



**Sierra – Sacramento Valley EMS Agency  
Regional Emergency Medical Advisory Committee  
(REMAC)**



**MEETING AGENDA**

**Meeting Date & Time**

- **Tuesday, April 16, 2024, 9:00 am – 12:00 pm**

**Meeting Locations & Virtual Attendance Information**

- **Primary Meeting Location:** 535 Menlo Drive, Suite A, Rocklin, CA 95675
- **Alternate Meeting Location:** 1255 East Street, 2<sup>nd</sup> Floor, Redding, CA 96001
- **Zoom:** <https://us02web.zoom.us/j/82284088099?pwd=cE01U0RxUjBQQiBidnQxdUI0QVY5QT09>
- **Telephone:** (669) 900-9128, **Meeting ID:** 822 8408 8099, **Passcode:** 1702

Note: All Zoom & telephone attendees are muted on entry. Please remain on mute unless actively speaking/interacting. If joining by telephone, dial \*6 on your keypad to unmute/mute your line.

**Meeting Agenda**

Item	Title	Leader
A	Call to Order & Introductions	Chairperson
B	Approval of Previous Meeting Minutes (September 19, 2023)	Chairperson
C	Approval of Meeting Agenda	Chairperson
D	Public Comment	Attendees
E	<b>GEMS Provider Member Appointments: 7/1/2024 – 6/30/2026 Term</b> <ul style="list-style-type: none"><li>• <b>S-SV EMS North Counties – Public (1 – Primary, 1 – Alternate)</b><ul style="list-style-type: none"><li>○ Nominations: Richard Harrison (McCloud FD)</li></ul></li><li>• <b>S-SV EMS North Counties – Private (1 – Primary, 1 – Alternate)</b><ul style="list-style-type: none"><li>○ Nominations: Jason Swann, Rich Lemon (Dignity EMS)</li></ul></li><li>• <b>S-SV EMS South Counties – Public (1 – Primary, 1 – Alternate)</b><ul style="list-style-type: none"><li>○ Nominations: Clayton Thomas (Penn Valley FPD)</li></ul></li><li>• <b>S-SV EMS South Counties – Private (1 – Primary, 1 – Alternate)</b><ul style="list-style-type: none"><li>○ Nominations: Fred Gregory (AMR Placer)</li></ul></li></ul>	Chairperson

## Sierra – Sacramento EMS Agency – REMAC Meeting Agenda

Item	Title	Leader
<b>F</b>	<b>HEMS Provider Member Appointments: 7/1/2024 – 6/30/2026 Term</b> <ul style="list-style-type: none"> <li>• <b>All S-SV EMS Counties (1 – Primary, 1 – Alternate)</b> <ul style="list-style-type: none"> <li>○ Nominations: None received</li> </ul> </li> </ul>	<b>Chairperson</b>
<b>G</b>	<b>Officer Elections: 7/1/2024 – 6/30/2026 Term</b> <ul style="list-style-type: none"> <li>• <b>Chairperson</b></li> <li>• <b>Vice-Chairperson</b></li> </ul>	<b>Troy M. Falck, MD</b>
<b>H</b>	<b>S-SV EMS Policy Actions</b>	<b>S-SV EMS Staff</b>
(H-1)	<b>305:</b> Base/Modified Base Hospital Program	Trenton Quirk
(H-2)	<b>460:</b> Tactical Emergency Medical Services (TEMS)	Trenton Quirk
(H-3)	<b>505:</b> Patient Destination	Trenton Quirk
(H-4)	<b>605:</b> EMS Documentation	Jeff McManus
(H-5)	<b>701:</b> ALS Provider Agency Inventory Requirements	Trenton Quirk
(H-6)	<b>705:</b> Prehospital Provider Agency Unit Inspections	Trenton Quirk
(H-7)	<b>706:</b> Equipment & Supply Shortages	Trenton Quirk
(H-8)	<b>715:</b> Biomedical Equipment Maintenance	Trenton Quirk
(H-9)	<b>852:</b> Patient Restraint Mechanisms	Trenton Quirk
(H-10)	<b>C-1P:</b> Pediatric Pulseless Arrest	Brittany Pohley
(H-11)	<b>C-3P:</b> Pediatric Bradycardia – With Pulses	Brittany Pohley
(H-12)	<b>C-4P:</b> Pediatric Tachycardia – With Pulses	Brittany Pohley
(H-13)	<b>M-1P:</b> Pediatric Allergic Reaction/Anaphylaxis	Brittany Pohley
(H-14)	<b>M-5P:</b> Pediatric Ingestions & Overdoses	Brittany Pohley
(H-15)	<b>M-6P:</b> General Pediatric Protocol	Brittany Pohley
(H-16)	<b>M-8P:</b> Pediatric Pain Management	Michelle Moss
(H-17)	<b>M-11:</b> Pediatric Behavioral Emergencies	Michelle Moss

## Sierra – Sacramento EMS Agency – REMAC Meeting Agenda

Item	Title	Leader
(H-18)	<b>N-1P:</b> Pediatric Altered Level of Consciousness	Brittany Pohley
(H-19)	<b>N-2P:</b> Pediatric Seizure	Brittany Pohley
(H-20)	<b>R-1P:</b> Pediatric Foreign Body Airway Obstruction	Brittany Pohley
(H-21)	<b>R-2P:</b> Pediatric Respiratory Arrest	Brittany Pohley
(H-22)	<b>R-3P:</b> Pediatric Acute Respiratory Distress	Brittany Pohley
(H-23)	<b>T-4:</b> Hemorrhage	Michelle Moss
<b>I</b>	<b>EMS Aircraft Provider Reports</b>	<b>Attendees</b>
<b>J</b>	<b>EMS Ground Provider Reports</b>	<b>Attendees</b>
<b>K</b>	<b>Hospital Provider Reports</b>	<b>Attendees</b>
<b>L</b>	<b>S-SV EMS Agency Reports</b>	<b>S-SV EMS Staff</b>
(L-1)	EMS Data System	Jeff McManus
(L-2)	EMS Quality Management	Michelle Moss
(L-3)	Regional Specialty Committees	Michelle Moss
(L-4)	Operations	Patrick Comstock
(L-5)	Regional Executive Director's Report	John Poland
(L-6)	Medical Director's Report	Troy M. Falck, MD
<b>M</b>	<b>Next REMAC Meeting (July 16, 2024, 9:00 am) &amp; Adjournment</b>	<b>Chairperson</b>

Sierra – Sacramento Valley EMS Agency Program Policy			
Base/Modified Base Hospital Program			
	Effective: DRAFT	Next Review: DRAFT	<b>305</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

**PURPOSE:**

To establish requirements for base and modified base hospitals in the S-SV EMS region.

**AUTHORITY:**

- A. HSC, Division 2.5, § 1797.16, 1797.107, 1797.171, 1797.204, 1797.206, 1797.214, 1797.218, 1797.220, 1798.102, and 1798.104.
- B. CCR, Title 22, Division 9, Chapters 3 & 4.

**DEFINITIONS:**

- A. **Base Hospital** – A hospital that meets the requirements contained in this policy, and utilizes S-SV EMS authorized Mobile Intensive Care Nurses (MICNs) and/or emergency department physicians to provide medical direction/supervision to prehospital EMS personnel in the S-SV EMS region. Base hospitals shall have a current base hospital agreement in place with S-SV EMS in order to operate as such.
- B. **Modified Base Hospital** – A hospital that meets the requirements contained in this policy, and utilizes only emergency department physicians to provide medical direction/supervision to prehospital EMS personnel in the S-SV EMS region. Modified base hospitals shall have a current modified base hospital agreement in place with S-SV EMS in order to operate as such.
- C. **Emergency Medical Services Quality Improvement Program (EMSQIP)** – Methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct process, and recognize excellence in performance and delivery of care, pursuant to the provisions of California Code of Regulations, Title 22, Chapter 12 and S-SV EMS policies.

**POLICY:**

S-SV EMS shall designate base and modified hospitals to receive ambulance patients and provide medical direction/supervision to prehospital EMS personnel in the S-SV EMS region.

**PROCEDURE:**

A. An S-SV EMS designated base or modified base hospital shall:

1. Be licensed by the California Department of Public Health as a general acute care hospital.
2. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.
3. Have a special permit for basic or comprehensive emergency medical service pursuant to the provisions of California Code of Regulations, Title 22, Division 5, or have been granted approval by the California EMS Authority for utilization as a base hospital pursuant to the provisions of Section 1798.101 of the California Health and Safety Code.
4. Have and agree to utilize/maintain two-way telecommunications capable of direct two-way voice communication with prehospital EMS personnel.
5. Maintain a record of all online medical direction between prehospital EMS and base/modified base hospital personnel as specified in S-SV EMS policies.
6. Have a written agreement with S-SV EMS, which is reviewed every three (3) years, indicating the concurrence of hospital administration, medical staff and emergency department staff to meet the requirements for program participation as specified in this policy.
7. Designate a base/modified base hospital medical director who shall be a physician on the hospital staff, licensed in the State of California who is certified or prepared for certification by the American Board of Emergency Medicine. The requirement of board certification or prepared for certification may be waived by the S-SV EMS Medical Director. The base/modified base hospital medical director shall be regularly assigned to the emergency department, have experience in and knowledge of base/modified base hospital radio operations and S-SV EMS policies, procedures and protocols, and shall be responsible for functions of the base/modified base hospital including the EMSQIP.
8. Identify a base/modified base hospital coordinator who is a California licensed Registered Nurse with experience in and knowledge of base/modified base hospital operations and S-SV EMS policies, procedures and protocols to act as a prehospital liaison to the local EMS system.
9. Assure that nurses giving medical direction to prehospital personnel are trained and authorized as MICNs by S-SV EMS.

<b>Base/Modified Base Hospital Program</b>	<b>305</b>
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10. Have a physician licensed in the State of California, experienced in emergency medical care, assigned to the emergency department; available at all times to provide immediate medical direction to MICN and/or prehospital EMS personnel. This physician shall have experience in and knowledge of base/modified base hospital radio operations and S-SV EMS policies, procedures and protocols.

11. Ensure that a mechanism exists for prehospital EMS providers to contract for the provision of medications, medical supplies and equipment used for patient care according S-SV EMS policies and procedures.

12. Provide for continuing education in accordance with S-SV EMS policies.

13. Agree to participate in the S-SV EMS EMSQIP, which may include making available all relevant records for program monitoring and evaluation.

B. S-SV EMS may deny, suspend, or revoke base/modified base hospital approval for failure to comply with any applicable policies, procedures, statutes or regulations.

#### **GENERAL PROVISIONS:**

##### **A. Education:**

An S-SV EMS designated base/modified base hospital shall:

1. Act as an education resource for prehospital EMS provider agencies.
2. Maintain approval as an EMS continuing education provider.
3. Provide formal education programs for prehospital EMS personnel.
4. Assist in providing special and mandatory training programs deemed necessary by S-SV EMS.
5. Provide supervised clinical experience for prehospital EMS students/trainees in accordance with CCR, Title 22 and S-SV EMS policies and procedures.
6. Provide clinical skills remediation training for prehospital EMS personnel as needed.

##### **B. EMS System Involvement:**

An S-SV EMS designated base/modified base hospital shall participate in S-SV EMS regional committee meetings and other EMS activities that affect the region.


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C. Patient Care Records:

An S-SV EMS designated base/modified base hospital shall participate in a collaborative manner with S-SV EMS data collection programs.

D. Multi Casualty Incidents/Disaster Planning and Response:

1. An S-SV EMS designated base/modified base hospitals shall reasonably participate in local and regional disaster drills; including utilization of EMResource.
2. An S-SV EMS designated base/modified base hospital shall actively participate in local and regional disaster related planning efforts.
3. During a Multi Casualty Incident (MCI) or disaster, the procedures indicated in applicable MCI plans and S-SV EMS policies shall be followed.

Sierra – Sacramento Valley EMS Agency Program Policy			
Tactical Emergency Medical Services (TEMS)			
	Effective: DRAFT	Next Review: DRAFT	<b>460</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

## PURPOSE:

- A. To define the different types of tactical emergency medical services (TEMS) utilized in the S-SV EMS region.
- B. To establish the training, program approval, utilization and equipment requirements for TEMS programs and personnel.

## DEFINITIONS:

- A. **Tactical Casualty Care (TCC)** – The delivery of specialized TEMS to casualties of active shooter/mass violence incidents by EMS personnel. TCC trained EMS personnel respond as medical support to law enforcement incidents and provide field tactical medical care to casualties usually in an area where there is minimal to no direct or immediate safety threat.
- B. **Tactical Medicine for Special Operations** – The delivery of specialized TEMS to casualties of any active law enforcement incident by law enforcement personnel assigned to a Special Weapons and Tactics (SWAT) operations team. Tactical Medicine for Special Operations personnel respond as an integral part of a SWAT operation team and may provide field tactical medical care to casualties in an area where there is a direct and immediate safety threat.

## AUTHORITY:

- A. HSC, Division 2.5, § 1797.218, 1797.220 & 1798.
- B. CCR, Title 22, Division 9, § 100145 & 100169.
- C. California POST/EMSA Tactical Medicine Operational Programs and Standardized Training Recommendations – July 2009.
- D. California Tactical Casualty Care Training Guidelines (EMSA #370) – June 2017.



