S-SV EMS Agency

ALS/BLS FIELD MANUAL

UPDATED: 04/01/2025

Sierra-Sacramento Valley EMS Agency

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Policy Manual Update #76 effective 04/01/2025

This manual is a synopsis of the S-SV EMS Prehospital Care Policy Manual and includes pertinent S-SV EMS field policies & all treatment protocols. The policies/protocols included in this manual are current as of the date listed above. EMS personnel are responsible for all policy/protocol updates released after the printing of this manual.

TABLE OF CONTENTS

FIELD POLICIES

TABLE OF CONTENTS

ADULT TREATMENT PROTOCOLS

TABLE OF CONTENTS

TABLE OF CONTENTS

GENERAL PROTOCOLS

PROCEDURE PROTOCOLS

S-SV EMS Field Policies

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Sierra – Sacramento Valley EMS Agency Program Policy			
HEMS Aircraft Authorization, Classification & Operations			
	Effective: 12/01/2022	Next Review: 09/2025	**450**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish standards for the authorization, classification, and operations of HEMS aircraft/personnel.

AUTHORITY:

A. HSC, Division 2.5, § 1797.200 – 1797.276, 1798 – 1798.8 & 1798.170.

B. CCR, Title 22, Chapter 8.

C. Federal Aviation Regulations, 91.3, 91.11 and 91.12.

DEFINITIONS:

A. **Helicopter Emergency Medical Services (HEMS) Aircraft –** Rotor wing aircraft utilized for the purpose of prehospital emergency response and patient transport. HEMS aircraft include air ambulances and all ALS/BLS rescue aircraft.

B. **Air Ambulance –** Any aircraft specially constructed, modified or equipped and used for the primary purpose of responding to emergency incidents and transporting critically ill and/or injured (life or limb) patients, whose medical flight crew has, at a minimum, two (2) attendants certified or licensed in advanced life support.

C. **Rescue Aircraft –** Aircraft whose usual function is not patient transport but may be used for patient transport when the use of an air or ground ambulance is inappropriate or not readily available. Rescue aircraft are classified as one of the following:

1. **Advanced Life Support (ALS) Rescue Aircraft –** A rescue aircraft whose medical flight crew has, at a minimum, one (1) attendant licensed as a paramedic.

2. **Basic Life Support (BLS) Rescue Aircraft –** A rescue aircraft whose medical flight crew has, at a minimum, one (1) attendant certified as an EMT.

3. **Auxiliary Rescue Aircraft –** A rescue aircraft that does not have a medical flight crew, or whose flight crew does not meet ALS/BLS rescue aircraft requirements.

POLICY:

A. S-SV EMS is responsible for classifying/authorizing HEMS aircraft based within the S-SV EMS region, except that the California EMS Authority (EMSA) is responsible for classifying aircraft of the California Highway Patrol, CAL FIRE, and California National Guard. S-SV EMS classification/authorization will be provided by written agreements with HEMS aircraft providers.

B. No person or organization shall provide or hold themselves out as providing HEMS aircraft services unless that organization has aircraft which have been classified/ authorized by a local EMS agency (LEMSA) or, in the case of the California Highway Patrol, CAL FIRE, and California National Guard, by EMSA.

C. Except for mutual aid requests, HEMS aircraft must be classified/authorized by S-SV EMS and possess a current/valid S-SV EMS air ambulance service provider permit to operate within the S-SV EMS region. A request from a designated dispatch center shall be deemed as authorization of aircraft operated by the California Highway Patrol, CAL FIRE, California National Guard, or the Federal Government.

D. HEMS aircraft providers, owners, operators, or any hospital where a HEMS aircraft is based, housed, or stationed permanently or temporarily shall adhere to all federal, state, and local statues, ordinances, policies, and procedures related to HEMS aircraft operations, including qualifications of flight crews and aircraft maintenance.

E. All ALS HEMS aircraft shall employ a provider medical director who is a physician licensed in the State of California who by training and experience, is qualified in emergency medicine. The medical director shall be responsible for the supervision of the quality assurance/improvement program of air medical transport patient care.

F. Medical Control:

1. The medical direction/management of the EMS system shall be under the medical control of the S-SV EMS medical director.

2. Flight paramedics shall operate under S-SV EMS policies/protocols. Paramedics employed by S-SV EMS authorized air ambulance providers who have been approved for Unified Paramedic Optional Scope of Practice may perform skills and administer medications in accordance with applicable S-SV EMS and/or HEMS aircraft provider approved policies/protocols.

3. Flight RNs may perform skills and administer medications beyond the S-SV EMS paramedic scope of practice, in accordance with RN specific policies/protocols developed/approved by the provider's medical director and agreed to by the S-SV EMS medical director. HEMS aircraft provider patient care policies/protocols shall be submitted to S-SV EMS initially and upon subsequent revision.

G. Personnel:

1. Air ambulances shall be staffed with a minimum of two (2) ALS medical flight crew members. Staffing can be achieved with any combination of:

    - S-SV EMS accredited paramedic.
    - Registered nurse (RN) who has successfully completed an S-SV EMS paramedic accreditation course or similar S-SV EMS approved training.

2. Rescue aircraft shall be staffed with a minimum of one (1) S-SV EMS accredited paramedic or EMT medical flight crew member, based on their classification level.

3. The medical flight crew of HEMS aircraft shall have training in aeromedical transportation equivalent to DOT Air Medical Crew National Standard Curriculum.

4. Medical flight crews shall participate in such continuing education requirements as required by their license/certification.

5. In situations where the flight crew is less medically qualified than the ground personnel from whom they receive patients, they may only assume patient care responsibility in accordance with applicable S-SV EMS policies/protocols.

H. Communications:

1. HEMS aircraft providers shall be honest, open, ethical, and responsible for accurately informing the air ambulance coordination center and/or requesting PSAP of any changes in availability or response status. This shall include any circumstance and/or activity that will delay their ability to respond (maintenance, training flights, interfacility transports, need for refueling, etc.).

2. HEMS aircraft shall provide an updated ETA to the air ambulance coordination center, requesting PSAP and/or designated LZ contact when enroute.

3. All communications between HEMS aircraft and the designated LZ contact should be done using CALCORD operational frequency of 156.075.

4. HEMS aircraft shall have the capability of communicating directly, while in flight, with the following entities:

    - Required FAA facilities.
    - Air ambulance coordination center and/or requesting PSAP.
    - Ground units.
    - Base, modified base and receiving hospitals.
    - S-SV EMS air to air EMS aircraft on frequency 123.025.

5. Air ambulance providers shall notify the applicable air ambulance coordination center when entering/flying through their geographical area. The air ambulance coordination center will inform air ambulance personnel of any other known aircraft activities in the area (fire suppression, other responding aircraft, etc.).

6. Air ambulance coordination centers will not routinely perform flight-following operations with HEMS aircraft. This will remain the responsibility of the requesting PSAP and/or the HEMS aircraft provider's dispatch center.

7. Air ambulance providers shall maintain and update their availability on EMResource a minimum of once per pilot shift. EMResource will not be used as a primary method of determining HEMS aircraft availability by the air ambulance coordination centers.

I. Air Ambulance Coordination Center Data Recording and Reporting:

1. Air ambulance coordination centers shall adequately record all air ambulance resource request activities.

2. Air ambulance coordination centers shall provide air ambulance coordination data to S-SV EMS upon request.

J. Space & Equipment:

1. HEMS aircraft shall be configured so that:

- There is sufficient space to accommodate one (1) patient on a stretcher and one (1) patient attendant. Air ambulances shall have space to accommodate one (1) patient and two (2) patient attendants, at a minimum.
- There is sufficient space for medical personnel to have adequate patient access to carry out necessary procedures on the ground and in the air.
- There is sufficient space for medical equipment and supplies required by applicable regulations and S-SV EMS policies.

2. HEMS aircraft shall have adequate safety belts and tie-downs for all personnel, patients, stretchers, and equipment to prevent inadvertent movement.

3. HEMS aircraft shall have onboard equipment and supplies commensurate with the scope of practice of the medical flight crew, as approved by S-SV EMS.

4. HEMS aircraft shall be equipped with a radio headset for each crew member, ride along and patient. Each crew member headset should allow for communications with ground stations, base/modified base and receiving hospitals.

Sierra – Sacramento Valley EMS Agency Program Policy			
Automatic Aid/Mutual Aid/Disaster Assistance (Including EMPF, AST & MTF Resource Requests)			
	Effective: 06/01/2022	Next Review: 05/2025	**461**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

A. To define the conditions/circumstances under which prehospital personnel may utilize the scope of practice for which they are trained and certified/licensed/accredited for during automatic aid/mutual aid/disaster assistance responses.

B. To describe the purpose, requesting process and utilization of Paramedic Fireline (EMPF), Ambulance Strike Team (AST) and Medical Task Force (MTF) resources.

AUTHORITY:

A. HSC, § 1797.170(b), 1797.204 & 1797.220.

B. CCR, Title 22, Division 9.

C. California Disaster and Civil Defense Master Mutual Aid Agreement (11/1950).

D. EMSA 'Ambulance Strike Team/Medical Task Force Guidelines' (07/2003).

E. EMSA 'Compendium of Statutes and Regulations Related to EMT and Paramedic Scope of Practice During Mutual Aid in California' (12/2011).

F. California Fire and Rescue Emergency Mutual Aid System, Mutual Aid Plan (02/2012).

G. Emergency Management Assistance Compact (EMAC).

H. Supplemental Interstate Compact For Emergency Mutual Assistance, July 2007.

I. FIRESCOPE California Incident Command System Position Manual Fireline Emergency Medical Technician/Fireline Paramedic (EMTF/EMPF) ICS 702 (12/2016)

DEFINITIONS:

A. **Ambulance Strike Team (AST)** – Consists of five ALS or BLS ambulances (two personnel each) and one leader in a separate command vehicle or Disaster Medical Support Unit (DMSU).

B. **Automatic Aid** – Agreements between two or more jurisdictions where the nearest available resource is dispatched to an emergency irrespective of jurisdictional boundaries, or where two or more agencies are automatically dispatched simultaneously to predetermined types of emergencies. This type of agreement is typically utilized on a routine basis.

C. **Disaster Assistance** – Requests for assistance in the event that a disaster overwhelms local resources. These requests may be under existing mutual aid agreements or the result of unforeseen needs arising from a large-scale disaster.

D. **Medical Task Force (MTF)** – Any combination of resources assembled to support a specific medical mission or operational need. All resource elements within a Task Force must have common communications and a designated leader.

E. **Mutual Aid** – Agreements between two or more jurisdictions to provide assistance across jurisdictional boundaries, when requested, as a result of the circumstances of an emergency exceeding local resources.

F. **Paramedic Fireline (EMPF)** – A paramedic who meets FIRESCOPE requirements, and is authorized by their department to provide ALS care on the fireline.

PRINCIPLES:

A. When requested by an authorized automatic aid/mutual aid/disaster assistance response requester, EMS personnel may utilize the scope of practice for which they are trained and certified/licensed/accredited according to CCR, Title 22 and their Local EMS Agency (LEMSA) policies and procedures.

B. EMPF personnel provide emergency medical care on an active fireline, division or other physically challenging assignment. These resources may also provide care in the medical unit and/or at other locations as directed by the Incident Commander or designee.

C. AST/MTF resources provide an EMS operational response to disaster situations with a focus on transportation. These resources may also work in concert with California Medical Assistance Team (CAL-MAT) or other disaster medical personnel, and be used for medical and health system support in various settings including first aid sites, shelters, command posts, and Mobile Field Hospitals.

POLICY:

A. Automatic Aid/Mutual Aid/Disaster Assistance Responses Within California

1. BLS (EMR/EMT) Personnel:

- BLS personnel may utilize their basic scope of practice in a volunteer or paid capacity. There is no requirement that BLS personnel be affiliated with a prehospital provider to utilize their basic scope of practice.
- While functioning under the authority/oversight of a LEMSA approved prehospital provider during an automatic aid/mutual aid/disaster assistance response, BLS personnel may utilize the optional/expanded scope of practice for which they are trained, certified and accredited for by their LEMSA.

2. LALS/ALS (AEMT/Paramedic) Personnel:

- LALS/ALS personnel may provide LALS/ALS care anywhere in California provided all of the following conditions are met:
  - They possess a valid California AEMT Certificate or Paramedic License.
  - They are accredited by a California LEMSA.
  - They are affiliated with a California LEMSA approved LALS/ALS provider, and are functioning under the authority/oversight of the LALS/ALS provider with whom they are affiliated.
  - They utilize the scope of practice for which they are trained and accredited for by their LEMSA.

B. Automatic Aid/Mutual Aid/Disaster Assistance Responses Outside California

Prehospital personnel are normally approved to utilize the scope of practice for which they are trained and certified/licensed/accredited according to their respective classification, but must check in with the Medical Unit Leader or other appropriate incident representative for any special restrictions or credentialing requirements.

PROCEDURE:

A. General Automatic Aid/Mutual Aid/Disaster Assistance Response Requirements

1. Prehospital personnel shall follow all S-SV EMS policies/protocols during an automatic aid/mutual aid/disaster assistance response, and shall not administer any medication or perform any procedures listed as ‘Base/Modified Base Hospital Physician Order Only’ without appropriate medical control approval.

2. Controlled substances shall be obtained, secured and inventoried as indicated in S-SV EMS Management of Controlled Substances Policy (710).

3. Documentation of patient care shall be completed as indicated in S-SV EMS Prehospital Documentation Policy (605).

B. EMPF Programs

1. EMPF programs shall be approved by S-SV EMS.

2. Designation of an individual as an EMPF by an S-SV EMS approved provider verifies that the paramedic has completed standard FIRESCOPE education.

3. The EMPF position is like any other single resource position requested for incident management, and is ordered at the discretion of an Incident Commander through normal ordering channels.

4. EMPF personnel shall carry the items listed in S-SV EMS ALS Specialty Program Provider Inventory Requirements Policy (702) when responding to wildland fires to provide ALS care in this capacity.

5. The EMPF shall present their credentials to the Medical Unit Leader upon arrival at the incident. The Medical Unit Leader is responsible for verifying credentials of all EMPF personnel assigned to the incident, and shall notify S-SV EMS of any EMPF personnel not affiliated with an S-SV EMS approved prehospital provider assigned to an incident in the S-SV EMS region.

C. AST/MTF Resources:

1. AST/MTF resources shall be requested/approved by one of the following entities:

- Medical Health Operational Area Coordinator (MHOAC).
- Regional Disaster Medical Health Coordinator/Specialist (RDMHC/S).
- California State EMS Authority (EMSA).

2. Upon receipt of an official verbal or written AST/MTF resource request, S-SV EMS representatives will identify/coordinate the assignment/deployment of resources. AST/MTF resource assignments will be done in a fair and consistent manner, based on system/incident needs and provider resource availability. ASTs/MTFs may be comprised of resources from multiple different provider agencies at the discretion of S-SV EMS. Any verbal AST/MTF request shall be followed up with an official written resource request from the AST/MTF requesting/approving entity as soon as incident conditions allow.

3. Any S-SV EMS approved ground ambulance transport provider agency may participate in an AST/MTF deployment. By participating in an AST/MTF deployment, provider agencies/personnel agree to the following:

- Resources/personnel should be able to deploy within 1 – 2 hours of a request, and are expected to be self-sufficient for up to 72 hours.
- Personnel will likely be working in austere environments and performing tasks outside their normal day-to-day duties.
- Provider agencies shall not commit resources/personnel that will negatively impact their normal EMS coverage responsibilities.
- Provider agencies agree to accept the current hourly Ambulance Strike Team Reimbursement rates adopted by the California State Association of Counties (CSAC) as recommended by the Emergency Medical Services Administrators Association of California (EMSAAC). Reimbursement shall be "portal to portal" (time of dispatch to return to home base), and no billing for transport or other costs are allowed.

4. Every AST/MTF shall have a leader selected/approved by S-SV EMS. Preference will be given to those individuals who have completed the Ambulance Strike Team Leader training. Provider agencies may choose to assign additional personnel to accompany the leader for training purposes, but the cost of these additional personnel will not be reimbursed by the requesting entity, unless previously agreed to.

5. The following shall apply to AST/MTF deployments within the S-SV EMS region:

   - S-SV EMS will assign appropriate representatives (within the affected area whenever possible) to support/oversee the affected EMS system(s) and all deployed AST/MTF resources as long as necessary/appropriate.
   - S-SV EMS representatives will assess, identify and order (in coordination with the AST/MTF requesting/approving entity) additional AST/MTF support resources/personnel (EMS overhead, fleet maintenance, CISM, etc.).
   - As soon as incident conditions allow, the AST/MTF requesting/approving entity shall be responsible for providing ongoing support to the AST/MTF resources (food, lodging, medical supplies, fuel, etc.).

6. For deployments outside the S-SV EMS region, AST/MTF resources will respond to the requested reporting location and follow the direction of requesting entity or other appropriate incident management personnel.

Sierra – Sacramento Valley EMS Agency Program Policy			
Patient Destination			
	Effective: 06/01/2024	Next Review: 04/2027	**505**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish procedures for determining the appropriate destination of patients transported by ambulance in the S-SV EMS region.

AUTHORITY:

A. HSC, Division 2.5, § 1797.67, 1797.88, 1798.165 & 1798.170.

B. CCR, Title 13, § 1105(c).

C. CCR, Title 22, Division 9, Chapters 2, 3, 4 & 7.

POLICY:

A. In the absence of decisive factors to the contrary, EMS personnel 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. In determining the most accessible facility, EMS personnel shall take into consideration traffic obstructions, weather conditions, or similar factors which clearly affect transport time.

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

C. All hospitals shall maintain their current facility status on EMResource, and shall update their facility status no less than once every 24 hours. All hospitals shall respond to EMResource hospital polls initiated by S-SV EMS or the applicable Medical Health Operational Area Coordinator within 30 minutes of notification.

PROCEDURE:

A. The most accessible medical facility shall ordinarily be the nearest licensed healthcare facility which maintains and operates a basic emergency department, except for the following circumstances:

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

2. S-SV EMS policies/protocols governing transport of special category patients to designated special care facilities shall be followed.

3. The Control Facility (CF) is responsible for the dispersal of all patients during multiple casualty incidents (MCIs).

4. In the event of an unprecedented demand for medical/health services beyond the capacity of current providers and resources available through local, regional, state, and/or federal mutual aid, Crisis Standard of Care Procedures may be implemented to include alternate patient transportation/destination orders.

B. A member of a health care service plan should be transported to a hospital that contracts with the plan when prehospital EMS personnel and/or the base/modified base hospital determines that the condition of the member permits such transport. However, when prehospital personnel determine that such transport would unreasonably remove the transport unit from the area, the member may be transported to the nearest hospital capable of providing appropriate treatment.

C. When a patient, or their legally authorized representative, requests transportation to a hospital other than the most accessible, the request should be honored when prehospital EMS personnel and/or the base/modified base hospital determines that the condition of the patient permits such transport; except when prehospital EMS personnel determine that such transport would unreasonably remove the transport unit from the area. In such cases:

1. Arrangements should be made for alternative transport if possible.

2. If such transport cannot be obtained without unacceptable delay, the patient may be transported to the nearest hospital capable of providing appropriate treatment.

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

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

2. Prehospital EMS personnel determine that such transportation would unreasonably remove the unit from the area. In such cases:

    - Arrangements should be made for alternate transportation if possible.
    - 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.
    - If alternate transportation cannot be arranged without unacceptable delay, and the private physician is not immediately accessible, the patient may be transported to the nearest hospital capable of providing appropriate treatment.

Sierra - Sacramento Valley EMS Regional Hospital Capabilities (505-A)

Hospital Type Abbreviations/Definitions

BASE (Base Hospital): EMS medical direction provided by MICNs and ED physicians.
MOD (Modified Base Hospital): EMS medical direction provided by ED physicians only (no MICNs).
REC (Receiving Hospital): Unable to provide EMS medical direction, but able to receive ambulance patients.

Stroke Center Abbreviations

PSC - Primary Stroke Center **TSC -** Thrombectomy Capable Stroke Center **CSC -** Comprehensive Stroke Center

Hospitals Located Within The S-SV EMS Region

Hospital Name	County	Hospital Type	Helispot/ Helipad	Trauma Center	Stroke Center	STEMI Center	L&D	Other
Enloe Medical Center	Butte	BASE	X	Level II	PSC	X	X	
Orchard Hospital	Butte	REC	X					
Oroville Hospital	Butte	BASE	X		PSC		X	
Colusa Medical Center	Colusa	MOD	X					
Glenn Medical Center	Glenn	REC	X					
Sierra Nevada Memorial Hospital	Nevada	MOD	X		PSC		X	
Tahoe Forest Hospital	Nevada	BASE	X	Level III	PSC		X	
Kaiser Roseville Medical Center	Placer	MOD			PSC	X	X	
Sutter Auburn Faith Hospital	Placer	MOD			PSC			
Sutter Roseville Medical Center	Placer	BASE	X	Level II	TSC	X	X	
Mayers Memorial Hospital	Shasta	BASE	X					
Mercy Medical Center Redding	Shasta	BASE	X	Level II	TSC	X	X	
Shasta Regional Medical Center	Shasta	BASE	X		PSC	X		
Fairchild Medical Center	Siskiyou	BASE	X	Level IV	PSC		X	
Mercy Medical Center Mt. Shasta	Siskiyou	BASE	X	Level III	PSC		X	
St. Elizabeth Community Hospital	Tehama	BASE	X	Level III	PSC		X	
Adventist Health +Rideout	Yuba	BASE	X	Level III	PSC	X	X	

S-SV EMS Designated MCI Control Facilities (CFs)

Control Facility (CF)	Coverage Area
Enloe Medical Center	Butte & Glenn Counties
Adventist Health +Rideout	Colusa, Sutter & Yuba Counties
Sutter Roseville Medical Center	Western Slope of Nevada & Placer Counties
Tahoe Forest Hospital (Back-Up: REMSA)	Tahoe Basin & Eastern Slope of Nevada & Placer Counties
Mercy Medical Center Redding	Shasta, Siskiyou & Tehama Counties

Sacramento County Hospitals

Sierra - Sacramento Valley EMS Regional Hospital Capabilities (505-A)

Hospital Name	County	Hospital Type	Helispot/ Helipad	Trauma Center	Stroke Center	STEMI Center	L&D	Other
Kaiser Sacramento Medical Center	Sac.	REC			PSC			
Kaiser South Sacramento Medical Center	Sac.	REC	X	Level II	CSC	X	X	
Mercy General Hospital	Sac.	REC			PSC	X	X	VAD
Mercy Hospital of Folsom	Sac.	REC	X		PSC		X	
Mercy San Juan Medical Center	Sac.	REC	X	Level II	CSC	X	X	
Methodist Hospital	Sac.	REC			PSC		X	
Sacramento VA Medical Center	Sac.	REC						
Sutter Sacramento Medical Center	Sac.	REC	X		PSC	X	X	VAD
UC Davis Medical Center	Sac.	BASE	X	Level I & Pediatric	CSC	X	X	VAD & Burn

Nevada Hospitals

Hospital Name	County	Hospital Type	Helispot/ Helipad	Trauma Center	Stroke Center	STEMI Center	L&D	Other
Northern Nevada Medical Center	Washoe	REC	X		PSC	X		
Northern Nevada Sierra Medical Center	Washoe	REC			PSC	X	X	
Renown Regional Medical Center	Washoe	REC	X	Level II	CSC	X	X	
Renown South Meadows Medical Center	Washoe	REC						
St. Mary's Regional Medical Center	Washoe	REC	X		PSC	X		

Oregon Hospitals

Hospital Name	County	Hospital Type	Helispot/ Helipad	Trauma Center	Stroke Center	STEMI Center	L&D	Other
Providence Medical Center	Jackson	REC	X	Level III	X	X	X	
Rogue Regional Medical Center	Jackson	REC	X	Level II	X	X	X	
Sky Lakes Medical Center	Klamath	REC	X	Level III			X	

Sierra – Sacramento Valley EMS Agency Program Policy			
EMS Documentation			
	Effective: 06/01/2024	Next Review: 04/2027	**605**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To specify EMS patient care report (PCR) documentation and data requirements.

AUTHORITY:

A. HSC, Division 2.5, § 1797.202, 1797.204, 1797.220, 1797.227, and 1798.

B. CCR, Title 22, Division 9, Chapters 3 and 4.

POLICY:

A. BLS non-transport providers shall complete a PCR for any EMS incident that results in a patient refusal of EMS care without ALS/LALS involvement.

B. BLS non-transport providers shall complete a S-SV EMS BLS Skills Utilization PCR (605-A), or electronic PCR (ePCR) compliant with current California Emergency Medical Services Information System (CEMSIS) and the National Emergency Medical Services Information System (NEMSIS) date standards (if available), to document the utilization of any of the following prior to ALS/LALS arrival:

   1. Defibrillation (AED shock delivered).

   2. BLS optional skills included in S-SV EMS Policy No. 477.

C. ALS/LALS non-transport providers and all transport providers shall utilize an ePCR software system, compliant with current CEMSIS/NEMSIS standards, for EMS documentation as follows:

   1. ALS/LALS non-transport personnel shall complete an ePCR for any EMS incident that results in their arrival at scene prior to a transport provider, unless patient contact was limited to BLS assessment and/or oxygen administration only, and patient care was assumed by a transport provider.

   2. Transport personnel shall complete an ePCR for any EMS incident that results in their arrival on scene. If the non-transport and transport personnel are from the same agency, a single ePCR by the appropriate unit is adequate.

3. For multiple patient incidents, an ePCR shall be completed for each individual patient (including patients who are determined to be deceased on scene).

4. For multiple casualty incidents (MCIs), the Medical Group Supervisor (or designee) shall complete a separate ePCR documenting pertinent incident information (MCI type, incident details, patient count/triage categories, etc.).

D. A PCR is a legal medical record. EMS personnel shall provide clear, legible, concise, complete, and accurate patient care documentation. Any form of misrepresentation is a serious infraction, which may result in disciplinary action.

E. EMS providers who fail to comply with EMS documentation laws, regulations, and/or policies may be suspended from providing service until they comply.

PROCEDURE:

A. All applicable/required PCR data fields shall be accurately completed.

1. EMS procedures and/or medication administrations, including specific dose, route, and response to treatment as applicable, shall be adequately documented in the Treatment/Procedures section. ALS/LALS personnel shall also document all pertinent procedures/medications utilized by bystanders or BLS personnel (including prior to their arrival on scene) in the Treatment/Procedures section.

2. The total volume of IV/IO fluid infused shall be adequately documented in the Treatment/Procedures and/or Narrative section.

3. All pertinent vital signs, including applicable cardiac rhythm interpretations, shall be adequately documented in the Vital Signs section. Vital signs shall be obtained/documented as close as possible to initial patient contact, a minimum of every 15 minutes during patient care (or more frequently if clinically indicated), and as close as possible to transfer of patient care at the receiving hospital.

4. The Narrative section shall be completed utilizing one of the following formats:

- SOAP (Subjective, Objective, Assessment, and Plan).
- CHART (Complaint, History, Assessment, Rx/pt. medications, and Treatment).
- Chronological order.

5. Response, patient care, and/or transport delays shall be adequately documented in the appropriate section(s) of the PCR.

6. A written or electronic legal signature of the individual completing the PCR is required.

B. The following information, when available, shall be documented on an interim PCR (605-B or equivalent), and left at the receiving facility at time of patient delivery:

   1. Basic incident and patient demographic information.

   2. Chief complaint, time of symptom onset, pertinent medical history, medications, and medication allergies.

   3. Pertinent vital signs.

   4. EMS treatment rendered (time, type, dose, route, response, etc.).

   5. Relevant patient care related documents (DNR/POLST forms, 12 Lead EKGs, cardiac monitor rhythm strips, etc.).

   6. Name, title, and ID of EMS personnel completing the documentation.

C. PCRs shall be completed within twenty-four (24) hours after completion of the patient encounter (NEMSIS V3.5 data element eTimes.13 – 'Unit Back in Service Date/Time'), and shall be distributed as follows:

   1. If a BLS optional skill was utilized, a copy of the completed PCR shall be provided/ available to S-SV EMS within seven (7) calendar days of the incident.

   2. PCRs shall be provided/available to the applicable receiving, base, and/or modified base hospital upon completion, but no later than twenty-four (24) hours after completion of the patient encounter.

D. Any EMS provider required to complete/submit ePCR data pursuant to this policy, and who chooses not to utilize the S-SV EMS ImageTrend ePCR software system, shall submit EMS data to S-SV EMS in the following manner:

   1. EMS data shall be continually compliant with current CEMSIS/NEMSIS standards and the current S-SV EMS data schematron.

   2. EMS data for all incidents required by this policy shall be submitted to the EMS data system utilized by S-SV EMS within twenty-four (24) hours after completion of the patient encounter. Any ePCR record that fails to import shall be identified, corrected, and successfully submitted to the EMS data system utilized by S-SV EMS within seventy-two (72) hours after completion of the patient encounter.

E. PCRs for adult and emancipated minor patients shall be preserved for at least seven (7) years. PCRs for unemancipated minor patients shall be preserved for at least one (1) year after such minor has reached the age of 18 years old and, in any case, not less than seven (7) years.

Sierra – Sacramento Valley EMS Agency Program Policy			
Management Of Controlled Substances			
	Effective: 06/01/2022	Next Review: 05/2025	**710**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To ensure accountability in the management of controlled substances utilized by ALS/ LALS prehospital service provider agencies/personnel.

AUTHORITY:

A. Code of Federal Regulations, Title 21.

B. HSC, Division 2.5 & Division 10.

C. CCR, Title 22, Division 9, Chapters 3 & 4.

POLICY:

A. S-SV EMS Approved Controlled Substances:

1. Fentanyl.
2. Ketamine.
3. Midazolam.
4. Morphine sulfate.

B. Obtaining Controlled Substances:

Prehospital service provider agencies shall obtain controlled substances through one of the following methods:

1. The medical director of the prehospital service provider agency.
2. The base/modified base hospital shall ensure that a mechanism exists for prehospital service provider agencies to contract for the provision of controlled substances.

C. Prehospital Service Provider Agency Controlled Substances Policies/Procedures:

1. Prehospital service provider agencies shall ensure that security mechanisms and procedures are established for controlled substances, including, but not limited to:

    - Controlled substance ordering & order tracking.
    - Controlled substance receipt & accountability.
    - Controlled substance master supply storage, security & documentation.
    - Controlled substance labeling & tracking.
    - Controlled substance vehicle storage & security.
    - Controlled substance usage procedures & documentation.
    - Controlled substance reverse distribution.
    - Controlled substance disposal.
    - Controlled substance re-stocking procedures.

2. Prehospital service provider agencies shall ensure that mechanisms for investigation and mitigation of suspected controlled substance tampering or diversion are established, including, but not limited to:

    - Controlled substance testing.
    - Controlled substance discrepancy reporting.
    - Controlled substance tampering, theft & diversion prevention/detection.
    - Controlled substance usage audits.

D. Controlled Substance Security:

1. AEMT II and paramedic personnel are responsible for maintaining the correct inventory of controlled substances at all times.

2. All controlled substances shall be stored/secured in one of the following manners:

    - Preferred: Secured in a commercially developed drug locker specifically designed for controlled substance storage. The drug locker shall be securely mounted to the vehicle to prevent theft and shall have an electronic access keypad with an individual PIN code assigned to each individual authorized to access/utilize controlled substances. The drug locker shall be able to produce an electronic audit trail showing the date, time and PIN code of each instance the locker was opened. The double lock requirement does not apply to providers storing their controlled substance utilizing this method.
    - Alternative: Secured in the vehicle under double lock, in an appropriate manner to prevent theft. The outside driver/passenger/patient access door(s) of the vehicle shall not be considered one of the two locks.

3. Prehospital service provider agencies shall abide by all State and Federal laws/ regulations related to the storage/security of controlled substances.

4. Each unit shall maintain a standardized written record of the controlled substance inventory. Controlled substance inventory and administration records shall be maintained in accordance with all applicable State and Federal laws/regulations.

5. Controlled substances shall be inventoried any time there is a change in personnel. The key to access the controlled substances, if applicable, shall be in the custody of the individual who performed the inventory.

6. Any discrepancies in the controlled substance count shall be reported as soon as possible to an appropriate supervisor and the issuing agent. A discrepancy report must be appropriately documented.

E. Controlled Substances Administered to Patients:

1. Controlled substances shall be administered in accordance with applicable S-SV EMS policies/protocols.

2. The following information must be documented on a controlled substance administration record:

   - Date & time administered.
   - Unit number.
   - Patient name.
   - Drug administered.
   - Amount administered.
   - AEMT II or paramedic signature & number.

3. If only a portion of the controlled substance was administered to the patient, the remainder shall be wasted in the presence of a registered nurse or physician at the receiving hospital, or the provider's immediate supervisor. Both parties shall document this action on the controlled substance administration form.

4. Controlled substance inventories/logs are subject to inspection by the California Board of Pharmacy, Bureau of Narcotic Enforcement Administration of the Justice Department, Federal Drug Enforcement Administration, S-SV EMS, the issuing agent, and/or officers of the prehospital service provider agency.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Scope Of Practice			
	Effective: 12/01/2024	Next Review: 10/2027	**803**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish the paramedic scope of practice in the S-SV EMS region.

AUTHORITY:

A. HSC, Division 2.5, § 1797.84, 1797.172, 1797.204, 1797.206, 1797.214, 1797.218, 1797.220, 1798, & 1798.2.

B. CCR, Title 22, Div. 9, Ch. 3.3.

POLICY:

A. A paramedic may perform any activity identified in the scope of practice of an EMT, or an Advanced EMT, without requiring a separate certification.

B. Activities listed in the 'Paramedic Basic Scope of Practice' section of this policy may be performed by paramedic students or paramedics under the following conditions:

1. Paramedic students currently enrolled in an approved paramedic training program, who are under the direct supervision of an approved paramedic field preceptor in the prehospital setting, or who are under the direct supervision of a physician, registered nurse, or physician assistant in the hospital setting.

2. California licensed and S-SV EMS accredited paramedics who are part of the organized EMS system, functioning under the oversight of an S-SV EMS approved paramedic prehospital service provider agency as follows:

- Under the direct supervision of a physician, registered nurse, or physician assistant in the hospital setting for the purposes of CE or while working in a rural hospital pursuant to § 1797.195 of the California Health and Safety Code.
- Standing order patient care specified in S-SV EMS approved policies/protocols.
- Base/modified base hospital physician or MICN on-line medical direction.
- Physician direction as specified in S-SV EMS Physician On Scene Policy (839).
- Physician interfacility transport written orders as specified in S-SV EMS Medical Control For Transfers Between Acute Care Facilities Policy (840).

C. Activities listed in the 'Paramedic Optional Scope of Practice' section of this policy, as applicable to the specific provider agency, may be performed by paramedic students under the conditions indicated above, or by California licensed and S-SV EMS accredited paramedics who are part of the organized EMS system and are functioning under the oversight of an S-SV EMS approved paramedic optional skills provider.

D. Paramedic Basic Scope of Practice:

1. Utilize electrocardiographic devices and monitor electrocardiograms, including 12-lead electrocardiograms.

2. Perform defibrillation, synchronized cardioversion, and external cardiac pacing.

3. Visualize the airway by use of a laryngoscope and remove foreign bodies with Magill forceps.

4. Perform pulmonary ventilation by use of an i-gel LMA device, stomal intubation, or adult oral endotracheal intubation.

5. Utilize ventilation devices for continuous positive airway pressure.

6. Institute IV catheters, saline locks, needles, or other cannula, in peripheral veins and monitor/administer medications through pre-existing vascular access.

7. Institute intraosseous access.

8. Administer IV or IO glucose solutions or isotonic balanced salt solutions, including Ringer's Lactate solution.

9. Obtain venous blood samples.

10. Use laboratory devices, including point of care testing, for prehospital screening use to measure lab values including, but not limited to glucose, capnometry, capnography, and carbon monoxide.

11. Utilize Valsalva maneuver.

12. Perform percutaneous needle cricothyroidotomy.

13. Perform needle thoracostomy.

14. Monitor thoracostomy tubes.

15. Monitor and adjust IV solutions containing potassium ≤ 40 mEq/L.

16. Administer approved medications by the following routes: IV, IO, intramuscular, subcutaneous, inhalation, transcutaneous, rectal, sublingual, endotracheal, intranasal, oral, or topical.

17. Administer the following medications:

- 10% dextrose.
- 50% dextrose.
- Activated charcoal.
- Adenosine.
- Albuterol.
- Amiodarone.
- Aspirin.
- Atropine sulfate.
- Calcium chloride.
- Diphenhydramine hydrochloride.
- Dopamine hydrochloride.
- Epinephrine.
- Fentanyl.
- Glucagon.
- Ipratropium bromide.
- IV acetaminophen.
- Lidocaine hydrochloride.
- Ketamine.
- Ketorolac.
- Magnesium sulfate.
- Midazolam.
- Morphine sulfate.
- Naloxone hydrochloride.
- Nitroglycerin preparations (except intravenous).
- Ondansetron.
- Pralidoxime chloride.
- Sodium bicarbonate.
- TXA.

E. Paramedic Optional Scope of Practice:

1. Perform the following during interfacility patient transports:

- Monitoring of magnesium, nitroglycerin, heparin, &/or amiodarone infusions.
- Monitoring of blood transfusions.
- Utilization of an automatic transport ventilator (ATV).
- Utilization of non-invasive High Flow Nasal Cannula (HFNC).

Sierra – Sacramento Valley EMS Agency Program Policy			
Unified Paramedic Optional Scope Of Practice For Qualified Transport Programs			
	Effective: 12/01/2022	Next Review: 11/2025	**806**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To specify the unified paramedic optional scope of practice for qualified transport programs, and establish provider requirements and personnel qualifications for utilization.

AUTHORITY:

A. HSC, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.102, 1798.150, 1798.170 and 1798.172.

B. CCR, Title 22, Division 9, Chapter 4, § 100146

DEFINITIONS:

A. **Air Ambulance Provider –** A prehospital service provider agency that utilizes specially constructed, modified or equipped aircraft for the primary purpose of responding to emergency incidents and transporting critically ill and/or injured patients. An air ambulance provider utilizes a medical flight crew consisting of a minimum of two attendants certified or licensed in advanced life support.

B. **CAMTS –** Commission on Accreditation of Medical Transport Systems.

C. **CAMTS Emergency Critical Care (ECC) Accreditation –** A level of accreditation issued by CAMTS verifying that the medical transport provider has met all Emergency Critical Care (ECC) level accreditation standards. CAMTS recognizes FP-C for ECC accreditation, but also requires the FP-C to be paired with a qualified transport nurse partner.

D. **FP-C –** A 'Certified Flight Paramedic' educated and trained in critical care transport and flight medicine, who holds a current certification as an FP-C by the International Board of Specialty Certification (IBSC).

E. **FP-C in training –** A paramedic who has completed the qualified transport program's initial training but has not completed their FP-C testing/certificate. The FP-C in training must pass the FP-C exam by the end of their second year with the qualified transport program.

F. **Qualified Flight Paramedic –** A California licensed, S-SV EMS accredited and FP-C certified/FP-C in training paramedic who meets the requirements for utilization of the unified paramedic optional scope of practice. These individuals have at least three (3) years of critical care experience and have completed the qualified transport program's initial academy training with additional education in flight and altitude physiology. They work for a qualified transport program and are paired with a qualified transport nurse.

G. **Qualified Transport Program –** An S-SV EMS permitted air ambulance provider that has met the requirements to participate in the unified paramedic optional scope of practice program by obtaining/maintaining CAMTS ECC accreditation, and meeting the training, education, competencies, QI and medical direction requirements.

H. **Qualified Transport Nurse –** A registered nurse with at least three (3) years of critical care experience, who has completed the qualified transport program's initial academy training and is working on obtaining the CEN, CCRN, CFRN or CTRN certification required by the CAMTS ECC accreditation. A qualified transport nurse is employed by and practicing with the qualified transport program.

I. **Qualified Transport Program Medical Director –** A physician board certified/eligible in emergency medicine, who meets the CAMTS ECC accreditation medical director requirements.

J. **Qualified Transport Program Physician –** A physician affiliated with the qualified transport program, who is not the qualified transport program medical director, who is board certified/eligible in emergency medicine or in the specialty appropriate for the scope of services being provided (neonate, pediatrics, critical care, etc.).

POLICY:

A. The unified paramedic optional scope of practice procedures include:

1. Pediatric intubation.

2. Rapid sequence intubation/induction (RSI) medication administration, including sedatives, paralytics, analgesics, and induction agents.

3. Ventilator initiation, maintenance and management.

B. Prehospital service provider agencies shall meet the following requirements to be approved by S-SV EMS as a qualified transport program:

1. Have a current S-SV EMS air ambulance provider permit.

2. Obtain/maintain CAMTS ECC accreditation.

3. Have a qualified transport program medical director.

4. Utilize all unified paramedic optional scope of practice procedures.

5. Provide all required optional scope of practice training, education and competency testing, which has been reviewed/approved by S-SV EMS.

6. Allow only qualified flight paramedics to utilize the unified paramedic optional scope of practice.

7. Have a unified paramedic optional scope of practice QI program, which has been reviewed/approved by S-SV EMS.

8. Collect/submit unified paramedic optional scope of practice data to S-SV EMS. Data submission elements/frequency shall be established, and modified as necessary, by S-SV EMS pursuant to EMS Medical Directors Association of California (EMDAC) and California Emergency Medical Services Authority (EMSA) requirements.

C. Paramedic personnel shall meet the following requirements to be approved by S-SV EMS to utilize the unified paramedic optional scope of practice:

1. Have a current California paramedic license.

2. Have a current S-SV EMS paramedic accreditation.

3. Completed a minimum of 200 hours of training conducted by the qualified transport program, and meet the FP-C certified/FP-C in training requirements.

4. Follow the qualified transport program provider's policies/protocols for utilization of unified paramedic optional scope of practice procedures.

5. Remain competent/proficient in the unified paramedic optional scope of practice by passing required competency testing as follows:

   - Pediatric Intubation: Quarterly (every 3 months)
   - RSI: Quarterly (every 3 months)
   - Ventilator Use: Annually

6. Be employed by a qualified transport program provider and functioning under the oversight of this provider during any transports where the unified paramedic optional scope of practice is utilized.

7. Be partnered with a qualified transport nurse, qualified transport program medical director or qualified transport program physician during any transports where the unified optional scope of practice is utilized.

D. Unified paramedic optional scope of practice medical control:

1. Medical control for the utilization of the unified paramedic optional scope of practice shall remain the primary responsibility of S-SV EMS, according to established S-SV EMS policies/protocols, and is delivered in conjunction with the qualified transport program provider's policies/protocols specific to the utilization of the unified paramedic optional scope of practice procedures.

2. During an interfacility transport, online medical control may be obtained from the sending physician, receiving physician, Qualified Transport Program Medical Director, or Qualified Transport Program Physician as necessary.

Sierra – Sacramento Valley EMS Agency Program Policy			
Base/Modified Base/Receiving Hospital Contact			
	Effective: 06/01/2023	Next Review: 01/2026	**812**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To define the circumstances under which prehospital personnel shall establish base, modified base, and/or receiving hospital contact for medical control, patient destination and/or patient notification purposes.

AUTHORITY:

A. HSC, Division 2.5, § 1797.220, 1798, 1798.2, 1798.102.

B. CCR, Title 22, Division 9, Chapters 2, 3 and 4.

POLICY:

A. Prehospital personnel shall make appropriate hospital contact in a timely manner according to the requirements contained in this policy.

B. Base/modified base hospital contact is required by prehospital personnel to perform procedure(s) and/or administer medications(s) that are identified in S-SV EMS policies/protocols as 'Base/Modified Base Hospital Order Only'. In the event of communication failure, those procedures/medications may still be utilized if the patient's condition warrants such treatment.

C. Base/modified base hospital contact is required by prehospital personnel to perform procedure(s) and/or administer medications(s) that are identified in S-SV EMS policies/protocols as 'Base/Modified Base Hospital Physician Order Only'. In the event of communication failure those procedures/medications shall not be utilized.

D. When requesting to speak directly to a base/modified base hospital physician, prehospital personnel shall advise the hospital staff member who initially answers the telephone or radio of the reason for the request.

E. Prehospital personnel may provide minimum necessary patient identifying information (name, DOB, MR#, etc.) when requested by the receiving hospital. A secured communication line (e.g. landline, cellular telephone) shall be used for these purposes if available.

Base/Modified Base/Receiving Hospital Contact	812

PROCEDURE:

A. Prehospital personnel shall contact the base/modified base hospital that is in closest proximity to the incident for any of the following circumstances:

1. For authorization to perform procedures and/or administer medications that are indicated in S-SV EMS policies/protocols as 'Base/Modified Base Hospital Order Only' or 'Base/Modified Base Hospital Physician Order Only'.

2. For patients refusing assessment, treatment and/or transportation as required by S-SV EMS Refusal Of EMS Care Policy (Reference No. 850).

3. For destination consultation on the following types of patients:

- Burn patients who require destination consultation as required by S-SV EMS Burns Treatment Protocol (Reference No. T-5).
- When there is initiation of an ALS/LALS protocol and transport to a facility other than the most accessible is being considered, except for the following types of patients meeting criteria for transport directly to a designated specialty care facility:
  - STEMI patients as defined in S-SV EMS Chest Discomfort/Suspected Acute Coronary Syndrome (ACS) Protocol (Reference No. C-6): If a STEMI patient is within the authorized catchment area of a designated STEMI receiving center, contact shall be made directly with the designated STEMI receiving center.
  - Stroke patients as defined in S-SV EMS Stroke Protocol (N-3): If a suspected stroke patient is within the authorized catchment area of a designated stroke receiving center, contact shall be made directly with the stroke receiving center.
  - Patients who meet Field Trauma Triage Criteria, when required/directed by S-SV EMS General Trauma Management Protocol (Reference No. T-1).

  Note: These exceptions do not apply to patients who 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 prehospital provider, requires the additional input or judgment of the base/modified base hospital for appropriate management.

B. Prehospital personnel shall make contact directly with the destination facility, in a timely manner, 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.

Sierra – Sacramento Valley EMS Agency Program Policy			
Crime Scene Management			
	Effective: 12/1/2023	Next Review: 09/2026	**825**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide guidelines for EMS personnel when patient care is required at the scene of a known or potential crime.

AUTHORITY:

A. California Health and Safety Code, Division 2.5, § 1798.6, 1797.220.

B. California Code of Regulations, Title 22, Division 9.

POLICY:

A. The primary duty of both law enforcement and EMS personnel is to protect and preserve human life. EMS personnel must ensure that patient care is given highest priority, in consideration to the needs of law enforcement (personnel/public safety, crime scene management and evidence preservation).

B. 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. EMS personnel shall assure their own safety and, if possible, attempt to follow the guidelines contained in this policy.

C. EMS personnel shall follow the directions of law enforcement with respect to crime scene management. This direction should not prevent or detract from patient care. The following guidelines should be followed:

1. Parking of EMS vehicles should be done to provide adequate access for EMS personnel but with consideration of 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).

2. Entry to the crime scene should be made by the minimum number of EMS personnel necessary to provide patient care. If possible, entry and exit should be accomplished by the same route.

3. Care should be taken not to disturb any physical evidence.

4. Removal of the patient's clothing should be kept to a minimum. If necessary, 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).

5. Patient clothing and personal articles are to be left in the possession of law enforcement personnel. Do not discard anything.

6. Place wrappers and other disposable trash items which accumulate as patient care is rendered in a single site away from the patient and/or potential crime scene evidence. Do not pick up trash items and discard because evidence may be destroyed. Law enforcement personnel may suggest a site to be used for trash which would be most ideal to maximize evidence preservation.

7. Determination Of Death (S-SV EMS Determination of Death Protocol G-2):

    - Patients who meet ‘Obvious Death Criteria’ do not require cardiac monitor confirmation of asystole.
    - Patients who meet ‘Probable Death Criteria’ should be assessed utilizing the minimum number of EMS personnel necessary.
    - If death has been determined by EMS personnel, the patient should be left in the position found and not moved or touched beyond what is necessary to determine death.
    - Law enforcement personnel have the authority to declare death. If this has occurred, medical confirmation procedures by EMS personnel do not need to be performed unless specifically requested by law enforcement.

8. Every effort to cooperate with law enforcement should be made. In the event of disagreement with law enforcement, EMS personnel should document the issue and refer the matter to their supervisor for follow up. If the disagreement involves an issue that could result in patient harm, an immediate request for supervisory personnel to respond to the scene shall be made.

Sierra – Sacramento Valley EMS Agency Program Policy			
Suspected Child Abuse/Neglect Reporting			
	Effective: 12/01/2024	Next Review: 07/2027	**830**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish requirements/procedures for EMS personnel to report suspected child abuse and/or neglect.

AUTHORITY:

A. PC, Ch. 916 (Part 4, Title 1, Chapter 2, Article 2.5) § 11164 - 11174.3.

B. HSC, Div. 2.5, § 1797.204, 1797.206, 1797.218, 1797.220, 1798, & 1798.2.

DEFINITIONS:

A. **Child –** Any person under the age of eighteen (18).

B. **Mandated reporter –** Includes paid firefighters, EMRs, EMTs, AEMTs, paramedics, teachers, peace officers, any healthcare practitioner, clergy member, childcare custodian, or an employee of a child protective agency.

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

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

E. **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.

Suspected Child Abuse/Neglect Reporting	830

PRINCIPLES:

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

B. California PC, § 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 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/neglect, 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. All healthcare professionals are mandated to report suspected child abuse/neglect that they have knowledge of or observe in their professional capacity. 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/neglect, that individual is required to report to law enforcement and/or CPS immediately or as soon as practically possible by telephone and shall complete/submit the suspected child abuse/neglect report form within 36 hours.

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.

G. When a mandated reporter is not performing their job duties, they become discretionary reporters and are not required by law to report.

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

POLICY:

A. If EMS personnel suspect child abuse/neglect, a prompt verbal report shall be made to law enforcement and/or CPS. If the child is in imminent danger, law enforcement shall be immediately notified/requested. To make a verbal report to CPS, call the applicable county CPS office using the appropriate 24-hour contact telephone number listed in this policy.

