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Includes Policy Manual Update #49 effective 12/01/2012

This field manual is a synopsis of the S-SV EMS Agency Prehospital Care Policy Manual and includes only a condensed version of S-SV EMS policies which are specifically related to field care as well as all patient care treatment protocols. The policies and protocols included in this manual are current as of the date listed above. EMS personnel are responsible for all policy and protocol updates released after the printing of this field manual.
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S-SV EMS
PATIENT CARE POLICIES
SUBJECT: PARAMEDIC ACCREDITATION TO PRACTICE

PURPOSE:

To establish the requirements for obtaining and maintaining accreditation to practice as a Paramedic in the S-SV EMS region.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.84, 1797.185, 1797.194, 1797.214.

California Code of Regulations, Title 22, Division 9.

POLICY:

A. In order to be eligible for initial Paramedic accreditation, an individual shall:

1. Provide a completed S-SV EMS Agency Paramedic Accreditation application.

2. Provide a copy of a current/valid California State Paramedic license.

3. Provide a copy of a current/valid U.S. state-issued Drivers License or identification card.

4. Pay the accreditation fee.

5. Attend an S-SV EMS Agency Paramedic orientation/accreditation class.


7. Successfully complete a supervised pre-accreditation field evaluation consisting of up to 10 ALS contacts. This requirement may be waived in one of the following circumstances:

   a. By providing documentation of five (5) ALS contacts in the S-SV EMS region during the Paramedic education program field internship within the previous six (6) months.
b. If the Paramedic accreditation candidate has been actively employed as a field Paramedic in the State of California within the past six (6) months and has a minimum of one (1) year's experience as a Paramedic.

8. Pass an examination on S-SV EMS Agency policies and protocols with a minimum score of 80%. If the examination is failed twice, the orientation/accreditation class shall be repeated prior to re-testing.

9. If all of the above requirements are not met within 60 days of completion of the S-SV EMS Agency orientation/accreditation class, the candidate must repeat all initial Paramedic accreditation requirements to be eligible for accreditation.

10. Upon completion of all the above requirements, the individual will be issued an S-SV EMS Agency Paramedic Accreditation Card with the same expiration date as the individual’s current California State Paramedic license.

B. Requirements for maintaining/renewing Paramedic accreditation:

To maintain continuous accreditation, a Paramedic shall:

1. Provide a completed S-SV EMS Agency Paramedic Accreditation application.

2. Provide a copy of a current/valid California State Paramedic license.

3. Maintain and provide proof of continuous PALS or PEPP recognition.

   PALS/PEPP recognition will not be required at the time of initial accreditation in the S-SV EMS region, but will be required at the time of Paramedic accreditation renewal.

4. Complete S-SV EMS Agency mandated education. This education includes, but is not limited to, policies, procedures, protocols, skills, medications and/or devices/equipment.

5. The ALS service provider will provide orientation to all Paramedic personnel for all new and/or revised policies, procedures and/or protocols.

   a. The ALS service provider shall be responsible for ensuring that all field employees are kept current on local policies and procedures. This includes part-time employees that may work shifts within the S-SV EMS region on an infrequent basis.

   b. The ALS service provider shall be responsible for ensuring that S-SV EMS Agency mandatory education requirements are completed by their ALS personnel, including annual infrequently used skills verification of maintenance.
6. Upon completion of all the above requirements, the individual will be issued an S-SV EMS Agency Paramedic Accreditation Card with the same expiration date as the individual’s current California State Paramedic license.

C. Lapse in maintaining Paramedic accreditation:

A lapse of S-SV EMS Agency paramedic accreditation shall require the following in order to be eligible for renewal:

1. A lapse of less than two years:
   a. Meet all of the requirements listed in section ‘B’ “Requirements for maintaining Paramedic accreditation” section of this policy
   b. Provide the S-SV EMS Agency with written documentation of completion of orientation/training by the employing ALS service provider to all S-SV EMS Agency policy/protocol updates during the lapse of accreditation.

2. A lapse of more than two years:
   a. All requirements for initial accreditation, as outlined in Section A of this policy, shall be met.

D. ALS Service Provider Agency Responsibilities:

If there is a change in the employment status of an S-SV EMS accredited paramedic employee; the ALS service provider shall submit a completed “S-SV Paramedic Employee Status Report”, Reference No. 913-A, to the S-SV EMS Agency within 30 calendar days.

APPLICATION PROCESSING:

A. A completed and signed application and all required supporting documentation must be submitted to the S-SV EMS Agency prior to processing. Incomplete applications will not be processed.

B. Incomplete applications will be maintained by the S-SV EMS Agency for 60 days awaiting required supporting documentation. All applications not completed within 60 days will be destroyed.

C. The S-SV EMS Agency will process completed applications within 10 business days.

CROSS REFERENCES:

Policy and Procedure Manual

Paramedic Scope of Practice, Reference No. 803.
SUBJECT: PATIENT DESTINATION

PURPOSE

To provide guidelines for determining the appropriate destination of patients transported in the S-SV EMS Region.

It is the intent of this policy to ensure, to the extent possible, that individual patients receive appropriate medical care while protecting the interests of the community at large by making maximum use of available emergency medical care resources.

AUTHORITY

California Health & Safety Code, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.165 & 1798.170

California Code of Regulations, Title 13, § 1105(c), Title 22, Division 9, Chapter 4, § 100169, & Chapter 7, § 100243

POLICY

Determination of patient destination shall be governed by California Code of Regulations, Title 13, Section 1105 (c):

"In the absence of decisive factors to the contrary, ambulance drivers shall transport emergency patients to the most accessible medical facility equipped, staffed, and prepared to receive emergency cases and administer emergency care appropriate to the needs of the patients."

Hospitals unable to accept patients due to incapacitating internal disaster shall be considered not "prepared to receive emergency cases."

In determining the "most accessible" facility, transport personnel shall take into consideration traffic obstructions, weather conditions, or similar factors, which clearly affect transport time.
GUIDELINES

A. "Most Accessible Facility"

"The most accessible medical facility" shall ordinarily be the nearest licensed health facility that maintains and operates a basic Emergency Department, except for:

1. Base Hospital/Modified Base Hospital Direction

The base hospital/modified base hospital may direct that the patient be transported to a further acute care hospital equipped, staffed, and prepared to receive emergency cases, which in the judgment of the base hospital physician or MICN, is more appropriate to the medical needs of the patient. Such direction shall take into consideration the paramedic provider agency’s stated and reasonable time and/or travel limitations.

2. Designated Special Care Facilities

Local EMS agency protocols governing transport of special category patients to designated special care facilities should be followed.

B. "Decisive Factors to the Contrary"

"Decisive factors to the contrary" include, but are not limited to, the following:

1. Prepaid Health Plans

A member of a group practice prepayment health care service plan should be transported to a hospital that contracts with the plan when the base hospital/modified base hospital determines that the condition of the member permits such transport. However, when the paramedic provider agency determines that such transport would unreasonably remove the transport unit from the area, the member may be transported to the nearest hospital capable of treating the member. (Health & Safety Code, Section 1797.106(b)).

2. Patient Requests

When a person or his legally authorized representative requests emergency transportation to a hospital other than the most accessible acute care hospital, the request should be honored when the base hospital/modified base hospital determines that the condition of the patient permits such transport; except when the paramedic provider agency determines that such transport would unreasonably remove the transport unit from the area. In such cases:

A. Arrangements shall be made for alternative transport appropriate to the medical needs of the patient.
SUBJECT: PATIENT DESTINATION

B. If such transport cannot be obtained without delay, the patient may be transported to the nearest hospital capable of treating him or her.

3. Private Physician’s Request

When a private physician requests emergency transportation to a hospital other than the most accessible acute care hospital, the request should be honored unless:

A. The base hospital/modified base hospital determines that the condition of the patient does not permit such transport. In such cases, base hospital directions shall be followed. If communication with the requesting physician is feasible, the base hospital should contact the physician and explain the situation to him or her.

B. The paramedic provider agency determines that such transportation would unreasonably remove the unit from the area. In such cases:

1) Arrangements should be made for alternate transportation appropriate to the medical needs of the patient.

2) If alternate transportation cannot be arranged without unacceptable delay, and the private physician is immediately accessible, the patient may be transported to a mutually agreed-upon alternate destination.

3) If alternate transportation cannot be arranged without unacceptable delay, and the private physician is not immediately accessible, the patient should be transported to the nearest hospital capable of treating him or her.

CROSS REFERENCES:

Policy and Procedure Manual

Cardiovascular “STEMI” Receiving Centers, Reference No. 506

Stroke System Triage and Patient Destination, Reference No. 507

Base Hospital Contact, Reference No. 812

Trauma Triage Criteria, Reference No. 860.

Chest Pain / Discomfort of Suspected Cardiac Origin, Reference No. C-8

Suspected CVA / Stroke, Reference No. N-3
SUBJECT: CARDIOVASCULAR “STEMI” RECEIVING CENTERS

PURPOSE:

A Cardiovascular STEMI Receiving Center (SRC) will be the preferred destination for patients who access the 9-1-1 system meeting defined criteria and who show evidence of a ST-elevation myocardial infarction on a 12 Lead electrocardiogram.

AUTHORITY:

Health and Safety Code, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.102, 1798.150, 1798.170 & 1798.172

California Code of Regulations, Title 13, § 1105 (c), Title 22, Division 9, Chapter 4, § 100169

DEFINITIONS:

A. STEMI – ST Elevation Myocardial Infarction
B. PCI – Percutaneous Coronary Intervention
C. Cardiovascular STEMI Receiving Centers (SRC) – S-SV EMS designated facilities that have emergency interventional cardiac catheterization capabilities
D. STEMI Referring Centers – Facilities that do not have emergency interventional cardiac catheterization capabilities

POLICY:

The following requirements must be met for a hospital to be designated as a Cardiovascular STEMI Receiving Center by S-SV EMS:

A. Licensure as a Cardiac Catheterization Laboratory.
B. Intra-aortic balloon pump capability.
C. Cardiovascular surgical services permit: 
   This requirement may be waived by the EMS Agency Medical Director when appropriate for patient or system needs. The Medical Director will evaluate conformance with existing American College of Cardiology / American Heart Association or other existing professional guidelines for standards.
D. Communication system for notification of incoming STEMI patients, available twenty four (24) hours per day, seven (7) days per week including a dedicated 12 Lead ECG receiving station and an in-house paging system.
E. Provide CE opportunities, minimum of four (4) hours per year, for EMS personnel in areas of 12 Lead ECG acquisition and interpretation, as well as assessment and management of STEMI patients.

F. Provide public education about STEMI warning signs and importance of early utilization the 9-1-1 system.

G. STAFFING REQUIREMENTS

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

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

2. **Nursing Director**
   The hospital shall designate two SRC nursing co-directors. One nursing director shall be an RN trained or certified in critical care nursing and affiliated with the Cardiac Catheterization Laboratory. The co-director shall be an RN trained or certified in critical care nursing and affiliated with the emergency department.

3. **On-Call Physician Consultants and Staff**
   A daily roster of the following on-call physician consultants and staff must be maintained:
   a. Cardiologist with percutaneous coronary intervention (PCI) privileges.
   b. Cardiovascular Surgeon, if cardiovascular surgical services are offered. *If cardiovascular surgical services are not available on site, the facility must have a rapid transfer agreement in place with a facility that provides this service. This agreement must be on file with the S-SV EMS Agency.* *This agreement must include the requirement that the cardiac surgical hospital cannot “refuse” transfer based on limitation of resources (e.g. lack of available beds, or staff to care for the patient) for true emergent patients. Additionally, the facility must have a rapid transport agreement with an S-SV EMS approved transport provider agency. The expectation will be that the patient will arrive at the cardiac surgical hospital within one (1) hour of the decision to operate, in emergency cases.*
   c. Cardiac Catheterization Laboratory team.
   d. Intra-aortic balloon pump capabilities 24/7.

H. INTERNAL HOSPITAL POLICIES

The hospital shall develop internal policies for the following situations:

1. Fibrinolytic therapy protocol to be used only in unforeseen circumstances when PCI for a STEMI patient is not possible.
2. Diversion of STEMI patients only during times of an incapacitating internal disaster. A written notification describing such events must be submitted to S-SV EMS within twenty four (24) hours of occurrence.

3. Prompt acceptance of appropriate STEMI patients from other STEMI referral centers that do not have PCI capability.

I. DATA COLLECTION / CONTINUOUS QUALITY IMPROVEMENT PROGRAM / PERFORMANCE STANDARDS

S-SV EMS designated SRC’s shall comply with all data collection, continuous quality improvement and performance standards as defined in individual SRC facility contracts. These requirements will be the same for each SRC.

DESIGNATION

A. The Cardiovascular STEMI Receiving Center applicant shall be designated after satisfactory review of written documentation and an initial site survey by S-SV EMS or its designees and completion of a contract between the hospital and S-SV EMS.

B. Initial designation as a SRC shall be for a period of four (4) years. Thereafter, re-designation shall occur every four (4) years, contingent upon satisfactory review.

C. Failure to comply with the criteria and performance standards outlined in this policy and individual SRC facility contracts may result in probation, suspension or rescission of SRC designation. Compliance will be solely determined by the S-SV EMS Agency.

PATIENT DESTINATION

The following factors should be considered with regards to choice of destination for STEMI patients:

A. An S-SV EMS designated SRC should be considered as the destination of choice if all of the following criteria are met:

1. Identified STEMI patients based on machine interpretation of field 12 Lead ECG, verified by paramedics.
2. Total transport time to the SRC is forty-five (45) minutes or less.
3. Paramedics shall notify the SRC emergency department of the patient’s pending arrival by advising of a “STEMI ALERT” as soon as possible, to allow timely activation of the Cardiac Catheterization Lab team at the SRC.

B. SRC destination will be in accordance with the guidelines used from the S-SV EMS Patient Destination Policy, Reference No. 505.

C. Base / modified base hospital contact and consultation is mandatory in these and similar situations:
SUBJECT: CARDIOVASCULAR “STEMI” RECEIVING CENTERS

1. Patients in cardiac arrest, refractory ventricular fibrillation, or with an unmanageable airway should be considered for transport to the closest receiving hospital.
2. Patients with unstable ventricular tachycardia, ventricular fibrillation, second degree type II heart block and third degree heart blocks may be considered for transport to the closest receiving hospital, based on specific clinical scenario.
3. Patients with obvious contraindications to thrombolytic therapy should be considered for transport to the closest SRC.
4. In the rare instance when the closest SRC Cardiac Catheterization Laboratory is unavailable, the patient should be transported to the next closest SRC if the total transport time to the alternate SRC is forty-five (45) minutes or less.

CROSS REFERENCES:

Prehospital Care Policy Manual
12 Lead Program, Reference No. 440
Patient Destination, Reference No. 505
S-SV EMS Base / Receiving Hospital Capabilities, Reference No. 505-A
Base / Modified Base / Receiving Hospital Contact, Reference No. 812
Chest Pain or Suspected Symptoms of Cardiac Origin, Reference No. C-8
PURPOSE:

The purpose of this policy is to describe the Sierra Sacramento Valley EMS (S-SV EMS) stroke system. This system is designed to provide timely, appropriate care to patients who have suffered symptoms of a stroke within 2.5 hours of onset of symptoms. Acute Stroke Patients will be transported to a Stroke Receiving Center in accordance with S-SV EMS policy.

AUTHORITY:

Health and Safety Code, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.102, 1798.150, 1798.170 & 1798.172

California Code of Regulations, Title 13, § 1105(c), Title 22, Division 9, Chapter 4, § 100169

DEFINITIONS:

A. Acute Stroke Patient – A patient who meets assessment criteria for an acute stroke in accordance with S-SV EMS patient care protocols and whose onset of symptoms is 2.5 hours or less.

B. Stroke Receiving Center – An acute care hospital that has successfully completed and maintains Joint Commission Accreditation as a Primary Stroke Center or that has been alternately approved by the S-SV EMS Agency, and enters into a memorandum of understanding (MOU) with S-SV EMS relative to being a Stroke Receiving Center.

POLICY:

A. Identification and Destination of the Acute Stroke Patient:

1. Criteria for the assessment, identification and treatment of an acute stroke patient will be based on S-SV EMS treatment protocols.

2. Patients identified by prehospital personnel as having the onset of stroke symptoms within the past 2.5 hours will be transported to a Stroke Receiving Center if transport time is less than 30 minutes.
SUBJECT: STROKE SYSTEM TRIAGE AND PATIENT DESTINATION

3. If there is any question as to the status of a patient within the 30 minute catchment area of a Stroke Receiving Center with symptoms of a stroke, prehospital personnel will consult with the ED physician at the closest Stroke Receiving Center as early as possible in the patient’s evaluation.

4. If the onset of symptoms is unknown or exceeds 2.5 hours, the patient should be transported per S-SV EMS routine destination criteria.

5. If the patient has an uncontrolled airway or is in cardiac arrest the patient should be transported to the closest receiving facility.

B. Notification of the Stroke Receiving Center:

As soon as feasible, preferably from the scene, prehospital personnel will contact the intended Stroke Receiving Center and inform them that a stroke patient is enroute to that facility. It is recommended that the report be started with the statement that this is a “Stroke Alert”. The prehospital report will include at a minimum:

1. The nature of the symptoms
2. The time of onset of symptoms or when patient was last seen normal
3. The blood glucose
4. Vital signs
5. Treatment provided

C. Diversion by a Stroke Receiving Center:

Stroke Receiving Centers will not close to acute stroke patients except in the following circumstances:

1. A declared internal disaster
2. There is a failure of all CT scanners

D. Documentation:

A complete Patient Care Report (PCR) shall be left at the Stroke Receiving Center for all stroke patients before prehospital personnel leave the receiving hospital.

E. Notification:

S-SV EMS shall be notified as soon as possible if any of the following occur:
SUBJECT: STROKE SYSTEM TRIAGE AND PATIENT DESTINATION

1. A patient within the 30 minute catchment area of a Stroke Receiving Center transported by the EMS system is identified as an acute stroke patient by the receiving facility and was not transported to a Stroke Receiving Center.

2. Any instance of diversion of a stroke patient by a Stroke Receiving Center.

3. An EMS field provider fails to leave a completed PCR at the receiving facility at the time of initial patient transport.

F. Transferring an Acute Stroke Patient to a higher level of stroke care:

In the event that an acute stroke patient needs to be transferred to a higher level of stroke care the emergency department will:

1. Follow their facility’s policies and procedures regarding patient transfers.

2. Request an ALS ambulance utilizing the 9-1-1 system to transport the patient to a Stroke Receiving Center, unless there is an equivalent agreement for emergent transport in place with another S-SV approved provider. If patient care has been initiated that exceeds the prehospital provider’s scope of practice, qualified medical or nursing staff will accompany the patient in the ambulance, or a Critical Care Transport unit may be utilized if their response time is appropriate.

3. Provide the ambulance personnel with a complete patient report and all appropriate documentation including a CT scan. Do not delay transport of the patient if complete documentation is not available. If complete documentation is not sent with the ambulance, the sending hospital will Fax the report to the Stroke Receiving Center in sufficient time that it should arrive prior to the patient.

CROSS REFERENCES:

Prehospital Care Policy Manual

Patient Destination, Reference No. 505

Base Hospital / Modified Base Hospital Contact, Reference No. 812

Suspected CVA / Stroke, Reference No. N-3
SUBJECT: PREHOSPITAL DOCUMENTATION

PURPOSE:

To define the responsibilities and requirements of prehospital personnel and service provider agencies in the initiation, completion and distribution of prehospital documentation.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.202, 1797.204, 1797.220, 1798 and 1798.220.

California Code of Regulations, Title 22, Chapter 2, 3 and 4.

POLICY:

A. Prehospital documentation shall be completed as follows:

1. ALS / LALS / BLS transport and ALS / LALS non-transport prehospital personnel shall complete patient care documentation for every response where patient contact is established.

2. ALS / LALS / BLS transport and ALS / LALS non-transport prehospital personnel shall complete appropriate documentation for all cancelled calls including:
   a. “Code 4” or cancelled calls prior to arrival at scene.
   b. “No patient contact” calls defined as arrival on scene and unable to locate any patient, or no direct interaction with patient.

3. BLS non-transport prehospital personnel shall complete patient care documentation for the following types of responses:
   a. An AED is utilized.
   b. An EMT optional skill is performed.
   c. An RAS / AMA is completed by BLS personnel.
SUBJECT: PREHOSPITAL DOCUMENTATION

B. Prehospital patient care documentation includes the following:

1. A written or electronic Patient Care Report (PCR).

2. An S-SV EMS Interim Patient Care Report (Reference No. 605-A) or an equivalent interim patient care report form utilized in addition to the PCR.

C. A PCR is a legal medical record and the primary source of information for provider, base / modified base hospital and S-SV EMS Agency Continuous Quality Improvement (CQI) review.

D. Prehospital personnel shall be responsible for providing clear, concise, complete, legible and accurate prehospital documentation.

E. Any form of falsification of prehospital documentation shall be considered a serious infraction subject to disciplinary certification / accreditation action by the S-SV EMS Agency and/or referral to the appropriate licensing authority.

PROCEDURE:

A. PCR UTILIZATION

Prehospital service provider agencies who are required to complete prehospital documentation as indicated by this policy must utilize one of the following forms of documentation:

1. An ePCR system:
   a. All S-SV EMS approved ALS / LALS / BLS transport and ALS / LALS non-transport providers must utilize one of the following ePCR systems:
      - The S-SV EMS Agency selected ePCR system.
      - An equivalent „CEMSIS“ (California Emergency Medical Services Information System) compliant ePCR system.

2. A written PCR:
   a. A written PCR may be utilized by BLS non transport providers for prehospital documentation purposes as required by this policy.
   b. A written PCR shall include, at a minimum, all data elements listed in the following appropriate policy(s):
      - EMT / Public Safety AED Program: Service Provider Requirements and Responsibilities, Reference No. 474.
B. DOCUMENTATION / COMPLETION OF THE PCR

1. Patient information documented on the PCR provides a medical record of the patient’s assessment, history, treatment rendered, response to treatment and all other pertinent medical information regarding the patient.

2. The certification name(s) and certification / license number(s) of appropriate prehospital personnel rendering patient care on a responding unit are required to be documented on the PCR. The primary prehospital patient care provider shall sign the PCR. An electronic signature is acceptable if an ePCR system is utilized for prehospital documentation.

3. All pertinent supporting patient care documentation (including but not limited to completed RAS / AMA forms, DNR / POLST forms, patient medication lists and cardiac monitor strips) shall be attached to the PCR.

C. MINIMUM PATIENT CARE DOCUMENTATION REQUIRED TO BE LEFT WITH THE PATIENT AT THE RECEIVING FACILITY AT TIME OF DELIVERY

The following minimum prehospital patient care documentation, when available to prehospital personnel, shall be completed by the primary patient care provider and left at the receiving facility at the time of patient delivery:

1. Date of incident & incident number
2. Call location
3. EMS unit number
4. Patient name, sex, age, date of birth, address, city and telephone number
5. Chief complaint
6. Patient weight
7. PQRST / time of symptom onset (including time of incident and mechanism of injury for all trauma patients)
8. Pertinent medical history
9. Medications
10. Medication allergies
11. Vital signs (including GCS, BP, pulse, respirations, pain scale, cardiac rhythm and Sp02 as appropriate)
12. Treatment rendered (including time, type of treatment, medication, dose, route, response and total IV volume infused)
13. Name, title and ID of the prehospital provider completing the documentation
There are no exceptions to this requirement. It is the preference of the S-SV EMS Agency that a completed PCR be left at the receiving hospital at the time of patient delivery. However, prehospital personnel may satisfy this requirement with the completion of the S-SV EMS Interim Patient Care Report (Reference No. 605-A) or an equivalent interim patient care report form that includes, at a minimum, all of the information listed above.

D. DISTRIBUTION OF THE COMPLETED PCR

1. The completed PCR shall be distributed as follows:
   a. Service provider agency.
   b. Receiving hospital:
      • In instances when a completed PCR is not left with the patient at the receiving hospital at the time of patient delivery (i.e. when an interim patient care report is utilized), a copy of the completed PCR shall be provided to the receiving hospital within 24 hours.
      • When patient care is transferred from one ALS / LALS provider to another provider for transportation, the ALS / LALS non-transporting provider shall send a copy of their completed PCR to the receiving hospital within 24 hours.
   c. Base / modified base hospital:
      • In instances where a base / modified base hospital is utilized for medical control that is not the receiving facility (including AMA patients and RAS patients that require base / modified base hospital contact), a copy of the completed PCR shall be sent to the base / modified base hospital that was utilized within 24 hours.
      • In instances where an AED or an EMT optional skill is utilized by BLS personnel, a copy of the completed PCR shall be sent to the provider’s base hospital within 24 hours.
   d. S-SV EMS Agency:
      • In instances when an AED or EMT Optional Skill is utilized by a BLS service provider, a copy of the completed PCR shall be sent to the S-SV EMS Agency within 7 days.

2. S-SV EMS service provider agencies shall be responsible for maintaining the PCRs for all patient care responses in accordance with all applicable laws, regulations, Government Codes and policies. The PCR shall be made available to the S-SV EMS Agency upon request.
SUBJECT: PREHOSPITAL DOCUMENTATION

E. PREHOSPITAL DOCUMENTATION TRAINING

Each service provider agency is responsible for training their appropriate prehospital personnel in the initiation, completion and distribution of required prehospital documentation.

F. PREHOSPITAL DATA SUBMISSION

ePCR data shall be provided to the S-SV EMS Agency in the following manner:

1. Prehospital service providers utilizing the S-SV EMS Agency selected ePCR system shall complete a data sharing agreement with the S-SV EMS Agency.

2. Prehospital service providers not utilizing the S-SV EMS Agency selected ePCR system shall establish a process with the S-SV EMS Agency ePCR vendor to allow for EMS data submission. This data shall include, at a minimum, all CEMSIS data elements. Data shall be submitted to the S-SV EMS Agency data system on a minimum of a monthly basis, no later than the 15th day of the following month.

CROSS REFERENCES:

Prehospital Care Policy Manual

Alternate Transport Vehicle Policy, Reference No. 416

EMT / Public Safety AED Program: Service Provider Requirements and Responsibilities, Reference No. 474

EMT Optional Skill: Service Provider Application, Approval Process, Requirements and Responsibilities, Reference No. 477

Patient Initiated Release at Scene (RAS) or Patient Initiated Refusal of Service Against Medical Advice (AMA), Reference No. 850
SUBJECT: MANAGEMENT OF CONTROLLED SUBSTANCES

PURPOSE

To ensure accountability for all controlled substances issued to and maintained upon permitted Advanced Life Support (ALS) and Limited Advanced Life Support (LALS) Units.

AUTHORITY

Code of Federal Regulations, Title 21. - Food and Drugs

California Health & Safety Code, Division 10. - Uniform Controlled Substances Act

California Health & Safety Code, Division 2.5 – Emergency Medical Services

California Code of Regulations, Title 22, Division 9 – Prehospital Emergency Medical Services.

POLICY

A. Approved Controlled Substances

1. Midazolam (Versed)

2. Morphine Sulfate

B. Providers Agencies may obtain controlled substances through

1. The medical director of the provider agency, if he/she is in agreement to authorize such procurement.

2. The Base/Modified Base Hospital

C. Policies and Procedures

1. Provider agencies that obtain controlled substances through the provider agencies medical director shall:
SUBJECT: MANAGEMENT OF CONTROLLED SUBSTANCES

a. Develop policies and procedures, approved by the medical director, to ensure that all narcotics are obtained, maintained, and distributed in a secure manner.

b. Such policies and procedures shall be subject to review at any time by the EMS Agency.

2. Provider agencies that obtain controlled substances through the base/modified base hospital shall follow the policies of the base/modified base hospital.

D. Security of Narcotics

1. Paramedics and Advanced EMTs assigned to an ALS / LALS units shall be responsible for maintaining the correct inventory of narcotics at all times.

2. All controlled substances shall be secured on the ALS / LALS units under double lock. The units outside driver/passenger/patient access door(s) shall not be considered one of the two locks. Narcotics shall not be stored in any location other than on ALS / LALS units, unless otherwise authorized by the S-SV EMS Agency.

3. Those agencies that resupply themselves must abide by all Federal, State and local regulations for the storage of controlled substances.

4. Each ALS / LALS unit shall maintain a standardized written record of the controlled drug inventory. That record shall be considered a permanent record. Once completed, drug inventory and administration records shall be maintained in accordance with State and Federal Law and Regulation.

5. Narcotics shall be inventoried any time there is a change in personnel. The key to access narcotics shall be in the custody of the individual who performed the inventory.

6. Any discrepancies in the narcotic count shall be reported to the ALS / LALS provider supervisor/management and to the issuing agent (i.e., Provider Agency Medical Director or base/modified base hospital). The discrepancy report must be in writing.

E. Controlled Substances Administered to Patients

1. Controlled substances are to be administered in accordance with S-SV EMS Agency treatment protocols.

2. The following information must be documented on a drug administration record.

   a. Date administered
SUBJECT: MANAGEMENT OF CONTROLLED SUBSTANCES

b. Time administered

c. ALS / LALS unit number

d. Patient name

e. Drug administered

f. Amount administered

g. Paramedic / Advanced EMT signature and number

h. If only a portion of the medication was administered to the patient, the remainder shall be wasted in the presence of the registered nurse or physician at the receiving hospital, or the ALS / LALS service provider’s immediate supervisor. Both parties shall document this action on the drug administration form.

3. Narcotic inventories and logs are subject to inspection by inspectors of the California Board of Pharmacy, agents of the Bureau of Narcotic Enforcement Administration of the Justice Department, Federal Drug Enforcement Administration, the EMS Agency, Base/Modified base hospital and officers of the provider agency.

CROSS REFERENCES

Prehospital Care Policy Manual

ALS Service Provider Inventory, Reference No. 701

LALS Service Provider Inventory, Reference no. 703
SUBJECT: PARAMEDIC SCOPE OF PRACTICE

PURPOSE:

To define the scope of practice of a Paramedic accredited in the S-SV EMS region.

AUTHORITY:

California Health & Safety Code, Division 2.5, Sections 1797.84, 1797.172, 1797.220.

California Code of Regulations, Title 22, Division 9.

PRINCIPLES:

A. A basic statewide scope of practice shall be used for the training and testing of Paramedics.

B. In addition to the basic scope of practice, procedures or medications may be added as part of the local optional scope of practice or through a trial study.

C. A paramedic may perform any activity identified in the scope of practice of an EMT.

D. Paramedics shall be licensed in the State, accredited by S-SV EMS Agency and sponsored by an approved Paramedic Service Provider in order to perform the scope of practice approved for paramedics.

E. Advanced life support activities carried out by paramedics at the scene of a medical emergency or during transport shall be under the following conditions only:

1. Paramedics, responding within a modified base hospital response area, render patient care based on S-SV approved policy/protocol (standing orders) without on-line medical control.

2. On-line medical direction by a base/modified base hospital physician or base hospital MICN.

3. Base/modified base hospital contact is required by all paramedics to perform the procedure(s) and/or administer medications(s) that are identified in S-SV policy/protocol as Base Hospital Order Only or Base Hospital Physician Order Only.
SUBJECT: PARAMEDIC SCOPE OF PRACTICE

4. Direct medical supervision as outlined in (Reference No 838) Physician on Scene.
5. Communication Failure Protocols (Reference No. 890) when unable to establish and/or maintain base hospital communications.

DEFINITIONS:

Local Optional Scope of Practice: The performance or monitoring of procedures or the administration of medications not included in the basic statewide scope of practice. The Medical Director of the EMS Agency and the Director of the EMS Authority must approve these procedures/medications. Paramedics must be trained and tested to demonstrate competence in performing the additional procedures and administering the additional medications.

POLICY:

A paramedic student or a licensed paramedic, as part of an organized EMS system, while caring for patients in a hospital as part of his/her training or continuing education under the direct supervision of a physician, registered nurse, or physician assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, or while working in a small and rural hospital pursuant to Section 1797.195 of the Health and Safety Code, may perform the following procedures or administer the following medications when such are approved by the medical director of S-SV EMS agency:

BASIC SCOPE OF PRACTICE:

A. Perform defibrillation and synchronized cardioversion.
B. Visualize the airway by use of the laryngoscope and remove foreign body (-ies) with forceps.
C. Perform pulmonary ventilation by use of lower airway multi-lumen adjuncts, the esophageal airway, stomal intubation, and adult oral endotracheal intubation.
D. Institute intravenous (IV) catheters, saline locks, needles, or other cannula (IV lines), in peripheral veins and monitor and administer medications through pre-existing vascular access.
E. Administer intravenous glucose solutions or isotonic balanced salt solutions, including Ringer's lactate solution.
F. Obtain venous blood samples.
G. Use glucose measuring device.
H. Utilize Valsalva maneuver.
I. Perform needle cricothyroidotomy.
J. Perform needle thoracostomy.
K. Monitor thoracostomy tubes.
L. Monitor and adjust IV solutions containing potassium ≤ 20 mEq/L.
M. Administer approved medications by the following routes: intravenous, intramuscular, subcutaneous, inhalation, transcutaneous, rectal, sublingual, endotracheal, oral or topical.
N. Administer, using prepackaged products when available, the following medications:
1. 25% and 50% dextrose;
2. activated charcoal;
3. adenosine;
4. aerosolized or nebulized beta-2 specific bronchodilators; - Albuterol
5. aspirin;
6. atropine sulfate;
7. pralidoxime chloride;
8. calcium chloride;
9. diazepam;
10. diphenhydramine hydrochloride;
11. dopamine hydrochloride;
12. epinephrine;
13. furosemide;
14. glucagon;
15. midazolam;
16. lidocaine hydrochloride;
17. morphine sulfate;
18. naloxone hydrochloride;
19. nitroglycerin preparations, except intravenous;
20. sodium bicarbonate.

LOCAL OPTIONAL SCOPE OF PRACTICE:

All licensed and accredited paramedics or a supervised paramedic student in the S-SV EMS Region may perform the following additional activities in the prehospital setting and/or during interfacility transport:

A. Administration of amiodarone
B. Administration of ondansetron (Zofran®)
C. Adult nasotracheal intubation
D. Pediatric oral endotracheal intubation
E. Intraosseous infusion
F. Transcutaneous Cardiac Pacing

Expanded Scope of Practice for Paramedic Interfacility Transport:
Only Paramedics who have successfully completed training program(s) approved by the S-SV EMS Agency Medical Director and employed by an ALS Ambulance provider approved for paramedic transport of interfacility transport optional skills by the S-SV EMS Agency Medical Director will be permitted to provide the service of using or monitoring the following during interfacility transports:

A. Automatic Transport Ventilators (ATV’s)
B. Preexisting intravenous infusion of magnesium sulfate, nitroglycerin, heparin &/or amiodarone
SUBJECT: BASE / MODIFIED BASE / RECEIVING HOSPITAL CONTACT

PURPOSE:

To provide for delineation of the circumstances in which EMS field provider personnel shall make base / modified base / receiving hospital contact for medical control or patient reporting purposes on EMS calls.

AUTHORITY:


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

POLICY:

A. S-SV EMS field personnel shall make appropriate hospital contact according to the requirements contained in this policy.

B. Base / modified base hospital contact is required by EMS personnel to perform procedure(s) and/or administer medications(s) that are identified in S-SV policy / protocol as „Base / Modified Base Hospital Physician Order Only”. In the event of communication failure those procedures/medications shall not be performed / administered.

C. When requesting to speak directly to a base / modified base hospital physician, EMS personnel shall advise the hospital staff member who initially answers the telephone or radio of the reason for the request (AMA approval, destination consultation, medication or procedure approval, treatment consultation, etc.).

PROCEDURE:

A. Contact with the base / modified base hospital that is in closest proximity to the incident shall be made for any of the following circumstances:
1. For authorization to administer medications and/or perform field procedures that are delineated in S-SV EMS policies and protocols as "Base /Modified Base Hospital Physician Order Only."

2. For any of the following classes of patients refusing assessment, treatment and/or transportation:

   a. Released at Scene (RAS) patients meeting the following criteria:
      - RAS within the previous 24 hours
      - Children 3 years of age or under
      - Patients age 4 years to 17 years old without a responsible adult signature

   b. All Against Medical Advice (AMA) patients.

3. For destination decision consultation on the following classes of patients:

   a. Trauma patients who meet the following criteria as defined in S-SV EMS „Trauma Triage Criteria” policy (Reference No. 860).
      - Anatomic and/or Physiologic criteria when the time closest trauma center is a Level III Trauma Center (*Note: contact shall be made with that Level III Trauma Center for these patients)
      - „Mechanism of Injury Criteria” only, with or without meeting any of the „Special Considerations Criteria”.
      - „Special Considerations Criteria” only when prehospital personnel determine that transport to a trauma center may be in the best interest of the patient.

   b. When there is initiation of an ALS / LALS protocol and transport to a facility other than the most accessible is being considered

**EXCEPTION:**

The following classes of patients meeting criteria for transport directly to a designated specialty care facility

- STEMI patients identified with a 12 Lead EKG

  If a STEMI patient identified with a 12 Lead EKG is within the authorized catchment area of a designated or recognized STEMI Receiving Center, contact shall be made with the designated or recognized STEMI receiving center.
Stroke patients

If a patient is identified as meeting stroke symptom criteria and the patient is within the authorized catchment area of a Stroke Receiving Center, contact shall be made with the Stroke Receiving Center.