**POLICY:**

- A. The tactical incident response environment presents unique challenges to law enforcement personnel and EMS personnel providing emergency medical services in that environment. TEMS personnel must have a clear understanding of law enforcement response and tactics, and the mission-specific objectives of a tactical operation when planning for and providing EMS support.
- B. TEMS trained personnel should be utilized when available to provide emergency medical services during an active shooter/mass violence incident and/or to support law enforcement special operations as appropriate. If necessary, EMS personnel without specific TEMS training may be utilized to provide emergency medical care during these type of incidents as requested/directed by Incident/Unified Command.

**PROCEDURE:****A. Tactical Casualty Care (TCC)****1. Tactical First Aid/TEMS First Responder Operations (FRO) Training Requirement:**

- Tactical First Aid/TEMS FRO training provides EMS personnel basic TCC techniques and a broad overview of law enforcement tactical operations and rescue operations methodologies. Upon course completion, participants will possess basic knowledge and skills to administer TCC to casualties during an active law enforcement incident.
- A minimum of four (4) hours training is required, although eight (8) hours of training is recommended, and shall include the following topics:
  - An overview of the California tactical casualty care initiative and its emergency medical and fire agency personnel response to active law enforcement incidents within state EMS systems.
  - Common tactical and rescue terminology and operations.
  - Description and demonstration of basic tactical casualty care techniques.
  - Casualty movement and evacuation techniques.
  - Medical planning and threat assessment considerations.
  - Comprehensive, competency-based student demonstration and, when applicable, student skills testing.

**2. Tactical Lifesaver/TEMS Technician Training Requirement:**

- Tactical Lifesaver/TEMS Technician training provides EMS personnel more advanced life support tactical medicine techniques and comprehensive instruction on the role of EMS in tactical response planning, response, and inter-department operations when providing medical support to law enforcement personnel during active shooter/mass violence incidents.

- A minimum of 40 hours training is required, and shall include the following topics:
  - Introduction and course administration and safety.
  - An overview of the California tactical casualty care initiative.
  - The role of California EMS personnel as it relates to medical planning, EMS medical support response, and inter-department operations.
  - Common tactical and rescue terminology and operations.
  - Casualty movement and evacuation techniques.
  - Threat assessment considerations.
  - Hemostasis: hemorrhage control management skills.
  - Airway and respiration management skills.
  - Circulation management skills.
  - Environmental injuries management.
  - Medication administration and pain management.
  - Medical aspects of tactical operations.
  - Team health management.
  - Comprehensive, competency-based student demonstration and skills testing.

3. Tactical First Aid/TEMS FRO and/or Tactical Lifesaver/TEMS Technician TCC Training Program Approval:

- S-SV EMS is responsible for approving/monitoring TCC training programs conducted within the S-SV EMS region.
- Programs shall meet the applicable requirements contained in the California Tactical Casualty Care Training Guidelines (EMSA #370) to receive S-SV EMS TCC training program approval.
- Interested entities may contact S-SV EMS to request a TCC training program application.

4. TCC Providers/Personnel:

- BLS/ALS prehospital service providers located within the S-SV EMS region may provide TCC services, in coordination with law enforcement, without the need for special TCC service provider approval.
- Medical direction/oversight of TCC trained personnel is provided by the S-SV EMS Medical Director (through established S-SV EMS policies/protocols), in coordination with local law enforcement.
- Equipment and supplies carried/utilized by TCC trained personnel shall be consistent with items listed in the S-SV EMS Prehospital Provider Agency Inventory Requirements Policy (701).

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**B. Tactical Medicine for Special Operations Programs**

1. The California Commission on Peace Officer Standards and Training (POST) is responsible for approving/monitoring Tactical Medicine for Special Operations training programs.
2. Tactical Medicine for Special Operations TEMS personnel shall successfully complete all initial and ongoing recommended training provided by a POST approved Tactical Medicine for Special Operations training program.
3. Medical direction/oversight of Tactical Medicine for Special Operations personnel is provided by a licensed physician associated with the approved program, in coordination with the S-SV EMS Medical Director. Prehospital EMS personnel shall only provide medical care that is within their approved scope of practice.
4. Tactical Medicine for Special Operations service provider programs require S-SV EMS approval.
5. Equipment and supplies carried/utilized by Tactical Medicine for Special Operations TEMS personnel shall be consistent with the items listed in the 'California POST/EMSA Tactical Medicine Operational Programs and Standardized Training Recommendations' document. Equipment and supplies shall be based on the appropriate level and approved scope of practice of personnel utilized for the particular tactical medicine program.




**Sierra – Sacramento Valley EMS Agency**  
**Tactical Casualty Care (TCC) Training Program Application**  
**Reference No. 460-A**



<input type="checkbox"/> Initial	<input type="checkbox"/> Renewal	<input type="checkbox"/> Program Update			
<b>Level of TCC Program</b>					
<input type="checkbox"/> Tactical First Aid/Tactical Medicine FRO (Minimum 4 hour course, 8 hours recommended)	<input type="checkbox"/> Tactical Life Saver/Tactical EMS Technician (Minimum 40 hour course)				
TCC Program Name:					
CE Provider # (if applicable):					
Street Address:					
City:	State:	Zip Code:			
Telephone:	Fax:	Email:			
Program Director Name:					
Program Director Certification/License Number and Expiration:					
<p>I certify that I have read and understand the S-SV EMS 'Tactical Emergency Medical Services (TEMS)' Policy (460) as well as the California Tactical Casualty Care Training Guidelines (EMSA #370), and that I/this agency will comply with all guidelines, policies, and procedures described therein. I agree to comply with all audit &amp; review provisions required/conducted by the S-SV EMS Agency. Furthermore, I certify that all information on this application is true and correct to the best of my knowledge.</p>					
Program Director Signature		Date			
<b>Required Supporting Documentation</b>					
<input type="checkbox"/> Instructor Resume	<input type="checkbox"/> List of Tactical Medical Scenarios				
<input type="checkbox"/> Course Curriculum/Training Material	<input type="checkbox"/> Written/Skills Examinations				
<input type="checkbox"/> Course Outline with Hourly Description	<input type="checkbox"/> Proposed CE Certificate/Course Completion				
<input type="checkbox"/> Course Safety Policy	<input type="checkbox"/> Fee \$100				
<input type="checkbox"/> List of Psychomotor Skills					
<b>S-SV EMS Agency Use Only</b>					
Application Received	Reviewed By	Approval Date	Renewal Date	CE Provider #	Method of Payment

# Sierra – Sacramento Valley EMS Agency Program Policy

## Patient Destination

	Effective: DRAFT	Next Review: DRAFT	<b>505</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

### 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			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, Colusa & Glenn Counties
Adventist Health +Rideout	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.	REC	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: DRAFT	Next Review: DRAFT	<b>605</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

**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) 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. Any Ambulance Patient Offload Time (APOT) greater than 60 minutes shall be additionally noted/documented in the patient care report narrative (i.e. "delayed patient offload time of greater than 60 minutes" or similar wording).

6. Response, patient care, and/or transport delays shall be adequately documented in the appropriate section(s) of the PCR.
  7. A written or electronic legal signature of the individual completing the PCR is required.
- B. The following information, when available to EMS personnel, 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 and time of symptom onset.
  3. Pertinent medical history, medications, and medication allergies.
  4. Pertinent vital signs.
  5. EMS treatment rendered (time, type, dose, route, response, etc.).
  6. Relevant patient care related documents (DNR/POLST forms, 12 Lead EKGs, cardiac monitor rhythm strips, etc.).
  7. Name, title, and ID of EMS personnel completing the documentation.
- C. PCRs shall be completed within 24 hours of the time of initial EMS request.
- D. Completed PCRs 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 24 hours after the time of initial EMS request.
- E. Any ~~ALS/LALS non-transport provider or transport~~ **EMS** provider **required to complete/submit ePCR data pursuant to this policy, and** who chooses not to utilize the S-SV EMS selected **ImageTrend** ePCR software system, shall submit CEMSIS/NEMSIS compliant 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 Agency 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 of the time of initial

EMS request after completion of the patient encounter (NEMSIS V3.5 data element eTimes.13 – 'Unit Back in Service Date/Time'). Providers shall ensure that their EMS data is continually compatible with the EMS data system utilized by S-SV EMS. Any ePCR record that fails to import shall be identified, corrected, and re- successfully submitted no later than seven (7) calendar days after the original incident date to the EMS data system utilized by S-SV EMS within seventy-two (72) hours after completion of the patient encounter (NEMSIS V3.5 data element eTimes.13 – 'Unit Back in Service Date/Time').

- F. 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			
ALS Provider Agency Inventory Requirements			
	Effective: 06/01/2024	Next Review: As Needed	<b>701</b>
	Approval: Troy M. Falck, MD – Medical Director		SIGNATURE ON FILE
	Approval: John Poland – Executive Director		SIGNATURE ON FILE

#### **PURPOSE:**

To establish a standardized inventory for ALS response vehicles in the S-SV EMS region.

#### **AUTHORITY:**

California Health and Safety Code, Division 2.5, § 1797.204 and 1797.220.

California Code of Regulations, Title 22, Division 9.

California Code of Regulations, Title 13.

California Vehicle Code, Section 2418.5.

Emergency Medical Services Authority Guidelines and Recommendations, Highway Patrol Handbook 82.4.

#### **POLICY:**

All S-SV EMS approved ALS response vehicles shall carry the minimum equipment and supply inventory listed in this policy. Reasonable variations may occur; however, any exceptions or additions shall have prior S-SV EMS approval.

<b>ALS Provider Agency Inventory Requirements</b>	<b>701</b>
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<b>Radio Equipment &amp; Miscellaneous Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Mobile UHF Med-Net Radio	1	Optional
Portable UHF Med-Net Radio <b>OR</b> Mobile Telephone	1	1
Maps (paper or electronic covering normal service area)	1	1
DOT Emergency Response Guidebook (ERG)	1	1
FIRESCOPE Field Operations Guide (FOG)	1	1
NEMSIS Version 3.4 Compliant Electronic PCR System	1	1
Refusal of EMS Care Forms	10	5
Triage Ribbon System	Optional	Optional
DMS All Risk Triage Tags	10	10
Triage Kit (MCI vests for 'Triage Unit Leader' and 'Medical Group Supervisor', pens, trauma shears, clipboard, patient tracking sheets, START Triage reference sheet, barrier tape, glow sticks)	1	Optional
Non-Sterile Gloves (various sizes)	10 pr. each	10 pr. each
Infection Control Kit with Particulate Filter Respirator (N95, etc.)	1 per crew	1 per crew
Antiseptic Hand Wipes <b>OR</b> Waterless Hand Sanitizer	10 <b>OR</b> 1	10 <b>OR</b> 1
Covered Waste Container (red biohazard bags acceptable)	1	1
Adult, Pediatric & Thigh BP Cuff	1 each	1 each
Stethoscope	1	1
Flashlight <b>OR</b> Penlight	1	1
Bedpan <b>OR</b> Fracture Pan	1	0
Urinal	1	0
Sharps Container	1	1
Padded Soft Wrist & Ankle Restraints	1 set	Optional
<u>Lightweight, Sheer, Protective Mesh Hood (Spit Hood)</u>	<u>Optional</u>	<u>Optional</u>
Pillows, Sheets, Pillowcases & Towels	2 each	0
Blankets	2	1
Emesis Basin/Disposable Emesis Bags	2	1
Length Based Pediatric Resuscitation Tape	1	1
Ambulance Cot & Vehicle Securing Equipment	1	0
Collapsible Stretcher/Breakaway Flat	1	Optional
Soft Stretcher/Portable Patient Transport Unit (MegaMover, etc.)	Optional	Optional
Stair Chair	Optional	Optional

<b>ALS Provider Agency Inventory Requirements</b>	<b>701</b>
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<b>Biomedical Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Mechanical Chest Compression Device (S-SV EMS approved)	Optional	Optional
Thermometer	1	1
Pulse Oximeter	1	1
Portable Monitor/Defibrillator (capable of synchronized cardioversion, transcutaneous pacing, 12 Lead ECG with printout and waveform capnography)	1	1
Spare Monitor/Defibrillator Battery	1	1
Adult Defibrillator Electrodes <b>OR</b> Paddles with Pads/Gel	2 sets	2 sets
Pediatric Defibrillator Electrodes <b>OR</b> Paddles with Pads/Gel	1 set	1 set
Monitor/Defibrillator Electrode Leads/Wires	2 sets	1 set
Monitor/Defibrillator ECG Paper	1 roll	1 roll
Adult/Pediatric ECG Electrodes	48	24
CO-Oximeter	Optional	Optional
Glucometer	1	1
Glucometer Test Strips	10	5
Lancets	10	5
<b>Airway &amp; Oxygen Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Ambulance Mounted 'H' or 'M' Oxygen Tank	1	0
Ambulance Wall Mounted Oxygen Regulator with Liter Flow	1	0
Portable 'D' or 'E' Oxygen Cylinder	2	1
Portable Oxygen Regulator with Liter Flow	1	1
Nasal Cannula	4	2
Adult Non-Rebreather Oxygen Mask	4	2
Pediatric Oxygen Mask	2	1
Handheld Nebulizer & Aerosol/Nebulizer Mask	2 each	1 each
Disposable CPAP Circuit with Mask	2	1
Adult Bag Valve Mask (BVM) With S, M & L Adult Masks	1	1
Pediatric Bag Valve Mask (BVM) With Neonate & Child Masks	1	1
BVM PEEP Valve	Optional	Optional
Inspiratory Impedance Threshold Device (ITD)	Optional	Optional
Oropharyngeal Airways: Sizes 40 mm – 110 mm or Equivalent	2 each	1 each