B. The suspected child abuse/neglect report shall be completed according to the instructions on the back of the form. The report shall be filled out as completely and clearly as possible. The completed form shall be submitted to law enforcement and/or CPS within 36 hours. A copy of the report should also be retained by the reporting party. An electronic version of the form/instructions can be obtained at the following link: https://oag.ca.gov/sites/all/files/agweb/pdfs/childabuse/ss_8572.pdf

C. The following information shall also be included in the PCR:

1. The name, department and badge # of the law enforcement officer and/or the name of the CPS social worker the report was made to.

2. The time of notification.

3. The disposition of the child, if not transported.

Suspected Child Abuse/Neglect Reporting Contact Information	
Butte County	**Colusa County**
Chico Area (North County) Child Protective Services: (800) 400-0902 765 East Ave., Suite 120 Chico, CA 95926 Oroville Area (South County) Child Protective Services: (800) 400-0902 78 Table Mountain Blvd., Oroville, CA 95965	Child Protective Services: (530) 458-0280 251 East Webster St., Colusa, CA 95932
Glenn County	**Nevada County**
Child Welfare Services: (530) 934-1429 420 E. Laurel St., Willows, CA 95988	Child Protective Services: (530) 273-4291 988 McCourtney Rd., Grass Valley, CA 95949
Placer County	**Shasta County**
Family & Children Services: (916) 872-6549 1000 Sunset Blvd., Rocklin, CA 95765	Child Protective Services: (530) 225-5144 1313 Yuba St., Redding, CA 96001
Siskiyou County	**Sutter County**
Child Protective Services: (530) 841-4200 2060 Campus Dr., Yreka, CA 96097	Child Protective Services: (530) 822-7227 1965 Live Oak Blvd., Suite A, Yuba City, CA 95991
Tehama County	**Yuba County**
Child Protective Services: (530) 527-1911 310 South Main St., Red Bluff, CA 96080	Child Protective Services: (530) 749-6288 5730 Packard Ave., Marysville, CA 95901

Sierra – Sacramento Valley EMS Agency Program Policy			
Suspected Elder/Dependent Adult Abuse Reporting			
	Effective: 12/01/2024	Next Review: 07/2027	**832**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish requirements/procedures for EMS personnel to report suspected elder/ dependent adult abuse.

AUTHORITY:

A. HSC, Div. 2.5, § 1797.204, 1797.206, 1797.218, 1797.220, 1798, & 1798.2.

B. WIC § 15630 et seq.

DEFINITIONS:

A. **Dependent adult –** Any person between the ages of 18 and 64 years who meets one or both of the following criteria:

1. 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.

2. Is admitted as an inpatient to a 24-hour health facility, as defined in HSC § 1250, 1250.2, or 1250.3.

B. **Developmentally disabled person –** 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.

C. **Elder/dependent adult abuse –** Either of the following:

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

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

D. **Elder –** Any person 65 years of age or older.

E. **Reasonable suspicion –** 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. Paid firefighters, EMRs, EMTs, AEMTs, paramedics, and MICNs 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 their professional capacity, or within the scope of their 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 dependent adult that they have experienced behavior, including an act or omission, constituting physical abuse, abandonment, abduction, isolation, financial abuse, or neglect, or the reporter reasonably suspects that abuse has occurred.

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 the 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.

E. 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.

F. All healthcare professionals are mandated to report suspected elder/dependent adult abuse that they have knowledge of or observe in their professional capacity. 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. Verbal 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. When the abuse is alleged to have occurred anywhere else, contact either the local law enforcement agency or the local County Adult Protective Services.

C. A written Report of Suspected Dependent Adult/Elder Abuse must be completed and submitted to the agency initially contacted within two (2) working days of the verbal report. Electronic versions of the reporting forms and instructions can be obtained at the following links:

1. Report of Suspected Dependent Adult/Elder Abuse (SOC 341): https://cdss.ca.gov/portals/9/fmuforms/q-t/soc341.pdf?ver=2018-11-15-132736-097

2. Report of Suspected Dependent Adult/Elder Financial Abuse (SOC 342): https://www.cdss.ca.gov/Portals/9/fmuforms/q-t/SOC342.pdf

D. The following information shall also be included in the PCR:

1. The name, department and badge # of the law enforcement officer and/or the name of the APS social worker or Local Ombudsman the report was made to.

2. The time of notification.

3. The disposition of the elder/dependent adult if not transported.

Suspected Elder/Dependent Adult Abuse Reporting Contact Information	
Butte County	**Colusa County**
Ombudsman: (530) 898-5923 Adult Protective Services: (800) 664-9774 78 Table Mountain Blvd., Oroville, CA 95965	Ombudsman: (530) 898-5923 Adult Protective Services: (530) 458-0280 251 East Webster St., Colusa, CA 95932
Glenn County	**Nevada County**
Ombudsman: (530) 898-5923 Adult Protective Services: (530) 865-1178 P.O. Box 611, Willows, CA 95988	Ombudsman: (916) 376-8910 Adult Protective Services: (530) 265-1639 950 Maidu Ave. Nevada City, CA 95959
Placer County	**Shasta County**
Ombudsman: (916) 376-8910 Adult Protective Services: (916) 787-8860 101 Cirby Hills Dr., Roseville, CA 95678	Ombudsman: (530) 229-1435 Adult Protective Services: (530) 225-5798 PO Box 496005, Redding, CA 96049
Siskiyou County	**Sutter County**
Ombudsman: (530) 229-1435 Adult Protective Services: (530) 842-7009 2060 Campus Dr., Yreka, CA 96097	Ombudsman: (916) 376-8910 Adult Protective Services: (530) 822-7227 1445 Veterans Memorial Cir Yuba City, CA 95993
Tehama County	**Yuba County**
Ombudsman: (530) 898-5923 Adult Protective Services: (530) 527-1911 PO Box 1515, Red Bluff, CA 96080	Ombudsman: (916) 376-8910 Adult Protective Services: (530) 749-6471 5730 Packard Ave., Marysville, CA 95901

Sierra – Sacramento Valley EMS Agency Program Policy			
Medical Control At The Scene Of An Emergency			
	Effective: 06/01/2023	Next Review: 03/2026	**835**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To define patient care and incident management responsibilities at the scene of a medical emergency.

AUTHORITY:

A. HSC, Division 2.5, § 1797.220, 1798.6.

B. CCR, Title 22, Division 9.

POLICY:

A. Authority for patient health care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic, or other prehospital emergency personnel, at the scene of the emergency, who is most medically qualified specific to the provision of rendering emergency medical care. 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.

B. Notwithstanding the above, authority for the overall 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 EMS personnel or other authoritative health care professionals at the scene in the determination of relevant risks. Some limited examples are as follows:

   1. California Highway Patrol – All freeways; all roadways in unincorporated areas to include right-of-way.

   2. Sheriff's Office – Off-highway unincorporated areas (parks, private property, etc.).

3. Local Fire/Police – Specific areas of authority within their jurisdiction, except freeways.

4. Airport Fire/Police – Airports.

5. 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 and care.

2. Medical aspects of extrication and patient movement.

3. Patient destination decisions, in consultation with base/modified base hospital when necessary.

4. Method and mode of transport.

B. The first on duty ALS licensed/accredited or certified responder on the scene shall assume responsibility for the patient's care unless they are cancelled by BLS personnel prior to patient contact, and there is no indication that ALS assessment/ treatment is necessary.

Sierra – Sacramento Valley EMS Agency Program Policy			
Hazardous Materials Incidents			
	Effective: 06/01/2023	Next Review: 01/2026	**836**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish guidelines for the response of EMS prehospital personnel to hazardous materials incidents.

AUTHORITY:

A. HSC, Division 2.5, § 1797.150, 1797.151, 1797.204, 1797.214, 1798.6.

B. CCR, Title 22, 100172 and 100175.

C. OSHA Regulations, CFR 1910.120.

D. Applicable County Hazardous Materials Response Plans.

DEFINITIONS:

A. **County Hazardous Materials Response Plan –** County specific plan defining hazardous materials incident types and establishing response protocols/ responsibilities of agencies within the county.

B. **Hazardous Materials (Haz Mat) –** 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.

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

D. **Decontamination –** The process of removing or neutralizing contaminates that have accumulated on a victim to the extent necessary to prevent/alleviate the occurrence of heath and/or environmental effects.

E. **First Responder Awareness Level –** First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release.

F. **Exclusion Zone (Hot Zone) –** The contaminated area, Immediately Dangerous to Life and Health (IDLH).

G. **Contamination Reduction Zone (Warm Zone) –** The area where decontamination takes place.

H. **Support Zone (Cold Zone) –** The uncontaminated area where individuals should not be exposed to hazardous conditions.

TRAINING AND COMPETENCY:

The minimum training for EMS prehospital personnel is 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 incident.

POLICY:

A. Responsibility for Haz Mat containment, identification, decontamination, and victim evacuation rests with the Incident Commander (IC)/Unified Command (UC).

B. Responding ambulances should stage off-site until the IC/UC provides for safety, a clear assignment and approach to scene.

C. EMS personnel must avoid contamination and not transport patients until they have been completely decontaminated. (Exception: For radiation contaminated patients that meet immediate triage criteria, treatment and transport should not be delayed for decontamination processes).

D. EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless specifically trained, equipped and authorized to do so.

E. EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless specifically trained, fit tested and authorized to do so.

F. EMS personnel shall contact the base/modified base or receiving hospital as soon as possible, so they may prepare to receive victims. The base/modified base hospital may also assist field personnel in determining a decontamination and treatment plan.

DISPATCH:

Ambulances dispatched to a possible hazardous materials incident shall be advised by dispatch of the following additional information when known/available:

A. On scene wind direction and recommended approach route (coordinated with IC/UC).

B. Staging area location.

C. Location of incident command post.

D. Communication frequencies.

E. Type of hazardous material(s) involved.

F. Estimated number of patients.

SCENE MANAGEMENT:

A. Once cleared to respond into the scene (Support Zone/Cold Zone) from staging, ambulance personnel shall follow directions provided by IC/UC or designee.

B. Recognition of a Haz Mat on-scene or during transport:

If ambulance personnel become aware of hazardous materials while on scene or during transport, they shall:

1. Consider themselves contaminated and part of the incident (Hot Zone).

2. Evacuate to a safe location (if safe/appropriate to do so) to minimize exposure, and consider self-decontamination.

3. Isolate the scene and deny entry (keep others away). Move uninvolved victims to a safe zone.

4. Confirm Haz Mat using DOT Emergency Response Guidebook and notify appropriate jurisdictional authorities to respond to the scene for site control and decontamination.

PATIENT CARE:

A. EMS personnel shall not render medical care beyond the Support Zone (Cold Zone) unless specifically trained, equipped, and authorized to do so.

B. Medical treatment and transportation is secondary to the prevention of spreading the contaminate, and the management of the Haz Mat incident. The IC/UC 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 (Warm Zone) after decontamination has been completed.

C. For radiation contaminated patients that meet immediate triage criteria, treatment and transport should not be delayed for decontamination processes.

D. Deceased victims shall be left undisturbed at the scene, or moved at the direction of the coroner, IC/UC, or designee.

E. The use of HEMS aircraft for the transport of potentially contaminated Haz Mat patient(s) is generally not appropriate. Patient transport by HEMS aircraft shall only occur by direction of the IC/UC or designee. HEMS aircraft may be utilized, at the discretion of the IC/UC or designee, to transport immediate radiation contaminated patients under the same criteria as ground based transportation assets.

F. If necessary, request CHEMPACK resources utilizing county specific activation procedures (refer to S-SV EMS Nerve Agent Treatment Protocol E-8).

G. Treat patients as directed by applicable S-SV EMS protocols, and/or direction from the base/modified base hospital.

Sierra – Sacramento Valley EMS Agency Program Policy			
Physician On Scene			
	Effective: 06/01/2023	Next Review: 03/2026	**839**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To define patient care responsibilities when a physician is on the scene of a medical emergency.

AUTHORITY:

A. HSC, Division 2.5, § 1797.220, 1798.2.

B. CCR, Title 22, Division 9.

POLICY:

A. EMS personnel encountering a physician on the scene of a medical emergency shall initiate and maintain responsibility for patient care, unless the physician assumes responsibility for patient care and accompanies the patient to the hospital (if required). EMS personnel may assist the physician as long as they operate within their applicable scope of practice.

B. If necessary, EMS personnel are responsible for confirming that the individual is in fact a California licensed physician. If needed, utilize the EMSA/CMA Physician on Scene Card included in this policy.

C. In the event of a conflict with a physician on scene, EMS personnel shall consult with the base/modified base hospital and document the events appropriately.

PROCEDURE:

A. Physician is a bystander:

1. If the physician wishes to do more than offer assistance, they must:

- Assume responsibility for the patient.
- Provide the care s/he wishes.
- Accompany the patient to the hospital (if safety allows).

2. If there is a conflict between the physician's requested treatment and the EMS personnel's scope of practice, EMS personnel shall explain that they can only treat within their applicable scope of practice.

3. If necessary, contact the base/modified base hospital and request the physician to discuss any issues directly with base/modified base hospital personnel.

B. Physician is patient's physician:

1. The physician may provide treatment prior to transfer of patient care to EMS personnel.

2. If there is a conflict between the physician's requested treatment and the EMS personnel's scope of practice following transfer of patient care, EMS personnel shall explain that they can only treat within their applicable scope of practice.

3. If necessary, contact the base/modified base hospital and request the physician to discuss any issues directly with base/modified base hospital personnel.

4. Patient care may be transferred to EMS personnel. There is no requirement for the physician to accompany the patient to the hospital in these circumstances.

EMSA/CMA PHYSICIAN ON SCENE CARD:

FRONT

NOTE TO PHYSICIANS ON INVOLVEMENT WITH EMS PERSONNEL

EMS personnel operate under standard policies and procedures developed by the Local EMS Agency and approved by their Medical Director under Authority of Division 2.5 of the California Health and Safety Code. The drugs they carry and procedures they can do are restricted by law and local policy.

If you want to assist, this can only be done through one of the alternatives listed on the back of this card. These alternatives have been endorsed by CMA, State EMS Authority and CCLHO.

Assistance rendered in the endorsed fashion, without compensation, is covered by the protection of the "Good Samaritan Code" (see Business and Professional Code, Sections 2144, 2395-2298 and Health and Safety Code, Section 1799.104).

BACK

ENDORSED ALTERNATIVES FOR PHYSICIAN INVOLVEMENT

After identifying yourself by name as a physician licensed in the State of California, and, if requested, showing proof of identity, you may choose one of the following:

1. Offer your assistance with another pair of eyes, hands or suggestions, but let EMS personnel remain under base hospital control; or,
2. Request to talk to the base station physician and directly offer your medical advice and assistance; or,
3. Take total responsibility for the care given by EMS personnel and physically accompany the patient until the patient arrives at a hospital (if safety allows) and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedures.

Sierra – Sacramento Valley EMS Agency Program Policy			
Medical Control For Transfers Between Acute Care Facilities			
	Effective: 06/01/2023	Next Review: 05/2026	**840**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To assure medical control of patients during ambulance transfers between acute care facilities. This policy does not exempt any acute care hospital or physician from meeting their regulatory/statutory obligations for patient transfers. The medical/legal responsibility for the patient rests with the transferring physician.

AUTHORITY:

A. HSC, Division 2.5, § 1797.185, 1797.194, 1797.218, 1797.220, 1798.102, 1798.170, and 1798.172.

B. CCR, Title 22, Division 9.

C. USC, Title 42, Section 395dd, EMTALA Statute.

D. CFR 42, Sections 489.20 and 489.24, EMTALA Regulations.

POLICY:

A. Prior to accepting an acute care interfacility transfer patient, EMS personnel shall:

1. Obtain patient information to include diagnosis, history and any therapies received while in the hospital or within the previous four (4) hours, whichever is less.

2. Complete a physical assessment, including vital signs.

B. EMS personnel shall follow orders of the transferring physician, however they cannot provide care beyond the S-SV EMS approved scope of practice. Should medical consultation be required during transport, EMS personnel shall follow the S-SV EMS Base/Modified Base/Receiving Hospital Contact Policy (Reference No. 812).

C. If a patient is transferred outside of the S-SV EMS region or base/modified base hospital radio contact range, EMS personnel may provide care according to S-SV EMS standing order policies/protocols.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Monitoring Of Magnesium Sulfate, Nitroglycerin, Heparin, &/Or Amiodarone Infusions During IFTs			
	Effective: 06/01/2023	Next Review: 03/2026	**841**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide parameters for paramedic monitoring of magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions during interfacility transports (IFTs).

AUTHORITY:

A. HSC, Division 2.5, § 1797.220.

B. CCR, Title 22, Chapter 4, Article 1, § 100145.

POLICY:

A. Only appropriately trained paramedics who are on duty with an S-SV EMS authorized paramedic IFT optional skills provider may monitor magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions during IFTs.

B. Patients will have pre-existing infusions in peripheral or central IV lines.

C. Paramedics will not initiate magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions.

D. Magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions should have been running for at least 10 minutes prior to transport.

E. Patients should have maintained stable vital signs for the previous 30 minutes and will not have more than two (2) medication infusions running exclusive of potassium chloride concentrations authorized under the paramedic basic scope of practice.

PROCEDURE:

A. All patients shall be maintained on a cardiac monitor and a non-invasive blood pressure monitor throughout transport.

B. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during transport, in addition to the type of solution, dosage and rate of infusion. These written orders shall be attached to the completed PCR.

C. Patients will be hemodynamically stable at time of transport.

D. If medication administration is interrupted, the paramedic may restart the infusion as delineated in the transfer orders.

E. All infusions (except for potassium chloride concentrations authorized under the paramedic basic scope of practice) will be monitored by a mechanical pump familiar to the paramedic. In cases of pump malfunction that cannot be corrected, the infusion shall be discontinued and the transferring physician and/or base/modified base hospital notified as soon as possible. S-SV EMS shall be notified of any mechanical pump malfunction no later than the end of the next business day.

F. The paramedic shall document on the PCR the total volume infused throughout the duration of the transport.

G. Magnesium sulfate infusion parameters:

1. Regulation of the infusion rate will be within parameters defined by the transferring physician.

2. If the patient develops signs/symptoms of magnesium toxicity, the medication drip shall be discontinued and the transferring physician and/or base/modified base hospital will be notified as soon as possible. Signs/symptoms of magnesium toxicity include:

    - Thirst
    - Diaphoresis
    - DTR’s (Deep Tendon Reflexes) – depressed or absent
    - Hypotension
    - Flaccid paralysis
    - Respiratory depression
    - Circulatory depression or collapse
    - CNS depression
    - Urine output < 30 ml/hr
    - Chest pain or pulmonary edema

3. Vital signs, including DTR's, shall be monitored and documented every 15 minutes and any time there is a change in patient condition or medication adjustment.

H. Nitroglycerin parameters:

1. Infusion fluid will be D5W.

2. Medication concentration will be 50mg/250mL.

3. Regulation of the infusion rate will be within parameters defined by the transferring physician, but in no case will changes be greater than 10mcg/minute increments every 5-10 minutes. In cases of severe hypotension, the medication drip will be discontinued and the transferring physician and/or base/modified base hospital will be notified as soon as possible.

4. Discuss with transferring physician concomitant use of analgesics during transport (i.e., morphine sulfate, fentanyl).

5. Vital signs shall be monitored and documented every 15 minutes and any time there is a change in patient condition or medication adjustment.

I. Heparin infusion parameters:

1. Infusion fluid will be D5W or NS.

2. Medication concentration shall not exceed 100units/mL of IV fluid (25,000 units/ 250mL).

3. Infusion rates shall be verified with the sending RN following changeover to the mechanical EMS transport pump and will remain constant during transport. No regulation of the rate will be performed by the paramedic except to turn off the infusion completely.

4. Vital signs shall be monitored and documented every 15 minutes and any time there is a change in patient condition.

J. Amiodarone infusion parameters:

1. Medication concentration must be a minimum concentration of 150mg/250mL (0.6 mg/mL).

2. Infusion rates may vary between 0.25 – 1 mg/min.

3. Infusion rates will remain constant during transport. No adjustment of the rate will be performed by the paramedic except to turn off the infusion completely.

4. Vital signs will be monitored and documented every 15 minutes and any time there is a change in patient condition.

5. Y-Injection incompatibility; the following will precipitate with amiodarone hydrochloride:

    - Heparin
    - Sodium bicarbonate

6. Amiodarone hydrochloride intravenous infusion monitoring is not approved for patients less than 14 years old without base/modified base physician contact.

7. For infusions greater than one hour, amiodarone hydrochloride concentrations should not exceed 2mg/mL unless a central venous catheter is used.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Monitoring Of Blood Transfusions During IFTs			
	Effective: 06/01/2023	Next Review: 03/2026	**842**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide parameters for paramedic monitoring of blood transfusions during interfacility transports (IFTs).

AUTHORITY:

A. HSC, Division 2.5, § 1797.220.

B. CCR, Title 22, Chapter 4, Article 1, § 100145.

POLICY:

A. Only appropriately trained paramedics who are on duty with an S-SV EMS authorized paramedic IFT optional skills provider may monitor blood transfusions during IFTs.

B. Paramedic monitoring of blood transfusions during IFTs is limited to those circumstances when there are no RN staffed Critical Care Transport (CCT) units available or when air ambulance transport is not appropriate/available.

C. Patients will have pre-existing blood transfusions in peripheral or central IV lines. Prehospital personnel will not initiate blood transfusions.

PROCEDURE:

A. All patients will be maintained on a cardiac monitor and a non-invasive blood pressure monitor throughout transport.

B. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport in addition to the transfusion rate. These written orders shall be attached to the completed PCR.

C. Patients will be hemodynamically stable at the time of transport.

D. Paramedic personnel must be knowledgeable in the operation of the specific blood delivery/warming equipment.

E. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.

F. Verify the patient and blood with the sending RN by checking the patient ID band against the blood label(s) and blood order for name, blood type and unit identifying number.

G. Vital signs will be monitored and documented every 15 minutes and any time there is a change in patient condition or change in transfusion rate.

H. Monitor the patient for any signs and symptoms of a transfusion reaction. Monitor temperature for adverse effects if transport time exceeds 15 minutes. The following are the most common types of transfusion reactions that may occur:

1. Hemolytic reactions: Hemolytic reactions are the most life-threatening. Clinical manifestations may vary considerably: fever, headache, chest or back pain, pain at infusion site, hypotension, nausea, generalized bleeding or oozing from surgical site, shock. The most common cause is from ABO incompatibility due to a clerical error or transfusion to the wrong patient. Chances of survival are dose dependent therefore it is important to stop the transfusion immediately if a hemolytic reaction is suspected. Give a fluid challenge.

2. Febrile non-hemolytic reaction: Chills and fever (rise from baseline temperature of 1°C or 1.8°F). Document and report to hospital on arrival.

3. Allergic reaction: Characterized by appearance of hives and itching.

4. Anaphylaxis: May occur after administration of only a few ml's of a plasma containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock, and loss of consciousness.

5. Volume overload: Characterized by dyspnea, headache, peripheral edema, coughing, frothy sputum, or other signs of congestive heart failure occurring during or soon after transfusion. Restrict fluid.

I. If a suspected transfusion reaction occurs:

1. Interrupt the transfusion immediately.

2. Contact the transferring and/or base/modified base hospital physician.

3. Consult appropriate treatment protocol.

4. Document any suspected transfusion reactions.

5. Report to hospital staff immediately upon arrival.

J. The paramedic shall document on the PCR the total volume infused throughout the duration of the transport.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Utilization Of Automatic Transport Ventilators During IFTs			
	Effective: 06/01/2023	Next Review: 03/2026	**843**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide parameters for paramedic utilization of an Automatic Transport Ventilator (ATV) during interfacility transports (IFTs).

AUTHORITY:

A. HSC, Division 2.5, § 1797.220.

B. CCR, Title 22, Chapter 4, Article 1, § 100145.

POLICY:

A. Only appropriately trained paramedics who are on duty with an S-SV EMS authorized paramedic IFT optional skills provider may utilize an ATV during IFTs.

B. Patients will be on ventilator support prior to transport. Paramedics will not initiate ventilator support.

C. Provider agencies utilizing ATV equipment shall follow the manufacturer instructions for use, maintenance, cleaning, and regular testing. At a minimum, ATV equipment shall undergo annual preventative testing/maintenance by qualified manufacturer's representative personnel.

D. Paramedics must be adequately trained and regularly retrained on the use of the ATV equipment. Such training shall occur no less than annually and shall be documented.

PROCEDURE:

A. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders must provide for maintaining and adjusting ventilations via ATV settings during transport and shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport. These written orders shall be attached to the completed PCR.

B. Ventilator support must be regulated by an ATV familiar to the paramedic.

C. If an ATV equipment failure occurs and cannot be corrected, the paramedic shall discontinue use of the ATV, initiate ventilation by bag-valve device, and notify the transferring physician and/or base/modified base hospital as soon as possible. S-SV EMS shall also be notified of any ATV failure by the end of the next business day.

D. Paramedics shall continually observe the patient and document patient response to any changes while the ATV is operational.

E. Initial ATV settings and any subsequent changes shall be documented on the PCR.

F. The paramedic is responsible for airway management and must frequently reassess tracheostomy/endotracheal tube placement, including after each patient movement.

G. Non-invasive BP monitoring equipment shall be utilized. Vital signs shall be monitored and documented every 15 minutes and any time there is any change in patient condition or adjustment of the ATV setting.

H. Continuous pulse oximetry, waveform capnography, and cardiac monitoring shall be maintained throughout transport, and values/rhythms shall be documented every 15 minutes and any time there is a change in patient condition.

I. The ATV equipment must be able to match the existing ventilator settings, and shall include the following minimum features (including circuit):

1. Modes:
   - Assist Control (AC).
   - Synchronized Intermittent Mandatory Ventilation (SIMV).

2. Ventilation rate control.

3. Tidal volume control.

4. FiO_2 control.

5. Positive End-Expiratory Pressure (PEEP) control.

6. Inspiratory (I) time control.

7. Peak airway pressure gauge.

8. Alarms:
   - Peak airway pressure.
   - Disconnect.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Utilization Of Non-Invasive High Flow Nasal Cannula During IFTs			
	Effective: 06/01/2024	Next Review: 03/2026	**844**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide parameters for paramedic utilization of non-invasive High Flow Nasal Cannula (HFNC) during interfacility transports (IFTs).

AUTHORITY:

A. HSC, Division 2.5, § 1797.220.

B. CCR, Title 22, Chapter 4, Article 1, § 100145.

POLICY:

A. Only appropriately trained paramedics who are on duty with an S-SV EMS authorized paramedic IFT optional skills provider may utilize non-invasive HFNC during IFTs.

B. Patients will be on non-invasive HFNC prior to transport. Paramedics will not initiate non-invasive HFNC.

C. Provider agencies utilizing non-invasive HFNC equipment shall follow the manufacturer instructions for use, maintenance, cleaning, and regular testing. At a minimum, non-invasive HFNC equipment shall undergo annual preventative testing/ maintenance by qualified manufacturer's representative personnel.

D. Paramedics must be thoroughly trained and regularly retrained on the use of the non-invasive HFNC equipment. Such training shall occur no less than annually and shall be documented.

PROCEDURE:

A. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders must provide for maintaining and titrating flow (LPM), FiO2 and SpO2 goals for non-invasive HFNC during transport and shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport. These written orders shall be attached to the completed PCR.

B. Non-invasive HFNC support must be administered utilizing non-invasive HFNC equipment familiar to the paramedic.

C. If a non-invasive HFNC equipment failure occurs and the paramedic is unable to maintain oxygen administration utilizing non-invasive HFNC, the paramedic shall discontinue use of non-invasive HFNC, provide appropriate oxygenation/ventilation support, and notify the transferring physician and/or base/modified base hospital as soon as possible. S-SV EMS shall also be notified of any non-invasive HFNC failure by the end of the next business day.

D. Paramedics shall continually observe the patient and document patient response to treatment and any changes while the non-invasive HFNC is operational.

E. Initial non-invasive HFNC settings and any subsequent changes shall be documented on the PCR.

F. The paramedic is responsible for airway management and must frequently reassess respiratory effort for effectiveness of non-invasive HFNC oxygen delivery.

G. Non-invasive BP monitoring equipment shall be utilized. Vital signs shall be monitored and documented every 15 minutes and any time there is any change in patient condition or adjustment of the non-invasive HFNC settings.

H. Continuous pulse oximetry and cardiac monitoring shall be maintained throughout transport, and values/rhythms shall be documented every 15 minutes and any time there is a change in patient condition.

Sierra – Sacramento Valley EMS Agency Program Policy			
Reduction/Cancellation Of ALS Response			
	Effective: 06/01/2023	Next Review: 01/2026	**848**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish criteria for the reduction or cancellation of responding ALS resources.

AUTHORITY:

A. HSC, Division 2.5, § 1797.204, 1797.220 and 1798.

B. CCR, Title 22, Division 9, Chapter 4, § 100147, 100169 and 100170.

DEFINITIONS:

A. **Code 2 –** Proceeding expeditiously but obeying all traffic laws without exception.

B. **Code 3 –** Proceeding with red lights and siren according to the vehicle code.

C. **Competent Individual –** An individual responsible for their own healthcare, or legally responsible for healthcare decisions involving the patient (parent, legal guardian, conservator, agent/attorney-in-fact, etc.), who has the capacity to understand the circumstances for which EMS care is indicated and the risks associated with refusing all or part of such care. They are alert and their judgement is not impaired by alcohol, drugs/medications, illness, injury, or grave disability.

POLICY:

A. The IC/designee on the scene of a medical incident may reduce a responding ALS resource from Code 3 to Code 2 upon determination that the patient's illness or injury is not immediately life-threatening and the difference in Code 3 and Code 2 response time would not likely have an impact on patient safety (note: when an ALS ambulance is reduced to Code 2, it is possible that the resource will be redirected to a higher priority call, resulting in a delayed subsequent ambulance response).

B. The IC/designee may cancel a responding ALS resource upon determination that the incident does not involve an illness or injury which would require assessment, treatment and/or transport by ALS personnel, or when a competent individual is refusing ALS assessment, treatment and/or transport.

1. BLS personnel should not cancel responding ALS resources for ‘high risk’ patients, including but not limited to:

    - Cardiac arrest with active CPR.
    - Cardiac symptoms.
    - Difficulty breathing.
    - Altered mental status.
    - Drug ingestion.
    - Attempted suicide, verbalized suicidal/homicidal ideations.
    - Seizures.
    - Near drowning.
    - Active or significant hemorrhage.
    - Pediatric patient’s ≤3 years old.
    - Patients who meet Field Trauma Triage Criteria as defined in S-SV EMS General Trauma Management Protocol (Reference No. T-1).

2. Once they have arrived on scene, ALS personnel shall attempt to make patient contact unless they are cancelled by BLS personnel prior to patient contact, and there is no indication that the patient meets any of the ‘high risk’ criteria listed in this policy.

Sierra – Sacramento Valley EMS Agency Program Policy			
Transfer Of Patient Care			
	Effective: 12/01/2023	Next Review: 07/2026	**849**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE

To establish requirements for transfer of patient care by EMS personnel.

AUTHORITY

A. HSC, Division 2.5, § 1791.220.

B. CCR, Title 22, Division 9, Chapters 1.5, 2, 3, and 4.

POLICY

A. The first on duty EMS personnel at the scene of a medical emergency shall initiate EMS assessment/treatment unless cancelled prior to patient contact. This individual shall be the EMS primary care provider and shall maintain that role until patient care is transferred to other EMS or receiving hospital personnel.

B. Transfer of patient care to higher level EMS personnel shall occur as soon as possible after their arrival at scene, unless cancelled prior to patient contact or it has already been determined by other EMS personnel that a higher level of EMS care is not required.

C. Other EMS personnel shall provide pertinent incident/patient information and assistance to the EMS primary care provider.

D. Base/modified base hospital consultation shall be utilized for any significant disagreement regarding EMS treatment or transfer of patient care.

PROCEDURE

A. EMS personnel are authorized to transfer patient care to other EMS personnel when determined appropriate and mutually agreed to.

1. Transfer of patient care to lower-level EMS personnel shall only occur if the patient condition permits, and the care required is within the scope of practice of the lower-level EMS personnel.

2. Prior to transfer of patient care to an EMT, AEMT/paramedic personnel shall perform an adequate patient assessment and obtain a patient history to confirm that AEMT/paramedic care is not required. In the event of subsequent changes to patient condition requiring a higher level of EMS care, AEMT/paramedic personnel shall re-assume primary patient care as soon as possible.

3. Transfer of care from AEMT/paramedic personnel to an EMT is not allowed for any of the following types of patients:

    - Any patient who requires ALS/LALS management according to any S-SV EMS policies/protocols.
    - Patients refusing EMS care (S-SV EMS Policy 850).
    - Patients meeting trauma triage criteria (S-SV EMS Protocol T-1/T-1 (LALS)).
    - Pregnant patients in active labor or greater than 20 week's gestation with an obstetric complaint.

4. If EMS personnel refuse to accept transfer of patient care due to the patient's condition or complexity of treatment, the initial EMS primary care provider shall maintain patient care and accompany the patient to the hospital, if transported.

5. Equivalent or higher level EMS personnel shall not refuse transfer of patient care in the following situations:

    - Transfer of patient care from EMS personnel functioning in a specialized role (tactical, fireline, ski patrol, bike team, special event, etc.).
    - During a declared Multi Casualty Incident (MCI).
    - Transfer of patient care from ground EMS to EMS aircraft personnel (unless safety reasons prevent such transfer). Patient care shall not be transferred to EMS aircraft personnel until they are safely ready to accept care of the patient.

6. EMS personnel transferring patient care to other EMS personnel shall:

    - Provide pertinent patient assessment and treatment information to EMS personnel accepting responsibility for the patient.
    - AEMT/paramedic personnel who transfer patient care shall ensure the completion of a PCR as required by S-SV EMS Prehospital Documentation policy (Reference No. 605). The PCR shall include the time of patient care transfer and the name/provider agency of the EMS personnel accepting transfer.

Sierra – Sacramento Valley EMS Agency Program Policy			
Refusal Of EMS Care			
	Effective: 12/01/2023	Next Review: 09/2026	**850**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish criteria and procedures for the refusal of EMS assessment, treatment, and/or transportation (collectively referred to in this policy as "EMS care") by a patient, or an individual acting on behalf of a patient.

AUTHORITY:

A. HSC, Division 2.5, § 1797.204, 1797.220, and 1798.

B. CCR, Title 22, Division 9.

C. WIC, § 5008, 5150 and 5170.

D. PROB, § 810-813, 4609, 4711, 4712

DEFINITIONS:

A. **Emergency Medical Condition (EMC)** – A medical condition that, if not immediately diagnosed and treated will lead to serious disability or death, or treatment is necessary to alleviate severe pain.

B. **Capacity –** An individual's ability to 1) understand the nature and consequences of a decision and 2) to make/communicate a decision and understand the significant benefits, risks, and alternatives of their decision. An individual who has a mental or physical disorder may still be capable of making medical decisions. An individual has the capacity to give informed consent for EMS care if they can do all the following:

1. Respond knowingly and intelligently to queries about EMS care.

2. Participate in EMS care decision by means of a rational thought process.

3. Understand the following:

- The nature and seriousness of the illness, disorder, or defect.
- The nature of the EMS care that is being recommended.

- The probable degree and duration of benefits and risks of medical interventions or reasonable alternatives and the consequences of lack of treatment.

C. **Legal Guardian –** An individual granted legal authority to care for another individual, including a court appointed conservator.

D. **Parent –** The lawful mother or father of a non-emancipated minor.

E. **Patient –** An individual who has a complaint suggestive of an illness/injury, requests evaluation of an illness/injury, and/or in the judgment of EMS personnel, demonstrates a known or suspected illness/injury that requires EMS care.

F. **Person –** An individual who does not have a complaint suggestive of an illness/injury, does not request evaluation of an illness/injury, and/or in the judgement of EMS personnel, does not demonstrate a known or suspected illness/injury that requires EMS care.

G. **Surrogate Health Care Decision Maker** – In the event that a patient lacks capacity, a health care provider caring for the patient may choose a surrogate to make health care decisions on the patient's behalf as appropriate to the situation. Prior to implementing any decision made by a surrogate for a patient, the healthcare provider is required by law to inform the patient of the decision made and the person making it. Surrogate decision makers shall be, in descending order of preference, determined as follows:

1. The patient's designated adult surrogate.

2. The patient's agent pursuant to an advance health care directive or a power of attorney for health care.

3. The conservator or guardian of the patient having the authority to make health care decisions for the patient.

4. If none of the above are available, then the healthcare provider can choose a surrogate decision maker. A surrogate decision maker must:

   - Be an adult 18 years or older.
   - Have demonstrated special care and concern for the patient.
   - Be familiar with the patient's personal values and beliefs to the extent known.
   - Be reasonably available and willing to serve.

5. The surrogate decision maker can be chosen from the following list:

   - The spouse or domestic partner of the patient.

- An adult child of the patient.
- A parent of the patient.
- An adult sibling of the patient.
- An adult grandchild of the patient.
- An adult relative or close personal friend.

POLICY:

A. No individual shall be encouraged to refuse EMS care.

B. No individual shall be denied EMS care based on age, sex, race, creed, color, origin, economic status, language, sexual preference, disease, or injury, or any other actual or potential discriminatory reason.

C. Individuals determined by EMS personnel to meet the definition of a person, according to this policy, do not require EMS care.

D. A patient, legal guardian, or surrogate health care decision maker may decline all or part of EMS care if EMS personnel, in consultation with the base/modified base hospital when appropriate, have determined that the patient, legal guardian, or surrogate health care decision maker has capacity.

E. Refusal of EMS care procedures shall be performed by the highest-level medical provider on scene. If the non-transport and transport providers are certified/licensed at the same level, and both are on scene, the primary care provider shall be responsible for completing the required refusal of EMS care procedures.

PROCEDURE:

A. Unless refused by the patient, legal guardian, or surrogate healthcare decision maker, EMS personnel shall perform a complete and appropriate patient assessment, including obtaining vital signs and if applicable, performing diagnostic procedures (EKG/12-Lead, finger stick blood glucose testing, etc.).

B. If EMS personnel have determined that an EMC exists:

1. If the patient does not have capacity and no legal guardian or surrogate health care decision maker with capacity is available, the patient should be transported to the closest appropriate facility. This should occur in collaboration with other public safety personnel on-scene and the base/modified base hospital.

2. If the patient has capacity, or a legal guardian or surrogate health care decision maker with capacity is available, EMS personnel shall provide the patient, legal guardian, or surrogate health care decision maker with enough information to understand the nature and consequences of refusing EMS care. EMS providers

shall document the reason why the patient is refusing care and efforts taken to support the patient in receiving care. This may include base/modified base hospital contact.

C. Law enforcement assistance shall be requested for any of the following circumstances:

1. Any individual who has attempted suicide or verbalized suicidal/homicidal ideations and is refusing EMS care.

2. There is concern for patient neglect or endangerment.

3. EMS personnel have determined that the patient should be considered for a mental health hold and no EMC exists.

4. Any circumstance where EMS personnel believe law enforcement assistance would be beneficial.

D. Base/modified base hospital contact shall be made, while in close proximity to the patient, for any of the following circumstances:

1. Any situation in which EMS providers believe that a patient lacks capacity and is attempting to communicate a desire to not receive EMS care, unless an EMC exists and doing so would delay emergent care/transport.

2. Patients with a new altered level of consciousness who meet any of the following criteria:

- Continuing altered level of consciousness.
- Diabetic patients who meet any of the following criteria:
  - No known cause for hypoglycemic episode (i.e. missed meal, pump failure).
  - Suspected medication error/overdose of prescribed diabetes medications.
  - Experienced a seizure.
  - Required more than one dose of dextrose and/or glucagon by EMS.
  - Repeat blood glucose is ≤100mg/dl.
  - A reliable adult will not be staying with the patient.

3. Seizure patients, with a known seizure disorder, who meet any of the following criteria:

- Prolonged seizure (>5 min) or multiple seizures.
- Seizures resulting from a traumatic injury.
- No known cause for seizure (i.e. compliant with seizure medications).
- New or different seizure symptoms.

- Pregnant patients.
- Patient has recently started a new medication.
- A reliable adult will not be staying with the patient.

4. Patients experiencing a potentially life-threatening condition, including but not limited to patients meeting STEMI, stroke, or trauma triage criteria.

5. A patient exhibiting unstable vital signs.

6. Any situation where law enforcement request/assistance was unsuccessful in facilitating EMS care, and EMS personnel believe that further EMS care is in the patient's best interest.

7. Any circumstance where EMS personnel believe base/modified base hospital assistance would be beneficial or are requesting direct MICN or base/modified base hospital physician communication with the patient.

8. A patient who is an unemancipated minor (<18 years of age) or under the care of a legal guardian or surrogate healthcare decision maker, who is being discharged to themselves or another person present at the scene who is not their parent or legal guardian.

E. Prior to releasing unemancipated minor patients, or patients under the care of a legal guardian, EMS personnel shall attempt to contact the patient's parent/legal guardian if they are not already on scene. Pertinent contact details, as well as information on who the patient was released to, shall be documented in the patient care report.

F. In the event of communication failure for circumstances that require base/modified base hospital contact, a patient, legal guardian, or surrogate health care decision maker with legal capacity may be released by EMS personnel after all other requirements contained in this policy are met. EMS personnel must document the method of communication attempted and the reason for the communication failure in the patient care report.

G. A patient, legal guardian, or surrogate health care decision maker refusing EMS care must sign a Refusal of EMS Care Form (850-A or similar), witnessed by one of the following individuals (listed in order of preference):

1. Immediate family member.

2. Law enforcement officer.

3. Other EMS personnel.

4. Involved third party.

If the patient, legal guardian, or surrogate health care decision maker refuses to sign the Refusal of EMS Care Form, EMS personnel shall document this information in both the patient care report and the Refusal of EMS Care Form and obtain a witness signature indicating that the patient refused to sign.

H. Provider agencies are responsible for routinely auditing refusal of EMS care calls. Random auditing of these types of calls shall occur on a minimum of a monthly basis.

Sierra – Sacramento Valley EMS Agency Program Policy			
EMS Care Of Minor Patients			
	Effective: 12/01/2023	Next Review: 07/2026	**851**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish criteria and procedures for EMS assessment, treatment and/or transport (collectively referred to in this policy as "EMS care") of minor patients.

AUTHORITY:

A. HSC, Division 2.5.

B. CCR, Title 22, Division 9.

C. FAM, § 6922, 6924, 6925, 6926, 6927, 6928, and 6929.

D. WIC, § 305 and 625.

DEFINITIONS:

A. **Emancipated –** An individual under the age of 18 years old who is married, on active duty in the military, or emancipated by court declaration.

B. **Emergency –** A situation requiring immediate services for alleviation of severe pain or immediate diagnosis of unforeseen medical conditions, which, if not immediately diagnosed and treated, would lead to serious disability or death.

C. **Legal Guardian –** An individual granted legal authority to care for another individual.

D. **Minor –** An individual under the age of 18 years.

E. **Parent –** The lawful mother or father of a non-emancipated minor.

POLICY:

A. Parent/legal guardian consent for EMS care is not required for minor patients meeting any of the following criteria:

1. Has an emergency medical condition and a parent/legal guardian is not available.

2. Is an emancipated minor.

3. Is fifteen (15) years of age or older, living separate and apart from their parents and managing their own financial affairs.

4. Is twelve (12) years of age or older and in need of medical care for an infectious, contagious communicable disease, or for a sexually transmitted disease.

5. Is twelve (12) years of age or older and in need of medical care for drug or alcohol abuse.

6. Is in need of medical care for rape or sexual assault.

7. Is pregnant and requires medical care related to the pregnancy.

B. EMS personnel shall make every effort to inform a parent/legal guardian of a non-emancipated minor of the situation requiring EMS care, and where their child has been transported.

1. EMS personnel are not permitted to inform a parent/legal guardian without the minor's consent under the following circumstances:

   - Is pregnant and requires medical care related to the pregnancy.
   - Is twelve (12) years of age or older and in need of medical care for an infectious, contagious communicable disease, or for a sexually transmitted disease.

2. EMS personnel are not permitted to inform a parent or legal guardian of a minor who needs medical care for rape or sexual assault when they reasonably believe that the parent/guardian committed the rape or assault.

C. If EMS personnel believe a parent or legal guardian is making a decision which appears to be endangering the health and welfare of a minor patient, law enforcement involvement shall be utilized.

Sierra – Sacramento Valley EMS Agency Program Policy			
Patient Restraint Mechanisms			
	Effective: 12/01/2024	Next Review: 07/2027	**852**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To provide guidelines on the use of restraint mechanisms by EMS personnel for patients who are violent, potentially violent, or who may harm themselves or others.

AUTHORITY:

A. HSC, Div. 2.5, § 1797.204, 1797.206, 1797.218, 1797.220, 1798, & 1798.2.

B. WIC § 5150.

PRINCIPLES:

A. 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.

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

C. 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.

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

POLICY:

A. General Principals

1. Restrained patients shall not be transported in a prone position. EMS 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.

2. Monitor vital signs and be prepared to provide airway/ventilation management.

3. The base and/or receiving hospital shall be informed as soon as possible that the patient has been restrained, the type of restraint used and the reason for restraint.

B. Forms of Restraint

1. Physical Restraint:

- Restraint devices applied by EMS personnel must be padded soft restraints that will allow for quick release.
- 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.
- 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.
- Restraints shall not be attached to movable side rails of a gurney.
- If the patient is actively spitting; a surgical mask or oxygen mask (at appropriate flow rate) may be placed over the patient's mouth to protect EMS personnel and others. If this method fails, a light weight, sheer, protective mesh hood may be used. When the mesh hood is placed over the patient's head, their mouth and/or nose shall never be obstructed, and the patient's airway/respiratory status shall be continuously monitored. The mesh hood shall never be tightened in any manner to secure it around the patient's neck.
- The following forms of restraint shall not be applied by EMS personnel:
  - Hard plastic ties or any restraint device requiring a key to remove.
  - Restraining a patient's hands and feet behind the patient.
  - "Sandwich" restraints, using backboard, scoop-stretcher, or flats.

2. Chemical Restraint:

- For patients who are combative, such that harm to self or others is likely, consult treatments outlined in protocols M-11 and M-11P (as applicable).

C. Law Enforcement Applied Restraints

1. The general principles of this policy shall pertain to patients with restraints applied by law enforcement who are treated/transported by EMS personnel.

2. Restraint devices applied by law enforcement must provide sufficient slack to allow the patient to straighten their abdomen/chest and to take full tidal volume breaths.

3. Restraint devices applied by law enforcement require the officer's continued presence to ensure patient and scene safety. The officer should accompany the patient in the ambulance or follow the ambulance during transport. Patients in custody/arrest remain the responsibility of law enforcement.

4. At the discretion of law enforcement, applied restraint devices may be replaced by EMS restraints if doing so does not threaten the safety of the patient and/or EMS personnel.

D. Interfacility Transport of Psychiatric Patients

Two-point, locking, padded cuff and belt restraints and/or two-point locking, padded ankle restraints may only be used during interfacility transport of psychiatric patients on a 5150 hold, under the following circumstances:

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

2. Transport personnel shall always have immediate access to the restraint key during transport.

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 adjusted or removed and reapplied, or supporting documentation as to why restraints could not be adjusted or removed and reapplied.

E. Documentation

The following information shall be documented on the patient care report:

1. Reason for restraint.

2. Type of restraint utilized and identity of personnel applying restraint.

3. Assessment of the vascular/neurological status of the restrained extremities and cardiac/respiratory status of the restrained patient.

Sierra – Sacramento Valley EMS Agency Program Policy			
Tasered Patient Care & Transport			
	Effective: 12/01/2023	Next Review: 07/2026	**853**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish guidelines for EMS personnel on the treatment and transportation of patients on whom a Taser has been used.

AUTHORITY:

A. HSC, § 1797.204, 1797.220, and 1798.

B. CCR, Title 22, § 100169.

GENERAL CONSIDERATIONS:

A. A Taser is designed to transmit electrical impulses that temporarily disrupt the body's nervous system. The 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 EMS personnel will evaluate or treat the patient.

C. Assess the patient for any potential cause of the abnormal or combative behavior such as head trauma, hypoxia, alcohol or drug related problems, hypoglycemia or other metabolic disorders, stress or psychiatric disorders.

D. Assess the patient for any potential injury resulting from Taser deployment.

POLICY:

A. Taser probes may be removed by EMS personnel if they interfere with the treatment or safe transportation of the patient. Only EMT, AEMT and paramedic personnel are approved to remove Taser probes in the prehospital setting.

B. If removed by EMS, Taser probes shall be offered to law enforcement prior to disposal.

C. Mode of transportation and destination will be determined by law enforcement, in consultation with EMS personnel and/or the base/modified base hospital if necessary.

Tasered Patient Care & Transport	853

PROCEDURE:

A. When safe to do so, patients should be immediately evaluated, with particular attention to signs and symptoms of excited delirium.

B. Treat any injuries/medical conditions according to appropriate protocol(s).

C. The patient will normally be in law enforcement custody, and will require transportation to an emergency department for medical clearance.

D. If EMS personnel determine that the patient is a danger to self or others, law enforcement may be requested to accompany the patient during transport.

E. The patient should be appropriately restrained if indicated.

F. If one or both of the Taser probes requires removal:

1. Verify the wires to the probes have been severed.

2. Use routine biohazard precautions. 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.

3. Inspect probes to ensure that all parts were removed, and all barbs are intact.

4. Follow law enforcement direction regarding the preservation or disposal of probes.

5. Apply direct pressure for bleeding and apply a sterile dressing to the wound site.

6. Bo not remove probes located in the eyes, face, neck, genitals, or any other potentially vulnerable area.

DOCUMENTATION:

The following information shall be documented on the patient care report:

A. Patient’s presenting behavior or signs/symptoms which resulted in Taser use.

B. Adequate patient assessment including, but not limited to, neurological assessment, oxygen saturation, blood glucose level, and other pertinent vital signs.

C. Anatomic location of the Taser probes (note: if Taser probes were removed by EMS, document time of removal and if probes were intact following removal).

Sierra – Sacramento Valley EMS Agency Program Policy			
HEMS Aircraft Requesting & Utilization			
	Effective: 06/01/2022	Next Review: 09/2025	**862**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To establish criteria for the requesting and utilization of HEMS aircraft on 911 incidents.