Trauma patients

If a patient meets Anatomic and/or Physiologic Trauma Triage Criteria, contact shall be made with the appropriate designated trauma center.

*Note – These exceptions do not apply to patients that require transport to the closest facility (i.e. – unable to establish an airway, CPR in progress)

4. For any patient who, in the opinion of the EMS field provider, requires the additional input or judgment of the base / modified base hospital for appropriate management.

B. S-SV EMS field personnel shall make contact directly with the destination facility for any patient who does not meet the above criteria or when base / modified base contact is made and the patient is authorized / directed to be transported to a facility other than the base / modified base hospital initially contacted.

CROSS REFERENCES:

Policy and Procedure Manual

Patient Destination, Reference No. 505

S-SV EMS Base / Receiving Hospitals List, Reference No. 505-A

Cardiovascular “STEMI” Receiving Centers, Reference No. 506

Stroke System Triage and Patient Destination, Reference No. 507

Trauma Triage Criteria, Reference No. 860

Communication Failure, Reference No. 890

Chest Pain or Suspected Symptoms of Cardiac Origin, Reference No. C-8

Suspected CVA / Stroke, Reference No. N-3
PURPOSE:

To serve as a treatment standard for prehospital personnel treating patients with a Ventricular Assist Device (VAD).

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.202, 1798 and 1798.2.

California Code of Regulations, Title 22, Division 9, Chapter 2, 3 and 4.

PROCEDURE:

A. Follow appropriate S-SV EMS treatment protocol for the patient’s condition.

B. There are no medication contraindications in relation to the VAD.

C. Chest compressions are CONTRAINDICATED. Chest compressions and blunt chest and/or abdominal trauma may dislodge the VAD grafts and cause sudden death.

D. If defibrillation or cardioversion is necessary, follow the appropriate treatment protocol. The pump is insulated so that electrical therapy should not be an issue.

E. A patient with a VAD will typically be pulseless as this is a continuous flow device. Pulse oximetry may not be measurable or accurate.

F. A patient with a VAD will not have a systolic and diastolic blood pressure. Automatic blood pressures are not accurate and usually cannot be obtained. The patient will have one number (typical range is 65-100 mmHg) representing a “mean” blood pressure. This blood pressure is typically obtained via doppler, however, auscultation may be possible.

G. A patient with a VAD may also have an Implanted Cardioverter-Defibrillator (ICD) or a Pacemaker/ICD.

H. The patient’s ECG heart rate will differ from the pulse rate since the VAD is not synchronized with the native heart rate.
I. A patient with a VAD will most likely have a trained companion with them. The companion is familiar with the VAD and emergency troubleshooting. The companion should accompany the patient during transport and be responsible for the VAD.

J. Patients/companions are taught to call 911 in an emergency then page the on-call VAD Coordinator immediately. The VAD Coordinator will typically be on the telephone to provide additional assistance to prehospital personnel when they arrive. The patient/companion will know how to contact the on-call VAD Coordinator if necessary.

K. If transporting a patient to the hospital, the VAD emergency bag, power source, battery and battery charger should be brought with the patient.

L. A patient with a VAD should typically be transported to the nearest appropriate VAD center. The patient and/or their companion will be able to advise prehospital personnel of the requested transport destination. If the patients’ condition does not warrant transportation to the VAD center (trauma, burns, unable to establish an airway, etc.), or if there are any questions regarding appropriate destination, the base/modified base hospital shall be contacted for destination decision.
PURPOSE:

This policy provides criteria for Public Safety, EMT, Advanced EMT (AEMT), and Paramedic personnel to determine death in the prehospital setting. This policy outlines the procedures to be followed whenever CPR is not started or if CPR is discontinued in the prehospital setting.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.220, 1798.6.

California Code of Regulations, Title 22, Division 9.

POLICY - PUBLIC SAFETY, EMT, AEMT OR PARAMEDIC PERSONNEL:

CPR need not be initiated and may be discontinued for patients who meet the criteria for "Obviously Dead."

**OBVIOUSLY DEAD:** Persons who, in addition to the absence of respiration, cardiac activity, and neurological reflexes have one or more of the following:

A. Decapitation

B. Decomposition

C. Incineration of the torso and/or head

D. Exposure, destruction, and/or separation of the brain or heart from the body

E. Rigor Mortis

F. A valid Do Not Resuscitate (DNR) form or medallion in accordance with the S-SV EMS Agency DNR policy # 823. Note: This applies regardless of the cause of death (e.g. person with a terminal illness who is a trauma victim).
PROCEDURE – OBVIOUSLY DEAD:

A. The initial assessment shall include a visual and physical examination. The examination shall be conducted in close proximity and with sufficient lighting to assure the existence of the obviously dead criteria.

B. The body and scene should be disturbed as little as possible to protect potential crime scene evidence. An immediate request for law enforcement shall be made. See S-SV Policy, ‘Crime Scene Management’, Reference No. 825.

C. If the determination of death is based on RIGOR MORTIS, ALL of the following specific assessments shall be completed and documented.

1. Assessment to confirm absence of respiration:
   a. Assess the patient’s airway.
   b. Look, listen, and feel for respirations. This shall include auscultation of the lungs for a minimum of 30 seconds.

2. Assessment to confirm absence of pulse:
   a. Palpate the carotid pulse for a minimum of 30 seconds.
   b. Auscultate the apical pulse for a minimum of 30 seconds.

3. Assessment to confirm absence of neurological response:
   a. Check for pupil response with a penlight or flashlight.
   b. Check for a response to painful stimuli.

A positive response to any of the above assessments requires immediate resuscitative intervention unless the patient has a valid “Do Not Resuscitate (DNR)” order. See S-SV Policy, "Do Not Resuscitate” - Reference No. 823.

4. Assessment to confirm RIGOR MORTIS:
   c. Confirm muscle rigidity of the jaw by attempting to open the mouth.
   d. Confirm muscle rigidity of one arm by attempting to move the extremity.

IF ANY DOUBT EXISTS, prehospital personnel shall initiate CPR unless the patient has a valid DNR order.
POLICY – AEMT II & PARAMEDIC PERSONNEL ONLY:

NOTE: BLS personnel and AEMT personnel not previously certified as an EMT II are not authorized to determine death based on the “Probable Death” criteria. They are limited to use of “Obviously Dead” criteria only.

PROBABLE DEATH: An AEMT II or Paramedic may determine death, as follows, for individuals for whom "Obviously Dead" criteria do not apply. The absence of respiration, pulses, and neurological reflexes, in addition to one or more of the following, at the time of INITIAL assessment by the AEMT II or Paramedic:

A. Lividity or ‘Livor Mortis’ (Lividity or Livor Mortis: Discoloration appearing on dependent parts of the body after death, as a result of cessation of circulation, stagnation of blood, and settling of the blood by gravity), and the monitor shows asystole in two (2) leads.

B. The patient is a victim of cardiac arrest secondary to blunt or penetrating trauma, and the monitor shows asystole in two (2) leads.

C. The patient is a victim of cardiac arrest secondary to blunt trauma, and the monitor shows PEA at a rate ≤ 40 beats per minute.

All other patients shall have base/modified base physician consult for determination of death. In the event of communication failure the AEMT II or Paramedic shall not determine death.

If there is any objection or disagreement by family members or prehospital personnel regarding terminating or withholding resuscitation, basic life support, including defibrillation, should continue or begin immediately and paramedics should contact the base hospital for further directions.

PROCEDURE – PROBABLE DEATH:

A. The assessments to confirm absence of respiration, pulse and neurological reflexes (and rigor mortis, if applicable) shall be performed and documented as defined on page 2, item C.

B. Probable death requires confirmation of Asystole in two (2) leads to confirm death. A minimum six-second rhythm strip of each lead shall be attached to the ePCR.

C. Notify the county coroner or appropriate investigative authorities.

D. Document all relevant facts/findings, including approximate time of determination of death, in the ePCR.
SPECIAL INFORMATION:

A. Hypothermia, drug and/or alcohol ingestion/overdose can mask the positive neurological reflexes which indicate life, so it is imperative to be certain no contributing environmental factors exist, such as cold water submersion or cold exposure. If any possibility exists that such conditions could be a factor, resuscitation should be started immediately.

B. In the event of a disaster/multi-casualty incident, death may be determined in accordance with START Triage criteria.

C. If a patient does not meet determination of death criteria on scene, once ambulance transport is started the base/modified base hospital on-line medical control can direct the paramedic to stop resuscitation efforts. When this occurs the ambulance will reduce transport code and continue transport on to the destination hospital.

D. If a patient undergoing resuscitation is transported in a ground ambulance to rendezvous with an air ambulance and is determined dead by the flight nurse, the body shall not be moved from the rendezvous location. Notify the county coroner or appropriate investigative authorities.

CROSS REFERENCES:

Policy and Procedure Manual

Crime Scene Management, Reference No. 825.

Do Not Resuscitate (DNR), Reference No 823.
SUBJECT: DO NOT RESUSCITATE (DNR)

PURPOSE

To provide a mechanism to allow patients to refuse unwanted resuscitation attempts and ensure that patient's rights to control their own medical treatment are honored.

This policy defines a valid Do Not Resuscitate (DNR) directive and establishes the criteria, requirements and procedures to withhold resuscitative measures in the prehospital setting.

AUTHORITY

California Health and Safety Code, Division 2.5, Sections 1797.220, 1798, 1798.2

California Code of Regulations, Title 22, Division 9

Guidelines for EMS Personnel Regarding Do Not Resuscitate (DNR) Directives, (EMSA #111), California Emergency Medical Services Authority

DEFINITIONS

A. Do Not Resuscitate (DNR): Means no chest compressions, defibrillation, advanced airway, assisted ventilation, or cardiotonic drugs. The patient shall receive full palliative treatment for pain, dyspnea, major hemorrhage, or other medical conditions; i.e., oropharyngeal suction and oxygen. Relief of choking caused by a foreign body is appropriate; however, if breathing has stopped and the patient is unconscious, ventilation should not be assisted.

B. Emergency Medical Services Prehospital Do Not Resuscitate (DNR) Form: An approved DNR form, developed by the California Emergency Medical Services Authority (EMSA) and the California Medical Association (CMA), that is used statewide for the purpose of instructing EMS personnel to forgo resuscitation attempts in the event of a patient's cardiopulmonary arrest in the out of hospital setting. The Emergency Medical Services Prehospital DNR form must be signed and dated by a physician and patient/surrogate. Ensuring appropriate informed consent is the responsibility of the attending physician, not the EMS system or prehospital provider. See 823-A for copy of EMSA/CMA DNR form.

C. POLST (Physician’s Orders for Life Sustaining Treatment): An approved form (usually bright pink in color) containing physician’s orders designed to improve end-of-life care by converting patients’ treatment wishes into medical
orders that are transferable throughout the health care system. See 823-B for copy of EMSA/California Coalition for Compassionate Care POLST form.

D. **MedicAlert® DNR Wrist or Neck Medallion**: A MedicAlert® or other State EMSA approved wrist or neck medallion, permanently engraved with the words "Do Not Resuscitate - EMS", and a patient identification number.

E. **California Durable Power of Attorney for Health Care (DPAHC)**: Allows an individual to appoint an “agent/attorney-in-fact” to make health care decisions if they become incapacitated. The DPAHC must be immediately available. The agent/attorney-in-fact must be physically present and provide adequate identification. Decisions made by the agent/attorney-in-fact must be within the limits set by the DPAHC, if any.

F. **“Advance Health Care Directive” or “Advance Directive” (AHCD)**: Means either a power of attorney for health care or an individual health care instruction. The AHCD must be immediately available. The agent/attorney-in-fact must be physically present and provide adequate identification. Decisions made by the attorney-in-fact must be within the limits set by the Advanced Directive, if any.

G. **“Agent or Attorney-In-Fact”** means an individual designated in a power of attorney for health care to make a health care decision for the principal/patient, regardless of whether the person is known as an agent or attorney-in-fact, or by some other term.

H. **“Declaration” found in the California Natural Death Act**: A statement to physicians (not intended for prehospital providers) by an adult patient directing the withholding or withdrawal of life sustaining procedures in a terminal condition or permanent unconscious state.

I. **“Living Will” or other form of documentation**: Communicates some sense of the patient’s wishes that explicitly express that resuscitation is unwarranted or unwanted.

**S-SV EMS APPROVED DNR ORDERS FOR PREHOSPITAL PROVIDERS**

A. Any one of the following DNR orders are approved and shall be honored, by prehospital providers:

1. A fully executed original or photocopy of the Emergency Medical Services Prehospital Do Not Resuscitate (DNR) form.

2. A fully executed original, or photocopy, of the POLST form.

3. The patient is wearing an approved DNR wrist or neck medallion.
**SUBJECT: DO NOT RESUSCITATE (DNR)**

4. If the patient's physician is present, s/he may verbally order DNR and immediately confirm the DNR order in writing in the PCR/patient’s medical record. A telephone order by the patient's physician to the prehospital care provider is not acceptable.

5. A written or electronic DNR order by a physician. In order to be valid this type of DNR order shall consist of the following:

   a. Patient's name
   b. The words "Do Not Resuscitate" (or DNR) or "No Code"
   c. The physician's signature or an RN signature verifying a valid verbal order from a physician on a physician order sheet
   d. The date of the order

   There are no other requirements for the DNR order, such as a prescribed form, a time or date of duration or a diagnosis.

A. POWER OF ATTORNEY FOR HEALTH CARE

A Power of Attorney for Health Care contained in an Advanced Health Care Directive (AHCD) or Durable Power of Attorney for Health Care (DPAHC), with the agent/attorney-in-fact physically present, and stating the patient refuses resuscitative measures. The agent/attorney-in-fact must provide adequate identification.

**PROCEDURE**

A. All patients shall receive an immediate assessment/medical evaluation.

B. Identify that the patient is the person named in the DNR order or Power of Attorney for Health care. This will normally require either the presence of a witness who can reliably identify the patient or the presence of an identification band/tag.

C. When prehospital personnel respond to a patient in cardiopulmonary arrest BLS measures shall be initiated pending verification of a valid DNR order.

D. Base/modified base hospital physicians retain authority for determining the appropriateness of resuscitation. When in doubt, resuscitation shall be initiated and the base/modified base hospital physician contacted immediately.

E. If an S-SV approved DNR order is not available, prehospital personnel shall consult with the base/modified base hospital physician to discuss the validity or applicability of forms presented other that those approved for use in the S-SV EMS Region. Examples of other DNR Directives not approved for prehospital care in the S-SV region are:
SUBJECT: DO NOT RESUSCITATE (DNR)

1. Individual health care instructions contained in an Advanced Health Care Directive.

2. Declaration found in the California Natural Death Act.

3. Living Will or other forms of documentation.

F. If there is any objection or disagreement by family members/caretakers regarding withholding resuscitation, or if prehospital personnel have any reservations regarding the validity of the DNR order, resuscitation shall begin immediately and contact with the base/modified base hospital physician shall be made for further direction.

G. If a patient has a valid DNR, but resuscitation was started prior to arrival of the EMS responder, CPR can be discontinued.

H. If the patient is conscious and states that s/he wishes resuscitative measures, then the DNR form shall be ignored.

DOCUMENTATION

A. A copy of the DNR form shall be included in the electronic Patient Care Report (ePCR), along with other appropriate documentation. The DNR form will be incorporated into the medical record at the receiving or base hospital.

B. If the patient is wearing a MedicAlert® DNR bracelet or neck medallion, record the MedicAlert® number in the ePCR documentation.

C. When DNR orders are noted in the patient’s written or electronic medical record, a copy of the order should be attached to the ePCR. If copies are unavailable, the prehospital care provider shall document in the ePCR that a written or electronic DNR order was present, including the name of the physician, date signed or entered and other appropriate information.

D. Document the base/modified base physician name in the ePCR narrative, if consulted.

E. When possible, a copy of the DPAHC or AHCD or other DNR directives should be included in the ePCR. If copies are unavailable, the prehospital care provider shall document in the ePCR narrative the type of written DNR directive that was present, including the date signed and other appropriate information.

F. If patient transport is undertaken, the DNR order is to be taken with the patient to the receiving facility.

G. All circumstances surrounding the incident and the validation criteria used to honor the DNR request shall be documented in the narrative portion of the ePCR.
SUBJECT: CRIME SCENE MANAGEMENT

PURPOSE:

To provide guidelines for prehospital care personnel when patient assessment, treatment and/or transport is required at the scene of a crime.

It is clearly understood that the first and foremost duty of all personnel (law enforcement and prehospital care) is to protect and preserve human life. Prehospital care personnel must ensure that patient care is given highest priority. In addition, and to the extent possible, this care should be given with consideration to the needs of law enforcement with respect to personnel safety, crime scene management and preservation of evidence.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1798.6, 1797.220.

California Code of Regulations, Title 22, Division 9.

POLICY:

Prehospital care personnel shall follow the directions of law enforcement with respect to crime scene management. This direction should not prevent nor detract from quality patient care. The following guidelines should be followed:

A. Parking of EMS vehicles should be done in such a way as to provide access for EMS personnel but with consideration for the crime scene; i.e., do not run over expended shell casings or destroy physical evidence such as tire tracks, foot prints and/or broken glass.

B. Entry to the crime scene should be made by the minimum number of EMS personnel necessary to access and provide care to patient(s).

C. Entry and exit to the crime scene should be accomplished by the same route, if possible.

D. Care should be taken not to disturb any physical evidence. Physical evidence can be as small as a single hair.
E. Removal of the patient's clothing should be kept to a minimum. Clothing removal should be done in a manner which will minimize the loss of physical evidence; i.e., do not cut clothing through bullet or knife holes.

F. Clothing and all other personal articles of the patient are to be left in the possession of law enforcement personnel. Do not discard anything.

G. Put wrappers and other disposable "trash," which accumulates as patient care is rendered, in a single site away from the patient and/or potential crime scene evidence. Do not pick up on-scene trash items and discard because evidence may be destroyed. On-scene law enforcement personnel may suggest a site to be used for trash which would be most ideal to maximize preservation of evidence.

H. Patients who meet the "obvious death" criteria, as stated in S-SV Policy, "Determination of Death," Reference No. 821, do not require EKG confirmation of asystole. These include:

1. Decapitation.
2. Total incineration of torso and/or head.
3. Decomposition.
4. Total separation of vital organs from the body or total destruction of these organs accompanied by no detectable pulse or respiration. Note: A single person can check for pulse and respiration.
5. Rigor Mortis.

I. Patients who meet the "probable death" criteria, as stated in S-SV Policy, "Determination of Death," Reference No. 820, should be assessed utilizing the minimum number of EMS personnel.

J. It is important that prehospital care personnel understand that law enforcement personnel have the authority to declare death. If this has occurred, the responsibility for the declaration of death is law enforcement's. If death has been declared by a law enforcement officer, medical confirmation procedures do not need to be performed by prehospital care personnel.

K. Every effort to cooperate with law enforcement should be made. In the event of disagreement with law enforcement, EMS personnel should document the problem and refer the matter to their superior for follow-up and/or action. If the disagreement involves, in the opinion of prehospital care personnel, an issue that will or could result in patient harm, an immediate request for on-scene supervisory personnel will be made.

L. In the event that EMS personnel discover a crime scene, or are at a crime scene without law enforcement, an immediate request for law enforcement shall be made. Until such time as law enforcement arrives, EMS personnel shall assure their own safety and, if possible, attempt to follow the guidelines contained in this policy.
SUBJECT: SUSPECTED CHILD ABUSE REPORTING GUIDELINES

PURPOSE:

To provide guidelines for the identification of suspected child abuse and the procedure for reporting such suspicions by prehospital care personnel.

AUTHORITY:

California Penal Code, Chapter 916 (Part 4, Title 1, Chapter 2, Article 2.5), Sections 11164 - 11174.3.

DEFINITIONS:

Agencies authorized to accept mandated reports: Police Department, Sheriff’s Department, Child Protective Services (CPS). School District Police and security departments are not included.

Child: Any person under the age of eighteen (18).

Mandated reporter: Includes, but not limited to: paid firefighters, EMRs, EMTs, AEMTs, paramedics, teachers, peace officers, any healthcare practitioner, clergy member, child care custodian, or an employee of a child protective agency.

Neglect: The negligent failure of a parent or caretaker to provide adequate food, clothing, shelter, medical/dental care, or supervision.

Physical abuse: A physical injury, including death, to a child that appears to have been inflicted by other than accidental means.

Sexual abuse: Sexual assault on, or the exploitation of a minor. Sexual assault includes: rape, rape in concert (aiding or abetting or acting in concert with another person in the commission of a rape), incest, sodomy, oral copulation, penetration of genital or anal opening by a foreign object, and child molestation. It also includes lewd or lascivious conduct with a child under the age of fourteen years, which may apply to any lewd touching if done with the intent of arousing or gratifying the sexual desires of either the person involved or the child. Sexual exploitation refers to conduct or activities related to pornography depicting minors, and promoting prostitution by minors.
SUBJECT: SUSPECTED CHILD ABUSE REPORTING GUIDELINES

PRINCIPLES:

A. The purpose of reporting suspected child abuse/neglect is to protect the child, prevent further abuse of the child and other children in the home, and begin treatment of the entire family. The infliction of injury, rather than the degree of that injury, is the determinant for intervention by CPS and law enforcement.

B. California Penal Code, Sections 11166 and 11168, requires that mandated reporters promptly report all suspected non-accidental injuries, sexual abuse, or neglect of children to local law enforcement and/or to CPS.

C. It is the job of law enforcement, CPS and the courts to determine whether child abuse/neglect has, in fact, occurred. It is not necessary for the mandated reporter to determine child abuse, but only to suspect that it may have occurred. Children under the age of five, especially less than six months, are at highest risk.

D. Under current law, all healthcare professionals are mandated to report suspected child abuse/neglect that they have knowledge of or observe in their professional capacity. They are required to sign a statement, for their employer, acknowledging their understanding of this requirement. Any person who fails to report as required may be punished by six months in jail and/or a $1,000 fine.

E. When a mandated reporter has knowledge of or has observed child abuse or neglect, that individual is required to report to the local law enforcement and/or to the CPS immediately or as soon as practically possible by telephone and shall complete the suspected child abuse report form within 36 hours. When a mandated reporter is not performing their job duties, they become discretionary reporters and are not required by law to report.

F. When two or more mandated reporters are present at scene and jointly have knowledge of a known or suspected instance of child abuse/neglect, the telephone report can be made by a selected member 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 designated reporter failed to uphold their agreement, shall thereafter make the report. If EMS personnel are not selected as the designated reporter, they shall document the name and agency of the appointed team member in their prehospital documentation to indicate that the reporting obligation has been met.

G. Those persons legally required to report suspected child abuse have immunity from criminal or civil liability for reporting as required.

POLICY:

A. The primary purpose of the Department of Justice (DOJ) Suspected Child Abuse Report form SS 8572 (Reference No. 830-A) is to make all agencies aware of possible abuse/neglect. This will lead to a thorough investigation, and protection
of the child. In order to facilitate this process, it is recommended that a prompt
verbal report be made to both the local county Child Protective Services (CPS)
and local law enforcement. However, if the child is in imminent danger, local law
enforcement should be notified immediately.

B. To make a verbal report to CPS, call the local county CPS office (included in this
policy). This should be done as soon as possible. Prehospital care providers
should be aware of their local law enforcement reporting procedures and
telephone numbers for notification.

C. The suspected child abuse/neglect report is to be completed according to the
instructions on the back of the form (Reference No. 830-A). The report shall be
filled out as completely and clearly as possible using lay terminology. The
completed form shall be sent to the local county CPS and local law enforcement
within 36 hours. A copy of the report should be retained by the reporting party.
An electronic version of the form and instructions can also be obtained at:


D. The following information shall be included in the prehospital documentation:

1. The name of the CPS social worker and/or name, department and badge
   number of the law enforcement officer.

2. Time of notification.

3. Disposition of child if not transported.

<table>
<thead>
<tr>
<th>CHILD ABUSE REPORTING</th>
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<tr>
<td>BUTTE COUNTY</td>
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| 24 HOUR TELEPHONE CONTACT NUMBER: (888) 268-8822 – Chico Area – North County  
  (800) 400-0902 – Oroville Area – South County |
| MAIL REPORTS TO (SOUTH COUNTY): Child Protective Services  
  78 Table Mountain Boulevard  
  Oroville CA, 95965 |
| MAIL REPORTS TO (NORTH COUNTY): Child Protective Services  
  2445 Carmichael Drive  
  Chico, CA 95928 |

| COLUSA COUNTY           |
| 24 HOUR TELEPHONE CONTACT NUMBER: (530) 458-0280 |
| MAIL REPORTS TO: Child Protective Services  
  P.O. Box 370  
  Colusa, CA 95932 |
## SUBJECT: SUSPECTED CHILD ABUSE REPORTING GUIDELINES

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<tr>
<th>COUNTY</th>
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<th>MAIL REPORTS TO</th>
<th>FAX REPORTS TO</th>
</tr>
</thead>
</table>
| NEVADA COUNTY     | (530) 273-4291 or (888) 456-9380 | Child Protective Services  
P.O. Box 1210  
Nevada City, CA 95959 | (530) 273-6941                   |
| PLACER COUNTY     | (916) 872-6549 or (866) 293-1940 | Family & Children’s Services  
101 Cirby Hills Drive, Ste. 5  
Roseville, CA 95678 | [pc_scar@placer.ca.gov](mailto:pc_scar@placer.ca.gov) |
| SHASTA COUNTY     | (530) 225-5144                   | Child Protective Services  
1313 Yuba Street  
Redding, CA 96001 |                                    |
| SISKIYOU COUNTY   | (530) 841-4200 or (530) 842-7009 – after hours | Child Protective Services  
1215 South Main Street  
Yreka, CA 96097 |                                    |
| SUTTER COUNTY     | (530) 822-7227                   | Child Protective Services  
P.O. Box 1599  
Yuba City, CA 95991 |                                    |
| TEHAMA COUNTY     | (530) 527-1911 or (800) 323-7711 | Child Protective Services  
310 South Main Street  
Red Bluff, CA 96080 |                                    |
| YOLO COUNTY       | (530) 669-2345 or (888) 400-0022 | Child Protective Services  
25 North Cottonwood Street  
Woodland, CA 95695 |                                    |
| YUBA COUNTY       | (530) 749-6288                   | Child Protective Services  
5730 Packard Avenue, Suite 100  
Marysville, CA 95901 | (530) 749-6809                  |
SUBJECT: SUSPECTED ELDER OR DEPENDENT ADULT ABUSE
REPORTING GUIDELINES

PURPOSE:

To define suspected elder and dependent adult abuse and the required reporting
procedures for prehospital care personnel.

AUTHORITY:

Welfare and Institutions Code Section 15630 et seq. California Code of Regulations,
Title 22, 100160 and 100075

DEFINITIONS:

Abuse of an elder or a dependent adult means either of the following:

- Physical abuse, neglect, financial abuse, abandonment, isolation, abduction, or
  other treatment with resulting physical harm or pain or mental suffering.

- The deprivation by a care custodian of goods or services that are necessary to
  avoid physical harm or mental suffering.

Dependent adult means any person between the ages of 18 and 64 years who:

- Resides in this state and who has physical or mental limitations that restrict
  his or her ability to carry out normal activities or to protect his or her rights,
  including, but not limited to, persons who have physical or developmental
  disabilities, or whose physical or mental abilities have diminished because of
  age; or

- Is admitted as an inpatient to a 24-hour health facility, as defined in Sections
  1250, 1250.2, and 1250.3 of the Health and Safety Code.

Developmentally disabled person means a person with a developmental disability
specified by or as described as follows:

- “Developmental disability” means a disability that originates before an
  individual attains age 18 years, continues, or can be expected to continue,
  indefinitely, and constitutes a substantial disability for that individual. As
defined by the Director of Developmental Services, in consultation with the Superintendent of Public Instruction, this term shall include mental retardation, cerebral palsy, epilepsy, and autism. This term shall also include disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for individuals with mental retardation, but shall not include other handicapping conditions that are solely physical in nature.

**Elder** means any person residing in this state, 65 years of age or older.

**Reasonable suspicion** means an objectively reasonable suspicion that a person would entertain, based upon facts that could cause a reasonable person in a like position, drawing when appropriate upon his or her training and experience, to suspect abuse.

**PRINCIPLES:**

A. EMRs, EMTs, AEMTs, Paramedics, and MICNs, as health care practitioners, are mandated reporters and have a legal obligation to report known or suspected elder or dependent adult abuse under the following circumstances:

1. When the reporter who in his or her professional capacity, or within the scope of his or her employment, has observed or has knowledge of an incident that reasonably appears to be physical abuse, abandonment, abduction, isolation, financial abuse, or neglect; or

2. When the reporter has observed a physical injury where the nature of the injury, its location on the body, or the repetition of the injury, clearly indicates that physical abuse has occurred; or

3. When the reporter is told by an elder or a dependent adult that he or she has experienced behavior, including an act or omission, constituting physical abuse, abandonment, abduction, isolation, financial abuse, or neglect, or the reporter reasonably suspects that abuse.

B. Any mandated reporter who has knowledge, or reasonably suspects, that types of elder or dependent adult abuse for which reports are not mandated have been inflicted upon an elder or dependent adult, or that his or her emotional well-being is endangered in any other way, may report the known or suspected instance of abuse.

C. Reports made under this law are confidential. The identity of all persons making reports of elder or dependent abuse is also confidential. This information will be shared only between the investigating and licensing agencies, with the district attorney in a criminal prosecution resulting from the report, by court order, or when the reporter waives the right to remain anonymous.
D. When two or more persons who are required to report are present and jointly have knowledge of a known or suspected instance of abuse of an elder or dependent adult, and when there is agreement among them, the telephone report may be made by a member of the team selected by mutual agreement and a single report may be made and signed by the selected member of the reporting team. Any member who has knowledge that the member designated to report has failed to do so shall hereafter make the report. If EMS personnel are not selected as the designated reporter, they shall document the name and agency of the appointed team member in their prehospital documentation to indicate that the reporting obligation has been met.

E. Reporting is the individual responsibility of the mandated reporter. No supervisor or administrator may prohibit the filing of a required report.

F. Mandated reporters who report suspected cases of elder or dependent adult abuse, in good faith, have absolute immunity, both civilly and criminally, for making a report of abuse of an elder or dependent adult. This includes taking of photographs of the victim and surroundings to submit with the report.

G. Under current law, all healthcare professionals are mandated to report suspected Elder / Dependent Adult Abuse that they have knowledge of or observe in their professional capacity. They are required to sign a statement, for their employer, acknowledging their understanding of this requirement. Failure to report physical abuse, abandonment, abduction, isolation, financial abuse, or neglect of an elder or dependent adult, is a misdemeanor, punishable by not more than six months in the county jail, by a fine of not more than one thousand dollars ($1,000); or both fine and imprisonment. Any mandated reporter who willfully fails to report physical abuse, abandonment, abduction, isolation, financial abuse, or neglect of an elder or dependent adult, where that abuse results in death or great bodily injury, shall be punished by not more than one year in a county jail, by a fine of not more than five thousand dollars ($5,000), or by both fine and imprisonment.

POLICY:

A. Reports of physical abuse are to be made immediately, or as soon as possible, by telephone.

B. When reporting abuse that allegedly occurred in a long-term care facility or Adult Day Health Care Center, contact either the local law enforcement agency or the local Ombudsman Program.

C. When the abuse is alleged to have occurred anywhere else, contact either the local law enforcement agency or the local county Adult Protective Services.
D. VERBAL REPORT: Verbal reports are to include the following information, unless unavailable:

1. The name, address, telephone number and occupation of the person making the report.

2. The name, address, age and present location of the elder or dependent adult.

3. The names and addresses of family members or any other person responsible for the elder or dependent adult's care.

4. The nature and extent of the elder or dependent adult's condition.

5. Date, time and place of the incident.

6. Any other information, including information that led that person to suspect elder or dependent adult abuse, as requested by the agency receiving the report.

E. WRITTEN REPORT: A written Report of Suspected Dependent Adult/Elder Abuse (832-A or http://www.dss.iahwnet.gov/Forms/English/SOC341.pdf) must be completed and submitted to the agency initially contacted within two (2) working days of the verbal report.

F. The following information shall be included in the prehospital documentation:

1. The name of the APS social worker or Local Ombudsman, and/or name, department and badge number of the law enforcement officer.

2. Time of notification.

3. Disposition of Elder or Dependent Adult if not transported.

G. VOLUNTARY REPORTS:

1. Any person who is not a mandated reporter, who knows, or reasonably suspects, that an elder or a dependent adult has been the victim of abuse may report that abuse to a long-term care ombudsman program or local law enforcement agency when the abuse is alleged to have occurred in a long-term care facility.

2. Any person who is not a mandated reporter, who knows, or reasonably suspects, that an elder or a dependent adult has been the victim of abuse in any place other than a long-term care facility may report the abuse to the county adult protective services agency or local law enforcement agency.
## ELDER / DEPENDENT ADULT ABUSE REPORTING

### BUTTE COUNTY

<table>
<thead>
<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(530) 898-5923 or (800) 822-0109</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(800) 664-9774</td>
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| MAIL REPORTS TO       | Department of Employment & Social Services  
P.O. Box 1649  
Oroville, CA 95965    |
| FAX REPORTS TO        | (530) 538-5093                   |

### COLUSA COUNTY

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| MAIL REPORTS TO       | Department of Social Services  
251 East Webster Street  
Colusa, CA 95932       |
| FAX REPORTS TO        | (530) 458-2664                   |

### NEVADA COUNTY

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<th>LOCAL OMBUDSMAN</th>
<th>(916) 376-8910 or (530) 274-2825</th>
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<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(888) 339-7248</td>
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| MAIL REPORTS TO       | Adult Services  
578 Sutton Way, PMB 135  
Grass Valley, CA 95945 |
| FAX REPORTS TO        | (530) 274-3264                   |

### PLACER COUNTY

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<th>(916) 376-8910 or (530) 823-8422</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(888) 886-5401</td>
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| MAIL REPORTS TO       | Adult Protective Services  
101 Cirby Hills Drive  
Roseville, CA 95678    |
| FAX REPORTS TO        | (916) 787-8857                   |

### SHASTA COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(530) 229-1435 or (530) 229-1816 or (866) 699-6191</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(530) 225-5798</td>
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| MAIL REPORTS TO       | Department of Social Services  
2460 Breslauer Way,  
P.O. Box 496005  
Redding, CA 96049-6005 |
| FAX REPORTS TO        | (530) 245-7693                                    |
### ELDER / DEPENDENT ADULT ABUSE REPORTING

#### SISKIYOU COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(530) 229-1435 or (530) 229-1816 or (866) 699-6191</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(530) 842-7009</td>
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</table>
| MAIL REPORTS TO | Adult Services Department  
1215 S. Main Street  
Yreka, CA 96097 |
| FAX REPORTS TO | (530) 841-4238 |

#### SUTTER COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(916) 376-8910 or (530) 755-2018</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(530) 822-7227</td>
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| MAIL REPORTS TO | Department of Human Services  
1965 Live Oak Blvd. Suite C  
Yuba City, CA 95991 |
| FAX REPORTS TO | (530) 822-7384 |

#### TEHAMA COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(530) 898-5923 or (800) 822-0109</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(800) 323-7711</td>
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| MAIL REPORTS TO | Department of Social Services  
P.O. Box 1515,  
Red Bluff, CA 96080 |
| FAX REPORTS TO | (530) 527-4836 |

#### YOLO COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(916) 376-8910 or (530) 668-5775</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(888) 675-1115 or (530) 661-2955</td>
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| MAIL REPORTS TO | Department of Employment & Social Services  
25 N. Cottonwood Street  
Woodland, CA 95695 |
| FAX REPORTS TO | (530) 661-2763 |

#### YUBA COUNTY

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<tr>
<th>LOCAL OMBUDSMAN</th>
<th>(916) 376-8910 or (530) 755-2018</th>
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<tr>
<td>APS 24 HOUR CONTACT NUMBER</td>
<td>(866) 999-9113 or (530) 749-6471</td>
</tr>
</tbody>
</table>
| MAIL REPORTS TO | Health and Human Services Agency  
5730 Packard Avenue, Suite 1000  
Marysville, CA 95901-9987 |
| FAX REPORTS TO | (530) 749-6244 |
PURPOSE:

To define patient care responsibilities at the scene of a non-disaster medical emergency when two or more ALS / LALS personnel are present from two or more agencies and to define the parameters for transferring patient care to another individual in the prehospital setting.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.220, 1798.6.

California Code of Regulations, Title 22, Division 9.

POLICY:

"Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any Paramedic, or other prehospital emergency personnel, at the scene of the emergency, who is most medically qualified specific to the provision of rendering emergency medical care. If no licensed or certified health care professional is available, the authority shall be vested in the most appropriate medically qualified representative of public safety agencies who may have responded to the scene of the emergency."