# ALS Provider Agency Inventory Requirements

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Airway & Oxygen Equipment/Supplies (continued)	ALS Transport	ALS Non-Transport
Nasopharyngeal Airways: Sizes 20 Fr – 34 Fr or Equivalent	2 each	1 each
Water Soluble Lubricant	2	1
Ambulance Mounted Suction Unit	1	0
Portable Mechanical Suction Unit	1	1
Spare Suction Canisters/Bags with Lids	2	Optional
Tonsillar Tip Suction Handle	2	1
Suction Catheters: Sizes 6 Fr – 14 Fr	1 each	1 each
Video Laryngoscope Device with Adult & Pediatric Blades	Optional	Optional
Laryngoscope Handle	1	1
Straight (Miller) Laryngoscope Blades: Sizes 0 – 4	1 each	1 each
Curved (Macintosh) Laryngoscope Blades: Sizes 3, 4	1 each	1 each
Spare Laryngoscope Handle Batteries	1 set	1 set
Spare Laryngoscope Blade Bulb (if not using disposable blades)	1	1
Magill Forceps: Adult & Pediatric	1 each	1 each
Cuffed Endotracheal Tubes: Sizes 6.0, 6.5, 7.0, 7.5, 8.0, 8.5	2 each	1 each
Adult Endotracheal Tube Stylet	2	1
Flex Guide ETT Introducer	2	1
i-gel Airway Devices: Sizes 1.0, 1.5, 2.0, 2.5	1 each	1 each
i-gel Airway Devices: Sizes 3, 4, 5	1 each	1 each
Advanced Airway Tube/Device Holder	2	1
Mainstream EtCO <sub>2</sub> Disposable Capnography Circuit	2	1
Sidestream EtCO <sub>2</sub> Disposable Capnography Circuit	2	1
<u>Sidestream EtCO<sub>2</sub> Disposable Capnography Circuit, Pediatric</u>	<u>2</u>	<u>1</u>
<b>Cricothyrotomy Equipment (one of the following sets)</b> <ul style="list-style-type: none"> <li>• Jet ventilation device with adult &amp; pediatric transtracheal catheters or a minimum 12 ga x 3" airway catheter; <b>OR</b></li> <li>• Adult (4.0 mm) &amp; pediatric (2.0 mm) Rusch QuickTrach Needle Cricothyrotomy Device; <b>OR</b></li> <li>• ENK Flow Modulator Kit</li> </ul>	1 set	1 set
Minimum 14 ga x 3.25" Needle Thoracostomy Catheter	2	2
Needle Thoracostomy Catheter One-Way Valve	Optional	Optional

<b>ALS Provider Agency Inventory Requirements</b>	<b>701</b>
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<b>Immobilization Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Kendrick Extrication Device (KED) or Equivalent	1	Optional
Adult Long Spine Board with Straps	2	1
Pediatric Spine Board	1	1
Head Immobilization Set	2	1
Rigid C-Collars: Sizes Pediatric & S, M, L Adult <b>OR</b> Adjustable	2 each	2 each
XCollar Plus	Optional	Optional
Approved Commercial Pelvic Binder	Optional	Optional
Arm & Leg Splints (SAM, cardboard, vacuum, etc.)	2 each	2 each
Traction Splint	1	1
<b>Obstetrical Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
OB Kit (gloves, cord clamps, dressings, bulb syringe, cap, etc.)	2	1
<b>Bandaging Equipment/Supplies</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Band-Aids	10	10
Bandage Shears	1	1
1" & 2" Adhesive Tape Rolls	2 each	1 each
Non-Sterile 4x4 Compresses	50	10
Sterile 4x4 Compresses	10	5
2", 3" or 4" Kling/Kerlix Rolls	5	2
Triangular Bandages	4	2
Surgipads	Optional	Optional
Trauma Dressing	2	1
Petroleum Gauze	2	2
Chest Seal (Asherman, Bolin, Halo, HyFin, SAM or equivalent)	Optional	Optional
Approved Hemostatic Agent	Optional	Optional
Approved Commercial Tourniquet Device	2	2
Hydrogen Peroxide	Optional	Optional
1000 mL Sterile Irrigation Solution	2	1
Potable Water	2 liters	2 liters
Cold Packs & Heat Packs	4 each	2 each

# ALS Provider Agency Inventory Requirements

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IV/IO Access & Medication Administration Equipment/Supplies	ALS Transport	ALS Non-Transport
Alcohol Swabs	20	10
Chlorhexidine Swabs/Skin Prep	5	5
IV Start Pack or Equivalent (with tourniquet)	4	2
IV Catheter: Sizes 14 ga, 16 ga, 18 ga, 20 ga	6 each	2 each
IV Catheter: Sizes 22 ga, 24 ga	4 each	2 each
Micro-Drip & Macro-Drip IV Set <b>OR</b> Selectable Drip IV Set	4 each	2 each
Blood Administration Set	Optional	Optional
Buretrol Set	Optional	Optional
IV Flow Regulator Set (Dial-A-Flo)	Optional	Optional
IV Extension Set	4	2
Saline Locks	Optional	Optional
3-Way Stopcock	2	1
10 mL NS Vials or Pre-Filled Syringes	Optional	Optional
IV Fluid Pressure Infusion Bag	1	1
IV Fluid Warmer	Optional	Optional
Syringes: Sizes: 1 mL, 3 – 5 mL, 10 mL	3 each	2 each
50 – 60 mL Syringe	1	1
22 ga, 25 ga Safety Injection Needles	2 each	2 each
Filter Needle (only if utilizing medications in ampules)	2	2
Vial Access Cannulas	2	2
Mucosal Atomizer Device (MAD)	2	2
Arm Boards: Sizes Short & Long	2 each	1 each
Vacutainer Holder, Needle & Blood Collection Tubes	Optional	Optional
<u>IO Equipment (one of the following sets)</u> <ul style="list-style-type: none"> <li>• Pediatric Bone Injection Gun or New Intraosseous Device (2 Transport, 1 Non-Transport)</li> <li>• Adult New Intraosseous Device (2 Transport, 1 Non-Transport)</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• EZ-IO, SAM IO, or BD IO Driver (1 Transport, 1 Non-Transport)</li> <li>• 15 mm Needle Set (Optional)</li> <li>• 25 mm Needle Set <ul style="list-style-type: none"> <li>○ If carrying 15 mm Needle Set (1 Transport, 1 Non-Transport)</li> <li>○ If not carrying 15 mm Needle Set (2 Transport, 1 Non-Transport)</li> </ul> </li> <li>• 45 mm Needle Set (1 Transport, 1 Non-Transport)</li> </ul>		

**ALS Provider Agency Inventory Requirements****701**

<b>IV Solutions</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Lactated Ringers 1000 mL Bag	Optional	Optional
Normal Saline and/or 5% Dextrose 100 mL Bag	Optional	Optional
Normal Saline 250 mL Bag	2	1
Normal Saline 1000 mL Bag	6	2
<b>Medications</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Acetaminophen – IV (1000 mg/100 mL)	2	2
<u>Acetaminophen – PO (960 mg/30 mL)</u>	<u>1</u>	<u>1</u>
Activated Charcoal	50 gm	Optional
Adenosine (6 mg/2 mL)	3	3
Albuterol (2.5 mg/3 mL)	6	4
Amiodarone (150 mg/3 mL)	6	3
Aspirin (chewable tablets)	8	8
Atropine (1 mg/10 mL)	2	2
Calcium Chloride (1 gm/10 mL)	4	2
Dextrose 10% (250 mL bag)	3	2
Diphenhydramine (50 mg/1 mL)	2	2
Diphenhydramine elixir (100 mg)	1	1
Epinephrine 1:1,000 (1 mg/1 mL – 1 mL vial or ampule)	5	5
Epinephrine 1:10,000 (1 mg/10 mL)	8	4
Glucagon (1 mg)	1	1
Glucose Oral Product (minimum 15 gm)	2	1
Ipratropium (500 mcg/2.5 mL)	2	2
Ketorolac (30 mg/1 mL)	2	2
Lidocaine 2% (100 mg/5 mL)	2	2
Mark-1/DuoDote Kit	Optional	Optional
Naloxone (2 mg/2 mL)	4	2
Nitroglycerin 0.4 mg (tablet bottle or aerosol spray)	2	1
Ondansetron (4 mg/2 mL)	6	2
Ondansetron Oral Disintegrating Tablets (4 mg)	4	2
Sodium Bicarbonate (50 mEq/50 mL)	2	1
Tranexamic Acid (1 gm/10 mL)	Optional	Optional

<b>ALS Provider Agency Inventory Requirements</b>	<b>701</b>
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<b>Controlled Substances</b>	<b>ALS Transport</b>	<b>ALS Non-Transport</b>
Controlled Substances Locking Storage Container	1	1
Controlled Substances Tracking Sheet	1	1
Capuject Holder (only if utilizing capuject supplied medications)	1	1
Fentanyl (50 mcg/1 mL concentration)	400 mcg minimum 1000 mcg maximum	400 mcg minimum 1000 mcg maximum
Ketamine (50 mg/1 mL concentration)	500 mg maximum	500 mg maximum
Midazolam (5 mg/1 mL concentration)	20 mg minimum 60 mg maximum	20 mg minimum 60 mg maximum

Sierra – Sacramento Valley EMS Agency Program Policy			
Prehospital Provider Agency Unit Inspections			
	Effective: DRAFT	Next Review: DRAFT	<b>705</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

**PURPOSE:**

To establish procedures for conducting annual and unannounced unit inspections that ensure prehospital EMS provider compliance with S-SV EMS inventory requirements.

**AUTHORITY:**

- A. HSC, Division 2.5, § 1797.204 & 1797.220.
- B. CCR, Title 22, Division 9.
- C. CVC, § 2418.5.
- D. CHP Ambulance Driver's Handbook 82.4, Title 13.

**POLICY:**

S-SV EMS representatives will conduct inspections of all BLS/LALS/ALS transport and LALS/ALS non-transport EMS provider vehicles within the S-SV EMS region. The inspections will occur once a year as scheduled or any time without prior notice.

**PROCEDURE:**

- A. Annual Unit Inspections:
  - 1. An S-SV EMS representative will contact the prehospital EMS provider to schedule annual inspections.
  - 2. Providers shall complete a S-SV EMS 705-A form prior to inspection.
  - 3. The annual inspection will consist of an complete examination of S-SV EMS required inventory, including visual inspection of expiration dates on medications and supplies and an operational demonstration of all required equipment.

4. The S-SV EMS representative will **may** also examine the unit's-controlled substance medications/records, if applicable, for compliance with S-SV EMS Management of Controlled Substances Policy.

**B. Unannounced Unit Inspections:**

1. When conducting an unannounced inspection, the S-SV EMS representative will notify a crew member on the unit to be inspected of the intent to conduct an inspection.
2. The unit will not be removed from service; however, dispatch will be notified of the inspection.
3. In the event an emergency call comes in and it is necessary for the unit to respond, the inspection will be discontinued.
4. When conducting the inspection, the S-SV EMS representative will inspect the unit's required equipment and supplies to ensure compliance with S-SV EMS policies.

**C. General Information:**

1. In the event the S-SV EMS representative determines there is a deficiency with equipment or supplies, the representative may advise the supervisor of the unit that there is a deficiency and give them the opportunity to immediately correct the deficiency. If the supervisor cannot correct the deficiency, and the S-SV EMS representative feels the deficiency may compromise patient care, the unit may be removed from service until corrections are made.
2. The S-SV EMS representative will complete an inspection report for every unit inspected.
  - The inspection report will indicate the type of inspection, and any deficiencies or issues identified.
  - Completed inspection reports will be maintained by S-SV EMS, with a copy provided to the EMS prehospital provider upon request.



# S-SV EMS Agency Vehicle Inspection Form

705-A

## EMS PROVIDER & INSPECTION TYPE/DETAILS

EMS Provider Name:

☐ Initial/New Vehicle Inspection    ☐ Annual Vehicle Inspection    ☐ Unannounced Vehicle Inspection

Inspection Date:

Inspection Location:

## UNIT DETAILS & INSPECTION RESULTS

Unit ID	Year	Make	Model	Mileage	Type/Level: (ALS, BLS, Ambulance, Non-Transport, etc.)	Inspection Results
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient





S-SV EMS Agency Vehicle Inspection Form

705-A

UNIT DETAILS & INSPECTION RESULTS (continued)						
Unit ID	Year	Make	Model	Mileage	Type/Level: (ALS, BLS, Ambulance, Non-Transport, etc.)	Inspection Results
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
						<input type="checkbox"/> Passed <input type="checkbox"/> Deficient
VEHICLE INSPECTION COMMENTS (INCLUDING DETAILS OF ANY DEFICIENCIES)						
Name/Title of S-SV EMS Staff Conducting Inspection:						

Sierra – Sacramento Valley EMS Agency Program Policy			
Equipment & Supply Shortages			
	Effective: DRAFT	Next Review: DRAFT	<b>706</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

**PURPOSE:**

To provide direction to EMS prehospital provider agencies regarding notifications and procedures for current or anticipated equipment/supply shortages.