AUTHORITY:

A. HSC, Division 2.5, § 1797.200 – 1797.276, 1798 – 1798.8 & 1798.170.

B. CCR, Title 22, Division 9, Chapters 4 & 8.

DEFINITIONS:

A. **Air Ambulance Coordination Center –** An emergency dispatch center designated by S-SV EMS for the purpose of coordinating air ambulance requests within the S-SV EMS region. The following EMS Aircraft Coordination Centers have been designated by S-SV EMS:

1. CAL FIRE Grass Valley Emergency Command Center: Colusa, Nevada, Placer, Sutter, and Yuba counties.

2. CAL FIRE Oroville Emergency Command Center: Butte, Glenn, Shasta, and Tehama counties.

3. CAL FIRE Yreka Interagency Command Center: Siskiyou County

B. **Public Safety Answering Point (PSAP) –** A public safety dispatch center where a 911 call is first received (primary PSAP) or where a 911 call is transferred/relayed for the purpose of dispatching resources (secondary PSAP).

C. **Helicopter Emergency Medical Services Aircraft (HEMS Aircraft) –** Rotor wing aircraft utilized for the purpose of prehospital emergency response and patient transport. HEMS aircraft include air ambulances and all ALS/BLS rescue aircraft.

D. **Air Ambulance –** Any aircraft specially constructed, modified or equipped and used for the primary purpose of responding to emergency incidents and transporting critically ill and/or injured (life or limb) patients, whose medical flight crew has, at a minimum, two (2) attendants certified or licensed in advanced life support.

E. **Rescue Aircraft –** Aircraft whose usual function is not patient transport but may be used for patient transport when the use of an air or ground ambulance is inappropriate or not readily available. Rescue aircraft are classified as one of the following:

1. **Advanced Life Support (ALS) Rescue Aircraft –** A rescue aircraft whose medical flight crew has, at a minimum, one (1) attendant licensed as a paramedic.

2. **Basic Life Support (BLS) Rescue Aircraft –** A rescue aircraft whose medical flight crew has, at a minimum, one (1) attendant certified as an EMT.

3. **Auxiliary Rescue Aircraft –** A rescue aircraft that does not have a medical flight crew, or whose flight crew does not meet ALS/BLS rescue aircraft requirements.

POLICY:

A. HEMS aircraft utilization criteria:

1. Trauma patients who meet RED Field Trauma Triage Criteria, and transport time to an appropriate level trauma center is ≥30 minutes by ground.

2. Prolonged extrication of an entrapped patient.

3. Multi-casualty incidents with a need for additional resources or distribution of patients to facilities ≥30 minutes by ground from the incident location.

4. Time-sensitive conditions where a decrease in transport time may reduce the risk of long-term disability or death.

5. Significantly reduced transport time for patients with specialty resource needs (significant burns, pediatric trauma, etc.).

6. Patients who are likely to require advanced procedures/medications beyond the scope of practice of ground providers.

7. Delayed accessibility to the scene by ground personnel and/or transport resources.

8. Initial dispatch for significant trauma mechanism or time-sensitive medical condition with ground transport provider time to scene ≥20 minutes.

B. HEMS aircraft transportation should not be used for the following patients:

1. Patients with CPR in progress.

2. Patients contaminated by hazardous materials who cannot be completely decontaminated prior to transport.

3. Patients who are combative, uncooperative, or have behavioral emergencies. However, a patient may be transported at the discretion of the flight crew.

C. The use of HEMS aircraft should provide a significant reduction (≥20 minutes) in arrival time to a receiving facility capable of providing definitive care, including designated specialty care centers.

D. After assessing the incident location, conditions and patient needs, the most medically qualified provider on scene shall be responsible for determining if the patient/event meets HEMS aircraft utilization criteria and shall advise the Incident Commander (IC)/ designee regarding the need for HEMS aircraft. The final authority to request or cancel HEMS aircraft is at the discretion of the IC/designee.

E. The pilot in command shall have the final authority in decisions to continue or abort the response. The pilot may also dictate the need to identify an alternate LZ/ rendezvous location or deviate from S-SV EMS patient destination policies.

F. The most medically qualified provider on scene has the authority/obligation to ensure that the patient meets HEMS aircraft utilization criteria. If the patient does not meet HEMS aircraft utilization criteria, the flight crew may transfer care to the ground ambulance for transport to the most appropriate facility.

G. HEMS Aircraft Requesting and Coordination:

1. For incidents likely meeting HEMS utilization criteria, appropriate HEMS resources should be requested early by applicable dispatch or ground EMS personnel, and may be cancelled prior to lift off, overhead or at scene when appropriate.

2. An air ambulance should be utilized for any incident that does not require the need for air rescue operations. Rescue aircraft may be utilized when, in the opinion of the most medically qualified provider at scene, the patient's condition warrants immediate transport and/or air ambulance resources are not readily available. Consideration should be given to airway stabilization and/or the need for higher level medical procedures.

3. No air ambulance shall respond to an EMS incident in the S-SV EMS region without the request of a designated air ambulance coordination center.

4. HEMS aircraft shall be requested by the IC/designee on scene, through the PSAP of the agency having jurisdiction over the incident. A responding ground EMS provider may request appropriate HEMS resources while enroute to an incident ('rolling request'), if they believe the patient/event meets HEMS utilization criteria.

   - If communication with the IC is not possible or practical, HEMS aircraft shall be requested through the applicable PSAP.

- If a private ambulance arrives on scene before the arrival of public safety personnel, HEMS aircraft shall be requested through the applicable PSAP. If unable to contact the PSAP directly from the field, the private ambulance dispatch center may be used to relay the request to the PSAP.

5. HEMS aircraft requests received from providers still enroute may be overridden by the IC/designee on scene. Excluding safety reasons, the IC/designee shall consult with the most medically qualified provider on scene to determine the necessity for HEMS aircraft.

6. The PSAP shall utilize the following procedures, based on the type and availability of HEMS aircraft resource requested:

   - Air ambulance resource request:
     - Contact the designated air ambulance coordination center for air ambulance resource requesting.
   - Rescue aircraft resource request:
     - The PSAP is responsible for contacting the applicable air rescue provider directly for resource requesting.

7. PSAPs are required to provide the following information to the air ambulance coordination center or air rescue provider for all HEMS aircraft resource requests:

   - Incident or LZ location: the general geographic location will suffice.
   - Nature of call: type of incident and severity of injuries, if known.
   - The designated LZ contact – as follows:
     - Identified by incident name (i.e., ‘Jones Road LZ’), if HEMS aircraft is being requested to respond directly to the incident scene; or
     - Identified by LZ name (i.e., ‘Rood Center LZ’), if HEMS aircraft is being requested to respond to a pre-established local/regional LZ location.
   - Any known aircraft hazards in the area, including hazardous materials, other aircraft, or inclement weather conditions at the scene.

8. The air ambulance coordination center will complete the following for all air ambulance resource requests:

   - Verify the incident/LZ location and identify the closest air ambulance.
   - Contact the closest air ambulance provider to obtain their availability to respond to the incident.
     - If the air ambulance resource is available and accepts the request, they will be assigned to the incident by the air ambulance coordination center.
     - If the air ambulance resource is unavailable/declines the request, the air ambulance coordination center will contact the next closest air ambulance provider to obtain their availability to respond to the incident. This process

will continue until an air ambulance is assigned, or it is determined that no timely air ambulance resources are available to respond to the incident.
    - Air ambulance coordination centers shall consider the location of an available airborne air ambulance in determining the closest resource to the incident when this information is known to the coordination center.
    - Air ambulance providers who have multiple aircraft shall accept/decline the request based on the availability of the specific aircraft resource requested.
    - The air ambulance provider will be allowed up to five (5) minutes to check weather. If the air ambulance provider does not accept/decline the assignment within five (5) minutes, the air ambulance coordination center will re-contact the air ambulance provider to confirm their status prior to contacting the next closest air ambulance provider.
        - If an air ambulance provider declines due to inclement weather at the incident/LZ location, it is unlikely that an alternate air ambulance provider will subsequently accept the request. The IC/designee shall be notified of this information as soon as possible. Personnel on scene may consider appropriate alternatives (utilizing an alternate LZ/rendezvous location; requesting the availability of rescue aircraft which are allowed to operate under different weather minimums; initiating ground ambulance transport; etc.).
- Relay the assigned air ambulance resource identifier and initial ETA to the requesting PSAP.

9. The requesting PSAP shall notify all responding agencies when a HEMS aircraft has been requested/assigned and shall keep responding agencies updated as to the HEMS aircraft status (delays, aborts, etc.).

10. HEMS aircraft personnel are responsible for communicating to the requesting PSAP any response delays or aborts in a timely manner.

11. Once assigned to an incident, HEMS aircraft shall not commit/respond to another assignment unless cancelled by the initial incident requestor.

12. If multiple aircraft are responding to or in the area of the incident, the air ambulance coordination center and/or the requesting PSAP shall notify all agencies of multiple aircraft responders.

13. All parties are responsible for informing HEMS aircraft providers of inclement weather related to the response, including previous HEMS aircraft providers who declined the flight due to weather conditions (at base, enroute, or at scene).

14. CALCORD operational frequency (156.075) should be utilized for air-to-ground communication. The IC/designee will communicate to all responding agencies if an alternate frequency will be utilized for the event.

H. Ground Provider Responsibilities:

1. If the event is a declared MCI, the IC/designee is responsible for notifying all responding HEMS aircraft of such.

2. If required by S-SV EMS policies/protocols, the most medically qualified provider on scene shall contact the appropriate facility for patient destination consultation prior to EMS aircraft arrival (when possible).

3. If ground personnel are at scene, the IC/designee shall assign appropriate personnel to establish/prepare a landing zone (LZ) and assure scene safety during landing. The LZ should meet the following criteria:

   - 100’ x 100’ open area, clear of hazards, obstacles, sloped terrain, loose surface materials, animals, overhead wires, foreign object debris (FOD).
   - If the LZ is on a dirt surface, assure that the area is watered down to reduce the risk of brown out upon aircraft landing.
   - Locate the LZ upwind from any incident with known hazardous materials.

   The pilot has final authority to determine if a landing is appropriate, including instances when no ground personnel are at scene.

4. Ground personnel shall not approach the aircraft under a running/hot rotor unless accompanied by HEMS personnel.

5. If requested, ground EMS personnel may accompany a patient in a rescue aircraft if the appropriate medical equipment is available and they have received an adequate safety briefing prior to transport.

6. S-SV EMS Transfer of Patient Care policy shall be followed, and a verbal patient care report shall be provided to HEMS aircraft personnel.

I. HEMS Aircraft Provider Responsibilities:

1. HEMS aircraft providers are expected be enroute within 15 minutes of incident acceptance. Response delays shall be documented in the PCR.

2. HEMS aircraft providers are expected to transport within 15 minutes from the time patient contact is made. Scene delays shall be documented in the PCR.

3. S-SV EMS Patient Destination policies/protocols shall be followed for all patients requiring HEMS aircraft transport. Patients shall be transported to the closest/most appropriate hospital with an approved helipad or HEMS aircraft landing site.

Sierra – Sacramento Valley EMS Agency Program Policy			
Prohibition On Carrying Of Weapons By EMS Personnel			
	Effective: 12/01/2023	Next Review: 09/2026	**883**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

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 or members of an approved Tactical Emergency Medical Support (TEMS) program who may also provide emergency patient care during the course of their assigned duties. This policy also does not apply to EMS supervisor personnel who have a current/valid carrying a concealed weapon (CCW) permit, if the EMS provider agency has a policy specifically addressing this matter (including minimum training requirements, storage, etc.).

AUTHORITY:

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

B. California Code of Regulations, Title 22, Division 9.

POLICY:

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

1. Firearms or concealed weapons of any sort.
2. Stun guns or Tasers.
3. Night sticks, batons, billy clubs, saps, or lead weighted gloves.
4. Dirk, dagger, or switchblade knife.
5. Any other deadly weapon.
6. Tear gas, mace, pepper spray, or chemical agents.
7. Handcuffs.

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

Sierra – Sacramento Valley EMS Agency Program Policy			
Communication Failure			
	Effective: 12/01/2023	Next Review: 07/2026	**890**
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

PURPOSE:

To define conditions under which prehospital personnel may utilize certain advanced life support (ALS) procedures/medications in the event of a communication failure.

AUTHORITY:

A. HSC, Division 2.5, § 1797.84, 1797.185, 1797.220, 1798, 1798.100, and 1798.102.

B. CCR, Title 22, Division 9.

POLICY:

If during patient care an AEMT or paramedic attempts but cannot establish or maintain adequate base/modified base hospital contact:

A. They may continue to utilize procedures/medications listed in S-SV EMS standing order policies/protocols, as warranted by the patient's condition.

B. Procedures/medications designated as 'Base/Modified Base Hospital Order Only' may be utilized under communication failure conditions, as warranted by the patient's condition.

C. The following procedures/medications designated as 'Base/Modified Base Hospital Physician Order Only' shall not be utilized without a direct order from a base/modified base hospital physician:

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

2. Administration of activated charcoal (Reference No. M-5).

3. Utilization of the Nerve Agent Treatment Protocol (Reference No. E-8).

Communication Failure	890

PROCEDURE:

In each instance where LALS/ALS procedures and/or medications are utilized under communication failure conditions, the AEMT or paramedic shall:

A. Attempt to establish base/modified base hospital contact by telephone and/or radio throughout the call as circumstances permit.

B. Immediately upon voice contact, provide a verbal report to the base/modified base hospital MICN or physician.

C. Document the existence and reason for the communication failure condition in the patient care report (PCR).

S-SV EMS Adult Treatment Protocols

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Sierra – Sacramento Valley EMS Agency Treatment Protocol

Non-Traumatic Pulseless Arrest

C-1

Approval: Troy M. Falck, MD – Medical Director | Effective: 12/01/2024

Approval: John Poland – Executive Director | Next Review: 10/2027

MANUAL CHEST COMPRESSIONS

- Rate: 100-120/min
- Depth: 2 inches – allow full chest recoil
- Minimize interruptions (≤10 secs)
- Rotate compressors every 2 mins
- Perform CPR during AED/defibrillator charging
- Resume CPR immediately after shock

MECHANICAL CHEST COMPRESSION DEVICES

Indications

- Adult pt (≥15 yo)

Contraindications

- Pt does not fit in the device
- 3rd trimester pregnancy

ⓘ Use in accordance with manufacturer indications/ contraindications

ⓘ Apply following completion of at least one manual CPR cycle, or at the end of a subsequent cycle

DEFIBRILLATION & GENERAL PT MANAGEMENT

- Analyze rhythm/check pulse after every 2 min CPR cycle
- Biphasic manual defibrillation detail:
  - Follow manufacturer recommendations
  - If unknown, start at 200 J (subsequent doses should be equivalent or higher)
- Movement of pt may interrupt CPR or prevent adequate depth and rate of compressions
- Consider resuscitation on scene up to 20 mins
- Go to ROSC protocol (C-2) if ROSC is obtained

ADVANCED AIRWAY MANAGEMENT

- Consider/establish advanced airway at appropriate time during resuscitation
- Do not interrupt chest compressions to establish an advanced airway
- Waveform capnography (if available) shall be used on all pts with an advanced airway in place
  - An abrupt increase in $PETCO_2$ is indicative of ROSC
  - Persistently low $PETCO_2$ levels (<10 mmHG) suggest ROSC is unlikely

TREAT REVERSIBLE CAUSES

- **H**ypovolemia
- **H**ypoxia
- **H**ydrogen Ion (acidosis)
- **H**ypo-/hyperkalemia
- **H**ypothermia
- **T**amponade, cardiac
- **T**ension pneumothorax
- **T**hrombosis, pulmonary
- **T**hrombosis, cardiac
- **T**oxins

ⓘ Refer to Hypothermia & Avalanche/Snow Immersion Suffocation Resuscitation Protocol (E-2) or Traumatic Pulseless Arrest Protocol (T-6) as appropriate

ⓘ Contact the base/modified base hospital for consultation & orders as appropriate

ⓘ Consider early transport of pts who have reversible causes that cannot be adequately treated in the prehospital setting

TERMINATION OF RESUSCITATION

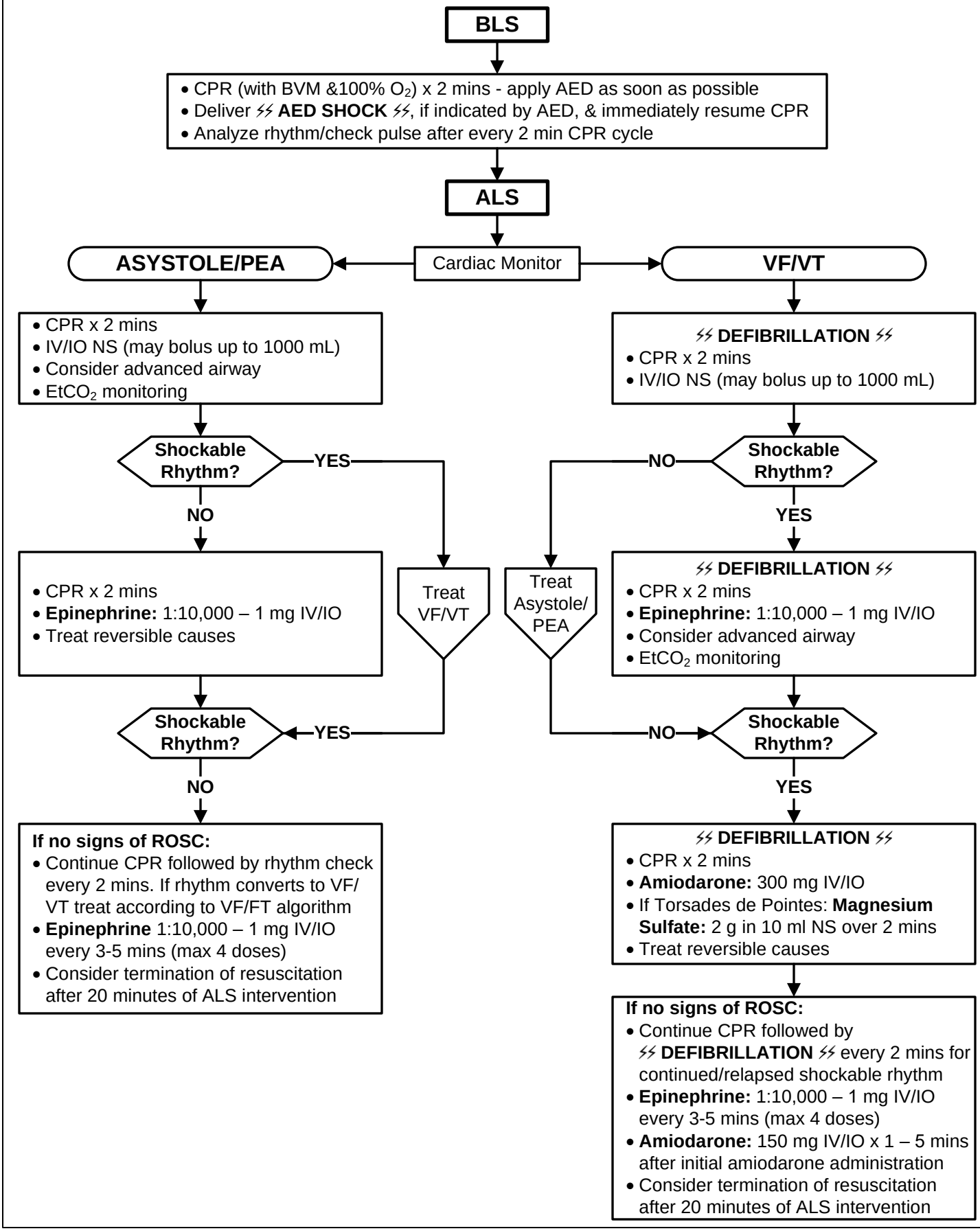
Base/Modified Base Hospital Physician Order**

- If resuscitation attempts do not obtain ROSC, consider termination of resuscitation efforts
- BLS termination of resuscitation criteria (all):
  (1) Arrest not witnessed by EMS
  (2) No AED shocks delivered
  (3) No ROSC after 3 rounds of CPR/AED analysis
- ALS Termination of Resuscitation Criteria (all):
  (1) Arrest not witnessed by EMS
  (2) No effective bystander CPR was provided, or effective CPR cannot be maintained
  (3) No AED shocks or defibrillations delivered
  (4) No ROSC after full ALS care

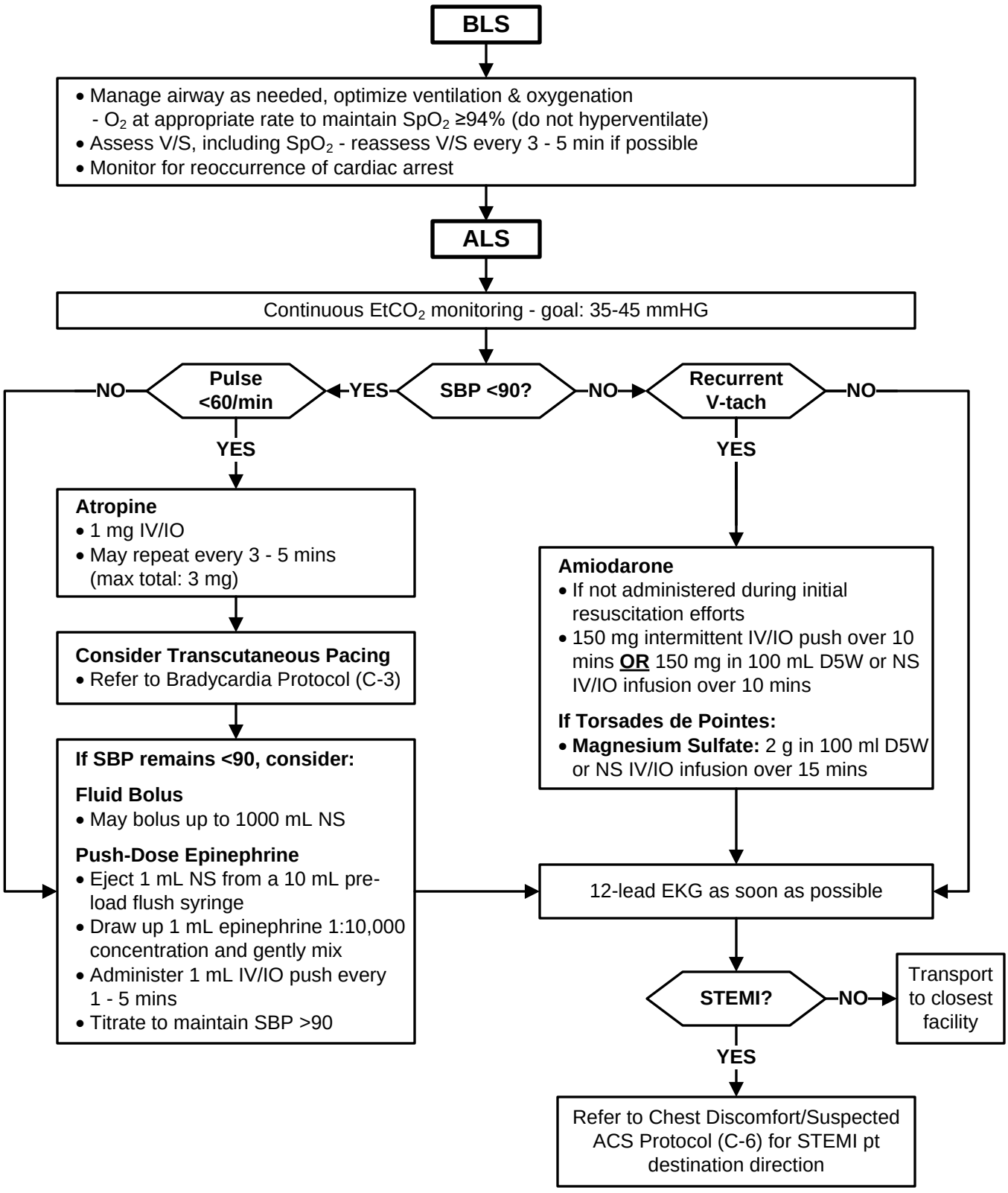
**In the event of communication failure, EMS personnel may terminate resuscitation without a base/modified base hospital physician order on a pt who meets ALS termination of resuscitation criteria.

SEE PAGE 2 FOR TREATMENT ALGORITHM

Non-Traumatic Pulseless Arrest



Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-2
Return Of Spontaneous Circulation (ROSC)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027



Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-3
Bradycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- **Symptomatic bradycardia exists clinically when the following 3 criteria are present: 1) The HR is slow (<60/min), 2) The pt has symptoms & 3) The symptoms are due to the slow HR.**
- **Bradycardia that causes symptoms is typically <50/min. The pt's cardiac rhythm should be interpreted in the context of symptoms, & atropine/TCP utilized only for symptomatic bradycardia.**

BLS

- Manage airway & assist ventilations as necessary
- Assess V/S, including SpO_2 - reassess V/S every 3 - 5 min if possible
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%), short of breath, or signs of heart failure/shock

ALS

- Cardiac monitor, 12-lead ECG at appropriate time (do not delay therapy)
- IV/IO NS at appropriate time (may bolus up to 1000 mL for hypotension)

Persistent bradycardia with SBP <90 & any of the following signs/ symptoms of hypoperfusion?

- Acutely altered mental status
- Signs of shock
- Ischemic chest discomfort
- Acute heart failure

YES →

NO

- Monitor & reassess
- Contact base/modified base hospital for consultation if necessary

Transcutaneous Pacing Sedation/Pain Control

- For pts receiving transcutaneous pacing in need of sedation/pain control, consider one of the following:
  - **Midazolam:** 2.5 - 5 mg IV/IO; **OR**
  - **Fentanyl:** 25 - 50 mcg IV/IO
- May repeat dose x 1 after 5 mins
- Fentanyl is preferred for pts with chest pain or suspected MI
- Continuous $EtCO_2$ monitoring required for pts receiving midazolam or fentanyl

Clinical judgement shall be utilized to determine the appropriate dose of midazolam or fentanyl for pts requiring sedation/pain control

Atropine

- 1 mg IV/IO
- May repeat every 3 - 5 mins (max total: 3 mg)
- Should not be used for wide-complex rhythms or for second-degree Type II or third-degree heart blocks

Wide-complex rhythms, second-degree Type II or third-degree heart blocks, or atropine ineffective:

Transcutaneous Pacing (TCP)

- Set initial rate at 60/minute
- Set initial current at 10 mA and increase by 10 mA increments while assessing for mechanical capture
- Once mechanical capture is achieved, adjust rate based on clinical response - most pts will improve with a rate of 60 - 70/min if the symptoms are primarily due to bradycardia
- Monitor/re-evaluate frequently, increase current as necessary to maintain mechanical capture.
- Consider sedation/pain control as needed*

If SBP remains <90 after atropine/TCP:

Push-Dose Epinephrine

- Eject 1 mL NS from a 10 mL pre-load flush syringe
- Draw up 1 mL epinephrine 1:10,000 concentration and gently mix
- Administer 1 mL IV/IO push every 1 - 5 mins
- Titrate to maintain SBP >90

Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-4
Tachycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- **Unstable pts with persistent tachycardia require immediate cardioversion.**
- **It is unlikely that symptoms of instability are caused primarily by the tachycardia if the HR is <150/min.**

BLS

- Manage airway & assist ventilations as necessary
- Assess V/S, including SpO_2 - reassess V/S every 3 - 5 min if possible
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%), short of breath, or signs of heart failure/shock

ALS

- Cardiac monitor, 12-lead ECG at appropriate time (do not delay therapy)
- IV/IO NS at appropriate time (may bolus up to 1000 mL for hypotension)

Pre-Cardioversion Sedation/Pain Control

- Consider one of the following for pts in need of sedation/pain control:
  - **Midazolam:** 2.5 - 5 mg IV/IO; **OR**
  - **Fentanyl:** 25 - 50 mcg IV/IO
- Continuous $EtCO_2$ monitoring required for pts receiving midazolam or fentanyl

Clinical judgement shall be utilized to determine the appropriate dose of midazolam or fentanyl for pts requiring pre-cardioversion sedation/pain control

Persistent tachycardia causing any of the following?

- Hypotension
- Acutely altered mental status
- Signs of shock
- Ischemic chest discomfort
- Acute heart failure

YES

Synchronized Cardioversion

- Initial synchronized cardioversion doses:
  - Narrow regular: 50 - 100 J
  - Narrow irregular: 120 - 200 J
  - Wide regular: 100 J
- Consider pre-cardioversion sedation/pain control
- If no response to initial shock, increase dose in a stepwise fashion for subsequent attempts
- If rhythm is wide-irregular or monitor will not synchronize, & pt is critical, treat as VF with unsynchronized defibrillation doses (protocol C-1)

NO

Wide QRS (≥0.12 seconds)?

NO

Valsalva Maneuver

YES

- **Amiodarone:** 150 mg intermittent IV/IO push over 10 mins **OR** 150 mg in 100 mL D5W or NS IV/IO infusion over 10 mins
- If Torsades de Pointes: **Magnesium Sulfate:** 2 g in 100 ml D5W or NS IV/IO infusion over 15 mins
- Contact base/modified base hospital for consultation if necessary

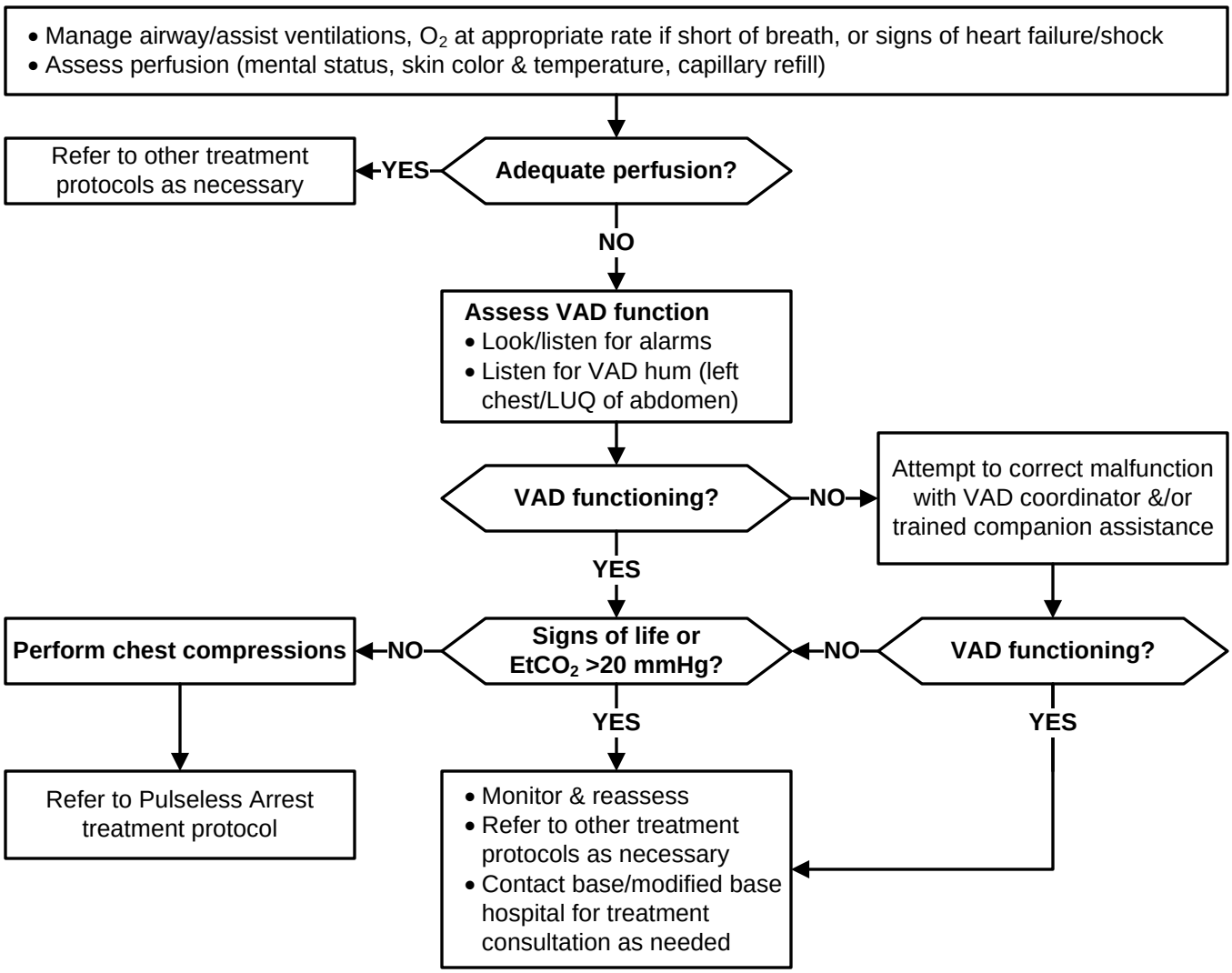
If no response to Valsalva Maneuver, consider:

Adenosine:

- First dose: 6 mg rapid IV/IO push
- Second dose (if rhythm does not convert within 1-2 mins): 12 mg rapid IV/IO push
- Flush IV/IO line with 20 mL NS after each dose

Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-5
Ventricular Assist Device (VAD)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2022
Approval: John Poland – Executive Director	Next Review: 05/2025

- **VAD pts may also have an Implanted Cardioverter-Defibrillator (ICD) or a Pacemaker/ICD.**
- **VAD pts may not have a palpable pulse as these are continuous flow devices. Utilize a cardiac monitor to accurately establish the pt's heart rate/rhythm. Arrhythmias with signs of inadequate perfusion should be treated according to applicable S-SV EMS protocols. If defibrillation or cardioversion is indicated, follow the applicable treatment protocol (the pump is insulated so that electrical therapy should not be an issue).**
- **VAD pts may not have a blood pressure obtainable by standard EMS measurement methods. An accurate blood pressure is typically obtained via doppler, however, auscultation or NIBP readings may be possible.**
- **SpO_2 may not be measurable or accurate. $EtCO_2$ monitoring should be utilized.**
- **VAD pts/companions are taught to call 911 and page the on-call VAD coordinator in an emergency. The VAD coordinator will typically be on the telephone to provide additional assistance to EMS personnel. Contact information for the VAD coordinator is usually attached to or located inside the pt's VAD equipment bag.**
- **VAD pts should be transported to the nearest appropriate VAD center. If the pt's condition does not warrant transportation to the VAD center, the base/modified base hospital shall be consulted for pt destination. The VAD equipment bag, power source, battery & charger shall be brought with any transported VAD pt.**



Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-6
Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

- **Common symptoms associated with ACS include, but are not limited to:**
  - **Dyspnea/SOB**
  - **Palpitations**
  - **Diaphoresis**
  - **Nausea/vomiting**
  - **Lightheadedness/near-syncope/syncope**
  - **Upper abdominal pain or heartburn unrelated to meals**
  - **Discomfort in the throat or abdomen may occur in pts with diabetes, women & elderly pts**
- **Fleeting or sharp chest pain that increases with inspiration & lying supine is unlikely to be ACS related.**
- **Pt assessment, treatment & transport destination determination should occur concurrently.**

BLS

- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%), short of breath, or signs of heart failure or shock
- P-Q-R-S-T

Aspirin
- 160 - 325 mg chewable PO (anticoagulant use is not a contraindication to administration)

ALS

- Cardiac monitor
- 12-lead EKG as soon as possible (prior to nitroglycerin administration)
  - Criteria for ST Elevation Myocardial Infarction (STEMI):
    1. Machine readout: 'Meets ST Elevation MI Criteria', 'Acute MI', 'STEMI' (or equivalent)
    2. ST elevation in 2 or more contiguous leads
  - For pts with suspected ACS, serial 12-lead EKGs should be obtained if the pt's clinical status changes or if EKG changes are noted on the monitor, and every 15 mins if transport times are long

- IV/IO at appropriate time during treatment
  - Administer 250 mL NS fluid boluses to maintain SBP >90
  - Do not administer fluid if signs of heart failure

If discomfort persists following initial 12-lead acquisition:

Nitroglycerin
- 0.4 mg SL (tablet or spray), repeat every 5 mins if discomfort persists
- Do not administer if SBP <100,
- Use with caution for pts with suspected inferior MI (establish vascular access prior to administration)
- Consult with base/modified base hospital prior to administration if pt takes erectile dysfunction or pulmonary hypertension medication

SEE PAGE 2 FOR ADDITIONAL ALS TREATMENT & PT DESTINATION

Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)

ADDITIONAL ALS TREATMENT & PT DESTINATION

If discomfort persists following one or more EMS administered nitroglycerine doses:

Fentanyl
- 25 mcg slow IV/IO
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 200 mcg)

ⓘ Do not administer fentanyl to pts with any of the following contraindications:
- Systolic BP <100 - Hypoxia or RR <12 - ALOC or evidence of head injury

For current or potential nausea/vomiting:

Zofran (Ondansetron)
- 4 - 8 mg slow IV/IO, IM or ODT
- May be administered concurrently with fentanyl to reduce potential nausea/vomiting

STEMI Criteria Met?
- NO → **Transport to Closest Facility**
- YES ↓

Both STEMI Criteria Met?
- NO → **Contact closest facility for destination consultation**
  - Transmit 12-lead to closest facility if able
- YES ↓

≤45 min to STEMI Receiving Center (SRC)
- NO → **Contact closest facility for destination consultation**
- YES ↓

Any of the following criteria met?
- CPR in progress
- Unmanageable airway
- Unstable v-tach

- YES → **Contact closest facility for destination consultation**
- NO ↓

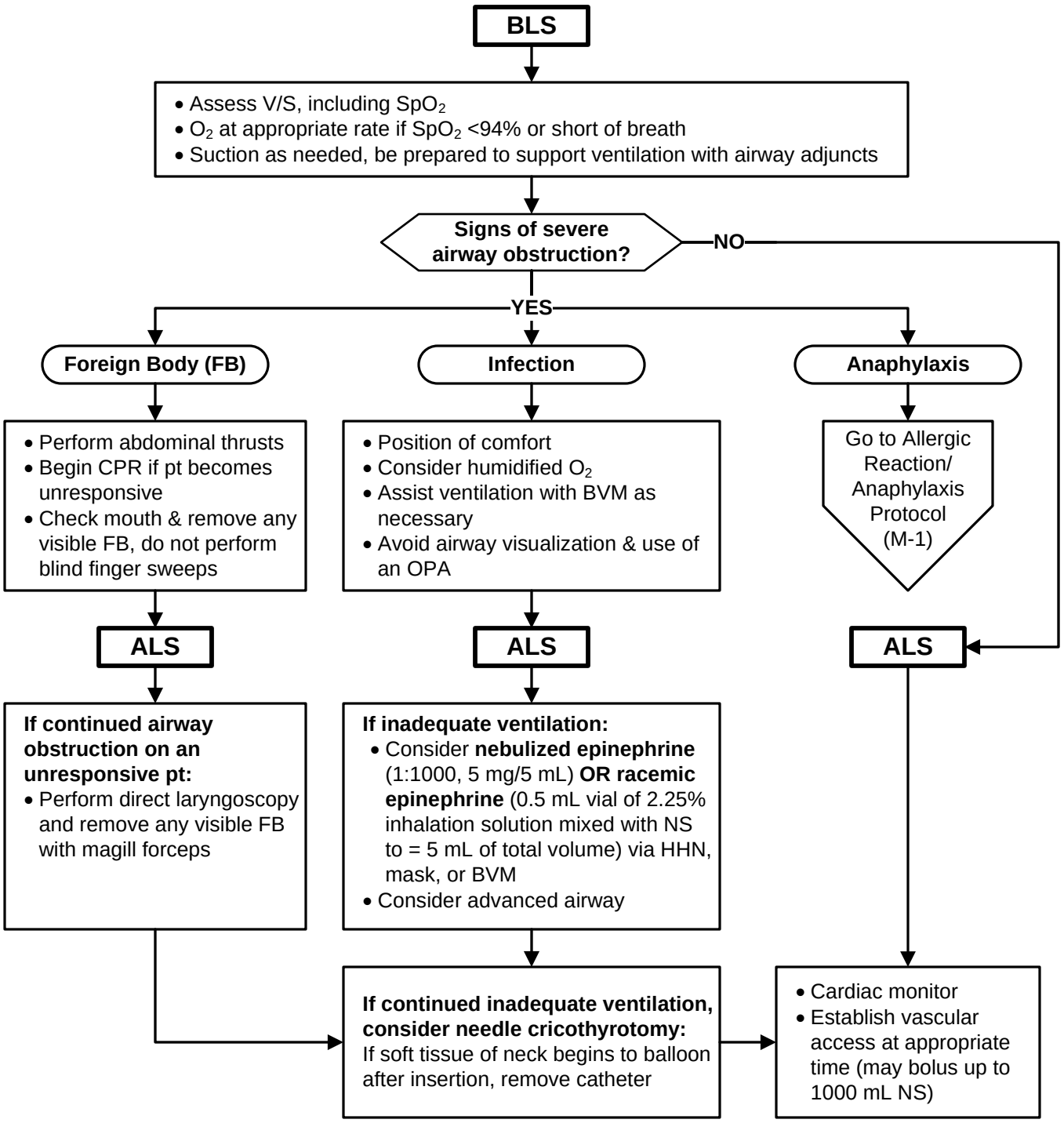
Transport Directly to SRC
- Transmit 12-lead to SRC if able
- Advise SRC of "STEMI ALERT"

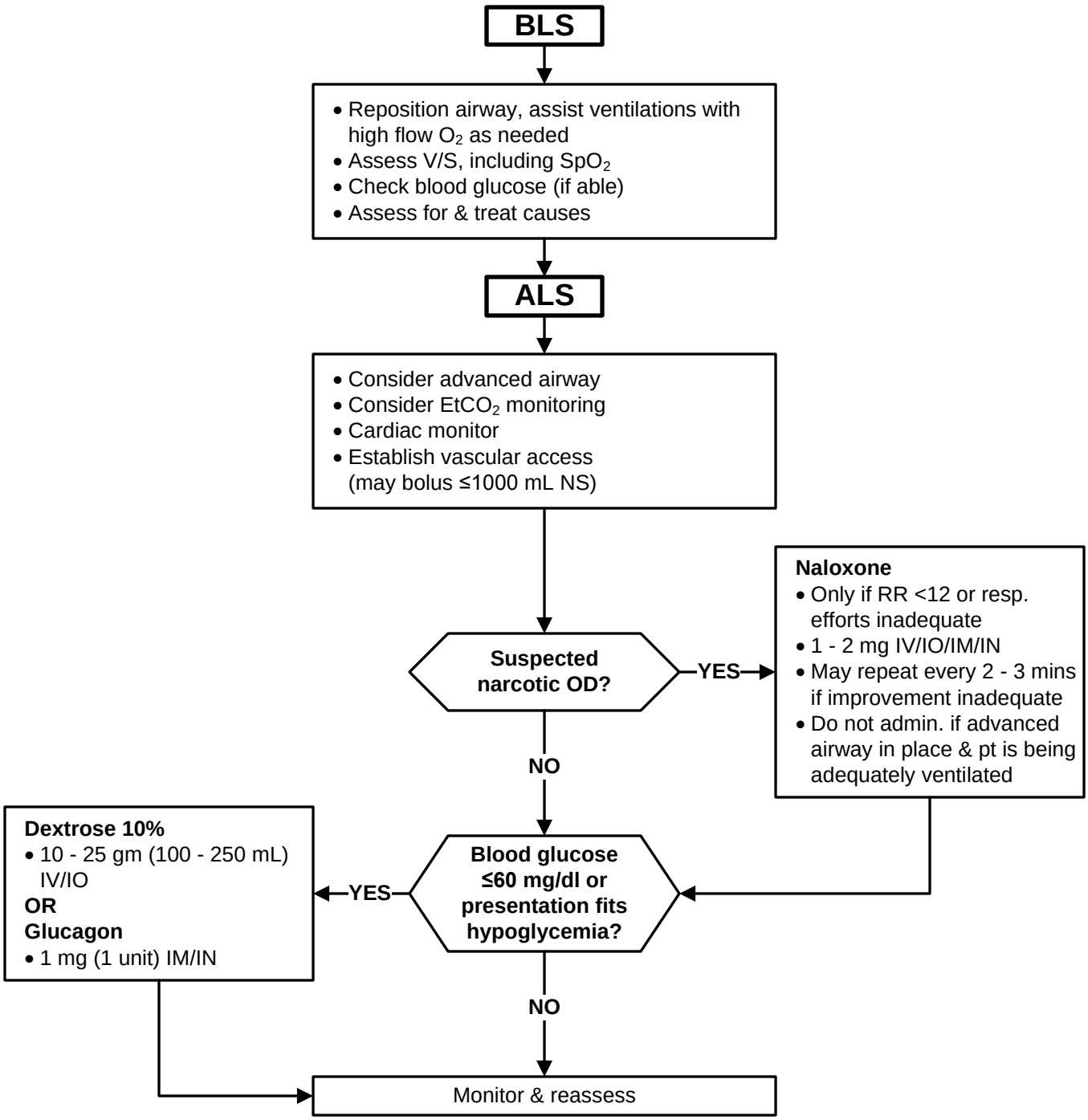
STEMI Pt Notes

- When possible, any 12-lead meeting STEMI criteria shall be transmitted within 10 mins of first STEMI positive 12-lead.
- Scene time for STEMI pts should be ≤10 mins.
- When possible, obtain & relay to the receiving hospital the name/contact information of an individual who can make decisions on behalf of the pt.
- Always relay pertinent medical directives (DNR, POLST, etc.) to the receiving hospital.

Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-1
Airway Obstruction	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2023
Approval: John Poland – Executive Director	Next Review: 09/2026

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




BLS
• Reposition airway, assist ventilations with high flow O_2 as needed
• Assess V/S, including SpO_2
• Check blood glucose (if able)
• Assess for & treat causes
ALS
• Consider advanced airway
• Consider $EtCO_2$ monitoring
• Cardiac monitor
• Establish vascular access (may bolus ≤1000 mL NS)
Suspected narcotic OD?
YES
Naloxone
• Only if RR <12 or resp. efforts inadequate
• 1 - 2 mg IV/IO/IM/IN
• May repeat every 2 - 3 mins if improvement inadequate
• Do not admin. if advanced airway in place & pt is being adequately ventilated
NO
Blood glucose ≤60 mg/dl or presentation fits hypoglycemia?
YES
Dextrose 10%
• 10 - 25 gm (100 - 250 mL) IV/IO
OR
Glucagon
• 1 mg (1 unit) IM/IN
NO
Monitor & reassess

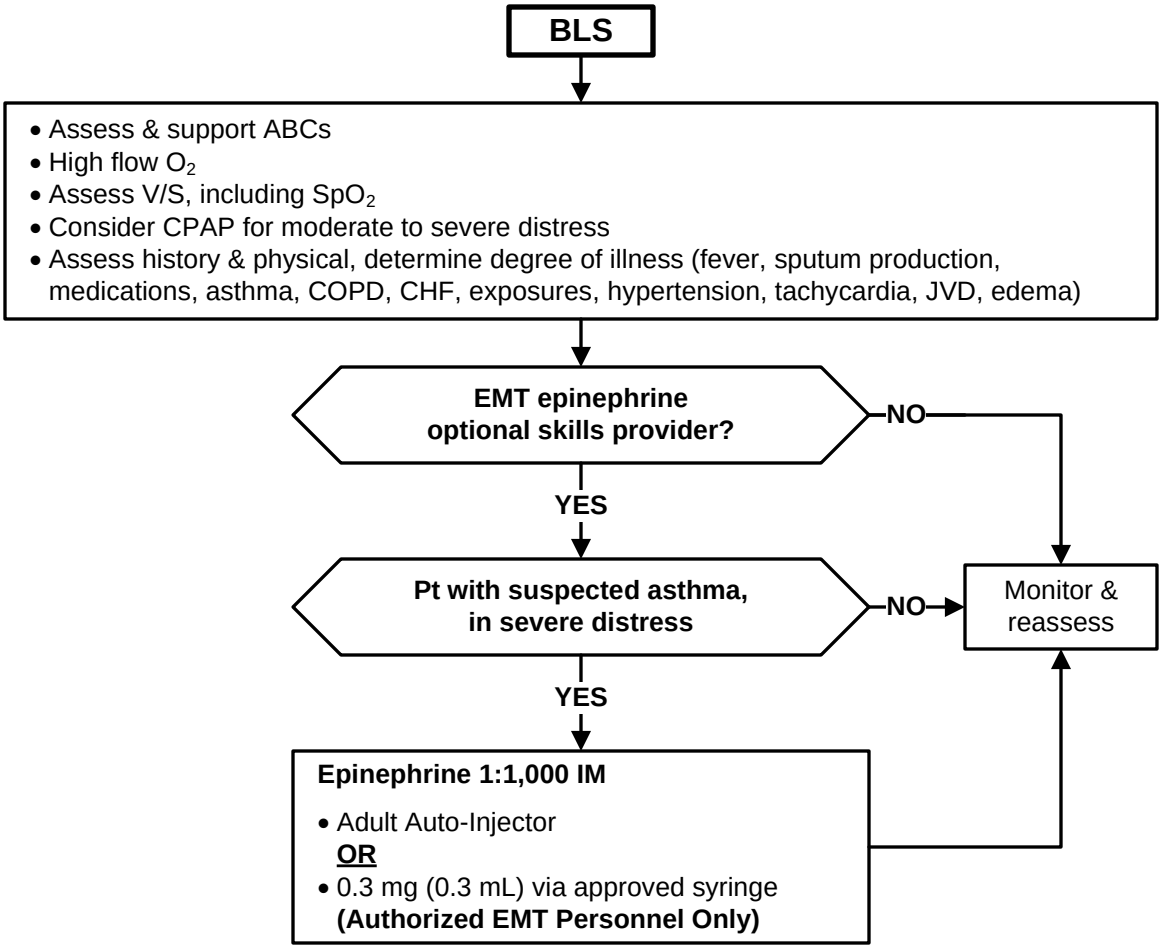
Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-3
Acute Respiratory Distress	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

Continuous Positive Airway Pressure (CPAP) Utilization

- **Indications:**
  - CHF with pulmonary edema
  - Moderate to severe respiratory distress
  - Near drowning
- **Contraindications:**
  - <8 years of age
  - Respiratory or cardiac arrest
  - Severe decreased LOC
  - Agonal respirations
  - Inability to maintain airway
  - Suspected pneumothorax
  - SBP <90
  - Major trauma, especially head injury or significant chest trauma
- **Complications:**
  - Hypotension
  - Pneumothorax
  - Corneal drying

Epinephrine Administration

- Epinephrine is only indicated for pts with suspected asthma who are in severe distress.
- **Use epinephrine cautiously in pts >35yo, or with a history of coronary artery disease or hypertension.**
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.