"Notwithstanding the above, authority for the management of the scene of an emergency shall be vested in the appropriate public safety agency having primary investigative authority. The scene of an emergency shall be managed in a manner designed to minimize the risk of death or health impairment to the patient and to other persons who may be exposed to the risks as a result of the emergency condition, and priority shall be placed upon the interests of those persons exposed to the more serious and immediate risks to life and health. Public safety officials shall consult emergency medical services personnel or other authoritative health care professionals at the scene in the determination of relevant risks." (Health and Safety Code, Section 1798.6). Some limited examples are as follows:

- **HIGHWAY PATROL**
  All freeways; all roadways in unincorporated areas to include right-of-way. (CVC 2454)

- **SHERIFF’S OFFICE**
  Off-highway unincorporated areas, i.e., parks, private property, etc. (Local policy)
SUBJECT: MEDICAL CONTROL AT THE SCENE OF AN EMERGENCY

LOCAL FIRE/POLICE  *Specific areas of authority within their jurisdiction, except freeways.*

AIRPORT/FIRE/POLICE  *Airports*

U.S. MILITARY  *National Defense Area; a military reservation or an area with “military reservation status” that is temporarily under military control, e.g., military aircraft crash site.*

PROCEDURE:

A. Medical management at the scene of a medical emergency includes:

1. Medical evaluation
2. Medical aspects of extrication and all movement of the patient(s)
3. Medical care
4. Patient destination, in consultation with base hospital when necessary
5. Transport code

B. The first on duty ALS or LALS licensed and accredited or certified responder on the scene shall assume responsibility for the patient’s care.

C. Whenever a Paramedic or Advanced EMT transfers patient care responsibility to another prehospital care provider, s/he is responsible for noting such action took place on the Patient Care Report (PCR) Form. The responsible Paramedic or Advanced EMT personnel are required to document patient findings and treatments according to S-SV EMS regional policy.

CROSS REFERENCES:

*Policy and Procedure Manual*

Patient Care Report (PCR) Form, Reference No. 605
Base Hospital Contact, Reference No. 812
Multiple Patient/Casualty Incidents, Reference No. 837
Physician on Scene, Reference No. 838
Communication Failure, Reference No. 890
PURPOSE:

This policy establishes guidelines for the response of ambulance transport providers to incidents involving Hazardous Materials (Haz Mat) or Weapons of Mass Destruction (WMD).

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.150, 1797.151, 1797.204, 1797.214, 1798.6.

California Code of Regulations, Title 22, Sections 100172 and 100175.

DEFINITIONS:

**Hazardous Materials** are classified as any material which is explosive, flammable, poisonous, corrosive, reactive, or radioactive, or any combination, and requires special care in handling because of the hazards it poses to public health, safety, and/or the environment.

**Hazardous Materials (Haz Mat) Response Team** – Is an emergency team that has received specialized training and equipment for the purpose of protecting the public and the environment in the event of a accidental or intentional release of Hazardous materials into the environment.

**Emergency Decontamination** – An emergency procedure for the removal of contamination from an exposed victim requiring immediate lifesaving care.

**Planned Decontamination** – The procedures in place for the Haz Mat Response Team to perform decontamination at a hazardous materials incident.

**Mass Decon** - Decontamination of the greatest number of people possible with available resources. Normally accomplished by emergency decon followed by full decon.

**Exclusion Zone (Hot Zone)** - Area that encompasses all known or suspected hazardous materials
Contamination Reduction Zone (Warm Zone) - Area between the "Exclusion Zone" and the "Support Area". "Safe Refuge Area" and "Contamination Reduction Corridor" are set up within this area.

Contamination Reduction Corridor - An area within the "Contamination Reduction Zone" where the actual decontamination takes place. EMS personnel, once cleared, receive patients at the end of the "Contamination Reduction Corridor" and move them to the "Support Area" for secondary treatment.

Support Zone (Cold Zone) - Clean area outside "Contamination Reduction Zone" where equipment and rescue personnel are staged to receive and treat decontaminated patients. Secondary exposure to hazardous materials is not expected in this area and special clothing is not required.

TRAINING AND COMPETENCY:

According to CCR, Title 8, Section 5192, the minimum training for EMS responders shall be Haz Mat First Responder Awareness level. Annual refresher training is required to be provided by the employer to be of sufficient content and duration to maintain competencies or to demonstrate those competencies. Additional training may be required to function at an emergency.

POLICY:

The responsibility for hazardous material containment, identification, decontamination, and victim evacuation rests with the Incident Commander of the fire and/or law enforcement agencies having primary investigative authority.

A. The management structure utilizes the Incident Command System. All resources ordered for Haz Mat incident shall be committed to the incident until released by the Incident Commander.

B. Avoid contamination – accept only decontaminated patients. Do not transport contaminated patients without Incident Commander approval and appropriate personal protective equipment.

**Exception:** For radiation contaminated patients that meet immediate triage criterion, treatment and transport will not be delayed for decontamination processes

C. Do NOT enter the Exclusion Zone. EMS personnel will not use personal protective equipment / breathing apparatus unless they have been specifically trained in its use prior to the incident.

D. Contact the base/modified base or receiving hospital as soon as possible in an incident, so they may prepare to receive victims. The base/modified base hospital should assist field personnel determine a decontamination and treatment plan.

DISPATCH:
SUBJECT: HAZARDOUS MATERIALS INCIDENTS

Units dispatched to a possible hazardous materials incident shall be advised by dispatch (in addition to the usual information) of the following:

A. On scene wind direction and recommended approach route; coordinated with Incident Commander.

B. Staging Area location.

C. Location of Incident Commander Post (if established).

D. Communication frequencies

E. Type of hazardous material(s) involved (if known).

F. Estimated number of patients.

SCENE MANAGEMENT:

Ambulances will approach cautiously and park upwind, uphill and upstream from the incident using the Emergency Response Guidebook (ERG) as a guide for the distance to park from the incident.

Observe wind and/or plume direction, if applicable.

**Initial Ambulance is first on scene:**

A. If first on scene, assume incident command until otherwise established.

   1. First provide for your own safety.
   2. *Isolate scene and Deny entry* (keep others away!). Move uninvolved victims to a safe zone.
   3. Notify dispatch and the base/modified base hospital that it is a Haz Mat scene. Ensure notification of local Haz Mat resources utilizing local procedures for hazardous materials incidents.
   4. Coordinate with other public safety personnel as they arrive on scene to establish the ICS.

B. Confirm HAZ MAT using DOT Emergency Response Guidebook and notify appropriate authorities. Reconfirm HAZ MAT with other references and resources if available.

**Initial Ambulance – first responders already on scene:**

A. If upon arrival of the first ambulance, the first responders have determined or have suspicion of a hazardous material incident, ambulance providers will coordinate with other public safety personnel on scene to establish the ICS.
B. If the ICS has been established, ambulance personnel shall report to the IC or staging area manager upon arrival on scene.

**Arrival at a known Hazardous Material scene:**

At no time shall EMS personnel enter the scene of a known Haz Mat incident without the clearance from the IC or designee. Once the support zone is established, the responding EMS unit(s) will stage as directed by the IC or designee. Once at scene, in coordination with the IC or designee, EMS will provide treatment and transport of patient(s) after decontamination is completed, with the exception of radiation incidents (See exception for radiation contamination under policy section, B).

**Recognition of a Hazardous Material on-scene or during transport:**

If EMS personnel become aware of Hazardous Materials while on scene or during transport:

A. Request Haz Mat response from appropriate jurisdictional authority.

B. Personnel shall consider themselves contaminated and part of the incident (HOT ZONE), and consider self-decontamination.

C. Evacuate to a safe location to minimize exposure and notify EMS Dispatch of the potential contamination. If identified during transport, notify dispatch of contamination and await direction.

D. Request closest fire and law enforcement agencies response to the scene for site control and emergency decontamination.

**PATIENT CARE:**

A. EMS personnel shall not attempt to enter any Haz Mat scene or render medical care beyond the support zone without the specific direction from the Incident Commander or designee. **ONLY appropriately trained prehospital personnel utilizing appropriate Personnel Protective Equipment (PPE) shall perform treatment within the “HOT” and “WARM” zones.**

B. Medical treatment and transportation is secondary to the prevention of spreading the contaminate, and the management of the Hazardous Materials incident. The Incident Commander or designee is responsible for determining the treatment priority for the patient(s). EMS transport personnel may be requested to receive non-ambulatory patients from the Contamination Reduction Zone after decontamination has been completed.

C. For radiation contaminated patients that meet immediate triage criteria, treatment and transport will not be delayed for decontamination processes.
D. EMS personnel may only provide and/or initiate patient care after the patient has been transferred to them in the designated area as deemed by the incident commander.

E. Deceased victims shall be left undisturbed at the scene, or moved at the direction of the coroner, Incident Commander or designee.

F. The use of EMS helicopters for the transport of potentially contaminated Haz Mat patient(s), or WMD is generally, NOT APPROPRIATE. Patient transport by helicopter shall occur only by direction of the IC or designee. EMS helicopters may be utilized at the discretion of the IC, or designee to transport immediate, radiation contaminated patients under the same criteria as ground based transportation assets.

G. Advise the base/modified base hospital of material involved and request direction for treatment.

H. If necessary, request CHEMPACK resources utilizing county specific activation procedures.

I. Treat as directed by specific S-SV EMS protocol, and/or the base/modified base hospital.
   1. Decontamination as directed, if trained and properly equipped.
   2. Determine effectiveness of decontamination.
   3. ABC’s.
   4. Oxygen and ventilate as needed.
   5. Cover the patient and consider modesty when possible. Warming measures as needed after decontamination.

J. Procedures and treatment as clinically indicated and per base/modified base hospital order.

K. For specific treatments see S-SV EMS Agency protocols as follows:
   1. Chemical burns, Organophosphate or Carbamate pesticides, and Hydrofluoric Acid see Hazardous Material Exposure protocol E-7
   2. Nerve Agent Exposure see Nerve Agent Treatment protocol E-8

CROSS REFERENCES

Policy and Procedure Manual

Ingestions and Overdoses, Reference No. M-5
Hazardous Material Exposure, Reference No. E-7
Nerve Agent Treatment, Reference No. E-8
EMERGENCY RESPONSE GUIDEBOOK
SIERRA-SACRAMENTO VALLEY EMS AGENCY
PROGRAM POLICY

REFERENCE NO. 837

SUBJECT: MULTIPLE PATIENT/CASUALTY INCIDENTS

INTRODUCTION:

The Sierra-Sacramento Valley Emergency Medical Services Agency serves a multi-county area in California State OES Regions III and IV. EMS personnel must be prepared to quickly shift from a 1-on-1 patient/provider relationship to a multiple patient incident operation. This may include the routine 2-5 patient incidents through the multiple/mass casualty incidents. EMS personnel must be prepared to implement and function within the Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), and Multiple Casualty Incident (MCI)/Incident Command System (ICS).

PURPOSE:

To direct EMS responders regarding the response organization, personnel, equipment, resources, and procedures for field operations during a multiple casualty incident. This policy is intended to supplement the Cal-EMA Mutual Aid Region III and Region IV MCI Plans

AUTHORITY:

Health & Safety Code, Division 2.5, Sections 1797.218, 1797.220.

California Code of Regulations, Title 22, Division 9, (Sections 100127, 100128, 100167, 100168, 100170).

California Code of Regulations, Title 19, Division 2, Articles 1-8, Sections 2400 et seq., Standardized Emergency Management System (SEMS) Regulations.

DEFINITIONS:

A. Multi-Casualty Incident (MCI) is an incident which requires more emergency medical resources to adequately deal with the victims than those available during routine responses.

B. Control Facility (CF) is the hospital responsible for the dispersal of patients during all Multi-Casualty Incidents. The designated Control Facilities for the S-SV EMS Region are listed in Policy Reference No. 505-A ‘Hospital Capabilities’.
SUBJECT: MULTIPLE PATIENTS/CASUALTY INCIDENTS

POLICY:

A. The OES Region IV MCI Plan shall be used as a standard for training and managing MCIs within the S-SV EMS Region until such time that an equivalent Region III MCI plan is developed and approved. This plan details the procedures for MCI response in the field (Manual 1), at the CF (Manual 2), and at the operational area and regional levels (Manual 3). Counties in Region IV will use all three manuals. Counties in Region III will use Manuals 1 and 2 until such time that an equivalent Region III MCI plan is developed and approved, and follow their local and regional protocols for local government, operational area, and regional assistance.

B. During an MCI all S-SV EMS Agency policies and procedures for treatment, destination, etc apply. The CF shall consider trauma triage criteria before directing the transport of trauma patients. Immediate trauma patients shall be transported to designated trauma centers until the trauma centers are unable to accept further trauma patients.

C. Emergency response agencies and personnel shall familiarize themselves with the Standardized Emergency Management System (SEMS) Regulations.

D. EMS personnel shall apply Incident Command System (ICS) concepts routinely on all emergency responses so that shifting from 1-on-1 patient/provider relationship to a multiple patient incident will occur without difficulty.

E. Provider agencies shall be responsible for the training of their personnel in the above.

PROCEDURE

Activation of the Multi-Casualty Incident System consists of the mobilization of the necessary resources, notification of the CF, and initiation of ICS.

A. As soon as it is determined that an emergency call may prove to be an MCI, additional appropriate resource requests and CF notifications should occur.

B. The procedures listed in the ‘MCI – Response Procedures’ addendum, Reference No. 837-A shall be followed, and the CF shall be utilized when one or more of the following criteria are met:

- Five (5) or more Immediate and/or Delayed patients from a unifocal incident, or
- Ten (10) or more Minor patients from a unifocal incident, irrespective of the number of Immediate and/or Delayed patients, or
SUBJECT: MULTIPLE PATIENTS/CASUALTY INCIDENTS

- At the discretion of the EMS provider(s) on scene or the base/modified base hospital.

CROSS REFERENCES:

Policy and Procedure Manual

S-SV EMS Region Hospital Capabilities, Reference No. 505-A

Base Hospital/Modified Base Hospital Contact, Reference No. 812

Medical Control at the Scene of an Emergency, Reference No. 835

MCI – Response Procedures, Reference No. 837-A

MCI – ICS Medical Branch Organizational Structure, Reference No. 837-B

MCI – Position Responsibilities, Reference No. 837-C
**SUBJECT: MCI – RESPONSE PROCEDURES**

<table>
<thead>
<tr>
<th>Activation Triggers</th>
<th>Incident conditions significantly impact or overwhelm hospital orprehospital resources, which may include one or more of the following:</th>
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<td>- Five (5) or more Immediate and/or Delayed patients from a unifocal incident, or</td>
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<td>- Ten (10) or more Minor patients from a unifocal incident, irrespective of the numbers of Immediate and/or Delayed patients, or</td>
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<td>- At the discretion of the EMS provider(s) on scene or the base/modified base hospital.</td>
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<tr>
<th>Command &amp; Control</th>
<th>A. The Incident Commander (IC) shall be that individual present on scene representing the public service agency having primary investigatory authority or responsibility. This role may be delegated to another appropriate public safety representative (i.e. Fire Department) if necessary, or a unified command may be established based on the needs of the incident.</th>
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<td>B. The IC may directly supervise operations or appoint an Operations Section Chief.</td>
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<td>C. The first-in medical responders should be appointed Medical Group Supervisor (MGS) and Triage Unit Leader.</td>
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<tr>
<th>Initial Responders</th>
<th>A. The first medical unit enroute shall notify the appropriate Control Facility (CF) of a possible MCI. Once on scene, report to the IC and get permission to establish the medical group (or temporarily assume IC and establish the ICS), including:</th>
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<td>- <strong>Resources:</strong> Ensure adequate resources have been ordered (Equipment, Manpower, Transportation), and clarify with the IC the ordering process (i.e. can MGS order additional medical resources). Update dispatch as appropriate, and the Control Facility as soon as possible upon arrival.</td>
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<td>- <strong>Assignments:</strong> Assign Triage Unit Leader to begin triage.</td>
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<td>- <strong>Communications:</strong> Dispatch will assign frequencies (i.e. tactical, command, air operations) for the incident. Clarify with the IC if necessary.</td>
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<td>- <strong>Ingress/Egress:</strong> Determine the best routes in and out of the incident in cooperation with the IC, and notify dispatch if appropriate.</td>
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<td>- <strong>Name:</strong> Incident name will normally be assigned by dispatch. Clarify incident name with the IC if necessary.</td>
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<td></td>
<td>- <strong>Geography:</strong> Quickly determine with the IC where staging, triage, treatment and transport areas will be established.</td>
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<td></td>
<td>B. The first-in ambulance should generally be the last ambulance to leave the scene. Medical supplies from the first-in ambulance should be used on scene by the triage and treatment units.</td>
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</table>
**SUBJECT: MCI – RESPONSE PROCEDURES**

| **Triage** | A. S.T.A.R.T. triage shall be used. Triage tags shall be applied to each patient.  
B. Personnel should spend no more than 30-60 seconds per patient triaging.  
C. Treatment rendered will initially be confined to airway positioning and major hemorrhage control.  
D. CPR shall not be initiated on cardiac arrest victims unless it is consistent with S-SV EMS policy (i.e. – patient does not meet criteria for obvious death or probable death), and there are sufficient personnel on scene to not result in the detriment of care to other patients. |
| --- | --- |
| **Treatment** | A. Designate Treatment Areas as needed: Immediate (Red), Delayed (Yellow), and Minor (Green). These areas should be located in safe areas, large enough to handle the number of victims, easily accessible to patient transport vehicles, and away from the Morgue Area (Black).  
B. Once initial triage has been completed, patients may be sent to the appropriate treatment area. Continuous re-triage and patient evaluation should occur in these areas until the patient is transported.  
C. Personnel assigned to the treatment areas shall only function within their scope of practice.  
D. Any on-scene MD’s and RN’s should be assigned to the treatment areas. |
| **Transportation** | A. If a staging area has been established, transport crews shall remain with their vehicle in the staging area until requested to the scene.  
B. The Patient Transportation Unit Leader (or Medical Communications Coordinator if established), in cooperation with the CF will arrange transport of patients to the most appropriate facilities.  
C. At all times the most immediate patients should be transported first to the most appropriate available medical facility.  
D. Patients may be transported by a lower level of trained personnel as determined by the Patient Transportation Unit Leader in cooperation with Treatment Area Managers based on available resources and personnel.  
E. The Patient Transportation Unit Leader (or Medical Communications Coordinator if established) will contact the CF and provide patient information, and total number of transport resources available. Patient information will be limited to age, gender, triage category, triage tag number, and major injury.  
F. The CF will relay patient information to the receiving facilities.  
G. Non-traditional transport resources (e.g. buses, vans) may be used on large scale incidents when appropriate, in consultation with the CF. Appropriate EMS personnel must accompany patients transported by these non-traditional transport resources. |
# SUBJECT: MCI – RESPONSE PROCEDURES

| Communications | A. On-scene coordination/car-to-car communications may occur on an assigned EMS Tactical Channel.  
B. All additional resources shall be requested through the IC (or Logistics Section if established). However, if authorized by the IC, the MGS may request ambulance resources directly through the appropriate Ambulance Dispatch and notify the IC or designee.  
C. The Control Facility shall be notified:  
   • Enroute by the first-in ambulance to a known or suspected MCI,  
   • After initial scene size-up, and after triage is completed,  
   • When patients are ready for transport (to obtain destinations),  
   • When units depart the scene (with Unit #/ETA), and  
   • When the scene is clear and there are no further patients to be transported. |
| Documentation | A. Triage tags shall be used, followed by a Patient Care Report (PCR) for each patient.  
B. The PCR requirement may be waived by the S-SV EMS Agency on large scale incidents.  
C. The Patient Transportation Worksheet shall be completed by the Patient Transportation Unit Leader.  
D. The MGS shall complete the Medical Branch Worksheet if necessary.  
E. The Ambulance Staging Log shall be completed by the Ambulance Coordinator if necessary.  
F. ICS 214 logs shall be completed by each position as requested by the IC or their designee.  
G. The MGS is responsible to ensure all paperwork is complete, in coordination with the CF as necessary. |
The number and type of positions filled is based on the size of the incident. Smaller incidents may only require a Triage Unit Leader, and a Medical Group Supervisor who also performs the functions of Treatment Unit Leader and Patient Transportation Unit Leader.

Positions should be filled based on the individual’s qualifications to adequately perform the assigned function.
## MEDICAL GROUP SUPERVISOR (MGS)

- **Resources**: assess need for additional resources:
  - Equipment: medical supplies (e.g. medical caches, backboards, litters, cots).
  - Manpower: FRs, EMTs, paramedics
  - Transportation: air/ground, vans, buses

- **Assignments**:
  - Establish Medical Group, assign personnel.
  - Direct and/or supervise on-scene personnel from agencies such as Coroner's Office, Red Cross, ambulance, etc.

- **Communications**:
  - Participate in Medical Branch/Operations Section planning activities.
  - Ensure notification of the Control Facility.

- **Ingress/Egress**:
  - Report staging area and transport routes to dispatch.

- **Name**:
  - Confer with IC/Ops Chief to determine incident name, report to dispatch / Control Facility.

- **Geography**:
  - Designate Treatment Area locations.
    - Isolate Morgue and Minor Treatment Area from Immediate/Delayed Treatment Areas.
    - Request proper security, traffic control, and access for the Medical Group work areas.

- Maintain Unit/Activity Log (ICS Form 214).

## TRIAGE UNIT LEADER

- Develop organization sufficient to handle assignment.
- Inform Medical Group Supervisor of resource needs.
- Implement triage process.
  - Ensure triage tags are properly applied to each victim.
- Coordinate movement of patients from the Triage Area to the appropriate Treatment Area.
- Give periodic status reports to Medical Group Supervisor, including total victim counts by triage category.
- Maintain security and control of the Triage Area.
- Establish Morgue.
- Maintain Unit/Activity Log (ICS Form 214).

## TREATMENT UNIT LEADER

- Develop organization sufficient to handle assignment.
- Direct and supervise Treatment Dispatch, Immediate, Delayed, & Minor Treatment Areas.
- Coordinate movement of patients from Triage Area to Treatment Areas with Triage Unit Leader.
- Request sufficient medical caches and supplies as necessary.
- Establish communications and coordination with Patient Transportation Unit Leader.
- Ensure continual triage of patients throughout Treatment Areas.
- Direct movement of patients to ambulance loading area(s).
- Give periodic status reports to Medical Group Supervisor.
- Maintain Unit/Activity Log (ICS Form 214)

## PATIENT TRANSPORTATION UNIT LEADER

- Ensure the establishment of communications with the Control Facility.
- Designate Ambulance Staging Area(s).
- Direct patient destinations as reported by the Medical Communications Coordinator and Control Facility.
- Ensure patient information and destinations are recorded on the Patient Transport Worksheet.
- Establish communications with the Ambulance Coordinator.
- Request additional ambulances as required.
- Notify Ambulance Coordinator of ambulance requests.
- Coordinate requests for air ambulance transportation through the Air Operations Branch Director.
- Coordinate the establishment of the Air Ambulance Helispots with the Medical Branch Director and Air Operations Branch Director (if assigned).
- Maintain Unit/Activity Log (ICS Form 214)
### MEDICAL BRANCH DIRECTOR
The Medical Branch Director is responsible for the implementation of the Incident Action Plan within the Medical Branch. The Branch Director reports to the Operations Section Chief and supervises the Medical Group(s) and the Patient Transportation function (Unit or Group). Patient Transportation may be upgraded from a Unit to a Group based on the size and complexity of the incident.

- Review Group Assignments for effectiveness of current operations and modify as needed.
- Provide input to Operations Section Chief for the Incident Action Plan.
- Supervise Branch activities.
- Report to Operations Section Chief on Branch activities.
- Maintain Unit/Activity Log (ICS Form 214).

### TREATMENT AREA MANAGER
- Request or establish Medical Teams as necessary.
- Assign treatment personnel to patients received in the Treatment Area.
- Ensure treatment of patients triaged to the Treatment Area.
- Assure that patients are prioritized for transportation.
- Coordinate transportation of patients with Treatment Dispatch Manager.
- Notify Treatment Dispatch Manager of patient readiness and priority for transportation.
- Ensure that appropriate patient information is recorded.
- Maintain Unit/Activity Log (ICS Form 214)

### MEDICAL COMMUNICATIONS COORDINATOR
- Establish communications with the Control Facility.
- Determine and maintain current status of hospital/medical facility availability and capability.
- Receive basic patient information and condition from Treatment Dispatch Manager.
- Coordinate patient destination with the hospital alert system.
- Communicate patient transportation needs to Ambulance Coordinator based upon requests from Treatment Dispatch Manager.
- Communicate patient air ambulance transportation needs to the Air Operations Branch Director based on requests from the Treatment Area Manager(s) or Treatment Dispatch Manager.
- Maintain Patient Transport Worksheet.
- Maintain Unit/Activity Log (ICS Form 214)

### AMBULANCE COORDINATOR
- Establish appropriate staging area for ambulances.
- Establish routes of travel for ambulances for incident operations.
- Establish and maintain communications with the Air Operations Branch Director regarding Air Ambulance Transportation assignments.
- Establish and maintain communications with the Medical Communications Coordinator and Treatment Dispatch Manager.
- Provide ambulances upon request from the Medical Communications Coordinator.
- Assure that necessary equipment is available in the ambulance for patient needs during transportation.
- Establish contact with ambulance providers at the scene.
- Request additional transportation resources as appropriate.
- Provide an inventory of medical supplies available at ambulance staging area for use at the scene.
- Maintain records as required and Unit/Activity Log (ICS Form 214)
# SUBJECT: MCI – POSITION RESPONSIBILITIES

<table>
<thead>
<tr>
<th>MEDICAL SUPPLY COORDINATOR</th>
<th>TREATMENT DISPATCH MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acquire, distribute and maintain status inventory of</td>
<td>• Establish communications with the Immediate, Delayed, and Minor Treatment Managers.</td>
</tr>
<tr>
<td>medical equipment and supplies within the Medical Group*</td>
<td>• Establish communications with the Patient Transportation Unit Leader.</td>
</tr>
<tr>
<td>• Request additional medical supplies*</td>
<td>• Verify that patients are prioritized for transportation.</td>
</tr>
<tr>
<td>• Distribute medical supplies to Treatment and Triage Units.</td>
<td>• Advise Medical Communications Coordinator of patient readiness and priority for transport.</td>
</tr>
<tr>
<td>• Maintain Unit/Activity Log (ICS Form 214).</td>
<td>• Coordinate transportation of patients with Medical Communications Coordinator.</td>
</tr>
<tr>
<td>*If the Logistics Section is established, this position</td>
<td>• Assure that appropriate patient tracking information is recorded.</td>
</tr>
<tr>
<td>would coordinate with the Logistics Section Chief or Supply</td>
<td>• Coordinate ambulance loading with the Treatment Managers and ambulance personnel.</td>
</tr>
<tr>
<td>Unit Leader.</td>
<td>• Maintain Unit/Activity Log (ICS Form 214)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MORGUE MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess resource/supply needs and order as needed.</td>
</tr>
<tr>
<td>• Coordinate all Morgue Area activities.</td>
</tr>
<tr>
<td>• Keep area off limits to all but authorized personnel.</td>
</tr>
<tr>
<td>• Coordinate with law enforcement and assist the Coroner or Medical Examiner</td>
</tr>
<tr>
<td>representative.</td>
</tr>
<tr>
<td>• Keep identity of deceased persons confidential.</td>
</tr>
<tr>
<td>• Maintain appropriate records.</td>
</tr>
</tbody>
</table>
SUBJECT: PHYSICIAN ON SCENE

PURPOSE:

To define patient care responsibilities when a physician is on the scene of a medical emergency, and one or more Paramedic or Advanced EMT personnel are present.

AUTHORITY:

California Health and Safety Code, Division 2.5, Section 1797.220, 1798.2.

California Code of Regulations, Title 22, Division 9.

POLICY:

It is the policy of the S-SV EMS Region that a Paramedic or Advanced EMT encountering a physician on the scene shall maintain responsibility for patient care unless the physician assumes responsibility for patient care and accompanies the patient to the hospital.

A Paramedic or Advanced EMT may assist the patient's physician provided the Paramedic or Advanced EMT operates within the approved S-SV scope of practice.

PROCEDURE:

A. Physician is a bystander:

1. Take care of patient first.

2. Require I.D. If needed, use card (see below) provided by State of California.

3. If the physician wishes to do more than offer assistance, s/he must get approval from the base / modified base hospital.

4. If the physician wishes care given that does not conform to the Paramedic or Advanced EMT personnel’s training, scope of practice, and S-SV EMS protocols, explain to the physician that the Paramedic license or Advanced EMT certification prevents the Paramedic or Advanced EMT from doing anything that does not conform to their training, scope of practice, S-SV EMS policies/protocols, and base hospital medical control.
SUBJECT: PHYSICIAN ON SCENE

a. The physician must:
   - Assume responsibility for the patient.
   - Provide the care s/he wishes.
   - Accompany the patient to the hospital.

5. In the event of conflict, follow orders of medical control and document events.

B. Physician is patient’s physician:
   1. Require I.D. if physician is unknown to Paramedic or Advanced EMT.
   2. The patient's physician may administer medication from his/her drug inventory.
   3. The Paramedic or Advanced EMT may follow the patient's physician’s orders if they do not conflict with the Paramedic or Advanced EMT scope of practice.
   d. If there is a conflict between patient's physician's orders and the Paramedic or Advanced EMT scope of practice, explain that you can legally only treat within the S-SV Paramedic or Advanced EMT scope of practice. Contact medical control and ask patient's physician to discuss any problem issues with the base hospital.

CROSS REFERENCES:
Policy and Procedure Manual
Base Hospital/Modified Base Hospital Contact, Reference No. 812.
Advanced EMT Scope of Practice, Reference No. 802
Paramedic Scope of Practice, Reference No. 803.

EMSA / CMA PHYSICIAN ON SCENE SAMPLE CARD:
PURPOSE:

This policy is to assure medical control of patients during transfers between acute care facilities.

This policy does not exempt any acute care hospital or physician from meeting their statutory or regulatory obligations for transfers. The medical/legal responsibility for the patient rests with the transferring physician.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.185, 1797.194, 1797.218, 1797.220, 1798.102, 1798.170, 1798.172.

California Code of Regulations, Title 22, Division 9.

United States Code, Title 42, Section 395dd, EMTALA Statute

Code of Federal Regulations 42, Sections 489.20 and 489.24, EMTALA Regulations

POLICY:

A. Prior to accepting the patient for an acute care inter-facility transfer, the paramedic shall:

1. Obtain pertinent patient information to include: Patient diagnosis, history, and documentation of the therapies that the patient received while in the hospital or the previous four (4) hours, whichever is less.

2. Complete a physical assessment, including vital signs.

B. The Paramedic and Advanced EMT scope of practice will be identical to the prehospital scope of practice identified in policy #802 and #803. The Paramedic or Advanced EMT will follow orders of the transferring physician, however the Paramedic or Advanced EMT cannot provide ALS / LALS care outside of the EMS Agency approved scope of practice. Should medical consultation be needed during transport, the Paramedic or Advanced EMT will follow S-SV EMS policy #812 for base hospital / modified base hospital contact.
SUBJECT: MEDICAL CONTROL FOR TRANSFERS BETWEEN ACUTE CARE FACILITIES

C. If a patient is to be transferred outside of the S-SV EMS region or base/modified base hospital radio contact range, the Paramedic or Advanced EMT may provide care according to approved S-SV EMS policies and ALS/LALS Field Treatment Protocols.

CROSS REFERENCES:

Policy and Procedure Manual

Advanced EMT Scope of Practice, Reference No. 802

Paramedic Scope of Practice, Reference No. 803

Base Hospital/Modified Base Hospital Contact, Reference No. 812

Patient Care Report (PCR) Form, Reference No. 605
SUBJECT: ALS / LALS TRANSFER OF PATIENT CARE

PURPOSE

To ensure a mechanism exists for the appropriate transfer of patient care from ALS / LALS personnel to other prehospital care providers.

AUTHORITY

California Health and Safety Code, Division 2.5, Section 1791.220

California Code of Regulations, Title 22, Division 9, Chapters 3 & 4.

POLICY

A. Patient assessment and care shall be started by the first arriving ALS / LALS unit Advanced EMT, paramedic or flight nurse.

B. The first on duty ALS / LALS licensed and accredited or certified responder who makes patient contact at the scene of an emergency shall be the primary care provider for that patient until such responsibility is transferred to another Advanced EMT, paramedic, flight nurse or EMT partner.

C. All ALS / LALS personnel on scene have a duty to provide the primary care provider with recommendations and assistance, to ensure the best possible patient care as logistics permit and circumstances require.

D. The primary care provider shall provide other assisting ALS / LALS personnel who arrive on scene with all appropriate patient care information.

E. If there are significant differences regarding the transfer of care or correct course of treatment between ALS / LALS providers, base / modified base hospital consultation shall be utilized to determine the appropriate treatment.

PROCEDURE

A. PARAMEDIC TO PARAMEDIC:

1. Paramedics are authorized to transfer the role of primary paramedic to another paramedic when patient condition permits.
2. The primary paramedic shall maintain the lead responsibility and accompany the patient during transport in the following circumstances:

   a. When the patient is determined to be critical, with the exception of the following special circumstances:

      - Paramedics who are functioning in an S-SV EMS Agency approved specialized role (Tactical Medic, Fireline Medic, Bike Medic) may transfer care of a critical patient to another paramedic when necessary.

      - Paramedics may transfer care of a critical patient to an ALS Flight Crew, including paramedic flight personnel, when necessary.

   b. When the receiving paramedic refuses transfer of care due to the patient’s condition or complexity of treatment.

   If there are significant differences regarding the transfer of care or correct course of treatment between ALS providers, base / modified base hospital consultation shall be utilized to determine the appropriate treatment.

3. The primary paramedic that decides to transfer care to another paramedic shall:

   a. Provide complete patient assessment and treatment information to the Paramedic accepting responsibility for the patient.

   b. Ensure the completion of an electronic patient care record (ePCR) per Agency policy. The narrative portion of the ePCR shall include; the time of transfer, name of paramedic personnel and ALS provider accepting transfer, and the time of the transport unit’s departure from the scene.

B. ADVANCED EMT TO ADVANCED EMT:

1. Advanced EMTs are authorized to transfer the role of primary Advanced EMT to another Advanced EMT when patient condition permits.

2. The primary Advanced EMT shall maintain the lead responsibility and accompany the patient during transport in the following circumstances:

   a. When the patient is determined to be critical

   b. When the receiving Advanced EMT refuses transfer of care due to the patient’s condition or complexity of treatment.

   If there are significant differences regarding the transfer of care or correct course of treatment between LALS providers, base / modified base hospital consultation shall be utilized to determine the appropriate treatment.
3. The primary Advanced EMT that decides to transfer care to another Advanced EMT shall:

   a. Provide complete patient assessment and treatment information to the Advanced EMT accepting responsibility for the patient.

   b. Ensure the completion of an electronic patient care record (ePCR) per Agency policy. The narrative portion of the ePCR shall include; the time of transfer, name of Advanced EMT personnel and LALS provider accepting transfer, and the time of the transport unit’s departure from the scene.

C. ADVANCED EMT TO GROUND PARAMEDIC:

1. Advanced EMTs shall provide a verbal and written report when able (in some cases a triage tag) to the arriving ground paramedic.

2. Patient care shall be transferred to the ground paramedic as soon as possible after their arrival on scene.

3. The ground paramedic shall provide a report and ETA to the receiving hospital staff while enroute.

4. Advanced EMTs shall ensure the completion of an electronic patient care record (ePCR) per Agency policy. The narrative portion of the ePCR shall include; the time of transfer, name of paramedic ground personnel and EMS ground provider accepting transfer, and the time of the transport unit’s departure from the scene.

D. ADVANCED EMT OR PARAMEDIC TO ALS FLIGHT CREW:

1. Ground Advanced EMT and paramedic personnel shall provide a verbal and written report when able (in some cases a triage tag) to the arriving flight crew.

2. Patient care may not be transferred to ALS flight crews until they are ready to accept care of the patient. This shall permit the flight crew to prepare for lift-off and begin any additional interventions.

3. The ALS flight crew shall provide a report and ETA to the receiving hospital staff while enroute.

4. Ground Advanced EMT and Paramedic personnel shall ensure the completion of an electronic patient care record (ePCR) per Agency policy. The narrative portion of the ePCR shall include; the time of transfer, name of ALS Flight personnel and EMS Air provider accepting transfer, and the time of the transport unit’s departure from the scene.
SUBJECT: ALS / LALS TRANSFER OF PATIENT CARE

E. RN FLIGHT NURSE TO AEMT OR PARAMEDIC:

1. Flight Nurses are authorized to transfer the role of primary care provider to an Advanced EMT or paramedic when the care does not exceed the Advanced EMTs or paramedic’s scope of practice, and patient condition permits.

2. The flight nurse shall maintain the lead responsibility and accompany the patient during transport in the following circumstances:
   a. When the patient is determined to be critical.
   b. When the receiving Advanced EMT or paramedic refuses transfer of care due to the patient’s condition or complexity of treatment.

3. The flight nurse that decides to transfer care to an Advanced EMT or paramedic shall:
   a. Provide complete patient assessment and treatment information to the Advanced EMT or paramedic accepting responsibility for the patient.
   b. Ensure the completion of an electronic patient care record (ePCR) per Agency policy. The narrative portion of the ePCR shall include; the time of transfer, name of Advanced EMT or paramedic personnel and ALS / LALS provider accepting transfer, and the time of the transport unit’s departure from the scene.

F. ADVANCED EMT OR PARAMEDIC TO EMT PARTNER:

The Advanced EMT or paramedic is responsible for the initial patient history, assessment and reassessment. The Advanced EMT or paramedic is ultimately responsible for all aspects of patient care rendered. Patient care may be delegated to an EMT partner, pursuant only to the requirements as defined in this policy.

