Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-5 (LALS)
Ingestions & Overdoses	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

Guidelines for EMS use of Activated Charcoal

BASE/MODIFIED BASE HOSPITAL PHYSICIAN ORDER ONLY

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

Activated Charcoal Indications

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

Activated Charcoal Contraindications

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

BLS

- O_2 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

BG ≤60 mg/dl or hx & clinical picture fits hypoglycemia?

YES

Oral glucose (BLS)
- 15 - 25 gm

OR

Dextrose 10% (LALS)
- 10 - 25 gm (100 - 250 mL) IV/IO

OR

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

NO

LALS

- Cardiac monitor **(AEMT II)**
- Establish vascular access at appropriate time (may bolus up to 1000 mL NS)
- Refer to page 2 for ingestion/overdose agent specific therapy

Consider activated charcoal – BASE/MODIFIED BASE HOSPITAL PHYSICIAN ORDER ONLY
- 50 gm PO routine dose

Treatment Notes

- Poison Control telephone number: (800) 876-4766 or (800) 222-1222.
- Refer to S-SV EMS Hazardous Materials Exposure Protocol (E-7 LALS) if pt exposed externally to organophosphate or carbamate.

Ingestion/Overdose Agent Specific Therapy

Beta Blockers

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

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

↓

Glucagon 1 mg (1 unit) IM/IN
- Only if HR <50 and SBP <90

↓

Push-Dose Epinephrine (AEMT II)
- 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 push every 1 - 5 mins
- Titrate to maintain SBP >90

Narcotics

Naloxone
- Only if RR <12 or respiratory efforts inadequate
- 1 - 2 mg IV/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

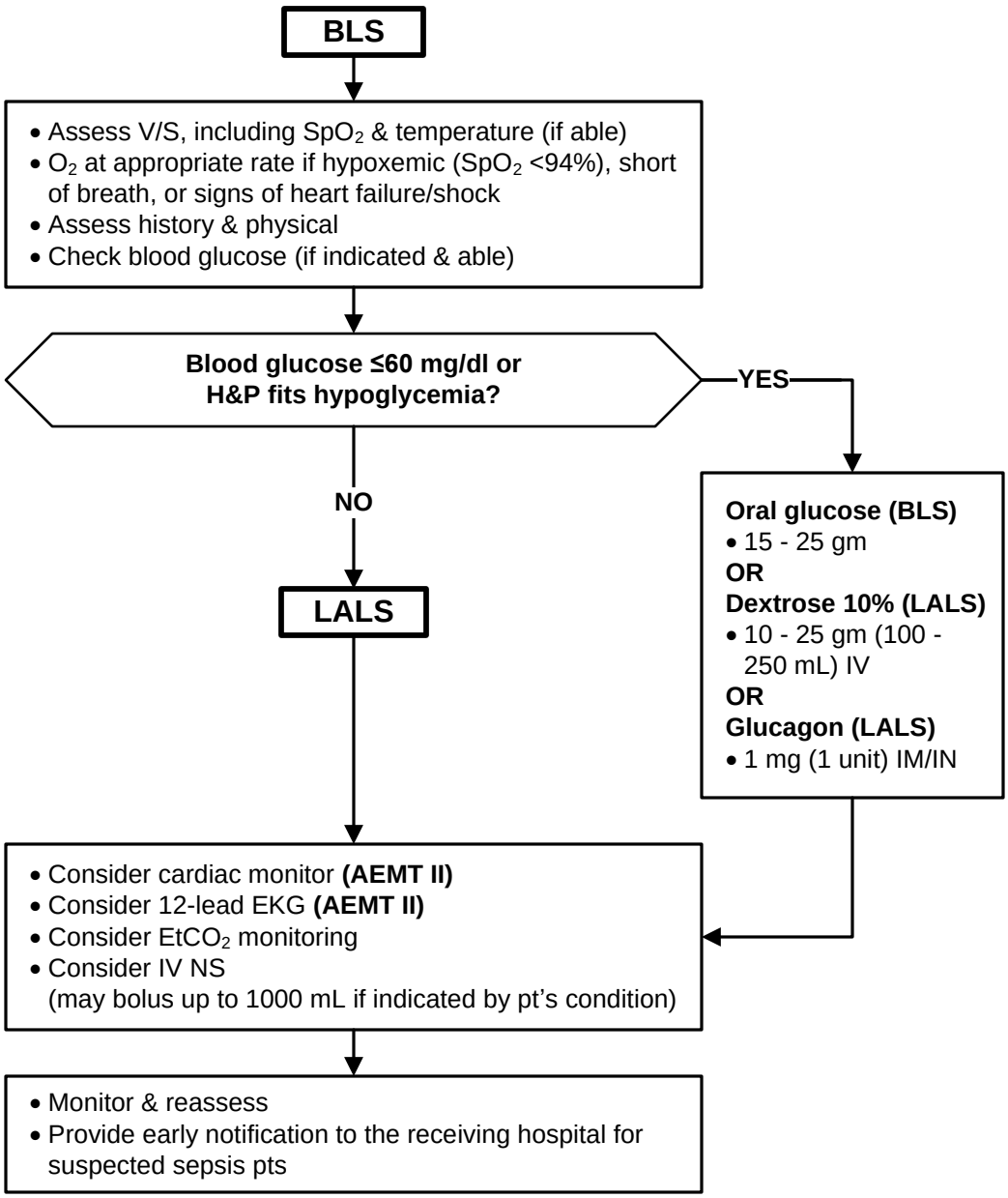
Atropine 2 mg IV (AEMT II)
- Only if HR <60
- May repeat every 3 mins – no max dose