SEE PAGE 2 FOR ALS TREATMENT

Acute Respiratory Distress

Asthma/COPD

ALS

Mild Distress

- Mild wheezing
- Mild shortness of breath
- Cough

- Cardiac monitor
- Consider IV NS (may bolus up to 1000 mL)

Albuterol 5 mg & Ipratropium 500 mcg

- Nebulizer
- May repeat **(albuterol 2.5-5 mg only)** for continued respiratory distress

Moderate to Severe Distress

- Cyanosis
- Accessory muscle use
- Inability to speak >3 words
- Severe wheezing/shortness of breath
- Decreased or absent air movement

- Cardiac monitor
- IV/IO NS (may bolus up to 1000 mL)

Albuterol 5 mg & Ipratropium 500 mcg

- Nebulizer/CPAP/BVM
- May repeat **(albuterol 2.5-5 mg only)** for continued respiratory distress

History of asthma with severe distress only

Epinephrine 1:1,000

- 0.01 mg/kg IM (max: 0.5 mg)

CHF/Pulmonary Edema

ALS

Mild Signs & Symptoms

- Cardiac monitor
- IV NS TKO

***Nitroglycerin**

- 0.4 mg SL
- May repeat every 5 mins

***Nitroglycerin Notes/Precautions**

- Do not administer if SBP <100
- Do not delay due to difficult vascular access
- Consult with base/modified base hospital prior to administration to pts taking erectile dysfunction or pulmonary HTN medication

Moderate to Severe Signs & Symptoms

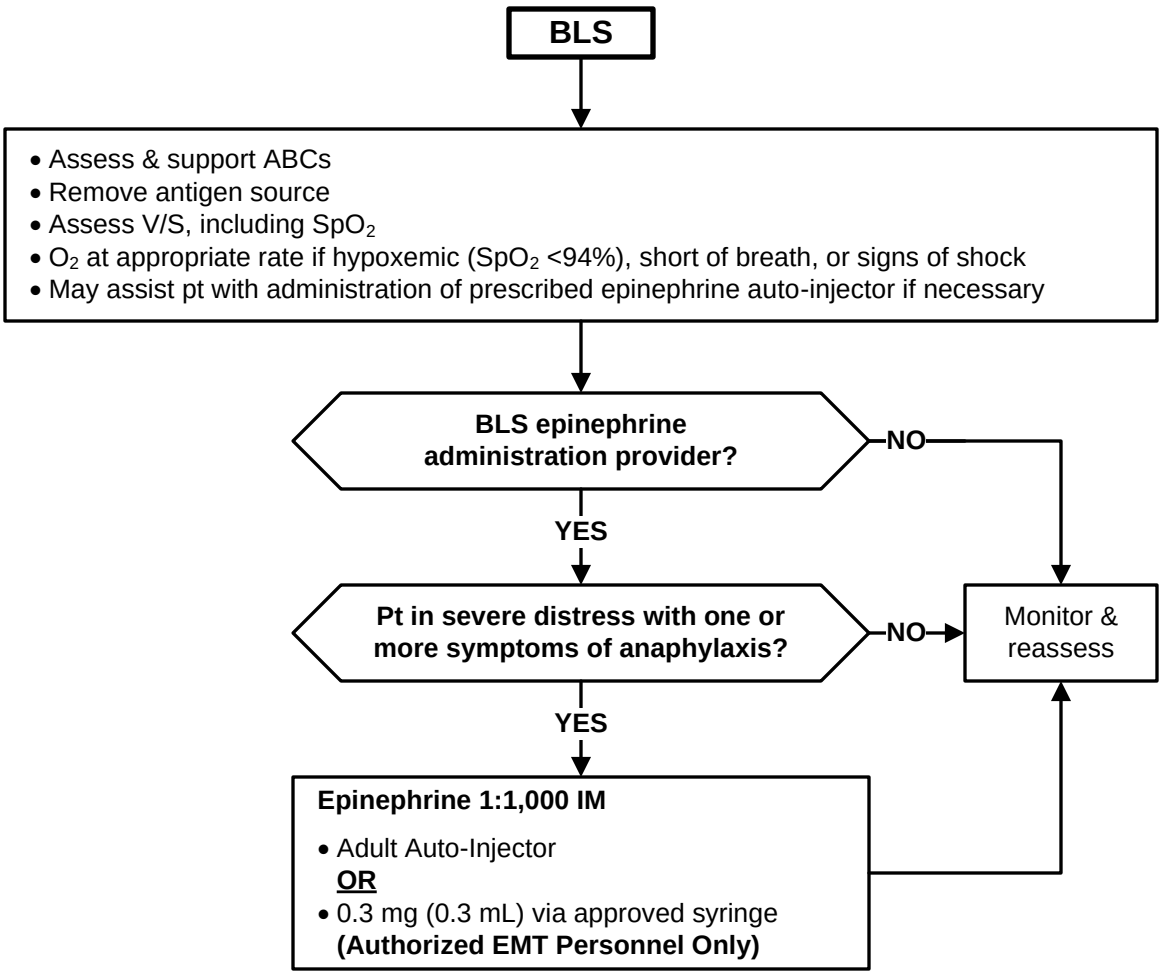
- Cardiac monitor
- Assess BP x 2 to confirm accuracy
- IV/IO NS TKO

***Nitroglycerin: titrate dose based on SBP**

- SBP 100-150: 0.4 mg SL
- SBP 150-200: 0.8 mg SL
- SBP >200: 1.2 mg SL
- May repeat titrated doses every 5 mins based on repeat SBP

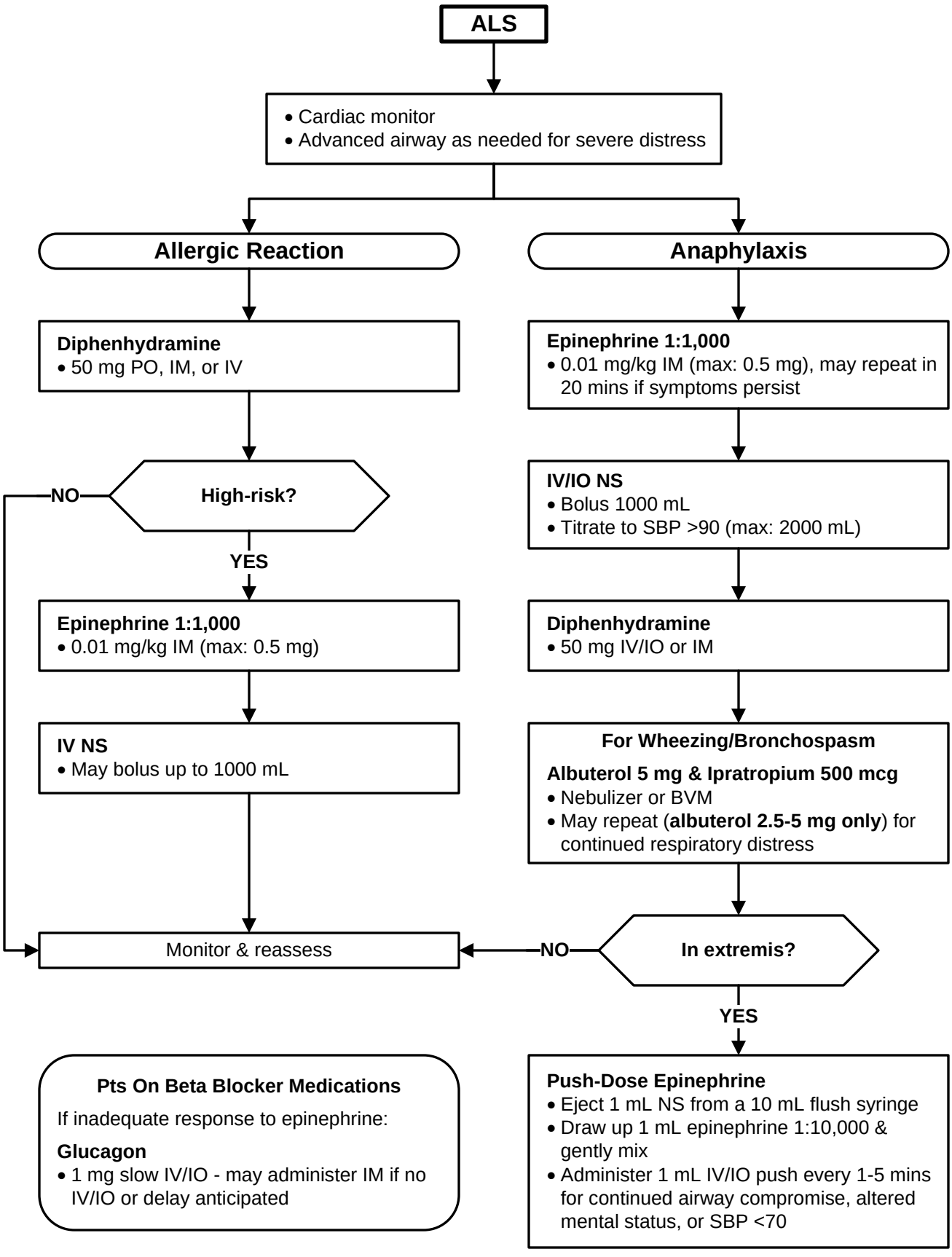
Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-1
Allergic Reaction/Anaphylaxis	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

- **Allergic reaction:** Sensitivity to an allergen causing hives, pruritus, flushing, rash, nasal congestion, watery eyes, &/or angioedema not involving the airway.
- **High-risk allergic reaction:** Allergic reaction with a history of anaphylaxis, or significant exposure with worsening symptoms.
- **Anaphylaxis:** Severe allergic reaction with one or more of the following: respiratory distress, bronchospasm, wheezes, diminished breath sounds, hoarseness, stridor, edema involving the airway, hypotension (SBP <90).
- **In extremis:** Anaphylaxis with one or more of the following: airway compromise, altered mental status, SBP <70.
- **Use epinephrine cautiously in pts >35yo, or with a history of coronary artery disease or hypertension.**
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.



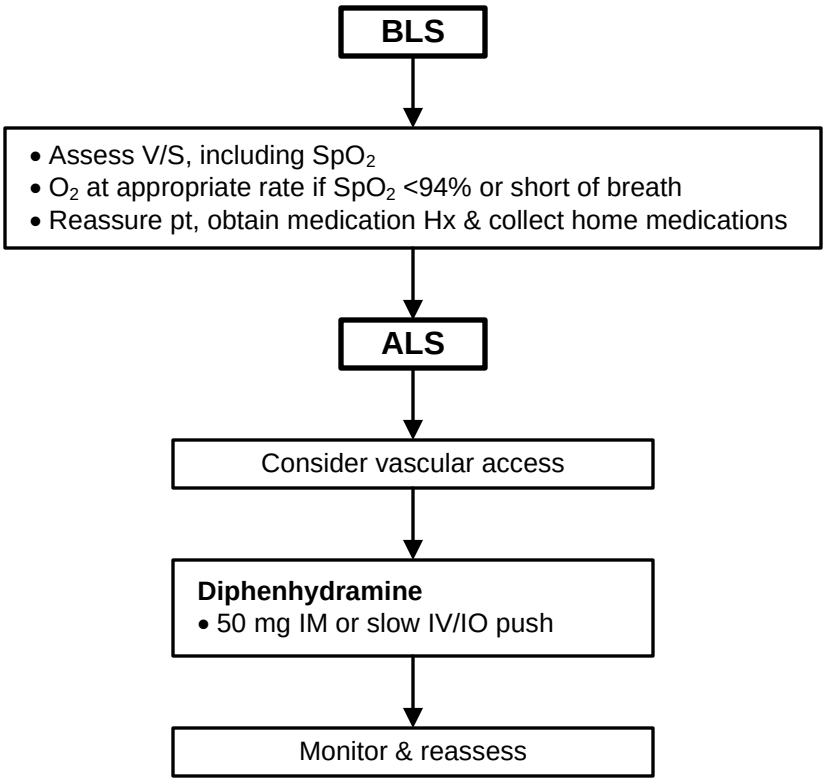
SEE PAGE 2 FOR ALS TREATMENT

Allergic Reaction/Anaphylaxis



Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-3
Phenothiazine/Dystonic Reaction	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027

- **Assessment:**
  - History includes possible ingestion of phenothiazine
  - Symptoms often mistaken for a seizure disorder or tetany
- **Signs & Symptoms:**
  - Facial grimaces
  - Protruding tongue/jaw muscle spasm
  - 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
  - Anxiety/restlessness
  - Torticollis (twisting of the neck)



Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

Guidelines for EMS use of Activated Charcoal

BASE/MODIFIED BASE HOSPITAL PHYSICIAN ORDER ONLY

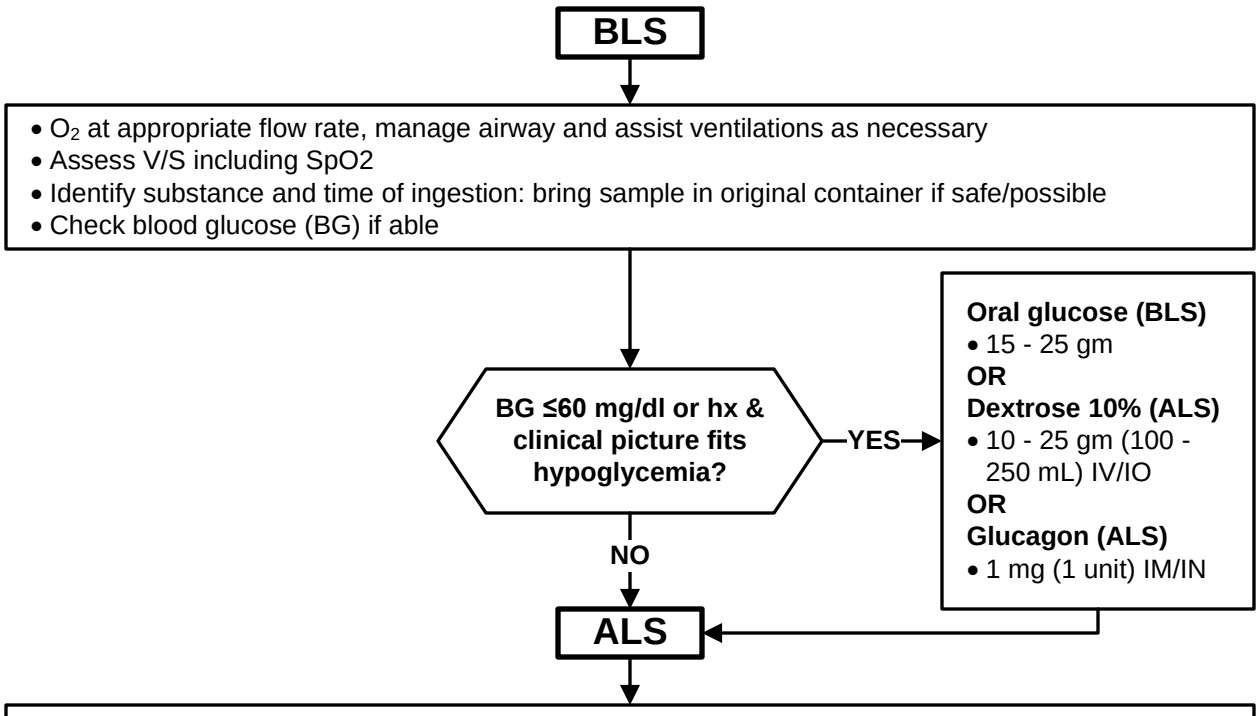
- Activated charcoal is an agent used for gastric decontamination following overdose ingestion. Clinical research only supports its use when given early after ingestion. While activated charcoal may be helpful when given rapidly after an overdose, it is very important to avoid administration in cases where potential contraindications exist.

Activated Charcoal Indications

- Early administration - usually within 1 hour of ingestion (agent still in stomach)
- Potentially deadly agent
- No effective antidote
- No contraindications
- Suggested agents where EMS administration of activated charcoal is appropriate:
  - Antidepressants - Anticonvulsants - Digoxin
  - Calcium channel blockers - Beta blockers

Activated Charcoal Contraindications

- Obtunded/altered level of consciousness
- Known caustic ingestion (acid or alkali)
- Known hydrocarbon ingestion
- Suspected GI obstruction (vomiting)
- Agents not well absorbed by activated charcoal (relative contraindication), examples include:
  - Lithium
  - Iron
  - Toxic alcohol



Ingestions & Overdoses

Treatment Notes

- Poison Control telephone number: (800) 876-4766 or (800) 222-1222.
- Refer to S-SV EMS Hazardous Materials Exposure Protocol (E-7) if pt exposed externally to organophosphate, carbamate or hydrofluoric acid.
- Oral ingestions of hydrofluoric acid require immediate treatment as it can cause fatal hypocalcemia – early signs of hypocalcemia include:
  - Tingling sensation around mouth, lips, hands or feet
  - Hand or foot spasms
  - QT interval prolongation

Ingestion/Overdose Agent Specific Therapy

Beta Blockers

May admin. up to 1000 mL NS bolus if SBP <90

↓

Atropine 1 mg IV/IO
- Only if HR <50 and SBP <90 after NS bolus
- May repeat every 5 mins (max total: 3 mg)

↓

Glucagon 1 mg (1 unit) IV/IO
- Only if HR <50 and SBP <90
- If no IV/IO, may admin. 1 mg IM/IN

↓

Push-Dose Epinephrine
- Only if HR <50 and SBP <90
- Eject 1 mL NS from a 10 mL pre-load syringe
- Draw up 1 mL epinephrine 1:10,000 concentration and gently mix
- Admin. 1 mL IV/IO push every 1 - 5 mins
- Titrate to maintain SBP >90

Calcium Channel Blockers

May admin. up to 1000 mL NS bolus if SBP <90

↓

Calcium Chloride 10% 10 mL slow IV/IO
- Only if SBP <90
- Admin. no faster than 1 mL/min
- May repeat every 5 mins (maximum: 4 total doses)

Narcotics

Naloxone
- Only if RR <12 or respiratory efforts inadequate
- 1 - 2 mg IV/IO/IM/IN
- May repeat every 2 - 3 mins if improvement inadequate
- Do not admin. if advanced airway in place & pt is being adequately ventilated

Tricyclic Antidepressants

Sodium Bicarbonate 1 mEq/kg IV/IO - if any of the following are present:
- SBP <90
- QRS >0.12 seconds (3 small boxes)
- Seizures

Hydrofluoric Acid

Calcium Chloride 10% 10 mL slow IV/IO
- Only if signs of hypocalcemia
- Admin. no faster than 1 mL/min

Organophosphate Or Carbamate

Atropine 2 mg IV/IO
- Only if HR <60
- May repeat every 3 mins – no max dose

Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-6
General Medical Treatment	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

- The purpose of this protocol is to provide standing order assessment/treatment modalities for pt complaints not addressed by other S-SV EMS treatment protocols – including nausea/vomiting and suspected sepsis.

BLS

- Assess V/S, including SpO_2 & temperature (if able)
- O_2 at appropriate rate if pt hypoxemic (SpO_2 <94%), short of breath, or has signs of heart failure/shock
- Assess history & physical
- Check blood glucose – if indicated & able

Blood glucose ≤60 mg/dl, or hx & clinical presentation fits hypoglycemia

NO

YES

Oral glucose (BLS) – ONLY if pt is conscious & able to swallow
- Pre-packaged glucose solution/gel or 2-3 tbsp of sugar in water/juice

OR

Dextrose 10% (ALS)
- 10 – 25 g (100 – 250 mL) IV/IO

OR

Glucagon (ALS)
- 1 mg (1 unit) IM/IN

ALS

Consider the following additional assessment/treatment modalities, as appropriate based on pt's condition & clinical presentation

- Cardiac monitor/12-lead EKG
- $EtCO_2$ monitoring
- IV/IO NS (may bolus up to 1000 mL if indicated)

- Refer to other sections of this protocol as appropriate
  - Suspected Sepsis – Page 2
  - Nausea/Vomiting – Page 3

- Early recognition of sepsis is critical to expedite hospital care and antibiotic administration.
- Aggressive IV fluid therapy is the most important prehospital treatment for sepsis.
- Septic pts are especially susceptible to traumatic lung injury and ARDS. If BVM ventilation is necessary, avoid excessive tidal volumes.
- Attempt to identify the source of infection (skin, respiratory, etc.), previous treatment and related history.
- Consider the possibility of sepsis when a combination of two or more of the following Systemic Inflammatory Response Syndrome (SIRS) criteria are present:
  - Temperature <96.8°F or >100.4°
  - RR >20bpm
  - HR >90bpm
  - ETCO2 ≤25 mmHg

High-Risk Indicators for Sepsis:

- Hx of pneumonia, UTI, MRSA
- Cancer pts
- Nursing home residents
- Pts with indwelling catheters
- Immune-compromised pts

Shock Index (SI):

- SI is used to assess the severity of hypovolemic shock
- SI = HR/SBP
  - Normal SI range is 0.5 to 0.7
  - HR>SBP (SI>1) may indicate sepsis

ALS

- Assess Temperature
- $EtCO_2$ monitoring
- IV/IO NS 500 mL boluses to a maximum of 2 L if SIRS criteria remain present
  - Reassess vital signs between boluses
  - Discontinue boluses and provide supportive care if signs of pulmonary edema develop

If SBP <90 after 2 L NS:
Push-Dose Epinephrine
- Eject 1 mL NS from a 10 mL flush syringe
- Draw up 1 mL epinephrine 1:10,000 & gently mix
- Administer 1 mL IV/IO push every 1-5 mins for continued SBP <90

If pt is febrile:
Acetaminophen
- 1 g IV/IO infusion over 15 mins (single dose)

- Monitor & reassess
- Provide early notification to the receiving hospital for suspected sepsis pts

Nausea/Vomiting

- Nausea/vomiting can be symptoms of a multitude of different causes. If possible, the specific underlying cause should be determined and treated. The use of an antiemetic may relieve symptoms while leaving the cause untreated, and possibly, more difficult to detect. EMS personnel 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/vomiting is indicated for pts where it may contribute to a worsening of their medical condition, or where the pt's airway may be endangered.
- EMS personnel may consider administering Zofran (Ondansetron) prophylactically, prior to or immediately after opioid administration, for a pt with a history of nausea/vomiting secondary to opioid administration. Zofran (Ondansetron) may also be administered prior to transport to a pt with a history of motion sickness.

ALS

Zofran (Ondansetron)
- 4 - 8 mg oral disintegrating tablet, **OR** 4 - 8 mg IM, **OR** 4 - 8 mg slow IV/IO (over 30 seconds)
- May repeat as needed (max total dose: 16 mg)

Zofran (Ondansetron) is contraindicated during the first 8 weeks of pregnancy

Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-8
Pain Management	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- All pts with a report of pain shall be appropriately assessed and treatment decisions/interventions shall be adequately documented on the PCR.
- A variety of pharmacological and non-pharmacological interventions may be utilized to treat pain. Consider the pt's hemodynamic status, age, and previous medical history/medications when choosing analgesic interventions.
- Treatment goals should be directed at reducing pain to a tolerable level; pts may not experience complete pain relief.

BLS

- Assess V/S including pain scale & SpO_2, every 15 mins or as indicated by pt's clinical condition
- Assess/document pain score using standard 1-10 pain scale before and after each pain management intervention and at a minimum of every 15 mins
- O_2 at appropriate rate if SpO_2 <94% or pt is short of breath
- Utilize non-pharmacological pain management techniques as appropriate, including:
  - Place in position of comfort and provide verbal reassurance to minimize anxiety
  - Apply ice packs &/or splints for pain secondary to trauma

Pain not effectively managed with non-pharmaceutical pain management techniques

Review/consider 'Medication Contraindications & Administration Notes' below & proceed to page 2

Medication Contraindications & Administration Notes

ⓘ Clinical judgement shall be utilized to determine appropriate doses within allowable protocol ranges
ⓘ All slow IVP medications contained in this protocol shall be administered over 60 seconds

Acetaminophen
ⓘ Do not administer to pts with any of the following:
- Severe hepatic impairment
- Active liver disease

ⓘ Discontinue infusion if SBP drops to <100

Ketamine
ⓘ Do not administer to pregnant pts

Ketorolac
ⓘ Do not administer to pts with any of the following:
- ≥65 yo
- Pregnancy
- NSAID allergy
- Active bleeding
- Multi-system trauma
- ALOC or suspected moderate/severe TBI
- Current use of anticoagulants or steroids
- Hx of asthma, GI bleeding, ulcers
- Hx of renal disease/insufficiency/transplant

Fentanyl/Midazolam
ⓘ Do not administer to pts with any of the following:
- SBP <100
- SpO2 <94% or RR <12
- ALOC or suspected moderate/severe TBI

ⓘ Consider reduced fentanyl doses for pts ≥65 yo
ⓘ There is an increased risk of deeper level of sedation & airway/respiratory compromise when administering midazolam to pts receiving fentanyl

ALS

- Continuous cardiac monitoring
- IV/IO NS TKO – if indicated by pt's clinical condition or necessary for medication administration
  - May bolus up to 1000 mL if indicated by pt's clinical condition
- Administer analgesic intervention as indicated below when appropriate

Non-Trauma Related/Chronic Pain

Acetaminophen: 1 g IV/IO infusion over 15 mins **OR Ketorolac:** 15 - 30 mg IV/IO or IM

If pain not effectively managed:

- Contact base/modified base hospital for additional pain management consultation

Pain Related to Acute Injury/Burns/Frostbite

Moderate Pain

Acetaminophen: 1 g IV/IO infusion over 15 mins
OR
Ketorolac: 15 - 30 mg IV/IO or IM

If pain not effectively managed:

- Continuous $EtCO_2$ monitoring

Fentanyl: 25 - 50 mcg slow IV/IO or IM/IN every 5 mins (max cumulative dose: 200 mcg)

Severe Pain

- Continuous $EtCO_2$ monitoring

Fentanyl: 50 - 100 mcg slow IV/IO or IM/IN
OR
Ketamine: 15 - 30 mg slow IV/IO

Acetaminophen: 1 g IV/IO infusion over 15 mins

If pain not effectively managed:

- If fentanyl previously administered, may repeat fentanyl 50 - 100 mcg slow IV/IO or IM/IN every 5 mins (max cumulative dose: 200 mcg)
- If ketamine previously administered, may repeat ketamine 15 – 30 mg slow IV/IO x 1

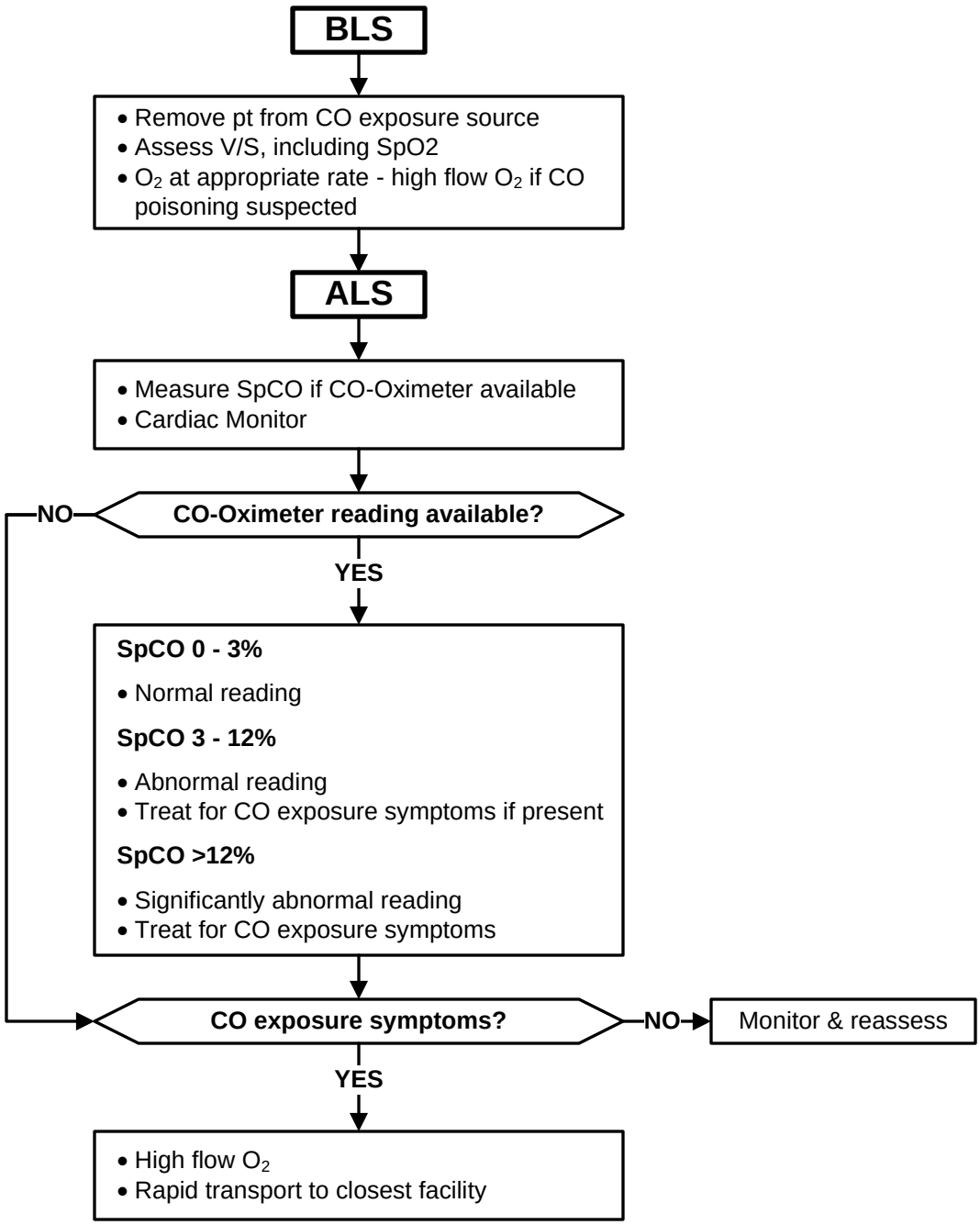
AND/OR
Midazolam: 1 mg slow IV/IO

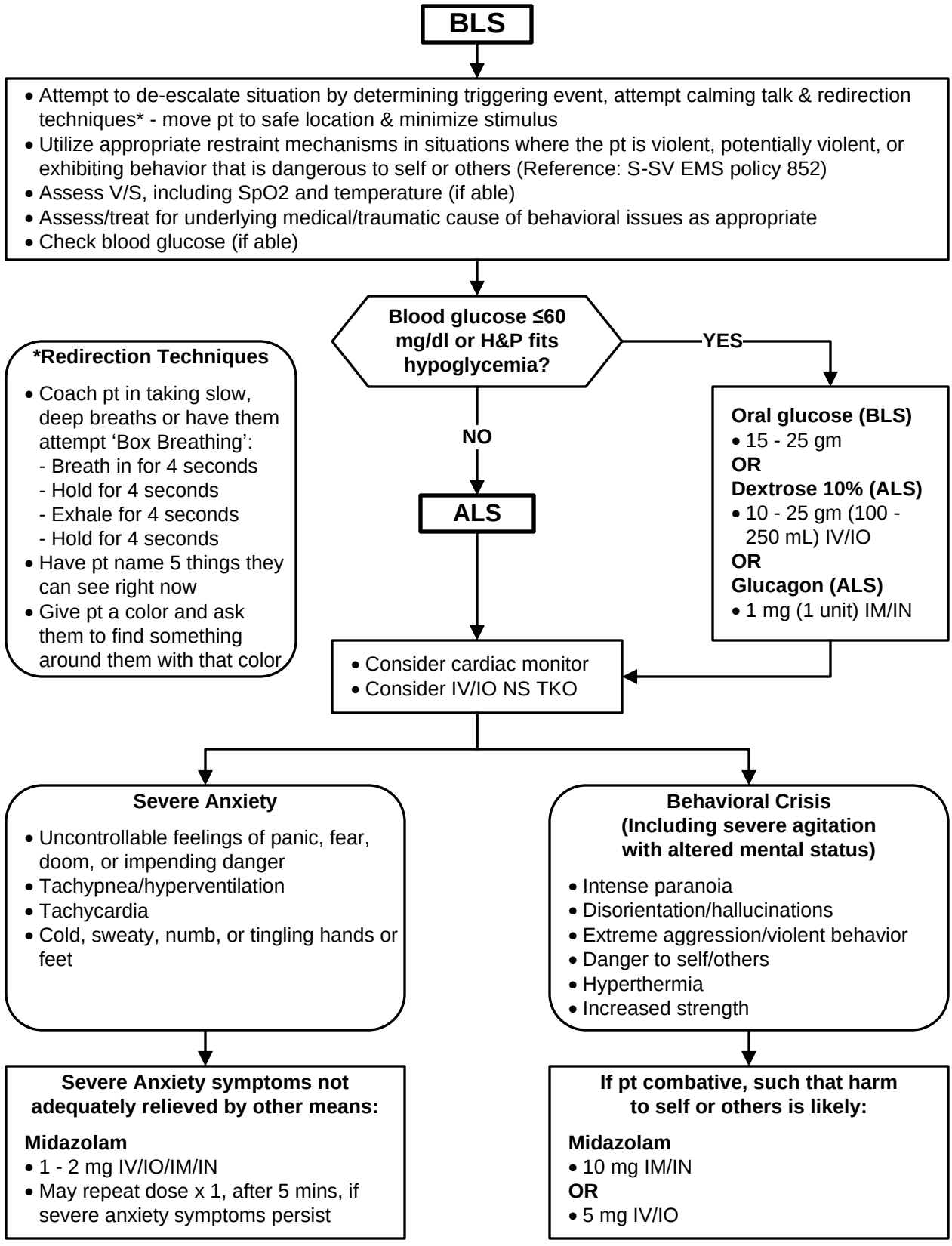
- May repeat 1 mg slow IV/IO x 1
- Wait 5 mins after fentanyl/ketamine administration before administering midazolam

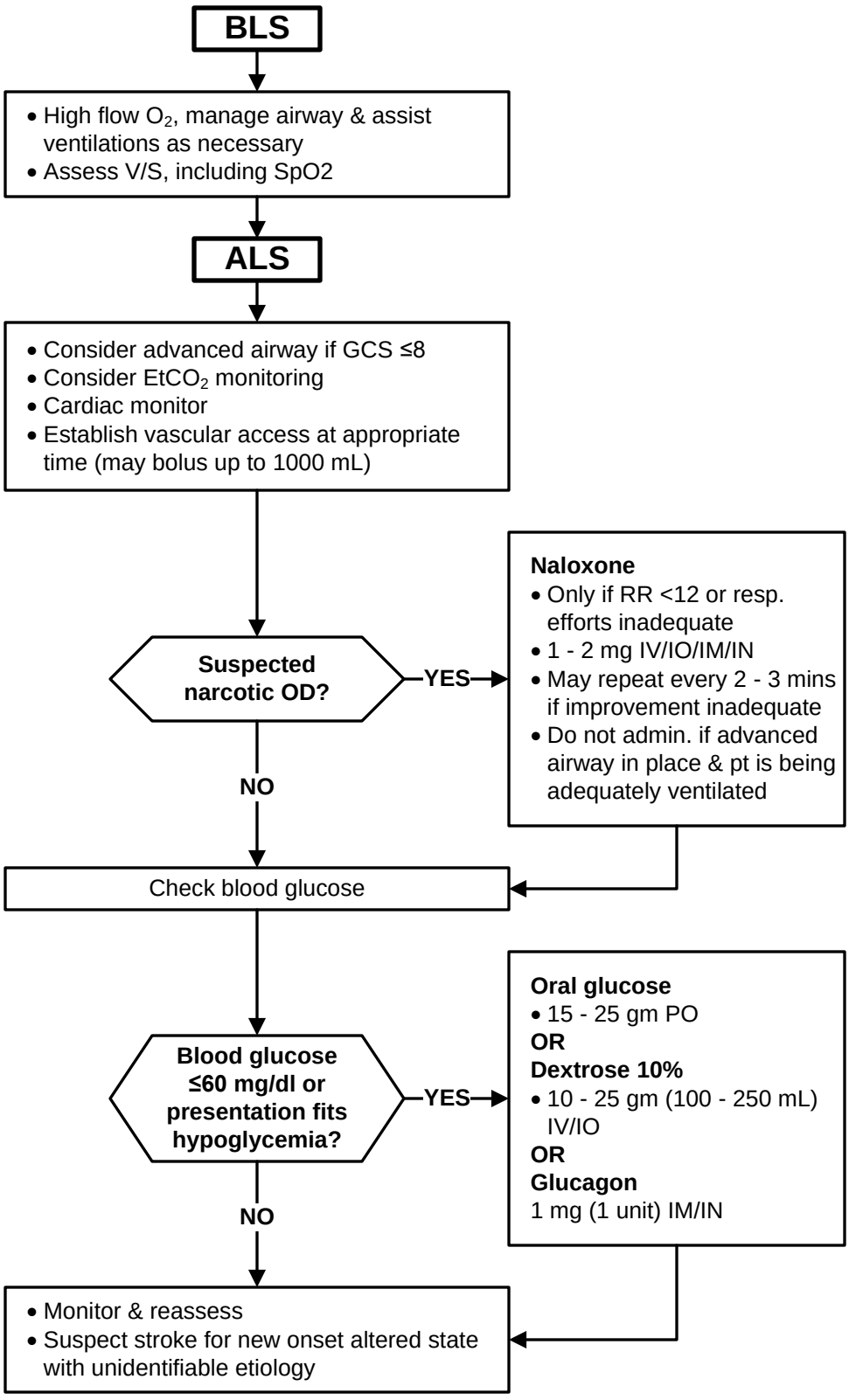
Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-9
CO Exposure/Poisoning	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

- **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 & may include one or more of the following:**

- Confusion	**- Dizziness/vertigo**	**- Headache**	**- Shortness of breath**	**- Nausea/vomiting**
- Fatigue	**- Syncope**	**- Confusion**	**- Tachycardia**	**- Cardiac arrhythmias**
- Seizures	**- Shock**	**- Coma**	**- Apnea**	

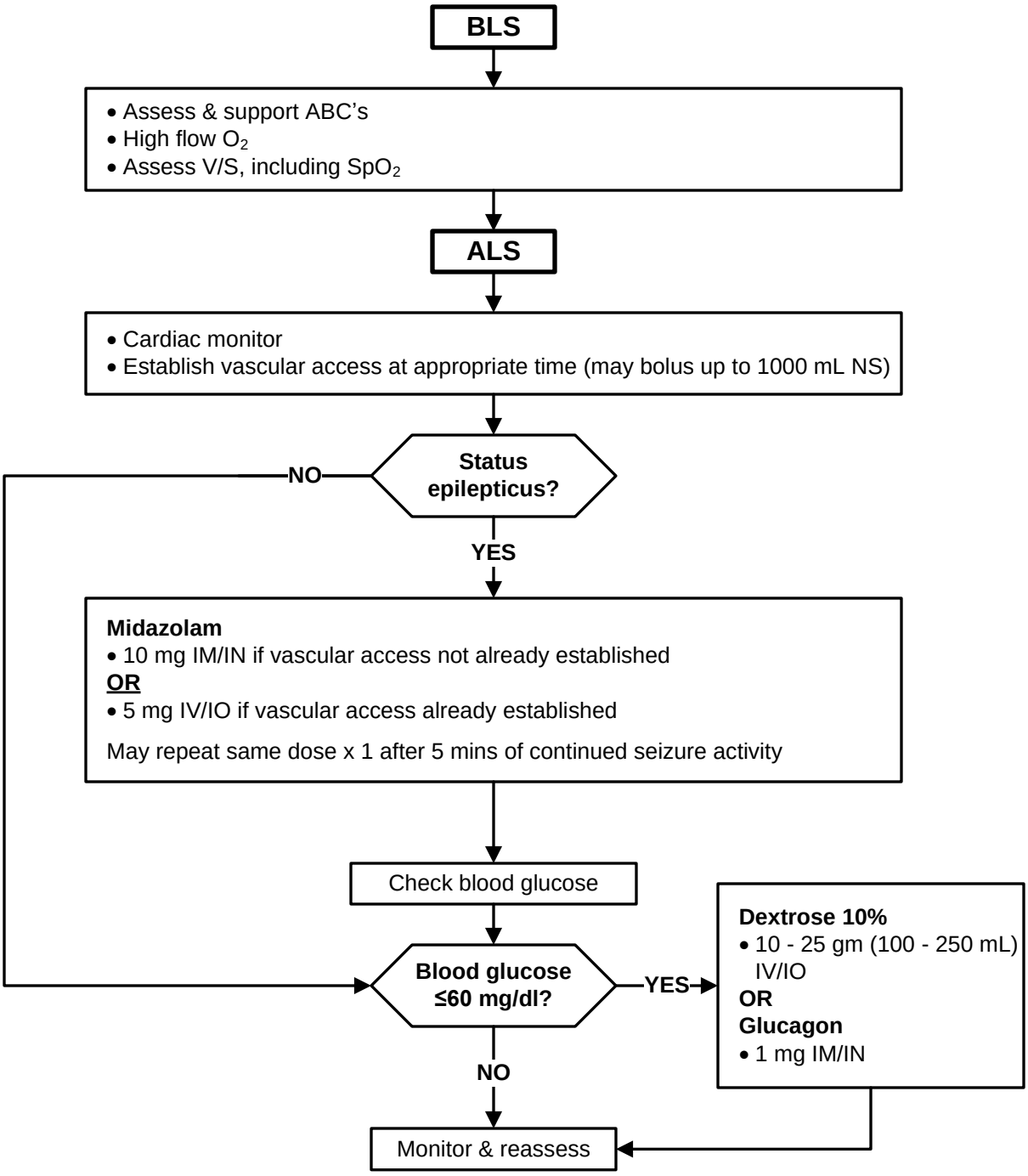



BLS
• Attempt to de-escalate situation by determining triggering event, attempt calming talk & redirection techniques* - move pt to safe location & minimize stimulus
• Utilize appropriate restraint mechanisms in situations where the pt is violent, potentially violent, or exhibiting behavior that is dangerous to self or others (Reference: S-SV EMS policy 852)
• Assess V/S, including SpO2 and temperature (if able)
• Assess/treat for underlying medical/traumatic cause of behavioral issues as appropriate
• Check blood glucose (if able)
Blood glucose ≤60 mg/dl or H&P fits hypoglycemia?
YES
NO
*Redirection Techniques
• Coach pt in taking slow, deep breaths or have them attempt 'Box Breathing':
- Breath in for 4 seconds
- Hold for 4 seconds
- Exhale for 4 seconds
- Hold for 4 seconds
• Have pt name 5 things they can see right now
• Give pt a color and ask them to find something around them with that color
Oral glucose (BLS)
• 15 - 25 gm
OR
Dextrose 10% (ALS)
• 10 - 25 gm (100 - 250 mL) IV/IO
OR
Glucagon (ALS)
• 1 mg (1 unit) IM/IN
ALS
• Consider cardiac monitor
• Consider IV/IO NS TKO
Severe Anxiety
• Uncontrollable feelings of panic, fear, doom, or impending danger
• Tachypnea/hyperventilation
• Tachycardia
• Cold, sweaty, numb, or tingling hands or feet
Behavioral Crisis (Including severe agitation with altered mental status)
• Intense paranoia
• Disorientation/hallucinations
• Extreme aggression/violent behavior
• Danger to self/others
• Hyperthermia
• Increased strength
Severe Anxiety symptoms not adequately relieved by other means:
Midazolam
• 1 - 2 mg IV/IO/IM/IN
• May repeat dose x 1, after 5 mins, if severe anxiety symptoms persist
If pt combative, such that harm to self or others is likely:
Midazolam
• 10 mg IM/IN
OR
• 5 mg IV/IO


BLS
• High flow O_2, manage airway & assist ventilations as necessary
• Assess V/S, including SpO2
ALS
• Consider advanced airway if GCS ≤8
• Consider $EtCO_2$ monitoring
• Cardiac monitor
• Establish vascular access at appropriate time (may bolus up to 1000 mL)
Suspected narcotic OD?
YES
Naloxone
• Only if RR <12 or resp. efforts inadequate
• 1 - 2 mg IV/IO/IM/IN
• May repeat every 2 - 3 mins if improvement inadequate
• Do not admin. if advanced airway in place & pt is being adequately ventilated
NO
Check blood glucose
Blood glucose ≤60 mg/dl or presentation fits hypoglycemia?
YES
Oral glucose
• 15 - 25 gm PO
OR
Dextrose 10%
• 10 - 25 gm (100 - 250 mL) IV/IO
OR
Glucagon
1 mg (1 unit) IM/IN
NO
• Monitor & reassess
• Suspect stroke for new onset altered state with unidentifiable etiology

Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-2
Seizure	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

- **Status Epilepticus:** 2 or more seizures without periods of consciousness, or a single seizure lasting >5 mins.
- Transport patients >20 weeks pregnant in left-lateral position.



Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-3
Suspected Stroke	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027

Cincinnati Prehospital Stroke Scale (CPSS)

Component	Normal Result	Abnormal Result
Facial Droop (Ask pt to show teeth or smile)	Both sides of face move equally	One side of face does not move as well as the other side
Arm Drift (Ask pt to close eyes & hold both arms out with palms up)	Both arms move the same, or both arms do not move	One arm does not move, or one arm drifts down compared with the other
Speech (Ask pt to say "you can't teach an old dog new tricks")	Pt uses correct words with no slurring	Pt slurs words, uses the wrong words, or is unable to speak

BLS

- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
- Perform CPSS assessment

Suspect stroke for any of the following:

- New onset symptoms with abnormal CPSS
- New onset altered state (GCS <14) with unidentifiable etiology
- CPSS is normal, but patient/bystander report stroke symptoms within previous 24 hrs

If stroke suspected:

- Determine time of onset of symptoms (pt last known normal)
  - When possible, obtain and relay to the receiving hospital the name/contact information of the individual who can verify the time of onset of symptoms (pt last known normal)
- Check blood glucose (if glucometer available)
- Transport as soon as possible (scene time should be ≤10 mins)

ALS

- Consider advanced airway if GCS ≤8 or need for airway protection
- Cardiac monitor, consider 12-lead EKG (do not delay transport to perform 12-lead EKG)
- Obtain blood draw if requested by stroke receiving center
- IV/IO NS TKO (may bolus up to 1000 mL)

Are both the following present?
- Onset of symptoms ≤24 hrs (including wake-up stroke*)
- ≤45 minute transport time to a stroke receiving center

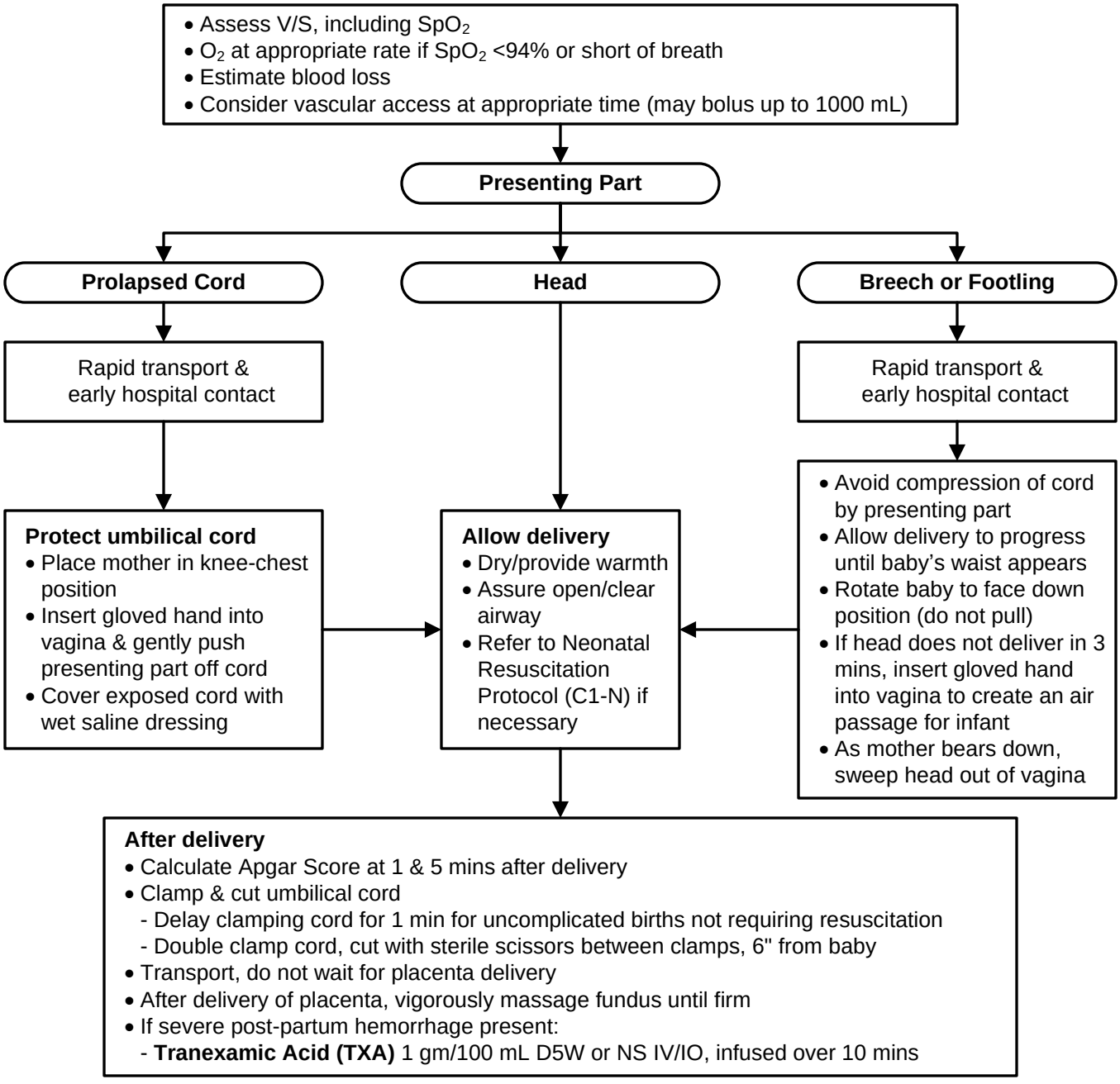
NO
- Transport to closest appropriate hospital
- Contact base/modified base hospital for destination consultation if necessary

YES
- Transport to closest stroke receiving center
- Advise of "Stroke Alert" & time pt. last known normal
- Provide pt. identifying information if requested by stroke receiving center

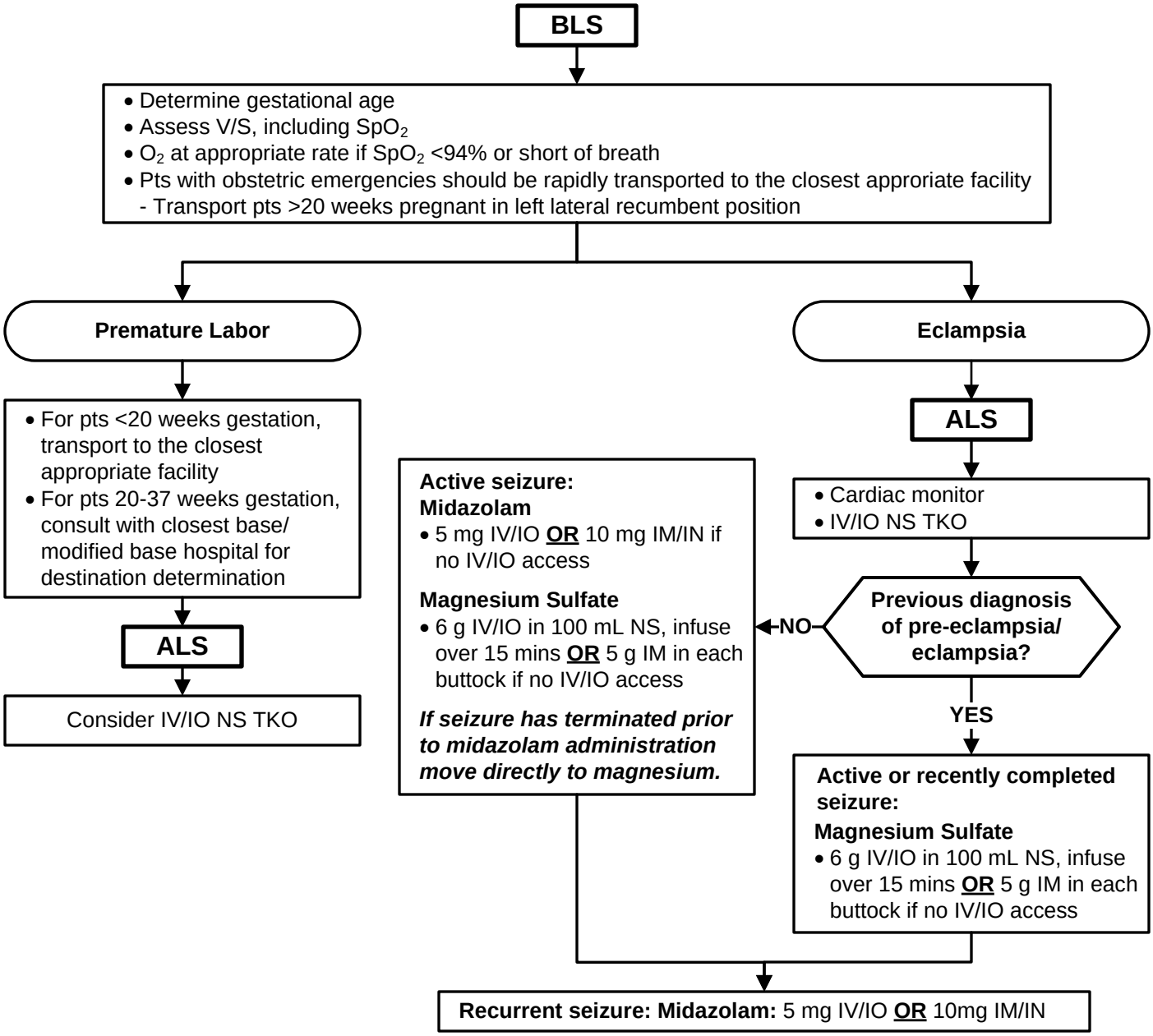
***Wake-up stroke definition:** Pt awakens with stroke symptoms that were not present prior to falling asleep

APGAR Score

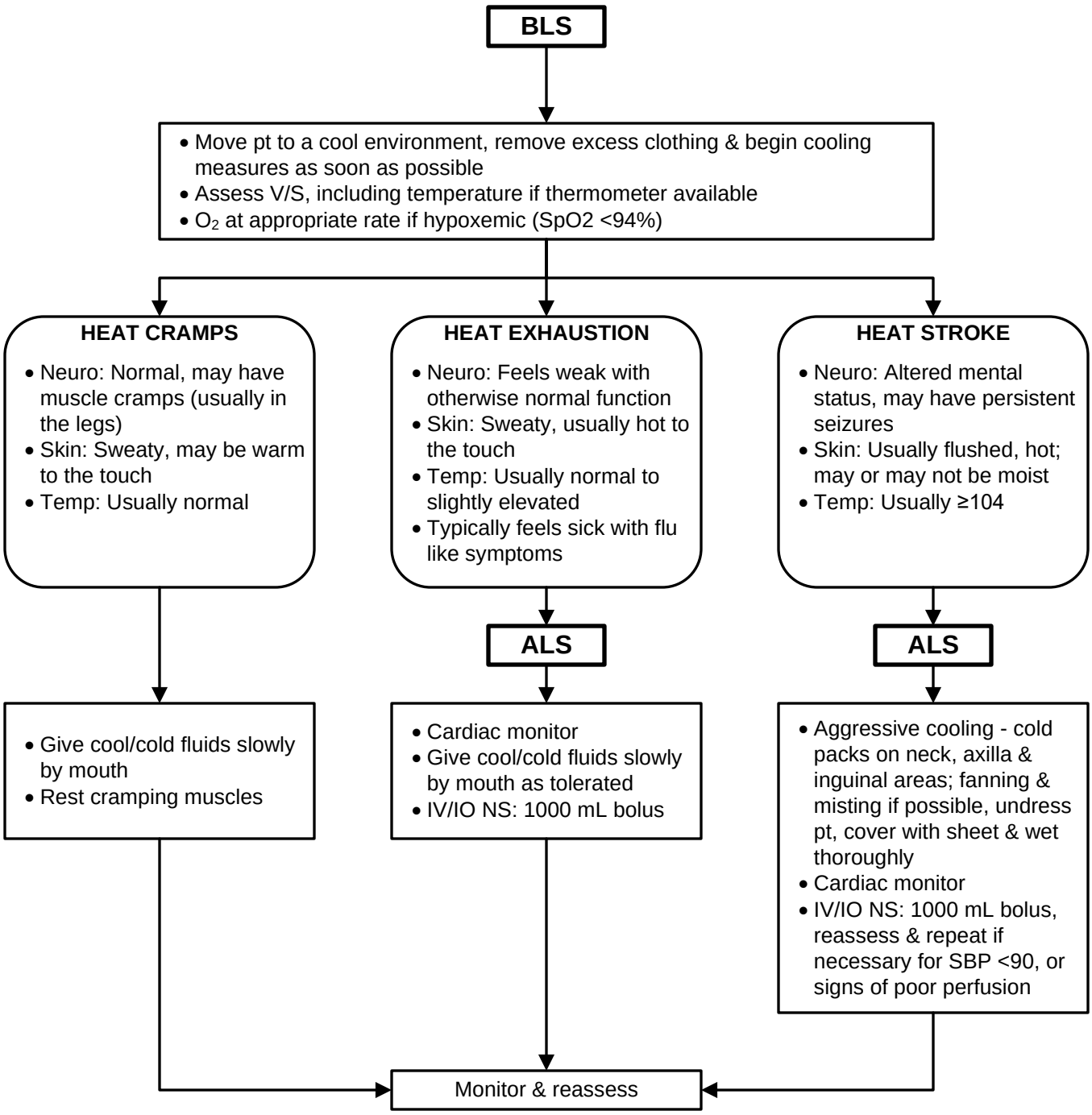
	Sign/Score	0	1	2
A	Appearance	Blue/Pale	Peripheral cyanosis	Pink
P	Pulse Rate	None	<100	>100
G	Grimace	None	Grimace	Cries
A	Activity	Limp	Some motion	Active
R	Respiration	Absent	Slow/irregular	Good/strong cry



- Obstetric emergencies can be high-acuity/low-frequency situations that can rapidly escalate & may include one or more of the following:
  - Premature Labor – Regular uterine contractions or cervical dilation prior to the 37th week of gestation.
  - Placenta Previa – Placenta covers the cervical opening (painless, often profuse, bright red bleeding).
  - Abruptio Placenta – Separation of placenta from the uterine wall (severe abdominal pain/abdominal rigidity).
  - Pre-Eclampsia – A condition of pregnancy characterized by high blood pressure & other symptoms.
  - Eclampsia – Seizures secondary to a pregnancy-related high blood pressure disorder.
- Pre-Eclampsia & Eclampsia may occur up to 8 weeks post-partum.
- If pt is in the 3rd trimester & has a BP >160/100, altered mental status, & visual disturbances, consult with base/ modified base for consideration of magnesium sulfate

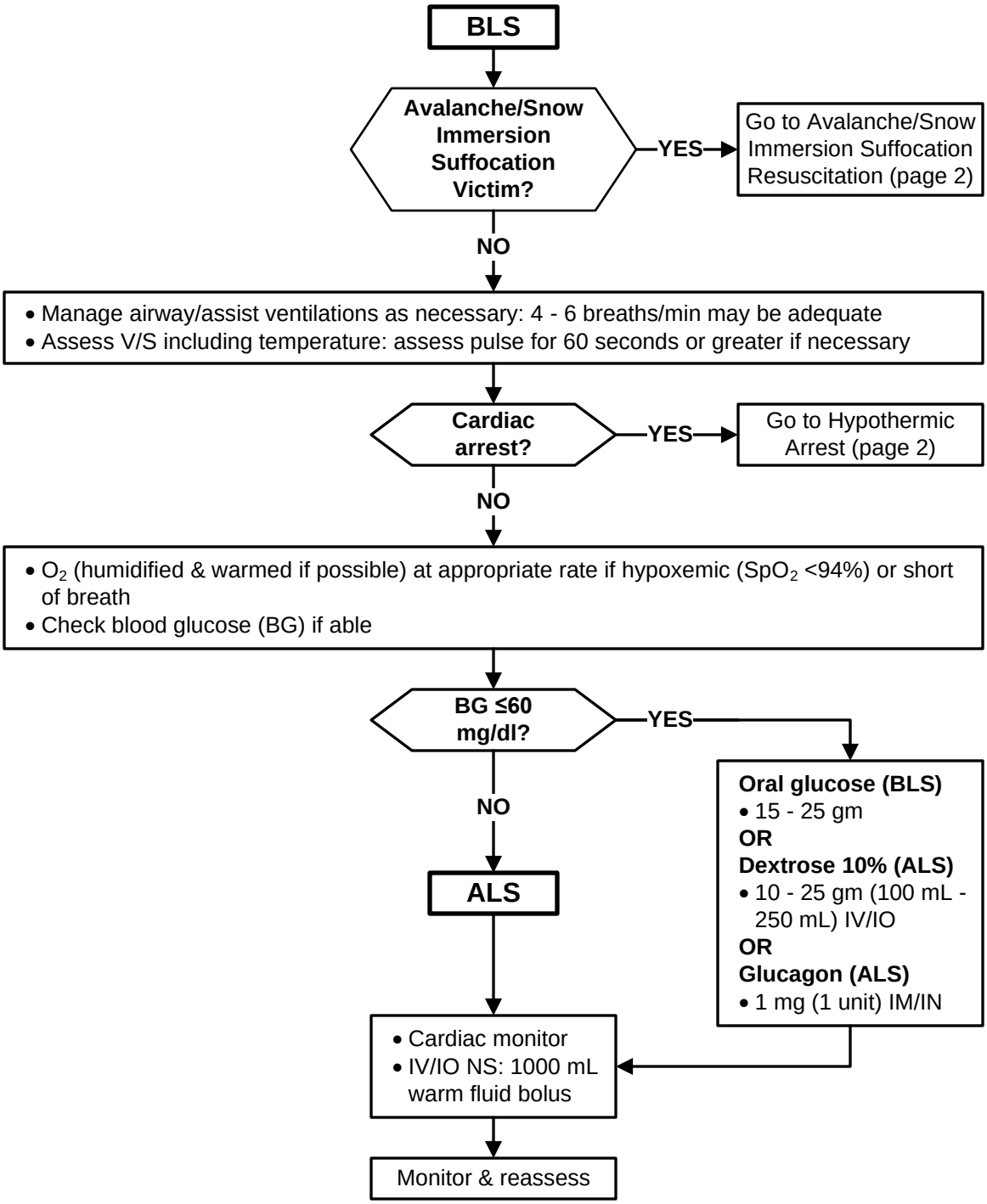


Sierra – Sacramento Valley EMS Agency Treatment Protocol	E-1
Hyperthermia	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/1/2022
Approval: John Poland – Executive Director	Next Review: 03/2025

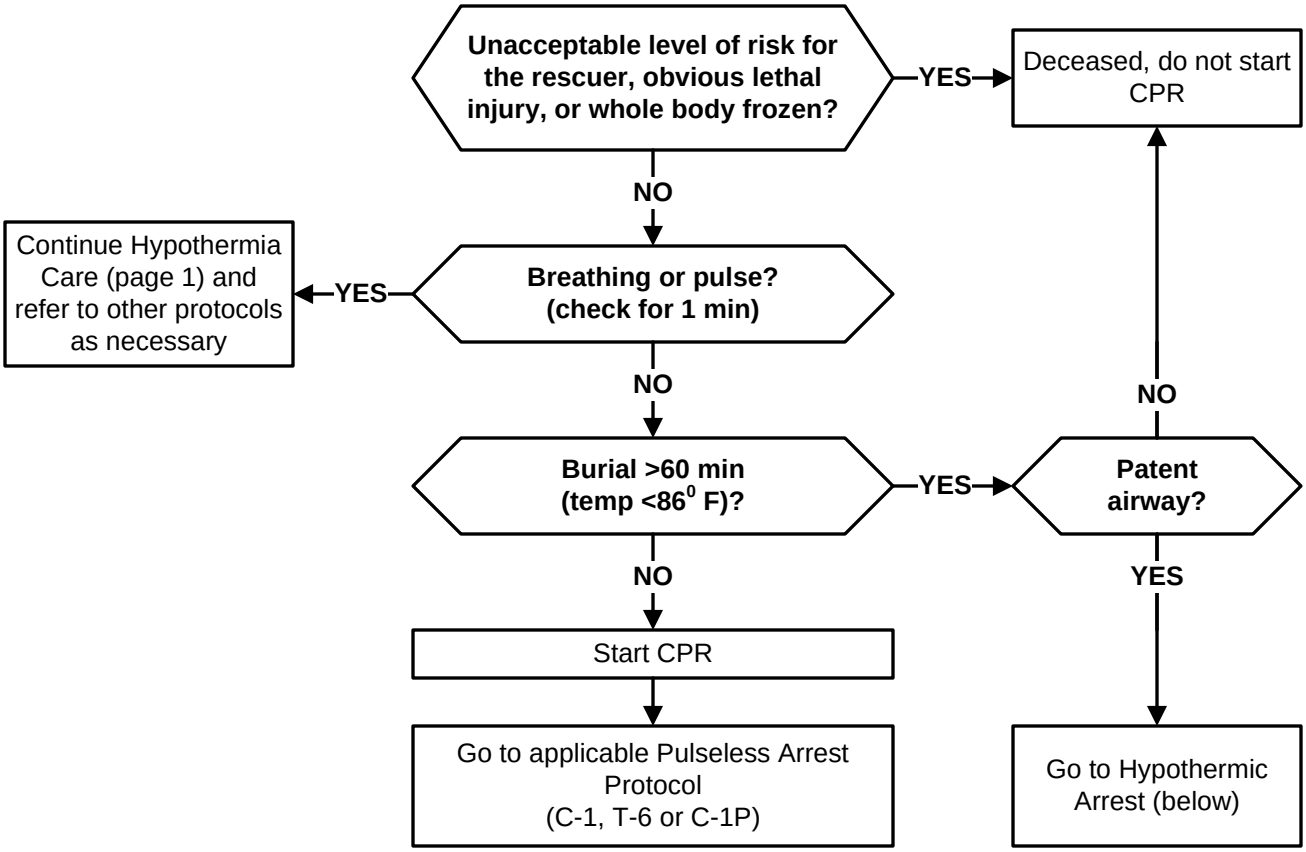


Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

- **Move pt to a warm environment, remove wet clothing, begin warming measures as soon as possible.**
- **Moderately & severely hypothermic pts should be handled as gently as possible.**
- **This protocol incorporates the official guidelines for the onsite treatment of avalanche victims established by the International Commission for Alpine Rescue (ICAR).**



Avalanche/Snow Immersion Suffocation Resuscitation



Hypothermic Arrest

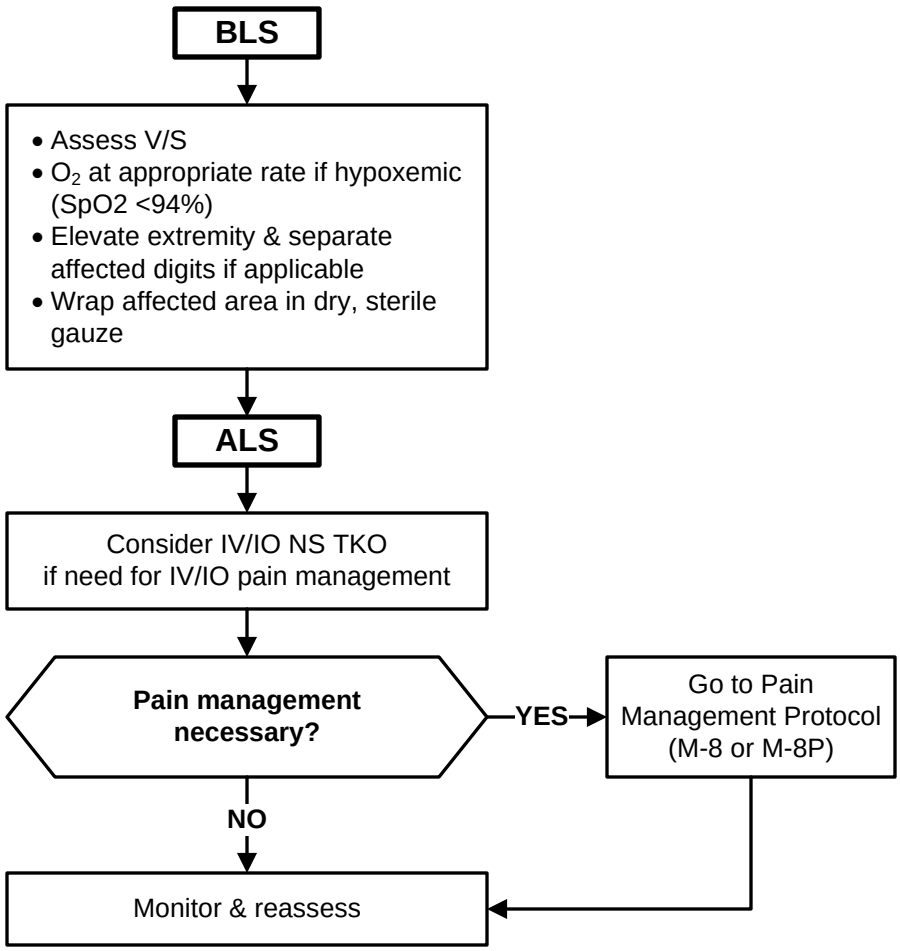
- **Medications & defibrillation may be ineffective in a hypothermic cardiac arrest pt. If the pt is in v-fib, one shock & one round of medications should be delivered. It is reasonable to delay further defibrillation attempts & further medications until the pt is rewarmed.**
- **Continuing CPR & safe expedited transport to the nearest facility is the pt's best chance at survival.**

BLS

Begin CPR & apply AED as soon as possible, deliver one AED shock if indicated

ALS

- If indicated according to Pulseless Arrest protocol (C-1, T-6 or C-1P), administer one manual defibrillation & one round of ALS medications
- Evacuate/transport as soon as possible - continue CPR until ROSC, rescuer exhaustion, hospital arrival, or base/modified base hospital order to terminate resuscitation efforts


BLS
• Assess V/S
• O_2 at appropriate rate if hypoxemic (SpO2 <94%)
• Elevate extremity & separate affected digits if applicable
• Wrap affected area in dry, sterile gauze
ALS
Consider IV/IO NS TKO if need for IV/IO pain management
Pain management necessary?
YES
Go to Pain Management Protocol (M-8 or M-8P)
NO
Monitor & reassess

Important Caveats

General

- Ensure the scene is safe. Attempt to identify what type of animal/reptile/insect the bite or sting is from (transport with the pt is not recommended). If safe to do so, a digital photograph is preferred for identification purposes (include the head, tail & any distinctive markings). Avoid the head & fangs of pit vipers as they are capable of envenomation even when dead.
- Venomous & mammal bites to the face, tongue, mouth & neck or direct stings to the tongue & mouth are imminent airway emergencies & will need to be addressed early.

Spider/Centipede Bites or Bee/Wasp/Scorpion/Ant Stings

- Bites from brown recluse, hobo & other spiders in the sicariidae family may cause a painless bite with tissue necrosis & clotting disorders developing over several days with little to no immediate symptoms. Brown recluse spiders are not native to California & are very rare. There is no current antivenom for this class of spider.
- Black widow spider bites cause diaphoresis, severe cramping & pain in the abdomen, groin, back & legs.
- Scorpion stings may cause pain & red welt at the sting site as well as uncontrolled muscle jerking, pain, eye twitching, hypotension & increased salivation.
- While very rare, severe reactions to black widow spider bites & some scorpion stings may require antivenom.
- Centipede bites may cause pain, minor bleeding & red welt at the sting site. First aid treatment is usually sufficient.
- Bee, wasp & ant stings may cause pain, minor bleeding & red welt at the sting site. First aid treatment is usually sufficient. Pts with history of reaction or who have multiple stings are at higher risk for anaphylaxis.

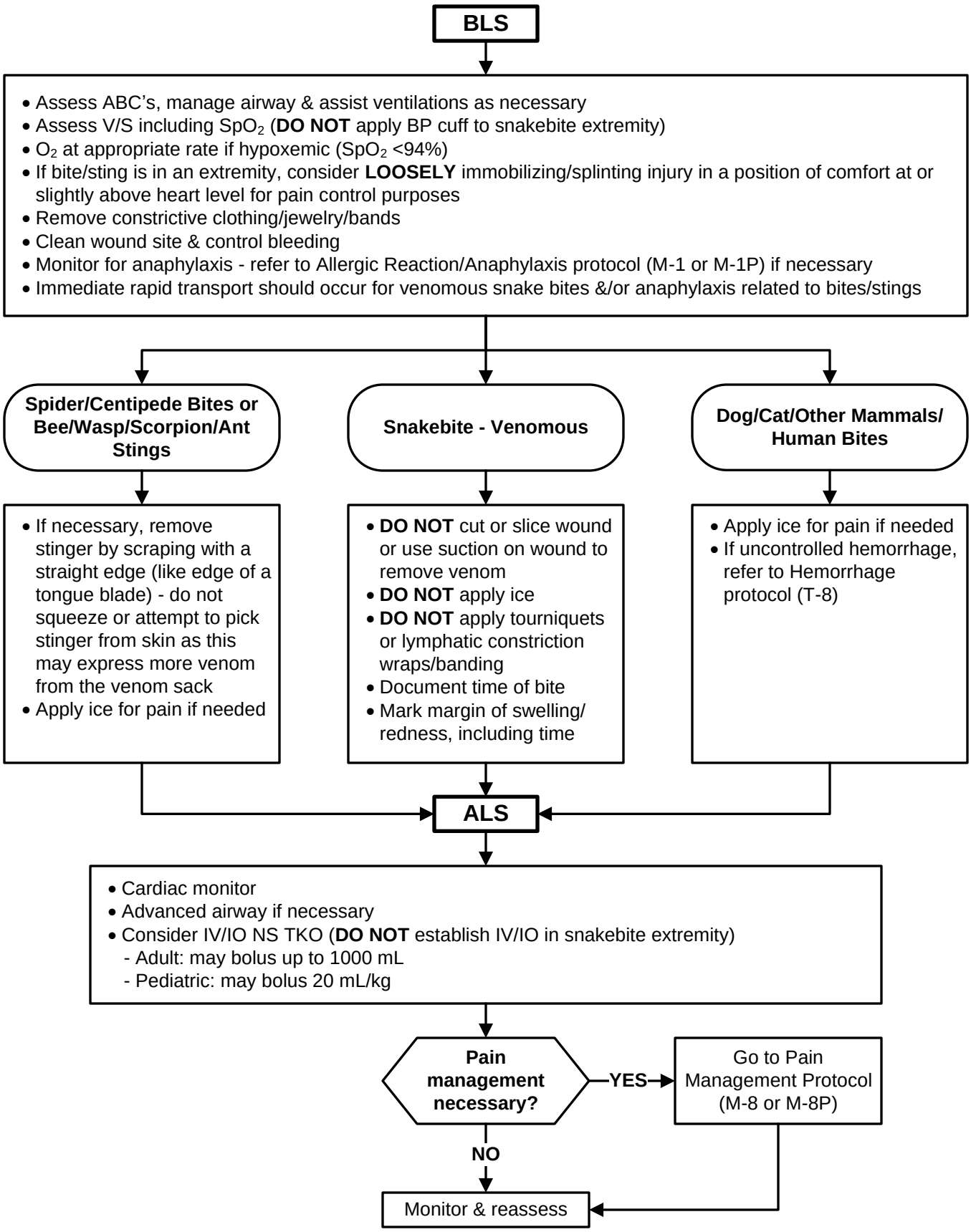
Snakebite - Venomous

- Bites from pit vipers & others in the crotalinae family are hemotoxic & cytotoxic & may cause pain, localized tissue destruction & edema. Oral paresthesia or metallic taste in the mouth may represent systemic toxicity. Hypotension may be due to fluid loss as a result of edema & usually resolves with antivenom. However, it may be due to the venom itself if no significant edema is noted.
- Bites from coral snakes & others in the elapid family, are neurotoxic & lack the impressive signs of envenomation of pit vipers, but may cause neuromuscular weakness & rapid respiratory depression/failure.
- If a snake bite was from an exotic pet or zoo animal (e.g. coral, cobra, krait, mojave), neurologic &/or respiratory depression may precede local reaction, observe closely for mental status change, respiratory depression, convulsions or paralysis.
- If bite/envenomation is from an exotic species, contact base/modified base hospital early as they may need to consult with poison control for specific antivenom.
- Pre-alert receiving hospital of probable need for antivenom if moderate to severe venomous snake bite is noted.

Dog/Cat/Other Mammals/Human Bites

- Human bites have higher infection rates than animal bites due to normal mouth bacteria.
- Consider risk for rabies, tetanus & other infections, especially in cat & other carnivore bites.
- Concern must be given for bleeding, infection & wound healing complications in patients with significant health history &/or extremes of age.

See page 2 for treatment of bites/envenomations


BLS
• Assess ABC's, manage airway & assist ventilations as necessary
• Assess V/S including SpO_2 (**DO NOT** apply BP cuff to snakebite extremity)
• O_2 at appropriate rate if hypoxemic (SpO_2 <94%)
• If bite/sting is in an extremity, consider **LOOSELY** immobilizing/splinting injury in a position of comfort at or slightly above heart level for pain control purposes
• Remove constrictive clothing/jewelry/bands
• Clean wound site & control bleeding
• Monitor for anaphylaxis - refer to Allergic Reaction/Anaphylaxis protocol (M-1 or M-1P) if necessary
• Immediate rapid transport should occur for venomous snake bites &/or anaphylaxis related to bites/stings
Spider/Centipede Bites or Bee/Wasp/Scorpion/Ant Stings
Snakebite - Venomous
Dog/Cat/Other Mammals/ Human Bites
• If necessary, remove stinger by scraping with a straight edge (like edge of a tongue blade) - do not squeeze or attempt to pick stinger from skin as this may express more venom from the venom sack
• Apply ice for pain if needed
• **DO NOT** cut or slice wound or use suction on wound to remove venom
• **DO NOT** apply ice
• **DO NOT** apply tourniquets or lymphatic constriction wraps/banding
• Document time of bite
• Mark margin of swelling/ redness, including time
• Apply ice for pain if needed
• If uncontrolled hemorrhage, refer to Hemorrhage protocol (T-8)
ALS
• Cardiac monitor
• Advanced airway if necessary
• Consider IV/IO NS TKO (**DO NOT** establish IV/IO in snakebite extremity)
- Adult: may bolus up to 1000 mL
- Pediatric: may bolus 20 mL/kg
Pain management necessary?
YES
Go to Pain Management Protocol (M-8 or M-8P)
NO
Monitor & reassess

Sierra – Sacramento Valley EMS Agency Treatment Protocol	E-7
Hazardous Material Exposure	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2023
Approval: John Poland – Executive Director	Next Review: 01/2026

Refer to S-SV EMS Hazardous Material Incidents Policy (836)

Important caveats for medical responders:

- EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless trained, equipped and authorized to do so.
- EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless trained, fit tested and authorized to do so.
- Do not transport pts until they have been completely decontaminated. If transport personnel become contaminated, they shall immediately undergo decontamination.
- Do not delay treatment/transport of immediate pts contaminated with radioactive material.
- Early base/modified base hospital contact, and CHEMPACK activation when appropriate (S-SV EMS Nerve Agent Treatment Protocol E-8), 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 hazardous materials incident:

- Number of pts.
- Material involved or DOT 4-digit placard #.
- Route(s) of exposure for each pt.
- Signs & symptoms for each pt.
- Decontamination procedure completed for each pt.
- Procedure utilized to determine effectiveness of decontamination procedure.
- Risk of secondary exposure to rescuers.
- PPE required to transport pt.

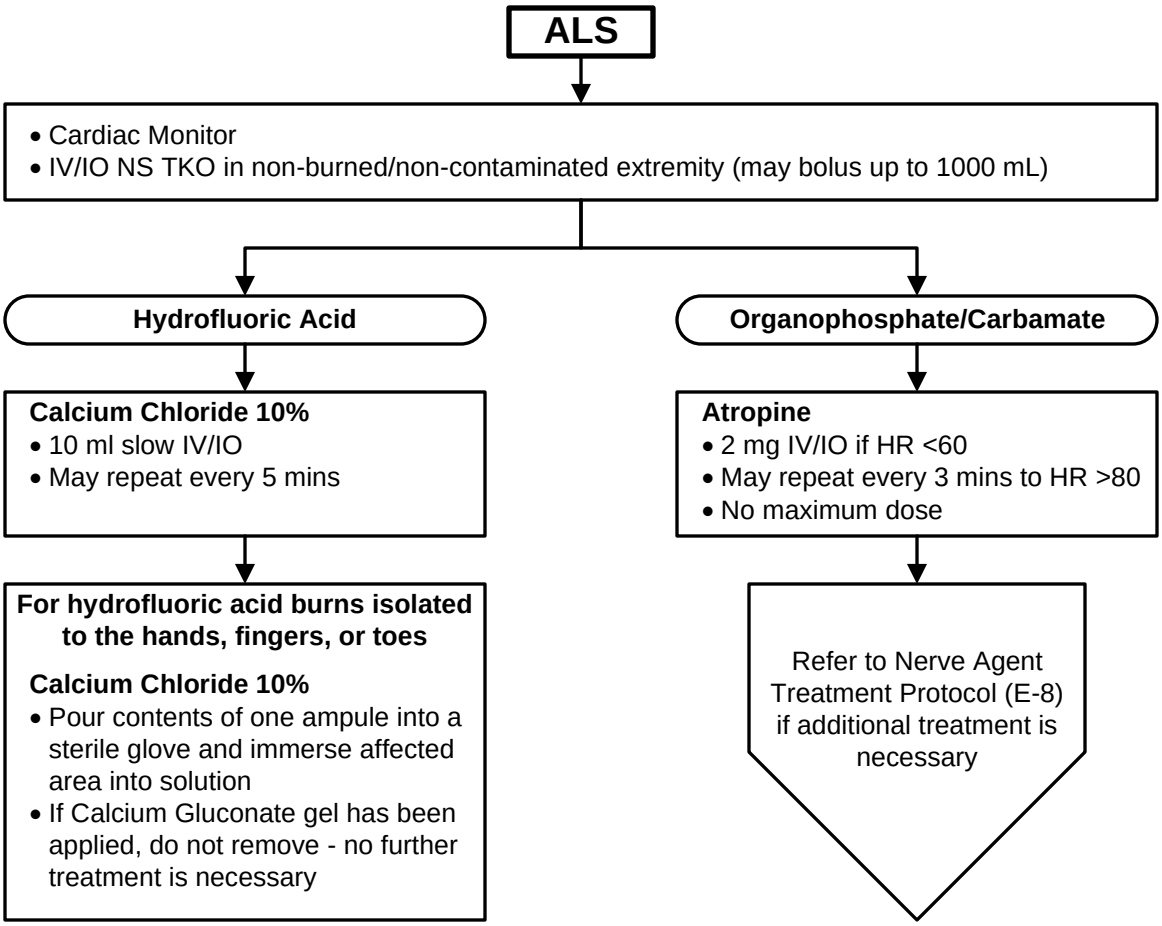
BLS

- Establish and secure airway as necessary
- O_2 at appropriate rate
- Contact base/modified base hospital for assistance in determining a decontamination/treatment plan
- After pt is fully decontaminated, cover with blankets and/or sheets as appropriate
- If eye exposure occurs, irrigate each exposed eye with NS – ensure contact lenses are removed

See pages 2 & 3 for additional treatment

Treatment Notes

- Skin exposure to hydrofluoric acid 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.
- Precautions must be taken to prevent direct contact with secretions of a pt who has ingested organophosphates or carbamate pesticides.



Radiation Emergencies

- Pt care takes priority over radiological concerns - addressing contamination issues should not delay treatment of life-threatening injuries.
- Viable pts are a high priority - rapidly extricate, treat and transport pts who are most critical and likely to survive.
- It is highly unlikely that the levels of radioactivity associated with a contaminated pt 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

- Avoid using internal and external compartments - work out of mobile kits as much as possible.
- Close all internal compartments prior to loading pt.
- Cover radio communication microphones with a rubber glove.
- Cover floor of ambulance with disposable papers or pads.

Radiation Exposure Haz Mat Pt

- If O_2 is warranted, use a non re-breather mask (if tolerated) to provide protection from inadvertent respiratory contamination hazards - an N95 mask is appropriate to protect pt from inadvertent respiratory contamination hazards when O_2 is not indicated
- Frequent glove changes will reduce the spread of contamination and should be considered prior to handling the pt or pt care adjuncts
- All medical procedures should be utilized to save an immediate pt - if it is medically necessary to intubate a pt that is contaminated, then do so - change gloves prior to intubation, and maintain ET tube sterility if possible

Limited or no field decontamination

- Initiate ALS care as necessary
- Keep pt wrapped (cocoon style) to minimize potential for contamination spread - only expose areas to assess and treat
- If necessary, cut and remove the pts clothing away from the body, being careful to avoid contamination to the unexposed skin - contain all removed clothing by placing in a sealable bag
- Continue to reassess/monitor vitals while transporting pt to the appropriate receiving facility
- Contact with pt may result in transfer of contamination - change gloves as necessary

Field decontamination performed

- Pts with non life-threatening injuries should have field decontamination prior to removal from the Exclusion (Hot) Zone
- Pts condition permits a more thorough radiological survey prior to continued care
- Conduct head to toe assessment as appropriate
- Initiate ALS care as necessary
- If pts clothing has not been removed during decontamination, keep pt wrapped (cocoon style) to minimize potential for contamination spread - only expose areas to assess and treat
- Contact with pt may result in transfer of contamination - change gloves as necessary

Sierra – Sacramento Valley EMS Agency Treatment Protocol	E-8
Nerve Agent Treatment	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2023
Approval: John Poland – Executive Director	Next Review: 01/2026

Refer to S-SV EMS Hazardous Material Incidents Policy (836)

Important caveats for medical responders:

- EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless trained, equipped and authorized to do so.
- EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless trained, fit tested and authorized to do so.
- Do not transport pts until they have been completely decontaminated. If transport personnel become contaminated, they shall immediately undergo decontamination.

Treatment notes:

- A base/modified base hospital physician order must be obtained prior to utilizing this protocol for pt treatment. Once an order is obtained, the entire protocol becomes a standing order that applies to all authorized/trained EMS personnel operating at the incident.
- Atropine (2mg) and pralidoxime chloride (600mg) auto-injectors included in MARK I/DuoDote nerve agent antidote kits shall only be used by authorized/trained EMS personnel.
- Paramedics may administer atropine and/or pralidoxime chloride IM/IV in situations where auto-injector nerve agent antidote kits are not available.
- EMS personnel may self-administer nerve agent antidote kits when authorized/trained to do so.
- Adult auto-injectors are not to be used in children under 40 Kg.
- Nerve agent antidote medications are only given if the pt is showing signs & symptoms of nerve agent poisoning, they are not to be given prophylactically. A decrease in bronchospasm and respiratory secretions are the best indicators of a positive response to atropine and pralidoxime.

Signs/Symptoms of Nerve Agent Exposure (mild to severe)

1. Runny nose
2. Chest tightness
3. Difficulty breathing
4. Bronchospasm
5. Pinpoint pupils/blurred vision
6. Drooling
7. Excessive sweating
8. Nausea/vomiting
9. Abdominal cramps
10. Involuntary urination/defecation
11. Jerking/twitching/staggering
12. Headache
13. Drowsiness
14. Coma
15. Convulsions
16. Apnea

Nerve Agent Exposure Mnemonic (SLUDGEM)

Salivation
Lacrimation
Urination
Defecation
GI distress
Emesis
Miosis/muscle fasciculation

CHEMPACK

Description:

- The Centers for Disease Control and Prevention (CDC) established the CHEMPACK project resulting in the forward placement of sustainable caches of nerve agent antidotes.
- CHEMPACK caches have been placed at select sites throughout the S-SV EMS region and surrounding areas according to program requirements and effective transportation alternatives.
- EMS CHEMPACK caches contain enough antidote to treat approximately 454 patients. These caches contain primarily auto-injectors for rapid administration, but also contain some multi-dose vials for variable dosing (including pediatric patients) and prolonged treatment.
- Authorization to deploy CHEMPACK assets will be limited to an event that:

  1. Threatens the medical security of the community; and
  2. Places multiple lives at risk; and
  3. Is otherwise beyond local emergency response capabilities; and
  4. Will likely make the material medically necessary to save human life.

CHEMPACK requesting/deployment:

- A requestor is considered to be one of the following entities at the scene of a suspected nerve agent or organophosphate release with known, suspected, or potential contaminated, exposed, or affected patients:

  1. EMS prehospital personnel; or
  2. Incident Commander (IC); or
  3. Medical Group Supervisor (MGS).

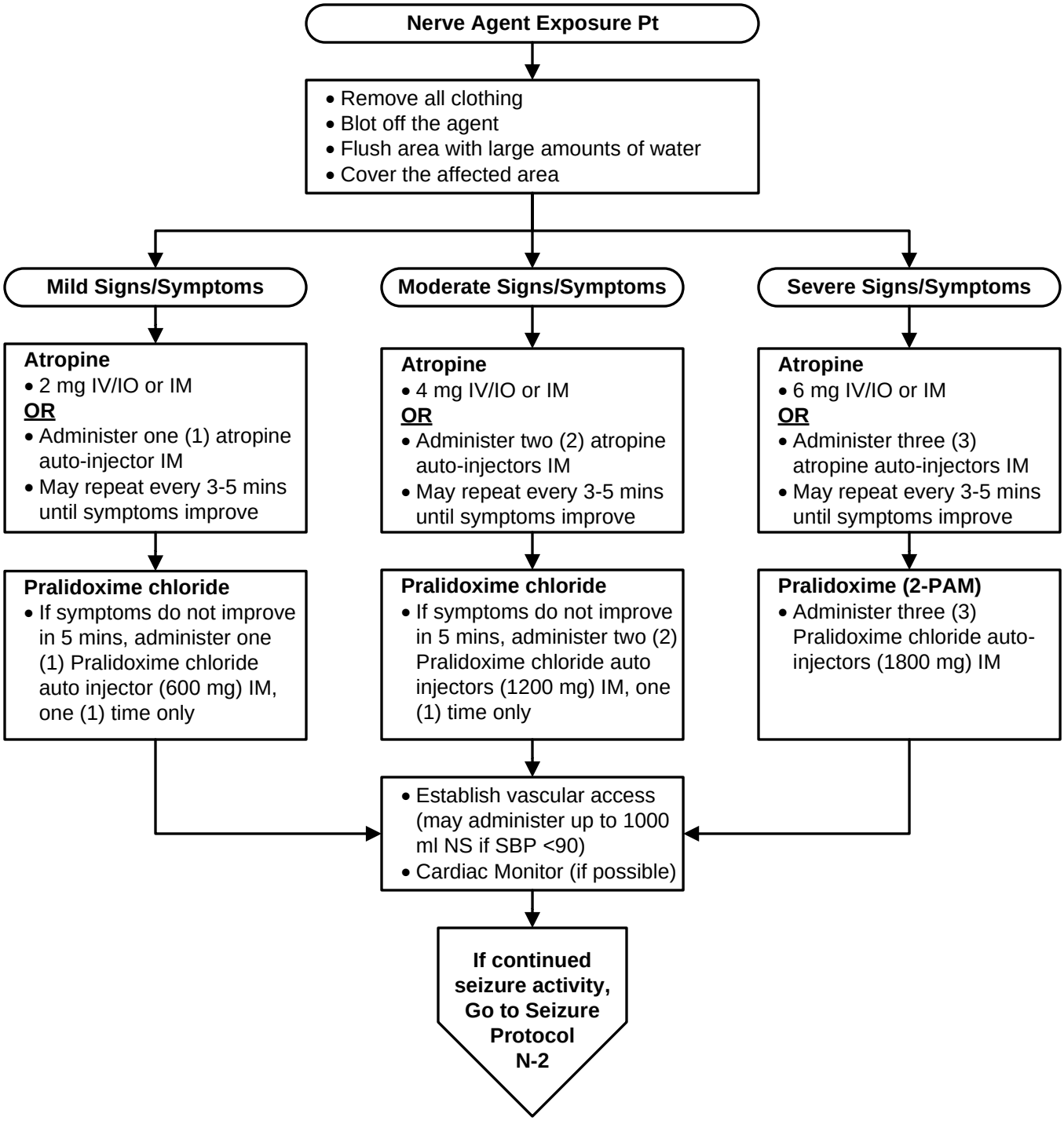
- Potential requestors should be familiar with and follow their Operational Area (OA)/county specific CHEMPACK plans and procedures
- The S-SV EMS Duty Officer and applicable MHOAC Program(s) shall be notified as soon as possible in the event of a CHEMPACK request/deployment.

See page 3 for specific treatment

Nerve Agent Treatment

Treatment Notes

- Only treat pts located in the Exclusion Zone (Hot Zone) with IM auto-injectors



Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-1
General Trauma Management	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- **Limit on scene procedures for pts meeting Field Trauma Triage Criteria to:**
  - Pt assessment - Airway management - Hemorrhage control - Immobilization/splinting - SMR
- **Transport pts with known/apparent third trimester pregnancy in left-lateral position.**
- **Notify receiving hospital of a 'Trauma Alert' as soon as possible for pts meeting Field Trauma Triage Criteria.**

BLS

- Assess & support ABCs
- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
- Control hemorrhage & immobilize/splint injuries as needed
- Initiate spinal motion restriction (SMR) if indicated (see page 3)
- Maintain body temperature, keep warm

ALS

- Consider advanced airway if indicated
- Consider $EtCO_2$ monitoring if indicated (see protocol T-3 or T-3P)
- Consider application of a pelvic binder if indicated (see page 2)
- Cardiac monitor
- Establish vascular access if indicated (see page 2)
- Consider pain management if indicated (see protocol M-8 or M-8P)

Field Trauma Triage Criteria (TTC) Pt Destination (see page 4 for TTC details)

Unmanageable Airway? — **YES** → **Transport to Closest Hospital**

NO

Meets RED TTC? — **YES** →

Adult (>14yo)
- If level I or II trauma center is closest, transport to that facility
- If level III or IV trauma center is closest, contact that facility (prior to transport) for destination consultation

Pediatric (≤14yo)
- Transport to pediatric trauma center if transport time ≤45 min
- Follow adult criteria if transport time to pediatric trauma center >45 min
- Contact closest trauma center for destination consultation if needed

NO

Meets YELLOW TTC? — **YES** →
- Contact closest trauma center for destination consultation if transport time to that facility is ≤45 min
- Contact base/modified base hospital for destination consultation if transport time to a trauma center is >45 min

Vascular Access

Need or anticipated need for fluid or medication administration?

NO → Vascular access not indicated

YES ↓

IV/IO – NS or LR

- Initiate vascular access on all pts meeting Field Trauma Triage Criteria
- Initiate second vascular access on adult pts presenting with hypotension (SBP <90 for pts <65 years of age, or SBP <100 for pts ≥65 years of age), or if thoracic/abdominal pain is present
- Fluid resuscitation guidelines:
  - Adult pts:
    - Administer 500 mL fluid boluses for signs of hypoperfusion/shock
    - Reassess hemodynamic parameters, respiratory status and lung sounds after each fluid bolus
    - Titrate fluid boluses to SBP of ≥90 for pts <65 years of age, or ≥100 for pts ≥65 years of age
  - Pediatric pts:
    - Administer 20 mL/kg fluid boluses for signs of hypoperfusion/shock
    - Reassess hemodynamic parameters, respiratory status and lung sounds after each bolus
    - Titrate fluid boluses to age appropriate SBP (max: 60 mL/kg)

Commercial Pelvic Binder

- Approved Commercial Pelvic Binders: Any commercial pelvic binder currently recommended by the Committee on Tactical Combat Casualty Care (CoTCCC).
- Utilization of a commercial pelvic binder is optional, and only approved for AEMT/paramedic personnel. ALS/LALS provider agencies must ensure that their personnel are appropriately trained on the application/use of the device, as misplacement of pelvic binders can significantly decrease the ability of the binder to reduce pelvic ring fractures.
- Physical exam findings which may indicate the presence of a pelvic ring fracture include, but are not limited to:
  - Crepitus when applying compression to the iliac crests
  - Perineal or genital swelling
  - Testicular/groin pain
  - Blood at the urethral meatus
  - Rectal, vaginal or perineal lacerations/bleeding
- When stabilizing a suspected pelvic ring fracture, care must be taken not to over-reduce the fracture. Over-reduction can be assessed by examining the position of the legs, greater trochanters and knees with the pt supine. The goal is to achieve normal anatomic position of the pelvis, so the lower legs should be symmetrical after stabilization.
- When clinically indicated and logistically feasible, the pelvic binder should be placed prior to extrication/movement.
- Pelvic binders should be placed directly to skin. Once applied, pelvic binders should not be removed.
- If possible, avoid log-rolling pts with a suspected pelvic fracture.

Mechanism of injury suggestive of a pelvic fracture?

NO → Pelvic binder not indicated

YES ↓

Does pt present with one or more of the following?

- Physical exam findings suggestive of a pelvic fracture
- Hemodynamic instability: HR >100 & SBP <90 (or SBP <100 in pts ≥65 years of age)

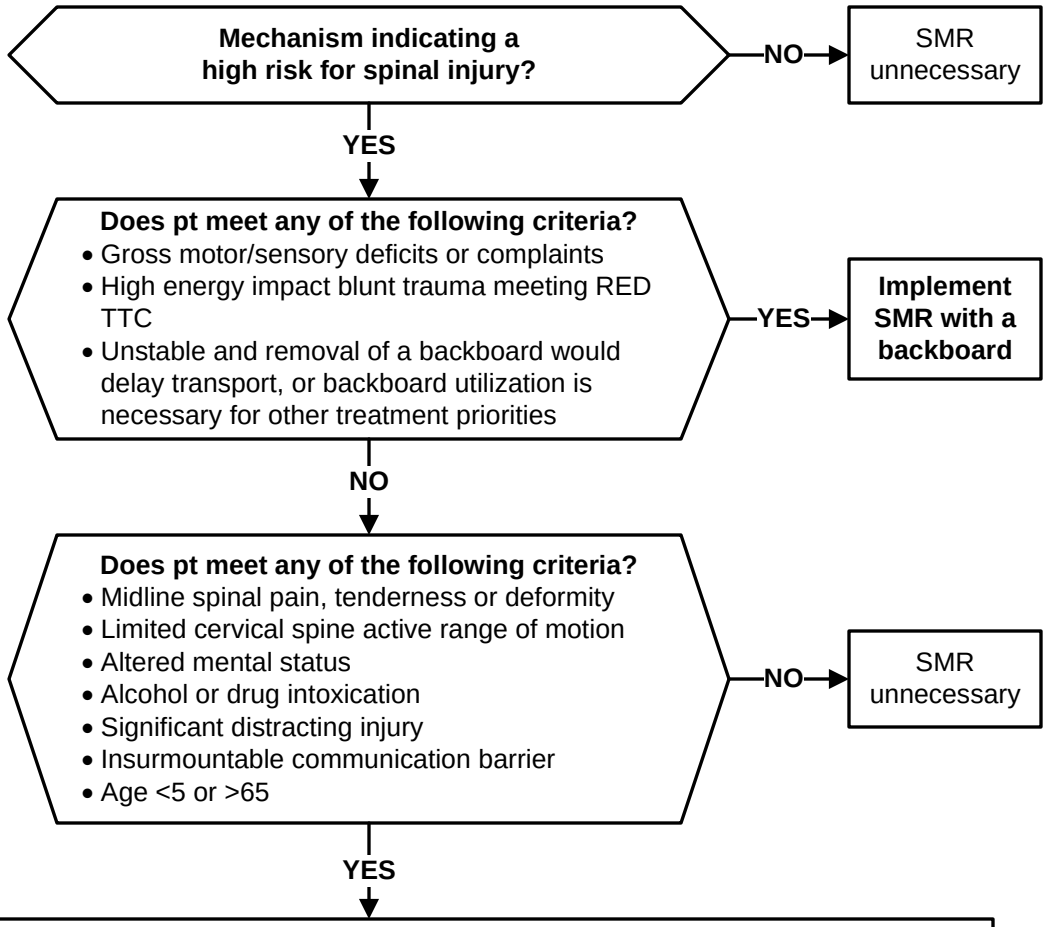
NO → Pelvic binder not indicated

YES ↓

Apply pelvic binder according to manufacturer instructions

Spinal Motion Restriction (SMR)

- A backboard shall not be utilized for pts with penetrating trauma to the head, neck or torso without evidence of spinal injury
- Helmet removal guidelines:
  - For pts who meet criteria for SMR with a backboard, football helmets should only be removed if they prevent adequate SMR or under the following circumstances:
    - If the helmet and chin strap fail to hold the head securely or prevent adequate airway control.
    - If the facemask cannot be removed.
  - Football helmets should be carefully removed to allow for appropriate SMR of pts who do not meet criteria for backboard utilization.
  - All other types of helmets (bicycle, motorcycle, etc.) should be carefully removed to allow for appropriate SMR.