1. Prior to delegation of patient care to an EMT partner:
   a. The Advanced EMT or paramedic shall be responsible for a complete initial assessment and patient history.
   b. Delegation of patient care can occur only if the patient does not meet ALS / LALS treatment criteria including, but not limited to, the following:
      • All patients refusing assessment, treatment, or transportation.
      • All patients where ALS treatment is indicated according to S-SV EMS policies or treatment protocols.
SUBJECT:  ALS / LALS TRANSFER OF PATIENT CARE

- All trauma patients as defined by S-SV EMS Trauma Triage Criteria policy (Reference No. 860).

- All 5150 patients.

- Any patient who, in the opinion of the ALS / LALS provider, requires the additional input or judgment of the Advanced EMT / paramedic or base / modified base hospital for appropriate management.

- All patients in active labor or pregnant patients with greater than 20 week’s gestation, with an obstetric complaint.

c. The Advanced EMT or paramedic is responsible to ensure that the documentation of his/her initial assessment and patient history is completed on the PCR.

CROSS REFERENCES

Policy and Procedure Manual

Prehospital Documentation, Reference No. 605.

Base / Modified Base / Receiving Hospital Contact, Reference No. 812.

Medical Control at The Scene of an Emergency, Reference No. 835.

Patient Initiated Release at Scene (RAS or Refusal of Service Against Medical Advice (AMA), Reference No. 850

Trauma Triage Criteria, Reference No. 860
SUBJECT: CANCELLATION OR REDUCTION OF ALS / LALS RESPONSE

PURPOSE:

The purpose of this policy is to identify the responsibilities of BLS prehospital emergency medical personnel when canceling/reducing responding ALS / LALS resources when patient contact has been made.

AUTHORITY:

California Health and Safety Code, Division 2.5, Sections 1797.204, 1797.220, and 1798 et seq.,

California Code of Regulations, Title 22, Division 9, Chapter 4, Sections 100147, 100169 and 100170.

DEFINITIONS:

A. **Code 4 or Canceled Call** - is defined as no further assistance is needed by the Incident Commander (IC). Further responding units are canceled. All ALS / LALS units dispatched via the 911 system that are canceled prior to arrival on scene shall be considered to be Code 4.

B. **No Patient Contact** - "No patient contact" is defined as arrival at scene and unable to locate any patient. Verbal or physical contact with a patient has not been made.

C. **Code 3** - Code 3 is defined as proceeding with red lights and siren, according to the California Vehicle Code.

D. **Code 2** - Code 2 is defined as proceeding expeditiously but obeying all traffic laws without exception.

E. **Competent Person** – is a person with a capacity to understand the nature of his/her medical condition, and not impaired by alcohol, drugs or medications, mental illness, traumatic injury, grave disability or mental abilities diminished because of age.

POLICY:

A. Cancellation of Responding Units:
The IC or designee on the scene of an incident may cancel a responding ALS / LALS resource upon determination of the following:

1. That the incident does not involve an injury or illness which would require assessment, treatment or transport by Paramedic or Advanced EMT personnel; or,

2. When the patient is a competent adult and is refusing ALS / LALS assessment and or transport.

Before canceling the ALS / LALS resource, consider the medicolegal responsibility involved. Once an ALS / LALS unit has arrived on scene, and ALS / LALS personnel are within visual range of the patient, the ALS / LALS personnel should attempt to make patient contact.

B. Reducing Code of Responding Units:

The IC or designee on the scene of a medical incident may reduce a responding ALS / LALS resource from Code 3 to Code 2 upon determination that, in the best judgment of the IC, the illness or injury is not immediately life-threatening and that the difference in Code 3 and Code 2 response time would not likely have an impact on patient safety.

Note: When an ambulance is reduced to Code 2 the agreed upon emergency response time standard is no longer applicable to that call. When an ambulance is reduced to Code 2, it is possible that the responding ambulance will be redirected to a different Code 3 call, resulting in a delayed ambulance response from a distant location.

C. Incidents when the ALS / LALS resource should not be canceled by BLS EMS personnel:

1. Medical
   a. Cardiac arrest with active CPR
   b. Cardiac symptoms
   c. Difficulty breathing
   d. Altered mental status
   e. Drug ingestion
   f. Seizures
   g. Near drowning
   h. GI or OB hemorrhage
   i. All Pediatric patients < 3 years old

2. Trauma
   a. Respiratory problems associated with trauma
b. Significant bleeding associated with trauma

c. Trauma where the patient has lost consciousness.

d. All penetrating injuries to the head, neck, chest, torso, and extremities proximal to the elbow and knee.

e. In general, any traumatic event with a mechanism of injury and high energy impact consistent with serious injury despite a lack of clinical signs and symptoms such as:

- Ejections from a motorized vehicle.
- Death in the same passenger compartment.
- Vehicular crashes requiring extrication time of > 20 minutes.
- Falls that appear to be > 20 feet.
- Vehicle rollovers.
- High-speed vehicular crashes with initial speed > 40 mph, major auto deformity > 20 inches, or intrusion into passenger compartment > 12 inches.
- Auto-pedestrian/auto-bicycle injuries with significant (> 5 mph) impact.
- Pedestrians thrown or run over by a vehicle.
- Motorcycle crash > 20 mph or with separation of a rider from the bike.

CROSS REFERENCES:

Policy and Procedure Manual

Patient Initiated Released at Scene (RAS) or Patient Initiated Refusal of Service (AMA), Reference No. 850

Treatment / Transport of Minors, Reference No. 851
SIERRA-SACRAMENTO VALLEY EMS AGENCY
PROGRAM POLICY

SUBJECT: PATIENT INITIATED RELEASE AT SCENE (RAS) OR REFUSAL OF SERVICE AGAINST MEDICAL ADVICE (AMA)

PURPOSE:

To provide directions and guidelines when a patient declines transport by ambulance to an acute care hospital, while respecting the rights of a competent person to make prudent healthcare decisions. To provide direction and guidelines when a patient refuses emergency medical assessment, treatment and / or transportation. Patients requesting ambulance transport shall not be denied transport under this policy.

AUTHORITY:

California Health & Safety Code, Division 2.5, Sections 1797.204, 1797.220, and 1798 et seq.

California Code of Regulations, Title 22, Division 9

Welfare and Institutions Code, Section 5008, 5150 and 5170

DEFINITIONS:

Person – Any competent individual encountered by EMS personnel who upon questioning, denies illness or injury and does not exhibit any evidence of illness or injury. The individual did not call 911 or direct 911 to be called for a medical complaint.

Patient – Any person encountered by EMS personnel who upon questioning, requests assessment, treatment or transport or appears to exhibit evidence of illness or injury.

Competent Person / Patient – An individual with a capacity to understand the nature of his / her medical condition, if one exists, and is not impaired by alcohol, drugs / medications, mental illness, traumatic injury, grave disability or mental abilities diminished due to age.

Gravely Disabled – A condition in which a person, as a result of a mental disorder or impairment by intoxication, is unable to provide for his / her basic personal needs for food, clothing and shelter (Welfare and Institutions Code, Section 5008). Persons who are 21 years of age or older who have organic brain syndrome, dementia, Alzheimer type conditions or other organic brain disorders may qualify for involuntary hospitalization if they are a danger to self / others or gravely disabled.
**5150 W & I** — When any person, as a result of a mental disorder is a danger to others or to him/herself or is gravely disabled; a peace officer or a member of the attending staff (as defined by regulation) of an evaluation facility designated by the County or members of a mobile crisis team or other professional person designated by the County may, upon probable cause take, or cause to be taken, the person into custody and place him/her in a facility designated by the County and approved by the State Department of Mental Health as a facility for 72-hour treatment and evaluation. (Welfare and Institutions Code, Section 5150)

**POLICY:**

**Patient Refusal of Service: Released at Scene**

A. Patients who are released at scene by EMS personnel must be a competent adult, a minor not requiring parental consent (Reference Policy 851) or a minor in compliance with Section C: MINORS below and meet **ALL** of the following:

1. The patient or guardian must have a clearly articulated plan for medical assessment and/or follow-up if necessary that relies on previously established medical providers or the use of recognized acute care/urgent providers and facilities.

2. This plan must have a reasonable and prudent transportation plan to reach follow-up medical care in a timely manner if necessary.

3. After a complete assessment, the highest medical authority on scene must concur with the appropriateness of scene release and the medical appropriateness of the follow-up plan.

4. The Incident Commander (IC) should be consulted and concur with the non-medical aspects of the follow-up plan.

5. The highest medical authority on scene shall instruct the patient or legal guardian and witness(es) to call 9-1-1 and/or seek immediate medical attention if the condition continues or worsens or if new symptoms develop.

B. Base/modified base contact shall be made by the highest medical authority on scene in close proximity to the patient prior to releasing the following classes of patients:

1. Patients, who the provider has knowledge of, who have been released at scene within the previous 24 hours.

2. Children 3 years of age or under.

3. Patients age 4 years to 17 years without a responsible adult signature.
Patients meeting the above criteria shall be assessed and offered treatment and transport by ALS / LALS personnel whenever possible. BLS personnel may only release at scene these classes of patients if ALS / LALS personnel are not available (i.e. extremely extended ETA of ALS, 9-1-1 BLS ambulance provider without ALS response).

C. MINORS

1. A minor who is evaluated by EMS personnel and determined not to be injured, to have sustained only minor injuries or to have illnesses or injuries not requiring immediate treatment or transportation, may be released to:
   a. Self, after base / modified base consult (consideration should be given to age, maturity, environment and other factors that may be pertinent to the situation)
   b. Parent or legal representative
   c. A responsible adult at the scene
   d. A designated caregiver
   e. Law enforcement

2. EMS personnel shall document on the Patient Care Report (PCR) to whom the patient was released.

3. Prior to releasing a minor to a responsible adult on scene who is not a parent, legal representative or designated caregiver, EMS personnel must verify the identity of the adult to whom the patient is being released. This verification (driver’s license number, other form of government ID, etc.) must be documented on the PCR. Involvement of law enforcement is required if a concern for child neglect or endangerment exists.

4. Base/modified base contact shall be required on:
   a. Patients 3 years old and under.
   b. Patients 4 years to 17 years old without a responsible adult signature.

5. If the minor is being released to himself/herself or a responsible adult on scene, EMS personnel shall attempt to contact the patient’s parent, legal representative, or designated caregiver prior to the release.

D. EMS personnel will NOT release at scene under this section of the policy the following classes of patients:
1. Patients who meet Trauma Triage Criteria.

2. Patients with ANY new onset medical complaints such as seizures, headache, hypoglycemia, respiratory distress or cardiac symptoms regardless of the duration of the complaint.

3. Patients who are difficult to assess, have altered mental status, OR whose baseline mental status is chronically altered due to a pre-existing condition such as Alzheimer’s disease, dementia or previous CVA.

4. Patients with a significant medical concern.

5. Patients meeting ALS / LALS treatment policy criteria.

6. Patients meeting criteria for ALTE.

7. Patients for whom EMS personnel do not feel comfortable with the termination of the EMS Personnel – Patient relationship

**Patient Refusal of Service: Against Medical Advice**

A. To legally refuse medical assessment, treatment and/or transportation against the medical advice of EMS personnel on scene, the patient must be a competent adult or minor not requiring parental consent (Reference Policy 851).

B. All AMA patients shall be assessed and offered treatment and transport by ALS / LALS personnel whenever possible. BLS personnel may only complete an AMA if ALS / LALS personnel are not available (i.e. extremely extended ETA of ALS, 9-1-1 BLS ambulance provider without ALS response).

C. Parents / legal guardians for minors / dependents may sign AMA but must be present at scene.

D. All AMA patients require the following steps:

   1. Consider having other EMS personnel on scene offer assessment, treatment and/or transportation.

   2. Involvement of law enforcement is required for the following patients:

      a. Any patient who presents with an altered level of consciousness and refuses care. Inappropriate hostility or aggressiveness should alert the care provider to the possibility that the patient’s thinking process may be impaired.

      b. Any patient refusing care who has attempted suicide or verbalizes suicidal/homicidal ideation.
c. A patient making a decision which is clearly irrational in the presence of a potentially life-threatening condition or has unstable vital signs and refuses care.

d. If the patient is less than 18 y/o and a concern for child neglect or endangerment exists.

e. A patient under a Welfare and Institutions Code 5150 hold.

Note: Patients may be detained against their will only when determined to be a danger to themselves or others or gravely disabled as defined by Welfare and Institutions Code section 5150. This determination must be done by law enforcement or a mental health care professional designated by the County.

If law enforcement refuses to assist in the facilitation of treatment and/or transport of a patient when indicated, EMS personnel should request that the officer on scene speak directly with the base / modified base MICN and/or physician regarding the necessity for patient treatment and/or transportation.

3. Base / modified base hospital contact is required for all AMAs. Communication with the base / modified base hospital should be in close proximity to the patient so that the MICN and/or physician can directly communicate with the patient or legal guardian to encourage him/her to consent to recommended assessment, treatment and/or transportation.

4. If the base / modified base hospital recommends additional involvement of law enforcement, adult or child protective services, the highest medical authority shall remain on scene until the patient is placed into or released from one of these special custody arrangements.

5. The highest medical authority on scene shall inform the patient or legal guardian and witness(es) of the adverse consequences of refusing indicated emergency medical assessment, treatment and/or transportation.

6. The highest medical authority on scene shall instruct the patient or legal guardian and witness(es) to call 9-1-1 and/or seek immediate medical attention if the condition continues or worsens or if new symptoms develop.

**Communication Failure**

In the event of communication failure, patients who require base / modified base hospital contact under this policy may be released after all other requirements are met. EMS personnel must document the method(s) of communication attempted and the reason for the communication failure.
Documentation

1. The highest medical authority on scene must document the following minimum information of a Patient Care Report for all RAS and AMA patients:
   
a. The date and estimated time of incident.
b. The time of receipt of the call.
c. The time of dispatch to the scene.
d. The time of arrival at scene.
e. The location of the incident.
f. The patient’s name, age, gender, weight if necessary for treatment and address.
g. Chief complaint.
h. Vital signs.
i. Appropriate physical assessment.
j. Any emergency care rendered and patient’s response to such treatment.
k. That emergency assessment and/or treatment has been offered and/or rendered, transportation offered and that the patient or legal guardian chooses an alternate plan or is refusing indicated emergency medical assessment, treatment and/or transportation.
l. In the event of communication failure for patients who require base / modified base contact under this policy, the method(s) of communication attempted and reason for the communication failure.
m. Information on whom a minor patient was released on scene to if applicable.
n. Patient disposition.
o. The name(s) and unique identifier number(s) of the EMS personnel.
p. Signature(s) (physical or electronic) of EMS personnel.

2. The patient or guardian shall sign the S-SV EMS Agency Refusal of Care Form (Reference No. 850-A), or an equivalent provider specific refusal of care form. If the patient or guardian refuses to sign, document the refusal and obtain a witness signature.

Continuous Quality Improvement

The provider will audit 100% of RAS and AMA patients released under this policy, based on available data, for medical appropriateness, compliance with department/company policy and compliance with S-SV EMS policies.

CROSS REFERENCES:

   Policy and Procedure Manual

   Cancellation or Reduction of ALS / LALS Response, Reference No. 848

   Treatment / Transport of Minors, Reference No. 851
Termination of EMS Personnel – Patient Relationship
Algorithm

- Did not call 911 or direct 911 to be called for a medical complaint
- Does not request assessment
- Does not have a significant mechanism of injury or illness
- Competent adult, minor not requiring consent, or individuals 4 to 17 y/o with parent/guardian/responsible adult
- Not intoxicated
- No altered mental status

- Has a minor injury or illness
- EMS personnel feel comfortable with termination of relationship

- Has a significant medical concern or mechanism of injury, including all ALS/LALS chief complaints or ALTE patients
- EMS personnel do not feel comfortable with termination of relationship
- Must be a competent adult or minor not requiring parental consent
- Parents/legal guardians for minors/dependents may sign AMA (must be present at scene)

**PERSON**
- No base/modified base contact required
- No signature required

- Document the circumstances surrounding reason for call
- Advise to call 911 if any change in condition or desire for transport
- No assessment documentation required
- No release signature required

**RAS**
- Base/modified base contact required for minors and/or a prior RAS within 24 hours
- RAS signature required

- Full assessment documentation required
- Advise patient/guardian the risks and benefits
- Advise to call 911 if any change in condition or desire for transport

- ***MINORS***

- Base/modified base contact required on all patients 3 y/o and under.
- Base/modified base contact required on all patients 4 to 17 y/o without adult signature

**AMA**
- Base/modified base contact required
- AMA signature required

- Full assessment documentation required
- Advise patient/legal guardian the risks and benefits up to & including death
- Advise to call 911 if any change in condition or desire for transport

- ***MINORS***

- If less than 18 y/o and concern for child endangerment exists, Law Enforcement shall be contacted

*****MINORS*****
- Base/modified base contact required on all patients 3 y/o and under.
- Base/modified base contact required on all patients 4 to 17 y/o without adult signature
SUBJECT: TREATMENT / TRANSPORT OF MINORS

PURPOSE

To describe the guidelines for treatment and/or transport of a patient under the age of eighteen (18).

AUTHORITY

California Health and Safety Code, Division 2.5
California Code of Regulations, Title 22, Division 9
California Welfare and Institution Code, Sections 305 and 625

POLICY

A. Minor: A person less than eighteen (18) years of age.

B. Minor not requiring parental consent: A person less than eighteen (18) years of age who meets one or more of the following criteria:

1. Has an emergency medical condition and parent or legal guardian is not available
2. Is married or previously been married
3. Is on active duty in the military
4. Is fifteen (15) years of age or older, living separate and apart from his or her parents and managing his or her own financial affairs
5. Is twelve (12) years of age or older and in need of medical care for a contagious reportable disease/condition or for substance abuse
6. Is an emancipated minor (decreed by a court, may be verified by DMV identification card)
7. Is pregnant and requires medical care related to the pregnancy
8. Is in need of medical care for sexual assault

Effective Date: 06/01/2012
Next Review Date: 03/2015
Approved:

S-SV EMS Medical Director

S-SV EMS Regional Executive Director
C. **Legal Guardian:** A person who is granted custody or conservatorship of another person by a court of law.

D. **Emergency:** A condition or situation in which an individual has a need for immediate medical attention or where the potential for need is perceived by EMS personnel or a public safety agency.

**PRINCIPLES**

**CONSENT:**

A. **Actual Consent:** Treatment or transport of a minor child shall be with the verbal or written consent of a parent or legal guardian.

B. **Implied Consent:** In the absence of a parent or legal guardian, emergency treatment and/or transport of a minor may be initiated without consent.

**PROCEDURE**

A. In the absence of a parent or legal guardian, minors with an emergency condition shall be treated and transported to the health facility most appropriate to the needs of the patient (e.g., Trauma Center, etc.).

B. Hospital or provider agency personnel shall make every effort to inform a parent or legal guardian of where their child has been transported.

C. If prehospital care personnel believe a parent or legal guardian of a minor is making a decision which appears to be endangering the health and welfare of the minor by refusing indicated immediate care or transport, law enforcement authorities should be involved.

**CROSS REFERENCES**

Policy and Procedure Manual

Patient initiated Release at Scene (RAS) or Refusal of Service Against Medical Advice (AMA), Reference No. 850
SIERRA-SACRAMENTO VALLEY EMS AGENCY
PROGRAM POLICY
REFERENCE NO. 852

SUBJECT: VIOLENT PATIENT RESTRAINT MECHANISMS

PURPOSE:

To provide guidelines on the use of restraint mechanisms in the field or during transport for patients who are violent, potentially violent, or who may harm themselves or others.

AUTHORITY:

California Code of Regulations, Title 22, Chapter 4, Article 2, Section 100147

Welfare and Institutions Code, 5150


PRINCIPLES:

A. The safety of the patient, community, and responding personnel is of paramount concern when following this policy.

B. Restraint mechanisms are to be used only when necessary in situations where the patient is potentially violent or is exhibiting behavior that is dangerous to self or others.

C. Prehospital personnel must consider that aggressive or violent behavior may be a symptom of medical conditions such as head trauma, hypoxia, alcohol, drug related problems, hypoglycemia and other metabolic disorders, stress and psychiatric disorders.

D. The method of restraint used shall allow for adequate monitoring of vital signs and shall not restrict the ability to protect the patient's airway or compromise vascular or neurological status.

E. Restraints applied by law enforcement require the officer to remain available at the scene or during transport to remove or adjust the restraints for patient safety.

F. This policy is not intended to negate the need for law enforcement personnel to use appropriate restraint equipment that is approved by their respective agency to establish scene management control.
POLICY:

A. The Base/Modified Base Hospital shall be informed as soon as possible with the time and reason of the decision to restrain.

B. Monitor vital signs.

C. Be prepared to provide airway/ventilation management.

D. Patients shall not be transported in a prone position. Prehospital personnel must ensure that the patient's position does not compromise their respiratory/circulatory systems, and does not preclude any necessary medical intervention to protect or manage the airway should vomiting occur.

E. Forms of Restraint:

   1. Physical Restraint:

      a. Restraint devices applied by prehospital personnel must be padded soft restraints that will allow for quick release.

      b. Restrained extremities should be evaluated for pulse quality, capillary refill, color, temperature, nerve and motor function immediately following application and every 10 minutes thereafter. It is recognized that the evaluation of vascular and neurological status requires patient cooperation, and thus may be difficult or impossible to monitor.

      c. Restraints shall be applied in such a manner that they do not cause vascular, neurological or respiratory compromise. Any abnormal findings require the restraints to be removed and reapplied or supporting documentation as to why restraints could not be removed and reapplied.

      d. The following forms of restraint shall NOT be applied by EMS prehospital care personnel:

         * Hard plastic ties or any restraint device requiring a key to remove. EXCEPTION: see Section G: Interfacility Transport of Psychiatric Patients.

         * Restraining a patient’s hands and feet behind the patient.

         * “Sandwich” restraints, using backboard, scoop-stretcher or flats.

      e. Restraints shall not be attached to movable side rails of a gurney.
F. Chemical Restraint

If patient remains combative despite physical restraint, such that further harm to the patient or provider(s) is possible:

<table>
<thead>
<tr>
<th>Base / Modified Base Hospital Physician Order Only:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Midazolam:</strong></td>
</tr>
<tr>
<td>• IV – 0.1 mg/kg (max dose 4 mg)</td>
</tr>
<tr>
<td>• IM / IN – 0.2 mg/kg (max dose 8 mg)</td>
</tr>
</tbody>
</table>

G. In situations where the patient is in custody and/or under arrest and handcuffs or other restraint devices have been applied by law enforcement officers:

1. Restraint devices applied by law enforcement must provide sufficient slack in the restraint device to allow the patient to straighten the abdomen and chest and to take full tidal volume breaths.

2. Restraint devices applied by law enforcement require the officer's continued presence to ensure patient and scene management safety. The officer should accompany the patient in the ambulance. In the unusual event that this is not possible, the officer should follow by driving in tandem with the ambulance on a pre-determined route. A method to alert the officer of any problems that may develop during transport should be discussed prior to leaving the scene. Patients in custody/arrest remain the responsibility of law enforcement.

H. Interfacility Transport of Psychiatric Patients

1. A two-point, locking, padded cuff and belt restraint and/or two-point locking, padded ankle restraints may be used only in the interfacility transport of psychiatric patients on a 5150 hold.

2. Transport personnel must be provided with a written restraint order from the transferring physician or their designee as part of the transfer record.

3. Restrained extremities should be evaluated for pulse quality, capillary refill, color, temperature, nerve and motor function immediately following application and every 10 minutes thereafter. Any abnormal findings require the restraints to be removed and reapplied or supporting documentation as to why restraints could not be removed and reapplied.

4. Transport personnel shall have immediate access to the restraint key at all times during the transport.
SUBJECT: VIOLENT PATIENT RESTRAINT MECHANISMS

I. Required documentation on the electronic Patient Care Report (ePCR)

1. Type of restraint mechanisms utilized.

2. Reason restraint mechanism utilized.

3. Identity of agency/medical facility applying physical restraints.

4. Assessment of the vascular and neurological status of the restrained extremities.

5. Assessment of the cardiac and respiratory status of the restrained patient.

CROSS REFERENCE:

Policy and Procedure Manual

Patient Destination, Reference No. 505

ALS Inventory, Reference No. 701

Base Hospital/Modified Base/Receiving Hospital Contact, Reference No. 812

Medical Control at the Scene of an Emergency, Reference No. 835

Tasered Patients Care & Transport, Reference No. 853
SUBJECT: TASERED PATIENTS CARE AND TRANSPORT

PURPOSE:

To establish guidelines for Paramedics and Advanced EMT personnel in the treatment and transportation of patients on whom a TASER has been used.

AUTHORITY:

California Code of Regulations, Title 22, Section 100169
Health & Safety Code, Sections 1797.204, 1797.220, 1798

GENERAL CONSIDERATIONS:

A. A TASER is designed to transmit electrical impulses that temporarily disrupt the body’s nervous system. Its Electro-Muscular Disruption (EMD) technology causes an uncontrollable contraction of the muscle tissue, allowing the TASER to physically debilitate a target regardless of pain tolerance or mental focus.
B. The scene must be safe and secured by law enforcement before Emergency Medical Services (EMS) will evaluate or treat the patient.
C. Assess the patient for any potential cause of the abnormal or combative behavior such as, but not limited to, head trauma, hypoxia, drug and alcohol related problems, hypoglycemia and other metabolic disorders, stress and psychiatric disorders and treat according to the appropriate protocol.
D. Assess the patient for any potential injury after the TASER was deployed. Remember the TASER will cause the patient to fall to the ground or become incapacitated.

POLICY:

A. Local law enforcement policy:
   1. Taser probes should not be removed by EMS personnel unless they interfere with the airway or the safe transportation of the patient. TASER probes should be considered legal evidence and if removed shall be offered to law enforcement prior to disposal. Follow law enforcement direction regarding the preservation or disposal of TASER probes.

B. Mode of transportation and destination to be determined by law enforcement.
PROCEDURE:

A. When safe to do so, patients should be immediately evaluated, with particular attention to signs and symptoms of excited delirium.
B. Any injuries or medical conditions will be treated according to the appropriate treatment protocol.
C. These patients will be in custody of law enforcement and will require transportation to an emergency department for medical clearance.
D. If the transporting Paramedic or Advanced EMT determines that the patient is a risk to him/herself and/or the ambulance personnel, law enforcement officer(s) may be requested to accompany the patient.
E. Unless otherwise contraindicated, the patient should be adequately and safely restrained.
F. If one or both of the TASER probes requires removal for safe transportation:
   1. Verify the wires to the probes have been severed.
   2. Use routine biohazard precautions.
   3. Place one hand on the patient in the area where the probe is embedded and stabilize the skin surrounding the puncture site between two fingers. Keep your hand away from the probe. With your other hand, in one fluid motion pull the probe straight out from the puncture site.
   4. Follow law enforcement direction regarding the preservation or disposal of TASER probes.
   5. Apply direct pressure for bleeding, and apply a sterile dressing to the wound site.

DOCUMENTATION

A. The following must be documented on the PCR:
   1. The patient’s presenting behavior or signs / symptoms which lead law enforcement to tase the patient, if available.
   2. Baseline patient assessment including, but not limited to, oxygen saturation, blood glucose level, neurological assessment, vital signs. Repeat assessment every 10 minutes until arrival at the ED.
   3. Time of taser barb removal, if applicable.
   4. Anatomic location of the taser barb(s).
   5. Whether or not the taser barb(s) are intact following removal.

CROSS REFERENCES:

   Policy and Procedure Manual

   Patient Destination, Reference No. 505

   Trauma Triage Criteria, Reference No. 860

   Base Hospital/Modified Base Hospital Contact, Reference No. 812

   Restraint of Violent Patients, Reference No. 852
SUBJECT: TRAUMA TRIAGE CRITERIA

PURPOSE:

To identify those patients who are at greatest risk for severe injury and determine the most appropriate facility to transport persons with different injury types and severities.

AUTHORITY:

California Health & Safety Code, Division 2.5; Chapter 6, Article 2.5, Section 1798.160 et seq.

California Code of Regulations, Title 22, Division 9, Chapter 7


PRINCIPLES:

The trauma triage criteria indicate high-risk factors for serious traumatic injuries. Trauma patients meeting triage criteria should be transported as soon as possible, and time on scene should be limited. Procedures at the scene should be limited to triage, patient assessment, airway management, control of external hemorrhage and appropriate immobilization. Additional interventions should be completed en route with the exception of those incidents requiring prolonged extrication.

TRAUMA CENTER LEVELS

**Level I:** A Level I Trauma Center has the greatest amount of resources and personnel for care of the injured patient. Typically, it is also a tertiary medical care facility that provides leadership in patient care, education and research for trauma, including prevention programs.

**Level II:** A Level II Trauma Center offers similar resources as a Level I facility, differing only by the lack of research activities for a Level I designation.
SUBJECT: TRAUMA TRIAGE CRITERIA

**Level I and II Pediatric:** Level I and II Pediatric Trauma Centers focus specifically on pediatric trauma patients. Level I Pediatric Trauma Centers require some additional pediatric specialties and are research and teaching facilities.

**Level III:** A Level III Trauma Center is capable of assessment, resuscitation and emergency surgery, if warranted. Injured patients are stabilized before transfer, if indicated, to a facility with a higher level of care according to pre-existing arrangements.

**Level IV:** A Level IV Trauma center is capable of providing 24-hour physician coverage, resuscitation and stabilization to injured patients before they are transferred, if indicated.

**PATIENT DESTINATION:**

A. Patients with an unmanageable airway shall be transported to the closest receiving hospital for airway stabilization.

B. For any patient who is found to meet at least one of the Anatomic or Physiologic Trauma Triage Criteria:

   1. If the time closest designated Trauma Center is a Level I or Level II Trauma Center, transport directly to the Level I or Level II Trauma Center.

   2. If the time closest designated trauma center is a Level III Trauma Center, contact the Level III Trauma Center for a destination decision.

C. If a trauma patient meets Mechanism of Injury Trauma Criteria only, with or without meeting any of the Special Considerations Criteria, prehospital personnel shall contact the closest base/modified base hospital for a destination decision.

D. If a trauma patient meets the Special Considerations Criteria only, without meeting any of the Anatomic, Physiologic or Mechanism of Injury trauma triage criteria, contact with the closest base/modified base hospital shall be made for a destination decision when prehospital personnel determine that transport to a trauma center may be in the best interest of the patient.

E. The use of EMS aircraft for transport of trauma patients should provide a clinically significant reduction in arrival time to the most appropriate designated trauma center. If the total time for air transport exceeds the ground ambulance arrival time, air transport may not be indicated.

F. Pediatric Trauma Patient Destination

   1. When ground ambulance or EMS aircraft (if utilized) transport times do not exceed 45 minutes, all children ≤ 14 years of age who meet Anatomic and/or Physiologic Trauma Triage Criteria should be transported directly to a designated pediatric trauma center.
2. If a pediatric patient meets criteria for direct transport to a designated pediatric trauma center, but the patient’s condition is so critical that any additional transport time may jeopardize the patient’s life, the patient shall be transported to the closest designated trauma center.

G. Prehospital personnel shall notify the designated receiving trauma center of the patient’s pending arrival as soon as possible.

TRAUMA TRIAGE CRITERIA:

A. Physiologic Criteria:

1. Respiratory Rate < 10 or > 29 breaths per minute (<20 in infant aged <1 year) or need for ventilatory support, or

2. Glasgow Coma Score ≤ 13, or

3. Systolic Blood Pressure < 90

B. Anatomic Criteria:

1. All penetrating injuries to the head, neck, chest, torso, and extremities proximal to the elbow or knee

2. Chest wall instability or deformity (e.g. flail chest)

3. Two or more proximal long-bone fractures

4. Paralysis

5. Pelvic fractures

6. Amputation proximal to wrist or ankle

7. Crushed, degloved or mangled or pulseless extremity

8. Open or depressed skull fracture

C. Mechanism of Injury Criteria:

1. High-risk auto crash (one or more of the following):
   a. Ejections (partial or complete) from automobile
   b. Death in the same passenger compartment
   c. Intrusion, including roof: > 12 inches at occupant site or > 18 inches at any site
SUBJECT: TRAUMA TRIAGE CRITERIA

2. Non-Automotive crash > 20 mph including, but not limited to: motorcycle, ATV, go-cart, bicycle, skateboard, watercraft and aircraft

3. Auto vs Pedestrian / Bicycle: thrown, run over, or with significant (> 20 mph) impact

4. Adults who fall > 20 feet

5. Children who fall > 10 feet or two to three times the height of the child

6. Other high energy impact

D. Special Considerations

1. Age:
   a. Adults > 55 years of age
      • SBP <110 might represent shock after 65 years of age
      • Low impact mechanism (e.g. ground level falls) might result in severe injury.
   b. Children ≤ 14 years of age
      • Children should be triaged to pediatric capable trauma centers when possible

2. Anticoagulation or bleeding disorders
   • Patients with head injury are at high risk for rapid deterioration

3. Burns:
   a. With trauma mechanism: Triage to trauma center
   b. Without trauma mechanism: Triage to burn facility

4. Pregnancy > 20 weeks

5. EMS provider judgment in conjunction with medical control

TRAUMA REGISTRY:

All hospitals receiving trauma patients from the S-SV EMS Region shall supply data to the S-SV EMS Trauma Registry.

GLASGOW COMA SCALE (GCS): Adult & Pediatric Combined GCS

Note: Modifications for age appropriate response for infant/young child are typed in bold print.
# SUBJECT: TRAUMA TRIAGE CRITERIA

## GLASGOW COMA SCORE

<table>
<thead>
<tr>
<th>EYE OPENING RESPONSE</th>
<th>BEST VERBAL RESPONSE</th>
<th>BEST MOTOR RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 pts = Open spontaneously</td>
<td>5 pts = Oriented &amp; converses Appropriate words and phrases Cries appropriately, coos, babbles</td>
<td>6 pts = Obeys commands Normal spontaneous movement</td>
</tr>
<tr>
<td>3 pts = To verbal stimuli To speech, to shout</td>
<td>4 pts = Disoriented &amp; converses Irritable cry</td>
<td>5 pts = Localizes pain Withdraws to touch</td>
</tr>
<tr>
<td>2 pts = To painful stimuli</td>
<td>3 pts = Inappropriate words Inappropriate crying/screaming</td>
<td>4 pts = Flexion withdrawal Withdraws to pain</td>
</tr>
<tr>
<td>1 pt = No response</td>
<td>2 pts = Incomprehensible sounds/words Grunts</td>
<td>3 pts = Flexion abnormal (decorticate)</td>
</tr>
<tr>
<td>1 pt = No response</td>
<td></td>
<td>2 pt = Extension (decerebrate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 pt = No response</td>
</tr>
</tbody>
</table>

Risk of injury is high with GCS < 14  
COMA is defined by GCS ≤ 8  
Any patient with a GCS ≤ 8, consider intubation and hyperventilate at 20 to 24 breaths per minute to reduce cerebral swelling.
SUBJECT: EMS AIRCRAFT UTILIZATION & QUALITY IMPROVEMENT

PURPOSE:

To identify consistent and appropriate criteria when requesting an EMS aircraft for assistance with patient care and transport.

To ensure that the best interest of the patient is priority when determining appropriate care and timely transport of patients via EMS Aircraft.

To provide guidelines for specific considerations for a Quality Improvement program for EMS Aircraft.

AUTHORITY:

California Health & Safety Code, Division 2.5, Sections: 1797.218, 1797.220, 1798.2, 1798.170, and 1798.172, 1798.200, 1798.206,

California Code of Regulations, Title 22, Division 9, Chapter 8, Sections 100276 – 100306

California Code of Regulations, Title 22, Chapter 12, Section 100400, 100402.

Prehospital EMS Aircraft Guidelines, EMSA Document #144, December 2010

POLICY:

UTILIZATION

Utilization is the decision to dispatch air resources and whether to use those resources to transport.

A. It is important that EMS personnel utilize consistent and appropriate criteria when requesting an EMS aircraft for assistance with patient care and transport.

B. When utilizing prehospital EMS aircraft, a patient being transported by EMS aircraft should be critically ill and/or injured (life or limb). Special circumstances related to a particular area will drive decisions related to prehospital EMS aircraft utilization.
C. The use of prehospital EMS aircraft should provide a significant reduction in arrival time to a receiving facility capable of providing definitive care, including designated specialty care centers. If the total estimated receiving facility arrival time for prehospital EMS aircraft exceeds the ground ambulance use, air transport should not be used.

D. Utilization of prehospital EMS aircraft should be considered in the following situations:

1. Patients who meet trauma triage criteria
2. Time critical medical patients
3. MCI
4. The patient is inaccessible by any other means
5. Utilization of existing ground transport services threatens to overwhelm the local EMS system

E. Time savings will be influenced by a number of factors, including but not limited to, a patient’s condition, the type of aircraft and current environmental conditions.

F. Utilization should be based upon time closest / most appropriate level of care.

G. The decision to cancel a responding air medical resource is at the discretion of the Incident Commander. The decision should be made collaboratively with the on scene medical personnel, after assessing the scene location and patient needs.

H. The pilot shall have the final authority in decisions to continue or cancel the response. The pilot in command may dictate the need to deviate from destination policy.

I. EMS aircraft transportation should not be used for the following patients:

1. CPR in progress
2. Patient(s) contaminated by hazardous materials that cannot be completely decontaminated prior to transport
3. Patient(s) who are potentially violent or have behavioral emergencies. However, a patient may be transported at the discretion of the flight crew.
QUALITY IMPROVEMENT

A. The provider QI program should be designed to objectively, systematically and continuously monitor, assess and improve the quality and appropriateness of patient care and safety of the transport service provided.