Tricyclic Antidepressants

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

Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-6 (LALS)
General Medical Treatment	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

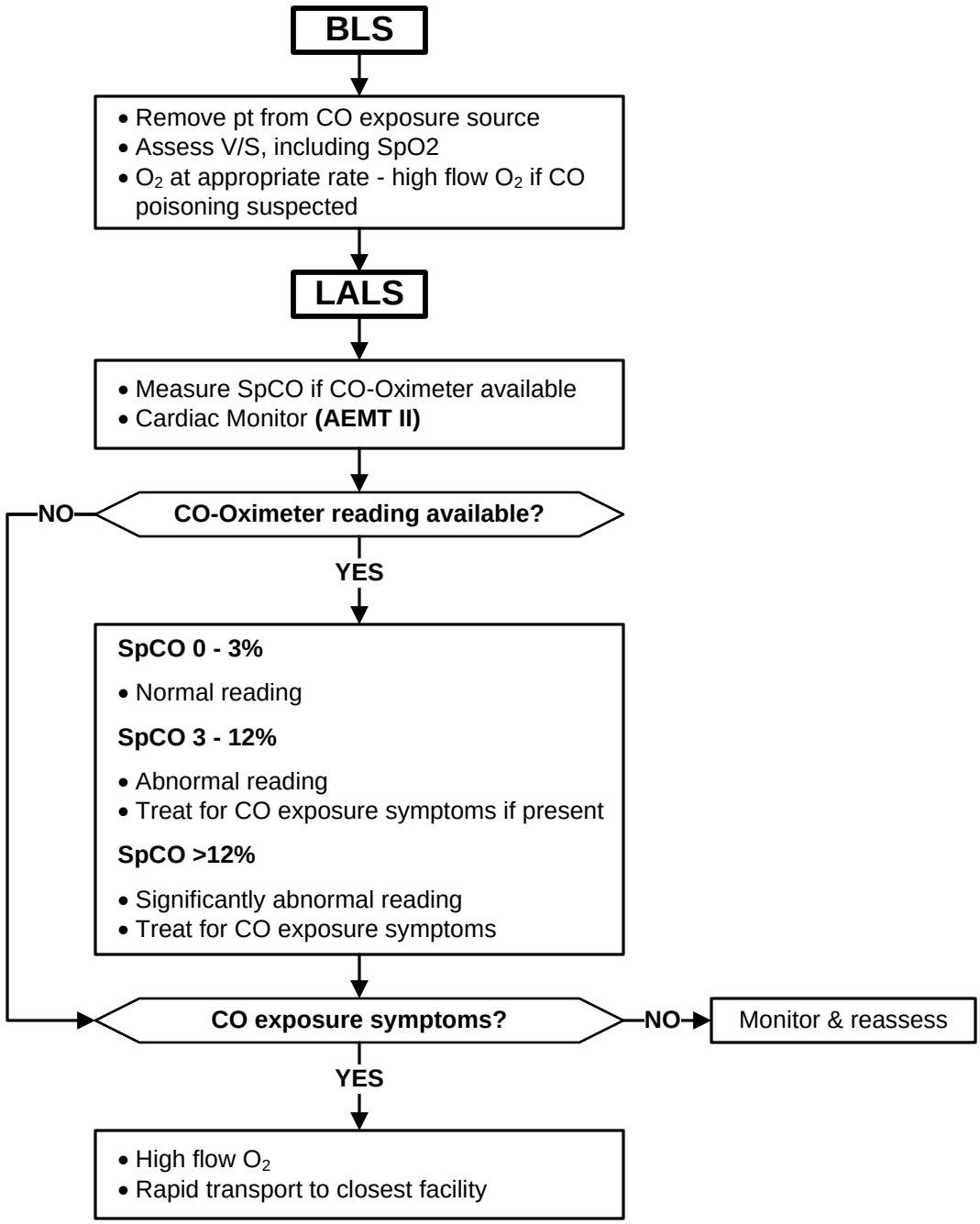
- **Consider the following:**
  - Trauma - Recent ALOC - Syncope/near syncope - Shock - GI bleed - Abdominal pain
- **Consider the possibility of sepsis when a combination (at least two) of the following Systemic Inflammatory Response Syndrome (SIRS) criteria are present in a pt with suspected infection:**
  - Temperature >100.4^0 F or <96.8^0 F - RR >20 - HR >90 - EtCO$_2$ ≤25 mm Hg



