



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



MEETING AGENDA

MEETING DATE & TIME INFORMATION

- **Wednesday, October 14, 2026, 9:00 am – 12:00 pm**

MEETING LOCATION & ALTERNATE ATTENDANCE INFORMATION

- **Primary Meeting Location:** 535 Menlo Drive, Suite A, Rocklin, CA 95675
- **Alternate Meeting Location:** 4300 Caterpillar Rd, Redding, CA 96003
- **Zoom:** <https://us02web.zoom.us/j/89420097820?pwd=s67WzS96jIEJS2M6Rzjpku5fPbBKJA.1>
- **Telephone:** (669) 900-9128 **Meeting ID:** 894 2009 7820 **Passcode:** 1702

IMPORTANT NOTIFICATIONS

Public comments on proposed policy/protocol actions listed on this agenda will be taken during the review/discussion of the applicable item. Individuals unable to attend the meeting may provide written public comment on any item listed on this agenda, no later than seven (7) calendar days prior to the scheduled meeting date, by sending an email to Jared.Gunter@ssvems.com.

Policy/protocol actions listed on this agenda may be approved by a majority vote of the REMAC members present at the meeting. If necessary, proposed policy/protocol actions may be continued to subsequent REMAC meetings until consensus is reached by the committee.

All REMAC approved policy/protocol actions shall also be approved by the S-SV EMS Medical Director and Regional Executive Director prior to implementation. S-SV EMS may make non-substantive corrections to approved policy/protocol actions to address any technical defect, error, irregularity, or omission prior to final publication.

EMS system participants will be notified of approved policy/protocol actions a minimum of 30 calendar days prior to the effective implementation date. Policy/protocol action updates are routinely published on a bi-annual basis as follows:

October & January meeting approved policy actions: April 1st implementation date.

March & July meeting approved policy actions: October 1st implementation date.

Some policy/protocol actions may require immediate action to maintain compliance with statutes/regulations, or to preserve medical control/integrity of the EMS system. Policy/protocol actions of this type may be implemented by S-SV EMS as urgency measures and scheduled for discussion at the next regularly scheduled REMAC meeting, if necessary.

Sierra – Sacramento Valley EMS Agency – REMAC Meeting Agenda

MEETING AGENDA		
ITEM	TITLE	LEADER
A	Call to Order/Introductions	Chairperson
B	Approval of Previous Meeting Minutes	Chairperson
C	Approval of Meeting Agenda	Chairperson
D	Public Comment	Attendees
E	210: REMAC Bylaws	Poland
F	REMAC Nominations and Appointments	Gunter
G	S-SV EMS Consent Policy/Protocol Action Items These policies/protocols items are due for routine review, with no substantive changes recommended by S-SV EMS staff or the S-SV EMS Medical Director. All Consent Policy/Protocol Actions will be approved by a single vote. Anyone may ask to address specific Consent Policy/Protocol Action items prior to the committee acting, and the item(s) may be removed for additional discussion.	Chairperson
	620: EMS System Quality Improvement Program (EMSQIP)	
	825: Crime Scene Management	
	883: Prohibition On Carrying Of Weapons By EMS Personnel	
H	S-SV EMS Discussion Policy/Protocol Action Items	S-SV EMS Staff
	406: Dispatch Determinants for 911 Transport Resources	Poland
	622-A: Prehospital Provider Clinical Performance Standards Details	Pohley
	622-B: Prehospital Provider Clinical Performance Standards Quarterly Report (BLS)	Pohley
	622-C: Prehospital Provider Clinical Performance Standards Quarterly Report (ALS)	Pohley
	704: BLS Provider Inventory	Evey
	850: Refusal Of EMS Care (with 850-A)	Gunter
	C-4P: Pediatric Tachycardia With Pulses	Pohley
	C-6: Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)	Pohley
	M-2P: Newborn Care/Neonatal Resuscitation	Pohley

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ITEM	TITLE	LEADER
	M-8P: Pediatric Pain Management	Pohley
	R-3: Acute Respiratory Distress	Pohley
	R-3P: Pediatric Respiratory Distress	Pohley
	PR-2: Airway & Ventilation Management	Pohley
	M-6P: Pediatric General Medical Treatment	Pohley
	Addition of Epinephrine Drip	Gunter
	C-2: Return Of Spontaneous Circulation (ROSC)	
	C-3: Bradycardia With Pulses	
	M-1: Allergic Reaction/Anaphylaxis	
	M-1P: Pediatric Allergic Reaction/Anaphylaxis	
	M-5: Ingestions & Overdoses	
	M-6: General Medical Treatment	
I	Discussion – Narrow Complex Tachycardia (C-4)	Royer
J	Discussion – E-7 Hazardous Material Exposure	Comstock
K	Quality Improvement (QI) & Case Review	Pohley
L	EMS Aircraft Provider Reports	Attendees
M	EMS Ground Provider Reports	Attendees
N	Hospital Provider Reports	Attendees
O	EMS Education Program Reports	Attendees
P	2027 Meeting Calendar	Poland
Q	S-SV EMS Agency Reports	S-SV EMS Staff
	EMS Data System	McManus
	Regional Specialty Committees	Gunter
	Operations	Comstock
	Regional Executive Director	Poland
	Medical Director	Falck, MD
R	Next Meeting/Adjournment: January 20, 2027	Chairperson



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



MEETING MINUTES

Meeting Date

Wednesday, July 1, 2026

A. Call to Order/Introductions

- Dr. Royer called the meeting to order at 9:00 am, and all attendees introduced themselves.

B. Approval of Previous Minutes: April 8, 2026

- The minutes were unanimously approved by the committee with no changes.

C. Approval of Agenda

- The committee approved the agenda with one change. The case presentations were moved.

D. Public Comment

- None was forthcoming.

E. S-SV EMS Consent Policy/Protocol Action Items

Policy	Name	Motion	Second	Committee Vote
441	Paramedic IFT Optional Skills Provider Agency Approval (with 441-A)	Dr. Iwai	Dr. Morris	<i>Passed Unanimously</i>
	<i>There were no proposed changes.</i>			
839	Physician On Scene	Dr. Iwai	Dr. Morris	<i>Passed Unanimously</i>
	<i>There were no proposed changes.</i>			
840	Medical Control for Transfers Between Acute Care Facilities	Dr. Iwai	Dr. Morris	<i>Passed Unanimously</i>
	<i>There were no proposed changes.</i>			
849	Transfer of Patient Care	Dr. Iwai	Dr. Morris	<i>Passed Unanimously</i>
	<i>There were no proposed changes.</i>			

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F. S-SV EMS Discussion Policy/Protocol Action Items

Policy	Name	Motion	Second	Committee Vote
210	REMAC Bylaws	Dr. Iwai	Dr. Morris	<i>Passed Unanimously</i>
	- At the last meeting, Mr. Poland suggested changing the bylaws to include more representatives on the prehospital side. With the proposed changes, there will be 16 representatives – all voting members. - This will come back to the October meeting for final approval. - There was some language clean-up in the bylaws as well.			
341	Paramedic IFT Optional Skills Transferring Hospital Requirements	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	- On page 1, line 20, removed 'in peripheral or central IV lines'. - On page 2, Item C, removed 'applicable' added 'the', 'Paramedic Interfacility Transport (IFT) Optional Skills Policy (841)', removed policy reference numbers. - Updated the State regulation chapter numbers.			
506	STEMI Receiving Center Designation Criteria	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	Updated the State regulation chapter numbers.			
507	Stroke Receiving Center Designation Criteria	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	- Updated Chapter 7.2 to 6.3, to reflect the updated Chapter 6 regulations. - No substantive changes were made to this policy, just updates to align with the new Chapter 6 regulations.			
509	Trauma Center Designation Criteria	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	On page 2, item 6, line 15 added 'and designation'.			

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605	EMS Documentation	Rich Lemon	Debbie Madding	<i>Passed Unanimously</i>
	• This policy was rewritten. • On page 1, line 12, removed 'if available'. • On page 2, removed Item 4, added Item E. • Under Procedure, line 16 added 'to include'. • Item 1 removed 'procedures and/or medication administrations' and added 'interventions, including total volume of IV/IO fluid infused' removed 'including' added 'medication' 'and', 'the intervention(s)' removed 'treatment', removed 'adequately', removed 'procedures/medications' added 'interventions'. • Item 2, removed 'the total volume of IV/IO fluid infused shall be adequately documented in the Treatment/Procedures and/or Narrative section'. • Item 3, removed 'pertinent' and 'adequately', added 'Vitals' removed 'Signs', added 'at or near', removed 'as close as possible to' and 'during', added 'throughout' and 'and at least twice during transport, following any intervention with anticipated physiologic impact', removed 'as close as possible to', added 'at or near', removed 'at the receiving hospital', added 'Vital signs include, but are not limited to:'. Added item a. • Added everything on page 3, and lines 1-12 of page 4. • Page 5 removed 'V3.5'. • Everything highlighted in green was also added to this policy. • Dr. Royer noted that on page 4, Section B, an interim PCR is to be left with the receiving nurse or physician at the time of patient delivery and reminded everyone to please leave those interim PCRs which was followed by a discussion about interim PCRs. • It was suggested that an interim audit be conducted to identify agencies not leaving the PCRs so that education can be done.			
622	Prehospital Provider Clinical Performance Stds (& 622A)	Dr. Morris	Rich Lemon	<i>Passed Unanimously</i>
	• This is a new policy. • A data dictionary is being developed for this to help the providers. • This policy will continue to have changes, for today the policy is just being put in place.			

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841	Paramedic IFT Optional Skills	Dr. Morris	Rich Lemon	<i>Passed Unanimously</i>
	• Four current policies were merged into one policy. • On page 1, removed 'in peripheral or central IV lines', and Item 2, line 18. • On page 2, Item D, number 3, added 'the specific ATV equipment utilized by the provider agency'. ○ Item E, number 3, added 'the specific HFNC equipment utilized by the provider agency'. • On page 3, lines 1-2, added 'and shall be verified with the sending RN following changeover to the mechanical EMS transport pump'. • On page 4, line 3, added 'at a minimum'. ○ Lines 11-12 removed 'shall be verified with the sending RN following changeover to the mechanical EMS transport pump and'. ○ Line 15 added 'at a minimum'. ○ Line 23 added 'at a minimum'. ○ Line 30 added 'without base/modified base physician contact'. • On page 5, line 1, added 'waveform capnography'. Line 16 added 'at a minimum'. • On page 8, line 2, added 'waveform capnography'. Line 16, added 'at a minimum'.			
C-2	Return of Spontaneous Circulation (ROSC)	Cindy Bergstrom	John Hughes	<i>Passed Unanimously</i>
	• This is a reorganization of the same information. • MAP was added to the algorithm.			
C-5	Ventricular Assist Device (VAD)	Rich Lemon	David Justice	<i>Passed Unanimously</i>
	• This was due for routine review. It was sent to area VAD experts for feedback. • In the top box, added 'In any emergency involving a VAD patient, contact the VAD coordinator as soon as possible'. • Changes in the flow of the algorithm were suggested by the VAD experts.			
M-8	Pain Management	Dr. Iwai	Dane Meredith	<i>Passed Unanimously</i>
	• A few years ago, S-SV EMS added chronic non-traumatic pain to this protocol. • The most common mistake made with this protocol is not knowing what non-traumatic pain is. • On page 2, non-acute and acute pain are separated. On page 2, in the top box, there is a definition of acute and non-acute pain. • IM Ketamine and weight-based dosing were added to this policy after it was sent out to the REMAC committee.			

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N-3	Suspected Stroke	Christian Anglin	Rich Lemon	<i>Passed Unanimously</i>
	- There was a request with regard to the identification of patients with a potential LVO and whether or not that should change destination. - Dr. Falck evaluated the different stroke scales for identifying LVOs and decided CPSS is as effective as many of the other scales. - A point system was added to the policy. - If providers are within 45 minutes of an Interventional Stroke Receiving Facility and have a patient that has one or greater on their score, they can contact the closest Stroke Center and see if they want the provider to divert. - This was discussed with the Stroke QI committee, and they were supportive of this as well. - A committee member asked if language could be added regarding being within 45 minutes from the closest thrombectomy center – to call for consultation. - There was some good discussion.			
R-1	Airway Obstruction	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	Under the Foreign Body box, added 'Repeated cycles of 5 back blows'.			
R-1P	Pediatric Foreign Body Airway Obstruction (FBAO)	Rich Lemon	Dr. Morris	<i>Passed Unanimously</i>
	- Updated the language to be consistent with the AHA. - Added the word 'slaps' to the 'Repeated Cycles' box and specified 'no blind finger sweeps' to the 'If pt becomes unconscious' box.			
T-1	General Trauma Management	Rich Lemon	John Hughes	<i>Passed Unanimously</i>
	- On page 2, added language to the center of the IV/IO box, to be more specific about giving fluid to patients after discussion with the Trauma QI Committee. - On page 3, in the bottom box, removed 'Apply a cervical collar' and added 'Alert and cooperative patients may be allowed to self-limit motion if appropriate with or without cervical collar' – by request from the PAC committee.			
T-4	Hemorrhage	Cindy Bergstrom	Dr. Morris	<i>Passed Unanimously</i>
	- This was discussed in the Trauma QI Committee. - On page 2, the top box has added language. - The ALS box is new. - In the TXA Exclusion Criteria box, removed 'Traumatic arrest with >5 mins of CPR without ROSC'.			

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G. Quality Improvement (QI) & Case Review

- There were two case presentations.
- There was some good discussion/feedback.

H. Discussion – Base Hospital Orders/Base Hospital Physician Orders

- This discussion was led by Christian Anglin.
- There was a presentation.
- The presentation highlighted the differences between S-SV EMS and other LEMSAs requiring or not requiring base hospital orders/base hospital physician orders for similar protocols/policies.
- It was suggested that Mr. Anglin present this to the Trauma QI Committee.
- There was some good discussion/feedback.
- It was suggested that an audit be done on how long it's taking doctors to get to the radio during these calls. Enloe volunteered to get this information to the agency.
- Dr. Falck recommended bringing this back to the October REMAC meeting, after some review.

I. EMS Aircraft Provider Reports

- Careflight
 - Now carrying whole blood.

J. EMS Ground Provider Reports

- None were forthcoming.

K. Hospital Provider Reports

- Kaiser Roseville – one year away from the new tower opening, which will add an additional 60 ED beds.
- Mercy Medical Center Redding
 - Please submit the EMS feedback request for MMCR Trauma Patients forms to them.

L. S-SV EMS Agency Reports

- EMS Data System
 - The state changed vendors and everyone is submitting data to the new vendor – EMS Flow. The S-SV EMS region is done. All 70+ providers have been transitioned over.
 - There was a schematron update on 6/15. Providers need to make sure they're current. Please reach out to Jeff McManus if you encounter difficulties with this.
 - Version 3.5.1 – Many vendors are still on version 3.5; please work towards getting to the new version which is due in November. If you're ImageTrend and need help, reach out to Jeff.
- Regional Specialty Committees
 - The Trauma QI meeting was on May 14.
 - S-SV EMS is changing its app and is going to change to a previous vendor. It should be coming in October.
- REMAC Committee Voting Member Discussion
 - This was discussed during the Bylaws.
- Operations
 - Half of the ambulance inspections are complete. S-SV EMS will be reaching out to providers to schedule these.
 - The State Central registry is currently behind with Paramedic applications. Please encourage staff to renew 60-90 days prior to their expiration.
- Regional Executive Director's Report
 - Banner Lassen Hospital, in Lassen County, just announced they're selling.
 - Oroville Hospital auction is scheduled for July 16, with no potential bidders identified.

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- All the S-SV EMS Stroke Center agreements are in the renewal process now.
- Sutter Roseville Medical Center Level II Trauma center agreement is in the works now.
- Sierra Regional took over today for SEMSA. They're going to maintain three ground ambulances.
- The draft Placer County RFP was submitted to the EMS Authority in the middle of June, and it will likely take them several months to review.
- All the helicopter EMS agreements are due for renewal in the next couple months, and S-SV EMS is working on that.
- The Grass Valley Air Ambulance Coordination Center Agreement is due for renewal.
- Sutter and Yuba County EOA agreements are in the process of being renewed.
- Sierra Nevada, Nevada County Ambulance EOA agreements are in the process of being renewed.
- The Mercy Redding Ambulance agreement, AMR Shasta agreement, and St. Elizabeth ambulance agreement are all being renewed.
- The Glenn County EMS System Assessment was completed and presented to a special joint city and public meeting a few weeks ago. S-SV EMS was in attendance. There will be some additional discussion to identify a long-term solution for ambulance services in that area.
- At the recent June JPA meeting, there was a lengthy discussion. S-SV EMS will have a public hearing at the August 14 JPA meeting to propose increases to the permit provider fees. This won't affect EOA or contracted providers. It's been 17 years since S-SV EMS has increased the fees of the permit providers and at this point, S-SV EMS is subsidizing some of that.
- There has been significant disruption in the APOT audit portal. This probably won't be completely fixed until the transition is done. The transition from the 30-minute APOT standard to 25 minutes takes effect today. No one will be held accountable for data that can't be audited.
- S-SV EMS is working on a health information pilot project with AMR Placer, Roseville Fire, Sutter Roseville and the EMS Authority. It's in the very early stages. It has to do with EMS Flow. There have been some challenges getting EPCR data in real-time. Roseville Fire has been doing real-time documentation, which is good. Technical details need to be ironed out. More to come on this.
- HCAI data exchange – providers must sign the HCAI data exchange framework agreement. Hopefully, the data submitted to CEMSIS will be used to meet the requirements. If you have any questions regarding this, please reach out to Mr. Poland.
- The 2026 Regional Training Module was completed and posted on the S-SV EMS website.
 - A neighboring LEMSA is investigating an EMT who has figured out a way to cheat the system and basically plays training videos in double time.
 - As a reminder, this tool is free to everyone and the S-SV EMS staff, and many providers, put in a lot of work to make these educational courses available.
 - If this continues, it will no longer be available.
- Protocol books – only three of the 34 LEMSAs still produce hard copy protocol books. S-SV EMS will no longer have these printed. The app is free for everyone.
- The S-SV EMS Redding office will be moving, this fall, to the Shield Training Center – which is a consortium of about 19 public safety agencies in the northern part of Redding. This new location will have more conference room space and will better accommodate the S-SV EMS meetings.
- Chapter 6 is done.
- APOT regulations are done.
- The EMT oral Zofran administration regulations were passed.
- The US Forest Service has some long-term contracts with out-of-state ALS Fire Departments that come into California for months at a time.