**AUTHORITY:**

- A. HSC, Division 2.5.
- B. CCR, Title 22, Division 9.


**POLICY:**

- A. This policy applies to instances when an equipment/supply shortage is the result of a manufacturers recall, manufacturers back order, or is otherwise confirmed to be unavailable from routine equipment/supply vendors.
- B. EMS prehospital provider agencies are encouraged to maintain relationships with multiple vendor sources, when possible, in order to prevent or minimize disruption to the delivery of EMS prehospital patient care.
- C. EMS prehospital provider agencies shall attempt to procure equipment/supplies from any reasonably available vendor source prior to notifying S-SV EMS and requesting assistance/direction. S-SV EMS notification shall be made timely enough to allow for appropriate assistance/direction prior to impacting EMS prehospital patient care.

**PROCEDURE:**

- A. If an EMS prehospital provider agency becomes aware of a current or anticipated equipment/supply shortage beyond their control, they shall first attempt to mitigate the situation utilizing the following means:
  - 1. Attempt to procure the identified equipment/supplies from reasonably available alternate vendor sources.

2. Complete a full inventory of the identified equipment/supplies (including restock supplies, back up vehicles and any other storage location), and rotate available stock to in-service vehicles.
- B. In the event of an acute equipment/supply shortage (i.e., manufacturer recall), the EMS prehospital provider agency shall immediately notify S-SV EMS.
- C. Once S-SV EMS is notified of a current or anticipated equipment/supply shortage, any of the following actions may be implemented:
1. Assist the EMS prehospital provider agency in identifying other sources to procure the identified equipment/supplies.
  2. Approve a temporary policy variance allowing the EMS prehospital provider agency to utilize the identified equipment/supplies in an alternate method, preparation, or concentration.
  3. Approve a temporary policy variance allowing the EMS prehospital provider agency to stock less than the minimum required inventory of the identified equipment/supplies.
  4. Approve a temporary policy variance allowing the EMS prehospital provider agency to utilize appropriate substitute equipment/supplies.
  5. Other direction as determined appropriate by the S-SV EMS Medical Director.
- D. Any S-SV EMS variance will be approved on a temporary basis, and will only apply to the applicable equipment/supply shortage identified. EMS prehospital provider agencies shall continually attempt to procure the identified equipment/supplies. EMS prehospital provider agencies shall update S-SV EMS on the status of this procurement on a regular basis and/or when the temporary variance is no longer needed.
- E. When notified of an acute or potential equipment/supply shortage that has the potential to affect multiple EMS prehospital provider agencies, S-SV EMS will notify appropriate providers as soon as possible and will provide any necessary direction.

Sierra – Sacramento Valley EMS Agency Program Policy			
Biomedical Equipment Maintenance			
	Effective: DRAFT	Next Review: DRAFT	<b>715</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

## PURPOSE:

To ensure EMS prehospital providers establish/maintain an adequate biomedical equipment maintenance program, and that pertinent equipment malfunctions are reported to S-SV EMS in a timely manner.

## AUTHORITY:


- A. HSC, Division 2.5, § 1797.204, 1797.220.
- B. CCR, Title 22, Division 9, Chapters 2, 3 and 4.

## POLICY:

- A. EMS prehospital providers in the S-SV EMS region shall have a maintenance program for biomedical equipment utilized for patient care in the prehospital setting.
- B. Periodic **P**reventative maintenance on biomedical equipment shall meet or exceed the criteria recommended by the manufacturer.
- C. Individuals performing scheduled maintenance or repair shall possess the necessary credentials recommended by the manufacturer.
- D. EMS prehospital providers shall immediately remove from service any biomedical equipment suspected of malfunctioning. Any malfunctioning biomedical equipment shall not be placed back into service until properly serviced or repaired by the manufacturer or manufacturer's authorized service program.
- E. Biomedical equipment suspected of malfunctioning, which may have adversely affected patient care shall be:
  - 1. Immediately reported to an on-duty supervisor.
  - 2. Immediately reported to the RN or physician staff at the receiving facility, if the malfunctioning equipment impacted or has a potential to impact patient health and well-being.

<b>Biomedical Equipment Maintenance</b>	<b>715</b>
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- 1                    3. Reported to S-SV EMS by the end of the next business day. This report shall  
2                    include the EMS prehospital providers name, date of incident, type/model of  
3                    device, patient's name, run number, description of incident, impact on patient  
4                    care, actions taken at the time of reporting, and current location/status of  
5                    equipment.  
6
- 7                    F. Records documenting compliance with this policy shall be subject to review and  
8                    inspection by S-SV EMS representatives.

Sierra – Sacramento Valley EMS Agency Program Policy			
Patient Restraint Mechanisms			
	Effective: DRAFT	Next Review: DRAFT	<b>852</b>
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

## 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, Division 2.5, § 1797.202, 1797.220, and 1798.
- B. CCR, Title 22.
- C. 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:

- If a patient is combative, such that harm to self or others is likely, consider chemical restraint as follows:
  - Pediatric patients: Contact base/modified base hospital for consultation.
  - Adult patients: Midazolam\* 5 mg IV/IO **OR** 10 mg IM/IN.

\*Continuous cardiac & EtCO<sub>2</sub> monitoring required following administration of midazolam.

**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.



**Pediatric Pulseless Arrest**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

**INFANT CPR****CHILD CPR**

- Perform chest compressions with minimal interruptions ( $\leq 10$  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 1/2")
- Compression/ventilation ratio:
  - 1 rescuer: 30:2
  - 2 rescuer: 15:2
- Perform CPR during AED/defibrillator charging & resume CPR immediately after shock

- Perform chest compressions with minimal interruptions ( $\leq 10$  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****ADVANCED AIRWAY 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

- 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<sub>2</sub> is indicative of ROSC
  - Persistently low PETCO<sub>2</sub> levels (<10 mmHG) suggest ROSC is unlikely

**TREAT REVERSIBLE CAUSES****TERMINATION OF RESUSCITATION**

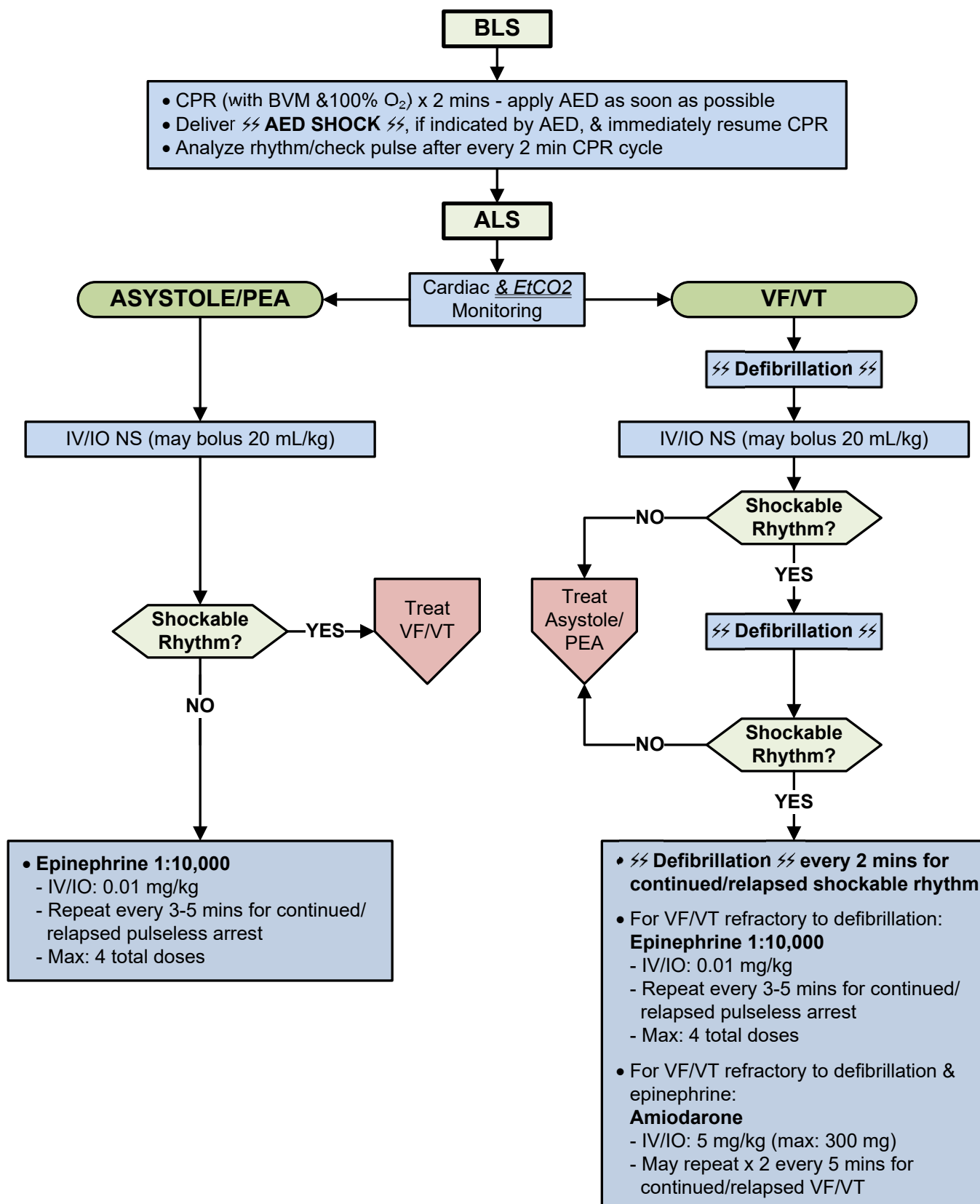
- Hypovolemia
  - Hypoxia
  - Hydrogen Ion (acidosis)
  - Hypo-/hyperkalemia
  - Hypothermia
  - Tamponade, cardiac
  - Tension pneumothorax
  - Thrombosis, pulmonary
  - Thrombosis, cardiac
  - Toxins
- ① Refer to Hypothermia & Avalanche/Snow Immersion Suffocation Resuscitation Protocol (E-2) or Traumatic Pulseless Arrest Protocol (T-6) as appropriate
- ① Contact the base/modified base hospital for consultation & orders as appropriate
- ① Consider early transport of pts who have reversible causes that cannot be adequately treated in the prehospital setting

- Base/Modified Base Hospital Physician Order Only**
- If non-shockable rhythm persists, despite appropriate, aggressive ALS interventions for 30 mins (or if ETCO<sub>2</sub> 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



**Pediatric Bradycardia – With Pulses**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

**Search For Possible Contributing Factors**

- Hypovolemia
- Hypoxia
- Hydrogen Ion (Acidosis)
- Hypo-/hyperkalemia
- Hypothermia
- Tamponade, cardiac
- Tension pneumo
- Thrombosis, pulmonary
- Thrombosis, cardiac
- Toxins

**Signs of Cardiopulmonary Compromise**

- Acutely altered mental status
- Hypotension
- Signs of shock

**BLS**

- Assess and support ABC's
- High flow O<sub>2</sub>
- Assess V/S, including SpO<sub>2</sub>
- **Start CPR if HR <60/min with signs of poor perfusion despite oxygenation/ventilation**

**ALS**

- Cardiac monitor
- Consider IV/IO NS (may bolus 20 mL/kg)

**Persistent  
symptomatic  
bradycardia?**

NO

Monitor &  
reassess

YES

- Epinephrine 1:10,000**
- IV/IO: 0.01 mg/kg (0.1 mL/kg)
- Repeat every 3-5 mins

- Atropine (if no response to epinephrine)**
- IV/IO: 0.02 mg/kg
- Min dose: 0.1 mg
- Max single dose: 0.5 mg

**Base Hospital Order Only**

- Transcutaneous pacing



## Pediatric Tachycardia – With Pulses

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

## Signs of Cardiopulmonary Compromise

- Acutely altered mental status

- Hypotension

- Signs of shock

## BLS

- Assess & support ABC's
- High flow O<sub>2</sub>
- Assess V/S, including SpO<sub>2</sub>

## ALS

- Cardiac **and EtCO<sub>2</sub>** monitoring, 12-lead ECG at appropriate time
- Consider IV/IO NS (may bolus 20 mL/kg)

## Probable Sinus Tachycardia

- P waves present & normal
- Variable R-R & constant P-R
- Infants: rate usually <220
- Children: rate usually <180

Treat underlying cause

Monitor &amp; reassess

## Probable SVT

- P waves absent or abnormal
- HR not variable
- Infants: rate usually ≥220
- Children: rate usually ≥180

Cardiopulmonary  
compromise?

NO

Vagal Maneuver

Vagal Maneuver  
successful?

NO

## Adenosine (Base Hospital Order Only)

- 1<sup>st</sup> dose: 0.1 mg/kg rapid IV/IO (max 6 mg), followed with 20 mL IV/IO NS flush
- If rhythm does not convert within 1-2 min:
- 2<sup>nd</sup> dose: 0.2 mg/kg rapid IV/IO (max 12 mg), followed with 20 mL IV/IO NS flush

## Probable VT

Cardiopulmonary  
compromise?