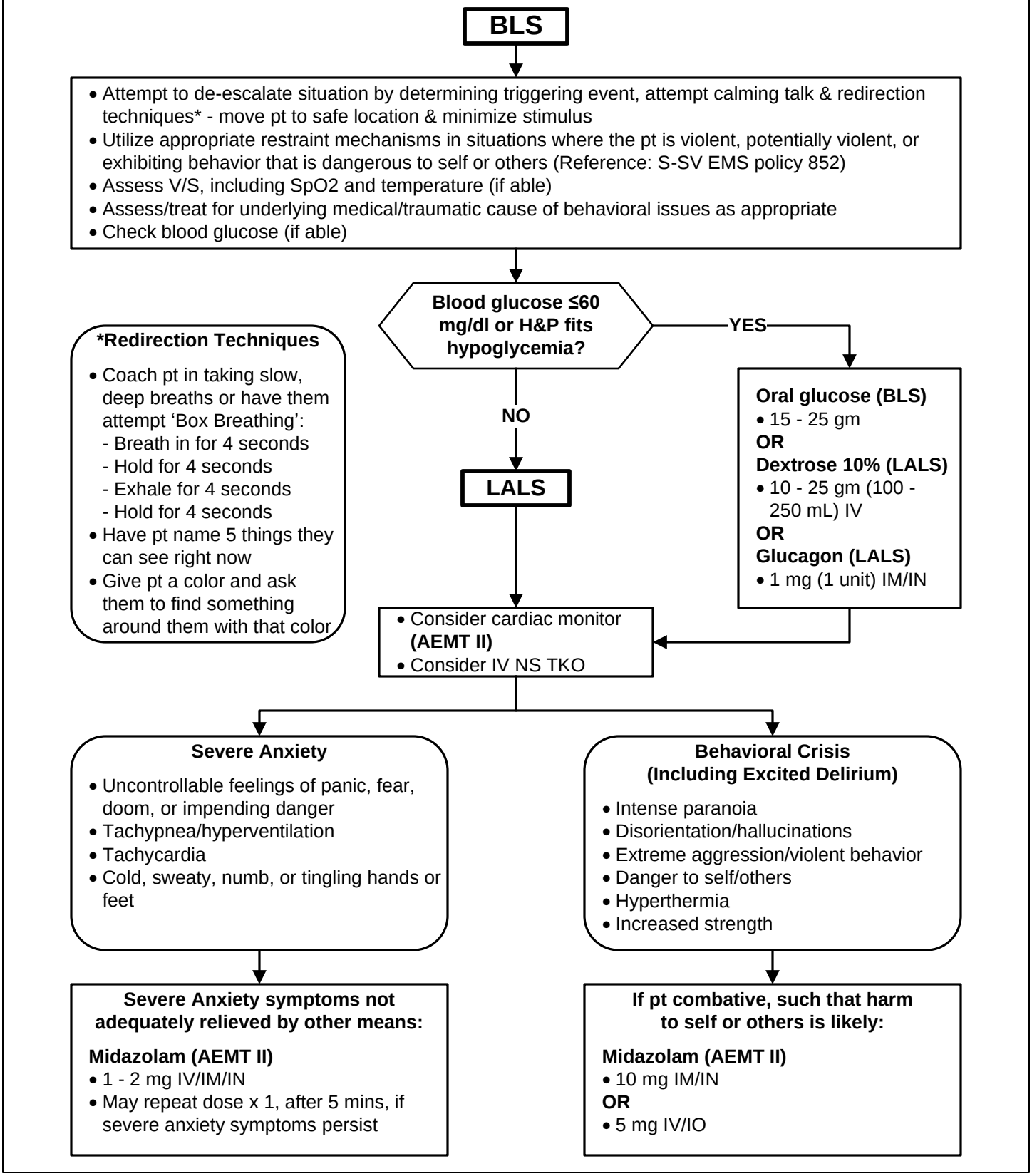
	Sierra – Sacramento Valley EMS Agency Treatment Protocol	**M-9 (LALS)**
	CO Exposure/Poisoning	
Approval: Troy M. Falck, MD – Medical Director		Effective: 12/01/2022
Approval: John Poland – Executive Director		Next Review: 09/2025