B. EMS air providers are to develop and implement a QI program in cooperation with other EMS system participants as defined in California Code of Regulations, Title 22, Division 9, Chapter 12.

C. Quality improvement programs should include indicators which cover the items listed in California Code of Regulations, Division 9, Chapter 12 of the Emergency Medical Services System Quality Improvement Program, which include, but are not limited to, the following:

1. Personnel
2. Equipment and Supplies
3. Documentation and Communication
4. Clinical Care and Patient Outcome
5. Skills Maintenance / Competency
6. Transportation / Facilities
7. Public Education and Prevention
8. Risk Management

D. The QI program should be in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines and shall be approved by the authorizing / local EMS agency.

E. QI indicators should be tracked and trended to determine compliance with their established thresholds as well as reviewed for potential issues.

F. Participation between the authorizing / local EMS agency and the provider’s EMS QI Program is encouraged. This may include, but not limited to, making available mutually agreed upon relevant records for program monitoring and evaluation.

G. Develop, in cooperation with appropriate personnel / agencies, a performance improvement action plan for the air medical provider when the EMS QI Program identifies a need for improvement. If the area identified as needing improvement
includes system clinical issues, collaboration is required with the provider medical director and the authorizing / local EMS agency medical director or his / her designee.

H. The QI Program should be reviewed annually for appropriateness to the operation of the EMS aircraft provider. A summary of this review is to be provided to the authorizing / local EMS agency. The summary should include how the air medical provider’s EMS QI Program addressed the program indicators.

I. A copy of the entire QI Program will be submitted to the authorizing / local EMS agency every five years for review.

CROSS REFERENCES:

Prehospital Care Policy Manual

Prehospital EMS Aircraft Guidelines, EMSA # 144

California Statewide CQI Plan Template

EMS System QI Program Model Guidelines, EMSA #166

EMS Prehospital Aircraft Operations Protocol, Reference No. 450
SIERRA-SACRAMENTO VALLEY EMS AGENCY
PROGRAM POLICY

REFERENCE NO. 883

SUBJECT: PROHIBITION ON CARRYING OF WEAPONS BY EMS PERSONNEL

PURPOSE

To establish a policy prohibiting the carrying of weapons by on-duty EMS personnel. This policy does not apply to on-duty peace officers (i.e., police, sheriff, CHP, arson investigators) who may also provide emergency patient care during the course of their assigned peace officer duties.

AUTHORITY

California Health and Safety Code, Division 2.5, Sections 1797.200, 1797.204 and 1798.200.

California Code of Regulations, Title 22, Division 9.

POLICY

On-duty EMS personnel shall not carry or possess on or about their person, or have in EMS equipment or vehicles, the following articles:

- Firearms
- Stun guns
- Concealed weapons of any sort
- Any other deadly weapon
- Saps, lead weighted gloves
- Night sticks, batons, billy clubs
- Ammunition, bullets
- Dirk or dagger
- Switchblade knife
- Tear gas, mace, pepper spray, chemical agents
- Handcuffs
- Any other items identified in Penal Code Section 12020

This policy does not include pocket knives or similar tools, instruments and/or equipment used in rescue EMS operations. It does not include animal repellent used on animals.

It is recommended that EMS provider agencies develop internal policies regarding weapons that at a minimum comply with this policy.
SUBJECT: COMMUNICATION FAILURE

PURPOSE

To define the specific conditions under which a Paramedic or Advanced EMT may utilize Advanced Life Support (ALS) and Limited Advanced Life Support (LALS) drugs and procedures for patient care, in the event of communication failure.

AUTHORITY

California Health and Safety Code, Division 2.5, Sections 1797.84, 1797.185, 1797.220, 1798, 1798.100, 1798.102

California Code of Regulations, Title 22, Division 9

POLICY

In the event that a Paramedic or Advanced EMT at the scene of an emergency attempts direct voice contact with a base hospital but cannot establish or maintain that contact:

A. The Paramedic or Advanced EMT may initiate necessary ALS / LALS procedures specified in the approved S-SV EMS policies and protocols.

B. Base / modified base contact is required to perform the procedures(s) and/or to administer medication(s) that are identified in S-SV policy/protocol as “Base / Modified Base Hospital Physician Order Only.” In the event of communication failure those procedures / medications shall not be performed / administered.

PROCEDURE

In each instance where ALS / LALS procedures are initiated or attempted under the conditions specified for communication failure, the Paramedic or Advanced EMT shall:

A. Attempt to establish base hospital contact throughout the call, as circumstances permit.

B. Immediately upon voice contact, provide a verbal report to the base hospital physician or mobile intensive care nurse.
SUBJECT: COMMUNICATION FAILURE

EXCEPTION:

The Paramedic or Advanced EMT, functioning within a modified base hospital response area, renders patient care based on S-SV approved policy/protocol (standing orders) without “on-line” medical control.

The following procedures are currently identified as “Base/Modified Hospital Physician Order Only”:

1. Chemical restraint of combative patients with midazolam (Reference No. 852).

2. Terminating resuscitative efforts utilizing either the BLS or ALS termination of resuscitation criteria if no ROSC in an adult pulseless arrest patient (Reference No. C-1).

3. The administration of activated charcoal (Reference No. M-5)

4. The activation and use of the Nerve Agent Treatment Protocol (Reference No. E-8).

CROSS REFERENCES:

Policy and Procedure Manual

Modified Base Hospital, Reference No. 305

Base Hospital Contact, Reference No. 812

Violent Patient Restraint Mechanisms, Reference No. 852

Pulseless Arrest, Reference No. C-1

Ingestions and Overdoses, Reference No. M-5

Nerve Agent Treatment, Reference No. E-8
S-SV EMS
ADULT
PATIENT
TREATMENT
PROTOCOLS
**PULSELESS ARREST**

**CPR x 2 min**
- Positive pressure ventilation with BVM & 100% O₂
- Analyze Rhythm / Check Pulse after 2 min of CPR

**NOTE:** If arrest is witnessed by EMS and an AED or defibrillator is immediately available, start CPR & use the AED (BLS) or manually defibrillate* (ALS) if appropriate as soon as possible.

**VF / VT**

Defibrillation
- AED (BLS) or Manual* (ALS)

**CPR x 2 min**
- Consider Perilaryngeal Airway (BLS)
- IV/IQ access (ALS)
- Analyze Rhythm / Check Pulse after 2 min of CPR

**Rhythm Shockable?**

- If ROSC – Go to ROSC Protocol C-5
- If NO ROSC – Go to Asystole / PEA algorithm

**CPR x 2 min**
- Epinephrine q 3-5 min (ALS)
  - IV/IQ: 1 mg – 1:10,000
  - ET: 2-2.5 mg – 1:1,000 (dilute with 5-10 ml NS)

Advanced airway when possible if not already established by BLS

Analyze Rhythm / Check Pulse after 2 min of CPR

**Rhythm Shockable?**

- Defibrillation
  - AED (BLS) or Manual* (ALS)

**CPR x 2 min**
- Amiodarone (ALS)
  - IV/IQ: 300 mg
  - May Repeat in 3-5 min x 1 - 150 mg

---

**TERMINATION OF RESUSCITATION CRITERIA**
Consider terminating resuscitative efforts utilizing one of the following criteria (*Base / Modified Base Hospital Physician Order Only*):

- **BLS termination of resuscitation**
  1. Arrest was not witnessed by EMS provider
  2. No ROSC after 3 full rounds of CPR & AED analysis
  3. No AED shocks were delivered

- **ALS/LALS termination of resuscitation**
  1. Arrest was not witnessed
  2. No bystander CPR was provided
  3. No ROSC after full ALS/LALS care
  4. No AED shocks were delivered

**DEFINITIONS**
- ROSC – Return Of Spontaneous Circulation
- REVERSIBLE CAUSES
  - Hypoglycemia
  - Hypoxia
  - Hypo-/Hyperkalemia
  - Tension pneumothorax
  - Trauma
  - Tamponade, cardiac
  - Hyperthermia
  - Hypothermia
  - Toxins
  - Thrombosis, pulmonary or coronary
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY
CARDIOVASCULAR
REFERENCE NO. C-5

SUBJECT: RETURN OF SPONTANEOUS CIRCULATION (ROSC)

BLS
- Manage airway and assist ventilations as appropriate / high flow O₂
- Confirm palpable carotid pulse and auscultated blood pressure
- Monitor for reoccurrence of arrest rhythm

ALS

B/P < 90 systolic
- Pulse < 60/min
  - Atropine
    - 0.5 mg IV/IO or 1 mg ET
    - May repeat q 3-5 mins
    - Maximum total dose 3 mg
  - Consider Transcutaneous Pacing
    - If indicated & available
  - Initiate Fluid Bolus
    - 1-2 L NS
  - Dopamine
    - 5 – 10 µg/kg/min to maintain systolic BP ≥ 90
  - Contact Receiving Hospital

- Pulse ≥ 60/min
  - Initiate Fluid Bolus
    - 1-2 L NS

B/P ≥ 90 systolic
- Resuscitated from VF/VT?
  - NO
  - Monitor
  - Initiate Fluid Bolus
    - 1-2 L NS
  - Consider Dopamine
    - 5 – 10 µg/kg/min to maintain systolic BP ≥ 90
  - Contact Base / Modified Base Hospital
  - Amiodarone 150 mg x 1 IV/IO
    - SLOW IV push over 3 - 5 minutes
    - Only give if not previously administered during initial resuscitation efforts

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SUBJECT: TACHYCARDIA WITH PULSES

- Serious signs or symptoms of poor perfusion caused by the tachycardia include:
  - BP < 90
  - Chest Pain
  - Decreased LOC
  - Pulmonary Congestion
  - Shock
  - Acute MI
  - CHF
  - Shortness of Breath

- Synchronized Cardioversion:
  - Stop if rhythm converts to sinus rhythm
  - Immediate cardioversion is seldom needed for heart rate < 150 beats/min
  - Pre-cardioversion sedation should be used for an awake patient whenever possible, use with caution in the hypotensive patient

**Flush line with 20 cc’s normal saline after each Adenosine dose

**NOTE**: if any delay in synchronized cardioversion, and the patient is critical, go to unsynchronized
SUBJECT: BRADYCARDIA

- Symptomatic Bradycardia: Heart rate < 60 beats / minute and inadequate for clinical condition
- Serious signs or symptoms of poor perfusion caused by the bradycardia include:
  - BP < 90
  - Chest Pain
  - Decreased LOC
  - Pulmonary Congestion
  - Shock
  - Acute MI
  - CHF
  - Shortness of Breath

BLS

- ABC’s
- Assess respiratory status / High flow O₂
- Assess V/S
- Assess History & Physical

ALS

Establish an advanced airway – If appropriate
- Monitor, pulse oximeter, vital signs
- IV / IO NS TKO
- Atropine 0.5 mg IV / IO or 1 mg ET
  - May repeat q 3 – 5 minutes
  - Maximum total dose 3 mg

Unstable?

**If patient is symptomatic, do not delay pacing to start an IV or wait for atropine to take effect

YES

** Transcutaneous Cardiac Pacing (TCP)
  (if available)
  Consider pain relief with:
  - Midazolam
  - 0.1 mg/kg IV / IO (max dose 4 mg)
  - 0.2 mg/kg IM / IN (max dose 8 mg)
  *May repeat sedation x 1 after 5 minutes
  OR
  - Morphine Sulfate 2 – 5 mg IV / IO

TRANSCUTANEOUS CARDIAC PACING INFORMATION

- Set initial rate at 80 BPM.
- Set initial current at 10 mA and increase by 10 mA increments while assessing for mechanical capture.
- After achieving mechanical capture, adjust by 5 mA increments to lowest current that maintains mechanical capture.

If patient remains symptomatic:
- Dopamine 2-10 µg/kg/min infusion to maintain BP > 90

NO

Reassess as needed

Contact Receiving Hospital

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SUBJECT: CHEST PAIN OR SUSPECTED SYMPTOMS OF CARDIAC ORIGIN

- If available, a 12 Lead EKG shall be performed as part of a complete patient assessment.
- If not detrimental to the patient’s condition, the initial 12 Lead should be performed prior to medication administration.
- All 12 Lead EKG’s performed shall include a patient name or other unique patient identifier that is input into the monitor and printed on the EKG strip. The patient identification information shall be entered prior to EKG transmission.
- All patients with a 12 Lead EKG that shows a computer read out consistent with an acute ST elevation MI (i.e. ***Acute MI Suspected***) shall be transported directly to the closest designated STEMI Receiving Center (SRC) if the transport time to that receiving center is ≤ 45 minutes. Early contact with the closest base/modified base hospital shall be made for any STEMI patient who is outside the SRC 45 minute transport time catchment area.

BLS
- Assess and support ABC’s as needed
- High flow O₂
- P-Q-R-S-T

ALS
- Cardiac Monitor
- Pulse Ox
- 12 Lead EKG
  *see notes above
- IV/IO NS

* Treatment / 12 Lead EKG / transport destination decision should occur concurrently

STEMI Confirmed by 12 Lead EKG?

Cardiac Arrest?
- Refractory V-Fib?
- Unmanageable Airway?
- Unstable V-Tach?
- 2nd degree type II or 3rd degree Heart Block?

NO

Contact SRC & advise of a "STEMI ALERT"

Transmit 12 Lead EKG to SRC

Transport to SRC

YES

Aspirin
- 320 – 325 mg chewable PO
  *Concurrent anticoagulant use by the patient is not a contraindication to the administration of aspirin.

Nitroglycerin
- 0.4 mg SL – tablet or spray
- May repeat q 5 minutes
- Do not administer if SBP < 100
  * Do not delay initial dose 2⁰ to difficult IV or 12 Lead EKG

**If the patient takes medication for erectile dysfunction or pulmonary HTN: should consult with base prior to starting nitroglycerin

Morphine Sulfate
- If discomfort persists following nitroglycerin administration
- 2 mg increments slow IV/IO if all the following are present:
  - RR > 12
  - SBP > 100
  - GCS = 15

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**SUBJECT: AIRWAY OBSTRUCTION**

**Signs of severe obstruction:**
- Poor air exchange
- Increased breathing difficulty
- Silent cough
- Cyanosis
- Inability to speak/breathe

**BLS**

- ABC’s
- High flow O₂
- Be prepared to support ventilation with appropriate airway adjuncts

**Signs of severe obstruction?**

**YES**

- Consider Causes & Immediate Transport
  - Foreign Body
    - Heimlich/Abdominal thrust
    - If pt becomes unresponsive: begin CPR
    - Check mouth for foreign body
    - No blind finger sweep

- Infection
  - Position of comfort
  - Consider humidified O₂
  - Assist ventilation with BVM
  - Avoid visualization
  - Avoid OPA

- Anaphylaxis
  - Go to Allergic Reaction/Anaphylaxis Protocol M-1

**NO**

- O₂ as indicated by clinical condition
- Suction as needed to control secretions

**ALS**

- Cardiac Monitor - Treat dysrhythmias as appropriate

**Transport**

- Contact Receiving Hospital

**For inadequate ventilation consider:**
- Nebulized epinephrine 5 ml – 1:1,000 via HHN, mask or BVM
- Advanced airway

**Consider Needle Cricothyrotomy**
- If unable to ventilate by appropriate airway maneuvers
- If soft tissue of neck begins to balloon, remove catheter

**Indications:**
- Extensive orofacial injuries that make orotracheal intubation impossible
- Complete airway obstruction with inability to remove F.B. by other methods

**Contraindications:**
- Age < 3 yrs or estimated weight < 15 kg
- Conscious patient
- Moving ambulance
- Patient has midline neck hematoma or massive subcutaneous emphysema

**Needle Cricothyrotomy**

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Date last reviewed revised: 03/12
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

RESPIRATORY
REFERENCE NO. R-2

SUBJECT: RESPIRATORY ARREST

BLS

- Reposition airway (head tilt/chin-lift or jaw thrust)
- Consider spinal precautions
- Assess V/S including Pulse Oximetry (if available) at appropriate time during treatment

Spontaneous Respirations?

YES

- Spontaneous Respirations?
- High flow O₂
- Assist ventilations as needed
- Assess for and treat underlying causes

NO

- Obstructed Airway?
- Consider advanced airway if GCS ≤ 8
- Ventilate w/100% O₂
- Cardiac Monitor
- IV/IO TKO

ALS

Suspect Narcotic OD?

YES

- Check Blood Glucose
- Dextrose 50%
  • 50ml (25gm) IV/IO
  If no IV/IO or delay anticipated:
  Glucagon
  • 1 unit (1 mg) IM/IN

NO

- Adequate Response?
- Naloxone
  • 2 mg SLOW IVP/IO
  May give IM/IN if no IV/IO and/or SBP > 90
  If no improvement, consider repeat dose x 2 (total 3 doses) q 2-3 minutes
  Do not administer if advanced airway is in place & patient is being adequately ventilated
  Use only for respiratory depression, if RR < 12 or respiratory efforts are inadequate

NO

- Assist Ventilations
- Continue CPR

NO

- Contact Receiving Hospital
- Go to Airway Obstruction Protocol R-1
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

SUBJECT: ACUTE RESPIRATORY DISTRESS

BLS

- ABC’s – limit physical exertion, reduce anxiety
- Assess respiratory status/high flow O₂/manage airway as appropriate
- Assess V/S including Pulse Oximetry
- Determine degree of illness
- CPAP when appropriate for moderate – severe distress
- History & Physical – fever, sputum production, medications, asthma, COPD, CHF, exposures, hypertension, tachycardia, JVD, edema

Asthma/COPD

Moderate –Severe Distress
- Cyanosis
- Accessory muscle use
- Inability to speak > 3 words
- Severe wheezing/SOB

Assist ventilation as needed

ALS

Albuterol
- 5 mg via HHN, mask or BVM
- If resp. distress persists, continuous Albuterol may be given during transport

IV/IO NS

Epinephrine 1:1,000
- For pt’s with acute asthma/bronchospasm only:
- 0.01 mg/kg IM – thigh preferred (max = 0.5 mg)
Use cautiously in pt’s older than 35 yrs or with history of CAD or HTN

CHF/Pulmonary Edema

Mild Distress
- Mild wheezing/SOB
- Cough

ALS

Albuterol
- 2.5 – 5 mg via HHN
- May repeat if respiratory distress continues

Consider IV at appropriate rate

ALS

Mild Distress
- Pts with acute asthma/bronchospasm only
- 0.01 mg/kg IM – thigh preferred (max = 0.5 mg)
- Use cautiously in pt’s older than 35 yrs or with history of CAD or HTN

Mild signs & symptoms

ALS

IV/IO NS TKO

BP x 2

* Nitroglycerin – Titrate SL based on 2nd BP as follows:
- SBP > 200 – 1.2 mg SL
- SBP 150 – 200 – 0.8 mg SL
- SBP 100 – 150 – 0.4 mg SL
- May repeat NTG q 5 minutes as above based on repeat BP
- Do not delay NTG due to difficult IV/IO start
- Do not administer if SBP < 100

Moderate – Severe signs & symptoms

ALS

IV NS TKO

* Nitroglycerin
- 0.4 mg SL q 5 minutes
- Do not administer if SBP < 100

* If the patient takes medication for erectile dysfunction or pulmonary HTN: should consult with base prior to starting nitroglycerin

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SUBJECT: CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)

PURPOSE:

To define the indications, contraindications, complications of Continuous Positive Airway Pressure (CPAP).

GOALS:

1. Elimination of dyspnea
2. Decreased respiratory rate
3. Decreased heart rate
4. Increased SpO2
5. Stabilized blood pressure

INDICATIONS:

1. Moderate - severe respiratory distress
2. Age 8 and above
3. CHF with acute pulmonary edema
4. Near drowning

CONTRAINDICATIONS:

1. < 8 yrs of age
2. Respiratory or cardiac arrest
3. Agonal respirations
4. Severe decreased LOC
5. SBP < 90
6. S/S of pneumothorax
7. Inability to maintain airway patency
8. Major trauma, especially Head Injury with increased ICP or significant chest trauma
9. Facial anomalies

COMPLICATIONS:

1. Hypotension
2. Pneumothorax
3. Corneal drying
SUBJECT: ALLERGIC REACTION / ANAPHYLAXIS

- Allergic Reaction: Acute onset cutaneous reactions, e.g. hives, pruritus, flushing, rash, or angioedema not involving the airway.
- Anaphylaxis: One (1) or more of the following symptoms: stridor, wheezing, hoarseness, edema involving the airway, hypotension.
- Anaphylaxis – In Extremis: SBP < 70, airway compromise, decreased LOC.

BLS
- ABC’s – establish and secure airway
- High flow O2
- Remove antigen source, if applicable
- Epi Pen – may assist with use

ALS
- Epinephrine
  - 1:1,000 0.01 mg/kg IM – thigh preferred (max = 0.5 mg)
  - May repeat in 20 minutes if symptoms persist
- IV/IO NS
  - Bolus 1000 ml
  - Titrate up to 2000 ml to SBP > 90

Is pt in extremis?
- Epinephrine
  - 1:10,000 0.1 mg SLOW IV/IO over 2-3 minutes through a fast running IV/IO
  - May repeat q 3 minutes if SBP < 90 or stridor persists
  - May give via ET if no IV/IO established
  - Max total dose = 0.5 mg

NO
- High-Risk” pt ?
  (Hx of anaphylaxis or significant exposure)
  - Diphenhydramine
    - 50 mg IV, IM or PO

NO
- Epinephrine
  - 1:1,000 0.01 mg/kg IM – thigh preferred (max = 0.5 mg)

NO
- IV NS @ TKO rate
- Contact Receiving Hospital

YES
- “High-Risk” pt ?
  (Hx of anaphylaxis or significant exposure)
- Diphenhydramine
  - 50 mg IV/IO or IM

NO
- Bronchospasm?
  - NO
    - Epinephrine
      - 1:1,000 0.01 mg/kg IM – thigh preferred (max = 0.5 mg)
    - IV NS @ TKO rate
    - Glucagon
      - Give only if pt on beta blocker & there is inadequate response to Epi.
      - 1 mg SLOW IV/IO (over 1 min)
      - If no IV/IO or delay anticipated, may administer 1 mg IM/IN
    - Dopamine
      - Start @ 10 µg/kg/min if hypotension persists
  - YES
    - Albuterol
      - 5 mg via HHN, mask or BVM
      - Continuous Albuterol may be given during transport if respiratory distress persists and pt has evidence of bronchospasm
    - Glucagon
      - Give only if pt on beta blocker & there is inadequate response to Epi.
      - 1 mg SLOW IV/IO (over 1 min)
      - If no IV/IO or delay anticipated, may administer 1 mg IM/IN
    - Albuterol
      - 5 mg via HHN, mask or BVM
      - Continuous Albuterol may be given during transport if respiratory distress persists and pt has evidence of bronchospasm

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SUBJECT: SHOCK / NON-TRAUMATIC HYPOVOLEMIA

- Shock = 2 or more of the following
  - Pale, cool and/or diaphoretic skin signs
  - Altered Mental Status
  - SBP < 90
- Initiate early transport and treatment en route if appropriate

**BLS**

- ABC's
- Assess respiratory status / High flow O₂
- Assess V/S
- Assess History & Physical

**ALS**

- Cardiac Monitor
- Pulse Ox
- Consider advanced airway if GCS ≤ 8
- Contact base if suspected cardiogenic shock

**IV / IO NS – TKO**

- If signs / symptoms of blood loss, hypoperfusion, SBP < 90:
  - Give up to 1000 mL bolus, titrate to SBP > 90
- If SBP < 70:
  - Give up to 2000 mL bolus, titrate to SBP > 90
- Consider 2nd IV

Contact Receiving Hospital
SUBJECT: PHENOTHIAZINE / DYSTONIC REACTION

- Assessment:
  - History includes possible ingestion of phenothiazines
  - Symptoms often mistaken for a seizure disorder or tetany
- Signs and Symptoms
  - Facial Grimaces
  - Protruding tongue / Jaw muscle spasm
  - Anxiety / Restlessness
  - Torticollis (twisting of the neck)
  - Oculogyric crisis (circular movement of the eyeballs)
  - Spasms of the back muscles, causing the head and legs to bend backward and the trunk to arch up

**BLS**

- ABC’s
- Reassure patient, get medication history and collect home meds.

**ALS**

- Consider IV / IO @ TKO rate

Diphenhydramine
- 50mg IM or IV / IO

Contact Receiving Hospital
SUBJECT: INGESTIONS AND OVERDOSES

The MICN or Base / Modified Base physician may wish to contact Poison Control
• 1-800-876-4766 or 1-800-222-1222 / TTY: 1-800-972-3323

BLS

• ABC’s
• Assess respiratory status / manage airway and assist ventilations as appropriate / \( \text{O}_2 \)
• Assess V/S
• Identify substance and time of ingestion. Bring sample in original container if possible

ALS

• Cardiac Monitor
• Check blood glucose

Results \( \leq 60 \text{ mg/dl} \)?

YES → • IV/IO TKO

NO

Pt Hx & clinical picture fits hypoglycemia?

YES → • Dextrose 50%
• 50 ml (25gm) IV/IO

If no IV/IO or delay anticipated:

• Glucagon
• 1 mg (1 unit) IM/IN

Note: If suspected insulin or oral diabetic agent OD, consider need for additional dextrose or glucagon

NO

• Treat other specific ingestions and overdoses according to specific therapy located on pages 2 - 3

BASE / MODIFIED BASE PHYSICIAN ORDER ONLY

Activated Charcoal
• 50gm PO
• Only give if patient is awake

Contraindications
- Acids / alkalais
- Corrosives
- Foreign body ingestions
- Prior administration of ipecac
### Narcotics

- BLS & ALS Basic Therapy (page 1)
- Consider advanced airway if GCS ≤ 8
- IV/IO TKO

**Naloxone**
- 2 mg SLOW IVP/IO
- May give IM/IN if no IV/IO and/or SBP > 90
- If no improvement, consider repeat dose x 2 (total 3 doses) q 2-3 minutes
- Do not administer if advanced airway is in place & patient is being adequately ventilated
- Use only for respiratory depression, if RR < 12 or respiratory efforts are inadequate

### Tricyclic Antidepressants and Related Compounds

- BLS & ALS Basic Therapy (page 1)
- IV/IO TKO

**Sodium Bicarbonate**
- 1mEq/kg IVP/IO
- If any of the following are present:
  - SBP < 90
  - QRS > 0.12 seconds (3 small boxes)
  - Seizures

### Beta Blockers

- BLS & ALS Basic Therapy (page 1)
- IV/IO: 500ml fluid challenge if SBP < 90

**Atropine 1 mg IV/IO**
- If HR < 50 & SBP < 90 after fluid challenge
- May repeat q 5 minutes up to 3 mg max dose

**Glucagon 1 mg (1 unit) IV/IO**
- If HR < 50 & SBP < 90 systolic
- If no IV/IO or delay anticipated, may administer 1 mg IM/IN

**Epinephrine 1: 10,000 0.1 mg SLOW IV/IO**
- If SBP < 70
- Repeat until SBP > 90

### Calcium Channel Blockers

- BLS & ALS Basic Therapy (page 1)
- IV/IO: 500ml fluid challenge if SBP < 90

**Calcium Chloride 10% 10ml SLOW IV/IO**
- Administer no faster than 1ml/minute
- ONLY if SBP < 90
- May repeat q 5 minutes – 4 total doses

Contact Receiving Hospital
SUBJECT: INGESTIONS AND OVERDOSES

SPECIFIC THERAPY: INGESTIONS & OVERDOSES

Organophosphate or Carbamate Pesticides

- BLS & ALS Basic Therapy (page 1)
- IV/IO TKO

Atropine 2 mg IV/IO
- If HR < 60
- May repeat q 3 minutes
- NO MAX DOSE

If exposed to pesticide externally: Reference Haz Mat Protocol E-7

Contact Receiving Hospital

Hydrofluoric Acid (HF)

- Oral ingestions require immediate treatment as Hydrofluoric Acid (HF) can cause fatal hypocalcemia
- Early signs of hypocalcemia include:
  - Tingling or “pins and needles” sensation around the mouth, lips, hands or feet
  - Hand or foot spasms
  - QT interval prolongation

- BLS & ALS Basic Therapy (page 1)
- IV/IO TKO

Calcium Chloride 10% 10ml SLOW IV/IO
- Administer no faster than 1ml/minute
- ONLY if signs of hypocalcemia

Exposed to HF externally?

Contact Receiving Hospital

Go to Haz Mat Protocol E-7
SUBJECT: GUIDELINES FOR EMS USE OF ACTIVATED CHARCOAL

PURPOSE:

This addendum is intended for the use of the base/modified base hospital in guiding the field use of activated charcoal.

Activated charcoal is an agent used for gastric decontamination following overdose ingestion. Its use is somewhat controversial as there is evidence to suggest its ability to absorb toxic agents, but little research supporting improvement in clinical outcomes after administration. Previous clinical research only supports its use when given early after ingestion. Therefore, while activated charcoal may be helpful when given rapidly after an overdose, it is very important to avoid administration in cases where potential contraindications exist.

INDICATIONS:

A. Early administration – within 1 hour of ingestion (agent still in stomach)
B. Potentially deadly agent
C. No effective antidote
D. No contraindications
E. Suggested agents where EMS administration of activated charcoal is appropriate:
   1. Calcium channel blockers
   2. Beta blockers
   3. Antidepressants
   4. Anticonvulsants
   5. Digoxin

CONTRAINDICATIONS:

A. > 2 hours since ingestion
B. Obtunded / altered level of consciousness (aspiration risk)
C. Known caustic ingestion (acid or alkali)
D. Known hydrocarbon ingestion
E. Suspected GI obstruction (vomiting)

RELATIVE CONTRAINDICATION:

Agent(s) not well absorbed by activated charcoal (examples: lithium, iron, toxic alcohols)

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Next Review Date: 01/2015
Approved:

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SUBJECT: GENERAL MEDICAL TREATMENT PROTOCOL

- Consider Trauma
- GI Bleeding
- Near Syncope
- Sepsis
- Abdominal Pain
- Any current or recent alteration in Primary Survey

BLS
- Assess ABC’s
- Assess respiratory status / consider O₂
- Assess V/S
- Assess history & physical
- Determine degree of illness

ALS
- Cardiac Monitor
- Consider IV / IO @ TKO rate
- Consider Blood Glucose check

Blood Glucose Checked?

Results ≤ 60 mg/dl?

Dextrose 50%
- 50ml (25gm) IV / IO
If no IV / IO or delay anticipated:
- Glucagon
  - 1 unit (1 mg) IM / IN
OR
- Oral Glucose
  - Pre-packaged glucose solution / gel or 2 – 3 tablespoons of sugar in water / juice ONLY if patient is conscious and able to swallow

Contact Receiving Hospital

Considering CVA?

Pt Hx & clinical picture fits hypoglycemia?

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• Nausea and vomiting can be a symptom of a multitude of different causes. If at all possible, the specific underlying cause should be determined and treated. Providers should realize that the use of an antiemetic may relieve symptoms while leaving the cause untreated, and possibly, more difficult to detect. With this in mind providers should weigh the benefits of antiemetic use against the possible risk of making an accurate diagnosis more difficult, and the possible side effects of the antiemetic agent.
• Treatment of nausea and vomiting is warranted for patients where it may contribute to a worsening of the patient's condition, or where the patient's airway may be endangered.

**BLS**
- Assess and support ABC's as needed
- Give O₂ as needed
- Assess and treat as appropriate for underlying cause

**ALS**
- Consider Cardiac Monitor
- Consider IV
- Check Blood Glucose if Hypoglycemia or Hyperglycemia Suspected

**Zofran (Ondansetron)**
- 4 mg ODT (Oral Disintegrating Tablet) / IM OR
- 4 mg slow IVP / IO (over 30 seconds)
- May repeat x 1 (max total Dose 8 mg ODT / IM / IVP / IO)

Contact Receiving Hospital
Subject: Altered Level of Consciousness

BLS
- Assess ABCs
- Assess respiratory status / manage airway and assist ventilations as appropriate / high flow O₂
- Assess V/S including Pulse Oximetry (if available)

ALS
- Cardiac Monitor
- IV/IO TKO
- Consider advanced airway if GCS ≤ 8

Suspect Narcotic OD?
- YES
  - Naloxone
    - 2 mg SLOW IVP/IO
    - May give IM/IN if no IV/IO and/or SBP > 90
    - If no improvement, consider repeat dose x 2 (total 3 doses) q 2-3 minutes
    - Do not administer if advanced airway is in place & patient is being adequately ventilated
    - Use only for respiratory depression, if RR < 12 or respiratory efforts are inadequate

- NO
  - OR
  - Oral Glucose
    - Pre-packaged glucose solution/gel or 2 – 3 tablespoons of sugar in water / juice ONLY if patient is conscious and able to swallow
  - Check Blood Glucose
    - Results ≤ 60 mg/dl?
      - YES
        - Adequate Response?
      - NO
        - NO
          - Pt Hx & clinical picture fits hypoglycemia?
            - NO
              - Contact Receiving Hospital
            - YES
              - Considering CVA?
                - YES
                  - Adequate Response?
                - NO
                  - Contact Receiving Hospital

- NO
  - ONLY if patient is conscious and able to swallow

Date last reviewed revised: 02/12
SUBJECT: SEIZURE

**BLS**
- ABC's
- Assess respiratory status / High flow O2
- Support ventilations with appropriate airway maneuvers / adjuncts

**ALS**
- IV / IO NS
- Check Blood Glucose

**Blood Glucose ≤ 60 mg/dl ?**
- NO
- YES

**Pt > 20 weeks pregnant ?**
- NO
- YES

**Transport in Left-Lateral position**

**Is pt actively seizing ?**
- NO
- YES

**Status Epilepticus?**

**Midazolam**
- 0.1 mg/kg SLOW IV/IO (max single dose 4 mg)
- If no IV/IO or delay anticipated:
- 0.2 mg/kg IM / IN (max single dose 8 mg)

*Initial dose of Midazolam may be repeated x 1 after 5 minutes of continued seizure activity following the first dose*

**Contact Receiving Hospital**

* Status Epilepticus definition: 2 or more seizures without any intervening periods of consciousness, or a single seizure lasting > 5 minutes.*
SUBJECT: SUSPECTED CVA / STROKE

BLS
- Assess ABC’s
- Assess respiratory status / high flow O₂
- Assess V/S
- Assess History & Physical
- Perform Cincinnati Prehospital Stroke Scale assessment
- Determine time of symptoms onset and when pt last seen normal

ALS
- Cardiac Monitor
- Pulse Ox
- Check Blood Glucose
- Consider Advanced Airway if GCS ≤ 8
- IV / IO TKO

Suspect CVA if:
- New onset symptoms with abnormal stroke scale
- Unexplained new altered LOC (GCS < 14) without response to Glucose, Glucagon or Narcan

Cincinnati Prehospital Stroke Scale

New Onset Symptoms

Facial Droop
(Have pt show teeth or smile)
Normal = Both sides of face move equally well.
Abnormal = One side of face does not move as well as the other side.

Arm Drift
(Pt closes eyes & extends both arms straight out for 10 seconds)
Normal = Both arms move the same or both arms do not move at all.
Abnormal = One arm does not move or one arm drifts down compared to the other.