NO

YES

Synchronized Cardioversion  
Base Hospital Order Only

- Initial dose: 0.5-1 J/kg
- Subsequent doses: 2 J/kg
- Consider sedation

Contact base hospital for  
consultation as needed



## Pediatric Allergic Reaction/Anaphylaxis

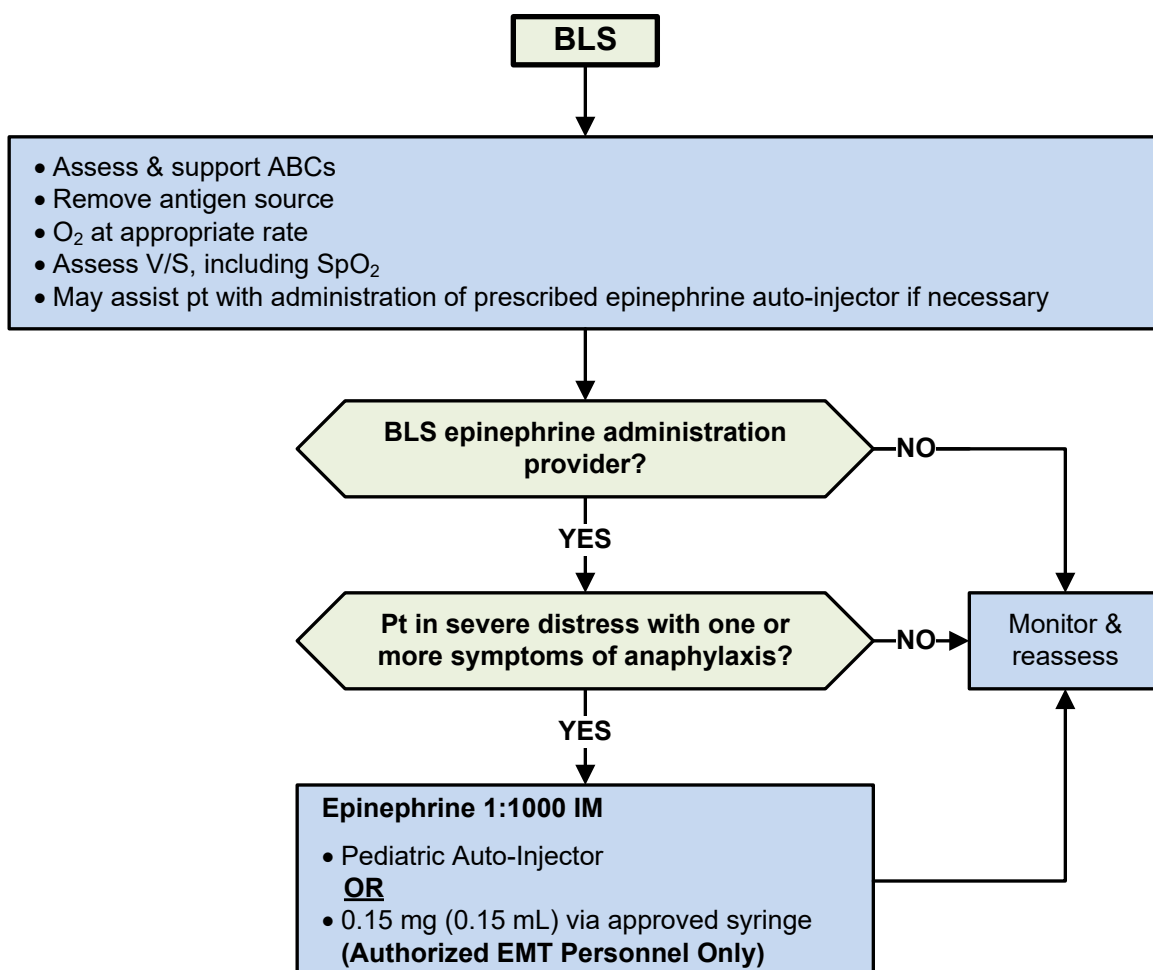
Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

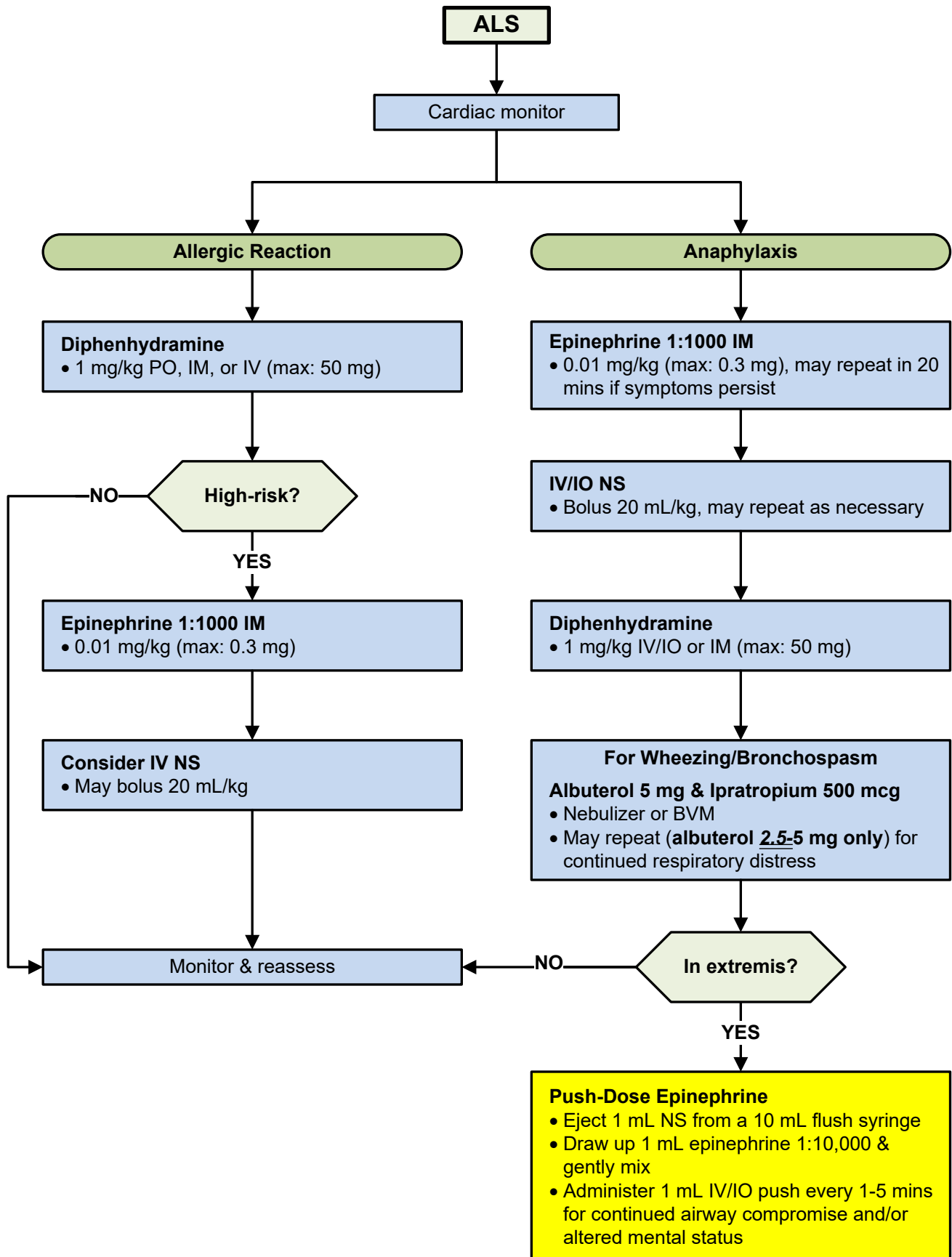
- **Allergic reaction:** Sensitivity to an allergen causing hives, pruritus, flushing, rash, nasal congestion, watery eyes, and/or angioedema not involving the airway.
- **High-risk allergic reaction:** Allergic reaction with a history of anaphylaxis, or significant exposure with worsening symptoms.
- **Anaphylaxis:** Severe allergic reaction with one or more of the following symptoms: abnormal appearance (agitation, restlessness, somnolence), respiratory distress, bronchospasm/wheezes/diminished breath sounds, hoarseness, stridor, edema involving the airway, diminished perfusion.
- **In extremis:** Anaphylaxis with one or more of the following symptoms: airway compromise, altered mental status, hypotension.
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.



SEE PAGE 2 FOR ALS TREATMENT



## Pediatric Allergic Reaction/Anaphylaxis



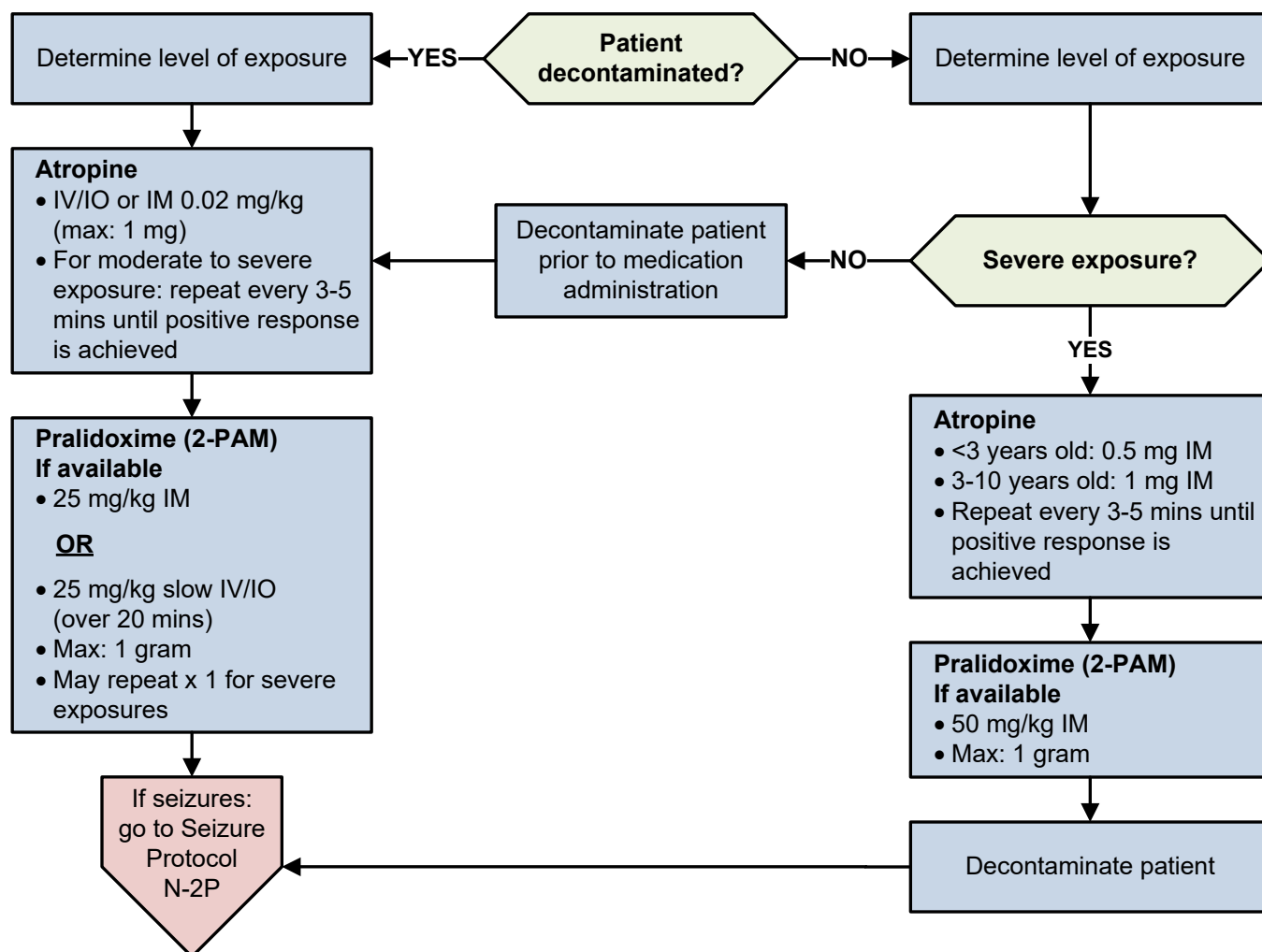




## Pediatric Overdose/Poisoning

**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





**Pediatric General Medical Treatment**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- The purpose of this protocol is to provide standing order assessment/treatment modalities for pediatric pt complaints not addressed by other S-SV EMS treatment protocols – including nausea/vomiting, BRUE & suspected shock.
- Neonatal Resuscitation Protocol (C-1N) shall be utilized for pts during the first 28 days of life.
- Pediatric protocols shall be utilized for pts >28 days old up to and including 14 years of age.
- Utilize applicable adult protocols when there is not a pediatric protocol applicable to the pt's complaint/condition.
- A parent/reliable family member reported weight, length-based pediatric resuscitation tape or Handtevy shall be utilized for determining sizes of equipment, defibrillation/cardioversion doses & medications doses.