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- Recently S-SV EMS identified an issue where an out-of-state ALS provider got on scene of an incident (not a US Forest Service incident, just a random 911 call) in Siskiyou County and started an IV and administered Fentanyl before the local ALS Provider got on scene.
- S-SV EMS is working through the legalities of this incident. This has only started within the last year or so.
- If anyone hears of or encounters an issue like this, please reach out to S-SV EMS staff.
- Butte EMS and Mercy Redding are the two providers identified as infectious disease transporters.
 - This goes back 10 years.
 - There hasn't been funding for several years, but with Ebola coming back there has been recent communication with these providers to get them back up to speed.
 - Please reach out with any questions.

M. Medical Director's Report

- Dr. Falck was pleased with the great turnout for today's meeting.
- Dr. Falck spoke about Dr. Morris and his involvement with the agency and community, and his career at Kaiser. Dr. Falck was very appreciative of Dr. Morris and all he has helped with. He congratulated Dr. Morris on his retirement.
- Dr. Morris took a moment to talk about S-SV EMS and the great providers.

N. Next Meeting Date & Adjournment

- The next meeting will be on October 14, 2026, at 9:00 am.
- The meeting was adjourned at 11:57 am.



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

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NAME:

The Committee shall be referred to as the Regional Emergency Medical Advisory Committee (REMAC).

PURPOSE:

- A. To represent the position of EMS system participants on EMS related issues and promote communication/coordination among EMS system participants.
- B. To promote region-wide standardization of EMS system quality management, including quality assurance and quality improvement requirements, processes, and activities.
- C. To monitor, evaluate and report on the quality of EMS training, care, and transportation.
- D. To make recommendations related to EMS system data collection, evaluation, and dissemination.
- E. To recommend policies, procedures, protocols, positions, and philosophy of EMS care to the Sierra-Sacramento Valley Emergency Medical Services Agency (S-SV EMS).

AUTHORITY:

The Committee is established by the S-SV EMS Medical Director, pursuant to the provisions of the Emergency Medical Services System and Prehospital Emergency Medical Care Personnel Act (HSC, § 1797 et seq.) and EMS Regulations (CCR, Title 22) and shall function as advisory to S-SV EMS.

MEMBERSHIP:

- A. The Committee shall consist of the following members:
 1. A base/modified base hospital medical director, or base/modified base hospital's appointed physician representative, from each S-SV EMS authorized base/modified base hospital.
 2. A base/modified base hospital coordinator, or base/modified base hospital's appointed nursing representative, from each S-SV EMS authorized base/modified base hospital.
 3. An emergency department medical director or appointed physician and nursing representative from each acute care receiving hospital located within the S-SV EMS region.
 4. The following prehospital members:
 - a. 14 paramedic or AEMT personnel who actively practice in the field and are employed by an S-SV EMS authorized ALS/LALS ground service provider.
 - b. Two (2) paramedic or RN personnel employed by S-SV EMS authorized HEMS aircraft service providers.



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

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MEMBER APPOINTMENTS, TERMS, AND VACANCIES:

- A. Base, modified base and receiving hospital members are appointed by the applicable hospital and serve at the request of S-SV EMS until resignation, replacement, or removal.
- B. Prehospital members are appointed by the Committee and serve two (2) year terms commencing July 1st of the first year through June 30th of the second year, or until resignation or removal.
 1. Prehospital members will be appointed by Committee vote based on nominations received from EMS system participants within the S-SV EMS region.
 2. All previously designated public and private ALS ground service provider and EMCC/EMAG members, already appointed for the July 1, 2026 – June 30, 2028 term, will be automatically appointed to the new prehospital ground provider member positions upon approval of the revised bylaws, and will serve for the remainder of the current term, or until resignation or removal.
 3. Prehospital member vacancies that occur during a term will be re-appointed in a timely manner by Committee vote based on nominations received from EMS system participants within the S-SV EMS region. Any subsequently appointed prehospital members will serve the remainder of the applicable term, or until resignation or removal.

MEMBER ATTENDANCE AND REMOVAL:

- A. Members are expected to attend all Committee meetings.
- B. Members may be removed from the Committee for any of the following reasons:
 1. Excessive absences.
 2. Disruption and/or rude behavior.
 3. When requested by a chief officer of the representative's organization or the S-SV EMS Medical Director.

OFFICER ELECTIONS, TERMS, VACANCIES, AND RESPONSIBILITIES:

- A. The Committee shall elect a Chairperson and Vice-Chairperson (Officers) utilizing the following procedures:
 1. Officer nominations will be requested by the Chairperson. Any member may nominate any other member. The member nominated must accept the nomination for the nomination to be valid. Officers will be selected by Committee vote.
 2. Officer terms shall be for a period of two (2) years, commencing July 1st of the first year through June 30th of the second year.



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B. Officer vacancies:

1. If the Chairperson should vacate the office during the term, the Vice-Chairperson shall become Chairperson and preside over the elections of a new Vice-Chairperson.
2. If the Vice-Chairperson should vacate the office during the term, the Chairperson shall preside over the election process of a new Vice-Chairperson.

C. Officer responsibilities:

1. The Chairperson shall preside over Committee meetings.
2. The Vice Chairperson shall assume the responsibilities of the Chairperson in their absence.

MEETINGS:

- A. Meetings shall be held on a regular basis, no less than four (4) times in a calendar year. Meeting dates and times will be set or modified as agreed to by the Committee.
- B. Meetings shall be governed by Robert's Rules of Order and will be conducted in a fair and professional manner.
- C. Closed session meetings will occur when business addressed by California Evidence Code § 1157.7 is being transacted. The Committee's § 1157.7 closed session business, records and minutes shall be considered confidential, and all members/ attendees are prohibited from any unauthorized disclosures.

QUORUM:

A quorum shall consist of a minimum of twelve (12) eligible Committee members. Committee business shall not be conducted unless a quorum is present.

VOTING:

- A. Each base/modified base hospital shall have one (1) vote.
- B. Each receiving hospital shall have one (1) vote.
- C. Each prehospital member shall have one (1) vote.
- D. Votes shall be recorded as:
 1. In Favor.
 2. Opposed.
 3. Abstain.

CONFLICT OF INTEREST:

Members/officers shall disclose any direct personal or pecuniary (monetary) interest in any subject or conversation before the Committee and will abstain from voting on any motion relative to that subject.



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BYLAWS:

A. Any recommended Bylaws change will be initially placed on the agenda as a non-action item. The Bylaws may then be recommended for change by a two-thirds vote at the next Committee meeting.

B. Any Bylaws change requires S-SV EMS approval.

S-SV EMS STAFF PARTICIPATION:

A. S-SV EMS staff shall be present at each Committee meeting.

B. S-SV EMS staff are non-voting members of the Committee.

C. S-SV EMS staff shall have the right to be heard before the Committee on any matter on the agenda, after being recognized by the Chairperson.

S-SV EMS RESPONSIBILITIES:

A. Establish the agenda, in consultation with the Chairperson/Vice-Chairperson.

B. Record the proceedings and prepare appropriate meeting minutes.

C. Maintain Committee records including: an updated list of members and officers, member contact information, bylaws, and meeting minutes.

D. Distribute the meeting notice and any other Committee correspondence.

EFFECTIVE DATE:

Effective Date: 10/14/2026	DRAFT
Approval: Troy M. Falck, MD – Medical Director	DRAFT
Approval: John Poland – Executive Director	DRAFT



Paramedic Representative Nominations – July 1, 2026 – June 30, 2028 term

- Proposed REMAC Bylaws Revisions
 - The following prehospital members:
 - 14 paramedic or AEMT personnel who actively practice in the field and are employed by an S-SV EMS authorized ALS/LALS ground service provider.
 - Two (2) paramedic or RN personnel employed by S-SV EMS authorized HEMS aircraft service providers.

	Nominee Name	Nominee Agency
1	<i>Teri Arrwood</i>	<i>City of Etna Ambulance</i>
2	<i>Michael Long</i>	<i>South Placer FD</i>
3	<i>Michael Eliassen</i>	<i>AMR Shasta County</i>
4	<i>Rich Lemon</i>	<i>Dignity Health - Redding</i>
5	<i>Dane Meredith</i>	<i>Grass Valley FD</i>
6	<i>David Justus</i>	<i>Penn Valley Fire</i>
7	<i>John Hughes</i>	<i>AMR Placer County</i>
8	<i>Dillon Coward</i>	<i>Grass Valley FD</i>
9	<i>Matt Smith</i>	<i>Bi County Ambulance</i>
10	<i>Jason Swann</i>	<i>Dignity Health – Redding</i>
11	Alex Burk	Roseville FD
12	Kristof Varga	Sierra Nevada Ambulance
13	Robert Kehoe	Saint Elizabeth's
14	Nathan Bronner	AMR Placer and Colusa
	<i>James Garcia</i>	<i>GMR</i>
	Stuart Emerson	REMSA Care Flight

Sierra – Sacramento Valley EMS Agency Program Policy			
EMS System Quality Improvement Program (EMSQIP)			
	Effective: DRAFT	Next Review: DRAFT	620
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish a system wide Emergency Medical Services System Quality Improvement Program (EMSQIP) to monitor, review, evaluate, and improve the delivery of prehospital care in the S-SV EMS region.

AUTHORITY:

A. HSC, §§ 1797.204, 1797.220, 1798.

B. CCR, Title 22, Div. 9, Chapter ~~12~~ 10.

POLICY:

- A. ALS/LALS prehospital provider organizations and base/modified base hospitals shall submit a written EMSQIP to S-SV EMS for review and approval every five (5) years. The EMSQIP shall include the provider/hospital name and management structure, including quality improvement (QI) coordinator (or similar position), medical director, and internal QI staff and structure. A provider/hospital organizational chart shall also be included if available.
- B. The EMSQIP shall, at a minimum, include the following QI activities:
 1. Prospective QI – Systematic approach to identify, measure, and improve the quality of care provided.
 2. Concurrent QI – Ongoing process to monitor and improve the quality of care in real-time during patient care.
 3. Retrospective QI – Analysis of data and events after the delivery of patient care to identify trends, patterns, and recurring issues.
 4. Reporting/Feedback – Sharing information about performance, outcomes, and quality measures with system participants.

C. ALS/LALS prehospital provider organization EMSQIPs shall, at a minimum, detail the process for conducting the following activities:

1. Prospective QI:

- Participation in S-SV EMS and base/modified base hospital QI committees.
- Initial and continuing employee education:
 - Orienting field personnel to the S-SV EMS system.
 - Developing educational programs based on problem identification and trend analysis.
 - Process for communicating system changes to field personnel.
- Process for development of performance standards to evaluate the quality of care delivered by field personnel.
- Methods for evaluating field personnel:
 - New/probationary employee clinical performance standards.
 - Clinical/operational deficiency identification methodology.
 - Problem-oriented evaluation and corrective action plans for identified deficiencies, including an example of a standardized performance improvement plan (PIP).
- Personnel certification/accreditation tracking:
 - Initial and ongoing certification/accreditation tracking process.
 - Other S-SV EMS required training/education.

2. Concurrent QI:

- Direct observation (ride-along, field training officer, etc.) of field personnel evaluating patient care against performance standards.
- Availability of field supervisors and/or QI personnel for field personnel support.

3. Retrospective QI:

- Process for retrospective analysis of field care to include but not be limited to:
 - High-acuity, low occurrence (HALO) call/event types.
 - Audit topics.
 - Problem oriented calls/events.
 - Calls/events requested to be reviewed by S-SV EMS.
- Documentation/PCR review to assure quality, accuracy, and adherence to provider/S-SV EMS documentation standards/requirements.
- Compliance with reporting and other quality improvement requirements as specified by S-SV EMS.

4. Reporting/Feedback:

- Process for reporting trends/issues to S-SV EMS and/or base/modified base hospitals.
- Process for communicating quality improvement/opportunities for improvement to field personnel.

D. All EMS system participants shall submit an annual EMSQIP report, utilizing an S-SV EMS developed standardized form, for the previous calendar year to S-SV EMS no later than March 31st.

E. All EMS system participants shall participate in the S-SV EMS EMSQIP, which may include providing records for program monitoring and evaluation.

Sierra – Sacramento Valley EMS Agency Program Policy			
Crime Scene Management			
	Effective: DRAFT	Next Review: DRAFT	825
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

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

AUTHORITY:

- A. HSC, §§ 1798.6, 1797.220.
- B. CCR, Title 22, Div. 9.

POLICY:

- A. The primary duty of both law enforcement and EMS personnel is to protect and preserve human life. EMS personnel must ensure that patient care is given highest priority, in consideration ~~to~~of the needs of law enforcement (personnel/public safety, crime scene management and evidence preservation).
- B. In the event that EMS personnel discover a crime scene, or are at a crime scene without law enforcement, an immediate request for law enforcement shall be made. EMS personnel shall ~~assure~~ensure their own safety and, if possible, attempt to follow the guidelines contained in this policy.
- C. EMS personnel shall follow the directions of law enforcement with respect to crime scene management. This direction should not prevent or detract from patient care. The following guidelines should be followed:
 - 1. Parking of EMS vehicles should be done to provide adequate access for EMS personnel but with consideration of the crime scene (e.g., do not run over expended shell casings or destroy physical evidence such as tire tracks, footprints and/or broken glass).
 - 2. Entry to the crime scene should be made by the minimum number of EMS personnel necessary to provide patient care. If possible, entry and exit should be accomplished by the same route.

3. Care should be taken not to disturb any physical evidence.
4. Removal of the patient's clothing should be kept to a minimum. If necessary, clothing removal should be done in a manner which will minimize the loss of physical evidence (i.e., do not cut clothing through bullet or knife holes).
5. Patient clothing and personal articles are to be left in the possession of law enforcement personnel. Do not discard anything.
6. Place wrappers and other disposable trash items which accumulate as patient care is rendered in a single site away from the patient and/or potential crime scene evidence. Do not pick up trash items and discard because evidence may be destroyed. Law enforcement personnel may suggest a site to be used for trash which would be most ideal to maximize evidence preservation.
7. Determination Of Death (S-SV EMS Determination of Death Protocol G-2):
 - Patients who meet 'Obvious Death Criteria' do not require cardiac monitor confirmation of asystole.
 - Patients who meet 'Probable Death Criteria' should be assessed utilizing the minimum number of EMS personnel necessary.
 - If death has been determined by EMS personnel, the patient should be left in the position found and not moved or touched beyond what is necessary to determine death.
 - Law enforcement personnel have the authority to declare death. If this has occurred, medical confirmation procedures by EMS personnel do not need to be performed unless specifically requested by law enforcement.
8. Every effort to cooperate with law enforcement should be made. In the event of disagreement with law enforcement, EMS personnel should document the issue and refer the matter to their supervisor for follow-up. If the disagreement involves an issue that could result in patient harm, an immediate request for supervisory personnel to respond to the scene shall be made.

Sierra – Sacramento Valley EMS Agency Program Policy			
Prohibition On Carrying Of Weapons By EMS Personnel			
	Effective: DRAFT	Next Review: DRAFT	883
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

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

AUTHORITY:

- A. HSC, §§ 1797.200, 1797.204, 1798.200.
- B. CCR, Title 22, Div. 9.

POLICY:

- A. On-duty EMS personnel shall not carry or possess on or about their person, or have in EMS equipment or vehicles, any of the following articles:
 - 1. Firearms or concealed weapons of any sort.
 - 2. Stun guns or Tasers.
 - 3. Nightsticks, batons, billy clubs, saps, or lead weighted gloves.
 - 4. Dirkss, daggerss, or switchblade kniveses.
 - 5. Any other deadly weapon.
 - 6. Tear gas, mace, pepper spray, or chemical agents.
 - 7. Handcuffs.
- B. This policy does not include apply to pocket knives or similar tools, instruments/equipment used in EMS rescue operations, or animal repellent.

Sierra – Sacramento Valley EMS Agency Program Policy			
Dispatch Determinants for 911 Transport Resources			
	Effective: DRAFT	Next Review: DRAFT	406
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish minimum requirements for the use of the Medical Priority Dispatch System™ (MPDS) and the assignment of Basic Life Support (BLS) and Advanced Life Support (ALS) transport resources.

AUTHORITY:

A. HSC, §§ 1798.102, 1798.150, 1798.170, 1798.172.

B. CCR, Title 22, Div. 9, Ch. 6.1.

DEFINITIONS:

A. Emergency Medical Dispatch (EMD) – Priority Dispatching characterized by an Emergency Medical Dispatcher who is responsible for providing pre-arrival instructions, when indicated and determining, using key medical questions, whether the call is a life threatening, or non-life-threatening emergency. The Emergency Medical Dispatcher acts on the request and, using established guidelines, determines the level and type of response. In all cases, a response is dispatched.

B. Medical Priority Dispatch System™ (MPDS) – The International Academies of Emergency Dispatch system that establishes a universal standard for emergency dispatchers taking call for a broad range of field and triage response while first responders are enroute.

POLICY:

A. Public safety answering points, emergency medical dispatch centers, and ambulance dispatch centers that use MPDS shall use the system in accordance with their approved emergency medical dispatch process and applicable MPDS quality assurance requirements.

B. MPDS determinant codes shall be used to support consistent call categorization, response prioritization, and BLS/ALS transport resource assignment.

C. Dispatch determinant assignments for BLS Transport and ALS Transport shall follow Attachment A unless a more restrictive S-SV EMS requirement, operational directive, or patient-specific circumstance requires a higher level of response.

D. Determinants marked “X” under ALS Transport shall receive an ALS transport resource when available and appropriate for the incident.

- 1 E. Determinants marked “X” under BLS Transport may receive a BLS transport resource
2 when the call information does not otherwise indicate the need for ALS assessment,
3 treatment, or transport.
- 4 F. Nothing in this policy prevents dispatch, field personnel, or a provider agency from
5 upgrading to an ALS response when call information, patient condition, scene factors,
6 or clinical judgment indicates a potential ALS need.
- 7 G. Dispatch centers shall not modify the determinant-to-resource assignment matrix
8 without S-SV EMS Agency written approval.