Implement SMR without a backboard as follows:

- Apply a cervical collar
- Allow ambulatory pts to sit on the stretcher and then lie flat (no 'standing take-down")
- If necessary, move pt from the position found to the ambulance stretcher utilizing a device such as a KED, scoop stretcher, backboard, or if necessary, by having the pt stand and pivot to the stretcher – do not permit the pt to struggle to their feet from a seated or supine position
- Once on the ambulance stretcher, remove any hard backboard device & instruct the pt to lie still
- The head of the stretcher may be elevated 20-30^0 in a position of comfort
- Secure cross stretcher straps and over-the-shoulder belts firmly
- Pts with nausea &/or vomiting may by placed in the lateral recumbent position, maintaining the head in a neutral position using manual stabilization, padding, pillows, &/or the pt's arm

Field Trauma Triage Criteria (TTC)

RED TTC (High Risk for Serious Injury)	
Injury Patterns	**Mental Status/Vital Signs**
• Penetrating injuries to head, neck, torso, &/or proximal extremities • Skull deformity, suspected skull fracture • Suspected spinal injury with new motor/sensory loss • Chest wall instability, deformity, or suspected flail chest • Suspected pelvic fracture • Suspected fracture of two or more proximal long bones in a pt of any age, or one or more proximal long bone fracture in a pt ≤14 or ≥65 years of age • Suspected open proximal long bone fracture • Crushed, degloved, mangled, or pulseless extremity • Amputation proximal to wrist or ankle • Continued, uncontrolled bleeding despite EMS hemorrhage control measures	**MENTAL STATUS** • **<65 years of age:** ○ GCS ≤13 • **≥65 years of age:** ○ GCS <15 (or decreased from baseline) with evidence/suspicion of a head strike **RESPIRATORY STATUS** • **All pt ages:** ○ RR <10 or >29 breaths/min ○ Resp. distress or need for resp. support ○ Room-air SpO_2 <90% **CIRCULATORY STATUS** **0-9 years of age:** • SBP <70mm Hg + (2 x age years) **10-64 years of age:** • SBP <90 mmHg **OR** HR>SBP **≥65 years of age:** • SBP <100 mmHG **OR** HR>SBP

YELLOW TTC (Moderate Risk for Serious Injury)	
Mechanism of Injury	**EMS Judgement**
• High-Risk Auto Crash ○ Partial or complete ejection ○ Significant intrusion (including roof) - >12 inches occupant site; or - >18 inches any site; or - Need for extrication for entrapped pt ○ Death in passenger compartment ○ Child (0-9 years of age) unrestrained or in unsecured child safety seat ○ Vehicle telemetry data consistent with severe injury • Rider separated from transport vehicle with significant impact (motorcycle, ATV, horse, etc.) • Pedestrian/bicycle rider thrown, run over, or with significant impact • Fall from height >10 feet (all ages)	EMS personnel should consider the following risk factors, and contact the closest trauma center or base/modified base hospital for destination consultation (see page 1), if transport to a trauma center is believed to be in the pt's best interest: • Low-level falls in young children (≤5 years of age) or older adults (≥65 years of age) with significant head impact • Anticoagulant use • Suspicion of child abuse • Special, high-resource healthcare needs • Pregnancy >20 weeks • Burns in conjunction with trauma

Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-3
Suspected Moderate/Severe Traumatic Brain Injury (TBI)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

Prehospital Identification of Moderate/Severe TBI

- Any pt with a mechanism of injury consistent with a potential for a brain injury, and one or more of the following:
  - <65 years of age with a GCS ≤13, or ≥65years of age with a GCS <15 (or decrease from baseline)
  - Post-traumatic seizures
  - Multi-system trauma requiring advanced airway placement

For any patient with a suspected moderate/severe TBI, avoid/treat the three TBI "H-Bombs":
1) **H**yperventilation, 2) **H**ypoxia, 3) **H**ypotension

BLS

- Assess V/S, including continuous SpO_2 monitoring and pupil exam: Reassess V/S every 3-5 min if possible
- High-flow O_2 (regardless of SpO_2 reading)
- If continued hypoxia (SpO_2 <94%) or inadequate ventilatory effort, proceed through the following in a stepwise manner
  - Reposition airway
  - Initiate positive pressure ventilation with appropriate airway adjunct if necessary (use of a pressure-controlled BVM &/or ventilation rate timer is recommended if available)
- Avoid hyperventilation (ventilate at a rate of 10 breaths/min)
- Maintain normothermia
- Consider the concurrent need for appropriate immobilization/spinal motion restriction

ALS

- Continuous cardiac & $EtCO_2$ monitoring
- IV/IO NS TKO: For SBP <110 bolus 1000 mL N/S, then titrate additional fluids to maintain SBP ≥110
- Check blood glucose

Blood glucose ≤60 mg/dl?

YES →
Dextrose 10%
- 10 - 25 gm (100 - 250 mL) IV/IO

OR

Glucagon
- 1 mg (1 unit) IM/IN

NO

For persistent hypoxia &/or inadequate ventilatory effort:
- Supraglottic airway or endotracheal intubation
- Target $EtCO_2$: 35-39 mmHg

- Transport to appropriate destination & notify receiving facility of a "Trauma Alert" as soon as possible (if applicable)
- Monitor & reassess

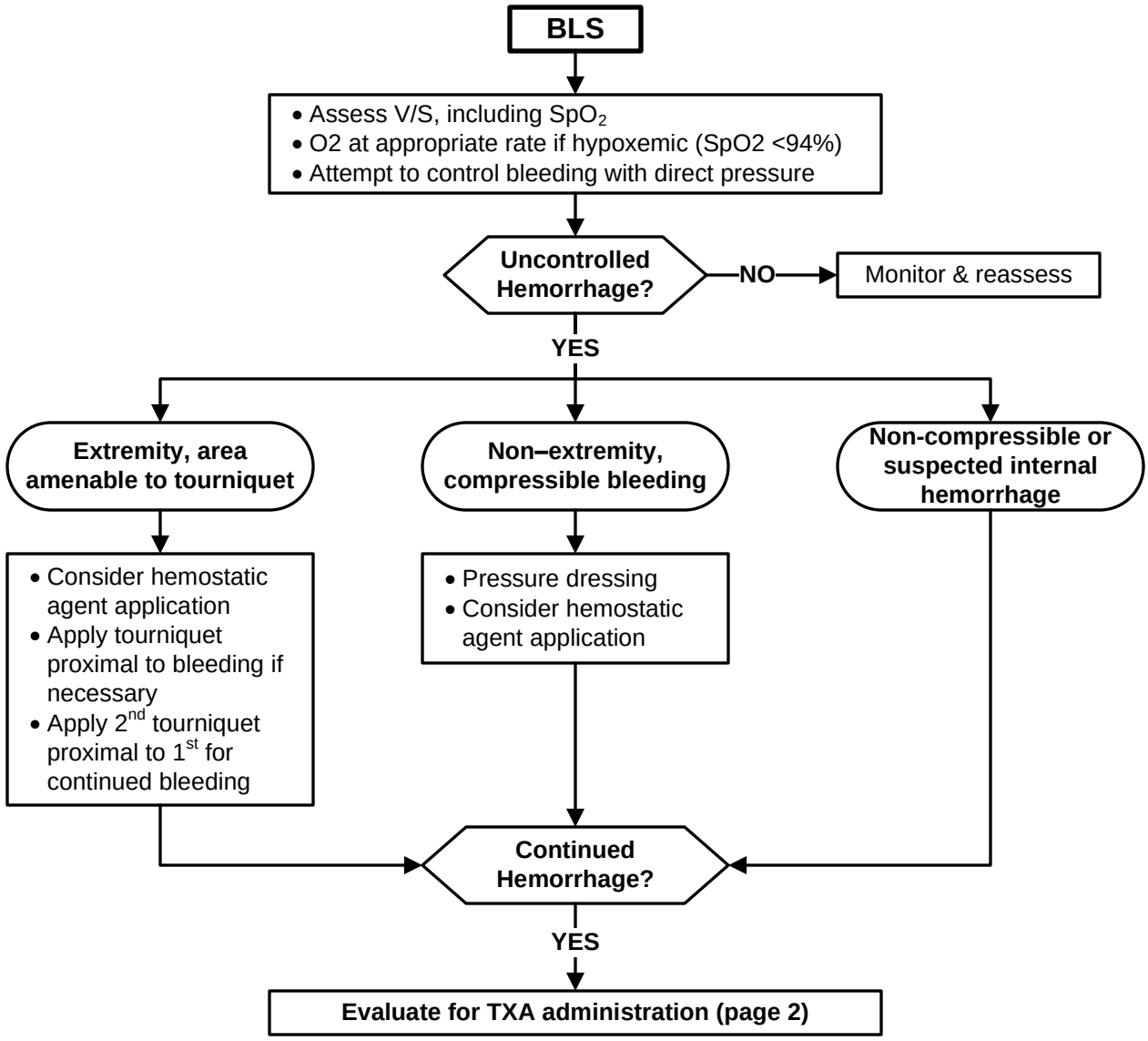
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

Tourniquet Devices:

- Any windlass style device included on the current Committee on Tactical Combat Casualty Care (CoTCCC) recommended Limb Tourniquets (non-pneumatic) list may be utilized by EMS personnel.
- Tourniquets applied by lay rescuers or other responders shall be evaluated for appropriateness and may be adjusted or removed if necessary – improvised tourniquets should be removed by prehospital personnel.
- If application is indicated and appropriate, a commercial tourniquet should not be loosened or removed by prehospital personnel unless time to definitive care will be greatly delayed (>2 hrs).

Hemostatic Dressings:

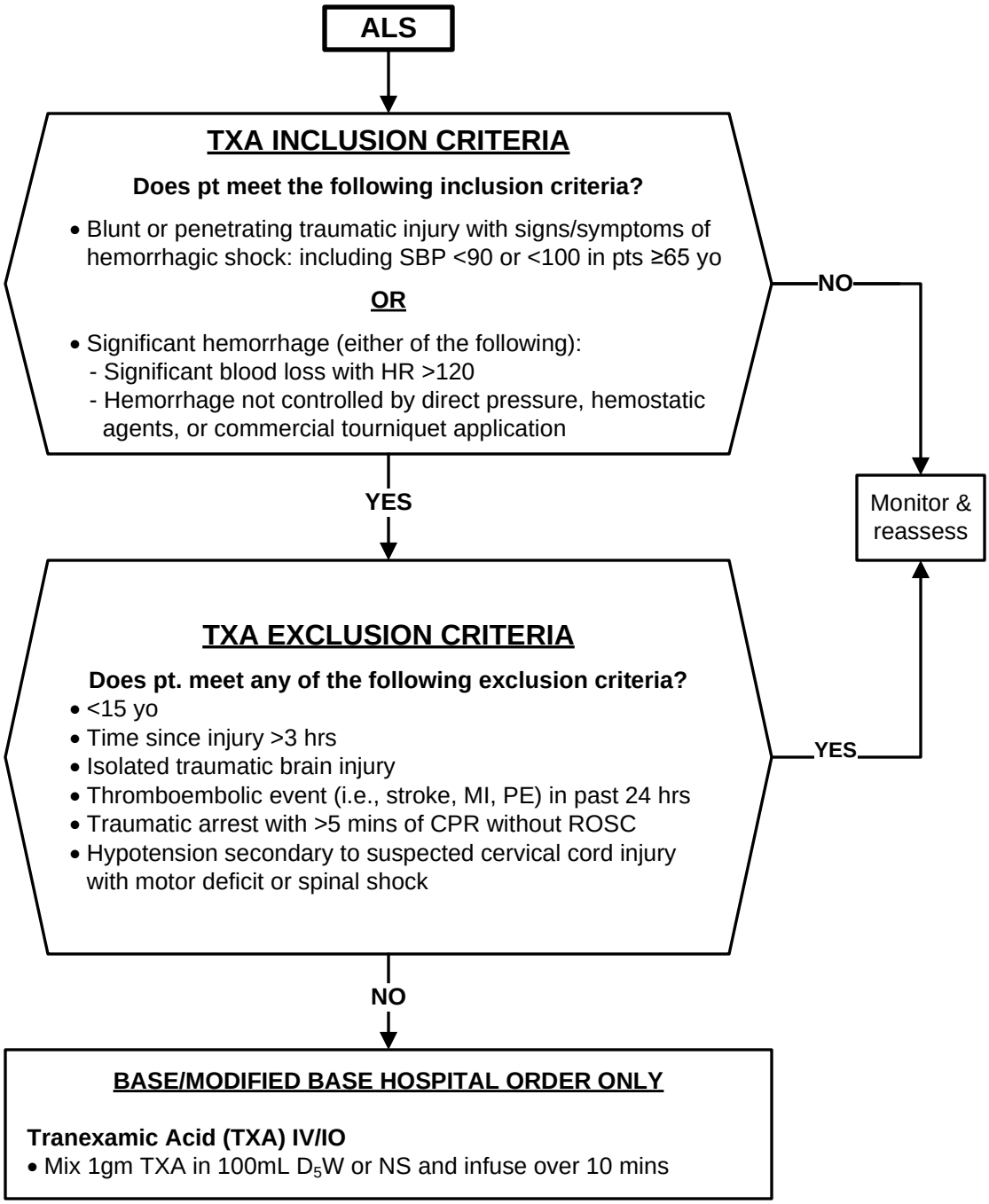
- Any hemostatic agent that is incorporated into gauze (no loose granules/particles) included on the current Committee on Tactical Combat Casualty Care (CoTCCC) recommended Hemostatic Dressings list may be utilized by EMS personnel.



Tranexamic Acid (TXA) Administration

TXA Administration Notes:

- Routes other than IV/IO (e.g., nebulized, topical) may be considered **(<u>with base/modified base hospital order only</u>)** for bleeding from epistaxis, lacerations, or oral trauma.
- For post-partum hemorrhage, refer to Childbirth Protocol (OB-G1).



Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-5
Burns	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 01/2027

Information Needed

- Type/source of burn: chemical, electrical, thermal, steam
- Complicating factors: concomitant trauma, exposure in enclosed space, total time of exposure, drug or alcohol use, smoke or toxic fumes, delayed resuscitation, compartment syndrome of extremities, chest, or abdomen.

Objective Findings

- Evidence of inhalation injury or toxic exposure (i.e., carbonaceous sputum, hoarseness/stridor, or singed nasal hairs).
- Extent of burn: full or partial thickness and body surface area (BSA) affected.
- Entrance or exit wounds for electrical or lightning strike or trauma from an explosion, electrical shock or fall.

Transport Notes

- All pts suffering from an electrical burn shall be transported for evaluation.
- Contact the closest base/modified base hospital for destination consultation on pts with any of the following:
  - Full thickness (3^o) burns of the hands, feet, face, perineum, or >2% of any BSA
  - Partial thickness (2^o) burns >9% of BSA
  - Significant electrical or chemical burns

BLS

- O_2 at appropriate rate, consider BVM early for altered LOC or respiratory distress
- Assess V/S, including SpO_2
- Remove wet dressings and cover with dry, clean dressings

ALS

- Cardiac monitor
- Consider $EtCO_2$ monitoring/trending
- Consider early advanced airway if evidence of inhalation injury or compromised respiratory effort
  - ⓘ The likelihood of airway compromise is increased in burn pts receiving IV/IO fluid administration
  - ⓘ Airway compromise/occlusion is likely for pts with burns >25-30% BSA, regardless of location of burns

IV/IO – NS/LR TKO (in non-burned extremity)

- For 2^o & 3^o burns >9% BSA, facial burns, or if IV/IO pain management is necessary
- Administer 1000 mL fluid bolus for adult pts or 20 mL/kg fluid bolus for pediatric pts with 2^o or 3^o burns >9% BSA or signs of hypovolemia (note increased airway compromise warning above & closely monitor)

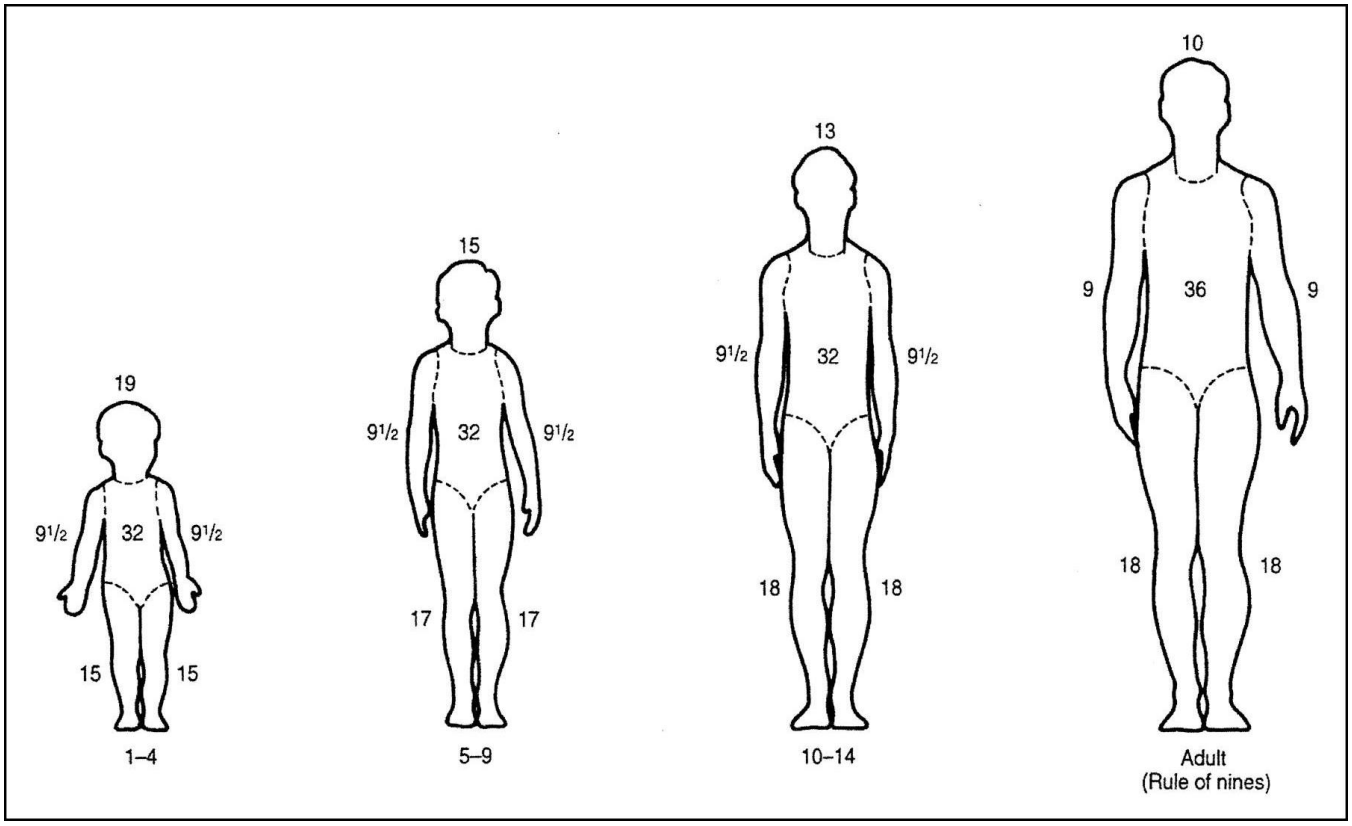
Albuterol (if wheezes are present)

- 5 mg in 6 mL NS via HHN, mask or BVM

Does pt meet trauma triage criteria? — YES → Destination Per General Trauma Management Protocol (T-1)

Pain management necessary? — YES → Go to Pain Management Protocol (M-8/M-8P)

Burn Chart


19
9½
32
9½
15
15
1–4
15
9½
32
9½
17
17
5–9
13
9½
32
9½
18
18
10–14
10
9
36
9
18
18
Adult
(Rule of nines)

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Approval: John Poland – Executive Director	Next Review: 01/2027

- Assess etiology – if there is suspicion that a medical event caused the traumatic arrest, treat per the applicable Non-Traumatic Pulseless Arrest Protocol (C-1 or C-1P).
- Epinephrine is likely not beneficial and may be harmful in traumatic pulseless arrest.
- Utilize mechanical chest compression devices in accordance with manufacturer indications/contraindications. If a mechanical chest compression device is used, transport shall not be significantly delayed for application of the device.
- Biphasic manual defibrillation detail: follow manufacturer's recommendations, if unknown, start at 200 J (subsequent doses should be equivalent or higher).
- CPR need not be initiated, and may be discontinued, for patients who meet S-SV EMS Obvious Death or Probable Death Criteria (Refer to Protocol G-2).

BLS

- High-Quality CPR (with BVM &100% O_2) – apply AED as soon as possible
- Deliver ⚡ **AED SHOCK** ⚡, if indicated by AED, & immediately resume high-quality CPR
- Hemorrhage control as appropriate
- Consider Spinal Motion Restriction (SMR) with a backboard for the following:
  - CPR
  - Blunt mechanism indicating a high risk for spinal injury

ALS

- Initiate rapid transport – ALS treatment/monitoring should be performed during transport
- Bilateral needle thoracostomy if chest or multi-system trauma is suspected
- Cardiac monitor
- Continue CPR followed by ⚡ **DEFIBRILLATION** ⚡ every 2 mins for continued/relapsed shockable rhythm (VF/VT)
- IV/IO NS:
  - **Adult pts:** Administer 1 L fluid bolus
  - **Pediatric pts:** Administer 20 mL/kg fluid bolus

Return of Spontaneous Circulation (ROSC)

- Manage airway as needed, optimize ventilation & oxygenation
  - O_2 at appropriate rate to maintain SpO_2 ≥94% (do not hyperventilate)
- Assess V/S, including SpO_2 – reassess V/S every 3-5 mins if possible
- Continuous $ETCO_2$ monitoring – goal 35-45 mmHg
- Titrate fluid boluses:
  - **Adult pts:** Titrate to SBP of ≥90 for pts <65 years of age, or ≥100 for pts ≥65 years of age
  - **Pediatric pts:** Titrate to age appropriate SBP (max: 60 mL/kg)
- Monitor for reoccurrence of pulseless arrest

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S-SV EMS Pediatric Treatment Protocols

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Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-1P
Pediatric Pulseless Arrest	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

INFANT CPR

- Perform chest compressions with minimal interruptions (≤10 secs)
  - 1 rescuer: 2 finger compressions
  - 2 rescuer: 2 thumbs with hands encircling chest
- Rate: 100-120/min
- Depth: 1/3 diameter of the chest (approx. 1 ½")
- Compression/ventilation ratio:
  - 1 rescuer: 30:2
  - 2 rescuer: 15:2
- Perform CPR during AED/defibrillator charging & resume CPR immediately after shock

CHILD CPR

- Perform chest compressions with minimal interruptions (≤10 secs)
  - 1 or 2 hand compressions
- Rate: 100-120/min
- Depth: 1/3 diameter of the chest (approx. 2")
- Compression/ventilation ratio:
  - 1 rescuer: 30:2
  - 2 rescuer: 15:2
- Perform CPR during AED/defibrillator charging & resume CPR immediately after shock

DEFIBRILLATION & OVERALL MANAGEMENT

- Analyze rhythm & check pulse after every 2 min CPR cycle
- AED detail:
  - Use child pads, if available, for infants & children <8 years old
  - If child pads not available, use adult pads, make sure pads do not touch each other or overlap
  - Adult pads deliver a higher shock dose, but a higher shock dose is preferred to no shock
- Manual defibrillation detail:
  - Initial dose: 2 J/kg, subsequent doses: 4 J/kg
- Movement of pt may interrupt CPR or prevent adequate depth and rate of compressions
- Consider resuscitation on scene up to 20 mins

ADVANCED AIRWAY MANAGEMENT

- Consider/establish advanced airway (ALS only) at appropriate time during resuscitation
- Do not interrupt chest compressions to establish an advanced airway
- Waveform capnography shall be used on all pts with an advanced airway in place
  - An abrupt increase in $PETCO_2$ is indicative of ROSC
  - Persistently low $PETCO_2$ levels (<10 mmHG) suggest ROSC is unlikely

TREAT REVERSIBLE CAUSES

- **H**ypovolemia
- **H**ypoxia
- **H**ydrogen Ion (acidosis)
- **H**ypo-/hyperkalemia
- **H**ypothermia
- **T**amponade, cardiac
- **T**ension pneumothorax
- **T**hrombosis, pulmonary
- **T**hrombosis, cardiac
- **T**oxins

ⓘ Refer to Hypothermia & Avalanche/Snow Immersion Suffocation Resuscitation Protocol (E-2) or Traumatic Pulseless Arrest Protocol (T-6) as appropriate

ⓘ Contact the base/modified base hospital for consultation & orders as appropriate

ⓘ Consider early transport of pts who have reversible causes that cannot be adequately treated in the prehospital setting

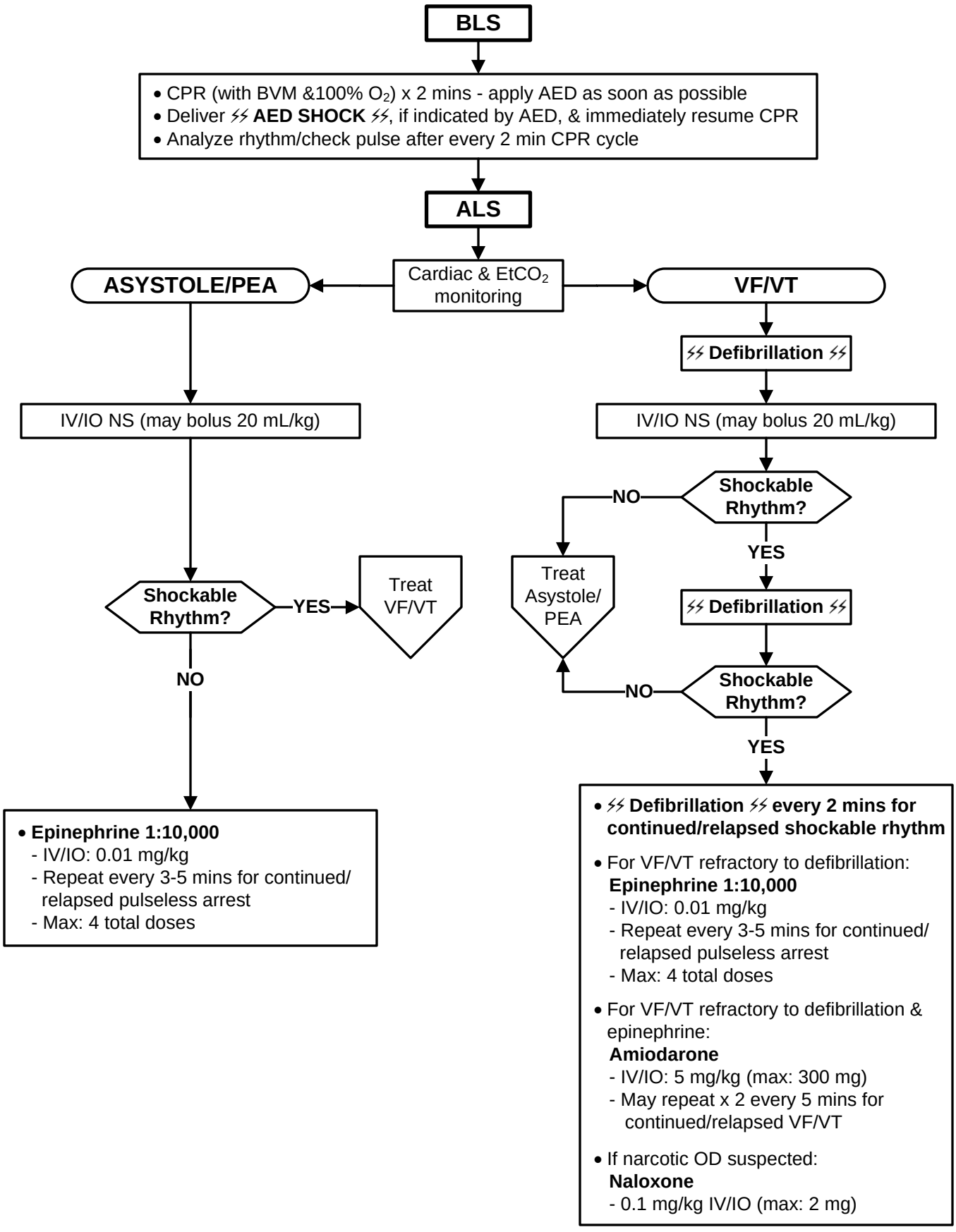
TERMINATION OF RESUSCITATION

<u>Base/Modified Base Hospital Physician Order Only</u>

- If non-shockable rhythm persists, despite appropriate, aggressive ALS interventions for 30 mins (or if $EtCO_2$ is <10 mm Hg after 20 mins in a pt with an advanced airway), consider discontinuation of CPR

SEE PAGE 2 FOR TREATMENT ALGORITHM

Pediatric Pulseless Arrest



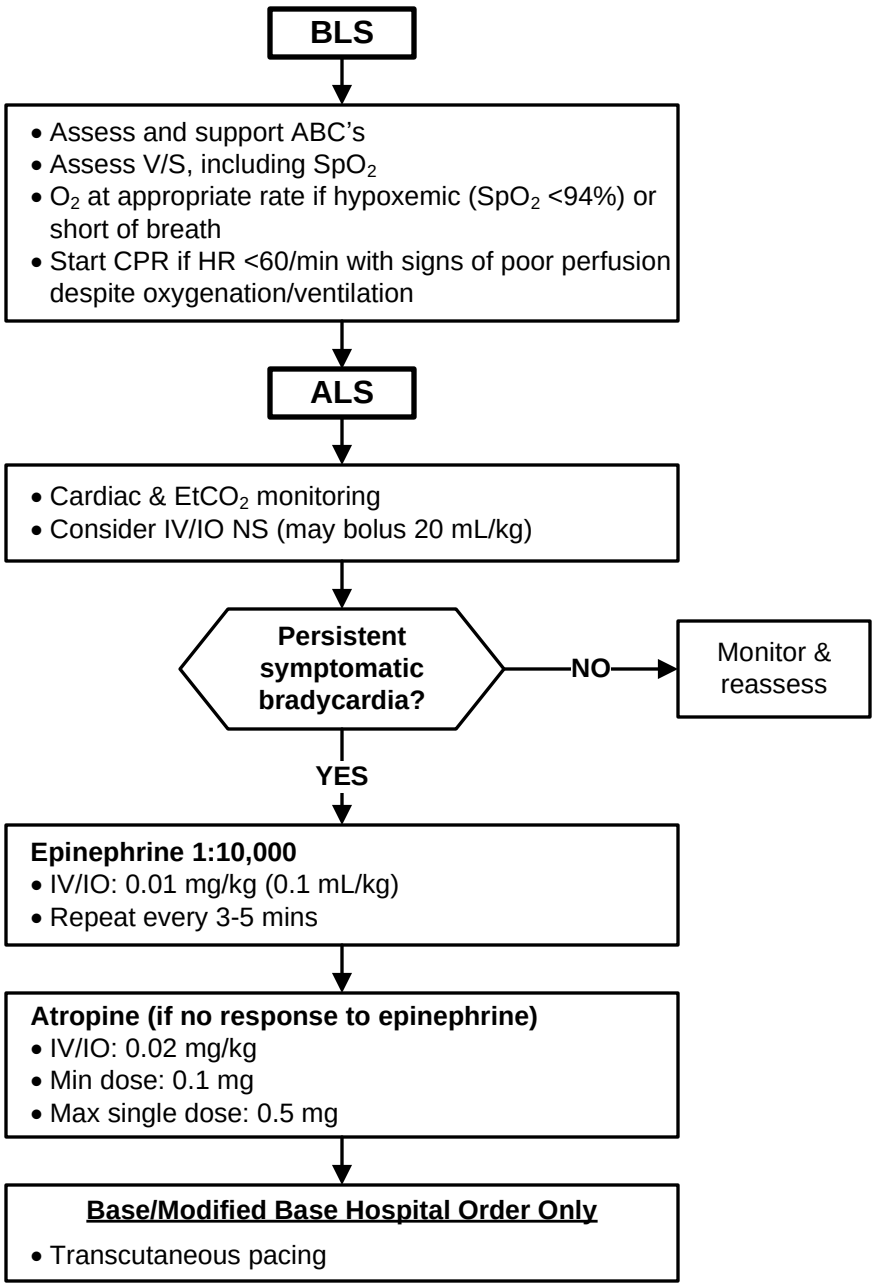
Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-3P
Pediatric Bradycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

Search For Possible Contributing Factors

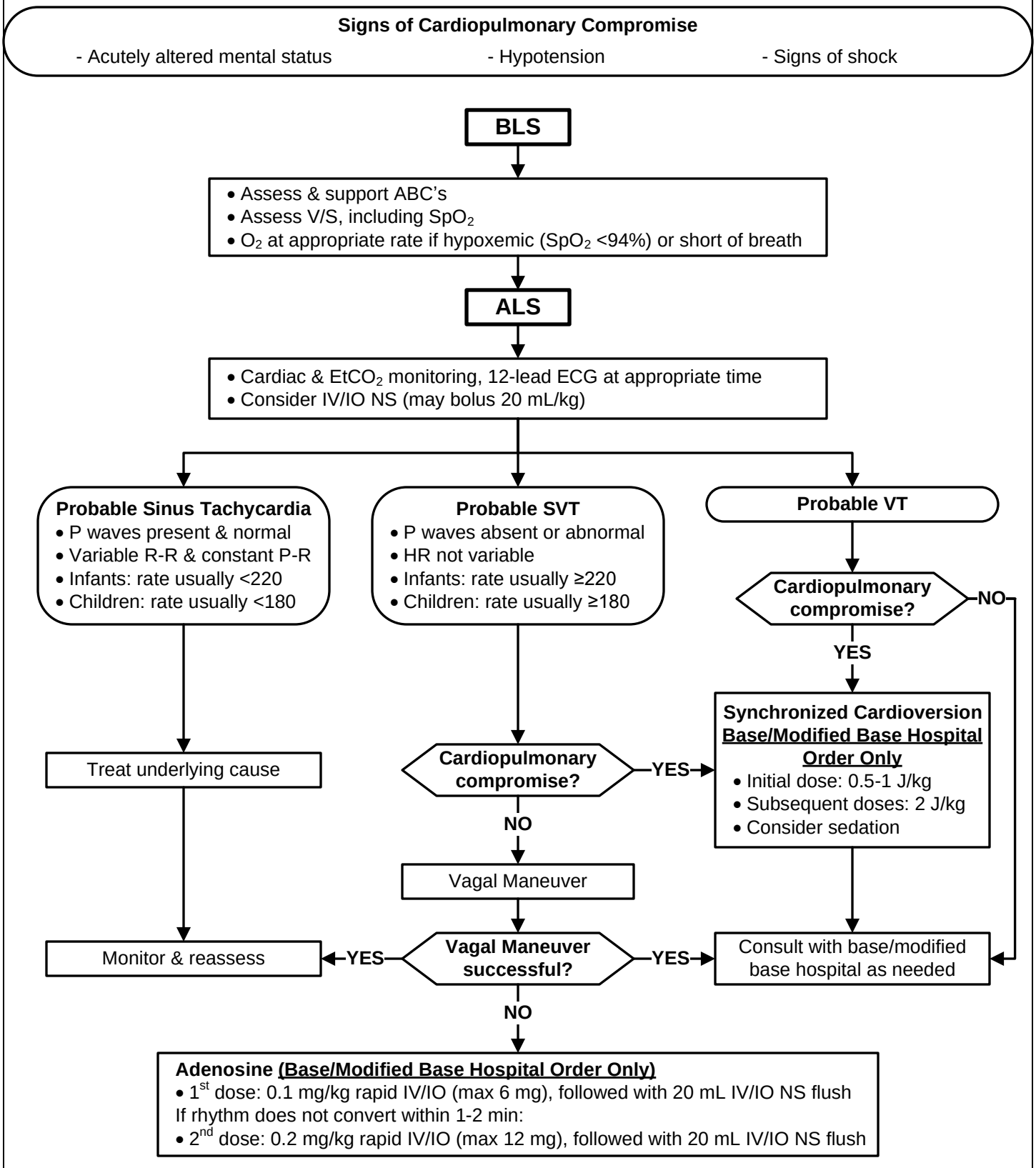
- **H**ypovolemia
- **H**ypoxia
- **H**ydrogen Ion (Acidosis)
- **H**ypo-/hyperkalemia
- **H**ypothermia
- **T**amponade, cardiac
- **T**ension pneumo
- **T**hrombosis, pulmonary
- **T**hrombosis, cardiac
- **T**oxins

Signs of Cardiopulmonary Compromise

- Acutely altered mental status
- Hypotension
- Signs of shock



Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-4P
Pediatric Tachycardia With Pulses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

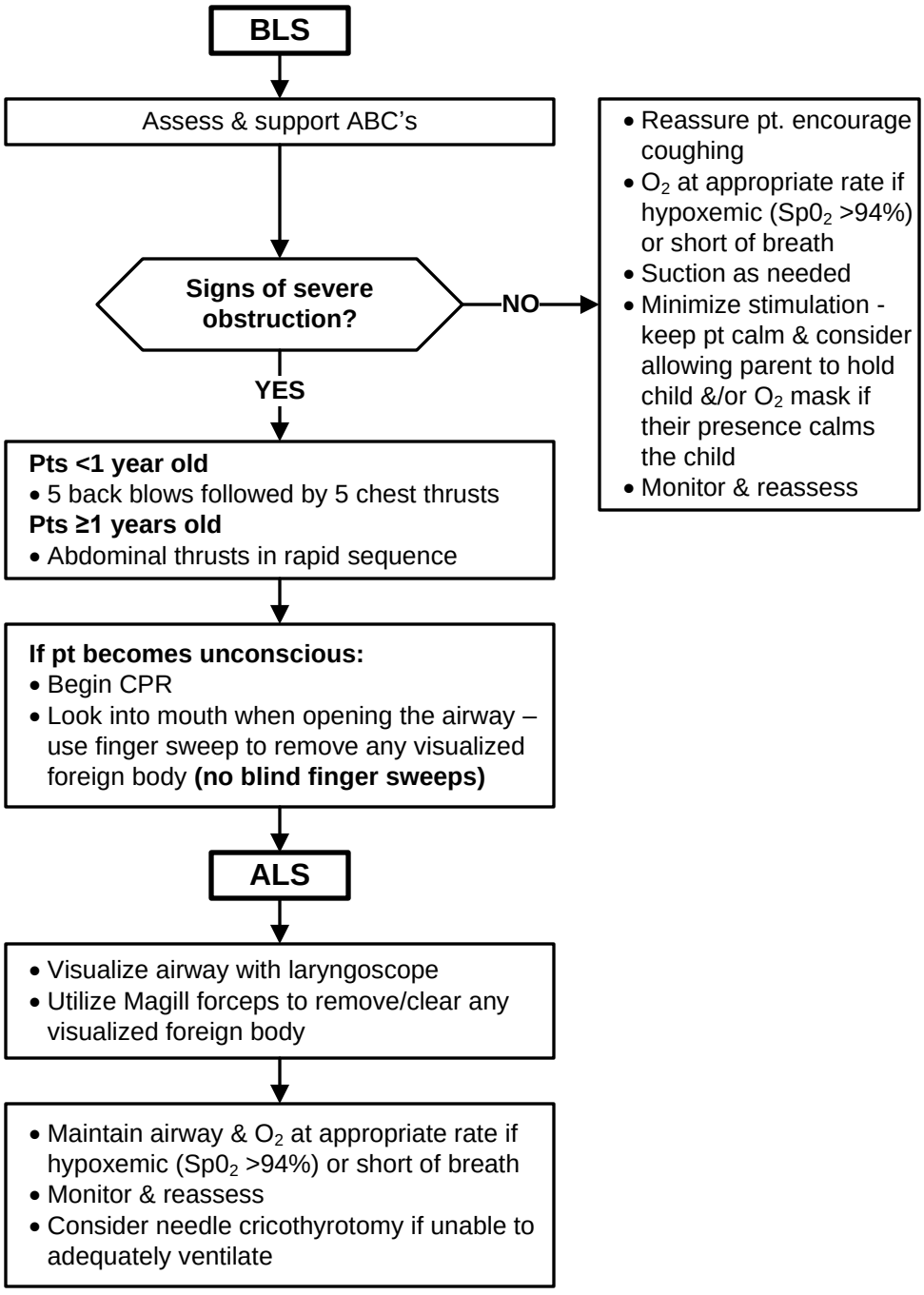


Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-1P
Pediatric Foreign Body Airway Obstruction (FBAO)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

- Signs/symptoms of FBAO: sudden onset of respiratory distress with coughing, gagging, stridor, or wheezing.
- Do not use tongue/jaw lift or perform blind finger sweep.
- Do not perform deep suctioning. Oropharyngeal suctioning should be performed while visualizing the FBAO.

Signs of severe obstruction:

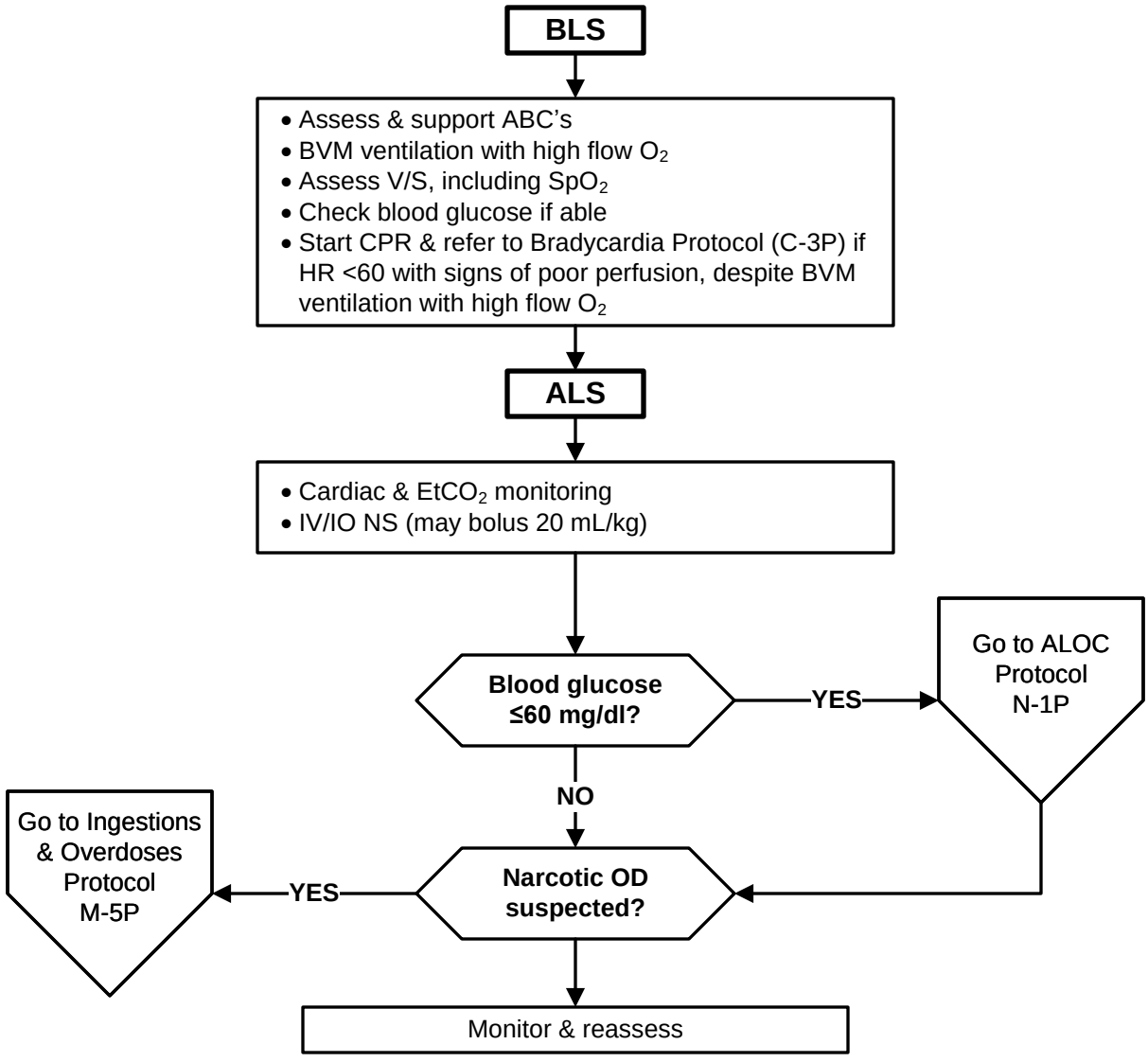
- Poor air exchange - Silent cough - Increased breathing difficulty - Inability to speak or breathe - Cyanosis



Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-2P
Pediatric Respiratory Arrest	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

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).
- Inadequate respiratory rate, effort, or chest excursion (e.g. diminished breath sounds, gasping, and cyanosis), especially if mental status is depressed.



Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-3P
Pediatric Respiratory Distress	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

- Consider respiratory failure for pts with a history of increased work of breathing & presenting with ALOC & a slow or normal respiratory rate without retractions.
- The hallmark of upper airway obstruction (croup, epiglottitis, foreign body aiway obstruction) is inspiratory stridor.
- Do not attempt to visualize the throat or insert anything into the mouth if epiglottitis suspected.

Continuous Positive Airway Pressure (CPAP) Utilization Information

- **Indications:**
  - CHF with pulmonary edema
  - Moderate to severe respiratory distress
  - Near drowning
- **Contraindications:**
  - <8 years of age
  - Agonal respirations
  - SBP <90
  - Respiratory or cardiac arrest
  - Inability to maintain airway
  - Major trauma/head injury/chest trauma
  - Suspected croup/epiglottitis
  - Suspected pneumothorax
  - Severe decreased LOC
- **Complications:**
  - Hypotension
  - Pneumothorax
  - Corneal drying

Epinephrine Administration

- Epinephrine is indicated for pts with suspected asthma who are in severe distress.
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.

BLS

- Assess & support ABCs
- High flow O_2
- Assess V/S, including SpO_2
- Assess history & physical, determine degree of illness
- Minimize stimulation – keep pt calm & consider allowing parent to hold the child &/or O2 delivery device if their presence calms the child
- Consider CPAP, when appropriate/indicated, for moderate to severe distress (pts ≥8 yo only)

Suspected asthma & in severe distress

YES

Epinephrine 1:1,000 IM (authorized/trained EMTs only)

- Pts 7.5 – 30 kg
  - 0.15 mg pediatric auto-injector **OR** 0.15 mg (0.15 mL) via approved syringe
- Pts >30 kg
  - 0.3 mg adult auto-injector **OR** 0.3 mg (0.3 mL) via approved syringe

SEE PAGE 2 FOR ALS TREATMENT OF WHEEZING OR SUSPECTED CROUP/EPIGLOTTITIS

Wheezing

ALS

Mild Distress
- Mild wheezing
- Mild shortness of breath
- Cough

- Cardiac & $EtCO_2$ monitoring

Albuterol 5 mg & Ipratropium 500 mcg
- Nebulizer
- May repeat **(albuterol 2.5-5 mg only)** for continued respiratory distress

Moderate – Severe Distress
- Cyanosis
- Accessory muscle use
- Inability to speak >3 words
- Severe wheezing/shortness of breath
- Decreased or absent air movement

- Cardiac & $EtCO_2$ monitoring
- IV/IO NS (may bolus 20 mL/kg)

Albuterol 5 mg & Ipratropium 500 mcg
- Nebulizer, CPAP, or BVM
- May repeat **(albuterol 2.5-5 mg only)** for continued respiratory distress

Epinephrine 1:1,000 (for severe distress only)
- 0.01 mg/kg IM (max: 0.3 mg)

Suspected Croup/Epiglottitis

ALS

- Cardiac & $EtCO_2$ monitoring
- Consider nebulized saline
- **MINIMIZE PT STIMULATION**
- If full upper airway occlusion suspected – ensure proper airway positioning & BVM seal, attempt to ventilate & reassess – **DO NOT ATTEMPT I-GEL**

Unable to ventilate/maintain airway utilizing less invasive procedures?

