cup or eye shield. Do not attempt to replace a partially torn globe – stabilize it in place with sterile saline soaked gauze. Cover uninjured eye.
- **Avulsed Tooth:** Collect teeth, place in moist, sterile saline gauze and place in a plastic bag.

**Impaled Object:** Immobilize and leave in place. Remove object if it interferes with CPR, or if the object is impaled in the face, cheek or neck and is compromising ventilations.

**Pediatric Patients:** If the level of the patient’s head is greater than that of the torso, use approved pediatric spine board with a head drop or arrange padding on the board so that the ears line up with the shoulders and keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.

**Traumatic Arrest:** CPR if indicated. May utilize an AED if indicated.

**Determination of Death on Scene:** Refer to Protocol # 12010  
Determination of Death on Scene.

L-ALS Continued

**Impaled Object:** Remove object upon trauma base physician order, if indicated.

**Traumatic Arrest:** Continue CPR as appropriate.  
• Apply AED follow instructions.

**Determination of Death on Scene:** Refer to Protocol # 12010,  
Determination of Death on Scene.

ALS Continued

**Head and Neck Trauma:** Immediately prior to intubation, consider prophylactic Lidocaine 1.5 mg/kg IV for suspected head/brain injury.

- **Base Station Orders**  
When considering nasotracheal intubation (>15 years of age) and significant facial trauma, trauma to the face or nose and/or possible basilar skull fracture are present, trauma base hospital contact is required.

**Impaled Object:** Remove object upon trauma base physician order, if indicated.

**Traumatic Arrest:** Continue CPR as appropriate.  
• Treat per Protocol # 14040 Pediatric Cardiac Arrest.

**Determination of Death on Scene:** Refer to Protocol # 12010  
Determination of Death on Scene.

**L-ALS Continued**

**Severe Blunt Force Trauma Arrest:**

**-IF INDICATED:** transport to the closest receiving hospital.

**Penetrating Trauma Arrest:**

**-IF INDICATED:** transport to the closest receiving hospital.

- If the patient does not meet the "Obvious Death Criteria" in the "Determination of Death on Scene" Protocol #12010, contact the trauma base station for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma, 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 station contact.

**Precautions and Comments:**

- Electrical injuries that result in cardiac arrest shall be treated as medical arrests.
- Confirm low blood sugar in children and treat as indicated with altered level of consciousness.
- Suspect child maltreatment when physical findings are inconsistent with the history. Remember reporting requirements for suspected child maltreatment.
- **Unsafe scene may warrant transport despite low potential for survival.**
- Whenever possible, consider minimal disturbance of a potential crime scene.

**Base Station Orders. May order additional**

- **fluid boluses.**

**ALS Continued**

**Severe Blunt Force Trauma Arrest:**

**-IF INDICATED:** transport to the closest receiving hospital.

**Penetrating Trauma Arrest:**

**-IF INDICATED:** transport to the closest receiving hospital.

- If the patient does not meet the "Obvious Death Criteria" in the "Determination of Death on Scene" Protocol #12010, contact the trauma base station 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 station contact.

**Precautions and Comments:**

- Electrical injuries that result in cardiac arrest shall be treated as medical arrests.
- Confirm low blood sugar in children and treat as indicated with altered level of consciousness.
- Suspect child maltreatment when physical findings are inconsistent with the history. Remember reporting requirements for suspected child maltreatment.
- **Unsafe scene may warrant transport despite low potential for survival.**
- Whenever possible, consider minimal disturbance of a potential crime scene.