9 **PROCEDURE:**

- 10 A. Upon receipt of an emergency medical request, the dispatch center shall process the
11 call using its approved MPDS workflow.
- 12 B. BLS Transport or ALS Transport assignment shall be based on the final MPDS
13 determinant.
- 14 C. If additional information is received after the initial determinant is assigned, the
15 dispatch center shall update the determinant and resource assignment consistent with
16 approved dispatch procedures.
- 17 D. BLS assignment shall not be used when the available information indicates an ALS-
18 level clinical condition, unless no ALS resource is available and the assignment is
19 made under approved system status or mutual aid procedures.
- 20 E. ALS upgrade may occur based on determinant code, caller information, known high-
21 risk patient factors, field request, or S-SV EMS direction.
- 22 F. Downgrades from ALS to BLS shall occur only when allowed by approved dispatch
23 procedures or when the highest-level medical provider on scene has completed an
24 appropriate physical assessment of the patient and it has been determined that a BLS
25 transport resource is appropriate based on patient condition.
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Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
1	A	Abdominal Pain/Problems	X	
	C			X
	D			X
2	A	Allergies (Reactions)/ Envenomation's (Stings, Bites)	X	
	B			X
	C			X
	D			X
	E			X
3	A	Animal Bites/Attacks	X	
	B			X
	D			X
4	A	Assault/Sexual Assault/Stun Gun		X
	B			X
	D			X
5	A	Back Pain (Non-Traumatic or Non-Recent Trauma)	X	
	C			X
	D			X
6	C	Breathing Problems		X
	D			X

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Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
7	A	Burns (Scalds)/Explosion (Blast)	X	
	B			X
	C			X
	D			X
	E			X
8	O	Carbon Monoxide/Inhalation/Hazmat/CBRN	X	
	B			X
	C			X
	D			X
9	O	Cardiac or Respiratory Arrest/Death	X	
	B			X
	D			X
	E			X
10	A	Chest Pain/Chest Discomfort (Non-Traumatic)		X
	C			X
	D			X
11	A	Choking	X	
	D			X
	E			X

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Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
12	A	Convulsions/Seizures		X
	B			X
	C			X
	D			X
13	A	Diabetic Problems	X	
	C			X
	D			X
14	A	Drowning/Near Drowning/ Diving/Scuba Accident		X
	B			X
	C			X
	D			X
	E			X
15	C	Electrocution/Lightning	X	
	D			X
	E			X
16	A	Eye Problems/Injuries	X	
	B			X
	D			X
17	A	Falls	X	
	B			X
	D			X

Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
18	A	Headache	X	
	B		X	
	C			X
19	A	Heart Problems/A.I.C.D.	X	
	C			X
	D			X
20	A	Heat/Cold Exposure	X	
	B			X
	C			X
	D			X
21	A	Hemorrhage (Bleeding)/Lacerations	X	
	B			X
	C			X
	D			X
22	A	Inaccessible Incident/Other Entrapments (Non-Traffic)	X	
	B			X
	D			X

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Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
23	O	Overdose/Poisoning (Ingestion)	X	
	B			X
	C			X
	D			X
	E			X
24	O	Pregnancy/Childbirth/Miscarriage	X	
	A		X	
	B			X
	C			X
	D			X
25	O	Psychiatric/Mental Health Conditions/ Suicide Attempt/Abnormal Breathing	X	
	A			X
	B			X
	C			X
	D			X
26	O	Sick Person (Specified Diagnosis)	X	
	A		X	
	B			X
	C			X
	D			X

Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
27	A	Stab/Gunshot/Penetrating Trauma	X	
	B			X
	D			X
28	A	Stroke (CVA)/ Transient Ischemic Attack (TIA)	X	
	C			X
29	O	Traffic Collision/Transportation Incident	X	
	A		X	
	B			X
	D			X
30	A	Traumatic Injuries (Specific)	X	
	B			X
	D			X
31	A	Unconscious/Fainting (Near)	X	
	C			X
	D			X
	E			X
32	B	Unknown Problem (Person Down)		X
	D			X

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Dispatch Determinants for 911 Transport Resources	406
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Dispatch Determinants			Transport Resource	
Card	Modifier	Description	BLS Transport	ALS Transport
34	O	ACN (Automatic Crash Notification)	X	
	A		X	
	B			X
	D			X
36	A	Pandemic/Epidemic/Outbreak (Surveillance or Triage)	X	
	C			X
	D			X



Prehospital Provider Clinical Performance Standards Details

622-A

BLS Clinical Performance Standards

Applies to all BLS optional skills providers authorized by S-SV EMS to utilize supraglottic airway (SGA) devices

BLS Clinical Performance Standard – 1

Domain	Medical
Standard	First-Pass Advanced Airway Success: Supraglottic Airway (SGA)
Inclusion Criteria	All patients which SGA placement was attempted
Metric	EMS personnel shall achieve successful SGA placement using the least number of attempts necessary, with emphasis on first-pass success
Minimum Encounters	5
Threshold	≥90%
Measurement	% of SGA procedures which successful placement is achieved on the first attempt – an attempt is defined as introducing the SGA into the oropharynx with the intent of placing the device – successful placement is defined as SGA placement confirmed by colorimetric CO ₂ detector (or waveform capnography if ALS is on scene) & clinical findings – all relevant details must be documented in applicable PCR data fields
Exemption Clause	Unanticipated anatomical difficulty or other valid reason(s) must be documented in the PCR as contributing factors to qualify for exemption

	Prehospital Provider Clinical Performance Standards Details	622-A
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ALS Clinical Performance Standards

Applies to all ALS providers, unless alternative clinical performance standards requirements are contained in an exclusive operating area (EOA) agreement

ALS Clinical Performance Standard – 1

Domain	Medical
Standard	First-Pass Advanced Airway Success: Endotracheal Tube (ETT) Intubation
Inclusion Criteria	All patients which ETT placement was attempted
Metric	EMS personnel shall achieve successful ETT placement using the least number of attempts necessary, with emphasis on first-pass success
Minimum Encounters	5
Threshold	≥70%
Measurement	% of ETT procedures which successful placement is achieved on the first attempt – an attempt is defined as introducing the ETT into the oropharynx with the intent of placing the device – successful placement is defined as ETT placement confirmed by waveform capnography & clinical findings – all relevant details must be documented in applicable PCR data fields
Exemption Clause	Unanticipated anatomical difficulty or other valid reason(s) must be documented in the PCR as contributing factors to qualify for exemption

ALS Clinical Performance Standard – 2

Domain	Medical
Standard	First-Pass Advanced Airway Success: Supraglottic Airway (SGA)
Inclusion Criteria	All patients which SGA placement was attempted
Metric	EMS personnel shall achieve successful SGA placement using the least number of attempts necessary, with emphasis on first-pass success
Minimum Encounters	5
Threshold	≥90%
Measurement	% of SGA procedures which successful placement is achieved on the first attempt – an attempt is defined as introducing the SGA into the oropharynx with the intent of placing the device – successful placement is defined as SGA placement confirmed by waveform capnography & clinical findings – all relevant details must be documented in applicable PCR data fields
Exemption Clause	Unanticipated anatomical difficulty or other valid reason(s) must be documented in the PCR as contributing factors to qualify for exemption

	Prehospital Provider Clinical Performance Standards Details	622-A
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ALS Clinical Performance Standard – 3	
Domain	Stroke
Standard	Evaluation of Blood Glucose Level (BGL) & Last Known Well (LKW) Time for Patients with a Positive Stroke Screen
Inclusion Criteria	Patients ≥18 years old with a positive stroke screen (NEMSIS eVitals.29 and eVitals.30)
Metric	EMS personnel shall document the BGL & LKW time in the PCR
Minimum Encounters	5
Threshold	≥90%
Measurement	Documentation of BGL evaluation/results & LKW time in applicable PCR data fields
Exemption Clause	Unable to complete, with valid reason(s), or patient refusal must be documented in the PCR to qualify for exemption

ALS Clinical Performance Standard – 4	
Domain	Cardiac
Standard	12-Lead Acquisition Within 10 Minutes of Patient Contact
Inclusion Criteria	Patients ≥18 years old with any of the following documented Provider's Primary Impression (NEMSIS eSituation.11): • Chest pain – Suspected Cardiac (Code: I20.9) • Chest pain – STEMI (Code: I21.3) • Cardiac Dysrhythmia (Code: I49.9) • Palpitations (Code: R00.2) • ALOC – Unspecified (Code: R41.82) • Dizziness/Vertigo (Code: R42) • Syncope/Near Syncope (Code: R55) • Respiratory Distress/Pulmonary Edema/CHF (Code: J81.0)
Metric	EMS personnel shall acquire/document a 12-Lead ECG for patients who meet applicable 12-Lead indications
Minimum Encounters	5
Threshold	≥90%
Measurement	12-Lead EKG acquired within 10 minutes of patient contact & pertinent information/results documented in applicable PCR data fields
Exemption Clause	Patient refusal, immediate life threats, extremely short transport time (<5 minutes), or other valid reasons for 12-Lead delay must be documented in the PCR to be qualify for exemption

	Prehospital Provider Clinical Performance Standards Details	622-A
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ALS Clinical Performance Standard – 5	
Domain	Cardiac
Standard	Defibrillation Timing
Inclusion Criteria	All patients in cardiac arrest with a shockable rhythm identified by EMS
Metric	EMS personnel shall deliver the first defibrillation shock within two (2) minutes of identification of a shockable rhythm
Minimum Encounters	5
Threshold	≥90%
Measurement	Elapsed time between shockable rhythm identification & the time of first defibrillation shock delivery documented in applicable PCR data fields
Exemption Clause	Scene safety concerns or other valid reason(s) for delay must be documented in the PCR to qualify for exemption

ALS Clinical Performance Standard – 6	
Domain	Trauma
Standard	Transport of Trauma Triage Criteria Patients to a Designated Trauma Center
Inclusion Criteria	All patients meeting red or yellow field trauma triage criteria, as defined in S-SV EMS General Trauma Management Protocol (T-1)
Metric	EMS personnel shall transport applicable patients meeting field trauma triage criteria to a designated trauma center
Minimum Encounters	5
Threshold	≥95%
Measurement	Percentage of patients meeting red or yellow field trauma triage criteria, as defined in S-SV EMS General Trauma Management Protocol (T-1), transported to a designated trauma center
Exemption Clause	Patients transported to a non-trauma hospital in accordance with S-SV EMS General Trauma Management Protocol (T-1) or other valid reason(s) for transport to a non-trauma hospital must be documented in the PCR to qualify for exemption

	Prehospital Provider Clinical Performance Standards Details	622-A
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ALS Clinical Performance Standard – 7	
Domain	Trauma
Standard	Trauma Patient Mechanism of Injury Documentation
Inclusion Criteria	All patients with either of the following documented Provider's Primary Impression (NEMSIS eSituation.11): • Traumatic Injury (Code: T14.90) • Traumatic Arrest (Code: I46.8)
Metric	EMS personnel shall document a mechanism of injury for all patients with a trauma-related primary impression
Minimum Encounters	5
Threshold	≥95%
Measurement	Percentage of patients with a trauma-related Provider's Primary Impression with a mechanism of injury documented in applicable PCR data fields
Exemption Clause	Unable to obtain history, with valid reason(s), must be documented in the PCR to qualify for exemption

ALS Clinical Performance Standard – 8	
Domain	Pediatric
Standard	Pediatric Weight Documentation & Correct Weight-Based Medication Dosing
Inclusion Criteria	Pediatric patients ≤14 years old who received EMS administered weight-based medication
Metric	EMS personnel shall document the weight of the pediatric patient & shall calculate/administer pediatric medication doses based on the documented patient weight in accordance with S-SV EMS protocol defined pediatric weight-based medication dosing
Minimum Encounters	5
Threshold	≥95%
Measurement	Percentage of pediatric patients who received EMS administered weight-based medication, with both a patient weight & accurate calculation/administration dose documented in applicable PCR data fields – medication dose must be within the applicable S-SV EMS protocol dosing range or within +/- 20% of the calculated weight-based dose if no dosing range is indicated, and must not exceed the protocol maximum allowable dose
Exemption Clause	N/A



**Prehospital Provider Clinical
Performance Standards Quarterly Report (BLS)**

622-B

Agency:

Year:

Quarter:

Clinical Performance Standard Description	Minimum Required Encounters	Minimum Threshold	Denominator (Applicable Encounters)	Numerator (Compliant Encounters – Including Exemptions)	Number Of Exemptions	Compliance (Numerator/Denominator)	Standard Met? (Yes, No, or N/A if Less Than Minimum Required Encounters)
First-Pass Advanced Airway Success: Supraglottic Airway (SGA)	5	≥90%					

Notes



Prehospital Provider Clinical Performance Standards Quarterly Report (ALS)

622-C

Agency:

Year:

Quarter:

Clinical Performance Standard Description	Minimum Required Encounters	Minimum Threshold	Denominator (Applicable Encounters)	Numerator (Compliant Encounters – Including Exemptions)	Number of Exemptions	Compliance (Numerator/Denominator)	Standard Met? (Yes, No, or N/A if Less Than Minimum Required Encounters)
First-Pass Advanced Airway Success: Endotracheal Tube (ETT) Intubation	5	≥70%					
First-Pass Advanced Airway Success: Supraglottic Airway (SGA)	5	≥90%					
Evaluation of BGL & LKW Time for Patients with a Positive Stroke Screen	5	≥90%					



**Prehospital Provider Clinical
Performance Standards Quarterly Report (ALS)**

622-C

Clinical Performance Standard Description	Minimum Required Encounters	Minimum Threshold	Denominator (Applicable Encounters)	Numerator (Compliant Encounters – Including Exemptions)	Number of Exemptions	Compliance (Numerator/ Denominator)	Standard Met? (Yes, No, or N/A if Less Than Minimum Required Encounters)
12-Lead Acquisition Within 10 Minutes of Patient Contact	5	≥90%					
Defibrillation Timing	5	≥90%					
Transport of Trauma Triage Criteria Patients to a Designated Trauma Center	5	≥95%					



**Prehospital Provider Clinical
Performance Standards Quarterly Report (ALS)**

622-C

Clinical Performance Standard Description	Minimum Required Encounters	Minimum Threshold	Denominator (Applicable Encounters)	Numerator (Compliant Encounters – Including Exemptions)	Number of Exemptions	Compliance (Numerator/Denominator)	Standard Met? (Yes, No, or N/A if Less Than Minimum Required Encounters)
Trauma Patient Mechanism of Injury Documentation	5	≥95%					
Pediatric Weight Documentation & Correct Weight-Based Medication Dosing	5	≥95%					

Notes



**Prehospital Provider Clinical
Performance Standards Quarterly Report (ALS)**

622-C

Notes (continued)

DRAFT

Sierra – Sacramento Valley EMS Agency Program Policy			
BLS Provider Agency Inventory Requirements			
	Effective: 06/01/2024	Next Review: 04/2027	704
	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 BLS response vehicles in the S-SV EMS region.

AUTHORITY:

HSC, §§ 1797.204, 1797.220.

CCR, Title 22, Div. 9.

CCR, Title 13.

CVC, § 2418.5.

EMSA Guidelines and Recommendations, Highway Patrol Handbook 82.4.

POLICY:

All S-SV EMS approved BLS 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.

BLS Provider Agency Inventory Requirements**704**

Radio Equipment & Miscellaneous Equipment/Supplies	BLS Transport	BLS Non Transport
Mobile UHF Med-Net Radio	1	0
Portable UHF Med-Net Radio or Mobile Telephone	1	0
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 3.5 Compliant Electronic PCR System	1	Optional
Refusal of EMS Care Forms	5	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 or Waterless Hand Sanitizer	10 OR 1	10 OR 1
Covered Waste Container (red biohazard bags acceptable)	1	1
Adult, Pediatric & Thigh BP Cuff	1 each	1 each
Stethoscope	1	1
Flashlight or Penlight	1	1
Bedpan or Fracture Pan	1	0
Urinal	1	0
Sharps Container	Optional	Optional
Padded Soft Wrist & Ankle Restraints	1 set	0
Lightweight, Sheer, Protective Mesh Hood (Spit Hood)	Optional	Optional
Pillows, Sheets, Pillowcases & Towels	2 each	0
Blankets	2	1
Emesis Basin/Disposable Emesis Bags	2	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

BLS Provider Agency Inventory Requirements

704

Biomedical Equipment/Supplies	BLS Transport	BLS Non Transport
Mechanical Chest Compression Device (S-SV EMS approved)	Optional	Optional
<u>Thermometer</u>	<u>1</u>	1
Pulse Oximeter	1	1
<u>AED</u>	<u>1</u>	1
<u>Adult Defibrillator Pads</u>	<u>1</u>	1
<u>Pediatric Defibrillator Pads</u>	<u>Optional</u>	<u>Optional</u>
<u>Glucometer (EMT Expanded Scope)</u>	<u>1</u>	<u>1</u>
<u>Test Strips (EMT Expanded Scope)</u>	<u>10 ct.</u>	<u>10 ct.</u>
<u>Lancets (EMT Expanded Scope)</u>	<u>10 ct.</u>	<u>10 ct.</u>
Airway & Oxygen Equipment/Supplies	BLS Transport	BLS Non Transport
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
Disposable CPAP Circuit With Mask	Optional	Optional
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
Water Soluble Lubricant	2	1
Oropharyngeal Airways: Sizes 40 mm – 110 mm or Equivalent	2 each	1 each
Nasopharyngeal Airways: Sizes 20 Fr – 34 Fr or Equivalent	2 each	1 each
Ambulance Mounted Suction Unit	1	0
Portable Mechanical Suction Unit (hand held manual suction unit acceptable for BLS non transport)	1	1
Spare Suction Canisters/Bags With Lids	2	Optional
Tonsillar Tip Suction Handle (if not using hand held suction unit)	2	1
i-gel Airway Devices: Sizes 3, 4, 5 (EMT Optional Skills)	1 each	1 each

BLS Provider Agency Inventory Requirements**704**

Airway & Oxygen Equipment/Supplies (cont.)	BLS Transport	BLS Non Transport
i-gel Airway Device Holder (EMT Optional Skills)	2	1
ETCO2 Colorimetric Device (EMT Optional Skills)	2	1
Immobilization Equipment/Supplies	BLS Transport	BLS Non Transport
Kendrick Extrication Device (KED) or Equivalent	1	Optional
Adult Long Spine Board With Straps	2	1
Pediatric Spine Board	1	Optional
Head Immobilization Set	2	1
Rigid C-Collars: Sizes Pediatric & S, M, L Adult or Adjustable	2 each	2 each
XCollar Plus	Optional	Optional
Arm & Leg Splints (SAM, cardboard, vacuum, etc.)	2 each	2 each
Traction Splint	1	1
Bandaging Equipment/Supplies	BLS Transport	BLS Non Transport
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	Optional	Optional
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

BLS Provider Agency Inventory Requirements	704
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Obstetrical Equipment/Supplies	BLS Transport	BLS Non Transport
OB Kit (gloves, cord clamps, dressings, bulb syringe, cap, etc.)	2	1
Medication & Medication Administration Equipment/Supplies	BLS Transport	BLS Non Transport
Alcohol Swabs	20	10
Chlorhexidine Swabs/Skin Prep	Optional	Optional
Mucosal Atomizer Device (EMT Optional Skills)	Optional	Optional
<u>Aspirin, Chewable Tablets (EMT Expanded Scope)</u>	<u>10 Ct.</u>	<u>10 Ct.</u>
<u>Epinephrine Optional Skills Provider Supplies:</u> Epinephrine 1:1000 Auto Injectors • Adult 0.3 mg • Pediatric 0.15 mg Or Epinephrine 1:1000 IM Injection Kit containing all of the following: • Epinephrine/Adrenalin, 1:1000, 1 mg/ml, 1 mg vial (1) • EpiRite Syringe (3) • 22 – 25 ga X 1.5” safety injection needle (3) • Alcohol prep pads (6) • Portable sharps container (1)	Optional	Optional
Glucose Oral Product, Minimum 15gm	2	1
Mark-1/DuoDote Kit (EMT Optional Skills)	Optional	Optional
Naloxone, 2mg/2mL or 4 mg IN prep. (EMT Optional Skills)	4	2

Sierra – Sacramento Valley EMS Agency Program Policy			
Refusal Of EMS Care			
	Effective: DRAFT	Next Review: DRAFT	850
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

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

AUTHORITY:

- A. HSC, §§ 1797.204, 1797.220, 1798.
- B. CCR, Title 22, Div. 9.
- C. WIC, §§ 5008, 5150, 5170.
- D. PROB, §§ 810-813, 4609, 4711, 4712.