YES → Perform needle cricothyrotomy (pts ≥3 yo) as airway of last resort

NO

<u>Base/Modified Base Hospital Order Only</u>

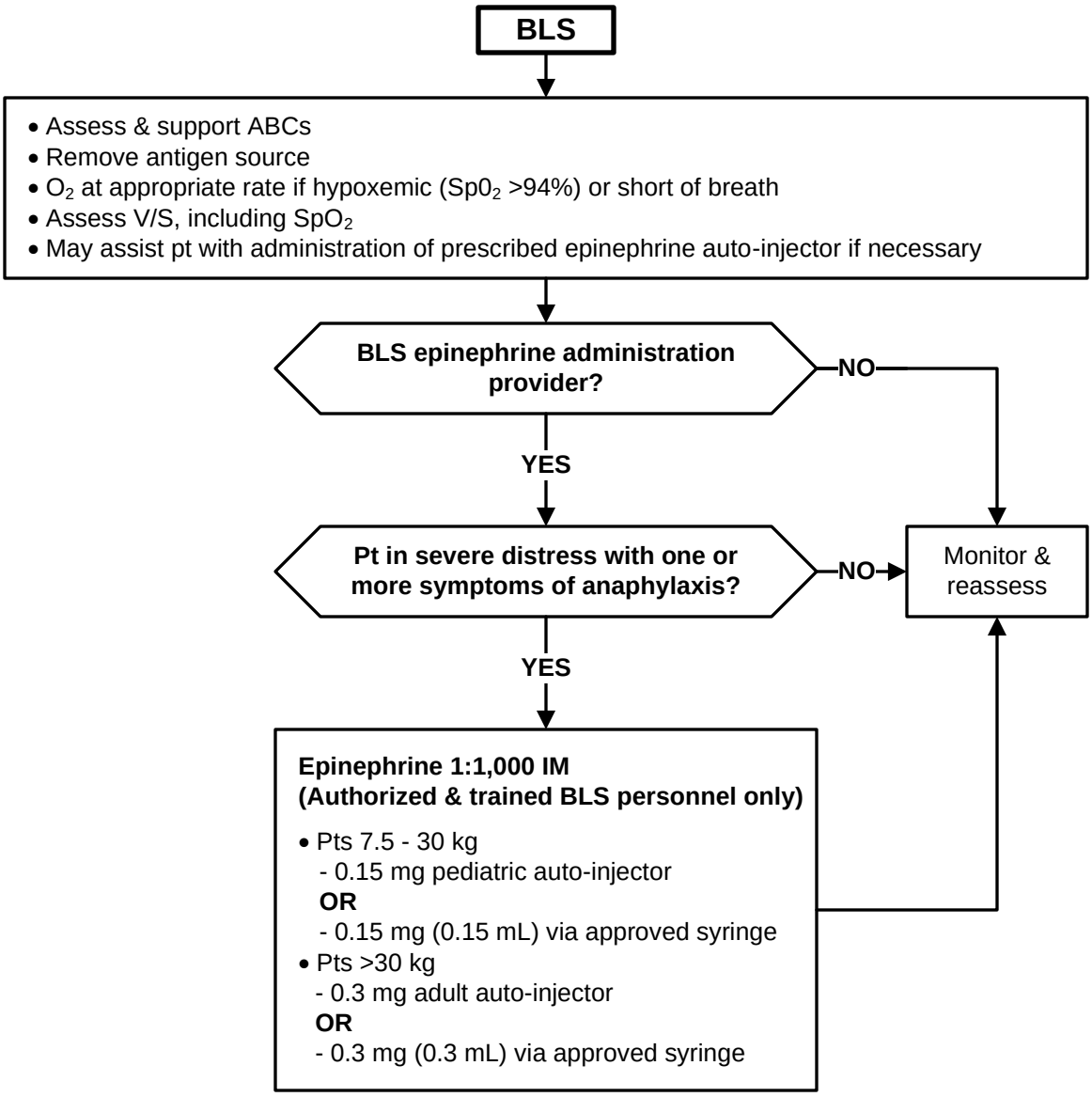
Racemic epinephrine
- One (1) - 0.5 ml vial of 2.25% inhalation solution (mix with NS to = 5 ml of volume)

OR

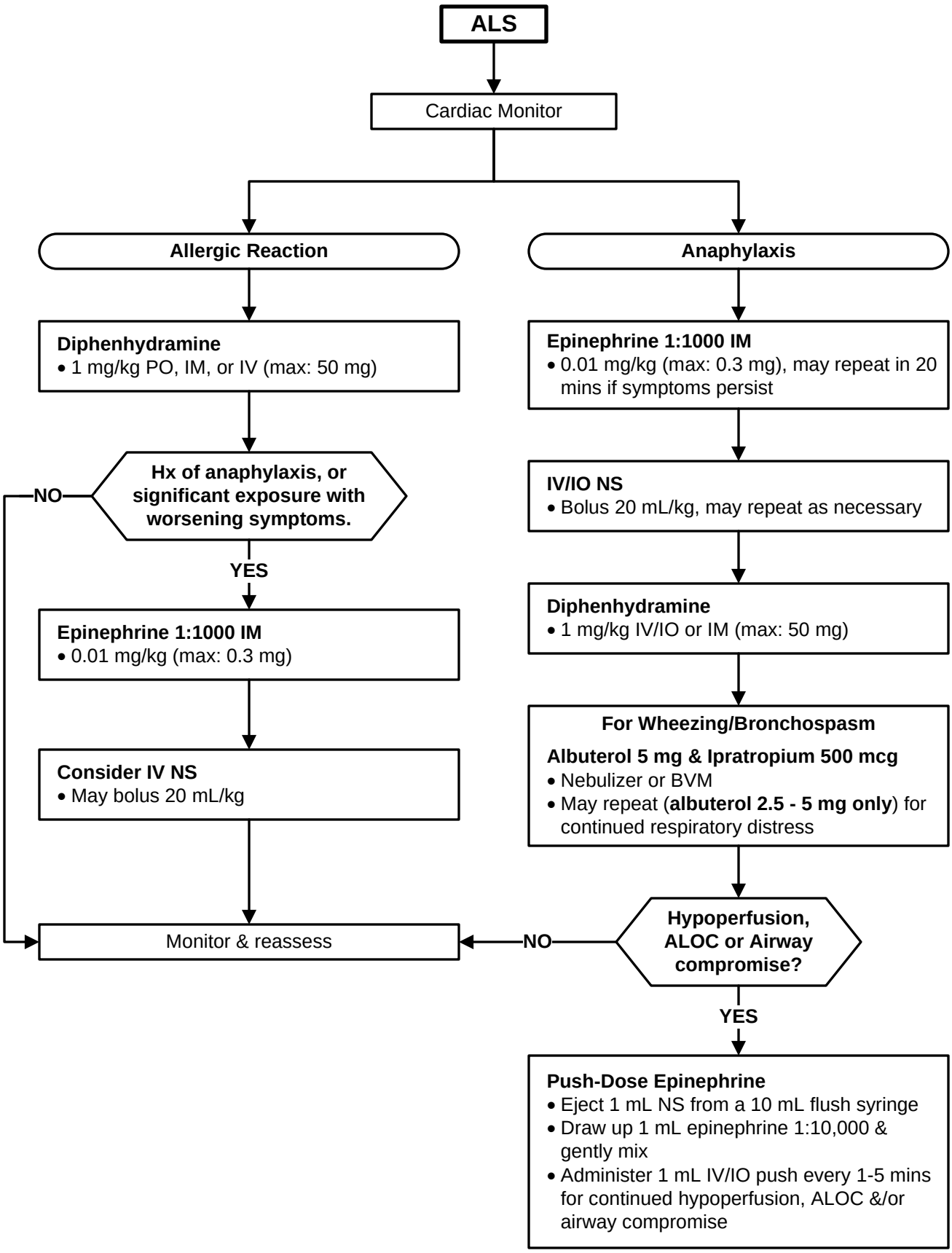
Nebulized epinephrine
- 1:1000 - 0.5 mL/kg (max: 5 mL) nebulizer or BVM (if <5 mL, mix with NS to = 5 mL of volume)

Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-1P
Pediatric Allergic Reaction/Anaphylaxis	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

- **Allergic reaction:** Sensitivity to an allergen causing hives, pruritus, flushing, rash, nasal congestion, watery eyes, and/or angioedema not involving the airway, and/or vomiting, diarrhea.
- **Anaphylaxis:** Severe allergic reaction with one or more of the following symptoms: abnormal appearance (agitation, restlessness, somnolence), respiratory distress, bronchospasm/wheezes/diminished breath sounds, hoarseness, stridor, edema involving the airway, diminished perfusion, loss of consciousness.
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.



SEE PAGE 2 FOR ALS TREATMENT

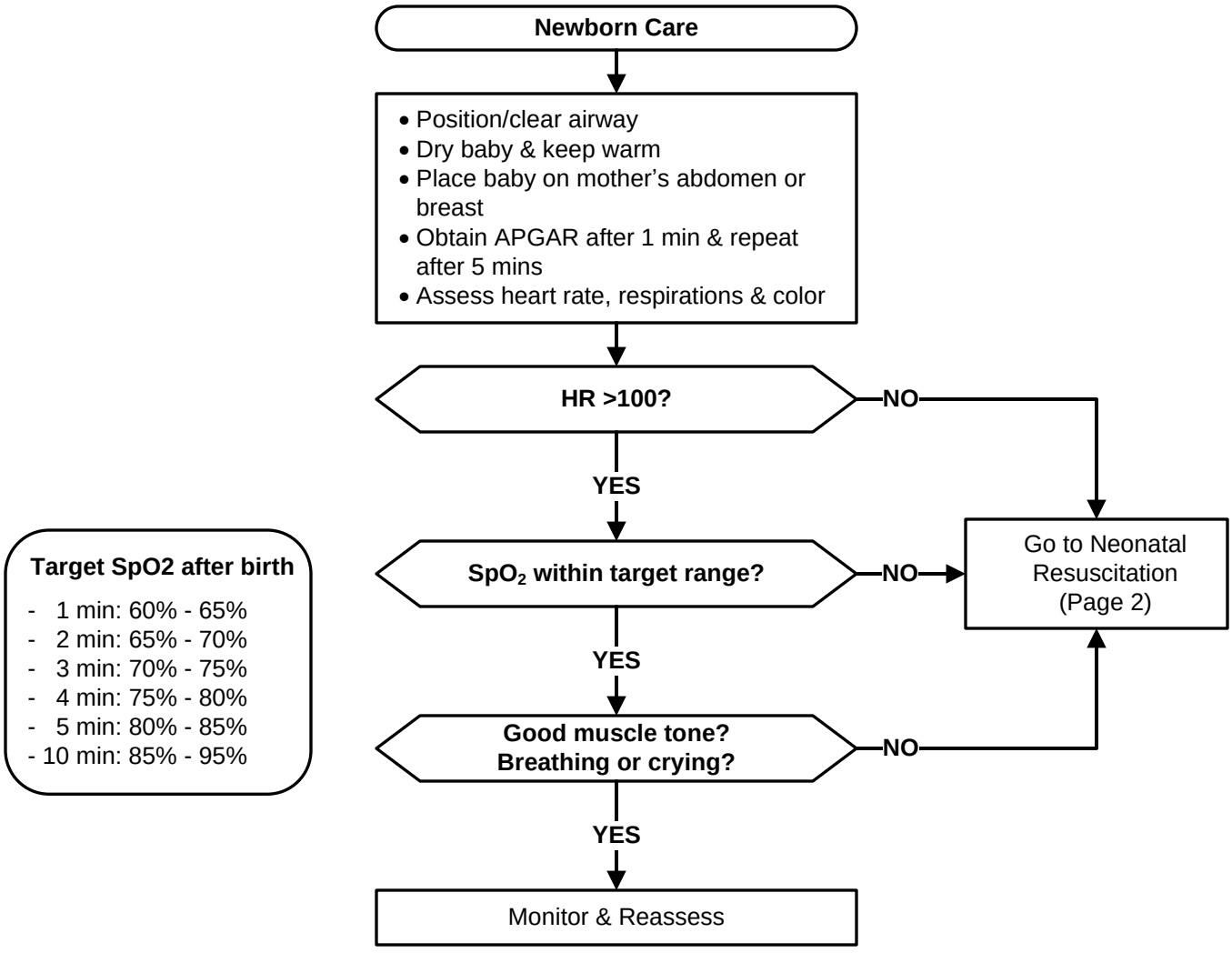

ALS
Cardiac Monitor
Allergic Reaction
Anaphylaxis
Diphenhydramine
• 1 mg/kg PO, IM, or IV (max: 50 mg)
Hx of anaphylaxis, or significant exposure with worsening symptoms.
NO
YES
Epinephrine 1:1000 IM
• 0.01 mg/kg (max: 0.3 mg)
Consider IV NS
• May bolus 20 mL/kg
Monitor & reassess
Epinephrine 1:1000 IM
• 0.01 mg/kg (max: 0.3 mg), may repeat in 20 mins if symptoms persist
IV/IO NS
• Bolus 20 mL/kg, may repeat as necessary
Diphenhydramine
• 1 mg/kg IV/IO or IM (max: 50 mg)
For Wheezing/Bronchospasm
Albuterol 5 mg & Ipratropium 500 mcg
• Nebulizer or BVM
• May repeat (albuterol 2.5 - 5 mg only) for continued respiratory distress
Hypoperfusion, ALOC or Airway compromise?
NO
YES
Push-Dose Epinephrine
• Eject 1 mL NS from a 10 mL flush syringe
• Draw up 1 mL epinephrine 1:10,000 & gently mix
• Administer 1 mL IV/IO push every 1-5 mins for continued hypoperfusion, ALOC &/or airway compromise

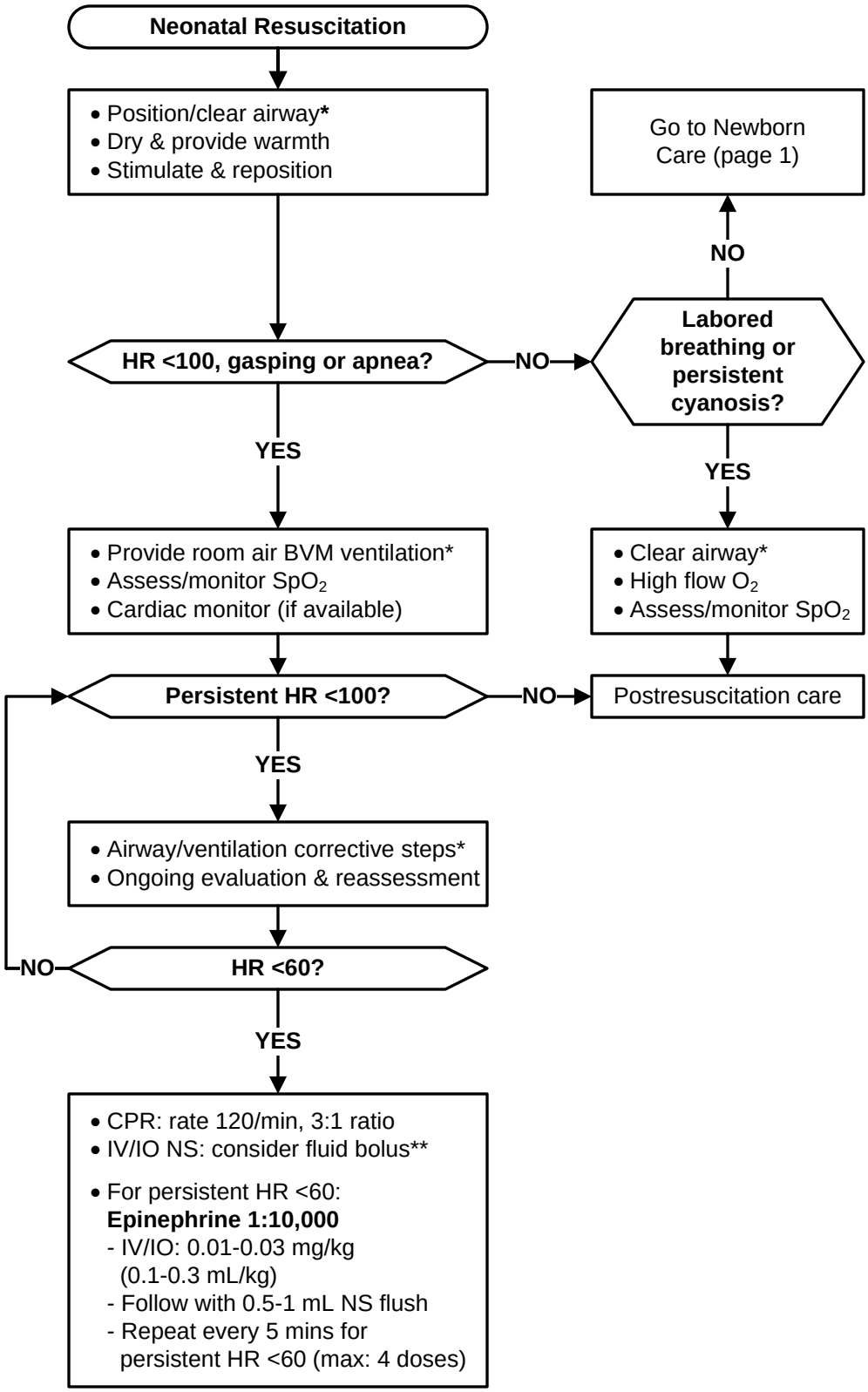
Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-2P
Newborn Care/Neonatal Resuscitation	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- A newborn/neonate is a child ≤28 days of age.
- Initial & ongoing assessments are critical to identifying and correcting life threats.
- If resuscitation is not required, EMS personnel should prioritize the following:
  - Whenever possible keep mother & baby together.
  - Maintain skin-to-skin contact between mother & baby.
  - Keep the baby warm – dry & cover the head, hands & feet.

APGAR SCORE

	Sign/Score	0	1	2
A	Appearance	Blue/Pale	Peripheral cyanosis	Pink
P	Pulse Rate	None	<100	>100
G	Grimace	None	Grimace	Cries
A	Activity	Limp	Some motion	Active
R	Respiration	Absent	Slow/irregular	Good/strong cry



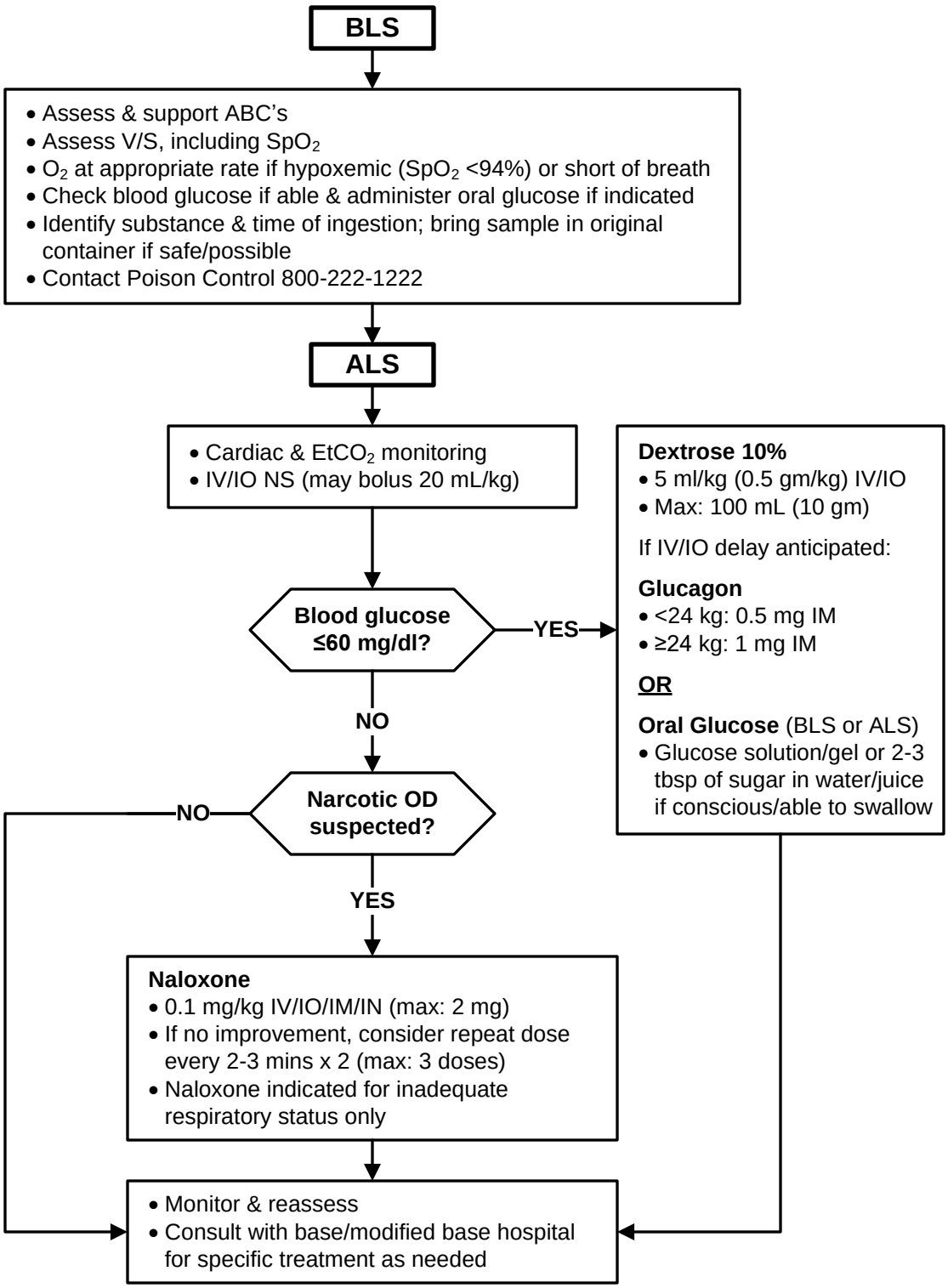


***Airway/Ventilation**

- Position in a "sniffing" position to open the airway & clear secretions with a bulb syringe if necessary.
- If no improvement, & chest is not moving with BVM ventilation, the trachea may be obstructed by thick secretions/meconium. Use a bulb syringe, or suction catheter if necessary, to clear the nose, mouth & oropharynx. A laryngoscope may be used to assist in visualization of the oropharynx.
- Convert from room air to high flow O_2 for persistent bradycardia &/or cyanosis.
- If HR persistently <60, consider hypovolemia &/or pneumothorax.

****Fluid Bolus**

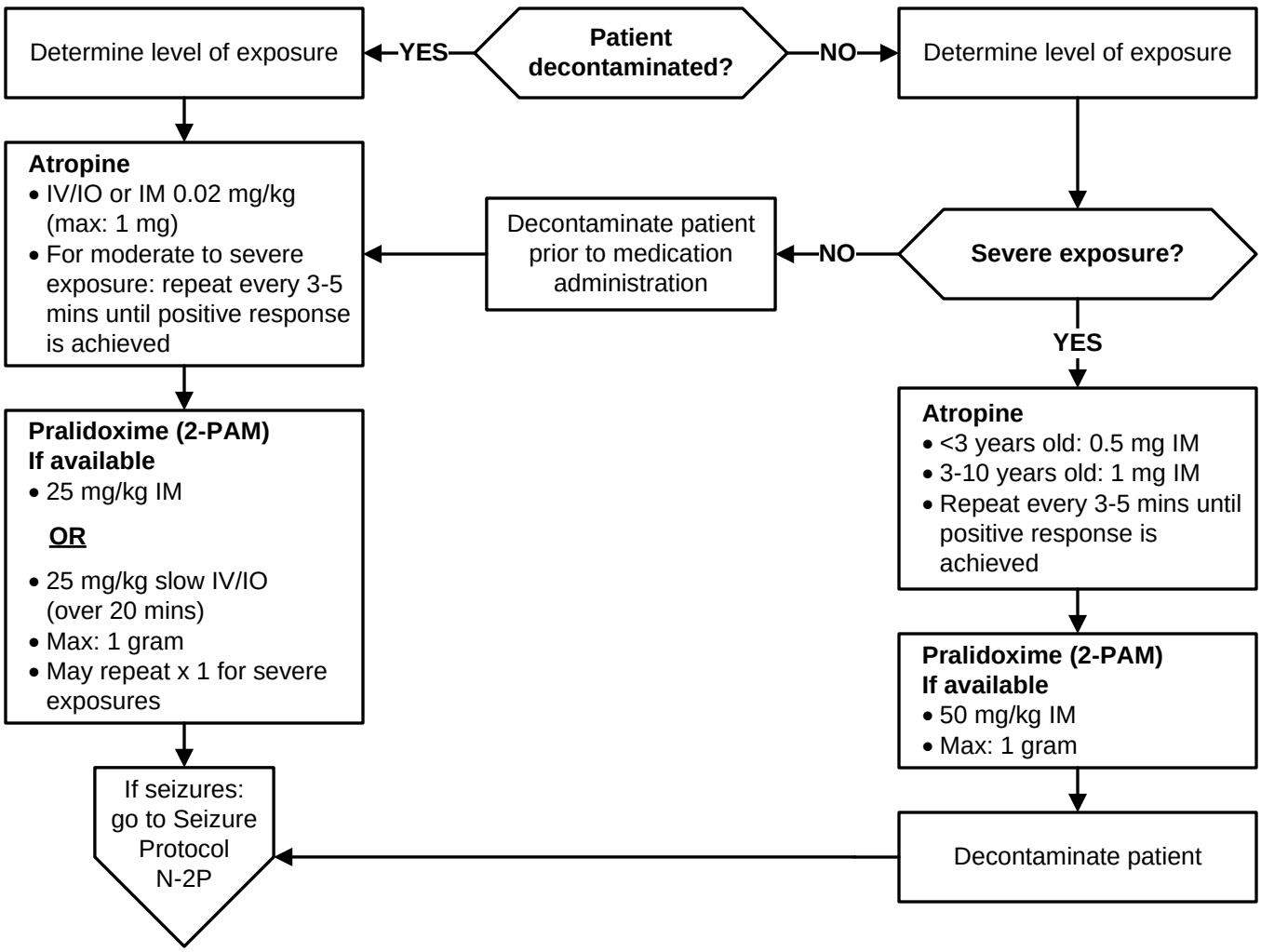
- Contact the base/ modified base hospital for specific fluid bolus volume direction.



SEE PAGE 2 FOR NERVE AGENT/ORGANOPHOSPHATE TREATMENT

PEDIATRIC NERVE AGENT/ORGANOPHOSPHATE TREATMENT

- EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless specifically trained, equipped and authorized to do so
- EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless specifically trained, fit tested and authorized to do so
- Do not transport patients until they have been completely decontaminated; if transport personnel become contaminated, they shall immediately undergo decontamination
- Only patients with severe exposure will be treated within the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) 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
- Early base hospital contact, and CHEMPACK activation when appropriate (S-SV EMS Nerve Agent Treatment Protocol E-8), will maximize assistance from necessary resources
- Adult auto-injectors are NOT to be used in children <40 kg



Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-6P
Pediatric General Medical Treatment	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

GENERAL PEDIATRIC TREATMENT PRINCIPLES

- The purpose of this protocol is to provide standing order assessment/treatment modalities for pediatric pt complaints not addressed in other S-SV EMS treatment protocols – including Nausea/Vomiting (Page 2), Brief Resolved Unexplained Event – BRUE (Page 3) & Suspected Shock/Sepsis (Page 4).
- The Newborn Care/Neonatal Resuscitation Protocol (M-2P) shall be used for pts during the first 28 days of life.
- Pediatric protocols shall be utilized for pts >28 days up to and including 14 years old.
- Applicable adult protocols may be utilized when there is not a pediatric protocol applicable to the pt's complaint/condition. Prehospital personnel shall consult with the base/modified base hospital for additional direction, if needed, when there is no standing order treatment protocol applicable to the pt's condition.
- A parent/reliable family member reported weight, length-based pediatric resuscitation tape or Handtevy shall be utilized for determining sizes of equipment and defibrillation/cardioversion joule settings. Once weight has been determined, medication dosing shall be based on S-SV EMS pediatric protocols.

NORMAL VITAL SIGNS & HYPOTENSION DEFINITION FOR NEONATAL & PEDIATRIC PATIENTS

Age	Normal Pulse Rate	Normal Resp. Rate	Normal SBP	Hypotension
≤28 days	100 - 205	30 - 50	60 - 80	SBP <60
29 days -12 months	90 - 180	30 - 50	70 - 100	SBP <70
1-2 years	80 - 140	24 - 40	80 - 110	SBP <70 + age x2
3-5 years	65 - 120	20 - 30	90 - 110	SBP <70 + age x2
6-9 years	60 - 120	20 - 30	100 - 120	SBP <70 + age x2
10-14 years	50 - 100	12 - 20	100 - 120	SBP <90

PEDIATRIC PROTOCOLS PROCEDURE/MEDICATION TREATMENT AGE RESTRICTIONS

- **≤28 days old:** Base/modified base hospital order required to administer a fluid bolus (M-2P)
- **<3 years old:** Needle cricothyrotomy is not allowed (PR-2 & R-3P)
- **<4 years old:** Base/modified base hospital order required to administer the following medications:
  - Zofran/Ondansetron for nausea/vomiting (M-6P)
  - Analgesic medications for pain management (M-8P)
  - Midazolam for severe anxiety/combative symptoms (M-11P)
- **<8 years old:** CPAP is not allowed (R-3P)
- **<15 years old:** Base/modified base hospital order required to utilize the following procedures/medications:
  - Transcutaneous pacing for bradycardia (C-3P)
  - Synchronized cardioversion for tachycardia (C-4P)
  - Adenosine for tachycardia (C-4P)

BLS

- Assess V/S, including SpO_2 & temperature (if able)
- O_2 at appropriate rate if pt hypoxemic (SpO_2 <94%), short of breath, cyanotic, or has signs of shock
- Assess and obtain medical history

- Refer to other pages/sections of this protocol for specific treatment modalities as applicable:
  - Nausea/Vomiting - Page 2
  - BRUE - Page 3
  - Suspected Sepsis - Page 4

ALS

- Consider the following additional assessment/treatment modalities, as appropriate based on pt's condition & clinical presentation
  - Cardiac monitor/12-lead EKG
  - $EtCO_2$ monitoring
  - IV/IO NS 20 mL/kg, to max 1000 mL

Nausea/Vomiting

- Nausea/vomiting can be symptoms of a multitude of different causes. If possible, the specific underlying cause should be determined and treated. The use of an antiemetic may relieve symptoms while leaving the cause untreated, and possibly, more difficult to detect. EMS personnel 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/vomiting is indicated for pts where it may contribute to a worsening of their medical condition, or where the pt's airway may be endangered.
- EMS personnel may consider administering Zofran (Ondansetron) prophylactically, prior to or immediately after opioid administration, for a pt with a history of nausea/vomiting secondary to opioid administration. Zofran (Ondansetron) may also be administered prior to transport to a pt with a history of motion sickness.

ALS

Zofran (Ondansetron)

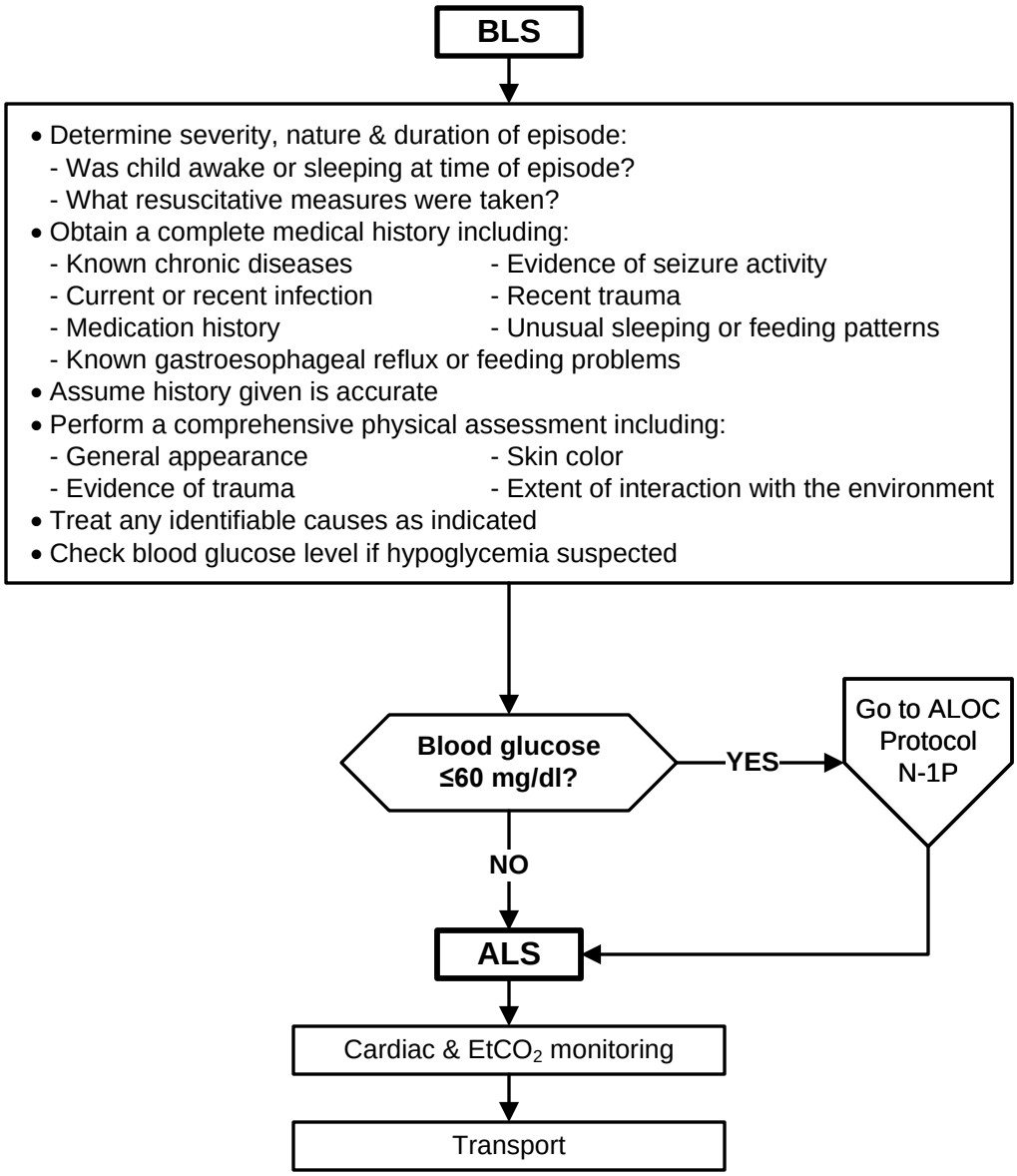
Pts (<4 yo) – BASE/MODIFIED BASE HOSPITAL ORDER ONLY
- 0.15 mg/kg (max. 4 mg) IM, or slow IV/IO (over 60 seconds)

Pts (4 - 14 yo) – Standing Order
- 4 mg oral disintegrating tablet, OR 4 mg IM, or slow IV/IO (over 30 seconds)
- Additional doses require base/modified base hospital consultation

Zofran (Ondansetron) is contraindicated during the first 8 weeks of pregnancy

Brief Resolved Unexplained Event (BRUE)

- Brief resolved unexplained event (BRUE) is an event occurring in an infant younger than one (1) year of age when the observer reports a sudden, brief (lasting <1 min, but typically <20-30 secs), and now resolved episode of any of the following:
  - Cyanosis or pallor
  - Marked change in tone (hyper- or hypotonia)
  - Absent, decreased, or irregular breathing
  - Altered level of responsiveness
- BRUE should be suspected when there is no explanation for a qualifying event after conducting an appropriate history & physical examination.
- All infants ≤1 year of age with possible BRUE should be transported by EMS for further medical evaluation. If the parent/guardian refuses EMS transport, base/modified base hospital consultation is required prior to release.
- EMS personnel shall make every effort to obtain the contact information of the person who witnessed the event, & provide this information to the receiving hospital upon pt delivery.



Suspected Shock/Sepsis

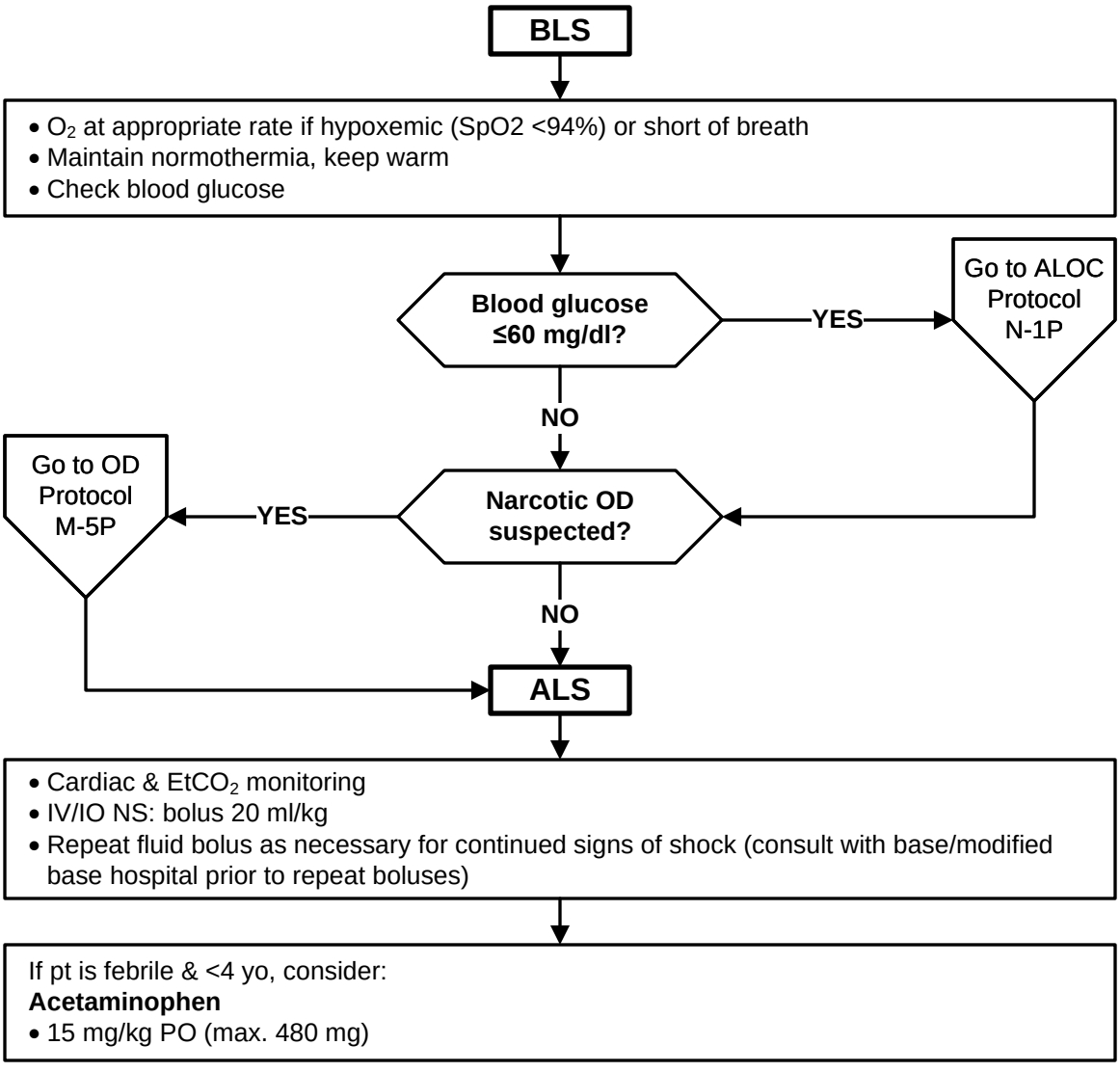
- Shock/Sepsis may be subtle and difficult to recognize.
- Early recognition of sepsis is critical to expedite hospital care and antibiotic administration.
- Septic pts are susceptible to traumatic lung injury. If BVM ventilation is necessary, avoid excessive tidal volumes.
- Obtain history including:
  - Onset and duration of symptoms
  - Fluid loss (vomiting/diarrhea)
  - Fever/Infection/Trauma/Ingestion
  - History of allergic reaction/cardiac disease or rhythm disturbance

Compensated Shock Signs/Symptoms:

- Tachycardia
- Cool extremities
- Weak peripheral pulses compared to central pulses
- Normal blood pressure

Decompensated Shock Signs/Symptoms:

- Hypotension &/or bradycardia (late findings)
- Altered mental status
- Decreased urine output
- Tachypnea
- Non-detectable distal pulses with weak central pulses



Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-8P
Pediatric Pain Management	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

- All pts with a report of pain shall be appropriately assessed and treatment decisions/interventions shall be adequately documented on the PCR.
- A variety of pharmacological and non-pharmacological interventions may be utilized to treat pain. Consider the pt's hemodynamic status, age, and previous medical history/medications when choosing analgesic interventions.
- Treatment goals should be directed at reducing pain to a tolerable level; pts may not experience complete pain relief.

BLS

- Assess V/S including pain scale & SpO_2, every 15 mins or as indicated by pt's clinical condition
- Assess/document pain score using standard 1-10 pain scale before and after each pain management intervention and at a minimum of every 15 mins
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
- Utilize non-pharmacological pain management techniques as appropriate, including:
  - Place in position of comfort and provide distraction/verbal reassurance to minimize anxiety
  - Apply ice packs &/or splints for pain secondary to trauma

Pain not effectively managed with non-pharmaceutical pain management techniques

Review/consider 'Medication Contraindications & Administration Notes' below & proceed to page 2

Medication Contraindications & Administration Notes

ⓘ **For pts <4 yo, consult with base/modified base hospital prior to medication administration**
ⓘ **All slow IVP medications contained in this protocol shall be administered over 60 seconds**

Acetaminophen
ⓘ Do not administer to pts with any of the following:
- Severe hepatic impairment
- Active liver disease

ⓘ Discontinue infusion if patient becomes hypotensive (see table on page 2)

Ketamine
ⓘ Do not administer to pts with any of the following:
- Pregnancy
- Multi-system trauma
- Suspected internal bleeding
- Active external bleeding

Ketorolac
ⓘ Do not administer to pts with any of the following:
- Pregnancy
- NSAID allergy
- Active bleeding
- Multi-system trauma
- ALOC or suspected moderate/severe TBI
- Current use of anticoagulants or steroids
- Hx of asthma, GI bleeding, ulcers
- Hx of renal disease/insufficiency/transplant

Fentanyl/Midazolam
ⓘ Do not administer to pts with any of the following:
- Hypotension (Pediatric Hypotension Table – page 2)
- SpO2 <94% or RR <12
- ALOC or suspected moderate/severe TBI

ⓘ There is an increased risk of deeper level of sedation & airway/respiratory compromise when administering midazolam to pts receiving fentanyl

ALS

- Continuous cardiac monitoring
- IV/IO NS TKO – if indicated by pt's clinical condition or necessary for medication administration
  - May bolus up to 20 mL/kg if indicated by pt's clinical condition
- Administer analgesic intervention as indicated below when appropriate

Non-Trauma Related/Chronic Pain

Acetaminophen: 15 mg/kg IV/IO infusion over 15 mins (max: 1000 mg) – single dose only; **OR**
Ketorolac: 0.5 mg/kg IV/IO or IM (max: 15 mg) – single dose only

If pain not effectively managed:

- Contact base/modified base hospital for additional pain management consultation

Pain Related to Acute Injury/Burns/Frostbite

Moderate Pain

Acetaminophen: 15 mg/kg IV/IO infusion over 15 mins (max: 1000 mg) – single dose
OR
Ketorolac: 0.5 mg/kg IV/IO or IM (max: 15 mg) – single dose

If pain not effectively managed:

- Continuous $EtCO_2$ monitoring

Fentanyl: 1 mcg/kg slow IV/IO or IM/IN (max single dose: 50 mcg) – may repeat every 5 mins to max 4 doses

Pediatric Normal SBP & Hypotension Table

Age	Normal SBP	Hypotension
1-12 mos	70-100	SBP <70
1-2 yrs	80-110	SBP <70 + age (yrs) x 2
3-5 yrs	90-110	
6-9 yrs	100-120	
10-14 yrs	100-120	SBP <90

Severe Pain

- Continuous $EtCO_2$ monitoring

Fentanyl: 1 mcg/kg slow IV/IO or IM/IN (max single dose: 50 mcg)
OR
Ketamine: 0.3 mg/kg slow IV/IO (max single dose: 30 mg)

Acetaminophen: 15 mg/kg IV/IO infusion over 15 mins (max: 1000 mg) – single dose

If pain not effectively managed:

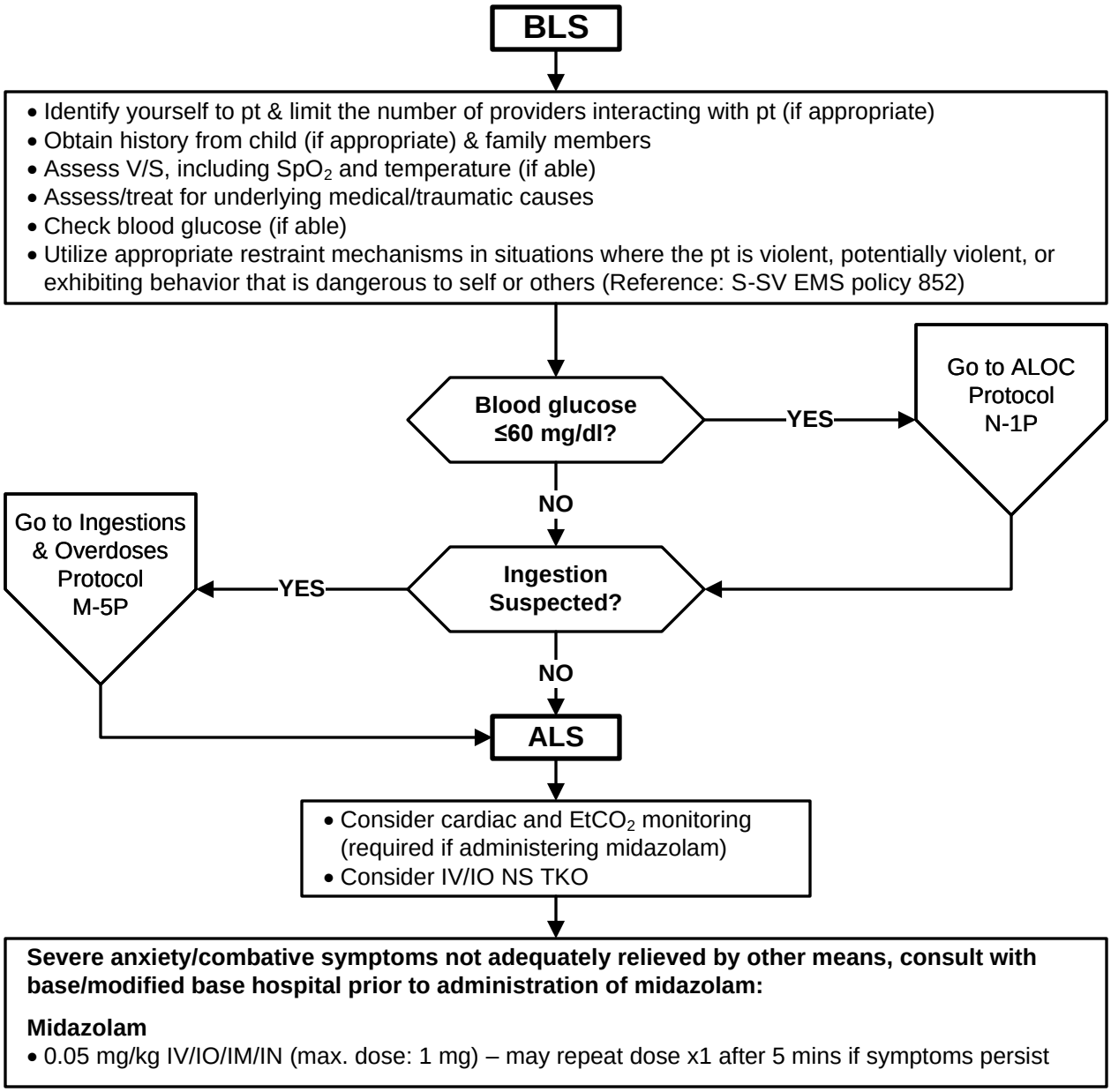
- If fentanyl previously administered, may repeat fentanyl every 5 mins to max 4 doses
- If ketamine previously administered, may repeat once after 10 - 15 mins to max 2 doses

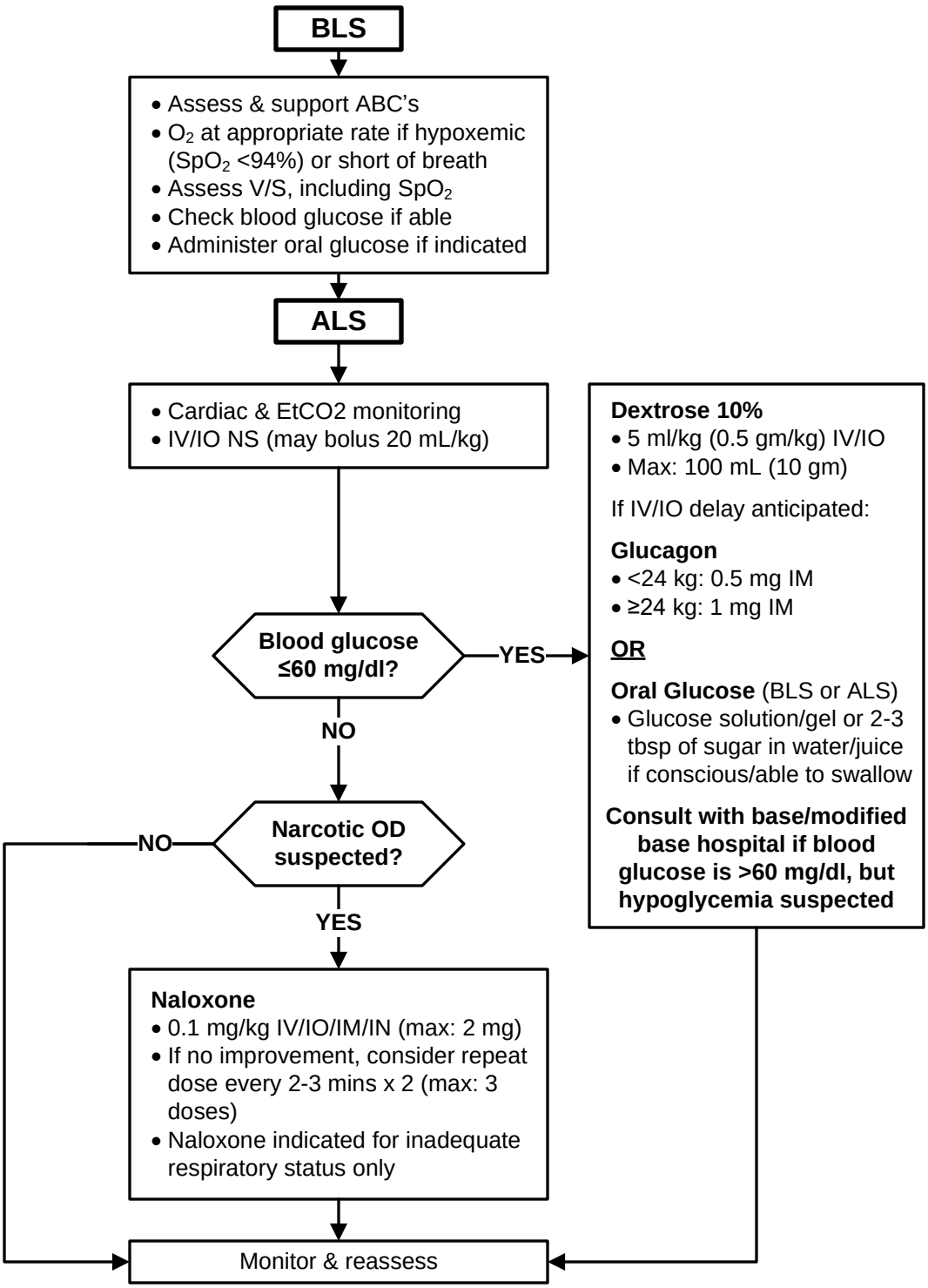
&/OR
Midazolam: 0.05 mg/kg slow IV/IO (max single dose: 1 mg)

- May repeat once after 5 mins to max 2 doses
- Wait 5 mins after fentanyl/ketamine administration before administering midazolam

Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-11P
Pediatric Behavioral Emergencies	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027

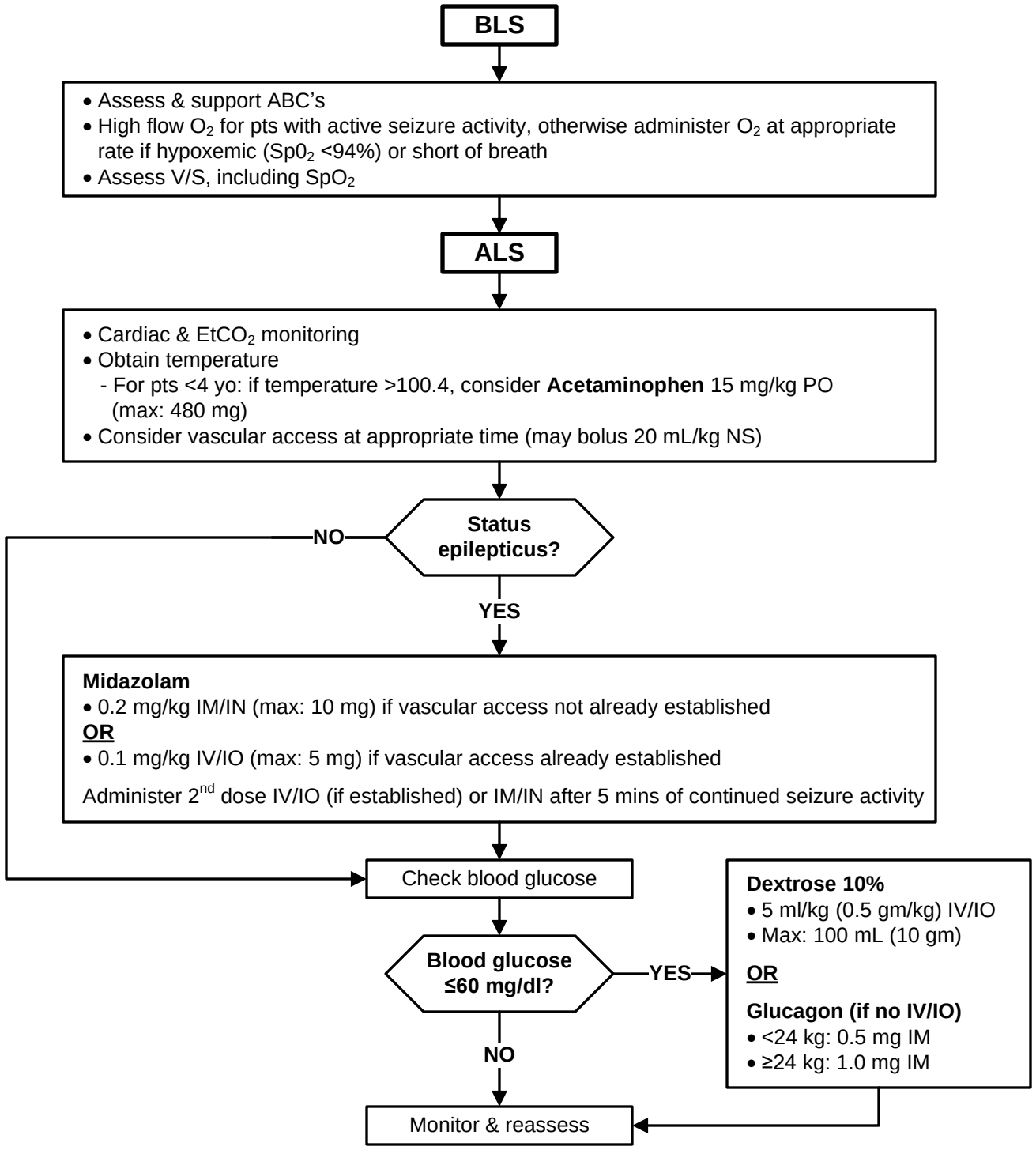
- Pediatric behavioral emergencies occur when the presenting problem includes some disorder of thought or behavior that is disturbing or dangerous to the pt or others. Psychiatric emergencies are a subset of behavioral emergencies.
- Crisis in pediatrics may be precipitated by social factors and/or instability in the home or community.
- Avoid judgmental statements and encourage pt to help with their own care.
- Consider dimming the lights and removing non-essential adults when appropriate.
- Assess for the presence of other conditions that may mimic behavioral emergencies, for example:
  - Diabetes/hypoglycemia - Trauma/TBI - Seizure disorders - Hypoxia - Ingestion/Overdose
- Major psychiatric disorders that may predispose to behavioral emergencies in children include:
  - Mood disorders (Depression, Bipolar Disorder) - Thought disorders (Schizophrenia)
  - Developmental disorders (Autism) - Anxiety disorders (PTSD)
  - Other disorders (ADD, ADHD, Oppositional Defiant Disorder, Reactive Attachment Disorder, etc.)