- **Initial symptoms of CO exposure are insidious, similar to the flu and thus seemingly benign. These symptoms increase in severity as the SpCO level rises & may include one or more of the following:**

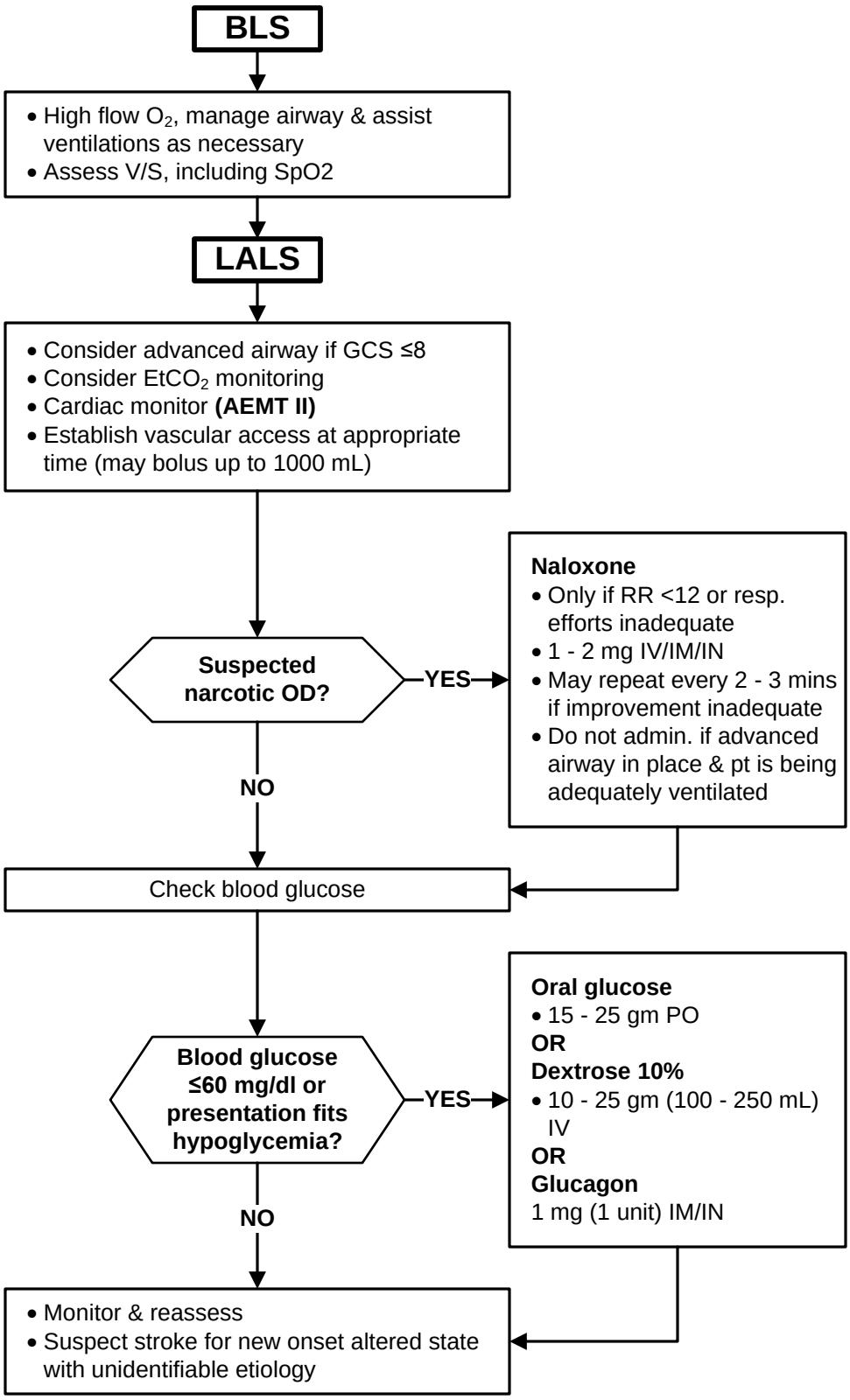
- Confusion - Dizziness/vertigo - Headache - Shortness of breath - Nausea/vomiting
- Fatigue - Syncope - Confusion - Tachycardia - Cardiac arrhythmias
- Seizures - Shock - Coma - Apnea



Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-11 (LALS)
Behavioral Emergencies	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

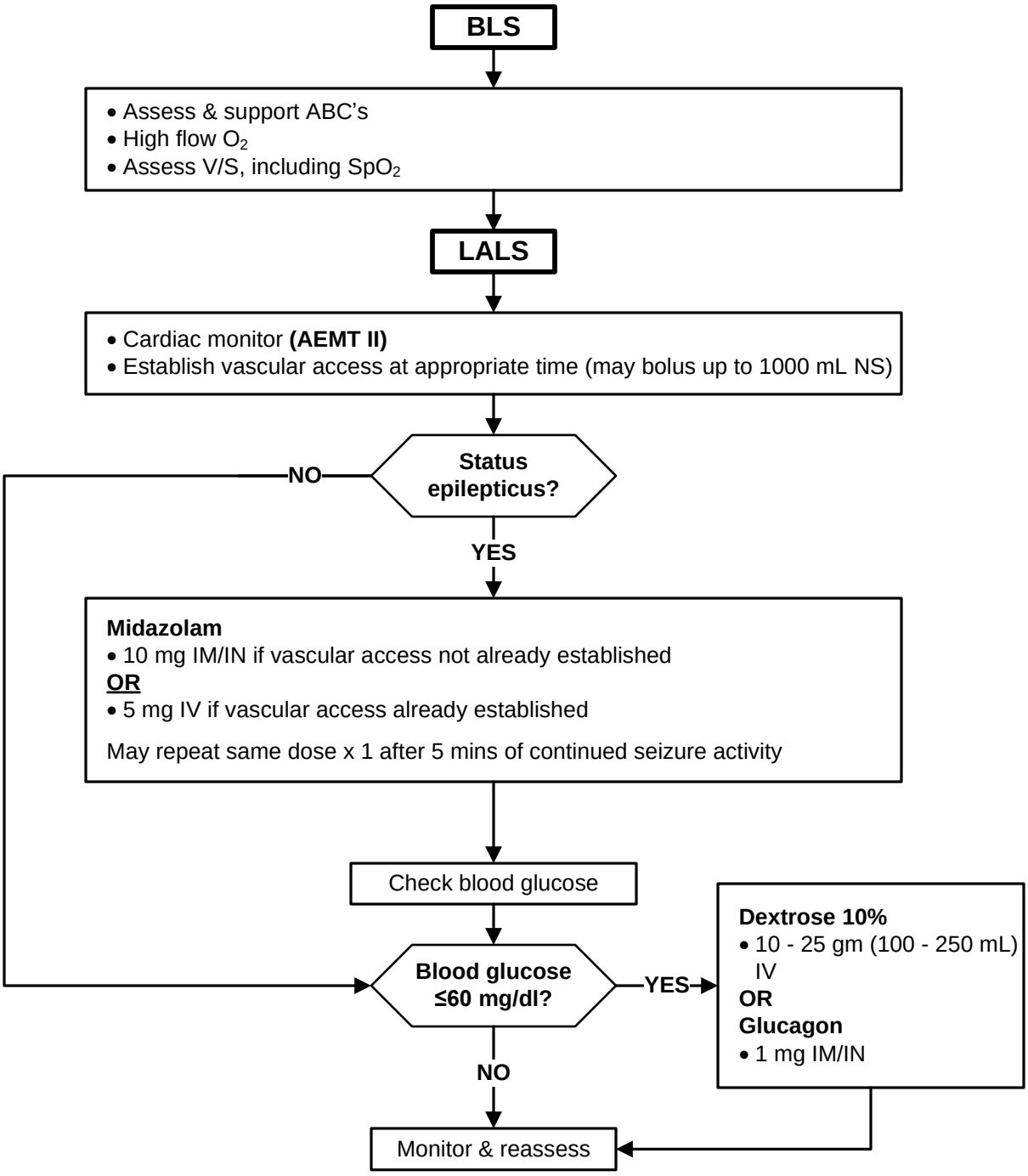


	Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-1 (LALS)
	Altered Level Of Consciousness	
Approval: Troy M. Falck, MD – Medical Director		Effective: 12/01/2022
Approval: John Poland – Executive Director		Next Review: 09/2025