DEFINITIONS:

- A. **Emergency Medical Condition (EMC)** – A medical condition that, if not immediately diagnosed and treated, will lead to serious disability or death, or treatment is necessary to alleviate severe pain.
- B. **Capacity** – An individual's ability to 1) understand the nature and consequences of a decision and 2) ~~to~~ make/communicate a decision and understand the significant benefits, risks, and alternatives of their decision. An individual who has a mental or physical disorder may still be capable of making medical decisions. An individual has the capacity to give informed consent for EMS care if they can do all the following:
 1. Respond knowingly and intelligently to queries about EMS care.
 2. Participate in EMS care decisions by means of a rational thought process.
 3. Understand the following:
 - The nature and seriousness of the illness, disorder, or defect.
 - The nature of the EMS care that is being recommended.

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

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

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

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

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

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

1. The patient's designated adult surrogate.
2. The patient's agent pursuant to an advance health care directive or a power of attorney for health care.
3. The conservator or guardian of the patient having the authority to make health care decisions for the patient.
4. If none of the above are available, then the healthcare provider can choose a surrogate decision maker. A surrogate decision maker must:
 - Be an adult 18 years or older.
 - Have demonstrated special care and concern for the patient.
 - Be familiar with the patient's personal values and beliefs to the extent known.
 - Be reasonably available and willing to serve.
5. The surrogate decision maker can be chosen from the following list:
 - The spouse or domestic partner of the patient.

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

POLICY:

- A. No individual shall be encouraged to refuse EMS care.
- B. No individual shall be denied EMS care based on age, sex, race, creed, color, origin, economic status, language, sexual preference, disease, or injury, or any other actual or potential discriminatory reason.
- C. Individuals determined by EMS personnel to meet the definition of a person, according to this policy, do not require EMS care.
- D. A patient, legal guardian, or surrogate health care decision maker may decline all or part of EMS care if EMS personnel, in consultation with the base/modified base hospital when appropriate, have determined that the patient, legal guardian, or surrogate health care decision maker has capacity.
- E. Refusal of EMS care procedures shall be performed by the highest-level medical provider on scene. If the non-transport and transport providers are certified/licensed at the same level, and both are on scene, the primary care provider shall be responsible for completing the required refusal of EMS care procedures.

PROCEDURE:

- A. Unless refused by the patient, legal guardian, or surrogate health care decision maker, EMS personnel shall perform a complete and appropriate patient assessment, including obtaining vital signs and if applicable, performing diagnostic procedures (EKG/12-Lead, finger stick blood glucose testing, etc.).
- B. If EMS personnel have determined that an EMC exists:
 - 1. If the patient does not have capacity and no legal guardian or surrogate health care decision maker with capacity is available, the patient should be transported to the closest appropriate facility. This should occur in collaboration with other public safety personnel on-scene and the base/modified base hospital.
 - 2. If the patient has capacity, or a legal guardian or surrogate health care decision maker with capacity is available, EMS personnel shall provide the patient, legal guardian, or surrogate health care decision maker with enough information to understand the nature and consequences of refusing EMS care. EMS personnel

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

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

1. Any individual who has attempted suicide or verbalized suicidal/homicidal ideations and is refusing EMS care.
2. There is concern for patient neglect or endangerment.
3. EMS personnel have determined that the patient should be considered for a mental health hold and no EMC exists.
4. Any circumstance where EMS personnel believe law enforcement assistance would be beneficial.

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

1. Any situation in which EMS providers believe that a patient lacks capacity and is attempting to communicate a desire to not receive EMS care, unless an EMC exists and doing so would delay emergent care/transport.
2. Patients with a new altered level of consciousness who meet any of the following criteria:
 - Continuing altered level of consciousness.
 - Diabetic patients who meet any of the following criteria:
 - No known cause for hypoglycemic episode (i.e., e.g., missed meal, pump failure).
 - Suspected medication error/overdose of prescribed diabetes medications.
 - Experienced a seizure.
 - Required more than one dose of dextrose and/or glucagon by EMS.
 - Repeat blood glucose is ≤ 100 mg/dL.
 - A reliable adult will not be staying with the patient.
3. Seizure patients, with a known seizure disorder, who meet any of the following criteria:
 - Prolonged seizure (>5 min) or multiple seizures.
 - Seizures resulting from a traumatic injury.
 - No known cause for seizure (i.e., e.g., compliant with seizure medications).

- New or different seizure symptoms.
 - Pregnant patients.
 - Patient has recently started a new medication.
 - A reliable adult will not be staying with the patient.
4. Patients experiencing a potentially life-threatening condition, including but not limited to patients meeting STEMI, stroke, or trauma triage criteria.
5. A patient exhibiting unstable vital signs.
6. In the event of a conflict with law enforcement, EMS personnel shall consult with the base/modified base hospital and document the events appropriately.
7. Any situation where a request for law enforcement request/assistance was unsuccessful in facilitating EMS care, and EMS personnel believe that further EMS care is in the patient's best interest.
8. Any circumstance where EMS personnel believe base/modified base hospital assistance would be beneficial or are requesting direct MICN or base/modified base hospital physician communication with the patient.
9. A patient who is an unemancipated minor (<18 years of age) or under the care of a legal guardian or surrogate health care decision maker, who is being discharged to themselves or another person present at the scene who is not their parent or legal guardian.
- E. Prior to releasing unemancipated minor patients, or patients under the care of a legal guardian, EMS personnel shall attempt to contact the patient's parent/legal guardian if they are not already on scene. Pertinent contact details, as well as information on who the patient was released to, shall be documented in the patient care report.
- F. In the event of communication failure for circumstances that require base/modified base hospital contact, a patient, legal guardian, or surrogate health care decision maker with legal capacity may be released by EMS personnel after all other requirements contained in this policy are met. EMS personnel must document the method of communication attempted and the reason for the communication failure in the patient care report.
- G. A patient, legal guardian, or surrogate health care decision maker refusing EMS care must sign a Refusal of EMS Care Form (850-A or similar), witnessed by one of the following individuals (listed in descending order of preference):
1. Immediate family member.

Refusal Of EMS Care	850
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2. Law enforcement officer.

3. Other EMS personnel.

4. Involved third party.

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

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



S-SV EMS Agency Refusal of EMS Care Form (850-A)



EMS Agency:	Incident #:	
Patient Name:	Patient DOB:	
Base Hospital: ☐ N/A	MICN/Physician: ☐ N/A	
The following apply to me or the patient I am representing (check all that apply): ☐ I am refusing medical assessment. ☐ I am refusing medical treatment. ☐ I am refusing medical transportation. ☐ I have received medical assessment and treatment, but decline medical transportation. ☐ I am insisting on medical transport to a hospital other than <u>that recommended by</u> EMS personnel <u>recommend</u> .		
I understand that EMS personnel are not physicians, are not qualified or authorized to make a medical diagnosis, and that their care is not a substitute for that of a physician. I recognize that I, or the patient I am representing, may have a serious injury or illness <u>which that</u> could get worse without medical attention even though I, or the patient I am representing, may feel fine at the present time. I understand that I may change my mind and call 911 if medical assistance, treatment, or transportation is needed at a later time. I also understand that medical treatment is available at an emergency department 24 hours a day or from my/the patient's physician. If I have insisted on being transported to a destination other than that recommended by EMS personnel, I understand that I have been informed that there may be a significant delay in receiving care at the emergency department, that the emergency department may lack the staff, equipment, beds, or resources to care for me promptly and/or that I might not be able to be admitted to that hospital. I acknowledge that this advice has been explained to me by EMS personnel and that I have read this form completely and understand its provisions. I agree on my own behalf, or on behalf of the patient I am representing, to release, indemnify, and hold harmless all EMS providers and their officers, members, employees, or other agents, and the base hospital, from any and all claims, actions, causes of action, damages, or legal liabilities of any kind arising out of my decision, or from any act or omission of the EMS providers or their personnel, or the base hospital or their personnel.		
Patient Instructions:		
Patient Signature: ☐ Patient ☐ Legal Guardian or Surrogate Health Care Decision Maker		
_____ Name	_____ Signature	_____ Date
Witness Signature: ☐ Immediate Family Member ☐ Law Enforcement Officer ☐ EMS Provider		
_____ Name	_____ Signature	_____ Date
Patient/Legal Guardian/Surrogate Health Care Decision Maker Refusal to Sign: I attest that the patient/legal guardian/ <u>health care</u> surrogate health care decision maker has refused EMS assessment, treatment, and/or transportation. The patient/legal guardian/surrogate health care decision maker was informed of the risks of refusal and refused to sign this form when asked by EMS personnel.		
Witness Signature: ☐ Immediate Family Member ☐ Law Enforcement Officer ☐ EMS Provider		
_____ Name	_____ Signature	_____ Date



S-SV EMS Agency Refusal of EMS Care Form (850-A)



Refusal of EMS Care Checklist

EMS Agency:

Incident #:

Step 1 – Capacity

☐ Yes ☐ No Does the pt, legal guardian, or surrogate health care decision maker have capacity to give informed consent for EMS care?

If “Yes”, go to Step 2.

If “No”, LE assistance &/or base/modified base hospital consultation is required prior to pt release.

Step 2 – Law Enforcement (LE) Assistance

☐ Yes ☐ No Does the pt have suicidal or homicidal ideations?

☐ Yes ☐ No Do EMS personnel suspect pt neglect/endangerment?

☐ Yes ☐ No Do EMS personnel believe the pt should be considered for a mental health hold?

☐ Yes ☐ No Do EMS personnel believe law enforcement assistance would be beneficial?

If “No” to all, go to Step 3.

If “Yes” to any, LE assistance must be requested prior to pt release.

If LE is unavailable unwilling, or LE assistance was unsuccessful in facilitating EMS care transport, base/modified base hospital consultation is required prior to pt release.

Step 3 – Base/Modified Base Hospital Consultation

☐ Yes ☐ No Does the pt have a new altered level of consciousness and meet any of the following?

- Continuing altered level of consciousness.
- Diabetic pt who requires base/modified base hospital consultation prior to release.
- Seizure pt who requires base/modified base hospital consultation prior to release.

☐ Yes ☐ No Is the pt experiencing a potentially life-threatening condition (STEMI, Stroke, Trauma Triage Criteria, etc.)?

☐ Yes ☐ No Is the pt exhibiting unstable vital signs?

☐ Yes ☐ No Do EMS personnel believe base/modified base hospital assistance/consultation would be beneficial?

☐ Yes ☐ No Is the pt an non-unemancipated minor (<18yo) and their whose parent/legal guardian is unavailable?

If “No” to all, pt may refuse EMS care & be released without base/modified base hospital consultation.

If “Yes” to any, EMS personnel must consult with the base/modified base hospital prior to pt release.

**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
- Assess V/S, including SpO₂
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%) or short of breath

ALS

- Cardiac & EtCO₂ 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 & 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/Modified Base Hospital Order Only)

- 1st 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:
- 2nd dose: 0.2 mg/kg rapid IV/IO (max 12 mg), followed with 20 mL IV/IO NS flush

Probable VTCardiopulmonary
compromise?

NO

YES

**Synchronized Cardioversion
Base/Modified Base Hospital
Order Only**

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

Consult with base/modified
base hospital as needed

**Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

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

BLS

- Assess V/S, including SpO₂
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%), short of breath, or signs of heart failure or shock
- P-Q-R-S-T

Aspirin

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

ALS

- Cardiac monitor
- 12-lead EKG as soon as possible (prior to nitroglycerin administration)
 - Criteria for ST Elevation Myocardial Infarction (STEMI):
 1. Machine readout: 'Meets ST Elevation MI Criteria', 'Acute MI', 'STEMI' (or equivalent)
 2. ST elevation in 2 or more contiguous leads
 - For pts with suspected ACS, serial 12-lead EKGs should be obtained if the pt's clinical status changes or if EKG changes are noted on the monitor, and every 15 mins if transport times are long
 - A posterior 12-lead EKG should be performed for pts with ACS symptoms when a standard 12-lead EKG demonstrates ST depression in leads V1 – V3 but does not meet STEMI criteria

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

If discomfort persists following initial 12-lead acquisition:**Nitroglycerin**

- 0.4 mg SL (tablet or spray), repeat every 5 mins if discomfort persists
- Do not administer if SBP <100,
- Use with caution for pts with suspected inferior MI (establish vascular access prior to administration)
- Consult with base/modified base hospital prior to administration if pt takes has taken erectile dysfunction or pulmonary hypertension medication (PDE-5 Inhibitors) within the last 24 hrs

SEE PAGE 2 FOR ADDITIONAL ALS TREATMENT & PT DESTINATION

**Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)****ADDITIONAL ALS TREATMENT & PT DESTINATION**

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

Fentanyl

- 25 mcg slow IV/IO
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 200 mcg)
- Continuous EtCO₂ monitoring

- ① Do not administer fentanyl to pts with any of the following contraindications:
- Systolic BP <100
 - Hypoxia or RR <12
 - ALOC or evidence of head injury

For current or potential nausea/vomiting:

Zofran (Ondansetron)

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

STEMI Criteria Met?

NO → **Transport to Closest Facility**

YES

Both STEMI Criteria Met?

NO

YES

≤45 min to STEMI Receiving Center (SRC)

NO

Contact closest SRC for destination consultation
(Transmit 12-lead EKG to closest SRC, if able)

YES

Any of the following criteria met?

- CPR in progress
- Unmanageable airway
- Unstable v-tach

YES

Transport to Closest Facility

NO

Transport Directly to SRC

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

STEMI Pt Notes

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



Newborn Care/Neonatal Resuscitation

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

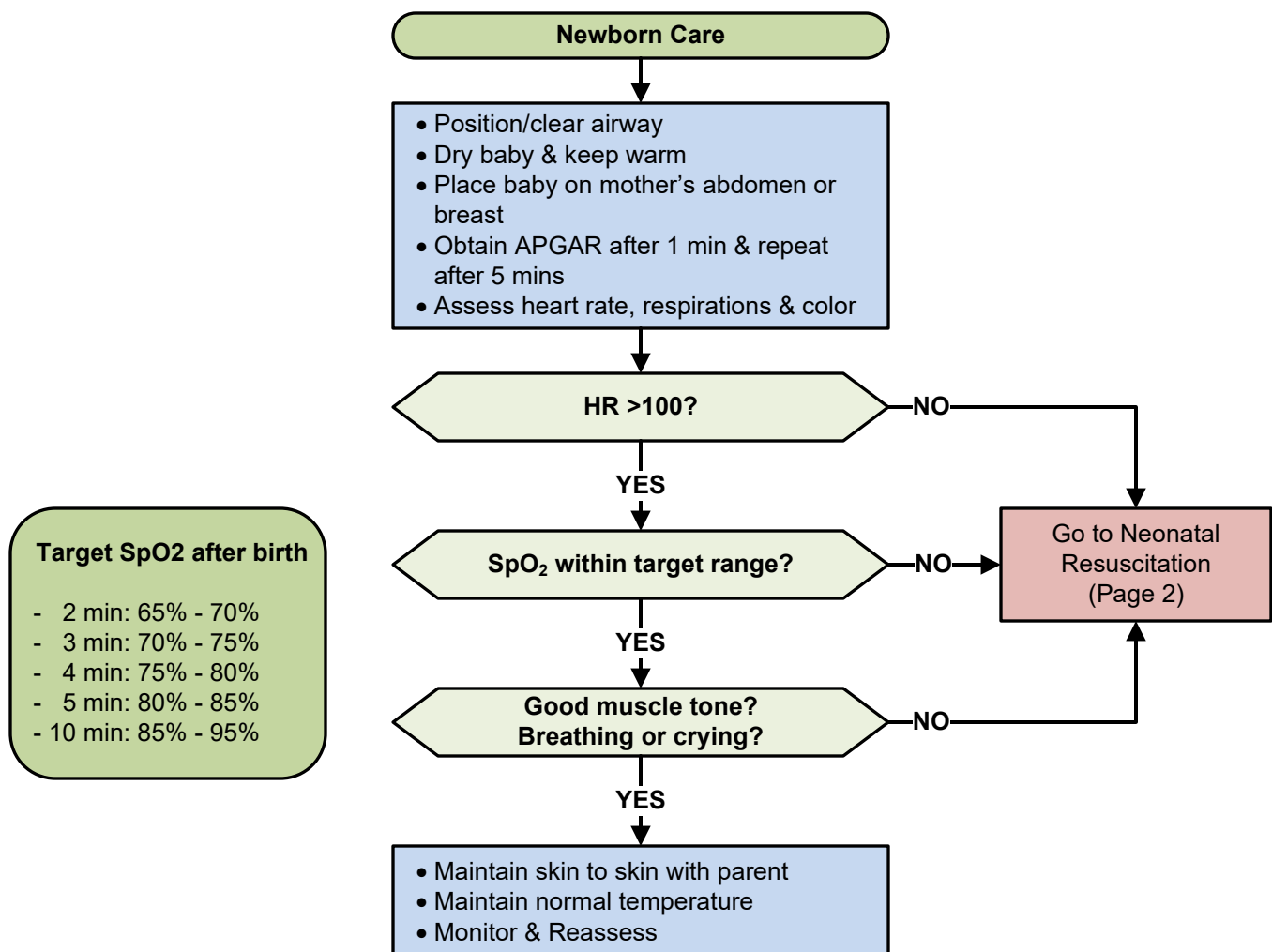
Approval: John Poland – Executive Director

Next Review: DRAFT

- A newborn/neonate is a child ≤ 28 days of age.
- Initial & ongoing assessments are critical to identifying and correcting life threats.
- If resuscitation is not required, EMS personnel should prioritize the following:
 - Whenever possible keep mother & baby together.
 - Maintain skin-to-skin contact between mother & baby.
 - Keep the baby warm – dry & cover the head, hands & feet.