Speech
(Have pt say: “You can’t teach an old dog new tricks”)
Normal = Pt uses correct words with no slurring.
Abnormal = Pt slurs words, uses the wrong words or is unable to speak

Interpretation: If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%

Suspect CVA if:
- New onset symptoms with abnormal stroke scale
- Unexplained new altered LOC (GCS < 14) without response to Glucose, Glucagon or Narcan

Stroke Symptoms ≤ 2.5 hours
YES

≤ 30 minutes of a Stroke Receiving Center
YES
- Transport to a Stroke Receiving Center
- Advise the Stroke Receiving Center of a “Stroke Alert”

NO
Contact Closest Base / Modified Base Hospital

Effective Date: 12/01/2010
Next Review Date: 06/2012
Approved by:

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S-SV EMS Regional Executive Director
SUBJECT: CHILDBIRTH

- ABC’s
- Estimate blood loss
- O₂ / manage airway and assist ventilations as appropriate
- Consider IV/IO if condition warrants

**Presenting part**

- Prolapsed Cord
  - Rapid Transport **early** base contact
  - Protect Cord
    - Place mother in knee-chest position
    - Insert gloved hand into vagina & gently push presenting part off the cord
    - Cover the cord with wet saline dressing

- Head
  - Allow delivery (note time)
    - Provide warmth
    - Assure open airway
    - Evaluate for meconium and clear airway if required
    - Dry
    - Refer to Neonatal Resuscitation Protocol P-2 if necessary

- Breech or Footling
  - Rapid Transport **early** base contact
  - Protect Cord
    - Avoid compression of cord by presenting part

**Clamp & Cut Cord**

- Delay clamping of the umbilical cord for 2 minutes for uncomplicated births not requiring resuscitation
- Double clamp cord, cut with sterile scissors between clamps, 6” from baby

**APGAR at 1 minute**

- Appearance
  - Blue / Pale
- Pulse
  - Absent
- Grimace
  - Flaccid / Limp
- Activity
  - No response
- Respiration
  - Absent

**APGAR at 5 minutes**

- Appearance
  - Completely pink
- Pulse
  - > 100
- Grimace
  - Active motion
- Activity
  - Vigorous cry
- Respiration
  - Good / Crying

**Transport**

- Do not wait for placenta

After delivery of placenta, gently massage fundus until firm

**Rapid Transport**

**Early base contact**

**Protect Cord**

**Delivery**

- Allow delivery to progress passively until baby’s waist appears
- Rotate baby to face down position (do not pull)
- If head does not deliver in 3 minutes, insert gloved hand into vagina to create an air passage for infant
- As mother bears down, sweep the head out of the vagina

**Protect Cord**

**Clamp & Cut Cord**

**Rest of the text continues with detailed instructions and protocols for childbirth and resuscitation.**
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY
ENVIRONMENTAL
REFERENCE NO. E-1

SUBJECT: HEAT STRESS EMERGENCIES: HYPERTHERMIA

BLS
- ABC’s
- 
- Immediate rapid transport should be considered with treatment performed en route
- Take patient’s temperature if thermometer available
- Move to a cool environment, remove excess clothing & begin cooling measures
- If the patient is in extremis, begin treatment prior to secondary survey
- Determine degree of illness

HEAT CRAMPS
- Alert
- Temperature usually normal
- Sweaty, may be warm or cool to touch
- Neuro exam is normal except for muscle cramps (usually legs)

- Give cool / cold fluids slowly by mouth
- Rest cramping muscles

HEAT EXHAUSTION
- Temperature normal – slightly elevated
- Sweaty, usually hot to touch
- Neuro exam: no loss of control of extremities, but feels very weak, with normal neuro function
- Patient typically feels sick with flu like symptoms

- Cardiac Monitor
- IV / IO
- Fluid Bolus 500 mL NS
- Give cool / cold fluids slowly by mouth as tolerated
- Transport

HEAT STROKE
- ALTERED MENTAL STATUS
- Core temperature usually ≥ 104
- Skin usually flushed, hot, may or may not be moist if exercise induced
- May have persistent seizures

- Cardiac Monitor
- IV / IO
- Fluid Bolus 500 mL NS, reassess and repeat if indicated for: Hypotension, SBP < 90, or signs of poor perfusion
- Continue cooling measures during transport

ALS

Signs & Symptoms of hypoglycemia or Narcotic OD?
- Go to ALOC Protocol #N-1

Is pt actively seizing?
- Go to Seizure Protocol #N-2

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Next Review Date: 04/2013
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S-SV EMS Medical Director

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S-SV EMS Regional Executive Director
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY
ENVIRONMENTAL
REFERENCE NO. E-2

SUBJECT: COLD STRESS EMERGENCIES : HYPOTHERMIA

BLS

- Assess ABC’s – establish and secure airway. Use adjuncts to prevent aspiration or if ventilations are inadequate (4 – 6 breaths per minute MAY be adequate)
- Consider – spinal precautions
- O₂ – at appropriate flow rate: should be humidified & warmed if possible
- Temperature – take pt’s temperature if thermometer is available
- Pulse – assess for 60 seconds or greater (if necessary)
- Warm Environment – extreme care & gentleness must be exercised when moving patient. Minimize physical movement of patient. Remove wet clothing and cover patient with warmed blankets &/or clothing
- AED – if necessary

ALS

- Cardiac Monitor

V Tach or V Fib ?

YES

- IV / IO NS – 500 ml fluid bolus (warm fluid if available)
- Check Blood Glucose

Results ≤ 60 mg/dl ?

YES

- Start CPR
- Give 1 shock
  - Manual biphasic: 200 J or manufacturer’s recommended energy dose
  - Manual Monophasic: 360 J
  - AED: Device specific
- Resume CPR immediately

NO

- Dextrose 50%
  - 50 ml (25 gm) IV / IO
- Glucagon
  - 1 unit (1 mg) IM / IN

NO

Frostbite ?

YES

- Go to Frostbite Protocol E-3

NO

Contact Receiving Hospital

Effective Date: 06/01/2011
Next Review Date: 04/2013
Approved by:

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S-SV EMS Medical Director

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S-SV EMS Regional Executive Director
SUBJECT: FROSTBITE

**BLS**
- ABC’s
- Assess respiratory status / High flow O₂
- Assess V/S
- Assess History & Physical
- Remove wet clothing
- Elevate extremity
- Wrap affected area in dry, sterile gauze
- Separate affected digits

**ALS**
- Consider IV / IO @ TKO rate - if experiencing pain with anticipated need for IV analgesia.

**Morphine Sulfate**
- 2 – 5mg increments IV/IO
- Maximum 2.5 mg/min
- Titrate to tolerable pain level

**Contact Receiving Hospital**
Haz Mat incidents require special attention and frequently the need for specially trained personnel. Refer to policy # 836 Hazardous Material Incidents.

Important Caveats For Medical Responders:

- Do not enter a contaminated area unless properly protected.
- Personal Protective Equipment (PPE) including SCBAs shall not be utilized by untrained personnel.
- Do not transport a contaminated patient without base/modified base approval until the patient has been thoroughly decontaminated.
- Do not delay the treatment or transportation of Immediate patients who are contaminated with radioactive material (see page 3).
- If transporting personnel become contaminated, they shall immediately undergo decontamination.
- Early base/modified base contact, and CHEMPACK activation when appropriate, will maximize assistance from necessary resources.
- Refer to Hazardous Materials Medical Management Reference as appropriate.

Information that must be obtained by EMS personnel on every Haz Mat incident:

- Number of patients.
- Material involved or DOT 4-digit placard #.
- Route(s) of exposure for each patient.
- Signs & Symptoms for each patient.
- Decontamination procedure completed for each patient.
- Procedure utilized to determine effectiveness of decontamination procedure.
- Risk of secondary exposure to rescuers.
- PPE required to transport patient.

For Specific Therapy See Pages 2 - 3
SUBJECT: HAZARDOUS MATERIAL EXPOSURE

**CHEMICAL BURNS**

*IF* isolated burn without inhalation is documented and **ALL** of the following are present:

- SBP > 100
- No allergy to Morphine
- Patient in moderate - severe pain

**Morphine Sulfate**

- 2 mg increments slow IVP / IO (max 2mg/min)
- Titrate to tolerable pain level
- Discontinue Morphine if SBP < 100

**HYDROFLUORIC ACID (HF)**

- **Calcium Chloride 10%**
  - 10 mL slow IVP / IO
  - May repeat q 5 minutes

For HF burns that are isolated to the hand(s), finger(s), or toe(s):

**Calcium Chloride 10%**

- Pour contents of one ampule into a sterile glove and immerse affected area into solution
- If **Calcium Gluconate gel** has been applied, do not remove. No further treatment is necessary

Skin exposure to HF with a concentration > 20% can cause fatal hypocalcemia and should be treated. Provide continuous EKG monitoring to look for QT-interval prolongation which is an early sign of hypocalcemia

**ORGANOPHOSPHATE OR CARBAMATE**

**Atropine**

- 2 mg IV / IO if HR < 60
- May repeat q 3 minutes to HR > 80
- No maximum dose

Refer to Nerve Agent Treatment Protocol E-8 if additional treatment is necessary

NOTE: Precautions must be taken to prevent direct contact with secretions of the patient who has ingested organophosphates or carbamate pesticides
RADIATION EMERGENCIES

- Patient care always takes priority over radiological concerns. Addressing contamination issues should not delay treatment of life-threatening injuries.
- Viable patients are a high priority. Therefore, rapidly extricate, treat and transport those patients who are most critical and likely to survive.
- It is highly unlikely that the levels of radioactivity associated with a contaminated patient would pose a significant health risk to care providers.
- Body Substance Isolation Clothing (gloves, gowns, N-95 masks, protective eyewear, shoe protectors, and head cap) are recommended, including 2-3 pair of disposable gloves.
- Due to fetal sensitivity to radiation, assign pregnant staff to other duties.

AMBULANCE PREPARATION

If time permits, consider the following:
- Avoid using internal and external compartments; work out of mobile kits as much as possible.
- Close all internal compartments prior to loading patient.
- Cover radio communication microphones with a rubber glove.
- Cover floor of ambulance with disposable papers or pads.

Patients

- If oxygen is warranted for patient treatment use a non re-breather mask, if patient will tolerate it. Additionally, the mask provides protection from inadvertent respiratory contamination hazards. An N95 mask is appropriate to protect patient from inadvertent respiratory contamination hazards when oxygen is not indicated.
- Frequent glove changes will reduce the spread of contamination, and should be considered prior to handling patient, and patient care adjuncts.
- All medical procedures should be utilized to save an immediate patient. If it is medically necessary to intubate a patient that is contaminated, then do so.
- Change gloves prior to intubation.
- Maintain endotracheal tube sterility if possible.

Pt’s with limited / no field decontamination

- Initiate ALS care as necessary.
- Keep patient wrapped (cocoon style) as much as possible to minimize the potential for contamination spread.
- Only expose areas to assess and treat.
- If necessary, cut and remove the patient's clothing away from the body being careful to avoid contamination to the unexposed skin.
- Properly contain all removed clothing by placing it in a sealable bag.
- Continue to reassess and monitor vitals while en route to the appropriate receiving facility.
- Contact with patient may result in transfer of contamination; change gloves as necessary.

Pt’s with field decontamination

- Patients with non life-threatening injuries should have field decontamination prior to removal from the hot zone.
- Patient's condition permits a more thorough radiological survey prior to continued care.
- Conduct a head to toe assessment as the patient's injuries warrant.
- If patients clothing has not been removed during decontamination procedures, keep patient wrapped (cocoon style) as much as possible.
- Expose patient's injuries for assessing and treating only.
- Contact with patient may result in transfer of contamination; change gloves as necessary.
PURPOSE:

To establish standards for the requirements for paramedics, and accredited EMTs in treating patients with nerve agent exposures.

AUTHORITY:

Health & Safety Code, Division 2.5.

California Code of Regulations, Title 22, Division 9.

California Code of Regulations, Title 19, Division 2, Articles 1-8, Sections 2400 et seq., Standardized Emergency Management System (SEMS) Regulations.

PROCEDURAL PROTOCOL:

A. This protocol is NOT a standing order. Any paramedic / EMT wishing to utilize this protocol for patient administration MUST obtain an activation order from a Base / Modified Base Hospital Physician. Once activation is obtained, the entire protocol is a standing order that applies to all paramedics / accredited EMTs operating at the incident.

B. Providers will ensure personal safety by assuring adequate decontamination of victims and using appropriate personal protective equipment (PPE). Medical procedures within the Exclusion Zone (Hot Zone / contaminated area) will only be performed by personnel who have specific training to allow them to function in that area. Under no circumstances should responding personnel at any level of expertise use Personal PPE or assist in patient decontamination without completing the required training.

C. The Atropine (2mg) and 2-PAM (Pralidoxime Chloride–600mg) auto-injectors included in MARK I / DuoDote Nerve Agent Antidote Kits will be used only by those paramedics / accredited EMTs that have been trained in their use and have them available. Paramedic personnel may administer atropine / 2-PAM IM/IV in situations where auto-injector Nerve Agent Antidote Kits are not available.

D. Auto-injectors are NOT to be used in children under 40 Kg.
E. SELF ADMINISTRATION

a. EMT / Public Safety personnel that have been trained and equipped may utilize this protocol to self administer MARK I / DuoDote auto-injectors when authorized by their prescribing physician.

b. Paramedics and accredited EMTs may self administer according to this protocol.

F. SPECIAL NOTES / PRECAUTIONS

a. Only specially trained paramedic and accredited EMT personnel may administer nerve agent antidote medications to patients.

b. Nerve agent antidote medications are only given if the patient is showing signs and symptoms of nerve agent poisoning. THEY ARE NOT TO BE GIVEN PROPHYLACTICALLY.

c. This treatment protocol is to be used in conjunction with protocol #E-7 (HazMat)

d. Note: a decrease in bronchospasm and respiratory secretions are the best indicators of a positive response to atropine and 2-PAM therapy.

Signs and Symptoms of Nerve Agent Exposure (from mild to severe)

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Signs &amp; Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILD</td>
<td>➢ Unexplained runny nose</td>
</tr>
<tr>
<td></td>
<td>➢ Tightness in the chest</td>
</tr>
<tr>
<td></td>
<td>➢ Difficulty breathing</td>
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<tr>
<td></td>
<td>➢ Bronchospasm</td>
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<td></td>
<td>➢ Pinpoint pupils resulting in blurred vision</td>
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<tr>
<td></td>
<td>➢ Drooling</td>
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<tr>
<td></td>
<td>➢ Excessive sweating</td>
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<tr>
<td></td>
<td>➢ Nausea and/or vomiting</td>
</tr>
<tr>
<td></td>
<td>➢ Abdominal cramps</td>
</tr>
<tr>
<td></td>
<td>➢ Involuntary urination and/or defecation</td>
</tr>
<tr>
<td></td>
<td>➢ Jerking, twitching and staggering</td>
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<tr>
<td></td>
<td>➢ Headache</td>
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<tr>
<td></td>
<td>➢ Drowsiness</td>
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<tr>
<td></td>
<td>➢ Coma</td>
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<tr>
<td></td>
<td>➢ Convulsions</td>
</tr>
<tr>
<td></td>
<td>➢ Apnea</td>
</tr>
</tbody>
</table>

Mnemonic for Nerve Agent Exposure

Salivation
Lacrimation
Urination
Defication
Gastrointestinal pain & gas
Emesis
Patient exposed?

**YES**
- Remove all patients clothing
- Blot off the agent
- Flush area with large amounts of water
- Cover the affected area

**Exclusion Zone**
(Hot Zone)
Treat only patients with severe exposure with IM auto-injectors

**Contamination Reduction Zone**
(Warm Zone)
Mild to severe exposures
- ABC’s & High Flow O₂

---

**Mild Exposure**

- **Atropine**
  - 2 mg IV / IO or IM
  - **OR**
  - Administer one (1) atropine auto-injector IM
  - May repeat q 3 – 5 mins until symptoms improve

- **Pralidoxime (2-PAM)**
  - If symptoms do not improve in 5 mins, administer one (1) pralidoxime (2-PAM) auto injector (600 mg) IM, one time only

---

**Moderate Exposure**

- **Atropine**
  - 4 mg IV / IO or IM
  - **OR**
  - Administer two (2) atropine auto-injectors IM
  - May repeat q 3 – 5 mins until symptoms improve

- **Pralidoxime (2-PAM)**
  - If symptoms do not improve in 5 mins, administer two (2) pralidoxime (2-PAM) auto injectors (1200 mg) IM, one time only

---

**Severe Exposure**

- Advanced airway adjuncts as needed

- **Atropine**
  - 6 mg IV / IO / IM
  - **OR**
  - Administer three (3) atropine auto-injector IM
  - Repeat: 2 mg IV / IO / IM or one (1) auto-injector q 3 – 5 mins until symptoms improve

- **Pralidoxime (2-PAM)**
  - If symptoms do not improve in 5 mins, administer two (2) pralidoxime (2-PAM) auto injectors (1200 mg) IM, one time only

---

- IV / IO TKO or titrate to SBP ≥ 90
- Cardiac monitor (if possible)

---

**If seizures continue: Go to Seizure Protocol # N-2**

---

- **DuoDote Auto-Injector** (Atropine 2.1 mg/0.7ml & Pralidoxime Chloride 600 mg/2ml) may be utilized if MARK I kits (Atropine 2mg & Pralidoxime Chloride 600mg) are not available
PROCEDURAL PROTOCOL:

**A. PATENT AIRWAY** - establish and secure. Administer oxygen at high flow rate. Be prepared to support ventilation with appropriate airway adjuncts. If Glasgow Coma Scale is ≤ 8, ventilate patient with 100% oxygen and consider advanced airway management.

**B. SPINE IMMOBILIZATION** – This policy is not intended to authorize removal of spinal immobilization once in place. Spinal immobilization should be implemented for any patient with a history of trauma, or found in the setting of trauma, who meets any of the following criteria:

1. Multi-system trauma.

2. Unreliable history & physical:
   a. Altered mental status (i.e. dementia or delirium)
   b. Drugs or alcohol
   c. Distracting injury in association with trauma
   d. Language barrier
   e. Extremes of age < 6 or > 65 years old

3. Spinal pain or tenderness, including any neck pain with a history of trauma.

4. Any neurological deficit (i.e. numbness or weakness in any extremity after trauma).

5. Pregnancy - Transport patient on long board. Place a towel roll under right side of the long board to elevate right hip six (6) to eight (8) inches higher than left hip. If contractions, abdominal pain, or vaginal bleeding occurs, notify the receiving hospital immediately so that appropriate personnel can be mobilized to evaluate the patient(s).

**C. TRANSPORT** as soon as possible. Ideally, scene times for critical trauma should not exceed 10 minutes.

**D. IV or IO** - initiate large bore IV or IO of Normal Saline via blood administration or macrodrip tubing on all patients meeting critical trauma criteria.
SUBJECT: GENERAL TRAUMA MANAGEMENT

If systolic blood pressure is less than 100 mmHg or, if thoracic or abdominal pain is present, initiate second line of Normal Saline solution with large bore IV (preferably 16 gauge).

All IV or IO access should be initiated en route, unless adequate personnel are available on scene to allow procedure without causing transport delay.

E. CONTACT BASE HOSPITAL

CROSS REFERENCES:

Policy and Procedure Manual

Trauma Triage Criteria, Reference No. 860
SUBJECT: TENSION PNEUMOTHORAX

BLS

- ABC’s
- Assess respiratory status/manage airway and assist ventilations as appropriate
- High flow O₂
- Assess V/S

ALS

Unstable patient and decreased or absent breath sounds on one side of chest?

NO

Transport

YES

Decompress Affected Side:
May be performed in transport

Approved Sites:
- Anterior – 2nd intercostal space in mid-clavicular line is preferred. If unavailable may use lateral site.
- Lateral - 4th or 5th intercostal space in mid-axillary line - must be above the anatomic nipple line.

- Use minimum 14g x 3” (8 cm) catheter specifically designed for needle decompression.
- Insert the needle at a 90 degree angle just over the superior border of the rib, advance until gush of air is heard. Air should be freely aspirated (if not - you are not in the pleural space).

Remove needle from catheter
- Attach a one-way valve
- Secure catheter to chest wall
- Recheck breath sounds and continuously monitor cardio-respiratory status

TWO ATTEMPTS ONLY ON AFFECTED SIDE PERMITTED WITHOUT BASE/MODIFIED BASE HOSPITAL CONTACT
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

TRAUMA
REFERENCE NO. T-6

SUBJECT: ISOLATED EXTREMITY INJURY – INCLUDING HIP OR SHOULDER INJURIES

BLS

- ABC’s
- Assess respiratory status/O₂
- Assess V/S
- Splint injury if necessary

Uncontrolled extremity bleeding?

YES

NO

Does pt meet Trauma Triage Criteria?

YES

NO

Go to General Trauma Mgmt. Protocol T-1

ALS

Are All of the following present?
- Pain scale documented & patient in pain
- RR > 12
- SBP > 100 systolic
- GCS = 15 or baseline mental status

Are All of the following present?
- Pain scale documented & patient in pain
- RR > 12
- SBP > 100 systolic
- GCS = 15 or baseline mental status

IV/IO Access?

YES

NO

Reassess as needed

Reassess as needed

Morphine Sulfate
- 2 – 5 mg IM/SQ
- May repeat x 1 (max dose 10 mg)

Morphine Sulfate
- 2 – 5 mg increments SLOW IVP/IO
- Titrate to pain

Morphine Sulfate
- 2 – 5 mg increments slow IVP/IO
- Titrate to pain

* Use caution when administering both morphine and midazolam to patients

*Midazolam - If necessary
- 0.1 mg/kg slow IVP/IO (max total dose 4 mg)

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Next Review Date: 07/2015
Approved by:

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S-SV EMS Medical Director

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S-SV EMS Regional Executive Director

Date last Reviewed/Revised: 07/12

140
SUBJECT: UNCONTROLLED EXTREMITY BLEEDING

BLS

- ABC’s
- Assess respiratory status / O₂
- Assess V/S
- Attempt to control bleeding with direct pressure

Uncontrolled extremity bleeding?

YES

- Apply approved commercial tourniquet device to bleeding limb(s) on proximal segment

NO

Transport ≥ 30 min. expected?

YES

Go to General Trauma Mgmt. Protocol T-1

NO

Reassess tourniquet for removal

Amputation or Near-Amputation?

YES

Leave tourniquet in place

NO

Significant bleeding from site?

YES

Tighten tourniquet & leave in place

NO

Go to General Trauma Mgmt. Protocol T-1

Reassess as needed

Go to General Trauma Mgmt. Protocol T-1

Does pt meet Trauma Triage Criteria?

YES

Go to General Trauma Mgmt. Protocol T-1

NO

Reassess as needed

Leave tourniquet in place

Go to General Trauma Mgmt. Protocol T-1

Tighten tourniquet & leave in place

Tighten tourniquet & leave in place

Significant bleeding from site?

YES

Tighten tourniquet & leave in place

NO

Go to General Trauma Mgmt. Protocol T-1

Reassess as needed

Leave tourniquet in place

Go to General Trauma Mgmt. Protocol T-1

Tighten tourniquet & leave in place

Tighten tourniquet & leave in place
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

TRiUMA
REFERENCE NO. T-10

SUBJECT: BURNS: THERMAL & ELECTRICAL

INFORMATION NEEDED:
- Type and source of burn: Chemical, electrical, thermal, steam
- Complicating factors: Exposure in enclosed space, total time of exposure, drug or alcohol use, smoke or toxic fumes
- Medical history: Cardiac or respiratory disease, circulatory problems, etc.
- Consider non accidental trauma and required reporting requirements

OBJECTIVE FINDINGS
- Evidence of inhalation injury or toxic exposure (carbonaceous sputum, hoarseness, or singed nasal hairs)
- Extent of burn (depth – full or partial thickness and BSA affected)
- Entrance or exit wounds for electrical or lightning strike
- Associated trauma from an explosion, electrical shock or fall

BLS
- ABC’s
- High flow O₂ by mask, consider BVM early for altered LOC or respiratory distress
- Consider early advanced airway for patient with evidence of inhalation injury, compromised respiratory effort, or GCS ≤ 8
- Remove wet dressings
- Cover with dry, clean dressings / linen

ALS
Cardiac Monitor / Pulse Ox
Albuterol - only if wheezes are present:
- 2.5 – 5 mg via HHN, mask or BVM
IV / IO – NS (in non-burned extremity) for 2° & 3° burns > 9% BSA, facial burns or burns requiring IV analgesia. Titrate to appropriate rate

Destination per Trauma Triage Policy # 860

Does pt meet trauma triage criteria?

YES

NO

Morphine Sulfate – for pain
- 2 – 5 mg increments IV / IO
- Titrate to tolerable pain level

*All patients suffering from an electrical burn shall be transported for evaluation

*Any patient with the following types of burns require contact with the closest base / modified base hospital for appropriate transport destination decision:
- Full thickness (3°) burns of the hands, feet, face, perineum, or > 2% of any body surface
- Partial thickness (2°) burns > 9% of body surface
- Significant electrical or chemical burns

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Next Review Date: 11/2012
Approved by:

SIGNATURE ON FILE
S-SV EMS Medical Director

SIGNATURE ON FILE
S-SV EMS Regional Executive Director
S-SV EMS PEDIATRIC PATIENT TREATMENT PROTOCOLS
PURPOSE:

To establish general guidelines for the treatment of pediatric patients encountered by EMS personnel who present with a medical complaint and/or a traumatic injury.

AUTHORITY:

California Health & Safety Code, Division 2.5; Chapter 6, Article 2.5, Section 1798.160 et seq.

California Code of Regulations, Title 22, Division 9.

DEFINITIONS:

Neonate is defined as an infant during the first 28 days of life.

Pediatric Patients are defined in the S-SV EMS Region as all patients > 28 days old up to and including 14 years of age.

PRINCIPLES / PROCEDURES:

Base / Modified Base Hospital Contact – EMS personnel shall make base / modified base contact prior to releasing children ≤ 3 years of age at scene.

Pediatric Intubation – Perform endotracheal intubation only if bag-valve-mask ventilation is unsuccessful or impossible.

End-tidal CO$_2$ detection – Secondary confirmation of proper ET tube placement is required for pediatric patients by end-tidal CO$_2$ detection, utilizing colorimetry, capnometry, or capnography immediately after intubation and throughout transport.

Vascular Access/Intraosseous – If unable to achieve peripheral venous access rapidly (within 90 seconds), and there is an urgent need to administer fluids and/or medications, and the child has an altered level of consciousness, intraosseous access may be established (S-SV EMS Policy Reference No. 1101).

Medication Doses – A length based pediatric resuscitation tape shall be used in determining sizes of equipment and medication dosages in the out-of-hospital setting.
SUBJECT: GENERAL PEDIATRIC PROTOCOL

PEDIATRIC AVERAGE WEIGHTS & VITAL SIGNS – RECOMMENDED ET TUBE, LARYNGOSCOPE BLADE & SUCTION CATHETER SIZES

<table>
<thead>
<tr>
<th>AGE</th>
<th>WEIGHT (KG)</th>
<th>PULSE</th>
<th>RESP</th>
<th>ET TUBE *</th>
<th>BLADE #</th>
<th>SUCTION CATHETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preemie</td>
<td>&lt; 1 - 2.5</td>
<td></td>
<td></td>
<td>See table below</td>
<td>0</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Term NB</td>
<td>2.5 – 4</td>
<td>100 – 160</td>
<td>30 – 50</td>
<td>3 – 3.5</td>
<td>1</td>
<td>6 or 8</td>
</tr>
<tr>
<td>6 Months</td>
<td>7</td>
<td>80 – 160</td>
<td>30 – 50</td>
<td>3.5 – 4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>1 Year</td>
<td>10</td>
<td>80 – 160</td>
<td>24 – 40</td>
<td>4 – 4.5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2 Years</td>
<td>12</td>
<td>80 – 130</td>
<td>24 – 32</td>
<td>4.5</td>
<td>2</td>
<td>8 or 10</td>
</tr>
<tr>
<td>4 Years</td>
<td>16</td>
<td>80 – 120</td>
<td>22 – 28</td>
<td>5.0</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>6 Years</td>
<td>20</td>
<td>75 – 115</td>
<td>22 – 28</td>
<td>5.5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>8 Years</td>
<td>25</td>
<td>70 – 110</td>
<td>20 – 24</td>
<td>6.0</td>
<td>2</td>
<td>10 or 12</td>
</tr>
<tr>
<td>10 Years</td>
<td>34</td>
<td>70 – 110</td>
<td>20 – 24</td>
<td>6.5</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>12 Years</td>
<td>41</td>
<td>65 – 110</td>
<td>16 – 22</td>
<td>7.0</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

*ET tube selection should be based on the child’s size, not age. One size larger or one size smaller should be allowed for individual variations.

HYPOTENSION IS DEFINED AS:

<table>
<thead>
<tr>
<th>AGE</th>
<th>SBP (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term neonates (0 – 28 days of age)</td>
<td>&lt; 60</td>
</tr>
<tr>
<td>Infants 1 month to 12 months</td>
<td>&lt; 70</td>
</tr>
<tr>
<td>Children &gt; 1 year to 10 years</td>
<td>&lt; 70 + (2 x age in years)</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>&lt; 90</td>
</tr>
</tbody>
</table>

NEONATAL SUGGESTED ET TUBE SIZES AND DEPTH OF INSERTION ACCORDING TO WEIGHT AND GESTATIONAL AGE

<table>
<thead>
<tr>
<th>Weight Grams</th>
<th>Gestational age, wk</th>
<th>Tube size mm (ID)</th>
<th>Depth of insertion From upper lip, cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1000</td>
<td>&lt; 28</td>
<td>2.5</td>
<td>6.5-7</td>
</tr>
<tr>
<td>1000-2000</td>
<td>28-34</td>
<td>3.0</td>
<td>7-8</td>
</tr>
<tr>
<td>2000-3000</td>
<td>34-38</td>
<td>3.5</td>
<td>8-9</td>
</tr>
<tr>
<td>&gt;3000</td>
<td>&gt;38</td>
<td>3.5-4.0</td>
<td>&gt;9</td>
</tr>
</tbody>
</table>

APGAR SCORING CHART

<table>
<thead>
<tr>
<th>SIGN</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>APPEARANCE (Color)</td>
<td>Blue, pale</td>
<td>Body pink, hands and feet blue</td>
</tr>
<tr>
<td>P</td>
<td>Pulse (Heart Rate)</td>
<td>Absent</td>
<td>Slow (below 100)</td>
</tr>
<tr>
<td>G</td>
<td>Grimace (Muscle Tone)</td>
<td>Flaccid limp extremities</td>
<td>Some flexing of extremities</td>
</tr>
<tr>
<td>A</td>
<td>Activity (Response to flick on sole)</td>
<td>No Response</td>
<td>Some motion, cry</td>
</tr>
<tr>
<td>R</td>
<td>Respiratory effort</td>
<td>Absent</td>
<td>Slow, irregular</td>
</tr>
</tbody>
</table>
ADMINISTRATION OF MEDICATION VIA ET TUBE

Note: For endotracheal administration of medication, use higher doses (2 to 10 times the IV dose). During pediatric resuscitation any vascular access, IO or IV, is preferable, but if you cannot establish vascular access, you can give lipid-soluble medications such as epinephrine, atropine and Naloxone via the endotracheal tube. Flush with 5 mL of normal saline followed by 5 assisted manual ventilations. If CPR is in progress, stop chest compressions briefly during administration of medication (AHA 2005 Guidelines, pg 170).

<table>
<thead>
<tr>
<th>Score</th>
<th>&lt; 2 years or Dev. delayed</th>
<th>Over 2 years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye Opening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Spontaneous</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>3</td>
<td>To Voice</td>
<td>To Voice</td>
</tr>
<tr>
<td>2</td>
<td>To Pain</td>
<td>To Pain</td>
</tr>
<tr>
<td>1</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Best Verbal Response</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Coos, babbles</td>
<td>Orientated</td>
</tr>
<tr>
<td>4</td>
<td>Irritable cry</td>
<td>Confused</td>
</tr>
<tr>
<td>3</td>
<td>Cries to pain</td>
<td>Inappropriate words</td>
</tr>
<tr>
<td>2</td>
<td>Moans to pain</td>
<td>Incomprehensible sounds</td>
</tr>
<tr>
<td>1</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Best Motor Response</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Spontaneous</td>
<td>Obeys commands</td>
</tr>
<tr>
<td>5</td>
<td>Withdraws to touch</td>
<td>Localizes pain</td>
</tr>
<tr>
<td>4</td>
<td>Withdraws to pain</td>
<td>Flexion Withdrawal</td>
</tr>
<tr>
<td>3</td>
<td>Abnormal flexion</td>
<td>Abnormal flexion</td>
</tr>
<tr>
<td>2</td>
<td>Abnormal extension</td>
<td>Abnormal extension</td>
</tr>
<tr>
<td>1</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

PEDIATRIC
REFERENCE NO. P-2

SUBJECT: NEONATAL RESUSCITATION – INFANTS ≤ 28 DAYS OLD

Approximate Time

- Term gestation?
- Breathing or crying?
- Good muscle tone?

NO

- Provide warmth
- Clear airway* if needed
- Dry, stimulate & reposition

YES

Routine Care
- Provide Warmth
- Clear airway* if needed
- Dry
- Ongoing evaluation

No

Labored breathing or persistent cyanosis?

YES

- Clear airway* / high flow O₂
- Pulse oximetry

NO

- Ongoing evaluation
- Postresuscitation care

HR <100?

NO

HR <60?

YES

- CPR – Rate 120/min compression:ventilation ratio 3:1
- Endotracheal Intubation* if necessary
- IV/IO NS TKO

NO

- Take ventilation corrective steps*

YES

HR <100, gasping, or apnea?

NO

- Positive-pressure ventilation* with BVM & 100% O₂: 40-60/min
- Pulse oximetry

YES

- Ongoing evaluation
- Postresuscitation care

HR <60?

YES

- Epinephrine
  - IV/IO: 0.01 – 0.03 mg/kg 1:10,000 (0.1 – 0.3 mL/kg)
  - ET: 0.1 mg/kg 1:1,000 (0.1 mL/kg)

*AIRWAY & VENTILATION INFORMATION
- Consider initial positive-pressure ventilation with room air for term infants.
- See notes on page 2 for clearing the airway of meconium.
- Endotracheal Intubation may be considered at several steps, perform only if BVM ventilation is unsuccessful or impossible.
- Consider hypovolemia and/or pneumothorax.

Effective Date: 12/01/2011
Next Review Date: 10/2014
Approved by:

SIGNATURE ON FILE
S-SV EMS Medical Director

Date last reviewed revised: 10/11

SIGNATURE ON FILE
S-SV EMS Regional Executive Director
Clearing the airway of meconium:

If the amniotic fluid contains meconium and the infant has absent or depressed respirations, decreased muscle tone, or a heart rate < 100 bpm; do not stimulate or ventilate the infant until meconium has been cleared from the airway as follows:

- **Suction capability ≤ 80 mm Hg:**
  
  Perform direct laryngoscopy immediately after birth for suctioning of the hypopharynx and intubation/suction of the trachea. Accomplish tracheal suctioning by applying suction directly to the endotracheal tube (utilizing a meconium aspirator), as it is withdrawn from the airway. Repeat intubation and suctioning until little additional meconium is recovered or until the heart rate indicates that resuscitation must proceed without delay.

- **Suction capability > 80 mm Hg**
  
  **Do not use an endotracheal tube to suction the trachea.** Use a bulb syringe and, if necessary, a suction catheter to thoroughly suction meconium from the nose, mouth and oropharynx. A laryngoscope blade may be inserted to assist in visualization of the oropharynx during suction with the catheter. Intubation may be necessary for respiratory depression.

Ventilate the infant at 40 to 60 breaths per minute (visualizing rise in chest). Use a neonatal resuscitator bag with oxygen reservoir apparatus.
SUBJECT: APPARENT LIFE THREATENING EVENT (ALTE) - ≤ 2 YEARS OLD

- An Apparent Life-Threatening Event (ALTE) is any episode that is frightening to the observer (may think the infant or child has died) and usually involves any combination of the following symptoms:
  - Apnea (central or obstructive)
  - Color change (cyanosis, pallor, erythema, plethora)
  - Unexplained episode of choking or gagging
  - Marked change or loss in muscle tone (limpness)
- All pediatric patients ≤ 2 years old with possible ALTE shall be transported. If parent/guardian refuses medical care and/or transport, Base / Modified Base Hospital consultation is required prior to AMA release.

BLS

- Determine the severity, nature and duration of episode
  - Was child awake or sleeping at time of episode?
  - What resuscitative measures were taken?
- Obtain a complete medical history to include
  - Known chronic diseases
  - Evidence of seizure activity
  - Current or recent infection
  - Recent Trauma
  - Medication history
  - Unusual sleeping or feeding patterns
  - Known gastro esophageal reflux or feeding patterns
- Assume history given is accurate
- Perform a comprehensive physical assessment including:
  - General appearance
  - Skin color
  - Evidence of trauma
  - Extent of interaction with the environment
  *NOTE: Exam May Be Normal
- Pulse Oximetry (if available)
- Treat any identifiable causes as indicated

ALS

- Cardiac Monitor
- Check Blood Glucose if hypoglycemia suspected

Results < 60 mg/dl?

YES

Go to ALOC Protocol P-24

NO

TRANSPORT

Effective Date: 06/01/2012
Next Review Date: 11/2014
Approved by:
**PEDIATRIC PULSELESS ARREST**

**DEFINITIONS**
- **ROSC** – Return Of Spontaneous Circulation

**REVERSIBLE CAUSES**
- Hypoglycemia
- Hydrogen ion (acidosis)
- Tension pneumothorax
- Toxins
- Hypovolemia
- Hypo-/hyperkalemia
- Tamponade, cardiac
- Hypothermia
- Thrombosis, pulmonary or coronary

**AED USE NOTES**
- In infants < 1 year, a manual defibrillator is preferred. If not available, an AED with a dose attenuator may be used. An AED without a dose attenuator may be used if neither a manual defibrillator nor a dose attenuator is available.

**NOTE:** If arrest is witnessed by EMS and an AED or defibrillator is immediately available, start CPR & use the AED (BLS) or manually defibrillate (ALS) if appropriate as soon as possible.