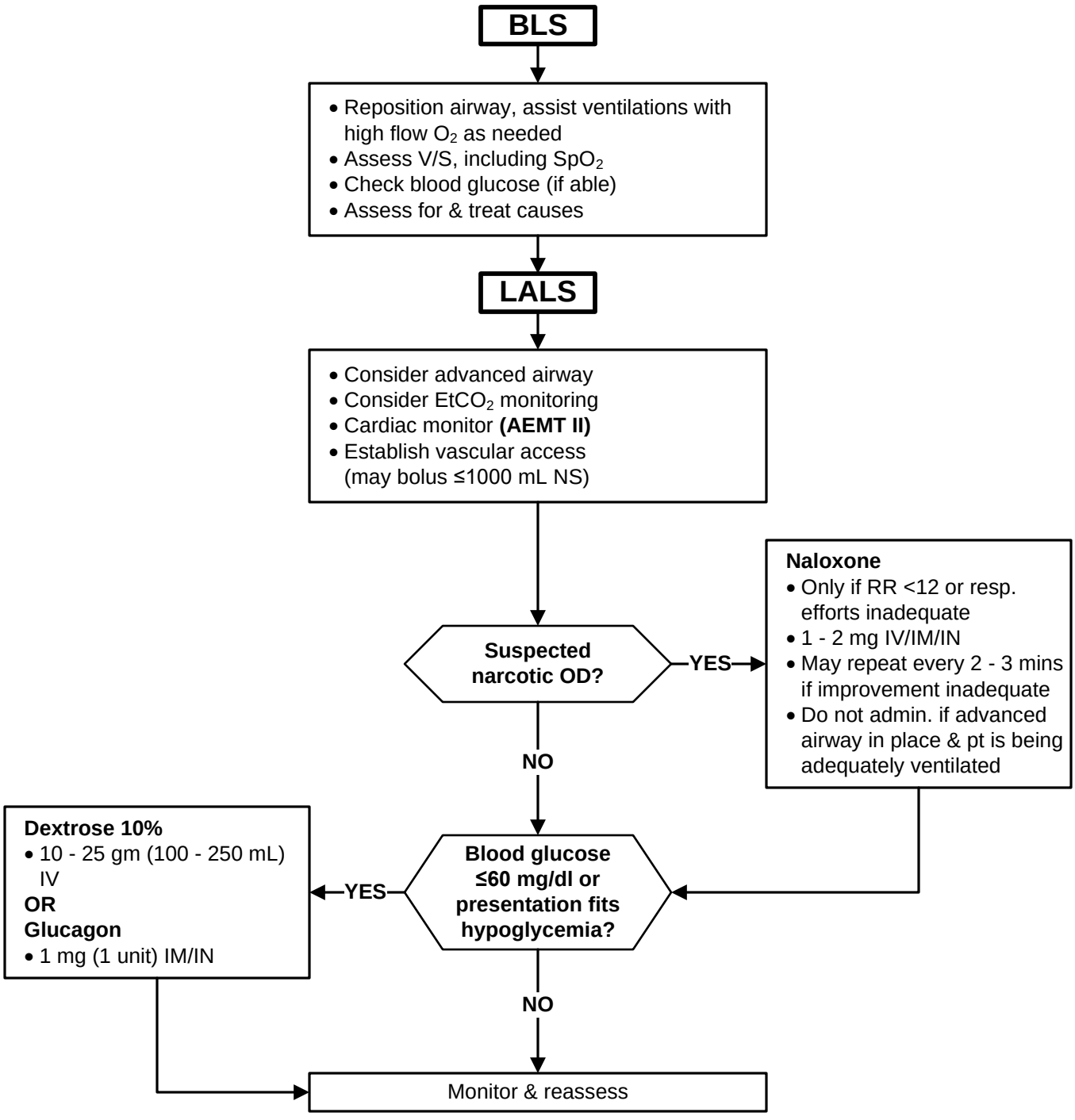


Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-2 (LALS)
Seizure	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2022
Approval: John Poland – Executive Director	Next Review: 09/2025

- **Status Epilepticus:** 2 or more seizures without periods of consciousness, or a single seizure lasting >5 mins.
- Transport patients >20 weeks pregnant in left-lateral position.