APGAR SCORE

	Sign/Score	0	1	2
A	Appearance	Blue/Pale	Peripheral cyanosis	Pink
P	Pulse Rate	None	<100	>100
G	Grimace	None	Grimace	Cries
A	Activity	Limp	Some motion	Active
R	Respiration	Absent	Slow/irregular	Good/strong cry





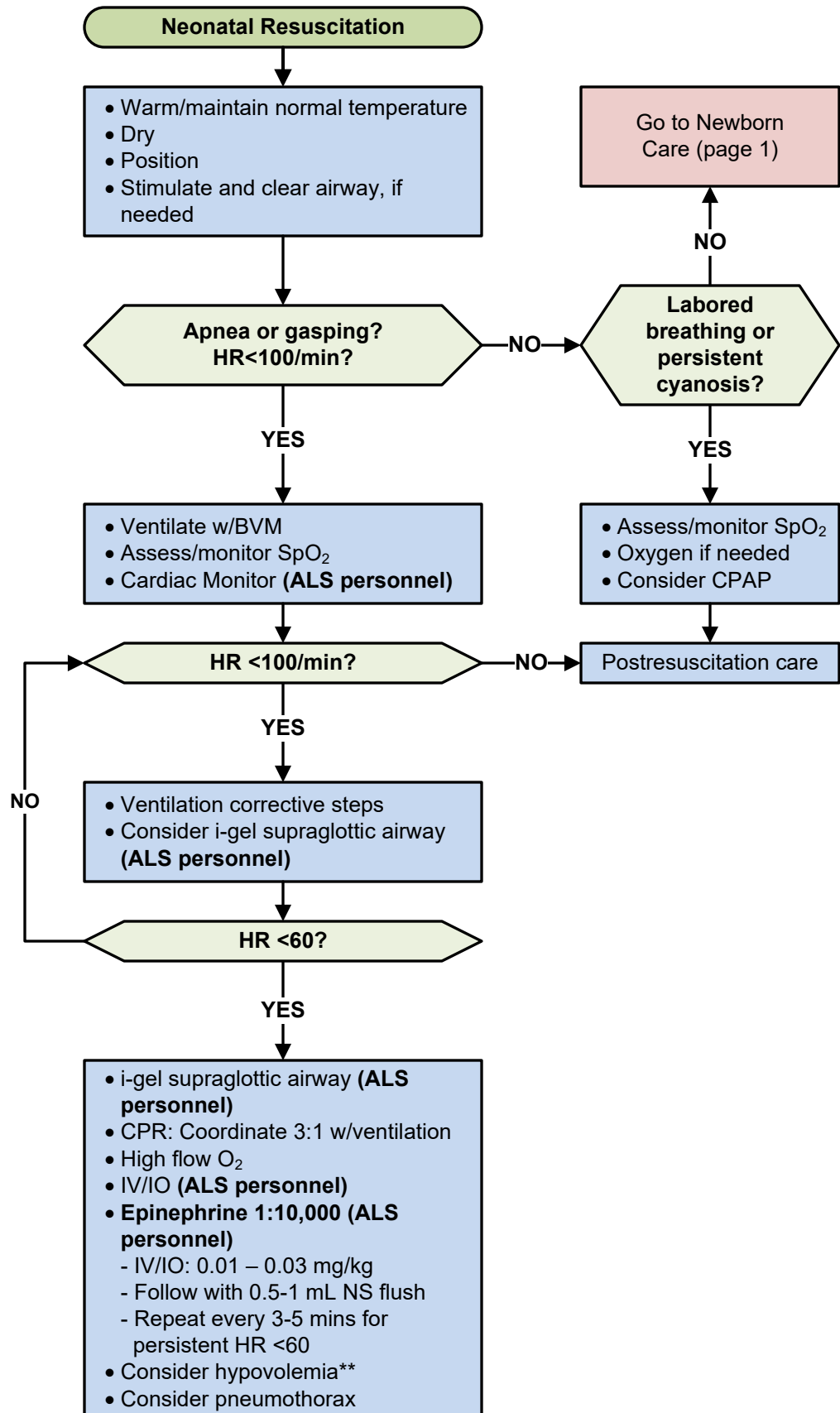
Newborn Care/Neonatal Resuscitation

***Airway/Ventilation**

- Position in a “sniffing” position to open the airway & clear secretions with a bulb syringe if necessary.
- If no improvement, & chest is not moving with BVM ventilation, the trachea may be obstructed by thick secretions/meconium. Use a bulb syringe, or suction catheter if necessary, to clear the nose, mouth & oropharynx. A laryngoscope may be used to assist in visualization of the oropharynx.

****Fluid Bolus**

- Contact the base/modified-base hospital for specific fluid bolus volume direction.
- Consider IV/IO NS (may bolus 10 mL/kg)



**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. Consider the pt's hemodynamic status, age, and previous medical history/medications when choosing analgesic interventions.
- Treatment goals should be directed at reducing pain to a tolerable level; pts may not experience complete pain relief.

BLS

- Assess V/S including pain scale & SpO₂, 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
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%) or short of breath
- Utilize non-pharmacological pain management techniques as appropriate, including:
 - Place in position of comfort and provide distraction/verbal reassurance to minimize anxiety
 - Apply ice packs &/or splints for pain secondary to trauma

Pain not effectively managed with non-pharmaceutical pain management techniques

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

Medication Contraindications & Administration Notes

- ① ~~For pts <4 yo, consult with base/modified base hospital prior to medication administration~~
- 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 pt becomes hypotensive (pg. 2)

Ketamine

- ① Do not administer to pregnant pts
- ① Consult with base/modified base hospital for additional doses following initial administration

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 (Pediatric Hypotension Table – page 2)
 - SpO₂ <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
- ① Consult with base/modified base hospital for additional doses following initial administration



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
Non-Acute Pain**

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

If pain not effectively managed:

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

Pain-Related to Acute Pain Injury/Burns/Frostbite**Moderate Pain**

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

If pain not effectively managed:

- Continuous EtCO₂ monitoring
- Fentanyl:** 1 mcg/kg slow IV/IO or IM/IN (max single dose: 50 mcg) – may repeat every 5 mins to max 4 doses

Severe Pain

Continuous EtCO₂ monitoring

Fentanyl:

- 1 mcg/kg slow IV/IO or IM/IN
(max single dose: 50 mcg)

OR**Ketamine:**

- IV/IO: 0.3 mg/kg slow
(max single dose: 30 mg)

If IV/IO access is unavailable or impractical:

- IM: 0.5 mg/kg
(max single dose: 25 mg)
- IN: 1 mg/kg
(max single dose: 50 mg)

Acetaminophen: 15 mg/kg
IV/IO infusion over 15 mins
(max: 1000 mg) – single dose

If pain not effectively managed - Base/Modified Base Contact Required

- If fentanyl previously administered, may repeat every 5 mins (max 4 doses)
- If ketamine previously administered, may repeat per dosing below (max 2 doses)
 - IV/IO – May repeat once after 10 – 15 minutes, 0.5 mg/kg
 - IM/IN – May repeat once after 20 minutes, 0.25 mg/kg

&/OR

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

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

**Acute Respiratory Distress**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

Continuous Positive Airway Pressure (CPAP) Utilization**• Indications:**

- CHF with pulmonary edema
- Moderate to severe respiratory distress
- Near drowning

• Contraindications:

- <8 years of age
- Respiratory or cardiac arrest
- Severe decreased LOC
- Agonal respirations
- Inability to maintain airway
- Suspected pneumothorax
- SBP <90
- Major trauma, especially head injury or significant chest trauma

• Complications:

- Hypotension
- Pneumothorax
- Corneal drying

Epinephrine Administration

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

BLS

- Assess & support ABCs
- High flow O₂
- Assess V/S, including SpO₂
- Consider CPAP for moderate to severe distress
- Assess history & physical, determine degree of illness (fever, sputum production, medications, asthma, COPD, CHF, exposures, hypertension, tachycardia, JVD, edema)

**EMT epinephrine
optional skills provider?**

NO

YES

**Pt with suspected asthma,
in severe distress**

NO

**Monitor &
reassess**

YES

Epinephrine 1:1,000 IM

- Adult Auto-Injector
- OR**
- 0.3 mg (0.3 mL) via approved syringe
(Authorized EMT Personnel Only)

SEE PAGE 2 FOR ALS TREATMENT



Acute Respiratory Distress

ALS TREATMENT

Asthma/COPD

Mild Distress

- Mild wheezing
- Mild shortness of breath
- Cough

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

- Albuterol 5 mg & Ipratropium 500 mcg**
- Nebulizer
- May repeat (**albuterol 2.5-5 mg only**) for continued respiratory distress

Moderate to Severe Distress

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

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

- Albuterol 5 mg & Ipratropium 500 mcg**
- Nebulizer/CPAP/BVM
- May repeat (**albuterol 2.5-5 mg only**) for continued respiratory distress

History of asthma with severe distress only
Epinephrine 1:1,000

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

Base/Modified Base Hospital Order Only
If inadequate response to Epinephrine**Magnesium Sulfate**

- 2 g in 100ml NS IV infused over 20 mins

CHF/Pulmonary Edema

Mild Signs & Symptoms

- Cardiac monitor
- IV NS TKO

- *Nitroglycerin**
- 0.4 mg SL
- May repeat every 5 mins

***Nitroglycerin Notes/Precautions**

- Do not administer if SBP <100
- Do not delay due to difficult vascular access
- Consult with base/modified base hospital prior to administration to pts taking erectile dysfunction or pulmonary HTN medication (PDE-5 Inhibitors) within the last 24 hrs
- If patient becomes hypotensive after application of NTG paste, remove and wipe the area with a clean towel

Moderate to Severe Signs & Symptoms

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

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

- SBP 100-150: 0.4 mg SL
- SBP 150-200: 0.8 mg SL
- SBP >200: 1.2 mg SL
- May repeat doses every 5 mins based on repeat SBP
- Consider applying 1" NTG paste if transport time is >30 min and 3x NTG SL has been administered without relief

**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 indicated for pts with suspected asthma who are in severe distress.
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.

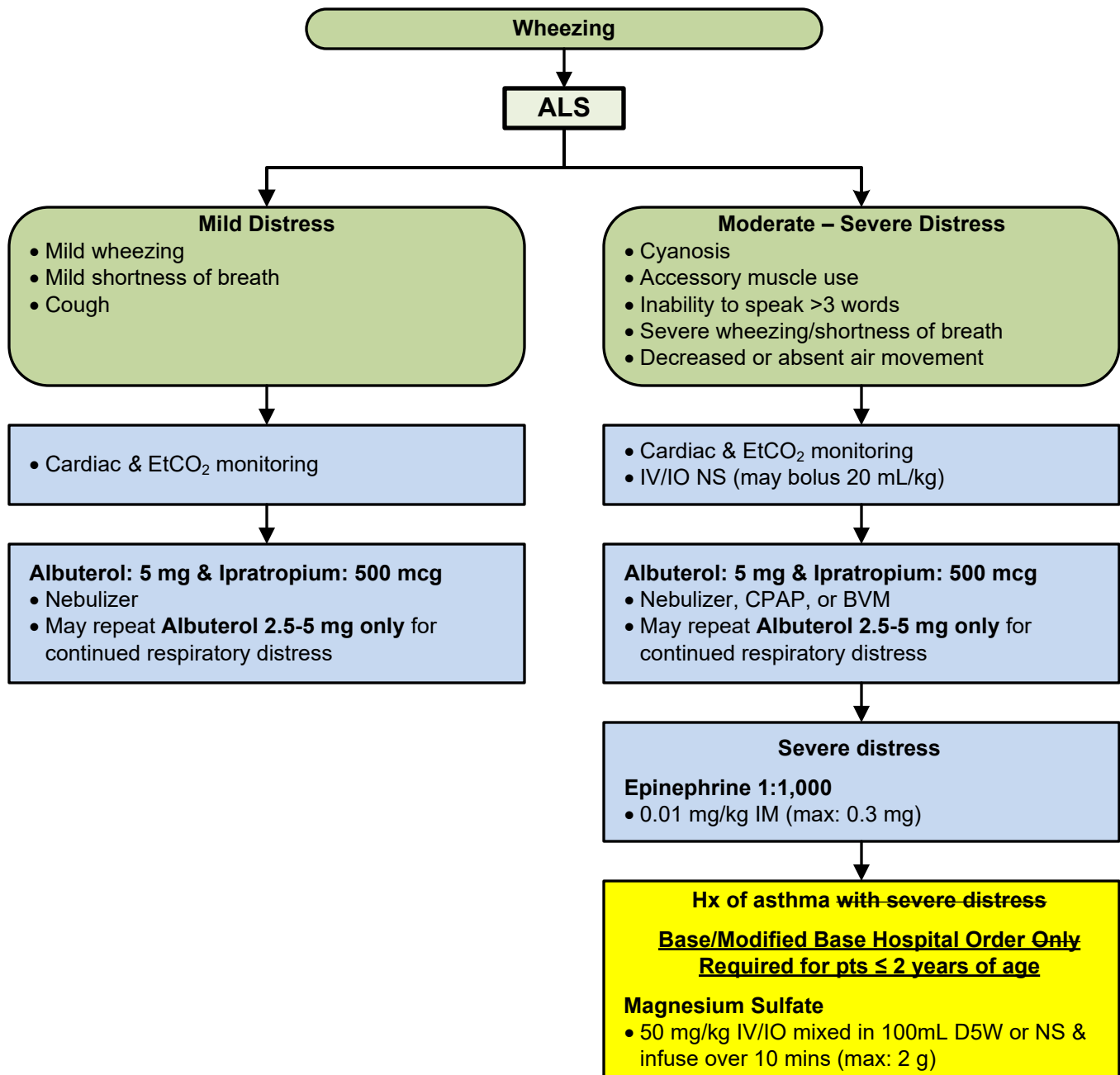
BLS

- Assess & support ABCs
- High flow O₂
- Assess V/S, including SpO₂
- Assess history & physical, determine degree of illness
- Minimize stimulation – keep pt calm & consider allowing parent to hold the child &/or O₂ delivery device if their presence calms the child
- Consider CPAP, when appropriate/indicated, for moderate to severe distress (pts ≥8 yo only)

**Suspected asthma &
in severe distress****YES****Epinephrine 1:1,000 IM (authorized/trained EMTs only)**

- Pts 7.5 – 30 kg
 - 0.15 mg pediatric auto-injector **OR** 0.15 mg (0.15 mL) via approved syringe
- Pts >30 kg
 - 0.3 mg adult auto-injector **OR** 0.3 mg (0.3 mL) via approved syringe

See pages 2 & 3 for ALS treatment of wheezing or suspected croup/epiglottitis

**Pediatric Respiratory Distress**

**Pediatric Respiratory Distress****Suspected Croup/Epiglottitis****ALS**

- Cardiac & EtCO₂ monitoring
- Consider nebulized saline
- **Minimize pt stimulation**
- If full upper airway occlusion suspected – ensure proper airway positioning & BVM seal, attempt to ventilate & reassess – **do not attempt i-gel**

**Unable to ventilate/maintain airway
utilizing less invasive procedures?****YES****Consider needle
cricothyrotomy
as airway of last
resort****NO**

Base/Modified Base Hospital Order Only
Transport is required if epinephrine is administered

Racemic epinephrine

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

OR**Nebulized epinephrine**

- 1:1000 - 0.5 mL/kg (max: 5 mL) nebulizer or BVM (if <5 mL, mix with NS to = 5 mL of volume)