---

**CPR x 2 min**
- Positive pressure ventilation with BVM & 100% O₂
- Apply AED – Use pediatric system if available for infants & children ≤ 8 years of age*
- Analyze Rhythm / Check Pulse after 2 min of CPR

**VF / VT**

**CPR x 2 min**
- IV/IO access (ALS)
- Analyze Rhythm / Check Pulse after 2 min of CPR

**Defibrillation**
- AED (BLS) or Manual: 2 J/kg (ALS)

**NO**
- **ASYSTOLE / PEA**

**CPR x 2 min intervals**
- IV/IO access (ALS)
- Epinephrine q 3-5 min (ALS)
  - IV/IO: 0.01 mg/kg - 1:10,000 (0.1 ml/kg)
  - ET: 0.1 mg/kg - 1:1,000 (0.1 ml/kg – dilute with 3-5 ml NS)

Advanced airway, if necessary, when possible
- Analyze Rhythm / Check Pulse after q 2 min of CPR

**NO**
- If ROSC – Begin post resuscitation care
- If NO ROSC – Go to Asystole / PEA algorithm

---

**EPINEPHRINE q 3-5 min (ALS)**
- IV/IO: 0.01 mg/kg - 1:10,000 (0.1 ml/kg)
- ET: 0.1 mg/kg - 1:1,000 (0.1 ml/kg – dilute with 3-5 ml NS)

Advanced airway, if necessary, when possible
- Analyze Rhythm / Check Pulse after 2 min of CPR

**Defibrillation**
- AED (BLS) or Manual: 4 J/kg (ALS)

**ASYSTOLE / PEA**

**CPR x 2 min intervals**
- IV/IO access (ALS)
- Amiodarone (ALS)
  - IV/IO: 5 mg/kg
  - May Repeat q 3 – 5 min x 2 (max total = 300 mg)

---

**Effective Date:** 06/01/2011  
**Next Review Date:** 02/2013  
**Approved by:**

**SIGNATURE ON FILE**  
S-SV EMS Medical Director

**SIGNATURE ON FILE**  
S-SV EMS Regional Executive Director
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

PEDIATRIC
REFERENCE NO. P-6

SUBJECT: BRADYCARDIA – With Pulses

Effective Date: 12/01/2011
Next Review Date: 10/2014
Approved by:

<table>
<thead>
<tr>
<th>SIGNATURE ON FILE</th>
<th>SIGNATURE ON FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-SV EMS Medical Director</td>
<td>S-SV EMS Regional Executive Director</td>
</tr>
</tbody>
</table>

**BLS**

- Assess & support ABC’s as needed / high flow O₂
- Assist ventilation with BVM as needed
- Assess V/S including a palpated and auscultated pulse
- Pulse oximetry (if available)

**HR < 60?**

**YES**

- CPR if HR <60/min with signs of poor perfusion despite oxygenation and ventilation

**NO**

- Support ABC’s
- Continue high flow O₂
- Observe

**ALS**

- Cardiac Monitor
- IV/IO NS if appropriate
- Intubate – as needed for severe distress if BVM unsuccessful or impossible

**Persistent symptomatic bradycardia?**

**YES**

Epinephrine
- IV/IO: 0.01 mg/kg 1:10,000 (0.1 mL/kg)
- ET: 0.1 mg/kg 1:1,000 (0.1 mL/kg)
- Repeat q 3 – 5 minutes

If no response to epinephrine:

Atropine
- IV/IO/ET: 0.02 mg/kg
- Minimum dose: 0.1 mg and maximum single dose 0.5 mg

**Base / Modified Base Hospital Order Only**

- Consider transcutaneous pacing

If pulseless arrest develops go to pulseless arrest protocol P-4

**Cardiopulmonary Compromise**

- Hypotension
- Acutely altered mental status
- Signs of shock

**Search for and treat possible contributing factors:**

- Hypovolemia
- Hypoxia / ventilation problems
- Hydrogen ion (acidosis)
- Hypo-/hyperkalemia
- Hypoglycemia
- Hypothermia
- Toxins
- Tamponade, cardiac
- Tension pneumothorax
- Thrombosis
- Trauma
 SUBJECT: TACHYCARDIA – With Pulses

BLS
- Assess & support ABC’s as needed
- High flow O₂
- Assess V/S; including pulse oximetry (if available)

ALS
- Narrow QRS (≤ 0.08 sec)
  - Cardiac Monitor (12 lead if available)
- Wide QRS (> 0.08 sec)
  - Cardiac Monitor (12 lead if available)

Probable Sinus Tachycardia
- Compatible hx consistent with known cause
- P waves present & normal
- Variable R-R & constant P-R
- Infants: rate usually < 220 bpm
- Children: rate usually < 180 bpm
  - Treat underlying cause
  - Consider fluid bolus NS 20 mL/kg
  - Contact Receiving Hospital

Probable Supraventricular Tachycardia
- Compatible hx (vague, nonspecific)
- P waves absent or abnormal
- HR not variable
- Hx of abrupt rate changes
- Infants: rate usually ≥ 220 bpm
- Children: rate usually ≥ 180 bpm
  - Vagal maneuvers
  - Successful?
  - YES
  - Contact Base/Modified Base Hospital for Treatment Consultation
  - NO
  - Adenosine
    - 0.1 mg/kg rapid IVP (max dose 6 mg)
    - If no response, administer second dose after 2 minutes
    - 0.2 mg/kg rapid IVP (max dose 12 mg)

Possible Ventricular Tachycardia
- *Cardiopulmonary compromise?
  - YES
  - Synchronized Cardioversion
    - 0.5 – 1 J/kg
    - If not effective, increase to 2 J/kg
    - Consider sedation
  - NO
  - Base / Modified Base Hospital Order Only

Base / Modified Base Hospital Order Only
- Contact Base/Modified Base Hospital for Treatment Consultation
**SUBJECT: FOREIGN-BODY AIRWAY OBSTRUCTION**

- Signs / symptoms of foreign body airway obstruction (FBAO) – sudden onset of respiratory distress with coughing, gagging, stridor, or wheezing.
- Do not use tongue/jaw lift or perform blind finger sweep
- **Signs of severe obstruction:**
  - Poor air exchange
  - Cyanosis
  - Increased breathing difficulty
  - Inability to speak or breath
  - Silent cough
  - Ask pt: “Are you choking”? If pt nods ‘yes’, act

**BLS**
- Assess ABC’s
- Reassure pt / Encourage coughing
- O₂ / Suction as needed
- Observe
- Transport

- **Signs of severe obstruction?**
- **NO**
- **YES**
  - If pt < 1 yr old
  - 5 back blows followed by 5 chest thrusts
  - If pt ≥ 1 yr old
  - Abdominal thrusts in rapid sequence
  - If ineffective, consider chest thrusts

- **If pt becomes unconscious**
  - Begin CPR
  - Check for F.B. – remove only if visualized
  - Look into mouth when opening the airway
  - Use finger sweep only to remove visible F.B.

**ALS**
- Intubation (only if BVM unsuccessful or impossible)
- If seen, remove F.B. with Magill forceps
- Maintain airway & O₂
- Observe
- Transport

- **Ventilating adequately?**
- **YES**
- **NO**
  - Consider Needle Cricothyrotomy

**Needle Cricothyrotomy**

**Indications**
- Extensive orofacial injuries that make orotracheal intubation impossible.
- Complete airway obstruction with inability to remove F.B. by other methods.

**Contraindications**
- Age < 3 yrs or weight < 15 kg.
- Conscious patient.
- Moving ambulance
- Pt. has midline neck hematoma or massive subcutaneous emphysema

Effective Date: 06/01/2011
Next Review Date: 02/2013
Approved by:

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S-SV EMS Medical Director

**SIGNATURE ON FILE**
S-SV EMS Regional Executive Director
SUBJECT: RESPIRATORY FAILURE / ARREST

Anticipate respiratory failure & possible respiratory arrest if any of the following are present:
- Increased respiratory rate, with signs of distress (e.g. increased effort, nasal flaring, retractions, or grunting)
- An inadequate respiratory rate, effort, or chest excursion (e.g. diminished breath sounds, gasping, and cyanosis), especially if mental status is depressed
- Note: Perform endotracheal intubation only if BVM ventilation is unsuccessful or impossible

**BLS**
- Assess & support ABC’s as needed
- Positive pressure ventilation with BVM and 100% O\(_2\)
- Assess V/S (including a palpated & auscultated pulse) & Pulse Oximetry (if available) at appropriate time during treatment

**ALS**
- Cardiac Monitor
- IV/IO TKO
- Attempt endotracheal intubation if BVM ventilation is unsuccessful or impossible

**Suspect Narcotic OD?**
- **YES**
  - Naloxone
    - 0.1 mg/kg IV/IO, or IM/IN (max dose 2 mg)
    - If no improvement, consider repeat dose x 2 (total 3 doses) q 2-3 minutes
    - Do not administer if advanced airway is in place & pt is being adequately ventilated
    - Naloxone is to be given for inadequate respiratory status only

- **NO**
  - **YES**
    - Blood Glucose Check
  - **NO**
    - Contact Receiving Hospital

**Results < 60 mg/dl?**
- **YES**
  - Go to ALOC Protocol P-24
- **NO**
  - Adequate Response?
    - **YES**
      - Go to Bradycardia Protocol P-6
    - **NO**
      - Contact Receiving Hospital

Effective Date: 06/01/2012
Next Review Date: 01/2015
Approved by:

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S-SV EMS Medical Director

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S-SV EMS Regional Executive Director
SUBJECT: RESPIRATORY DISTRESS – WHEEZING

Wheeze – A high pitched, whistling sound, during expiration, characterizing disease, obstruction or spasm of the lower airways. It may be caused by asthma, bronchiolitis or allergic reaction.

Obtain History – Foreign body aspiration, fever, drooling, sore throat, sputum production, onset, duration.

Do not attempt to visualize the throat or insert anything into the mouth if epiglottitis suspected.

Consider respiratory failure when a child has a history of increased work of breathing and is presenting with an altered LOC and a slow or normal respiratory rate without retractions.

BLS
- Assess V/S including Pulse Oximetry (if available)
- High flow O₂ by blow-by or mask
- Keep patient calm – allow parent to hold the child and/or O₂ mask, if the presence of the parent calms the child
- Consider CPAP for patients age 8 and above
- Consider BVM / assist respirations early for altered LOC or severe distress

ALS
- Cardiac monitor

Albuterol
- 5 mg via HHN, mask or BVM
- May repeat x 1 dose

If response to Albuterol inadequate:
Epinephrine
- 1:1,000 – 0.01 mg/kg IM – thigh preferred (max = 0.3 mg)

Intubate – as needed for severe distress if BVM unsuccessful or impossible

IV/IO TKO

Contact Receiving Hospital

SIGNS OF RESPIRATORY DISTRESS
MILD RESPIRATORY DISTRESS
- Mild Wheezing
- SOB
- Cough

MODERATE – SEVERE RESPIRATORY DISTRESS
- Cyanosis
- Accessory muscle use
- Inability to speak > 2 words
- Severe Wheezing / SOB
SUBJECT: RESPIRATORY DISTRESS – STRIDOR

- The hallmark of upper airway obstruction (i.e. croup, epiglottitis, foreign body airway obstruction) is inspiratory stridor.
- Obtain History – Foreign body aspiration, fever, drooling, sore throat, sputum production, onset, duration, medications, asthma, exposures (allergens, toxins, smoke) or trauma (blunt / penetrating).
- Do not attempt to visualize the throat or insert anything into the mouth if epiglottitis suspected.
- *Note: Perform endotracheal intubation only if BVM ventilation is unsuccessful or impossible.

**BLS**
- Assess V/S including Pulse Oximetry (if available)
- High flow O₂ by blow-by or mask
- Minimize outside stimulation / keep pt calm & allow parent to hold the child and/or O₂ mask if the presence of the parent calms the child
- Provide positive pressure ventilation via BVM if patient deteriorates or becomes completely obstructed

**ALS**
- Cardiac monitor
- Consider nebulized saline

**BASE / MODIFIED BASE HOSPITAL ORDER ONLY**

Nebulized epinephrine
- 0.5 ml/kg – 1:1,000 (max = 5 ml) via HHN, mask or BVM
- For doses < 5 ml, mix with enough NS to ensure 5 ml of volume

**FULL UPPER AIRWAY OCCLUSION?**
- YES
  - Ensure proper airway positioning and seal on BVM mask
  - Attempt to ventilate and reassess
  - If unsuccessful – perform endotracheal intubation
  - Perform Needle Cricothyroidotomy as airway of last resort
- NO
  - Contact Base Hospital

**NEEDLE CRICOTHYROTOMY**

Indications
- Extensive orofacial injuries that make intubation impossible
- Complete airway obstruction with inability to remove foreign body by other methods

Contraindications:
- Age < 3 yrs or estimated weight < 15 kg
- Conscious patient
- Moving Ambulance
- Pt has midline neck hematoma or massive subcutaneous emphysema

---

Effective Date: 06/01/2012
Next Review Date: 11/2014
Approved by:

SIGNATURE ON FILE
S-SV EMS Medical Director

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S-SV EMS Regional Executive Director
SUBJECT: ALLERGIC REACTION / ANAPHYLAXIS

- If the patient is in severe distress, consider immediate transport with treatment en route
- History - History of exposure to allergens (bee stings, seafood, nuts, medications), prior allergic reactions, prior asthma. Medications already administered for this event including benadryl, Epi-pen, or inhalants.
- Note: Perform endotracheal intubation only if BVM ventilation is unsuccessful or impossible

**MILD**
- Acute onset
- Cutaneous reactions, e.g. hives pruritis, flushing, rash, or angioedema **NOT involving the airway**

- **O₂** – Blow by or Non-rebreather mask
- Position of comfort

**Diphenhydramine**
- 1 mg/kg PO, IM or IV (max = 50 mg)

**MODERATE**
- Rapid onset
- Wheezing, mild bronchospasm
- Respiratory distress, retractions
- Itching, rash, hives
- Nausea, weakness, anxiety
- Normotensive for age, tachycardia, SpO₂ > 95%

- **O₂** – Blow by or Non-rebreather mask
- Position of comfort

**Epinephrine 1:1,000**
- 0.01 mg/kg IM - thigh preferred (max = 0.3 mg)

**Diphenhydramine**
- 1 mg/kg IM or IV (max = 50 mg)

For Wheezing / Bronchospasm
- **Albuterol**
  - 5 mg in 6 ml NS via HHN, mask or BVM

**ANAPHYLAXIS**
- Abnormal appearance (agitation, restlessness, somnolence)
- Altered Mental Status
- Signs of diminished perfusion (weak brachial pulse, delayed cap refill, pale or cool skin)
- Respiratory distress - severe bronchospasm
- Stridor
- Bradycardia
- SpO₂ < 95%

- **O₂** – High flow by mask, consider BVM early for ALOC or respiratory distress

**Epinephrine 1:1,000**
- 0.01 mg/kg IM - thigh preferred (max = 0.3 mg)

**IV/IO access**
- **Bolus 20 ml/kg NS**
  - As quickly as possible

For Wheezing / Bronchospasm
- **Albuterol**
  - 5 mg via HHN, mask or BVM

**Epinephrine 1:1,000 – Only if unable to give IV/IO**
- 0.1 mg/kg ET (Max single dose = 2 mg)

**Epinephrine 1:10,000**
- 0.01 mg/kg IV/IO (Max single dose = 0.1 mg)

**Diphenhydramine**
- 1 mg/kg IM or IV/IO (max dose: 50 mg)
Shock in children may be subtle and difficult to recognize. Tachycardia may be the only sign noted. Hypotension is a late sign of shock. Determining B/P may be difficult and readings may be inaccurate in children < 3 years of age

Obtain History Including:
- Onset and duration of symptoms
- Fluid Loss (vomiting, diarrhea)
- Fever, infection, trauma or ingestion
- History of: allergic reaction, cardiac disease or rhythm disturbances

Important signs to watch for:

Note: Perform endotracheal intubation only if BVM ventilation is unsuccessful or impossible

**COMPENSATED SHOCK**
- Tachycardia
- Cool extremities
- Capillary refill time > 2 seconds (despite warm ambient temperature)
- Weak peripheral pulses compared with central pulses
- Normal blood pressure

**DECOMPENSATED SHOCK**
- Hypotension and / or bradycardia (late findings)
- Decreased mental status
- Decreased urine output
- Tachypnea
- Non-detectable distal pulses with weak central pulses

**BASE / MODIFIED BASE HOSPITAL ORDER ONLY**
- Repeat fluid bolus

**FLUID BOLUS**
- NS 20 mL/kg as quickly as possible
- Reassess pulse & perfusion

**CONT. SIGNS OF SHOCK?**
- NO
  - BASE / MODIFIED BASE HOSPITAL ORDER ONLY
    - Repeat fluid bolus
- YES
  - CONTACT RECEIVING HOSPITAL
SUBJECT: OVERDOSE / POISONING

- Poison Control Contact Info for Base Physicians or MICN’s – Voice: 1-800-222-1222 / TTY: 1-800-972-3323
- Note: Perform endotracheal intubation only if BVM ventilation is unsuccessful or impossible
- Consult with base / modified base if blood glucose reading is > 60 mg/dl but hypoglycemia is suspected

BLS

- Assess & support ABC’s, O₂ as needed
- Assess V/S including Pulse Oximetry (if available)
- Consider BVM / assist respirations early for ALOC or respiratory distress

ALS

- Cardiac Monitor

Ventilating adequately, alert with a good gag reflex?

YES

- Intubate as needed for severe distress if BVM unsuccessful or impossible
- IV/IO TKO

NO

- Suspect Narcotic OD?

YES

- Naloxone
  - 0.1 mg/kg IV/IO, or IM/IN (max dose 2 mg)
  - If no improvement, consider repeat dose x 2 (total 3 doses) q 2-3 minutes
  - Do not administer if advanced airway is in place & pt is being adequately ventilated
  - Naloxone is to be given for inadequate respiratory status only

NO

- Check blood glucose

Results ≤ 60 mg/dl?

YES

- Contact Receiving Hospital

NO

Adequate Response?

YES

Dextrose 25%
- 0.5 gm/kg (2 mL/kg) IV/IO (max dose 25 gm)

If no IV/IO or delay anticipated

Glucagon
- 0.5 mg IM/IN (up to age 14)
Subject: Overdose / Poisoning

Nerve Agent / Organophosphate Exposure

- All providers will ensure personal safety by assuring adequate decontamination of victims and using appropriate personal protective equipment (PPE).
- Under no circumstances should responding personnel at any level use personal protective equipment (PPE) or assist in patient decontamination without completing the required training.
- Only patients with severe exposure will be treated within the Exclusion Zone (Hot Zone) or contaminated area by personnel who have specific training to allow them to function in that area.
- Patients in the Exclusion Zone (Hot Zone) with severe exposure shall be treated with IM medication only.
- Auto-injectors are NOT to be used in children < 40 kg.

Mild to Severe Exposure

Patient decontaminated?

YES

- Assess and support ABCs as needed
- O₂ as needed
- BVM / assist respirations / advanced airway adjuncts as needed
- IV/IO NS

NO

Decontaminate patient

Severe Exposure?

YES

- Advanced airway adjuncts as needed

Atropine IM only

- ≤ 2 years old – 0.5 mg IM
- 2 – 10 years old – 1.0 mg IM
- Repeat q 3 – 5 minutes as needed until a positive response is achieved

Pralidoxime (2-PAM) – IM only: if available from the CHEMPACK

- 50 mg/kg IM
- Maximum 1 gram

If seizures present: Go to Seizure Protocol P-26

Decontaminate patient

NO

Decontaminate patient

Support ABC’s / O₂ as needed

IV/IO NS
SIERRA SACRAMENTO VALLEY EMS AGENCY
TREATMENT PROTOCOL – MEDICAL EMERGENCY

PEDIATRIC
REFERENCE NO. P-24

SUBJECT: ALTERED LEVEL OF CONSCIOUSNESS

- Clinical setting and/or medical history may dictate naloxone or dextrose as the initial medication
- Note: glucose paste or glucose solution, sugared soft drinks, orange juice or other oral glucose may be administered if the patient is: 1) able to maintain their airway; and, 2) able to follow commands
- Consult with base / modified base if blood glucose reading is > 60 mg/dl but hypoglycemia is suspected

**BLS**
- Assess & support ABC’s as needed / high flow O₂
- Assess V/S including Pulse Oximetry (if available)
- Consider BVM early for altered LOC or respiratory distress

**ALS**
- Cardiac Monitor
- IV/IO TKO
- Consult with base / modified base if blood glucose reading is > 60 mg/dl but hypoglycemia is suspected

**Suspect Narcotic OD?**

**NEONATE ≤ 28 DAYS OLD**
- Dextrose 12.5%
  - 2 mL/kg IV/IO

**PEDIATRIC > 28 DAYS OLD UP TO & INCLUDING 14 YEARS OF AGE**
- Dextrose 25%
  - 2 mL/kg (0.5 gm/kg) IV/IO
  - (max dose 25 gm)

If no IV/IO or delay anticipated
- Glucagon
  - 0.5 mg IM/IN (up to age 14)

* If Signs / Symptoms of ALTE: Go to ALTE Protocol P-3

Effective Date: 06/01/2012
Next Review Date: 01/2015
Approved by:

SIGNATURE ON FILE
S-SV EMS Medical Director

SIGNATURE ON FILE
S-SV EMS Regional Executive Director
**SIERRA SACRAMENTO VALLEY EMS AGENCY**

**TREATMENT PROTOCOL – MEDICAL EMERGENCY**

**PEDIATRIC**

**REFERENCE NO. P-26**

**SUBJECT: SEIZURE**

- Only prolonged or continuous seizure activity or repetitive seizures require ALS intervention.
- Cooling Measures: loosen clothing and/or remove outer clothing / blankets.
- Use length based resuscitation tape to determine drug doses.
- Note: Perform endotrachael intubation only if BVM ventilation is unsuccessful or impossible.

**BLS**

- ABC’s
  - Assess respiratory status / high flow O₂
  - Consider BVM early for altered LOC or respiratory distress
  - Assess V/S including Pulse Oximetry (if available)

**ALS**

- Cardiac Monitor
- Check Blood Glucose

**Results**

- ≤ 60 mg/dl?
  - YES → Go to ALOC Protocol P-24
  - NO → Consider IV/IO NS

- Midazolam
  - 0.1 mg/kg SLOW IV/IO in 1–2 mg increments (max dose 4 mg)
  - If no IV/IO or delay anticipated:
    - 0.2 mg/kg IM/IN – (max dose 8 mg)

**Status Epilepticus Definition**

Two (2) or more seizures without any intervening periods of consciousness, or a single seizure lasting > 5 minutes

**Effective Date: 06/01/2012**
**Next Review Date: 11/2014**
**Date last reviewed revised: 11/11**

Approved by:

**SIGNATURE ON FILE**

S-SV EMS Medical Director

S-SV EMS Regional Executive Director
SUBJECT: BURNS

INFORMATION NEEDED:
- Type and source of burn: Chemical, electrical, thermal, steam
- Complicating factors: Exposure in enclosed space, total time of exposure, drug or alcohol use, smoke or toxic fumes
- Medical history: Cardiac or respiratory disease, circulatory problems, etc.
- Consider non accidental trauma and required reporting requirements

OBJECTIVE FINDINGS:
- Evidence of inhalation injury or toxic exposure (carbonaceous sputum, hoarseness, or singed nasal hairs)
- Extent of burn (depth – full or partial thickness and BSA affected)
- Entrance or exit wounds for electrical or lightning strike
- Associated trauma from an explosion, electrical shock or fall

BLS
- ABC’s - High flow 02 by mask, consider BVM early for altered LOC or respiratory distress
- Remove wet dressings
- Cover with dry, clean dressings / linen

ALS
- Cardiac monitor
- Pulse oximetry
- Consider early intubation for patients with evidence of an inhalation injury and compromised respiratory effort

IV / IO NS
- In non-burned extremity – for 2° & 3° burns > 9 % BSA, facial burns, or burns requiring IV analgesia
- For 2° or 3° burns > 9 % BSA or signs of hypovolemia, consider a fluid challenge of 20 mL / kg NS

Albuterol (if wheezes are present)
- 5 mg in 6 mL NS via HHN, mask or BVM

Morphine Sulfate
- 0.1 mg/kg Slow IVP / IO (max 5 mg)
- OR
- 0.2 mg/kg IM (max 10 mg)
- May repeat x 2 (max total = 15 mg IV / IO or 30 mg IM)
- Titrate to tolerable pain level

Does pt meet trauma triage criteria?

YES
- Refer to Trauma Triage Policy 860 for appropriate transport destination

NO
- *All patients suffering from an electrical burn shall be transported for evaluation
- *Any patient with the following types of burns require contact with the closest base / modified base hospital for appropriate transport destination decision
  - Full thickness (3°) burns of the hands, feet, face, perineum, or > 2% of any body surface
  - Partial thickness (2°) burns > 9% of body surface
  - Significant electrical or chemical burns
PEDIATRIC BURN CHART
RULE OF NINES

CHILD

INFANT
SUBJECT: ISOLATED EXTREMITY INJURY – INCLUDING HIP OR SHOULDER INJURIES

BLS

- ABC’s
- Assess respiratory status / O₂
- Assess V/S
- Splint injury if necessary

Uncontrolled extremity bleeding?

NO

Does pt meet Trauma Triage Criteria?

YES

Go to General Trauma Management Protocol T-1

ALS

Are ALL of the following present?

- Pain scale documented & pt has moderate – severe pain
- RR > 12
- SBP > age appropriate
- GCS = 15 & no evidence of head injury
- AGE ≥ 4 YEARS OLD

NO

YES

Reassess as needed

Go to General Trauma Management Protocol T-1

IV / IO Access?

NO

YES

Morphine Sulfate
- 0.2 mg/kg SQ / IM (max 10 mg)
- May repeat x 2 (max total = 30mg)
- Titrate to tolerable pain level

Reassess as needed

Contact Base / Modified Base Hospital if additional pain relief required

Morphine Sulfate
- 0.1 mg/kg SLOW IVP / IO (max 5 mg)
- May repeat x 2 (max total dose 15 mg)
- Titrate to tolerable pain level

Reassess as needed
Nausea and vomiting can be a symptom of a multitude of different causes. If at all possible, the specific underlying cause should be determined and treated. Providers should realize that the use of an antiemetic may relieve symptoms while leaving the cause untreated, and possibly, more difficult to detect. With this in mind providers should weigh the benefits of antiemetic use against the possible risk of making an accurate diagnosis more difficult, and the possible side effects of the antiemetic agent.

Treatment of nausea and vomiting is warranted for patients where it may contribute to a worsening of the patient's condition, or where the patient's airway may be endangered.

BLS
- Assess and support ABC's as needed
- Give O₂ as needed
- Assess and treat as appropriate for underlying cause

ALS
- Consider Cardiac Monitor
- Consider IV
- Check Blood Glucose if Hypoglycemia or Hyperglycemia Suspected

Age ≥ 4 years old ?

NO

Zofran (Ondansetron)
- 4 mg ODT (Oral Disintegrating Tablet) / IM OR
- 4 mg slow IVP / IO (over 30 Seconds)
- Base contact required for additional doses

YES

Contact Receiving Hospital
SUBJECT: UNCONTROLLED EXTREMITY BLEEDING

BLS

- ABC’s
- Assess respiratory status / O₂
- Assess V/S
- Attempt to control bleeding with direct pressure

Uncontrolled extremity bleeding?

NO

Does pt meet Trauma Triage Criteria?

YES

Go to General Trauma Management Protocol T-1

NO

Apply approved commercial tourniquet device to bleeding limb(s) on proximal segment

Leave tourniquet in place

Transport ≥ 30 min. expected?

NO

Transport to appropriate destination

YES

Reassess tourniquet for removal

Amputation or Near-Amputation?

YES

Leave tourniquet in place

NO

Significant bleeding from site?

NO

Transport to appropriate destination

YES

Tighten tourniquet & leave in place

Apply pressure dressing and loosen tourniquet (leaving it in place)

Reassess as needed
S-SV EMS GENERAL POLICIES & INFO SECTION
PURPOSE:

To provide an alternative technique for establishing vascular access in critical adult and pediatric patients when peripheral IV access is difficult or time-sensitive.

AUTHORITY:

Health and Safety Code 1797.220 and 1798

California Code of Regulations, Title 22, Division 9, Section 100169

INDICATIONS:

A. Intraosseous infusion is indicated in emergency situations when life-saving fluids or drugs should be administered and IV cannulation is difficult, impossible or too time-consuming to perform.

B. If a peripheral IV cannot be established after two attempts or within 60-90 seconds of elapsed time.

C. For adult and pediatric patients, weighing 3 kg or more, who present with one or more of the following clinical conditions:

1. Cardiac arrest
2. Hemodynamic instability (B/P <90 mmHg and clinical signs of shock)
3. Imminent respiratory failure
4. Status epilepticus with prolonged seizure activity greater than 10 minutes, and refractory to IN / IM anticonvulsants
5. Toxic conditions requiring immediate IV access for antidote

D. IO placement may be considered prior to peripheral IV attempts in cases of cardiopulmonary or traumatic arrest, in which it may be obvious that attempts at placing an IV would likely be unsuccessful or too time consuming, resulting in a delay of life-saving fluids or drugs.
CONTRAINDICATIONS:

A. Fracture or suspected vascular compromise of the selected tibia or humerus.

B. Previous significant orthopedic procedures (IO within 24 hours; prosthesis).

C. Inability to locate anatomical landmarks for insertion.

D. Skin infection overlying the area of insertion.

SITE SELECTION, PREPARATION AND INSERTION NOTES

A. In small children (3-12 kg), the tibial tuberosity cannot be palpated as a landmark, so the insertion site is two finger-breadths below the patella in the flat aspect of the medial tibia.

B. In larger children (13-39 kg) the insertion site is located on the flat aspect of the medial tibia one finger-breadth below the level of the tibial tuberosity. If the tibial tuberosity is not palpable, insert two finger-breadths below the patella in the flat aspect of the medial tibia.

C. For adults, proximal or distal tibial sites are preferred. If unavailable, the humeral site may be utilized as a site of last resort by providers who choose to approve their paramedic personnel to access this optional site:

1. The proximal tibial site is one finger-breadth medial to the tibial tuberosity.

2. The distal tibial site is two finger-breadths above the medial malleolus (inner aspect of ankle) in the midline of the shaft of the tibia.

3. Humeral insertion site is considered a site of last resort and may only be utilized by paramedic personnel who are adequately trained and approved by their provider to access this site (Intraosseous Infusion – Optional Humeral Site, Reference No. 1101-A)

4. Prep the surface with a recognized antiseptic agent and wipe dry with a sterile gauze pad.

5. Insert the device according to manufacture specific directions

6. Syringe flush catheter with 10 ml of normal saline. Remember, No Flush = No Flow. If the patient responds to painful stimuli, SLOWLY (over 1 to 2 minutes) administer 0.5 mg/kg of 2% Lidocaine (not to exceed 50 mg) prior to saline flush. Consider additional bolus of saline if flow rates slower than expected.

7. Utilize a blood pressure cuff or pressure bag to help infuse fluids.
8. Dress site, secure tubing.

OPTIONAL SECONDARY HUMERAL INSERTION SITE:

A. Providers may choose whether or not to allow their personnel to utilize the humerus as a secondary insertion site for patients who meet criteria for IO insertion and for whom utilization of the primary tibia insertion site is contraindicated.

B. Humeral insertion site selection:

Expose the shoulder and place the patient’s arm against the patient’s body, resting the elbow on the stretcher or ground and the forearm resting on the abdomen. Note the humeral head on the anterior-superior aspect of the upper arm, or the anterior-lateral shoulder. Palpate and identify the mid-shaft humerus and continue palpating toward the proximal end (humeral head). Near the shoulder feel for the small protrusion, this is the base of the greater tubercle and the insertion site. With the opposite hand, pinch the anterior and inferior aspects of the humeral head, while confirming the identification of the greater tubercle. This will help ensure that you have located the midline of the humerus.

C. Providers choosing to utilize this optional insertion site will ensure that all of their paramedic personnel are adequately trained and approved to access this site.

PRECAUTIONS AND POSSIBLE COMPLICATIONS:

A. Chest compressions (if indicated), airway and breathing should be established first in accordance with other protocols.

B. No more than one attempt in each tibia or humerus.

C. Local infiltration of fluids / drugs into the subcutaneous tissue due to improper needle placement.

D. Cessation of the infusion due to clotting in the needle, or the bevel of the needle being lodged against the posterior cortex.

E. Osteomyelitis or sepsis.

F. Fluid overload.

G. Fat or bone emboli.

H. Fracture.
SUBJECT: INTRAOSSEOUS INFUSION

S-SV EMS APPROVED IO DEVICES:

The following IO devices have been approved for use in the S-SV EMS Region:

A. Bone Injection Gun (B.I.G.)®

B. EZ-IO®

C. Manual pediatric IO device – bone marrow type needles, 15 and 18 gauge size
PURPOSE:

To define the indications and use of the King Airway in the prehospital setting by Paramedic, Advanced EMT, or approved EMT personnel.

AUTHORITY:

Health and Safety Code 1797.220 and 1798
California Code of Regulations, Title 22, Division 9, Section 100169

POLICY:

Paramedic, Advanced EMT, or approved EMT personnel may use the King Airway as an option for advanced airway management.

PROCEDURE:

A. **Indications:** Patients who require assisted ventilation and meet criteria for an advanced airway:

1. Cardiac arrest.
2. Respiratory arrest or severe compromise AND unable to adequately ventilate with BVM.
3. May be used as a primary airway or after one or more unsuccessful endotracheal intubation attempts (paramedic personnel only).

B. **The following contraindications shall be observed:**

1. Conscious patients with a gag reflex.
2. Patients under four (4) feet tall.
3. Known cases of esophageal diseases, suspected ingestion of caustic substances or extensive airway burns.
4. Laryngectomy with stoma.
C. **Placement:**

1. Select appropriate sized King Airway:
   
   a. Size 3 – Patient between 4 and 5 feet tall (55 ml air)
   b. Size 4 – Patient between 5 and 6 feet tall (70 ml air)
   c. Size 5 – Patient over 6 feet tall (80 ml air)

2. Check King Airway cuffs to ensure patency. Deflate tube cuffs. Leave syringe attached. Lubricate the tip of the tube with water soluble lubricant.

3. Oxygenate with 100% oxygen.

4. Position the head. The ideal position is the “sniffing position”. A neutral position can also be used if trauma is suspected.

5. Hold the King Tube at the connector with the dominate hand.

6. With non-dominate hand, hold mouth open and apply chin lift.

7. Using a lateral approach, introduce tip into mouth.

8. Advance the tip behind the base of the tongue while rotating tube back to midline so that the blue orientation line faces the chin of the patient.

9. Without exerting excessive force, advance tube until base of connector is aligned with teeth or gums.

10. Inflate cuffs based on size according to Section 1 above.

11. Attach bag-valve to King Airway. While gently bagging the patient to assess ventilation, withdraw the airway until ventilation is easy and free flowing.

12. Attach bag valve device and verify placement by **ALL** of the following:

   a. Rise and fall of the chest
   b. Bilateral breath sounds
   c. Absent epigastric sounds
   d. CO2 measurement (colorimetric capnography)

13. If there is any question about the proper placement of the King Airway, deflate the cuffs and remove the device, ventilate the patient with a BVM for 30 seconds and repeat.

14. Secure the tube with tape or commercial tube holder. Note depth marking on tube.
SUBJECT: KING AIRWAY

15. Continue to monitor the patient for proper tube placement throughout prehospital treatment and transport.

D. Troubleshooting:

1. If placement is unsuccessful, remove tube, ventilate via BVM and repeat the sequence of steps.

2. If unsuccessful on second attempt, BLS airway management should be resumed.

3. Most unsuccessful placements relate to failure to keep tube in midline during placement.

E. Additional Information:

1. Cuffs can be lacerated by broken teeth or dentures. Remove dentures before placing tube.

2. Do not force tube, as airway trauma can occur.

F. Documentation:

Document time of placement and results of tube placement checks performed throughout the resuscitation and transport.

CROSS REFERENCES:

Policy and Procedure Manual

EMT Scope of Practice, Reference No. 801
Advanced EMT Scope of Practice, Reference No. 802
Paramedic Scope of Practice, Reference No. 803
Pulseless Arrest, Reference No. C-1
Airway Obstruction, Reference No. R-1
Respiratory Arrest, Reference No. R-2
Shock / Non-Traumatic Hypovolemia, Reference No. M-2
Ingestions and Overdoses, Reference No. M-5
Altered Level of Consciousness. Reference No. N-1
General Trauma Management, Reference No. T-1
Burns: Thermal & Electrical, Reference No. T-10
SUBJECT: MUCOSAL ATOMIZATION DEVICE

PURPOSE:

To define the indications and use of the Mucosal Atomization Device (MAD) in the prehospital setting by paramedic personnel.

AUTHORITY:

Health and Safety Code 1797.220 and 1798
California Code of Regulations, Title 22, Division 9

OVERVIEW:

In the absence of an established IV, intranasal is a rapid route offering a high level of bio-availability of the medication being administered. The intranasal route can reduce the risk of needlesticks while delivering effective medication levels.

The rich vasculature of the nasal cavity provides a direct route into the bloodstream for medications that easily cross the mucous membranes. Due to this direct absorption into the bloodstream, rate and extent of absorption are relatively comparable to IV administration.

INDICATIONS:

Paramedic and Advanced EMT personnel may utilize the Mucosal Atomization Device (MAD) as an alternative drug delivery adjunct for patients without IV access who require urgent medication administration.

MEDICATIONS THAT MAY BE ADMINISTERED VIA INTRANASAL (IN) ROUTE:

A. Glucagon

B. Naloxone (Narcan)

C. Midazolam (Versed) – 5 mg/ml concentration required
SUBJECT: MUCOSAL ATOMIZATION DEVICE (MAD)

PROCEDURE:

A. Determine appropriate medication dose per applicable protocol.
B. Draw up medication into a syringe using appropriate transfer needle.
C. Purge air from syringe.
D. Place mucosal atomization device on the end of the syringe and screw into place.
E. Gently insert the atomizer into the nare. Stop once resistance is met.
F. Rapidly administer the medication when patient fully exhales and before inhalation. ADMINISTER ½ DOSE IN EACH NOSTRIL.
G. Do not exceed 1.0 ml per nostril.
H. Evaluate the effectiveness of the medication, if desired effect has not been achieved, consider repeating and/or changing route of administration.