**Normal Vital Signs & Hypotension Definition for Neonate & Pediatric Patients**

Age	Normal Pulse Rate	Normal Resp. Rate	Normal SBP	Hypotension
<28 days	100 - 205	30 - 50	60 - 80	SBP <60
1-12 months	90 - 180	30 - 50	70 - 100	SBP <70
1-2 years	80 - 140	24 - 40	80 - 110	SBP <70
3-5 years	65 - 120	20 - 30	90 - 110	SBP <70
6-9 years	60 - 120	20 - 30	100 - 120	SBP <70
10-14 years	50 - 100	12 - 20	100 - 120	SBP <70

**BLS**

- Assess V/S, including SpO<sub>2</sub> & temperature (if able)
- O<sub>2</sub> at appropriate rate if pt hypoxemic (SpO<sub>2</sub> <94%), short of breath, cyanotic, or has signs of shock
- Assess and obtain medical history

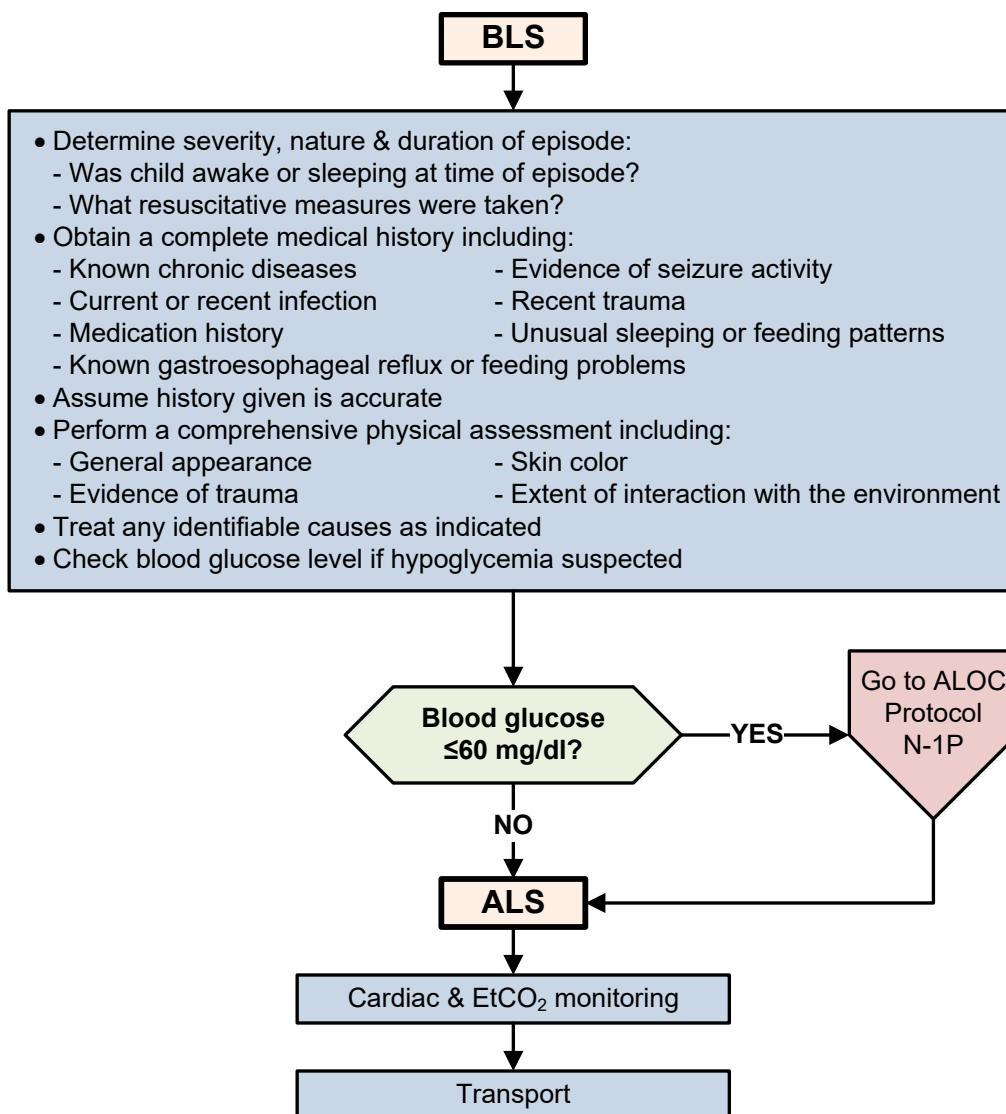
- Refer to other pages/sections of this protocol as applicable/appropriate:
  - BRUE - Page 2
  - Suspected Sepsis - Page 3
  - Nausea/Vomiting - Page 4

**ALS**

- Consider the following additional assessment/treatment modalities, as appropriate based on pt's condition & clinical presentation
  - Cardiac monitor/12-lead EKG
  - EtCO<sub>2</sub> monitoring
  - IV/IO NS (may bolus up to 1000 mL if indicated)

**Pediatric General Medical Treatment****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
  - Absent, decreased, or irregular breathing
  - Marked change in tone (hyper- or hypotonia)
  - 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.



## Pediatric General Medical Treatment

## Suspected Shock/Sepsis

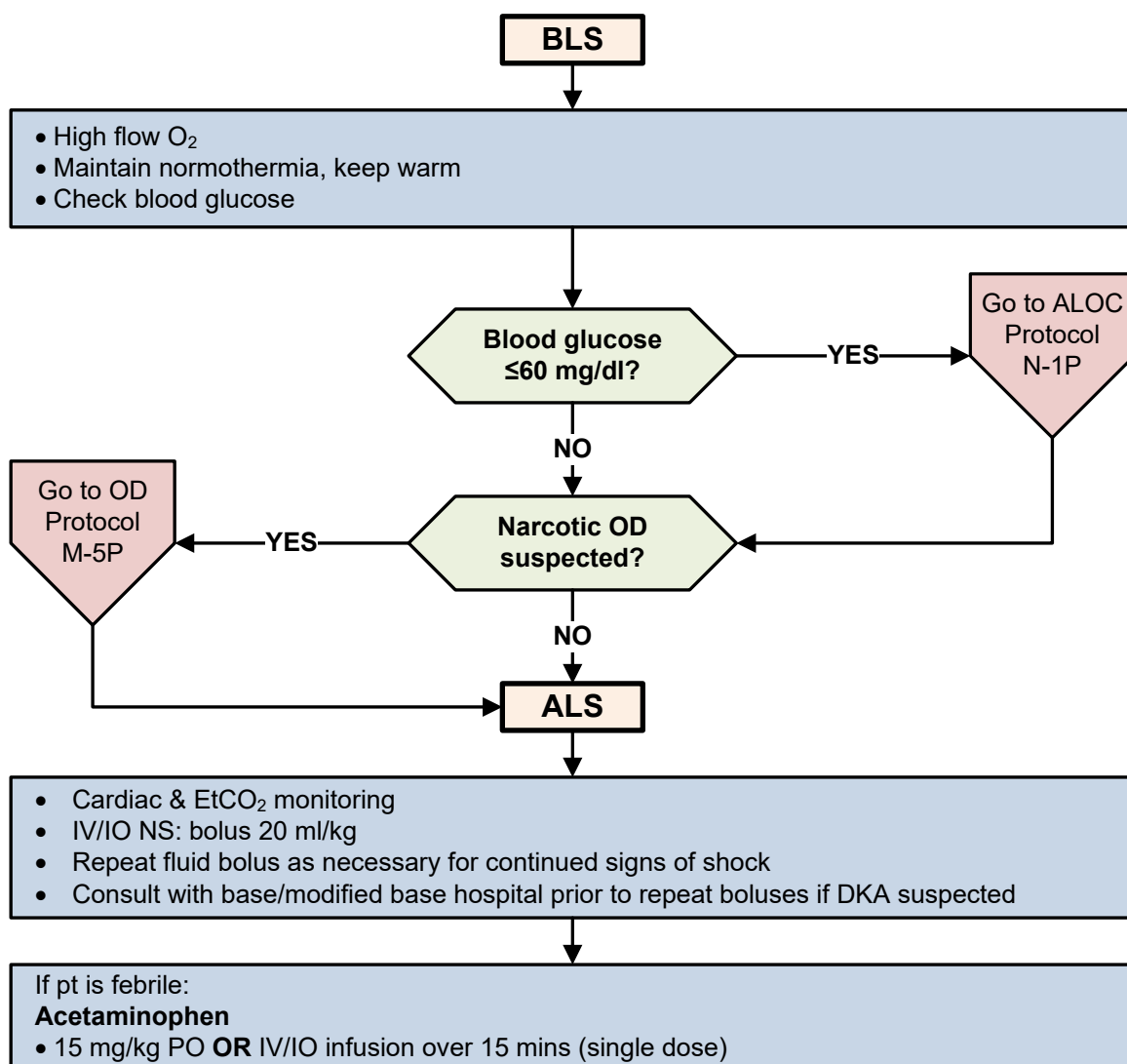
- Shock/Sepsis may be subtle and difficult to recognize.
- Early recognition of sepsis is critical to expedite hospital care and antibiotic administration.
- Septic pts are susceptible to traumatic lung injury. If BVM ventilation is necessary, avoid excessive tidal volumes.
- Obtain history including:
  - Onset and duration of symptoms
  - Fever/Infection/Trauma/Ingestion
  - Fluid loss (vomiting/diarrhea)
  - 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

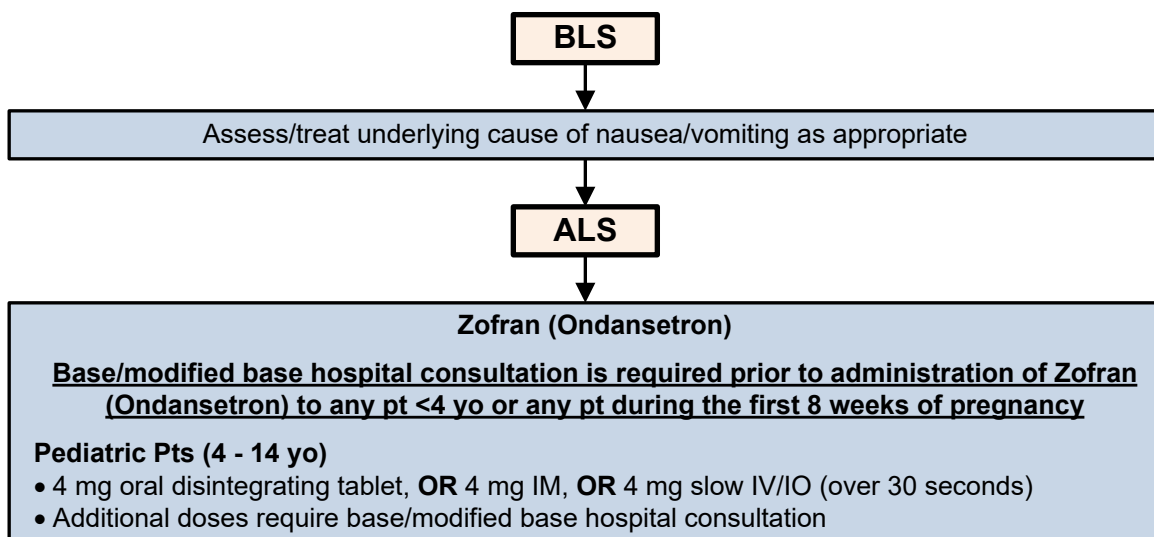




## Pediatric General Medical Treatment

## 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.





## Pediatric Pain Management

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- 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.
- Consideration should be given to 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<sub>2</sub>, 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<sub>2</sub> at appropriate rate if SpO<sub>2</sub> <94% or pt is 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 &amp; Administration Notes' below &amp; proceed to page 2

**Medication Contraindications & Administration Notes****① All slow IVP medications contained in this protocol shall be administered over 60 seconds****Acetaminophen**

- ① Do not administer to pts with any of the following:
  - Severe hepatic impairment
  - Active liver disease
- ① Discontinue infusion if patient becomes hypotensive (see table on page 2)

**Ketamine**

- ① Do not administer to pts with any of the following:
  - Pregnancy
  - Multi-system trauma
  - Suspected internal bleeding
  - Active external bleeding

**Ketorolac**

- ① 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**

- ① Do not administer to pts with any of the following:
  - Hypotension (see table on page 2)
  - SpO<sub>2</sub> <94% or RR <12
  - ALOC or suspected moderate/severe TBI
- ① There is an increased risk of deeper level of sedation & airway/respiratory compromise when administering midazolam to pts receiving fentanyl



## Pediatric Pain Management

## 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: 1000mg) – single dose only  
**OR Ketorolac:** 0.5 mg/kg IV/IO or IM (max:15mg) – 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

- For pts ≤ 4 yo contact base/modified base for consult prior to administration of fentanyl/ketamine/midazolam

## Moderate Pain

**Acetaminophen:** 15 mg/kg IV/IO infusion over 15 mins (max: 1000mg) – single dose only  
**OR**  
**Ketorolac:** 0.5 mg/kg IV/IO or IM (max:15mg) – single dose only

## If pain not effectively managed:

- Continuous EtCO<sub>2</sub> monitoring
- Fentanyl:** 1 mcg/kg slow IV/IO or IM/IN (max single dose: 50 mcg) every 5 mins (max. cumulative: 4 doses)