Airway & Ventilation Management

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

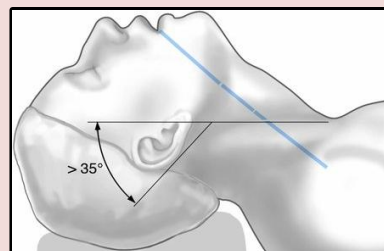
Next Review: DRAFT

INDICATIONS

- Airway & ventilation management techniques may include: basic airway maneuvers, use of airway adjuncts (e.g., oropharyngeal or nasopharyngeal airways), & advanced airway procedures (e.g., endotracheal intubation, supraglottic airway devices, or cricothyrotomy) based on the situation & the provider's level of training – Indications for airway management may include but are not limited to:
 - Obstructed airway
 - Respiratory distress/failure
 - Altered mental status
 - Severe shock (hemorrhagic, septic, cardiogenic)
 - Cardiac arrest
 - Trauma/burns/smoke inhalation
- An i-gel SGA is the preferred advanced airway device & should be attempted prior to ET intubation unless video laryngoscopy is available & the ALS provider has completed training for that device
- During cardiac arrest, advanced airway placement should not delay or interrupt CPR & shall not be considered until after the 1st round of defibrillation (if indicated) & administration of epinephrine
- If a functioning i-gel SGA is in place & there are no clinical signs of ventilatory insufficiency, the i-gel SGA shall not be replaced by ET intubation

BLS AIRWAY PROCEDURE

- Look, Listen, and Feel for level of responsiveness, chest movement, breath sounds, obstructions
- Positioning of unresponsive pts:
 - Place in the Head Elevated Laryngoscopy Position (HELP) to facilitate alignment of the pharyngeal, laryngeal & oral axis of the airway
 - Use the Head-Tilt/Chin-Lift, Jaw-Thrust, or Lateral Recovery Position (as appropriate)
- Remove visible obstructions &/or suction fluids as necessary, limiting suctioning to 10-15 secs
- Maintain airway patency – insert OPA/NPA as appropriate

**BAG-VALVE-MASK (BVM) VENTILATION PROCEDURE*****BVM ventilation should be performed by two rescuers whenever possible***

- Attach oxygen to BVM at a minimum flowrate of 10-15 L/min
- For one rescuer ventilation, position the mask over the nose & mouth & ensure a tight seal with an E-C clamp technique
- Squeeze the bag slowly, delivering breath over 1-2 secs
- Deliver only enough volume to achieve normal chest rise & fall
avoid excessive ventilation
- If utilizing a Positive End Expiratory Pressure (PEEP) valve, maintain between 5-10 cmH₂O. Do not utilize PEEP in any of the following circumstances:
 - Suspected pneumothorax
 - Suspected TBI or increased intracranial pressure
 - Hypovolemic shock
- Ventilate to maintain SpO₂ & EtCO₂ within appropriate range for pt condition
- An Impedance Threshold Device (ITD) may be utilized in adult non-traumatic pulseless arrest pts; however, two rescuers are required to maintain effectiveness if no advanced airway is in place





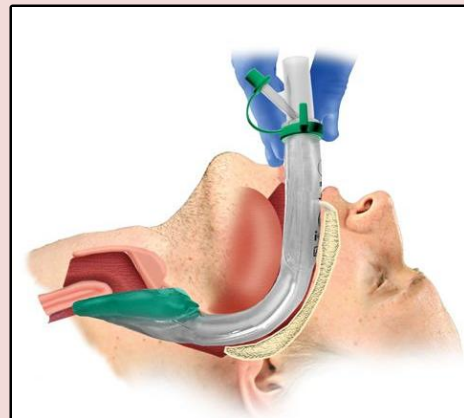
Airway & Ventilation Management

i-gel SUPRAGLOTTIC AIRWAY (SGA) PROCEDURE**Contraindications:**

- Intact gag reflex
- Caustic ingestion
- Unresolved complete airway obstruction
- If a functioning i-gel SGA is in place & there are no clinical signs of ventilatory insufficiency, the i-gel SGA shall not be replaced by ET intubation
- Pre-oxygenate pt with high-flow O₂ via NRM or BVM as appropriate, for a minimum of 3 mins
- Administer 10-15 L/min O₂ via NC, in addition to NRM/BVM O₂ to augment pre-oxygenation
- Select the correct size i-gel SGA device
- Lubricate the back & sides of the i-gel SGA device with a water-based lubricant
- Place the pt in a sniffing position or use a Jaw-Thrust maneuver if spinal injury is suspected
- Grasp the i-gel SGA device by the proximal end with the dominant hand, making sure the cuff is pointing downwards & the airway tube is aligned in the midline
- Gently press down on the chin & introduce the soft tip into the mouth towards the hard palate
- Glide the i-gel SGA device downwards & backwards Along the hard palate with a continuous but gentle Push until a definitive resistance is felt
- Begin ventilating with a BVM at the appropriate ventilation rate
- Follow **ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION & POST-PROCEDURE** instructions on page 3

Relative Contraindications:

- Trismus or limited ability to open the mouth
- Oral trauma
- Distorted anatomy that prohibits device placement

**ENDOTRACHEAL (ET) INTUBATION PROCEDURE**

- ET intubation attempts should last no more than 30 secs
- Pre-oxygenate pt with high-flow O₂ via NRM or BVM as appropriate, for a minimum of 3 mins
- Administer 10-15 L/min O₂ via NC, in addition to NRM/BVM O₂ to augment pre-oxygenation
- Assemble/prepare all equipment prior to ET intubation attempt
- Consider utilizing an ET tube introducer
- Follow manufacturer's directions for use specific to the laryngoscope utilized (direct laryngoscopy or video laryngoscopy)
- Visualize the vocal cords & pass the ET tube through the cords & into the trachea, approx. 2-3 cm beyond the cords
 - A common depth is approximately 21 cm for women/23 cm for men (measured at the teeth)
- Inflate the ET tube cuff with 5-10 mL of air
- Begin ventilating with a BVM at the appropriate ventilation rate
- If required, prior to 2nd ET attempt ventilate with 100% oxygen for a minimum of 1 min
- Follow **ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION & POST-PROCEDURE** instructions on page 3



Airway & Ventilation Management

NEEDLE CRICOTHYROTOMY PROCEDURE

Indications:

- Severe airway obstruction after assessment and visualization of the airway
- Failed intubation with an inability to ventilate using other methods

Contraindications:

- Pt age <3 yo or estimated weight <15 kg
- Conscious pt
- Presence of midline neck hematoma or massive subcutaneous emphysema

- Do not perform procedure in a moving ambulance
- Assemble/prepare all equipment prior to procedure attempt
- Position pt supine with the neck slight extended (if no cervical spine injury suspected)
- Locate the cricothyroid membrane
 - Palpate for the depression between the thyroid cartilage (Adam's apple) & the cricoid cartilage
- Attach a 10 mL syringe filled with 5 mL NS to the airway catheter
- **If utilizing a 12ga, 3" airway catheter:** With the bevel facing up, insert the needle through the skin at a 45° angle caudally into the cricothyroid membrane penetrating the skin & cricothyroid membrane with the needle
- **If utilizing a Rusch® QUICKTRACH® Needle Cricothyrotomy Device:** Puncture the skin & underlying cricothyroid membrane at a 90° angle with the needle, then adjust angle to 45° after penetrating the cricothyroid membrane
- Advance the catheter/cannula, aspirating with the syringe until bubbles are observed in the NS
- Continue advancing the catheter/cannula into the trachea while withdrawing the needle
- Secure in place, ensuring it is fixed to avoid displacement
- ~~Begin ventilating with a BVM at the appropriate ventilation rate~~

ADVANCED AIRWAY DEVICE PLACEMENT CONFIRMATION

- Using a stethoscope, check for the absence of gurgling sounds over the epigastrium & the presence of equal breath sounds over the lungs while observing for chest rise and fall. When an ET tube is in place, no sounds should be heard over the epigastrium. Gurgling may still be heard in pts who are breathing spontaneously or when an i-gel SGA device is in place
- Attach an EtCO₂ monitoring device, which must remain in place until arrival to the hospital or cessation of resuscitation efforts
- At least four (4) of the following techniques must be utilized to confirm advanced airway placement
 - Bilateral breath sounds
 - Bilateral chest rise and fall
 - Consistent EtCO₂ waveform
 - Change in Colorimetric CO₂ detector from purple to yellow
 - Condensation in the airway tube
 - SpO₂ rising to/or remaining above 94%
- ALS/LALS personnel must immediately confirm patency of an advanced airway placed by an EMT

POST-PROCEDURE

- Airway patency must be reassessed at a minimum of every 15 mins and:
 - Each time the patient is moved
 - If ventilation becomes difficult
 - If vital signs, including SpO₂ & EtCO₂ change unexpectedly
- If a pt with an advanced airway in place regains consciousness:
 - Use restraints as necessary to avoid displacement of the advanced airway device
 - Consider sedation with **Midazolam 10 mg IV/IO/IM/IN** for adult pts (may repeat same dose x 1)
 - Contact base/modified base hospital for pediatric Midazolam dosing if needed
- Document all methods/devices used to confirm advanced airway device placement in the PCR

**Pediatric General Medical Treatment**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

GENERAL PEDIATRIC TREATMENT PRINCIPLES

- The purpose of this protocol is to provide standing order assessment/treatment modalities for pediatric pt complaints not addressed in other S-SV EMS treatment protocols – including Nausea/Vomiting (Page 2), Brief Resolved Unexplained Event – BRUE (Page 3) & Suspected Shock/Sepsis (Page 4).
- The Newborn Care/Neonatal Resuscitation Protocol (M-2P) shall be used for pts during the first 28 days of life.
- Pediatric protocols shall be utilized for pts >28 days up to and including 14 years old.
- Applicable adult protocols may be utilized when there is not a pediatric protocol applicable to the pt's complaint/condition. Prehospital personnel shall consult with the base/modified base hospital for additional direction, if needed, when there is no standing order treatment protocol applicable to the pt's condition.
- A parent/reliable family member reported weight, length-based pediatric resuscitation tape or Handtevy shall be utilized for determining sizes of equipment and defibrillation/cardioversion joule settings. Once weight has been determined, medication dosing shall be based on S-SV EMS pediatric protocols.

NORMAL VITAL SIGNS & HYPOTENSION DEFINITION FOR NEONATAL & PEDIATRIC PATIENTS

Age	Normal Pulse Rate	Normal Resp. Rate	Normal SBP	Hypotension
≤28 days	100 - 205	30 - 50	60 - 80	SBP <60
29 days -12 months	90 - 180	30 - 50	70 - 100	SBP <70
1-2 years	80 - 140	24 - 40	80 - 110	SBP <70 + age x2
3-5 years	65 - 120	20 - 30	90 - 110	SBP <70 + age x2
6-9 years	60 - 120	20 - 30	100 - 120	SBP <70 + age x2
10-14 years	50 - 100	12 - 20	100 - 120	SBP <90

PEDIATRIC PROTOCOLS PROCEDURE/MEDICATION TREATMENT AGE RESTRICTIONS**≤ 6 months old:** Do not administer Ondansetron (M-6P)**≤ 2 years old:** Base/modified base hospital order required for Magnesium Sulfate (R-3P)**< 8 years old:** CPAP is not allowed (R-3P)**≤14 years old:** Base/modified base hospital order required for the following procedures/medications:

- Adenosine for tachycardia (C-4P)
- Transcutaneous pacing for bradycardia (C-4P)
- Midazolam for severe anxiety/combatative symptoms (M-11P)
- Repeat doses of Fentanyl/Ketamine if the initial administration was ineffective (M-8P)
- Midazolam for pain management (M-8P)

**Pediatric General Medical Treatment****BLS**

- Assess V/S, including SpO₂ & temperature (if able)
- O₂ at appropriate rate if pt hypoxemic (SpO₂ <94%), short of breath, cyanotic, or has signs of shock
- Assess and obtain medical history

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

ALS

- Consider the following additional assessment/treatment modalities, as appropriate based on pt's condition & clinical presentation
 - Cardiac monitor/12-lead EKG
 - EtCO₂ monitoring
 - IV/IO NS 20 mL/kg, to max 1000 mL

Nausea/Vomiting

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

ALS**Zofran (Ondansetron)****Pts (6 months – 4 years old)**

- 0.15 mg/kg (max. 4 mg) IM, or slow IV/IO (over 60 seconds) – single dose

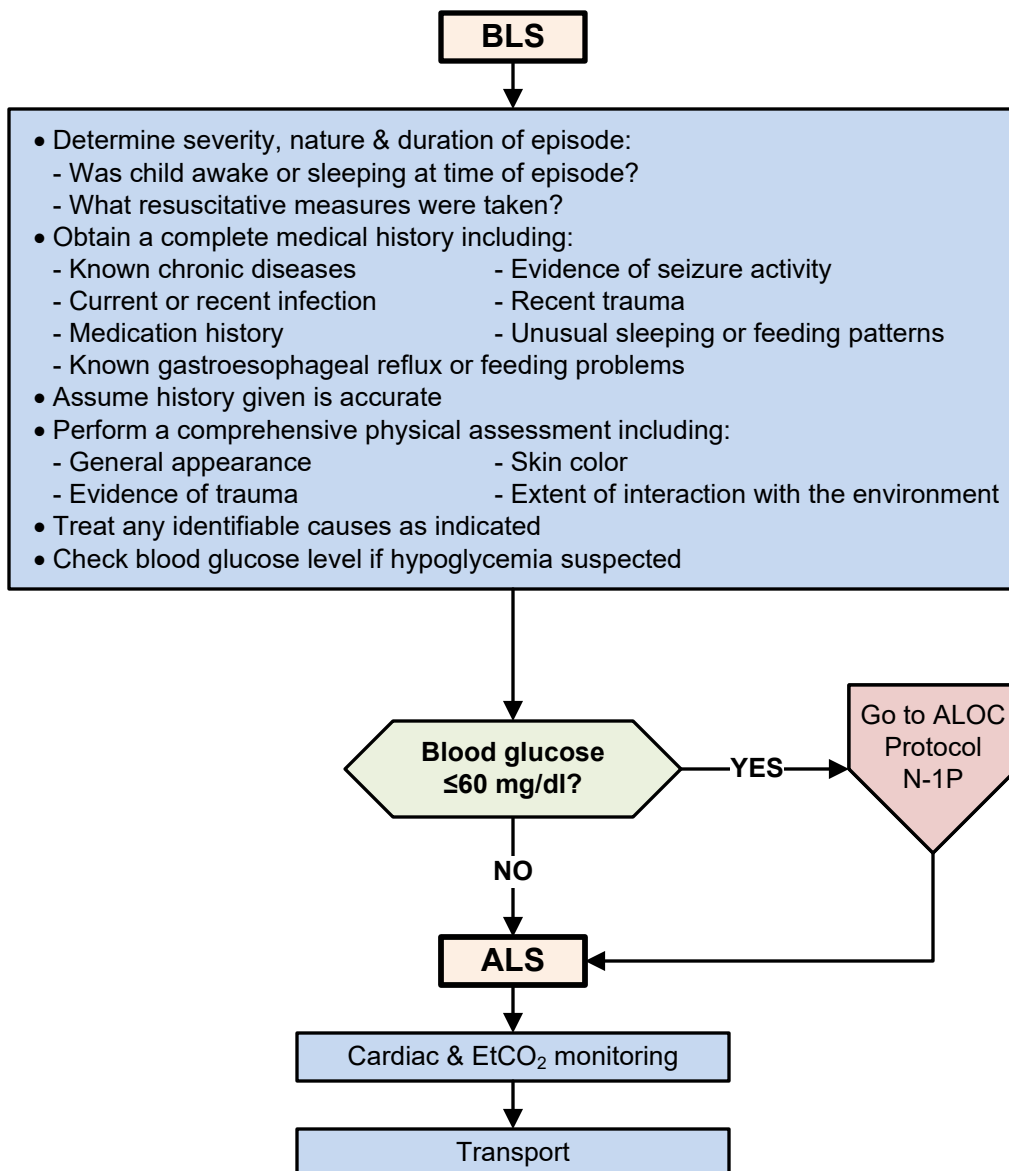
Pts (> 4 years)

- 4 mg oral disintegrating tablet, OR 4 mg IM, or slow IV/IO (over 30 seconds) – single dose

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

**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

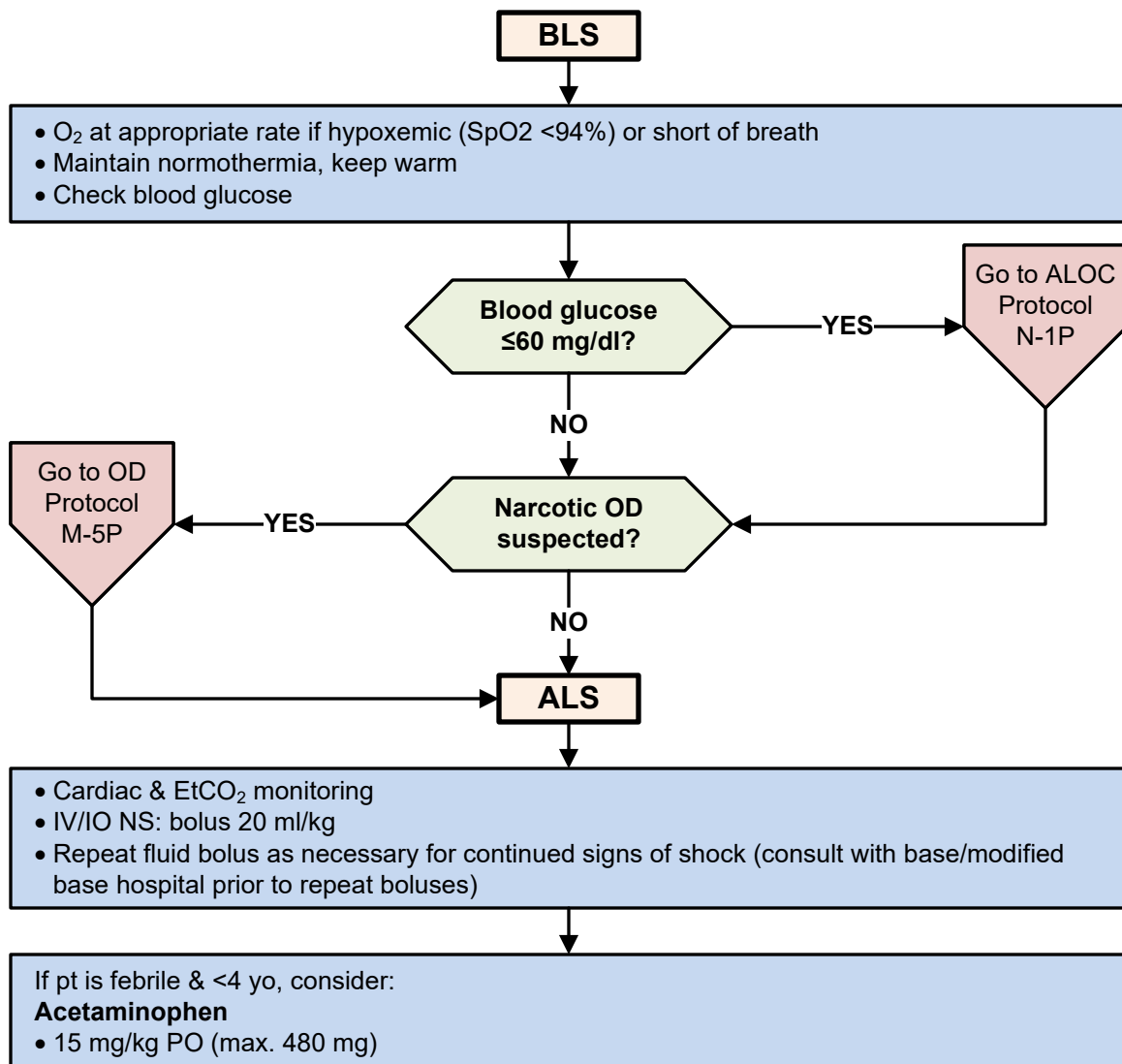
- Shock/Sepsis may be subtle and difficult to recognize.
- Early recognition of sepsis is critical to expedite hospital care and antibiotic administration.
- Septic pts are susceptible to traumatic lung injury. If BVM ventilation is necessary, avoid excessive tidal volumes.
- Obtain history including: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