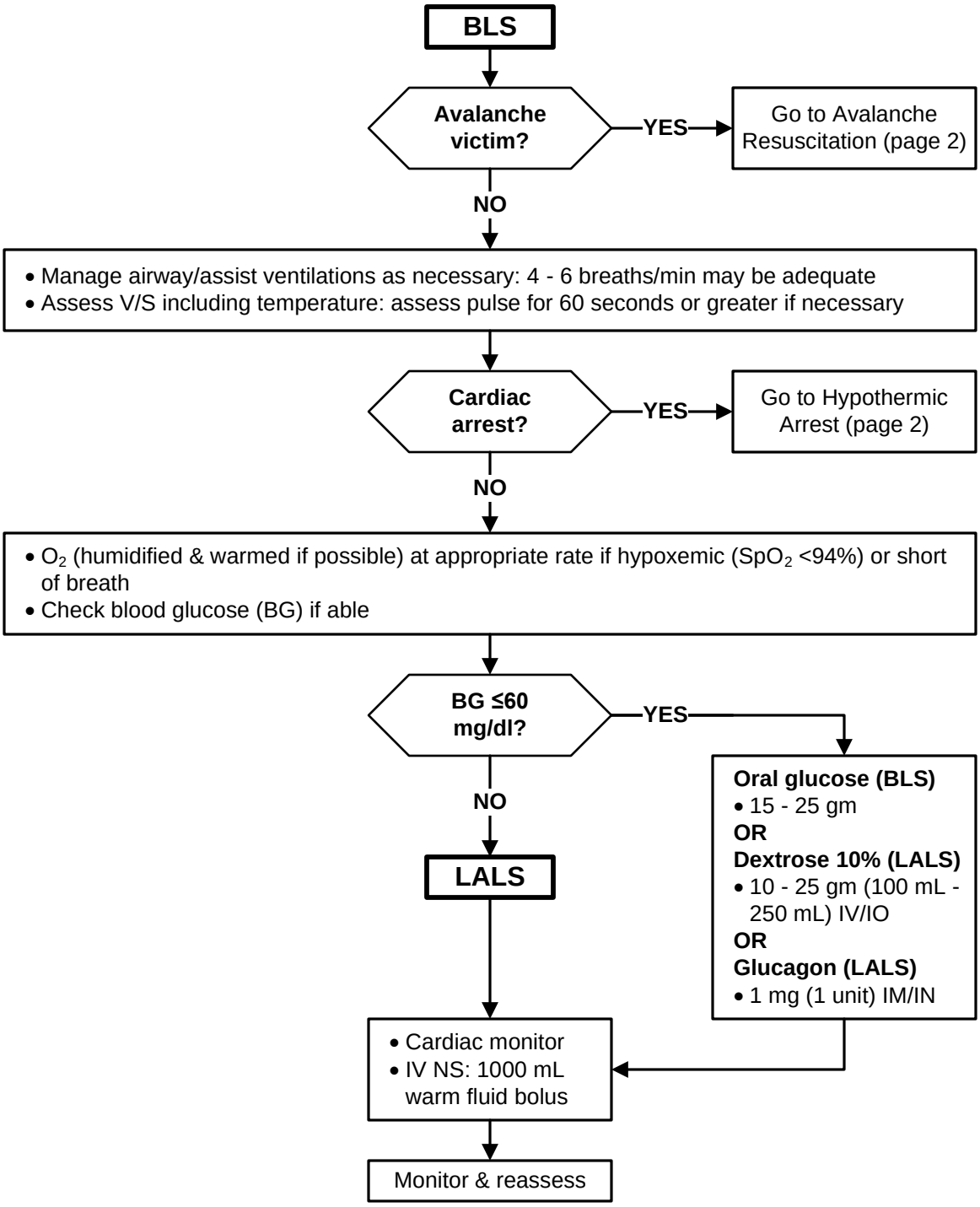


	Sierra – Sacramento Valley EMS Agency Treatment Protocol	**R-2 (LALS)**
	Respiratory Arrest	
Approval: Troy M. Falck, MD – Medical Director		Effective: 12/01/2022
Approval: John Poland – Executive Director		Next Review: 09/2025