**Base Station Orders. May order additional**

- **medications.**
- **fluid boluses.**

**REFERENCE PROTOCOLS**

<b><u>Protocol Number</u></b>	<b><u>Protocol Name</u></b>
8100	Continuation of Trauma Care
9010	General Patient Care Guidelines
10150	External Jugular Vein Access
10030/10040	Oral Endotracheal Intubation
10080	Insertion of Nasogastric/Orogastric Tube
10060	Needle Thoracostomy
10140	Intraosseous Infusion IO
10050	Nasotracheal Intubation
10070	Needle Cricothyrotomy
10160	Axial Spinal Stabilization
10010/10020	King Airway Device
14040	Pediatric Cardiac Arrest
15030	Trauma Triage Criteria and Destination Policy
12010	Determination of Death on Scene



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## GLASGOW COMA SCALE OPERATIONAL DEFINITIONS

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### EYE OPENING

**Spontaneous:** Eye opening is spontaneous if the patient's eyes are already open at the time of the assessment with no stimulation other than that of the existing ambient environment. The patient can close his eyes to command. This eye opening response implies an intact reticular activating mechanism and a functioning arousal mechanism.

**To Voice:** If the patient's eyes are not open at the time of the assessment, a response to voice is present if the eyes open when the patient's name is spoken or shouted.

**To Pain:** If verbal stimulation is unsuccessful in eliciting eye opening, a response to pain is present if the eyes open when a standard pain stimulus is applied.

**None:** No eye response is present if the above attempts at stimulation are unsuccessful.

### BEST VERBAL RESPONSE

**Oriented:** After being aroused, the patient is asked name, place and date. The patient is oriented if the answers given are correct.

**Confused:** The patient is confused if the individual cannot answer the questions regarding, name, place and date accurately, but is still capable of producing phrases, sentences or conversation exchanges.

**Inappropriate:** In this state, the patient cannot produce phrases, sentences or conversational exchanges, but can produce an intact word or two. These words may be elective only in response to physical stimulation and may frequently be obscenities or relative's names.

**Incomprehensible:** In this state, the patient can produce groans, moans or unintelligible mumblings, but cannot produce an intact word in response to stimulation.

**None:** In this state, the patient does not respond with any phonation to any stimulation no matter how prolonged or repeated.

**BEST MOTOR RESPONSE**

**Obedient:** In response to instructions, whether verbal or written, or through gestures, patient shows ability to comprehend the instruction and to physically execute it. A common example is the command to hold up two fingers.

**Purposeful:** When a standard painful stimulus is applied, the patient may move limb or body away from stimulus in a purposeful manner or attempt to push stimulus away.

**Withdrawal:** If the patient does not obey commands, the standard pain stimulus is applied. Withdrawal is present if 1) the elbow flexes, 2) the movement is rapid, 3) there is no muscle stiffness and 4) the arm is drawn away from the trunk.

**Flexion:** Flexion is present if 1) the elbow flexes, 2) the movement is slow, 3) muscle stiffness is present, 4) the forearm and hand are held against the body and 4) the limbs hold a hemiplegic position.

**Extension:** Extension is present if 1) the legs and arms extend, 2) muscle stiffness is present and 3) external rotation of the shoulder and forearm occurs.

**None:** maximum standard pain stimulation produces no motor response.

**NOTE:** Spinal cord injury may invalidate motor assessment in this form.

**Modified Glasgow Coma Scale for Infants and Children**

	<b>Child</b>	<b>Infant</b>	<b>Score</b>
Eye opening	Spontaneous	Spontaneous	4
	To speech	To speech	3
	To pain only	To pain only	2
	No response	No response	1
Best verbal response	Oriented, appropriate	Coos and babbles	5
	Confused	Irritable cries	4
	Inappropriate words	Cries to pain	3
	Incomprehensible sounds	Moans to pain	2
	No response	No response	1
Best motor response*	Obeys commands	Moves spontaneously and purposefully	6
	Localizes painful stimulus	Withdraws to touch	5
	Withdraws in response to pain	Withdraws to response in pain	4
	Flexion in response to pain	Abnormal flexion posture to pain	3
	Extension in response to pain	Abnormal extension posture to pain	2
	No response	No response	1

\*If patient is intubated, unconscious, or preverbal, the most important part of this scale is motor response. Motor response should be carefully evaluated.