Compensated Shock Signs/Symptoms:

- Tachycardia
- Cool extremities
- Weak peripheral pulses compared to central pulses
- Normal blood pressure

Decompensated Shock Signs/Symptoms:

- Hypotension &/or bradycardia (late findings)
- Altered mental status
- Decreased urine output
- Tachypnea
- Non-detectable distal pulses with weak central pulses





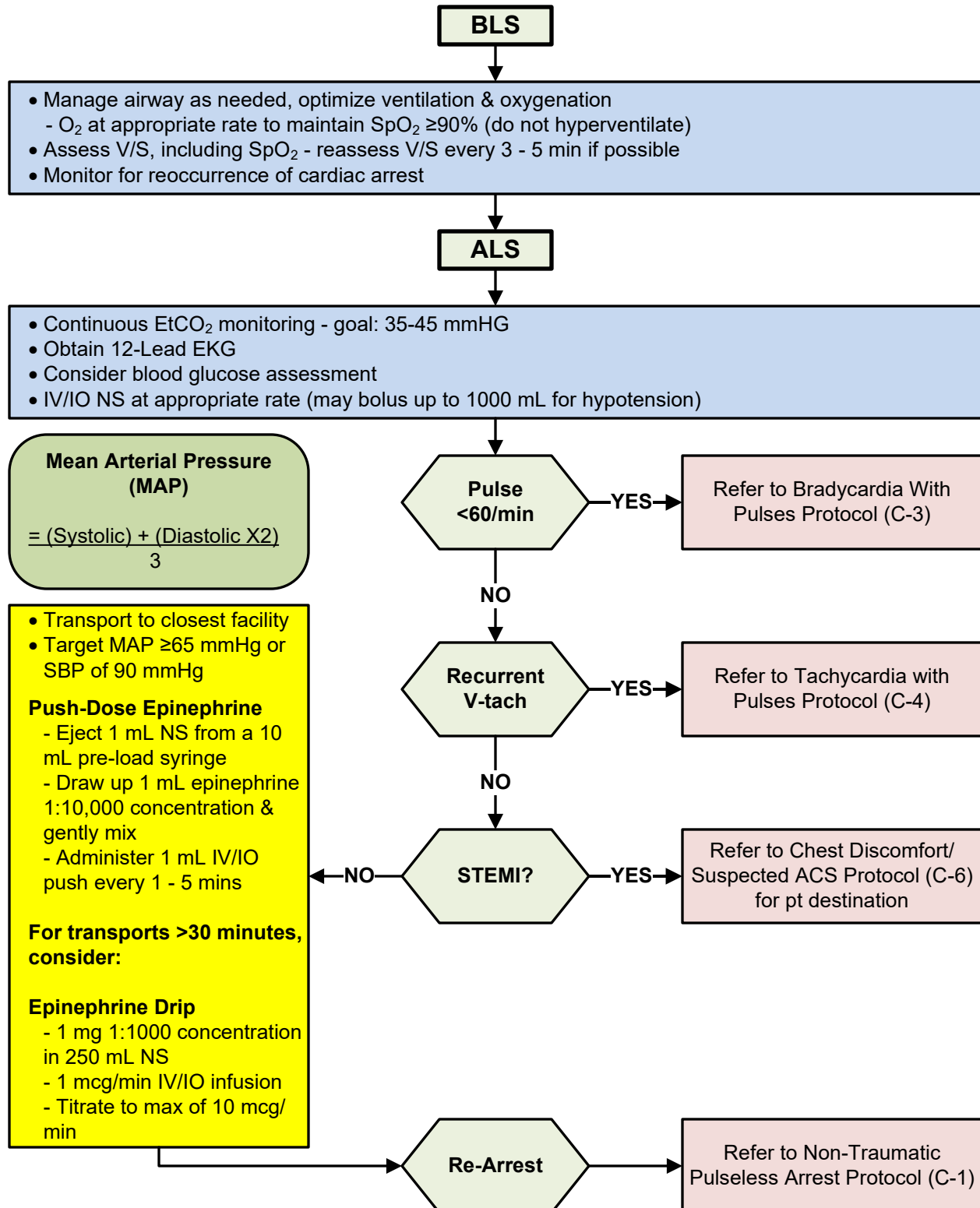
Return Of Spontaneous Circulation (ROSC)

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT



**Bradycardia With Pulses**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

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

BLS

- Manage airway & assist ventilations as necessary
- Assess V/S, including SpO₂ - reassess V/S every 3 - 5 min if possible
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%), short of breath, or signs of heart failure/shock

ALS

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

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

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

YES →

NO ↓

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

For transports >30 minutes, consider:**Epinephrine Drip**

- 1 mg 1:1000 concentration in 250 mL NS
- 1 mcg/min IV/IO infusion
- Titrate to max of 10 mcg/min

Transcutaneous Pacing Sedation/Pain Control

- For pts receiving transcutaneous pacing in need of sedation/pain control, consider one of the following:
 - **Midazolam:** 2.5 - 5 mg IV/IO; **OR**
 - **Fentanyl:** 25 - 50 mcg IV/IO
- May repeat dose x 1 after 5 mins
- Fentanyl is preferred for pts with chest pain or suspected MI
- Continuous EtCO₂ monitoring required for pts receiving midazolam or fentanyl

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

Atropine

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

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

Transcutaneous Pacing (TCP)

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

If SBP remains <90 after atropine/TCP:**Push-Dose Epinephrine**

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

**Allergic Reaction/Anaphylaxis**

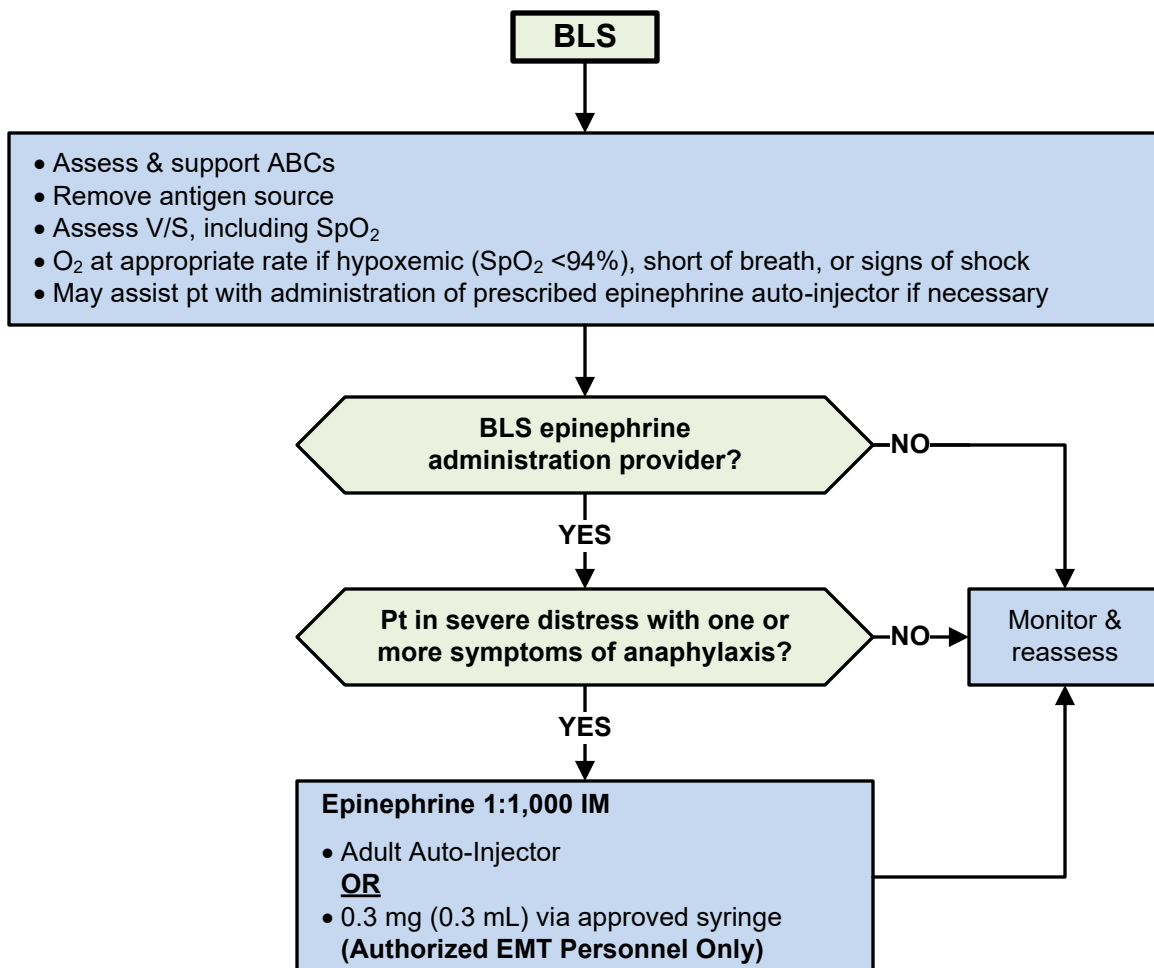
Approval: Troy M. Falck, MD – Medical Director

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Approval: John Poland – Executive Director

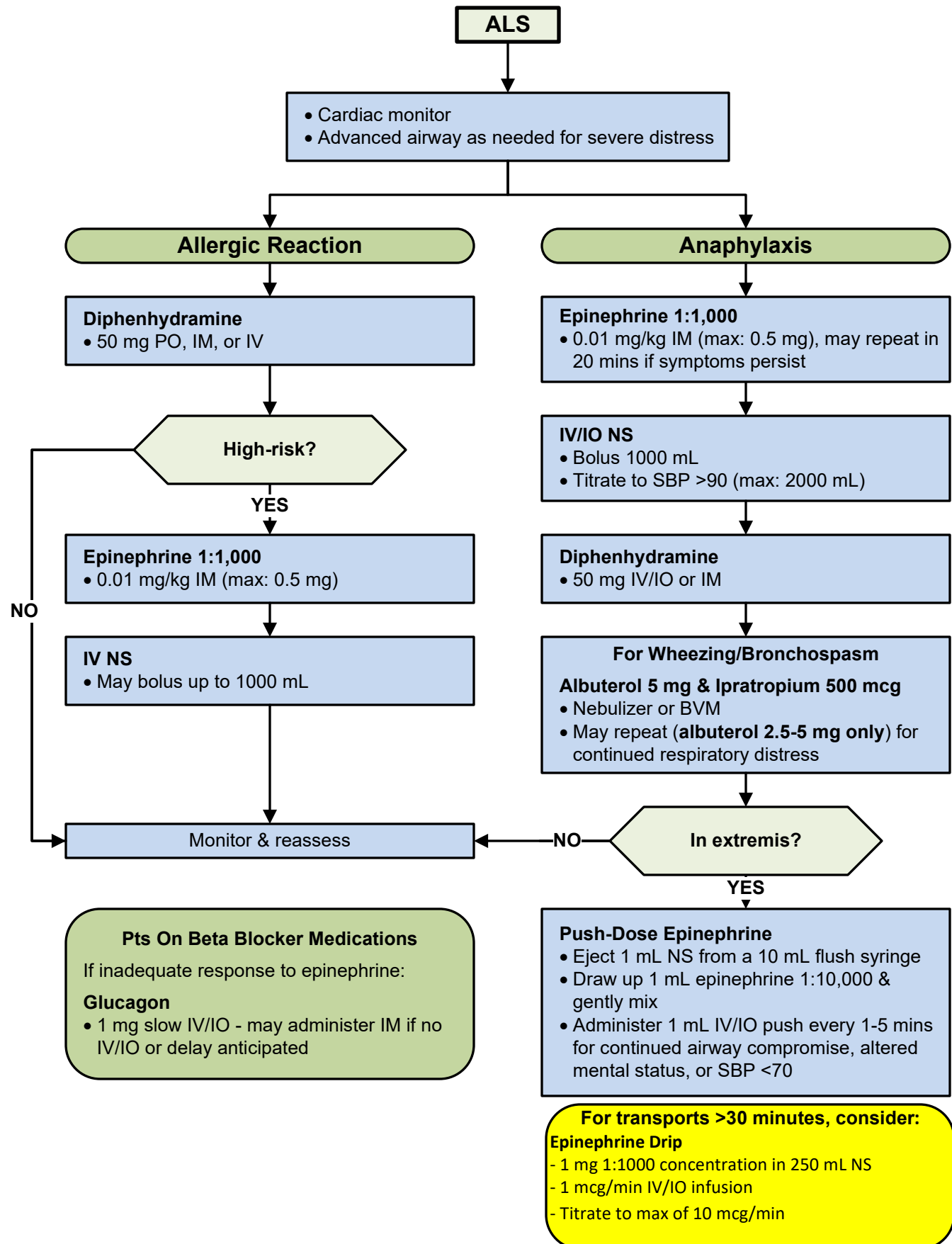
Next Review: DRAFT

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

**SEE PAGE 2 FOR ALS TREATMENT**



Allergic Reaction/Anaphylaxis



**Pediatric Allergic Reaction/Anaphylaxis**

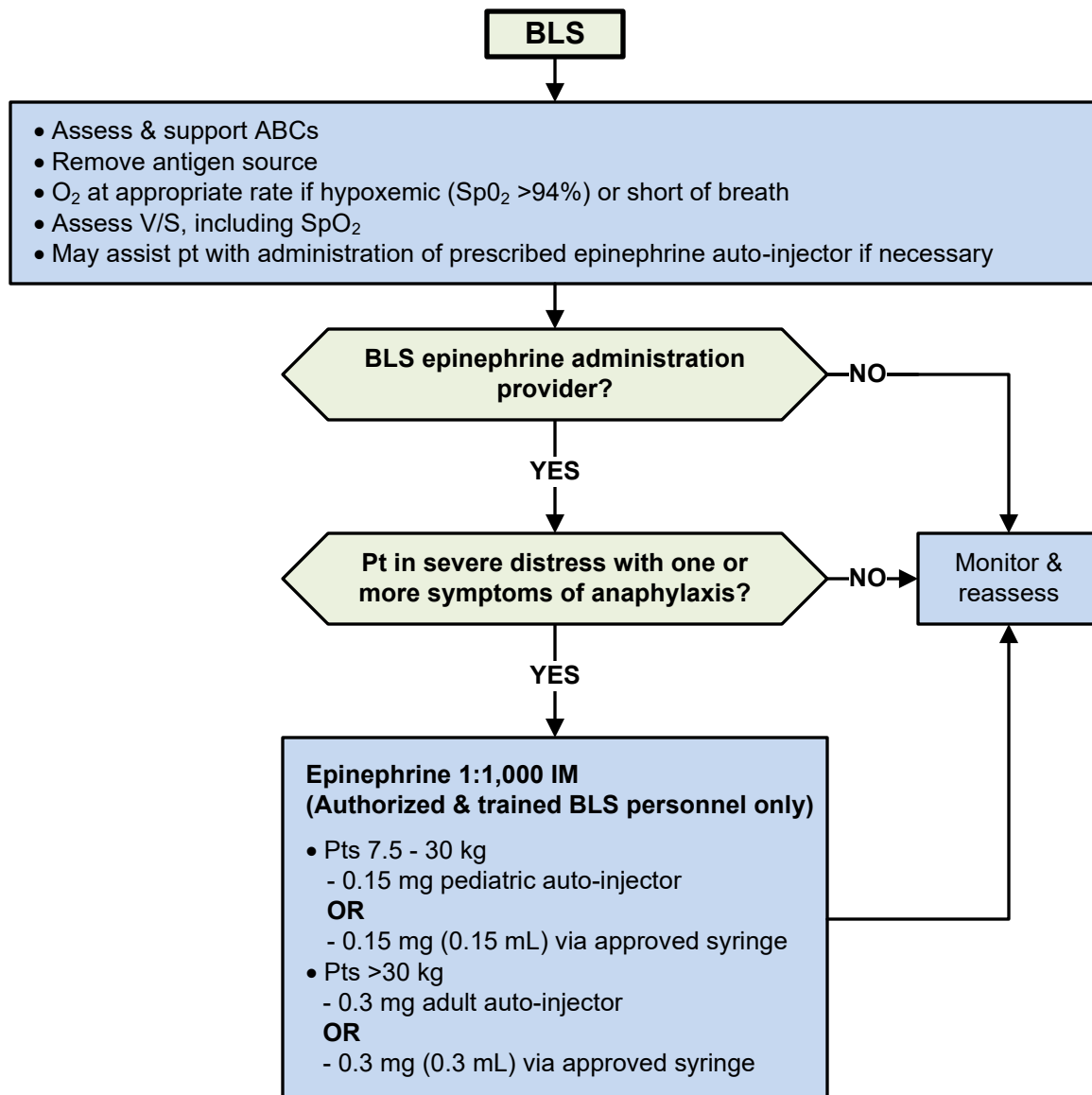
Approval: Troy M. Falck, MD – Medical Director