BLS
• Assess & support ABC's
• O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
• Assess V/S, including SpO_2
• Check blood glucose if able
• Administer oral glucose if indicated
ALS
• Cardiac & EtCO2 monitoring
• IV/IO NS (may bolus 20 mL/kg)
Blood glucose ≤60 mg/dl?
YES
NO
Dextrose 10%
• 5 ml/kg (0.5 gm/kg) IV/IO
• Max: 100 mL (10 gm)
If IV/IO delay anticipated:
Glucagon
• <24 kg: 0.5 mg IM
• ≥24 kg: 1 mg IM
OR
Oral Glucose (BLS or ALS)
• Glucose solution/gel or 2-3 tbsp of sugar in water/juice if conscious/able to swallow
Consult with base/modified base hospital if blood glucose is >60 mg/dl, but hypoglycemia suspected
Narcotic OD suspected?
NO
YES
Naloxone
• 0.1 mg/kg IV/IO/IM/IN (max: 2 mg)
• If no improvement, consider repeat dose every 2-3 mins x 2 (max: 3 doses)
• Naloxone indicated for inadequate respiratory status only
Monitor & reassess

Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-2P
Pediatric Seizure	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

- **Febrile:** Cooling measures: loosen clothing and/or remove outer clothing/blankets.
- **Status Epilepticus:** 2 or more seizures without periods of consciousness, or a single seizure lasting >5 mins.
- Only continuous or repetitive seizure activity requires ALS intervention.

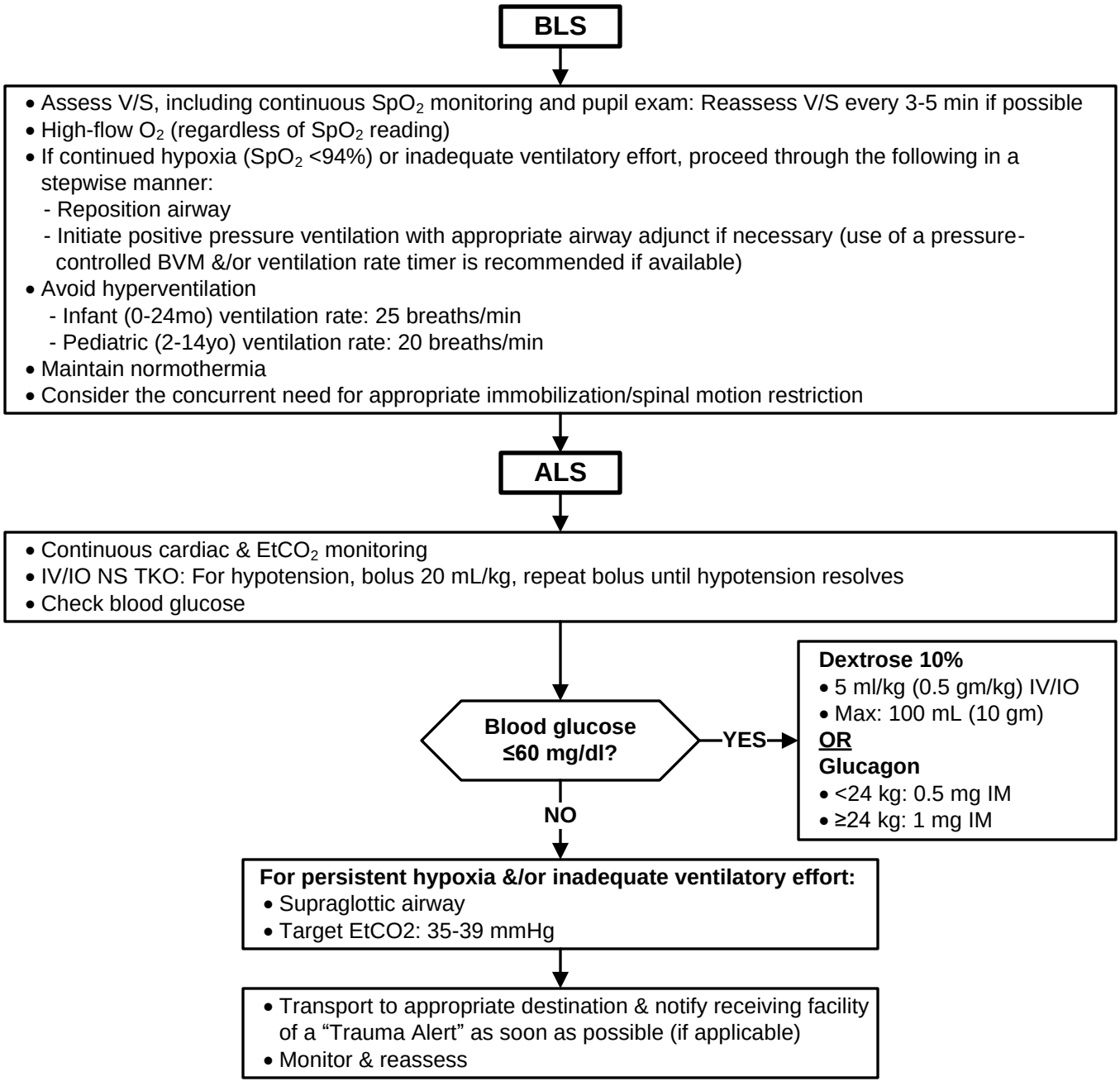


Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-3P
Pediatric Suspected Moderate/Severe Traumatic Brain Injury (TBI)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

Prehospital Identification of Moderate/Severe TBI

- Any pt with a mechanism of injury consistent with a potential for a brain injury, and one or more of the following:
  - GCS <13 (in infants: any decreased responsiveness, deterioration of mental status, irritation or agitation)
  - Post-trauma seizures, whether continuing or not
  - Multi-system trauma requiring advanced airway placement

For any patient with a suspected moderate/severe TBI, avoid/treat the three TBI "H-Bombs":
1) **H**yperventilation, 2) **H**ypoxia, 3) **H**ypotension



S-SV EMS General Protocols

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Sierra – Sacramento Valley EMS Agency Treatment Protocol	G-1
Multiple Patient Incidents	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027

DEFINITIONS

Control Facility (CF): An acute care hospital or EMS dispatch center responsible for situation status reporting and patient dispersal during a MCI or URVI.

EMS Surge Incident: An incident that does not overwhelm prehospital resources but has the potential to overwhelm hospital resources with multiple patients.

Unified Response to Violent Incident (URVI): An evolving event, primarily managed by law enforcement (LE), involving the use of force or violence on a group of people (e.g. mass shooting, bombing, riots, etc.). These incidents present a significantly higher threat of injury or loss of life to first responders, victims, and the public.

Multiple Casualty Incident (MCI): An incident that requires more prehospital and/or hospital resources to adequately manage patients than those available during a routine response. A MCI is categorized by the following levels:

LEVEL 1 MCI: Approximately 5-14 patients, expected duration ≤1 hour

LEVEL 2 MCI: Approximately 15-49 patients, expected duration ≥1 hour

LEVEL 3 MCI: 50+ patients, expected duration ≥1 hour

EMS SURGE ALERT

When:

- Three (3) or more ground or air transport resources are requested to respond to an incident; or
- Three (3) or more patients are identified after arrival at the scene of an incident; or
- Multiple patients are released at scene who may arrive at a hospital by private vehicle.
- A URVI.

Who:

- Dispatch center or first dispatched ground transport resource.

Why:

- To provide early notification to the CF for situation status reporting and hospital polling.

MCI ALERT

When:

- An incident that requires more EMS system resources to manage patients than those available during a routine response; or
- The number of patients from a single incident overwhelms the CF or closest appropriate receiving hospital.

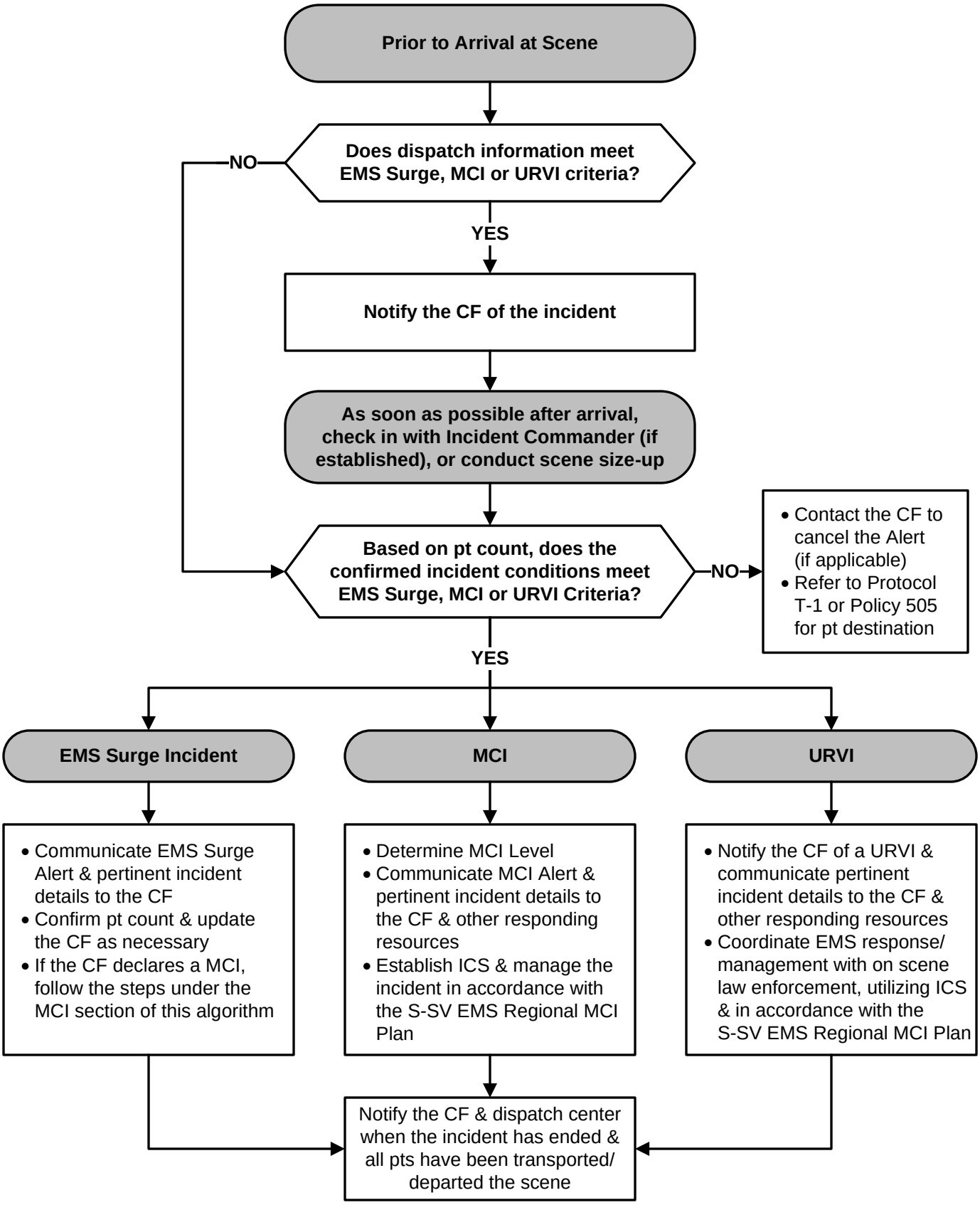
Who:

- Dispatch center, prehospital resources, or CF.

Why:

- To provide early notification for situation status reporting, hospital polling and initiation of the Regional MCI Plan.

Multiple Patient Incidents



Sierra – Sacramento Valley EMS Agency Treatment Protocol	G-2
Determination Of Death	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

General Procedures/Considerations:

- CPR need not be initiated and may be discontinued for pts who meet Obvious Death or Probable Death criteria as contained in this protocol, at the time of initial assessment.
- A valid Do Not Resuscitate (DNR) should be honored for any pt with absent respirations, pulses and neurological response, regardless of the cause of death (e.g. terminal illness, trauma).
- Hypothermia, drug and/or alcohol overdose can mask neurological reflexes. If any doubt exists about contributing environmental factors (e.g. cold water submersion) and no valid DNR exists, initiate resuscitation and treat according to applicable S-SV EMS protocol.
- In the event of a declared MCI, death may be determined in accordance with START/JUMP START criteria.
- For all pts treated under this protocol, the following must be assessed/confirmed (as possible):

  - Absent respirations: look, listen (auscultate), and feel for respirations for a minimum of 30 secs.
  - Absent pulses: palpate both the carotid and apical pulses for a minimum of 30 secs.
  - Absent neurological response: check pupil response with a light and check for response to painful stimuli.

- If the base/modified base hospital physician directs EMS personnel to stop resuscitation efforts once transport has begun, the ambulance shall reduce transport code and continue transport to the original destination hospital.
- If determination of death is made at rendezvous location with HEMS aircraft, the body shall not be moved from the ambulance and an immediate request for law enforcement shall be made.
- If there is any objection/disagreement by family members or EMS personnel to terminating or withholding resuscitation for pts who have a valid DNR or meet probable death criteria, BLS measures (including defibrillation) shall continue or begin immediately and EMS personnel shall contact the base/modified base hospital for further direction.

Instructions for EMS Personnel Upon Determination of Death:

- If not already on scene, request law enforcement
- Minimize contact with the body and scene to protect potential crime scene evidence
- Appropriate EMS personnel shall remain on scene until released by law enforcement
- Provide law enforcement with the following minimum information:

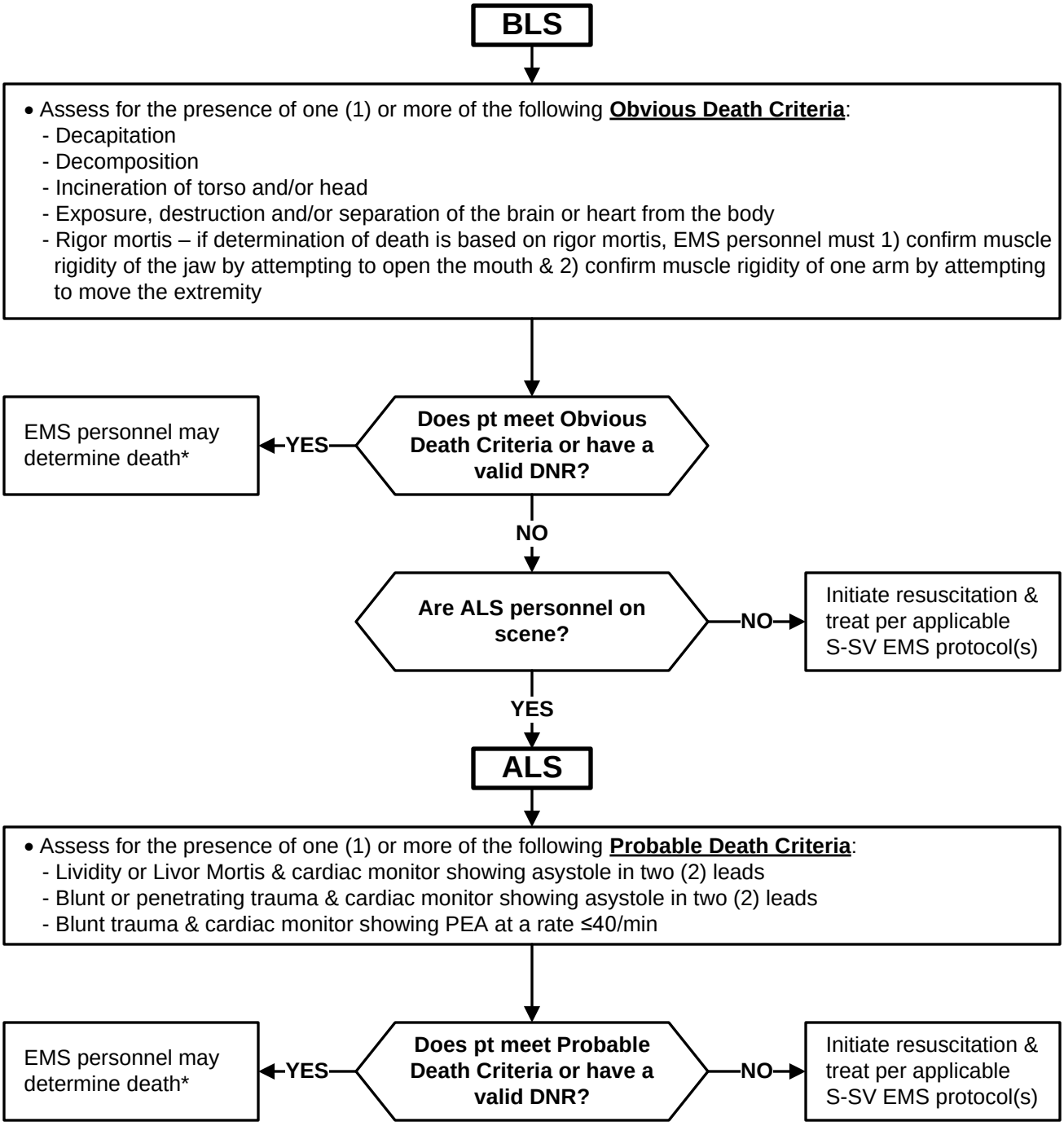
  - Unit ID
  - Name and certification/license # of EMS provider determining death
  - Patient demographics and known, pertinent medical history
  - Determination of death date and time

- At a minimum, the PCR must include the following:

  - Time of determination of death
  - Six-second cardiac monitor strip of two (2) leads for pts meeting probable death criteria

See page 2 for Determination of Death Assessment Criteria

Determination of Death Assessment Criteria
(all pts must have absent respirations, pulses & neurological response)



***Once EMS personnel have determined death, they shall follow the 'Instructions for EMS Personnel Upon Determination of Death' contained on page 1 of this protocol**

Sierra – Sacramento Valley EMS Agency Treatment Protocol	G-3
DNR, POLST & End Of Life Option Act	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

DEFINITIONS

Advance Health Care Directive (AHCD) – A document that allows an individual to provide healthcare instructions &/or appoint an agent to make healthcare decisions when they are unable or prefer to have someone speak for them.

Agent or Attorney-In-Fact – An individual designated in a power of attorney for health care to make a health care decision for the pt, regardless of whether the person is known as an agent or attorney-in-fact, or by some other term.

Aid-in-Dying Drug – A drug prescribed by a physician for a qualified individual, which the qualified individual may choose to self-administer to bring about their death.

Do Not Resuscitate (DNR) – A request to withhold interventions to restore cardiac activity & respirations (no chest compressions, defibrillation, assisted ventilation, advanced airways, or cardiotonic medications).

DNR Wrist or Neck Medallion – A MedicAlert® or other approved wrist or neck medallion, engraved with the words "Do Not Resuscitate", and a patient ID number.

Durable Power of Attorney for Health Care (DPAHC) – A document that 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 and the agent/attorney-in-fact must be physically present. Decisions made by the agent/attorney-in-fact must be within the limits set by the DPAHC, if any.

EMSA/CMA Prehospital DNR Form – A form developed by the California Emergency Medical Services Authority (EMSA) and California Medical Association (CMA) for the purpose of instructing EMS personnel to forgo resuscitation attempts in the event of a pt's cardiopulmonary arrest in the out of hospital setting. The form must be signed and dated by a physician and pt/representative to be valid.

End of Life Option Act – A law authorizing an adult, 18 years or older, who meets certain qualifications and who has been determined by their attending physician to be suffering from a terminal disease, to request an aid-in-dying drug prescribed for the purpose of ending their life in a humane and dignified manner.

Physician's Orders for Life Sustaining Treatment (POLST) – A physician order form that addresses a patient's wishes about a specific set of medical issues related to end-of-life care. The form must be signed and dated by a physician and pt/representative to be valid.

VALID DNR ORDERS/FORMS

- EMSA/CMA Prehospital DNR form
- POLST form
- DNR wrist or neck medallion
- DNR order in the medical record of a licensed healthcare facility signed by a physician (or an RN verifying a valid verbal physician order on a physician order sheet), or an electronic physician's order
- Verbal DNR order given by the patient's physician
- An AHCD or DPAHC with the agent/attorney-in-fact physically present and stating the pt refuses resuscitative measures

DNR orders do not expire and photocopies/electronic physician's orders are considered valid

DNR, POLST & End Of Life Option Act

- **All pts shall receive an immediate assessment/evaluation by EMS personnel.**
- A copy of applicable DNR orders/forms shall be attached to the EMS patient care report (PCR) when available.
  - If DNR orders/forms are not available, document the method of DNR verification in the PCR.
  - If DNR bracelet or neck medallion present, document the medallion number in the PCR.
  - If applicable, document the name/contact information of any agent, attorney-in-fact or other pt representative.
- If pt is transported by EMS, DNR orders/forms shall be taken with the pt to the receiving facility.
- Pts with a POLST form indicating "Comfort-Focused Treatment", are typically only transported to a hospital if their comfort needs cannot be met in their current location/setting. These pts who have no signs of pain or respiratory distress, & who have sufficient family/caretaker support present, may be released at scene by EMS personnel & not transported to the hospital, unless transportation is requested by the patient/legal representative.
- EMS personnel shall contact the base/modified base hospital for consultation for any questions or concerns regarding EMS treatment/transport of a patient with a POLST form.
- Provide supportive care to family members/caregivers as appropriate.

DNR Pt

- Verify pt identity & confirm validity of DNR orders/form
- Provide palliative treatment for pain, dyspnea or other medical conditions
- If pt is in cardiac arrest, initiate BLS resuscitative measures pending confirmation of a valid DNR

Non-Cardiac Arrest

- If conscious, determine if pt wishes to have resuscitative measures/treatment other than as documented on the DNR orders/form
  - If yes, ignore the DNR orders & provide treatment per applicable S-SV EMS protocol(s)
  - If no, follow DNR orders
- If unconscious, follow DNR orders

Cardiac Arrest

- If pt has a valid DNR, discontinue CPR if already initiated
- If unable to validate DNR, or there is objection by family members/caretakers regarding withholding resuscitation, continue BLS resuscitative measures & consult with the base/modified base hospital

End of Life Option Act Pt

If a terminally ill individual appears to have ingested an Aid-in-Dying drug:

- Provide comfort care (e.g. oxygen, non-invasive airway positioning, suctioning) as indicated
- Determine whether there are DNR orders available, and follow such orders as applicable
- If family objects, consult with base/modified base hospital for consultation
- Do not start resuscitation measures if pt is in cardiac arrest

S-SV EMS Procedure Protocols

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Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-1
12-Lead EKG	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

INDICATIONS

12-lead EKG procedures shall be performed on pts who present with one or more of the following:

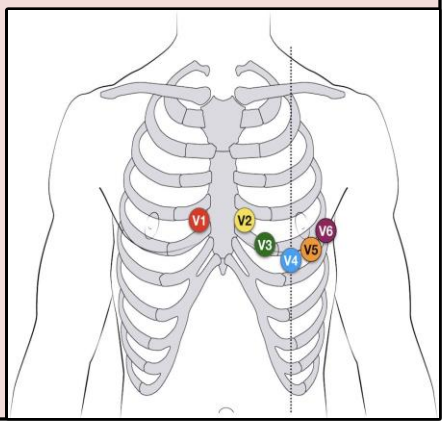
- Sign/symptoms suggestive of acute coronary syndrome (ACS) such as:
  - Non-traumatic chest or upper abdominal discomfort
  - Syncope/near-syncope
  - Acute generalized weakness
  - Dyspnea
- Cardiac dysrhythmias on 4-lead EKG
- ROSC following cardiac arrest

PRE-PROCEDURE

- Assess vital signs including SpO_2
- Administer O_2 as indicated by clinical condition

PROCEDURE

- Prepare EKG monitor and connect 12-lead cables
- Utilize packaged electrodes designed for single pt use (not bulk)
- Prep skin as necessary (e.g. wiping with 4x4 gauze, shaving)
- Enter, at a minimum, pt's age, gender, and last name/first initial into the cardiac monitor
- Apply chest leads using the landmarks indicated on the diagram
- While acquiring the 12-lead EKG:
  - Position pt away from 60hz RF noise (light switches, smartphones, LED lights, etc.)
  - Position pt supine, or semi-fowler with their arms at their side and legs uncrossed
  - Instruct pt to breath normally and remain still
  - Don't converse with or touch pt during acquisition
- Interpret the EKG findings
- If isoelectric line has significant artifact or machine reads "poor data quality" (or equivalent), attempt to reacquire a clean 12-lead EKG if pt condition allows



POST-PROCEDURE

- 12-lead EKG's meeting STEMI criteria shall be transmitted to the appropriate facility (closest hospital or STEMI Receiving Center depending on incident specific circumstances) as soon as possible if transmission capabilities are available
- For pts with suspected ACS, serial 12-lead EKGs should be obtained if the pt's clinical status changes or if EKG changes are noted on the cardiac monitor, and every 15 minutes if transport times are long
- Copies of 12-lead EKGs shall be provided to the receiving hospital physician upon EMS arrival, left at the receiving hospital at time of pt delivery, and attached to the EMS pt care report (PCR)

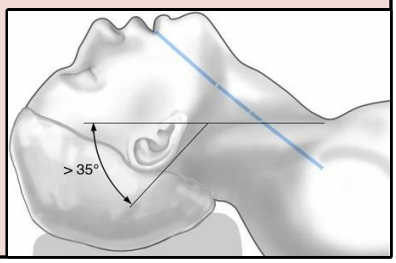
Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-2
Airway & Ventilation Managment	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

INDICATIONS

- Airway & ventilation management techniques may include: basic airway maneuvers, use of airway adjuncts (e.g., oropharyngeal or nasopharyngeal airways), & advanced airway procedures (e.g., endotracheal intubation, supraglottic airway devices, or cricothyrotomy) based on the situation & the provider's level of training – Indications for airway management may include but are not limited to:
  - Obstructed airway
  - Respiratory distress/failure
  - Altered mental status
  - Severe shock (hemorrhagic, septic, cardiogenic)
  - Cardiac arrest
  - Trauma/burns/smoke inhalation
- An i-gel SGA is the preferred advanced airway device & should be attempted prior to ET intubation unless video laryngoscopy is available & the ALS provider has completed training for that device
- During cardiac arrest, advanced airway placement should not delay or interrupt CPR & shall not be considered until after the 1st round of defibrillation (if indicated) & administration of epinephrine

BLS AIRWAY PROCEDURE

- Look, Listen, and Feel for level of responsiveness, chest movement, breath sounds, obstructions
- Positioning of unresponsive pts:
  - Place in the Head Elevated Laryngoscopy Position (HELP) to facilitate alignment of the pharyngeal, laryngeal & oral axis of the airway
  - Use the Head-Tilt/Chin-Lift, Jaw-Thrust, or Lateral Recovery Position (as appropriate)
- Remove visible obstructions &/or suction fluids as necessary, limiting suctioning to 10-15 secs
- Maintain airway patency – insert OPA/NPA as appropriate



BAG-VALVE-MASK (BVM) VENTILATION PROCEDURE

BVM ventilation should be performed by two rescuers whenever possible

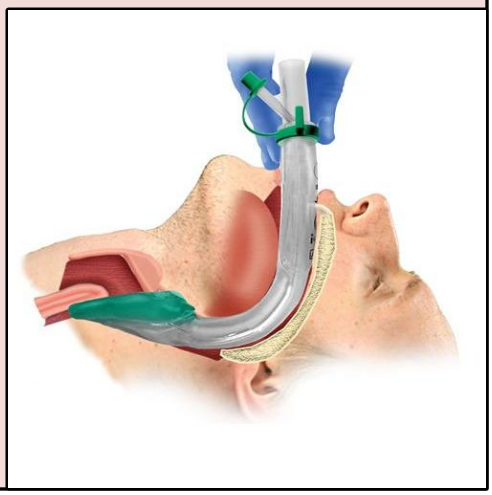
- Attach oxygen to BVM at a minimum flowrate of 10-15 L/min
- For one rescuer ventilation, position the mask over the nose & mouth & ensure a tight seal with an E-C clamp technique
- Squeeze the bag slowly, delivering breath over 1-2 secs
- Deliver only enough volume to achieve normal chest rise & fall **avoid excessive ventilation**
- If utilizing a Positive End Expiratory Pressure (PEEP) valve, maintain between 5-10 cmH_2O. Do not utilize PEEP in any of the following circumstances:
  - Suspected pneumothorax
  - Suspected TBI or increased intracranial pressure
  - Hypovolemic shock
- Ventilate to maintain SpO_2 & $EtCO_2$ within appropriate range for pt condition
- An Impedance Threshold Device (ITD) may be utilized in adult non-traumatic pulseless arrest pts; however, two rescuers are required to maintain effectiveness if no advanced airway is in place

i-gel SUPRAGLOTTIC AIRWAY (SGA) PROCEDURE

Contraindications:
- Intact gag reflex
- Caustic ingestion
- Unresolved complete airway obstruction

Relative Contraindications:
- Trismus or limited ability to open the mouth
- Oral trauma
- Distorted anatomy that prohibits device placement

- If a functioning i-gel SGA is in place & there are no clinical signs of ventilatory insufficiency, the i-gel SGA shall not be replaced by ET intubation
- Pre-oxygenate pt with high-flow O_2, via NRM or BVM as appropriate, for a minimum of 3 mins
- Administer 10-15 L/min O_2 via NC, in addition to NRM/BVM O_2 to augment pre-oxygenation
- Select the correct size i-gel SGA device
- Lubricate the back & sides of the i-gel SGA device with a water-based lubricant
- Place the pt in a sniffing position or use a Jaw-Thrust maneuver if spinal injury is suspected
- Grasp the i-gel SGA device by the proximal end with the dominant hand, making sure the cuff is pointing downwards & the airway tube is aligned in the midline
- Gently press down on the chin & introduce the soft tip into the mouth towards the hard palate
- Glide the i-gel SGA device downwards & backwards Along the hard palate with a continuous but gentle Push until a definitive resistance is felt
- Begin ventilating with a BVM at the appropriate ventilation rate
- Follow **ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION & POST-PROCEDURE** instructions on page 3



ENDOTRACHEAL (ET) INTUBATION PROCEDURE

- ET intubation attempts should last no more than 30 secs
- Pre-oxygenate pt with high-flow O_2, via NRM or BVM as appropriate, for a minimum of 3 mins
- Administer 10-15 L/min O_2 via NC, in addition to NRM/BVM O_2 to augment pre-oxygenation
- Assemble/prepare all equipment prior to ET intubation attempt
- Consider utilizing an ET tube introducer
- Follow manufacturer's directions for use specific to the laryngoscope utilized (direct laryngoscopy or video laryngoscopy)
- Visualize the vocal cords & pass the ET tube through the cords & into the trachea, approx. 2-3 cm beyond the cords
  - *A common depth is approximately 21 cm for women/23 cm for men (measured at the teeth)*
- Inflate the ET tube cuff with 5-10 mL of air
- Begin ventilating with a BVM at the appropriate ventilation rate
- If required, prior to 2nd ET attempt ventilate with 100% oxygen for a minimum of 1 min
- Follow **ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION & POST-PROCEDURE** instructions on page 3

NEEDLE CRICOTHYROTOMY PROCEDURE

Indications:
- Severe airway obstruction
- Failed intubation with an inability to ventilate using other methods

Contraindications:
- Pt age <3 yo or estimated weight <15 kg
- Conscious pt
- Presence of midline neck hematoma or massive subcutaneous emphysema

- Do not perform procedure in a moving ambulance
- Assemble/prepare all equipment prior to procedure attempt
- Position pt supine with the neck slight extended (if no cervical spine injury suspected)
- Locate the cricothyroid membrane
  - Palpate for the depression between the thyroid cartilage (Adam's apple) & the cricoid cartilage
- Attach a 10 mL syringe filled with 5 mL NS to the airway catheter
- **If utilizing a 12ga, 3" airway catheter:** With the bevel facing up, insert the needle through the skin at a 45^{o} angle caudally into the cricothyroid membrane penetrating the skin & cricothyroid membrane with the needle
- **If utilizing a Rusch® QUICKTRACH® Needle Cricothyrotomy Device:** Puncture the skin & underlying cricothyroid membrane at a 90^{o} angle with the needle, then adjust angle to 45^{o} after penetrating the cricothyroid membrane
- Advance the catheter/cannula, aspirating with the syringe until bubbles are observed in the NS
- Continue advancing the catheter/cannula into the trachea while withdrawing the needle
- Secure in place, ensuring it is fixed to avoid displacement
- Begin ventilating with a BVM at the appropriate ventilation rate

ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION

- Using a stethoscope, check for the absence of gurgling sounds over the epigastrium & the presence of equal breath sounds over the lungs while observing for chest rise and fall. When an ET tube is in place, no sounds should be heard over the epigastrium. Gurgling may still be heard in pts who are breathing spontaneously or when an i-gel SGA device is in place
- Attach an $EtCO_2$ monitoring device, which must remain in place until arrival to the hospital or cessation of resuscitation efforts
- At least four (4) of the following techniques must be utilized to confirm advanced airway placement
  - Bilateral breath sounds
  - Bilateral chest rise and fall
  - Consistent $EtCO_2$ waveform
  - Change in Colorimetric CO_2 detector from purple to yellow
  - Condensation in the airway tube
  - SpO_2 rising to/or remaining above 94%
- ALS/LALS personnel must immediately confirm patency of an advanced airway placed by an EMT

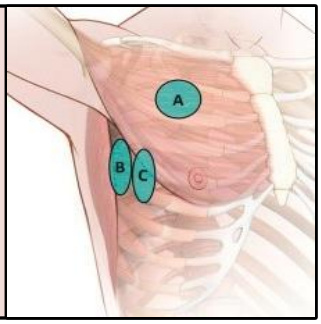
POST-PROCEDURE

- Airway patency must be reassessed at a minimum of every 15 mins and:
  - Each time the patient is moved
  - If ventilation becomes difficult
  - If vital signs, including SpO2 & EtCO2 change unexpectedly
- If a pt with an advanced airway in place regains consciousness:
  - Use restraints as necessary to avoid displacement of the advanced airway device
  - Consider sedation with **Midazolam 10 mg IV/IO/IM/IN** for adult pts (may repeat same dose x 1)
  - Contact base/modified base hospital for pediatric Midazolam dosing if needed
- Document all methods/devices used to confirm advanced airway device placement in the PCR

Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-3
Pleural Decompression	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

INDICATIONS
- Suspected tension pneumothorax with a history of chest trauma, unilateral absent or diminished breath sounds & one or more of the following:
  - Severe respiratory distress with SpO_2 <94% - SBP ≤90 or loss of radial pulse - Traumatic cardiac arrest

PRE-PROCEDURE
- Assess respiratory status
- Manage airway & assist ventilations as appropriate
- Administer high flow O_2 & monitor SpO_2
- Assess & continually monitor vital signs
- Identify & cleanse/prep site - approved sites (in preferred order):
  A – Mid-clavicular line, 2nd intercostal space
  B – Mid-axillary line, 4th/5th intercostal space (above nipple line)
  C – Anterior axillary line, 5th intercostal space (above nipple line)



PROCEDURE

Capnospot® Pneumothorax Decompression Indicator:
- Use a minimum 14g x 3.25" needle/catheter specifically designed for pleural decompression
- Attach Capnospot Pneumothorax Decompression Indicator to needle/catheter prior to insertion
- Penetrate the skin, advancing needle/catheter with at a 90^0 angle, over the superior border of the rib
- Advance needle/catheter through the chest wall until a positive indication of CO_2 is observed via Capnospot or a "pop" is felt upon entering the pleural space
- Hold the decompression device in place for approx. 10 secs & observe for visible color change in the Capnospot indicator chamber (note: color change may not be reliable on pts with an open pneumothorax)
- Advance catheter hub of the decompression device over the needle to the plane of the pt's skin
- Remove needle after catheter has been fully inserted
- Remove Capnospot from the needle & reapply the Capnospot to the catheter for ongoing assessment

Simplified Pneumothorax Emergency Air Release (SPEAR®) Procedure:
- Insert SPEAR needle/catheter through skin targeting selected rib (below level of intended insertion site)
- Place needle tip against exterior rib and confirm position – direct SPEAR over the rib and into thoracic cavity
- Penetrate thoracic cavity – extending SPEAR approx. 3 cm beyond exterior of target rib
- Direct needle tip toward middle of clavicle
- Release catheter from needle by disconnecting Spin Lock
- Advance only the catheter toward middle of clavicle using needle as stationary guide
- Remove needle after catheter has been fully inserted

- Adequately secure catheter & observe for clinical indicators of successful placement
- If an initial attempt at one approved site is unsuccessful, consider utilizing an alternate approved site
- Two attempts allowed on affected side(s) without base/modified base hospital contact

POST-PROCEDURE
- Reassess breath sounds & administer high flow O_2
- Continuous cardiac, SpO_2 & $EtCO_2$ monitoring
- Assess & document vital signs every 3 - 5 mins (if possible)
- Monitor Capnospot® (if used) & breath sounds for signs of development of tension pneumothorax

Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-4
Venous Blood Draws	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

INDICATIONS

- Paramedics or AEMTs may perform blood draws on pts with a medical complaint, when there is an agreement to do so in place between the EMS provider agency & the receiving hospital
- Paramedics may perform chemical testing blood draws at the direction of law enforcement (LE) under the following parameters:
  - Fire department/district employees are not allowed to perform chemical testing blood draws
  - Personnel must be authorized to perform chemical testing blood draws by their employer
  - Medical treatment & emergency calls take precedence over chemical testing blood draw requests

PRE-PROCEDURE

- Assess for & provide medical treatment as indicated/appropriate

MEDICAL BLOOD DRAW PROCEDURE

- Select appropriate equipment & site:
  - If drawing blood from an IV catheter, attach blood draw adapter to the IV catheter hub & draw blood sample prior to IV fluid administration
  - If no IV has been established, or if IV fluids have been administered, prep site with an appropriate disinfectant agent, place tourniquet 3 - 4 inches above collections site & perform venipuncture
- Insert the blood tubes in the following order (releasing tourniquet when blood starts to flow):
  - Blue, Red, Green, Purple
- Apply slight pressure to the site with a gauze pad & secure with tape
- Gently invert each tube a few times (do not shake or mix vigorously)
- Label samples as follows:
  - Patient name & date of birth
  - Date & time of blood draw
  - EMS unit number
- Place labeled tubes in a specimen collection bag & turn over to appropriate hospital staff
- Adequately document medical blood draws on the PCR

CHEMICAL TESTING BLOOD DRAW PROCEDURE

- Suspects shall be in LE custody and shall consent to the blood draw - if the suspect refuses or is unable to consent, the paramedic shall stop the procedure immediately
- Paramedics shall not draw blood on a struggling or restrained suspect
- Blood draw kits shall be supplied by the requesting LE agency
- Alcohol or other volatile organic disinfectant shall not be used to clean the skin at the draw site - a suitable aqueous disinfectant (normally included in the LE supplied blood draw kit) shall be utilized
- The arresting officer must be present when the blood draw is performed & the blood sample is the property of the arresting officer
- In addition to routine incident information, the paramedic shall document the following on the PCR:
  - Blood draw kit number
  - Requesting officer's name & badge number
  - Suspect/Pt's consent for the procedure
  - Skin prep used and site of blood draw(s)

Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-5
Vascular Access	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

INDICATIONS

- Vascular access may be established by authorized EMS personnel when there is a current or anticipated need to administer intravenous medications/fluids.

ADDITIONAL DIRECTIONS/CONSIDERATIONS

- Do not delay transport to establish vascular access unless clinically necessary.
- Avoid establishing vascular access in an extremity with a functioning dialysis shunt unless no other vascular access is available/appropriate.
- Intraosseous (IO) access or external jugular (EJ) vein cannulation shall only be attempted if unable to establish peripheral vascular access & immediate medication/fluid administration is necessary.
- Preexisting Vascular Access Devices (PVADs) may be utilized for pts in extremis when no other vascular access is available/appropriate.
- Limit vascular access attempts to three (3) unless necessary for emergent treatment.
- Do not connect the primary IV tubing directly to the IV catheter. IV extension/saline lock tubing shall be utilized between the primary IV tubing and the IV catheter.

INTRAOSSEOUS (IO) ACCESS

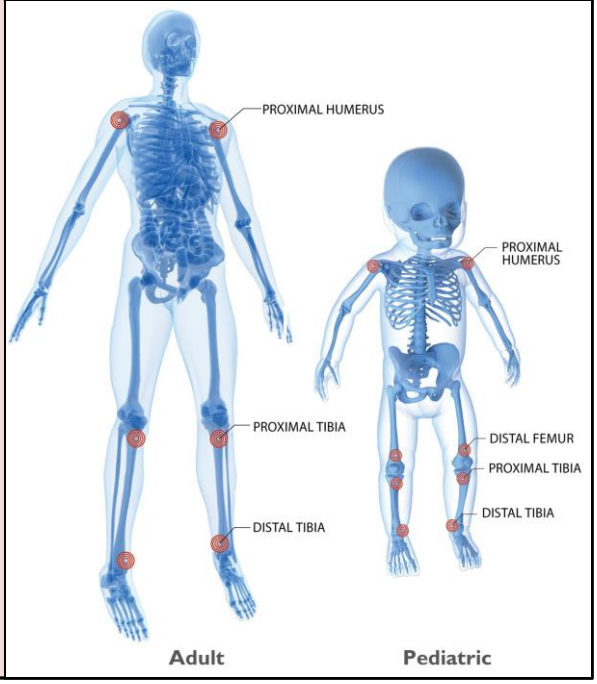
Contraindications:

- Fracture/suspected vascular compromise in targeted bone or infection at area of insertion site.
- Excessive tissue or absence of adequate anatomical landmarks.
- Previous significant orthopedic procedure at site or IO access in targeted bone within past 48 hours.

Procedure:

- Prep selected site (see images) with a recognized antiseptic agent & wipe dry with a sterile gauze pad.
- Insert device per manufacturer specific instructions.
- Attach primed extension set to needle & secure needle per manufacturer instructions.
- For pts unresponsive to pain:
  - Rapid flush with 10 mL of normal saline.
- For pts responsive to pain:
  - Prime extension set with 2% lidocaine.
  - Slowly administer 2% lidocaine over 120 sec.
    - Adult pts - 40 mg.
    - Pediatric pts - 0.5 mg/kg (max: 40 mg).
  - Allow lidocaine to dwell in IO space 60 sec.
  - Rapid flush with 10 mL of normal saline.
  - Slowly administer a subsequent ½ dose of 2% lidocaine over 60 sec.
- Connect fluids to extension set – infusion may need to be pressurized to achieve desired rate.
- Dress site and secure tubing.

Approved IO Sites



EXTERNAL JUGULAR (EJ) VEIN CANNULATION

Contraindications:

- Suspected coagulopathy (e.g. advanced liver disease, anti-coagulant medications)
- Suspected cervical spine injury
- Inability to tolerate supine position

Procedure:

- Place pt in Trendelenburg or supine position and elevate shoulders.
- Turn head 45^{o} - 60^{o} to side opposite of intended venipuncture site.
- Palpate to assure no pulsatile quality to vessel.
- Prep site with recognized antiseptic agent & wipe dry with a sterile gauze pad.
- 'Tourniquet' vein by placing finger just above clavicle near midclavicular line.
- Stabilize skin over vein with thumb.
- Point needle toward shoulder in direction of vein & puncture vein midway between jaw & clavicle, over belly of sternocleidomastoid muscle.
- Maintain compression of vein at clavicle area until needle is withdrawn & IV tubing has been connected.
- Secure IV site.

PREEXISTING VASCULAR ACCESS DEVICE (PVAD) UTILIZATION

Contraindications:

- Subcutaneous access requiring special equipment & entry through the skin is not approved for use by EMS personnel

Procedure:

- Do not remove injection cap from catheter.
- Do not use a syringe smaller than 10 ml to prevent catheter damage from excess infusion pressure.
- Always expel air from syringe prior to administration.
- Follow all medications with 5 ml of saline to avoid clots.
- Do not inject medications or fluids if resistance is met when establishing patency.
- Do not allow IV fluids to run dry.
- Do not manipulate or remove an indwelling catheter under any circumstances.
- Should damage occur to the external catheter, clamp immediately between the skin exit site & the damaged area to prevent air embolism or blood loss.