## Severe Pain

- Continuous EtCO<sub>2</sub> 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: 1000mg) – single dose only

## 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 to max. 2 doses

**AND/OR**

**Midazolam:** 0.05 mg/kg slow IV/IO (max single dose: 1 mg)

- May repeat once to max. 2 doses
- Wait 5 mins after fentanyl/ketamine administration before administering midazolam

Age	Normal SBP	Hypotension
1-12 months	70-100	SBP<70
1-2 years	80-110	SBP<70+ age x2
3-5 years	90-110	SBP<70+ age x2
6-9 years	100-120	SBP<70+ age x2
10-14 years	100-120	SBP<90

**Pediatric Behavioral Emergencies**

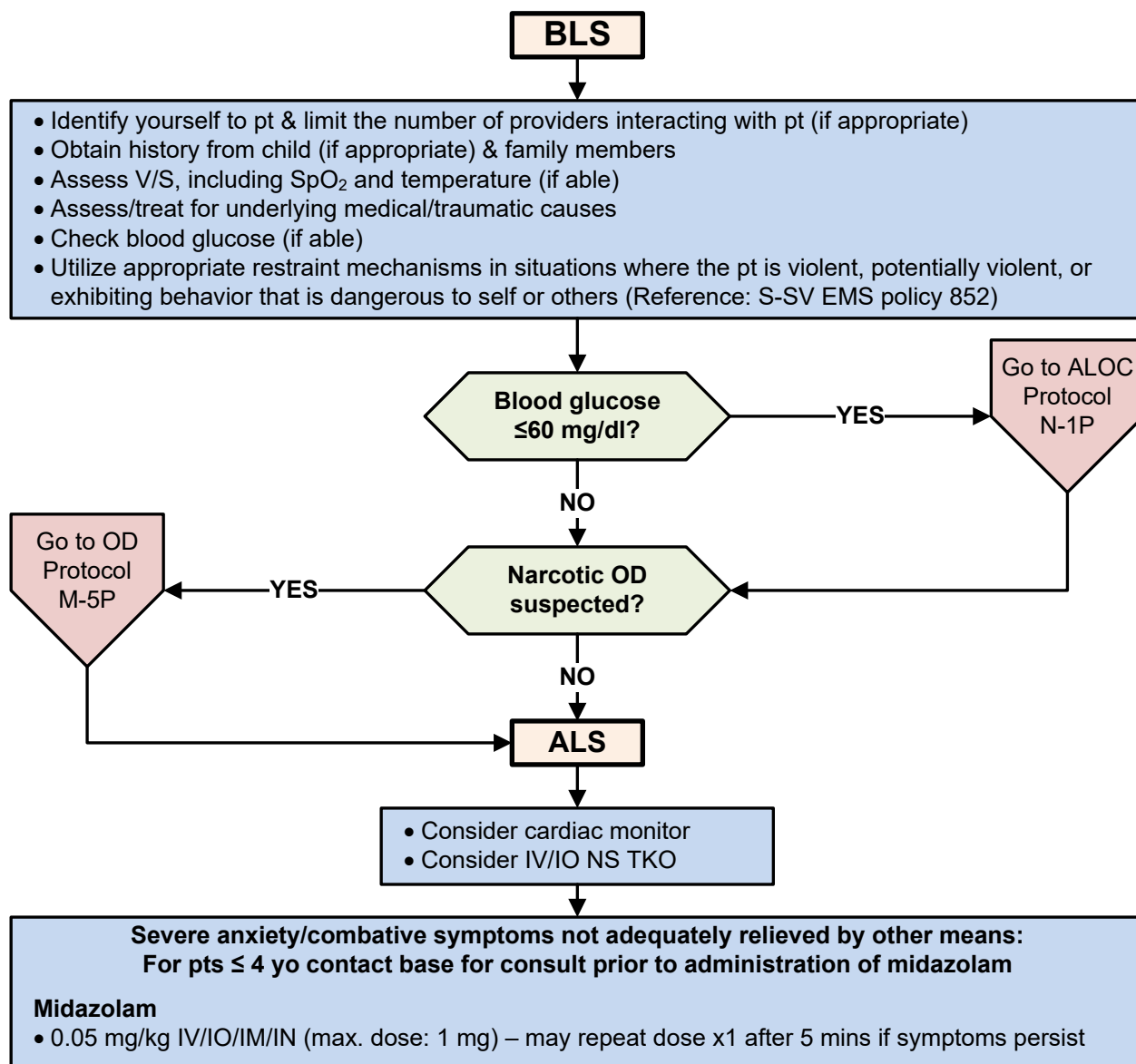
Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- 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.)





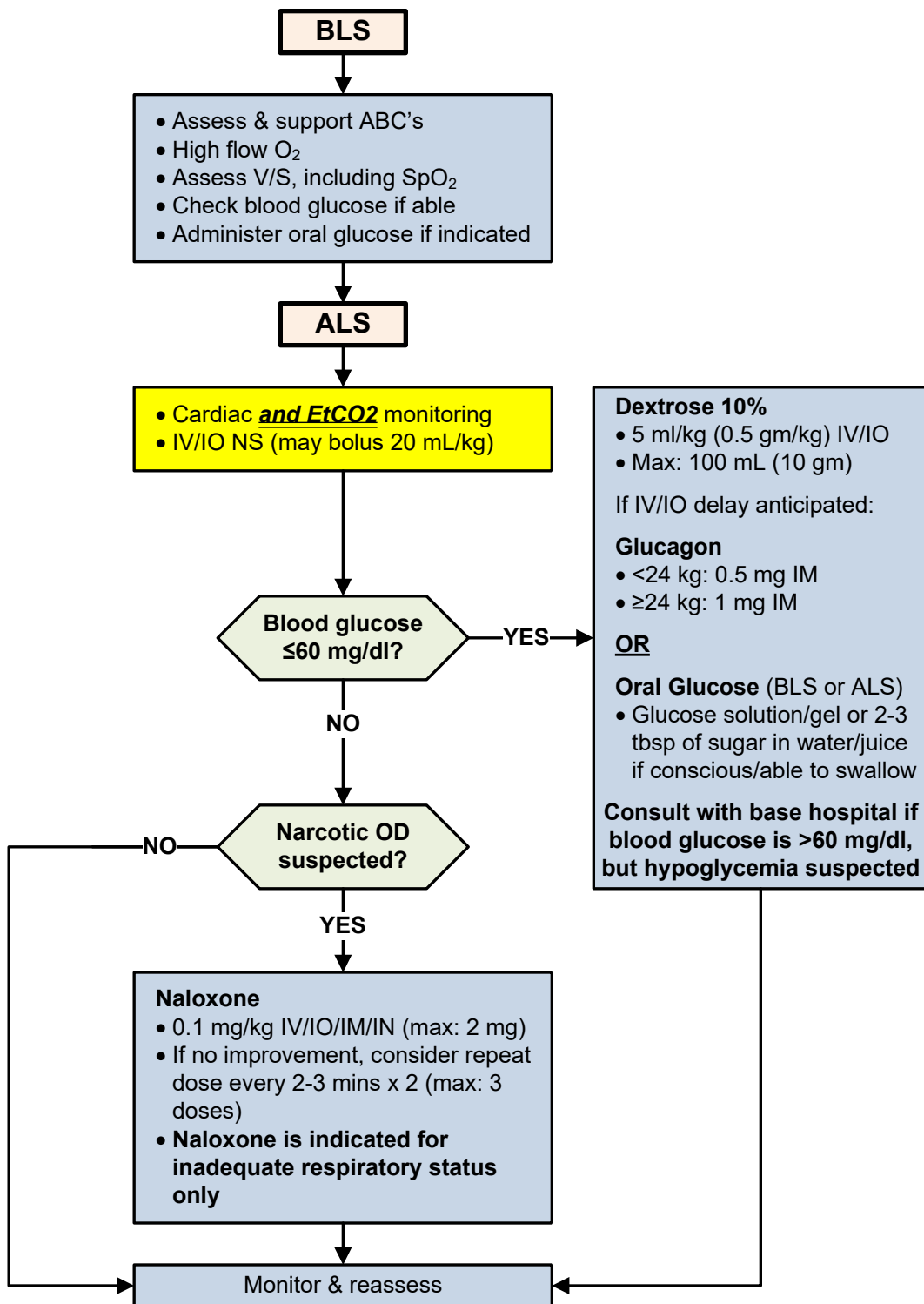
## Pediatric Altered Level Of Consciousness

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT







## Pediatric Seizure

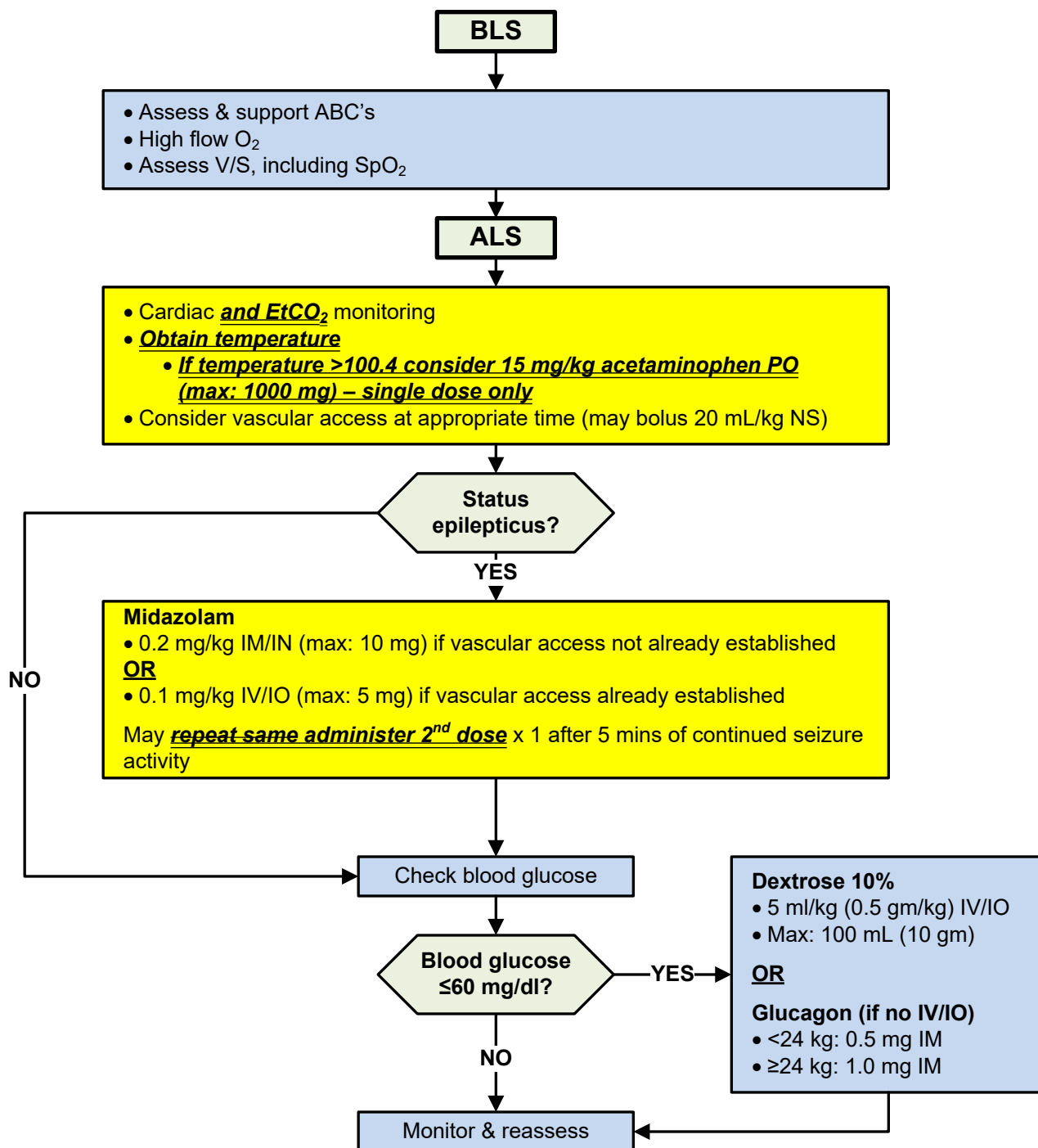
Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- **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.