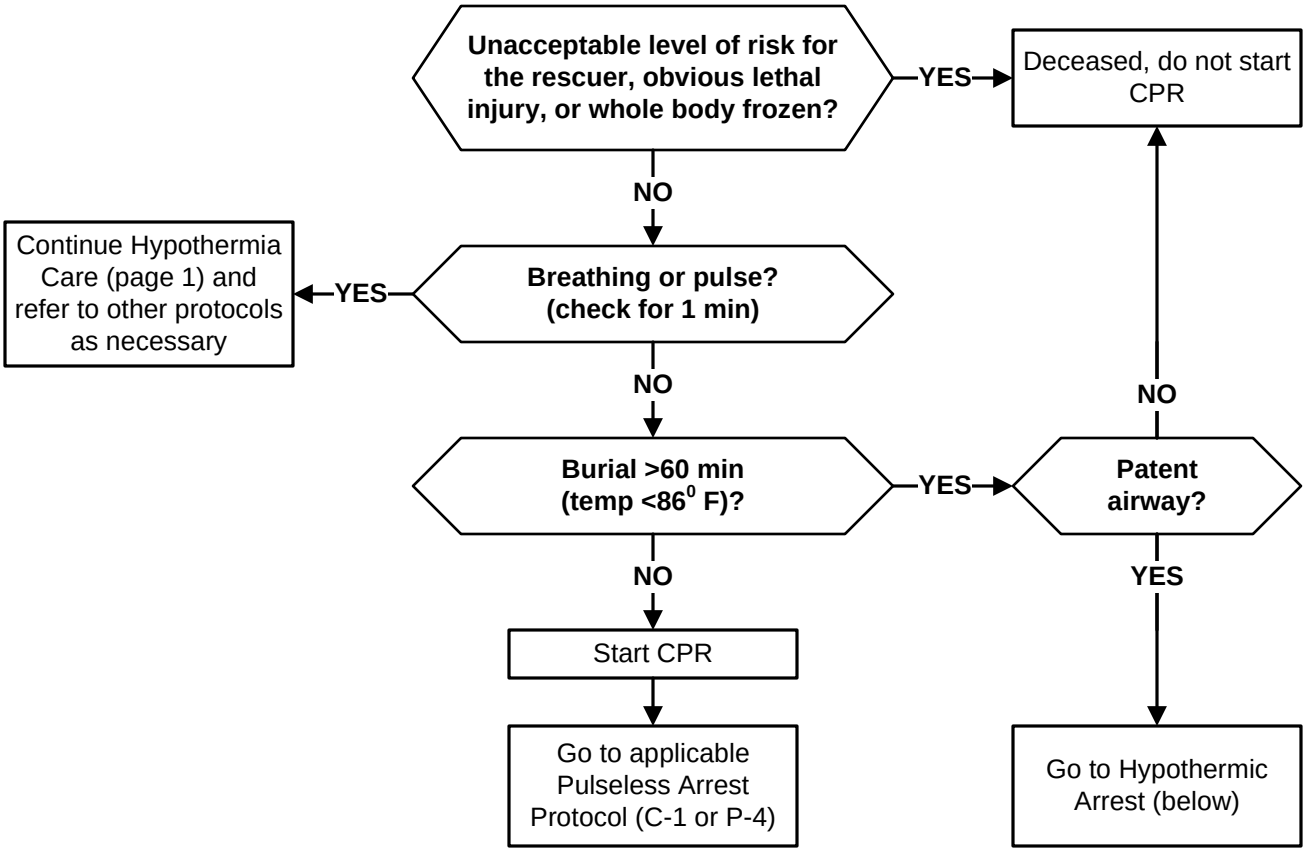


	Sierra – Sacramento Valley EMS Agency Treatment Protocol	E-2 (LALS)
	Hypothermia & Avalanche Resuscitation	
Approval: Troy M. Falck, MD – Medical Director		Effective: 12/01/2022
Approval: John Poland – Executive Director		Next Review: 09/2025

- **Move pt to a warm environment, remove wet clothing, begin warming measures as soon as possible.**
- **Moderately & severely hypothermic pts should be handled as gently as possible.**
- **This protocol incorporates the official guidelines for the onsite treatment of avalanche victims established by the International Commission for Alpine Rescue (ICAR).**



Avalanche Resuscitation



Hypothermic Arrest

- **Medications & defibrillation may be ineffective in a hypothermic cardiac arrest pt. If the pt is in v-fib, one shock & one round of medications should be delivered. It is reasonable to delay further defibrillation attempts & further medications until the pt is rewarmed.**
- **Continuing CPR & safe expedited transport to the nearest facility is the pt's best chance at survival.**

BLS

Begin CPR & apply AED as soon as possible, deliver one AED shock if indicated

LALS

- If indicated according to Pulseless Arrest protocol (C-1 or P-4), administer one manual defibrillation **(AEMT II)** & one round of ALS medications **(AEMT II)**
- Evacuate/transport as soon as possible - continue CPR until ROSC, rescuer exhaustion, hospital arrival, or base/modified base hospital order to terminate resuscitation efforts