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Approval: John Poland – Executive Director

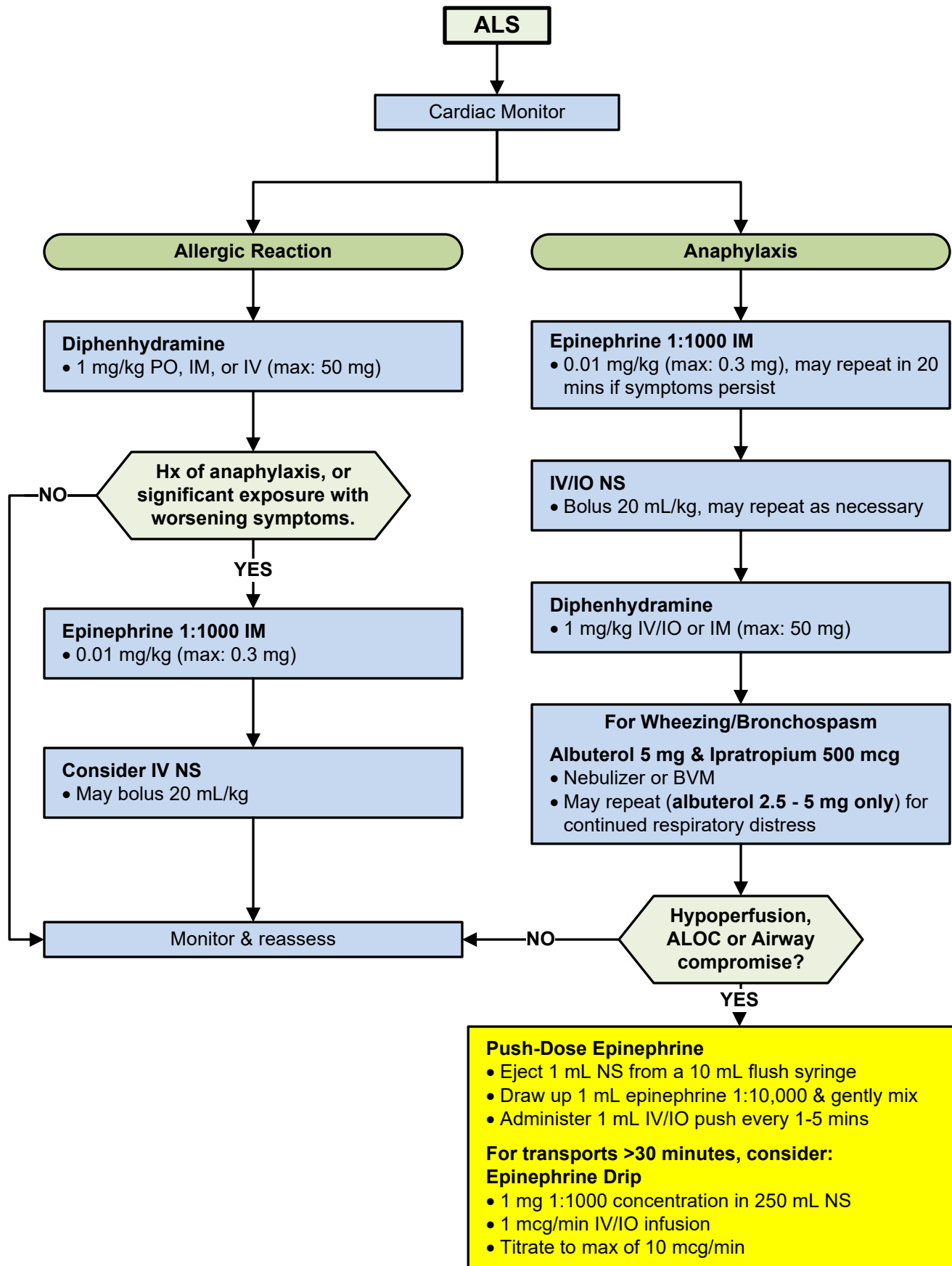
Next Review: DRAFT

- **Allergic reaction:** Sensitivity to an allergen causing hives, pruritus, flushing, rash, nasal congestion, watery eyes, and/or angioedema not involving the airway, and/or vomiting, diarrhea.
- **Anaphylaxis:** Severe allergic reaction with one or more of the following symptoms: abnormal appearance (agitation, restlessness, somnolence), respiratory distress, bronchospasm/wheezes/diminished breath sounds, hoarseness, stridor, edema involving the airway, diminished perfusion, loss of consciousness.
- Administer Auto-Injector/IM epinephrine into the lateral thigh, midway between waist & knee.

**SEE PAGE 2 FOR ALS TREATMENT**



Pediatric Allergic Reaction/Anaphylaxis





Ingestions & Overdoses

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

- When possible, contact Poison Control for consultation: (800) 876-4766 or (800) 222-1222.
- Refer to Hazardous Material Exposure Protocol (E-7) if pt externally exposed to organophosphate, carbamate or hydrofluoric acid.
- Oral ingestions of hydrofluoric acid require immediate treatment as it can cause fatal hypocalcemia – early signs of hypocalcemia include:
 - Tingling sensation around mouth, lips, hands or feet
 - Hand or foot spasms
 - QT interval prolongation
- Activated charcoal is an agent used for gastric decontamination following ingestion overdose. Clinical research only supports its use when given early after ingestion. While activated charcoal may be helpful when given rapidly after an overdose, it is very important to avoid administration in cases where potential contraindications exist.

Activated Charcoal Indications

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

Activated Charcoal Contraindications

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

BLS

- O₂ at appropriate flow rate, manage airway and assist ventilations as necessary
- Assess V/S including SpO₂
- Identify substance and time of ingestion: bring sample in original container if safe/possible
- Check blood glucose (BG) if able

**Blood glucose
≤60 mg/dl or
presentation fits
hypoglycemia?**

YES

Refer to General Medical
Treatment Protocol (M-6)

NO

ALS

- Cardiac monitor
 - Establish vascular access at appropriate time (may bolus up to 1000 mL NS)
- Consider activated charcoal – (BASE/MODIFIED BASE HOSPITAL PHYSICIAN ORDER ONLY)**
- 50 gm PO routine dose

SEE PAGE 2 FOR AGENT SPECIFIC TREATMENT



Ingestions & Overdoses

AGENT SPECIFIC TREATMENT

Beta Blockers

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

Atropine 1 mg IV/IO

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

Glucagon 1 mg (1 unit) IV/IO

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

Push-Dose Epinephrine

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

**For transports >30 minutes, consider:
Epinephrine Drip**

- 1 mg 1:1000 in 250 mL NS
- 1 mcg/min IV/IO infusion
- Titrate to max of 10 mcg/min

Calcium Channel Blockers

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

Calcium Chloride 10% 10 mL slow IV/IO

- Only if SBP <90
- Admin. no faster than 1 mL/min
- May repeat every 5 mins (maximum: 4 total doses)

Hydrofluoric Acid

Calcium Chloride 10% 10 mL slow IV/IO

- Only if signs of hypocalcemia
- Admin. no faster than 1 mL/min

Narcotics

Naloxone

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

Organophosphate or Carbamate

Atropine 2 mg IV/IO

- Only if HR <60
- May repeat every 3 mins – no max dose

Tricyclic Antidepressants

Sodium Bicarbonate 1 mEq/kg IV/IO - if any of the following are present:

- SBP <90
- QRS >0.12 seconds (3 small boxes)
- Seizures



General Medical Treatment

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

Important Notes

- The purpose of this protocol is to provide assessment & treatment modalities for pt complaints not addressed by other S-SV EMS protocols – including suspected sepsis, suspected abdominal aortic aneurysm (AAA), & nausea/vomiting.

BLS

- Assess V/S, including SpO₂ & temperature (if able)
- O₂ at appropriate rate if pt is hypoxemic (SpO₂ <94%), short of breath, or has signs of heart failure/shock
- Assess history & physical
- Check blood glucose – if indicated & able

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

NO

YES

- Oral glucose (BLS) – ONLY if pt is conscious & able to swallow**
- Pre-packaged glucose solution/gel or 2-3 tbsp of sugar in water/juice
- OR**
- Dextrose 10% (ALS)**
- 10 – 25 g (100 – 250 mL) IV/IO
- OR**
- Glucagon (ALS)**
- 1 mg (1 unit) IM/IN

ALS

- Consider the following additional assessment/treatment modalities, as appropriate, based on pt's condition & clinical presentation:
- Cardiac monitor/12-lead EKG
 - EtCO₂ monitoring
 - IV/IO NS (may bolus up to 1000 mL if indicated)

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



General Medical Treatment

Suspected Sepsis

Important Notes

- Early recognition of sepsis is critical to expedite hospital care and antibiotic administration.
- Aggressive IV fluid therapy is the most important prehospital treatment for sepsis.
- Septic pts are especially susceptible to traumatic lung injury and ARDS. If BVM ventilation is necessary, avoid excessive tidal volumes.
- Attempt to identify the source of infection (skin, respiratory, etc.), previous treatment and related history.
- Consider the possibility of sepsis when a combination of two or more of the following Systemic Inflammatory Response Syndrome (SIRS) criteria are present:
 - Temperature $<96.8^{\circ}\text{F}$ or $>100.4^{\circ}$
 - RR $>20\text{bpm}$
 - HR $>90\text{bpm}$
 - $\text{ETCO}_2 \leq 25\text{ mmHg}$

High-Risk Indicators for Sepsis:

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

Shock Index (SI):

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

ALS

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

If SBP <90 after 2 L NS:

Push-Dose Epinephrine

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

For transports >30 minutes, consider:

Epinephrine Drip

- 1 mg 1:1000 concentration in 250 mL NS
- 1 mcg/min IV/IO infusion
- Titrate to max of 10 mcg/min

If pt is febrile:

Acetaminophen

- 1 g IV/IO infusion over 15 mins (single dose)

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



General Medical Treatment

Suspected Dissecting or Ruptured Abdominal Aortic Aneurysm (AAA)

Important Notes

- **Pts at high risk for AAA include:**
 - Men age >65
 - History of smoking
 - History of hypertension
 - Family/pt history of AAA
- **Hallmark symptoms of AAA often include one (1) or more of the following:**
 - Sudden onset of abdominal, flank, back, or groin pain
 - Pain described as “ripping” or “tearing”
 - Pain is typically severe, constant, & progressive
 - Sudden onset of weakness or syncope/near-syncope
 - Nausea &/or vomiting
 - Sense of impending doom/restlessness
- **One (1) or more of the following V/S &/or assessment findings may be present:**
 - Hypotension (late or rapidly developing)
 - Narrowing pulse pressure
 - Tachycardia (caution: pts with history of hypertension may be on beta blockers)
 - Weak or thready peripheral pulses
 - Asymmetric femoral pulses
 - Pulsatile abdominal mass (often absent or difficult to assess)

ALS

- Cardiac monitor/12-lead EKG
- EtCO₂ monitoring
- Establish two (2) large-bore IVs/IOs when possible
- Do not aggressively treat hypotension – allow for permissive hypotension
 - Target SBP 80-90 mmHg if pt has palpable pulses & is conscious
 - Administer 250 mL NS boluses only if signs of critical hypoperfusion (including: mental status changes, delayed capillary refill, bilateral absent femoral pulses)
- Prioritize pain management – refer to ‘Pain Management’ protocol (M-8)

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



General Medical Treatment

Nausea/Vomiting

Important Notes

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

ALS

Zofran (Ondansetron)

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

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



Tachycardia With Pulses

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

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

BLS

- Manage airway & assist ventilations as necessary
- Assess V/S, including SpO₂ - reassess V/S every 3-5 min if possible
- O₂ at appropriate rate if hypoxemic (SpO₂ <94%), short of breath, or signs of heart failure/shock

ALS

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

Persistent tachycardia causing any of the following?

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

YES →

Synchronized Cardioversion

- Use the energy level recommended by the defibrillator manufacturer – for atrial fibrillation & atrial flutter ≥200 J is preferred
- Consider pre-cardioversion sedation/pain control
- If no response to initial shock, increase dose in a stepwise fashion for subsequent attempts
- If rhythm is wide-irregular or monitor will not synchronize, & pt is critical, treat as VF with unsynchronized defibrillation doses (protocol C-1)

NO

Wide QRS (≥0.12 seconds)?

NO →

Valsalva Maneuver

YES →

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

If no response to Valsalva Maneuver, consider:

Adenosine:

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

**Hazardous Material Exposure**

Approval: Troy M. Falck, MD – Medical Director

Effective: DRAFT

Approval: John Poland – Executive Director

Next Review: DRAFT

Refer to S-SV EMS Hazardous Material Incidents Policy (836)**Important caveats for medical responders:**

- EMS personnel shall not enter or provide treatment in the Contamination Reduction Zone (Warm Zone) or Exclusion Zone (Hot Zone) unless trained, equipped and authorized to do so.
- EMS personnel shall not use Haz Mat specific personal protective equipment (PPE), including self-contained breathing apparatus (SCBA), unless trained, fit tested and authorized to do so.
- Do not transport pts until they have been completely decontaminated. If transport personnel become contaminated, they shall immediately undergo decontamination.
- Do not delay treatment/transport of immediate pts contaminated with radioactive material.
- Early base/modified base hospital contact, and CHEMPACK activation when appropriate (S-SV EMS Nerve Agent Treatment Protocol E-8), will maximize assistance from necessary resources.
- Refer to Hazardous Materials Medical Management Reference as appropriate.

Information that must be obtained by EMS personnel on every hazardous materials incident:

- Number of pts.
- Material involved or DOT 4-digit placard #.
- Route(s) of exposure for each pt.
- Signs & symptoms for each pt.
- Decontamination procedure completed for each pt.
- Procedure utilized to determine effectiveness of decontamination procedure.
- Risk of secondary exposure to rescuers.
- PPE required to transport pt.

BLS

- Establish and secure airway as necessary
- O₂ at appropriate rate
- Contact base/modified base hospital for assistance in determining a decontamination/treatment plan
- After pt is fully decontaminated, cover with blankets and/or sheets as appropriate
- If eye exposure occurs, irrigate each exposed eye with NS – ensure contact lenses are removed

See pages 2 & 3 for additional treatment

**Hazardous Material Exposure****Treatment Notes**

- Skin exposure to hydrofluoric acid with a concentration >20% can cause fatal hypocalcemia and should be treated. Provide continuous EKG monitoring to look for QT-interval prolongation which is an early sign of hypocalcemia.
- Precautions must be taken to prevent direct contact with secretions of a pt who has ingested organophosphates or carbamate pesticides.

ALS

- Cardiac Monitor
- IV/IO NS TKO in non-burned/non-contaminated extremity (may bolus up to 1000 mL)

Hydrofluoric Acid

- **Calcium Chloride 10%**
- 10 ml slow IV/IO
- May repeat every 5 mins

For hydrofluoric acid burns isolated to the hands, fingers, or toes

- **Calcium Chloride 10%**
- Pour contents of one ampule into a sterile glove and immerse affected area into solution
- If Calcium Gluconate gel has been applied, do not remove - no further treatment is necessary

Organophosphate/Carbamate

- **Atropine**
- 2 mg IV/IO if HR <60
- May repeat every 3 mins to HR >80
- No maximum dose

Refer to Nerve Agent
Treatment Protocol (E-8)
if additional treatment is
necessary

**Hazardous Material Exposure****Radiation Emergencies**

- Pt care takes priority over radiological concerns - addressing contamination issues should not delay treatment of life-threatening injuries.
- Viable pts are a high priority - rapidly extricate, treat and transport pts who are most critical and likely to survive.
- It is highly unlikely that the levels of radioactivity associated with a contaminated pt would pose a significant health risk to care providers.
- Body substance isolation clothing (gloves, gowns, N-95 masks, protective eyewear, shoe protectors, and head cap) are recommended, including 2-3 pair of disposable gloves.
- Due to fetal sensitivity to radiation, assign pregnant staff to other duties.

Ambulance Preparation

- Avoid using internal and external compartments - work out of mobile kits as much as possible.
- Close all internal compartments prior to loading pt.
- Cover radio communication microphones with a rubber glove.
- Cover floor of ambulance with disposable papers or pads.

Radiation Exposure Haz Mat Pt

- If O₂ is warranted, use a non re-breather mask (if tolerated) to provide protection from inadvertent respiratory contamination hazards - an N95 mask is appropriate to protect pt from inadvertent respiratory contamination hazards when O₂ is not indicated
- Frequent glove changes will reduce the spread of contamination and should be considered prior to handling the pt or pt care adjuncts
- All medical procedures should be utilized to save an immediate pt - if it is medically necessary to intubate a pt that is contaminated, then do so - change gloves prior to intubation, and maintain ET tube sterility if possible

Limited or no field decontamination

- Initiate ALS care as necessary
- Keep pt wrapped (cocoon style) to minimize potential for contamination spread - only expose areas to assess and treat
- If necessary, cut and remove the pts clothing away from the body, being careful to avoid contamination to the unexposed skin - contain all removed clothing by placing in a sealable bag
- Continue to reassess/monitor vitals while transporting pt to the appropriate receiving facility
- Contact with pt may result in transfer of contamination - change gloves as necessary

Field decontamination performed

- Pts with non life-threatening injuries should have field decontamination prior to removal from the Exclusion (Hot) Zone
- Pts condition permits a more thorough radiological survey prior to continued care
- Conduct head to toe assessment as appropriate
- Initiate ALS care as necessary
- If pts clothing has not been removed during decontamination, keep pt wrapped (cocoon style) to minimize potential for contamination spread - only expose areas to assess and treat
- Contact with pt may result in transfer of contamination - change gloves as necessary

Sierra – Sacramento Valley Emergency Medical Services Agency



Regional Executive Director

John Poland, Paramedic

Medical Director

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Serving Butte, Colusa, Glenn, Nevada, Placer, Shasta, Siskiyou, Sutter, Tehama, & Yuba Counties

2027 REMAC Committee Calendar

- January 20, 2027: 9:00 am
- April 14, 2027: 9:00 am
- June 14, 2027: 9:00 am
- October 13, 2027: 9:00 am