**Pediatric Foreign Body Airway Obstruction (FBAO)**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

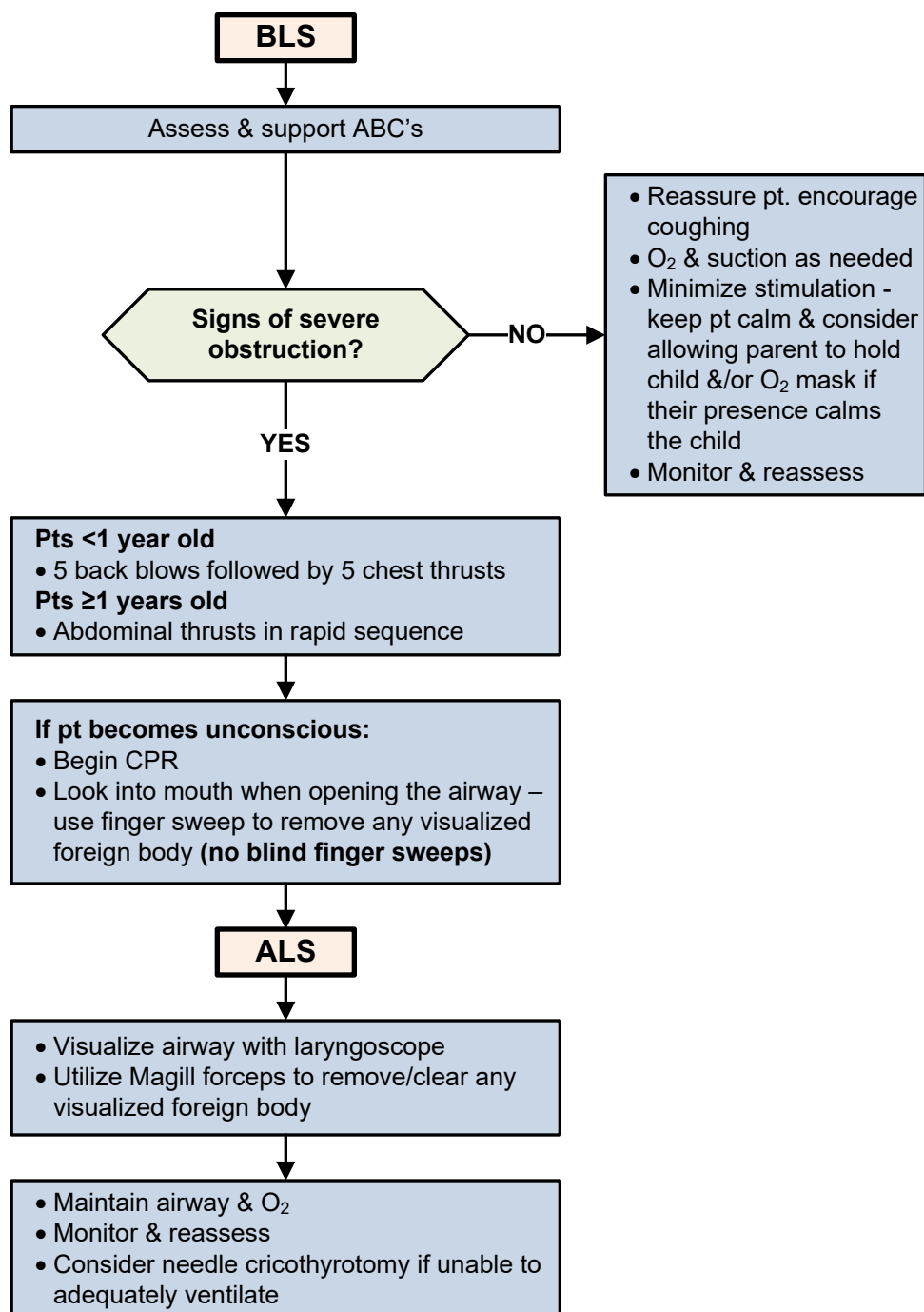
Approval: John Poland – Executive Director

Next Review: DRAFT

- 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



**Pediatric Respiratory Failure/Arrest**

Approval: Troy M. Falck, MD – Medical Director

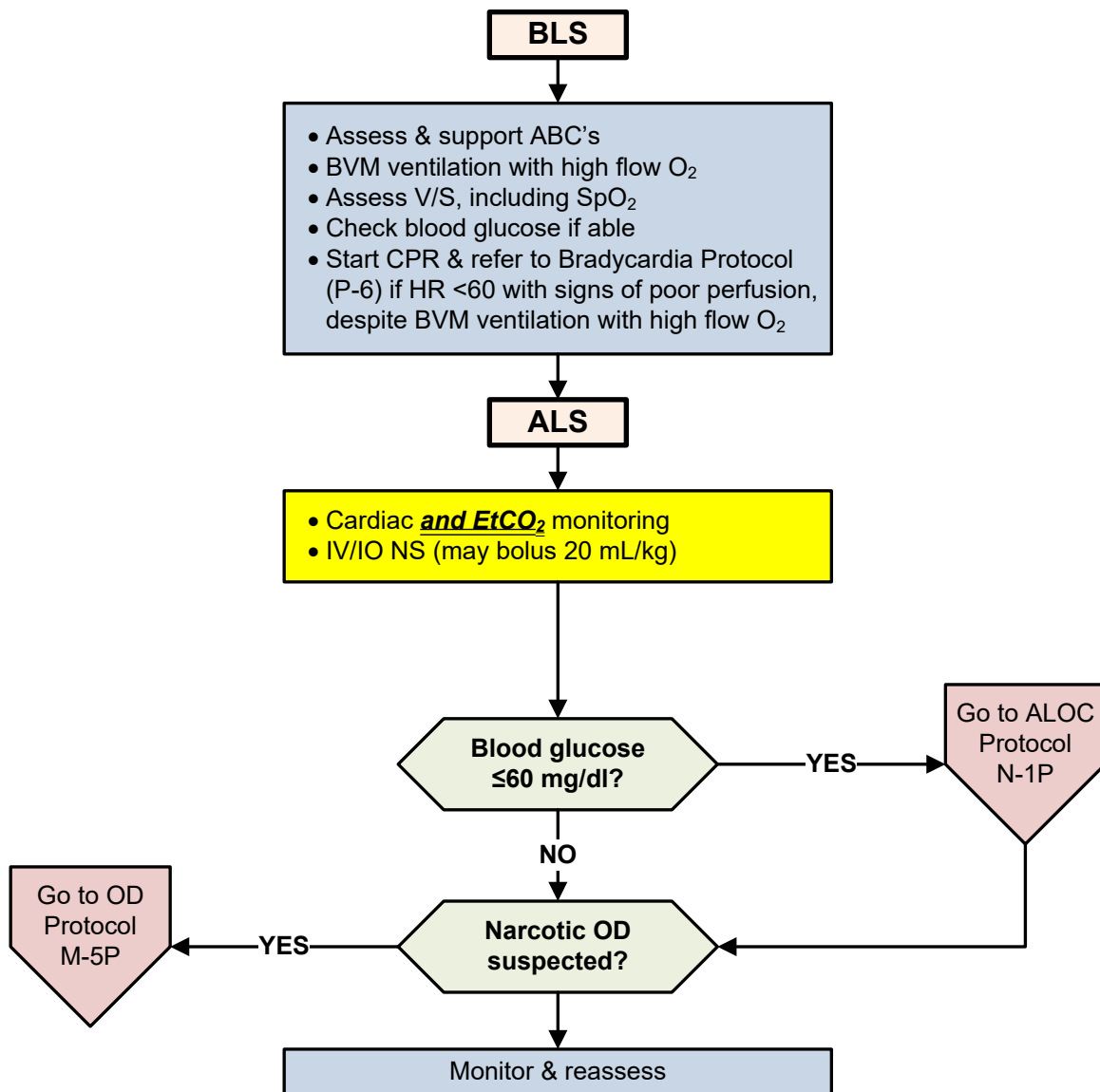
Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

**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.



**Pediatric Respiratory Distress**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- 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 airway 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
- Respiratory or cardiac arrest
- Suspected croup/epiglottitis
- Agonal respirations
- Inability to maintain airway
- Suspected pneumothorax
- SBP <90
- Major trauma/head injury/chest trauma
- Severe decreased LOC

**• Complications:**

- Hypotension
- Pneumothorax
- Corneal drying

**Epinephrine Administration**

- Epinephrine is only 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<sub>2</sub>
- Assess V/S, including SpO<sub>2</sub>
- Assess history and physical, determine degree of illness
- Minimize stimulation – keep pt calm & consider allowing parent to hold the child &/or O<sub>2</sub> 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 BLS personnel only)**

- Pediatric Auto-Injector
- OR**
- 0.15 mg (0.15 mL) via approved syringe

**SEE PAGE 2 FOR ALS TREATMENT OF WHEEZING OR SUSPECTED CROUP/EPIGLOTTITIS**

**Pediatric Respiratory Distress****Wheezing****ALS****Mild Distress**

- Mild wheezing
- Mild shortness of breath
- Cough

- Cardiac &  $\text{EtCO}_2$  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 &  $\text{EtCO}_2$  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 &  $\text{EtCO}_2$  monitoring
- Consider nebulized saline
- If full upper airway occlusion suspected – ensure proper airway positioning & BVM seal, attempt to ventilate & reassess

**Base/Modified Base Hospital Order Only****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)

**OR****Racemic epinephrine**

- One (1) - 0.5 ml vial of 2.25% inhalation solution (mix with NS to = 5 ml of volume)

- If pt cannot be ventilated – perform needle cricothyrotomy as airway of last resort

**Hemorrhage**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

**Approved Commercial Tourniquet Devices:**

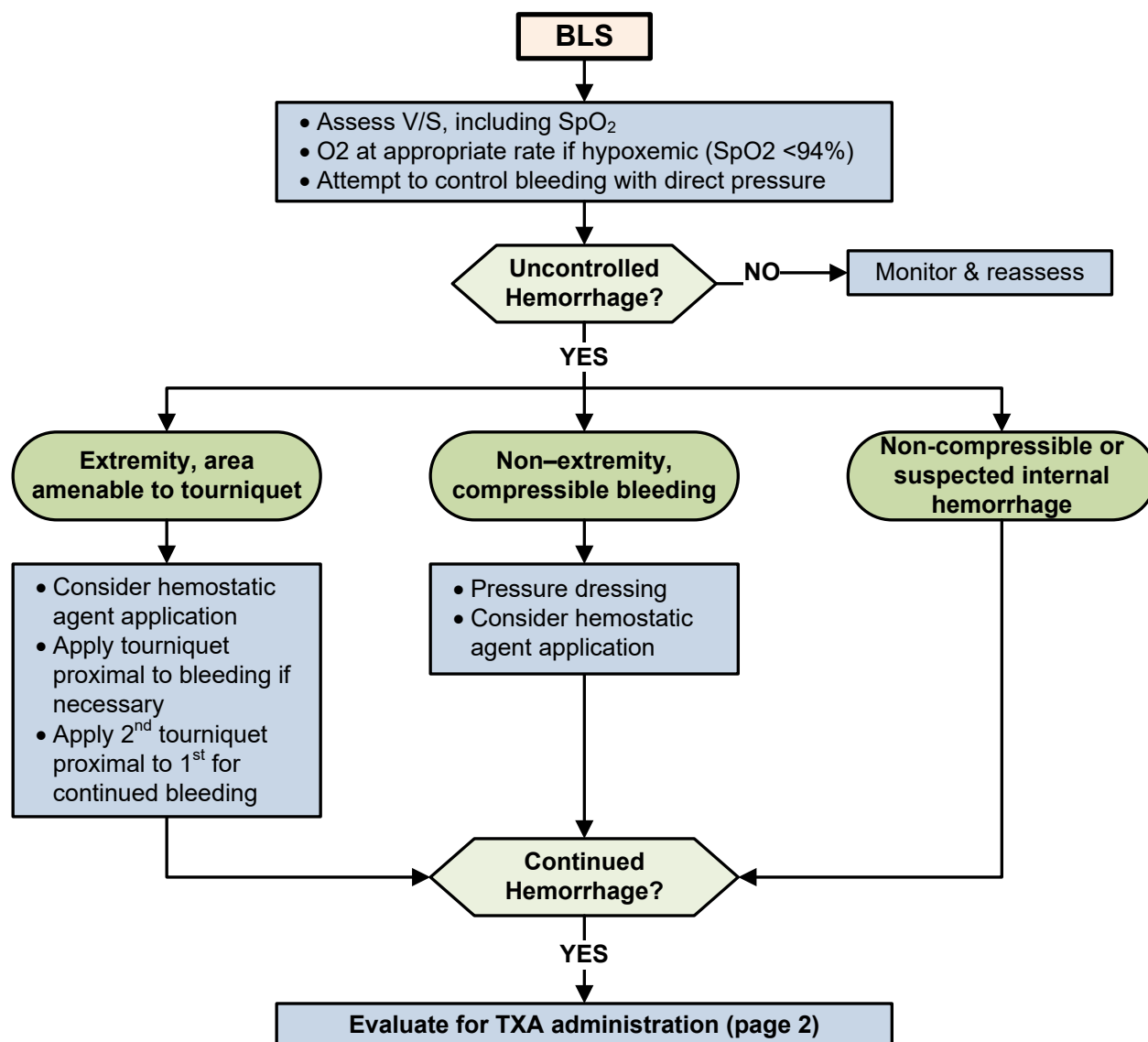
- Combat Application Tourniquet
- Emergency and Military Tourniquet
- Mechanical Advantage Tourniquet
- SAM XT Extremity Tourniquet
- Special Ops. Tactical Tourniquet
- RECON Medical Tourniquet

**Tourniquet Utilization Notes:**

- 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).

**Approved Hemostatic Agents:**

- QuikClot EMS 4x4 & Combat Gauze
- HemCon ChitoGauze XR PRO
- HemCon ChitoGauze XR2 PRO
- HemCon ChitoGauze OTC
- HemCon Bandage PRO
- HemCon OneStop Bandage



**Hemorrhage****Tranexamic Acid (TXA) Administration**