CONTRAINDICATIONS:

A. Epistaxis.
B. Nasal Trauma.
C. Nasal Septal Abnormalities.
D. Nasal Congestion / Discharge.

PRECAUTIONS:

A. Nasal administration does not always work for every patient.
B. Nasal administration is less likely to be effective if the patient has been abusing inhaled vasoconstrictors such as cocaine.

CROSS REFERENCES:

Policy and Procedure Manual
Advanced EMT Scope of Practice, Reference No. 802
Paramedic Scope of Practice, Reference No. 803
Restraint of Violent Patients, Reference No. 852
SUBJECT: MUCOSAL ATOMIZATION DEVICE (MAD)

Tachycardia with Pulses, Reference No. C-6
Bradycardia, Reference No. C-7
Respiratory Arrest, Reference No. R-2
Ingestions and Overdoses, Reference No. M-5
General Medical Treatment Protocol, Reference No. M-6
Altered Level of Consciousness, Reference No. N-1
Seizure, Reference No. N-2
Cold Stress Emergencies, Reference No. E-2
Pediatric Respiratory Arrest, Reference No. P-12
Pediatric Overdose and/or Poisoning, Reference No. P-22
Pediatric Altered Level of Consciousness, Reference No. P-24
Pediatric Seizure, Reference No. P-26
SUBJECT: ADVANCED AIRWAY MANAGEMENT

PURPOSE:

To establish minimum guidelines, procedures and requirements for the use of advanced airway procedures in critical patients in the S-SV EMS Region.

AUTHORITY:

Health and Safety Code 1797.220 and 1798

California Code of Regulations, Title 22, Division 9

POLICY:

A. The S-SV EMS approved advanced airway management procedures for adult patients consist of the following:

1. Endotracheal Intubation
2. Nasotracheal Intubation
3. Insertion of an esophageal-tracheal double-lumen airway (ETDLA)
4. Insertion of a King Airway device

B. The preferred method of airway management for the pediatric patient ≤ 14 years of age is Bag-Valve-Mask (BVM) ventilation. Intubation in this age group should be performed only if BVM is unsuccessful or impossible (see General Pediatric Protocol #P-1)

C. ALS (Paramedic) personnel are authorized to perform any of the advanced airway skills listed in this policy.

D. LALS (Advanced EMT) personnel are authorized to perform the skill of insertion of an ETDLA or King Airway device only. LALS personnel may not intubate.

E. BLS personnel are authorized to perform the skill of insertion of an ETDLA or King Airway device only if their provider has been authorized by the S-SV EMS Agency as an approved EMT optional skills provider and they have successfully completed an approved training program. BLS personnel may not intubate.
F. Defer advanced airway insertion rather than interrupt chest compressions in the cardiac arrest patient.

G. ALS / LALS and BLS personnel must confirm correct advanced airway placement with physical assessment (auscultation, observation of chest rise, visualization of the tube passing through the cords, etc.) in addition to one or more of the following methods:

1. Waveform Capnography (Preferred)
2. Esophageal Detection Device (EDD) and Capnometer
3. Esophageal Detection Device (EDD) and Colorimetric end-tidal CO$_2$ detector device

H. ALS / LALS personnel must re-confirm correct advanced airway placement utilizing the methods listed above on any patient where the airway has been established by a BLS provider. ALS / LALS personnel assume responsibility for the advanced airway once they have arrived on scene and established patient care.

I. An ALS / LALS provider who establishes an advanced airway shall accompany the patient to the hospital if the patient is transported. This does not apply to multiple patient incidents or when patient care is appropriately transferred to another ALS / LALS provider (Air Ambulance, Air Rescue). In these cases, the receiving ALS / LALS provider must re-confirm correct advanced airway placement immediately upon transfer of patient care.

J. Advanced airway placement must be re-confirmed by the EMT, Advanced EMT, or Paramedic utilizing the methods listed above, any time there is concern about the patency of the airway or any time there is a movement of the patient; including but not limited to:

1. Movement of the patient onto the ambulance gurney
2. Movement of the patient into or out of the ambulance
3. Movement of the patient from the ambulance gurney to the hospital gurney when able.

If the advanced airway is determined to no longer be patent during a reconfirmation assessment, appropriate measures must be immediately taken to re-establish the patency of the airway. This may include removal of the advanced airway and the utilization of BLS airway measures until the advanced airway can be appropriately re-established. The paramedic shall confirm that the advanced airway remains patent when the patient is transferred from the ambulance gurney to the hospital gurney and any concerns must be reported immediately to the receiving ED physician.

PROCEDURE:

A. Indications:
1. Patients who require assisted ventilation and meet the following criteria:
   a. Cardiac arrest
   b. Respiratory arrest or severe compromise AND unable to adequately ventilate with BVM

B. Endotracheal Intubation – (ALS – Paramedic personnel only):

1. An intubation attempt is defined as the introduction of an endotracheal tube past the patient’s teeth.

2. Make no more than 2 total attempts per patient at placing the endotracheal tube. Each attempt should not last longer than 30 seconds. Ventilate with 100% oxygen for a minimum of one minute prior to each attempt. If endotracheal intubation is unsuccessful; an ETDLA or King Airway Device shall be utilized if an advanced airway remains necessary.

3. Pediatric intubation should be performed only if BVM ventilation is unsuccessful or impossible (see General Pediatric Protocol #P-1)

C. Esophageal-Tracheal Double-Lumen Airway (ETDLA) Device (Combitube®) or King Airway Device:

1. An ETDLA or King Airway device may be placed as a primary airway or after unsuccessful attempt(s) at endotracheal intubation

2. The ETDLA comes in two sizes:
   a. Small Adult 37 fr. – Patient between 4 and 5 feet tall
   b. Adult 41 fr. – Patient over 5 feet tall

3. The King Airway comes in three sizes:
   a. Size 3 – Patient between 4 and 5 feet tall
   b. Size 4 – Patient between 5 and 6 feet tall
   c. Size 5 – Patient over 6 feet tall

4. The ETDLA and King Airway devices are not to be used in patients < 4 feet tall.

D. Confirm Advanced Airway Placement:

1. If waveform capnography is not available, use an approved bulb-type esophageal detection device (EDD) prior to ventilating through the tube. Squeeze the bulb, apply to end of tube, and release the bulb. If the tube properly placed, the bulb should fully inflate in ≤ 5 seconds. Remove the bulb and begin ventilation.
2. Auscultate both lung fields for breath sounds, confirm chest rise with ventilation. Listen over left upper quadrant of the abdomen for air in the stomach.

3. Attach an approved end-tidal CO\textsubscript{2} detector (colorimetric device), capnometer or waveform capnography unit, that must remain in place until arrival at the hospital, \textit{Waveform Capnography is preferred and must be used if available}. 

4. All devices used to confirm advanced airway placement must be documented on the PCR (EDD, ETCO\textsubscript{2} – colorimetric or capnography)

5. If there is any doubt as to the proper placement of the endotracheal tube, visualize the pharynx and vocal cords with laryngoscope and use capnography. If still in doubt, suction the patient, deflate the cuff and remove the endotracheal tube

E. If the patient regains consciousness while intubated, do not extubate. Use restraints as necessary to prevent uncontrolled extubation. Consider sedation – Base / Modified Base Physician order only.

CROSS REFERENCES:

Policy and Procedure Manual

EMT Scope of Practice, Reference No. 801
Advanced EMT Scope of Practice, Reference No. 802
Paramedic Scope of Practice, Reference No. 803
Pulseless Arrest, Reference No. C-1
Airway Obstruction, Reference No. R-1
Respiratory Arrest, Reference No. R-2
Shock / Non-Traumatic Hypovolemia, Reference No. M-2
Ingestions and Overdoses, Reference No. M-5
Altered Level of Consciousness. Reference No. N-1
General Trauma Management, Reference No. T-1
Burns: Thermal & Electrical, Reference No. T-10
General Pediatric Protocol, Reference No. P-1
King Airway Device, Reference No. 1102
PURPOSE:

To define the indications and use of CO-Oximeter devices in the prehospital setting by paramedic personnel.

AUTHORITY:

Health and Safety Code 1797.220 and 1798

California Code of Regulations, Title 22, Division 9, Section 100146 & 100169

OVERVIEW:

As carbon monoxide (CO) is considered the “silent killer”, its presence should be considered on the fire ground, in confined spaces, when multiple unexplained illnesses occur within the same occupancy, or when a CO detector has alarmed.

CO is only slightly lighter than air and usually rises to the ceiling with the warm currents of air blown into a house. Because its specific gravity is so close to that of air, it blends quickly with a home’s atmosphere and is quite pervasive. A typical home can be charged within minutes with lethal levels of CO by a malfunctioning forced air furnace. This silent killer is particularly adept at killing those in their sleep, as they tend to succumb without any waking symptoms.

CO has an affinity with hemoglobin, the oxygen carriers of the blood, which is 250 times greater than that of oxygen. The hemoglobin becomes saturated with CO, like a magnet, replacing oxygen molecules and greatly reducing available oxygen to the cells of the body – particularly the brain.

INDICATIONS:

The use of CO-Oximeters to measure CO exposure is an advanced life support skill because it is considered a laboratory test rather than a measurement of vital signs.

S-SV EMS paramedic personnel may utilize an approved CO-Oximeter as a laboratory testing device on any patient (adult and pediatric) with suspected carbon monoxide (CO) exposure.
SUBJECT: CO-OXIMETER DEVICES

Signs & Symptoms of Possible CO exposure

The initial symptoms of CO exposure are insidious, similar to the flu and thus seemingly benign. These symptoms increase in severity as the SpCO level rises and may include:

1. Dizziness / vertigo
2. Headache
3. Shortness of breath
4. Nausea / vomiting
5. Fatigue
6. Confusion / altered judgment
7. Syncope
8. Tachycardia
9. Cardiac arrhythmias
10. Seizures
11. Shock
12. Coma
13. Apnea

PROCEDURE:

A. All persons entering areas of suspected elevated CO levels should don appropriate PPE, including, but not limited to SCBA.

B. Remove all ambulatory persons / patients to fresh air as soon as safely permitted. Remaining patients should be triaged and extricated according to START-TRIAGE procedures.

C. Secondary triage including application of the CO-Oximeter away from the CO source in accordance with the accompanying algorithm will allow for determination of further treatment and transport considerations.

D. Approved triage tags should be used when necessary with CO level, time measured, and time O2 applied recorded on the triage tag along with standard information.

E. Use of the CO-Oximeter should not interfere with treatment or transport of any other suspected or identified injury or illness nor does it negate the need for further management and investigation of the symptomatic patient as other medical conditions may still be present.

F. The following guidelines should be utilized regarding placement of the CO-Oximeter finger sensor:

1. Sensor should be placed on the middle or ring finger. Index finger may be used, but as a last choice.
SUBJECT: CO-OXIMETER DEVICES

2. Thumb placement may be utilized for patients 10 – 50 kg.

3. Sensor should not be below heart level.

4. Insert finger until the tip of finger hits the “Stop Block”, LED’s (red light) should pass through mid-nail, not cuticle.

CONTINUOUS QUALITY IMPROVEMENT

A copy of the completed PCR for any patient on whom a CO-Oximeter monitoring device is utilized must be forwarded to the S-SV EMS Agency within 30 days for Continuous Quality Improvement purposes.

CARBON MONOXIDE (CO) EXPOSURE ASSESSMENT AND TRIAGE ALGORITHM:

Patients with the following SpCO measurements should be considered critical and require treatment with 100% O₂ and immediate rapid transport to the closest facility
- > 25% in Adults
- > 15% in Pediatrics or Pregnant Females

0 – 3%
- Measure SpCO with CO-Oximeter device
- Considered a normal reading
- Treat according to appropriate protocol based on patient presentation

3 – 12%
- Symptoms of CO exposure?
  - YES
    - 100% O₂
    - Treat according to General Medical Protocol # M-6 or other appropriate protocol based on patient presentation
    - Transport to closest facility
  - NO
    - No further evaluation of SpCO needed
    - Treat according to appropriate protocol based on patient presentation
    - Contact Base Hospital if additional assistance is required

> 12%
- Contact Receiving Hospital
SUBJECT: ACCESSING A PRE-EXISTING VASCULAR ACCESS DEVICE

PURPOSE:
To provide vascular access utilizing a Pre-Existing Vascular Access Device (PVAD) for patients in extremis when no other vascular access is available.

AUTHORITY:
California Code of Regulations, Title 22, Division 9, Chapters 3 and 4.

DEFINITION:
A Pre-Existing Vascular Access Device (PVAD) is an indwelling catheter / device placed into one of the central veins, to provide vascular access for those patients requiring long-term intravenous therapy or hemodialysis.

POLICY
Paramedics and Advanced EMTs may access pre-existing vascular devices on any patient who is in extremis and no other vascular access is available or appropriate. The types of catheters used are:

A. Indwelling catheter / device exiting externally inserted into the superior vena cava or right atrium (Broviac, Hickman, PICC and others).

B. Hemodialysis shunt (fistulas / grafts): used to divert blood flow from an artery to a vein.

C. Internally implanted devices (Portacaths, etc.): access that is subcutaneous requiring entry through the skin and special equipment to access. These types of devices are Not approved for use by S-SV EMS personnel.

INDICATIONS:
Only in the absence of any other observable vascular access, when the patient has:

A. Cardiopulmonary arrest
SUBJECT: ACCESSING A PRE-EXISTING VASCULAR ACCESS DEVICE

B. Extremis due to circulatory shock
C. Critical need for pharmacological intervention

COMPLICATIONS

A. Infection: Due to the location of the catheter, strict adherence to aseptic technique is crucial when handling a PVAD.
   1. Use of sterile gloves is recommended;
   2. Prep injectable port and surrounding skin with chlorhexidine prior to attaching I.V. tubing;
   3. Use new supplies if equipment becomes contaminated;
   4. Re-cover port with sterile dressing and securely tape.
B. Air Embolism: The PVAD provides a direct line into the central circulation; introduction of air into these devices can be hazardous

APPROVED INFUSIONS

A. Intravenous solutions
B. All medications except diazepam (Valium) as it interacts with silicone causing crystallization of the medications and deterioration of the silicone.

PROCEDURE

A. Do not remove injection cap from catheter.
B. Do not use a syringe smaller than 10 ml to prevent catheter damage from excess infusion pressure.
C. Always expel air from syringe prior to administration.
D. Follow all medications with 5 ml of saline to avoid clots.
E. Do not inject medications or fluids if resistance is met when establishing patency.
F. Do not allow I.V. fluids to run dry.
G. Do not manipulate or remove an indwelling catheter under any circumstances.
H. Should damage occur to the external catheter, clamp immediately between the skin exit site and the damaged area to prevent air embolism or blood loss.
PURPOSE

To standardize the skills identified as infrequently used and provide a method for annual evaluation of all S-SV EMS Agency certified Advanced EMT’s and accredited paramedic’s ability to safely, efficiently and accurately perform them.

To establish a standardized method of ensuring that appropriate education and training is provided to all LALS/ALS prehospital personnel in the S-SV EMS Region on a regularly scheduled basis.

AUTHORITY

California Health and Safety Code, Division 2.5, Section 1797.214.

California Code of Regulations, Title 22, Division 9, Sections 100107, 100128, 100147, 100165, 100169 and Chapter 12

DEFINITIONS

Infrequently Used Skill: Those skills, identified below, that are performed rarely in the prehospital setting and/or that have serious complications when performed incorrectly.

A. Advanced EMT (AEMT) Infrequently Used Skills

1. Adult
   a. Esophageal Tracheal Airway Device (Combitube/King Airway Device)
   b. Defibrillation/Cardioversion
   c. Continuous Positive Airway Pressure (CPAP) devices

2. Pediatric
   a. Defibrillation/Cardioversion
   b. Intraosseous Infusion
B. Paramedic Infrequently Used Skills

1. Adult
   a. Endotracheal Intubation
   b. Nasotracheal Intubation
   c. Esophageal Tracheal Airway Device (Combitube/King Airway Device)
   d. Needle Cricothyrotomy
   e. Defibrillation/Cardioversion
   f. Needle Decompression
   g. Transcutaneous Cardiac Pacing
   h. Intraosseous Infusion
   i. Continuous Positive Airway Pressure (CPAP) devices

2. Pediatric
   a. Endotracheal Intubation
   b. Needle Cricothyrotomy
   c. Defibrillation/Cardioversion
   d. Intraosseous Infusion

**S-SV EMS Agency Regional Training Module:** A standardized training module developed by the S-SV EMS Agency in conjunction with appropriate S-SV EMS Regional committee members. It is the intent of the S-SV EMS Agency to develop and distribute this training module on a regularly scheduled annual basis. However, additional more frequent training modules may be developed to address time sensitive material as necessary.

**POLICY:**

A. Each LALS/ALS prehospital service provider in the S-SV EMS region shall verify that every AEMT and/or paramedic in their agency has successfully performed all of the infrequently used skills a minimum of once every 12 months. An extension to the 12 month requirement resulting from special circumstances may be individually approved by the S-SV EMS Agency upon request.

B. These skills shall be verified by successful performance in a structured training environment.

C. Skills competency shall be verified by one of the following personnel:

1. LALS/ALS service provider’s CQI Coordinator or their designee (i.e. – Training Coordinator, Field Training Officer)

2. LALS/ALS service provider’s Medical Director
3. Base/Modified Base Prehospital Coordinator or their designee

D. LALS/ALS service providers shall utilize the S-SV EMS Infrequently Used Skills – Verification of Maintenance checklists (Reference No. 1110-B through 1110-N) for evaluating skills competency.

E. S-SV EMS Agency Regional Training Modules will be developed and distributed on an annual basis (normally around the beginning of the 4th quarter of the calendar year). All LALS/ALS provider agencies are required to provide these training modules in an instructor based format (i.e. – structured classroom or one on one setting). All AEMT and Paramedic personnel are required to complete this training no later than the end of the following calendar quarter. EMR and EMT personnel are encouraged to complete this training as appropriate but it is not a mandatory requirement for BLS personnel.

F. LALS/ALS service providers shall maintain documentation of skills competency and regional training module completion for each of their AEMT and/or paramedic personnel for a period not less than four (4) years.

1. The S-SV EMS Agency Skills Competency/Regional Training Module Verification Summary (Reference No. 1110-A) shall be used for documenting the completion of these requirements.

2. Documentation of skills competency and regional training module completion is subject to audit by the S-SV EMS Agency. Any AEMT or paramedic who is determined to not have current skills verification and/or regional training module completion documentation on file will not be allowed to function as an S-SV EMS certified AEMT or accredited paramedic until they complete the required skills verification and/or regional training module.

CROSS REFERENCES:

Prehospital Care Policy Manual

Skills Competency/Regional Training Module Verification Summary Form, Reference No. 1110-A

Adult Endotracheal Intubation Annual Skills Verification Form, Reference No. 1110-B

Adult Nasotracheal Intubation Annual Skills Verification Form, Reference No. 1110-C

Esophageal Tracheal Airway Device Annual Skills Verification Form, Reference No. 1110-D

King Airway Device Annual Skills Verification Form, Reference No. 1110-E

Needle Cricothyrotomy (Adult & Child) Annual Skills Verification Form, Reference No. 1110-F
SUBJECT: INFREQUENTLY USED SKILLS – VERIFICATION OF MAINTENANCE/REGIONAL TRAINING MODULE

Adult Cardioversion/Defibrillation Annual Skills Verification Form, Reference No. 1110-G

Needle Chest Decompression Annual Skills Verification Form, Reference No. 1110-H

Transcutaneous Cardiac Pacing Annual Skills Verification Form, Reference No. 1110-I

Intraosseous Infusion – Powered Device (EZ-IO® or B.I.G.®) Adult & Pediatric Annual Skills Verification Form, Reference No. 1110-J

Continuous Positive Airway Pressure (CPAP) Devices Annual Skills Verification Form, Reference No. 1110-K

Pediatric Endotracheal Intubation Annual Skills Verification Form, Reference No. 1110-L

Pediatric Cardioversion/Defibrillation Annual Skills Verification Form, Reference No. 1110-M

Intraosseous Infusion (Manual Pediatric) Annual Skills Verification Form, Ref. No. 1110-N
Regional EMS Helicopter Resource Guide
Contact your primary dispatch center to request a helicopter

The Helicopter Resource Guide was developed by the Aircraft Utilization/Quality Improvement Committee of the Sierra-Sacramento Valley Emergency Medical Services (S-SV EMS) Agency

REVISED SEPTEMBER 2011

SIERRA – SACRAMENTO VALLEY EMERGENCY MEDICAL SERVICES AGENCY
- Placer County
- Yolo County
- Yuba County
- Sutter County
- Nevada County
- Colusa County
- Butte County
- Shasta County
- Tehama County
- Siskiyou County
PURPOSE

EMS helicopters are a specialized resource for prehospital response, transport, and care of patients. The purpose of this handbook is to provide all EMS ground providers standardized guidelines for the integration of the request, dispatch and utilization of EMS aircraft, within the S-SV EMS region. The primary goal is to minimize loss of life, disability, pain and suffering by ensuring the timely availability of air medical resources in the S-SV EMS Region.

UTILIZATION

A. AIR RESOURCES

EMS aircraft classifications:

1. **Air Ambulance**: Specially configured for transporting critically ill. Minimum of (2) ALS licensed attendants. Generally have an expanded scope of practice.

2. **ALS Rescue Aircraft**: Primary function is not prehospital emergency medical transport and may be used when appropriate. Minimum of (1) ALS licensed medical attendant.

3. **BLS Rescue Aircraft**: Primary function is not prehospital emergency medical transport and may be used when appropriate. Minimum of (1) attendant certified as an EMT-I.

4. **Auxiliary Aircraft**: Primary function is not prehospital emergency medical transport and may be used when appropriate. Medical attendant has no BLS certification in the aero medical transport of patients.
B. AIR AMBULANCES

1. Based in S-SV EMS Region

   **Calstar: RN/RN, Night Vision, VFR, IFR**

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<th>Location</th>
<th>Type</th>
<th>Capabilities</th>
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<tbody>
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<td>3</td>
<td>Auburn</td>
<td>Skids</td>
<td>2 patient capability, rear load</td>
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<tr>
<td>6</td>
<td>South Lake Tahoe</td>
<td>Skids</td>
<td>1 patient capability, rear load</td>
</tr>
<tr>
<td>8</td>
<td>Vacaville</td>
<td>Skids</td>
<td>2 patient capability, rear load</td>
</tr>
<tr>
<td>10</td>
<td>Jackson</td>
<td>Skids</td>
<td>2 patient capability, rear load</td>
</tr>
<tr>
<td>11</td>
<td>McClellan</td>
<td>Skids</td>
<td>2 patient capability, right side load</td>
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   **Care Flight: RN/CCEMTP, Night Vision, VFR, TAWS, NVG**

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<th>Code</th>
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<th>Type</th>
<th>Capabilities</th>
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</thead>
<tbody>
<tr>
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<td>Skids</td>
<td>1 patient capability, L side load</td>
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<tr>
<td>1</td>
<td>Reno</td>
<td>Skids</td>
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</tr>
<tr>
<td>2</td>
<td>Gardnerville</td>
<td>Skids</td>
<td>1 Patient capability, L side load</td>
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   **Enloe Flightcare: RN/Paramedic, Night Vision, VFR,**

   Skids (with skis for snow landing – winter), 1 patient capability, L side load.

   **PHI Air Medical: CFRN/FP-C, Night Vision, VFR, IFR**

<table>
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<th>Location</th>
<th>Type</th>
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<td>4-2</td>
<td>Sonora</td>
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<tr>
<td>4-1</td>
<td>Modesto</td>
<td>Skids</td>
<td>1 patient capability, IFR, rear load</td>
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   **REACH: RN/EMT-P, Night Vision**

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<tr>
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<th>Location</th>
<th>Type</th>
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<td>7</td>
<td>Marysville</td>
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<td>1 patient capability, IFR, R side load</td>
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<td>5</td>
<td>Redding</td>
<td>Skids</td>
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<tr>
<td>6</td>
<td>Lakeport</td>
<td>Skids</td>
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</tr>
<tr>
<td>2</td>
<td>Stockton</td>
<td>Skids</td>
<td>1 patient capability, VFR, L side load</td>
</tr>
</tbody>
</table>

2. Based outside S-SV EMS Region

   **Mercy Flights: CFRN, NVG**

   Mercy Flight 105, skids, 1 patient capability, rear load.
C. ALS AIR RESCUE

CHP: EMT-P, Night Vision, VFR, FLIR, Search

Short Haul (1660 Lbs.), External Hoist (450 Lbs.) and technical rescue capable. Skids, can reconfigure for 1 patient capability, L side load,

H-20 & H-24 (Auburn)
H-14 & H-16 (Redding)
H-30 & H-32 (Napa)

Metro Fire Copter 1: Hoist, SAR, can reconfigure for 1 patient capability (does not require landing). (Sacramento) external hoist with 600 lb. payload.

D. AUXILIARY RESCUE AIRCRAFT

CAL FIRE: Available during Fire Season Only, Short Haul
Vina: Short haul, 1 patient capability
Columbia: Short Haul, 1 patient capability
ACTIVATION

A. EMS aircraft shall be requested by the Incident Commander (IC), or designee. The request for EMS Aircraft shall be made through the Incident Commander or designee’s primary dispatch.

B. The S-SV EMS Agency designated Emergency Communications Center (ECC) shall be utilized as the helicopter coordination center for initial response emergency incidents.

C. If more than one critical patient is identified as needing helicopter transport request multiple EMS helicopters.

D. If needed as a resource on scene, request an EMS Aircraft early; or anticipate need of additional resources early to allow sufficient time for response; you may cancel that request at any time.

E. If public agencies are not available for Search and Rescue (SAR), consider air ambulance. Air ambulances will maintain availability for other EMS calls and their SAR time is limited.

F. Based upon the best available evidence, the Greater Sacramento Area Trauma Quality Improvement Committee recommends that patients undergoing active CPR should not be transported by air ambulance to a receiving facility.

G. Patients with partial or complete amputation requiring re-implantation or patients requiring hyperbaric treatment must be evaluated at the local hospital prior to being transported to a specialty center.
SAFETY

NEVER APPROACH THE AIRCRAFT WITHOUT THE SIGNAL FROM THE PILOT OR FLIGHT CREW TO COME FORWARD.

A. SAFETY ZONES

Safe Zone – The two areas at each side of the helicopter’s main body - the area in full view of the pilot and flight crew.

Caution Zone -- The area that extends from the pilot forward.

Hazard Zone – The area extending rearward from the main body to the tail rotor. This area should always be avoided and be clear of people, obstacles, and debris.

B. EMERGENCY LANDING ZONE (ELZ) REQUIREMENTS

Setting up a SAFE landing zone will insure the safety of the critical care crew as well as all individuals on the ground.

1. Emergency Landing Zone (ELZ) Day and Night: 100 ft x 100 ft or 100 ft in diameter.

2. ELZ area should be a firm, flat landing surface free of obstacles, hazards, and debris. Be prepared for 60-80 mph winds from rotor wash that would cause debris to be blown
around. Consider FIRE POTENTIAL! Always coordinate landing efforts with pilot.

3. If watering a site is required, attempt to use as little as possible to achieve the task. If the ELZ is too slippery to walk in comfortably, it is too slippery to operate in safely.

4. If sloped, the site should NEVER exceed ten (10) degrees.

5. When choosing an ELZ, remember that the aircraft will land and take-off INTO the wind. These flight paths should be clear of wires, trees, towers, poles, and signs.

6. All vehicle lights will be used by the pilot to locate the ELZ. Be prepared to shut off lights as requested by the pilot. Some areas may use ELZ kits.

7. Never direct lights toward the aircraft, unless requested specifically by the pilot through the Designated ELZ Officer.

8. Consideration should be given to ground resources.

9. **The pilot remains the final authority on the acceptance of the ELZ.**

C. **OBSERVE AND REPORT TO THE HELICOPTER CREW**

1. Wires, poles, trees, towers, antennae and their relation to the ELZ. When identifying the hazard, use the “clock position” in reference to the aircraft. (“Fence line to your nine o’clock”)

2. Terrain features.

3. Surface conditions with the slope angle.

4. Wind speed and direction, including gusts.

5. Hazards such as wellheads, ditches, fence posts, snow stakes, rocks, etc.

6. Animals or livestock

7. Flight path hazards

8. Consider utilizing the pneumonic: **HOTSAW**: **(Hazards, Obstructions, Terrain, Surface, Animals, Wind / Weather)**
D. APPROACHING THE AIRCRAFT

**DO**

1. Approach the aircraft as directed by the flight crew or upon receiving the “Come Forward” signal from the pilot or crew.

2. Maintain eye contact with the pilot upon approach to the aircraft.

3. Be prepared for 60-80 mph winds. Secure and protect. Protect yourself, other personnel, and your patient from blowing debris.

4. Be mindful of fire danger when using smoke or flares.

5. Communicate freely any hazards you think may be a threat to safe operation. Remain vigilant to hazards during all phases of scene operation.

6. Use the command **“STOP-STOP-STOP”** or **“ABORT-ABORT-ABORT”** when communicating an unsafe condition to the pilot. Once you have his attention, inform him of your concern or observation.

7. Think WIRES! WIRES! WIRES!

8. Follow all directions from the flight crew and pilot.

9. Stay out of the Hazard Zone and away from the tail rotor.

10. Use head, eye, and hearing protection.

11. Approach the aircraft on the downhill side of uneven terrain.

12. Always be mindful of the main rotor and the tail rotor.

13. Allow only the flight crew to secure all doors and latches in preparation for take-off.

14. Stay clear of the entire ELZ perimeter when aircraft is landing and departing.
NEVER

1. Approach the aircraft without the signal from the pilot or flight crew to come forward.
2. Run in the landing zone, or behave erratically.
3. Chase items that may be blown by the rotor wash.
4. Approach the tail rotor. Contact with a spinning tail rotor is FATAL.
5. Carry items such as IV poles, skis, poles, etc over your head. All items should be at waist level or below, or secured to the patient stretcher. No items should be above waist level.
6. Allow loose blankets, ball caps, or clothes to be a hazard when the aircraft is running.
7. Approach the aircraft during start-up or shut-down. The blades may dip down, reducing ground clearance and creating a strike hazard.
8. Walk under the tail boom, unless directed by the crew to assist with rear patient loading.
9. Approach the aircraft from the uphill side of uneven terrain.
10. Remain within the ELZ perimeter during aircraft landing and departure.
E. DESIGNATED ELZ COORDINATOR — The roles and responsibilities

1. Is responsible for all ground-to-air communications with helicopter.

2. Communicates other frequency when CALCORD is unavailable. Standard frequency is CALCORD (156.075 MHz). Line of sight frequency.

3. Selects landing zone site and is responsible for all hazard identification to aircraft.

4. Communications latitude and longitude coordinates to identify ELZ to incoming aircraft (lat/long).

5. Identifies visual references easily seen from the air to assist the pilot in locating the landing zone.

6. Walks a “Z” or “N” pattern through entire zone, covering all corners, middle, and perimeter to identify slope and possible hazards.

7. Considers the use of water to “settle” snow or dust, or help distinguish ELZ.

8. Understands using the “STOP-STOP-STOP” or “ABORT-ABORT-ABORT” command to identify hazards to the pilot during approach or departure.

9. Maintains “radio silence” on final approach and take-off unless a safety issue arises.

10. Directs the use of emergency lighting to mark obstacles such as wires or identify ELZ location day or night.

11. Considers the use of additional lighting at night as directed by the pilot. Prepares to have lights turned off including strobes if requested by pilot during NVG operations.

12. Prepares for communication with other members of the ground staff by radio before arrival of the helicopter.

13. Reports having visual contact or hearing the helicopter. Use clock directions as seen by the pilot when identifying your position. “We are at your 2 o’clock position next to the grey house in the driveway”.

14. Ensures that the entire ELZ is secure from traffic, pedestrians, and livestock. No scene personnel should get closer than 50 feet to the perimeter of the ELZ unless approved and directed by a flight crew member. Bystanders need to be kept at least 100 – 200 feet from the ELZ perimeter.

15. Maintains the security of the ELZ until the pilot clears the aircraft of the ELZ (in the event the departing helicopter must emergently return due to mechanical or other
safety issues).

16. Always expects the unexpected.

17. ALWAYS RELAYS THE PRESENCE OF ADDITIONAL AIRCRAFT IN THE AREA – EITHER REQUESTED OR ON THE GROUND.

18. ASSIGNS ADDITIONAL PERSONNEL AS NEEDED TO SECURE ELZ PERIMETER, AND MAINTAIN ELZ SECURITY UNTIL INCIDENT IS COMPLETE AND AIRCRAFT HAS DEPARTED SCENE.

If a “hard landing” or crash occurs during operations, NEVER approach the aircraft until all machinery movement has stopped.

If a fire ensues, use standard methods of extinguishment utilizing foam whenever possible.

LOOK AT LEAST 300 FEET BEYOND ELZ PERIMETER WHEN IDENTIFYING HAZARDS WHENEVER POSSIBLE. COMMUNICATE ALL OBSERVATIONS THAT YOU THINK MAY AFFECT SAFE HELICOPTER OPERATIONS TO THE PILOT DURING YOUR ELZ REPORT.
MULTI-CASUALTY INCIDENT (MCI)

A. Consider early request of multiple aircraft if incident scope indicates need.
   1. Aircraft will only take one critical patient at a time.
   2. Additional responders from adjoining regions may be available.

B. Consider need for specialized aircraft:
   1. Water rescue
   2. High angle rescue (Hoist or Short Haul capable)

C. Consider staging at closest appropriate airport or pre-designated large ELZ.

D. Follow NIMS and ICS procedures:
   1. Establish ELZ Coordinator.
   2. Consider establishing Air Operations Branch if size of incident warrants.

E. Establish air-to-ground communication frequency early on.
   1. Normally Cal-Cord (156.075 MHz Simplex)

F. Ensure safety coordination if landing / loading multiple aircraft.

G. Ensure loading safety practices are adhered to.
   1. Don’t rush loading – Safety First!

H. Consider use of available aircraft to transport patients, regardless of injuries, if ground resources are exhausted, overtaxed or if access to scene by ground is limited or difficult.
HAZARDOUS MATERIALS (HAZMAT) INCIDENT

A. The use of EMS helicopters for the transport of potentially contaminated Haz Mat patient(s), or WMD, is generally NOT APPROPRIATE. Patient transport by helicopter shall occur only by direction of the IC or designee. EMS helicopters may be utilized at the discretion of the IC, or designee, to transport immediate radiation contaminated patients under the same criteria as ground based transportation units.

B. Consider decontamination prior to transporting by air.

C. If an aircraft is requested, recognize that rotor wash of the aircraft may introduce an element into the HAZMAT incident, which is not in the best interest of scene safety.

1. Always strongly consider a rendezvous landing strip 3 – 5 miles away and up wind from the incident site.
S-SV EMS AIRCRAFT CONTACT NUMBERS

AIR AMBULANCES

CalStar 1-800-252-5050 or 1-916-565-7720

Care Flight 1-776-858-5700 1-800-648-4888 (dispatch)

Emergency Airlift (No Bend, Or) 1-800-804-4911

Enloe Flightcare 1-800-344-1863

Mercy Flights (Medford, Or) 1-800-903-9000

Mountain Life Flight 1-530-257-0249

PHI 1-800-576-7828

REACH 1-800-338-4045

ALS AIR RESCUE

CHP: Sacramento Communications Center (916) 861-1300
CHP: Redding Communications Center (530) 242-3210
H-20 & H-24 (Auburn) (530) 823-4535
H-14 & H-16 (Redding) (530) 225-2040
H-30 & H-32 (Napa) (707) 257-0103

Sacramento Metropolitan Fire Department 1-800-660-0290
Metro Fire Copter

AUXILIARY RESCUE AIRCRAFT

CAL FIRE Emergency Command Center – Grass Valley (530) 477-0641

SHASCOM 1-530-245-6540
GRASS VALLEY EMERGENCY COMMAND CENTER 1-530-477-0641
DOPAMINE DRIP CHART

400 mg of Dopamine in 250 cc Solution, run via either micro drip tubing or macro drip tubing with a Dial a Flow device at the following rates

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<th>10 Mcg gtts/min</th>
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## SIERRA SACRAMENTO VALLEY EMS AGENCY
### PROGRAM POLICY

**SUBJECT: S-SV EMS BASE/RECEIVING HOSPITALS**

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<tr>
<th>Hospital Name</th>
<th>County</th>
<th>Base</th>
<th>Level I/II Trauma Center</th>
<th>Level III Trauma Center</th>
<th>Level IV Trauma Center</th>
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### SUBJECT: S-SV EMS BASE/RECEIVING HOSPITALS

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<th>Hospital Name</th>
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<th>Base Mod. Base Receiving</th>
<th>Level I/II Trauma Center</th>
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### S-SV EMS MCI CONTROL FACILITIES

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<th>Control Facility</th>
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<td>Enloe Medical Center</td>
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<td>Sutter Roseville Medical Center</td>
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<td>Tahoe Forest Hospital</td>
<td>Tahoe Basin and Eastern Slope of Nevada and Placer Counties</td>
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<td>Woodland Memorial Hospital</td>
<td>Yolo County</td>
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<tr>
<td>UC Davis Medical Center</td>
<td>When requested by Woodland Memorial Hospital and agreed to by UCDMC, to handle patient dispersal for those MCI events that occur in Yolo County but patient dispersal will be primarily into Sacramento County</td>
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<tr>
<td>Mercy Medical Center Redding</td>
<td>Shasta County/Siskiyou County/Tehama County</td>
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