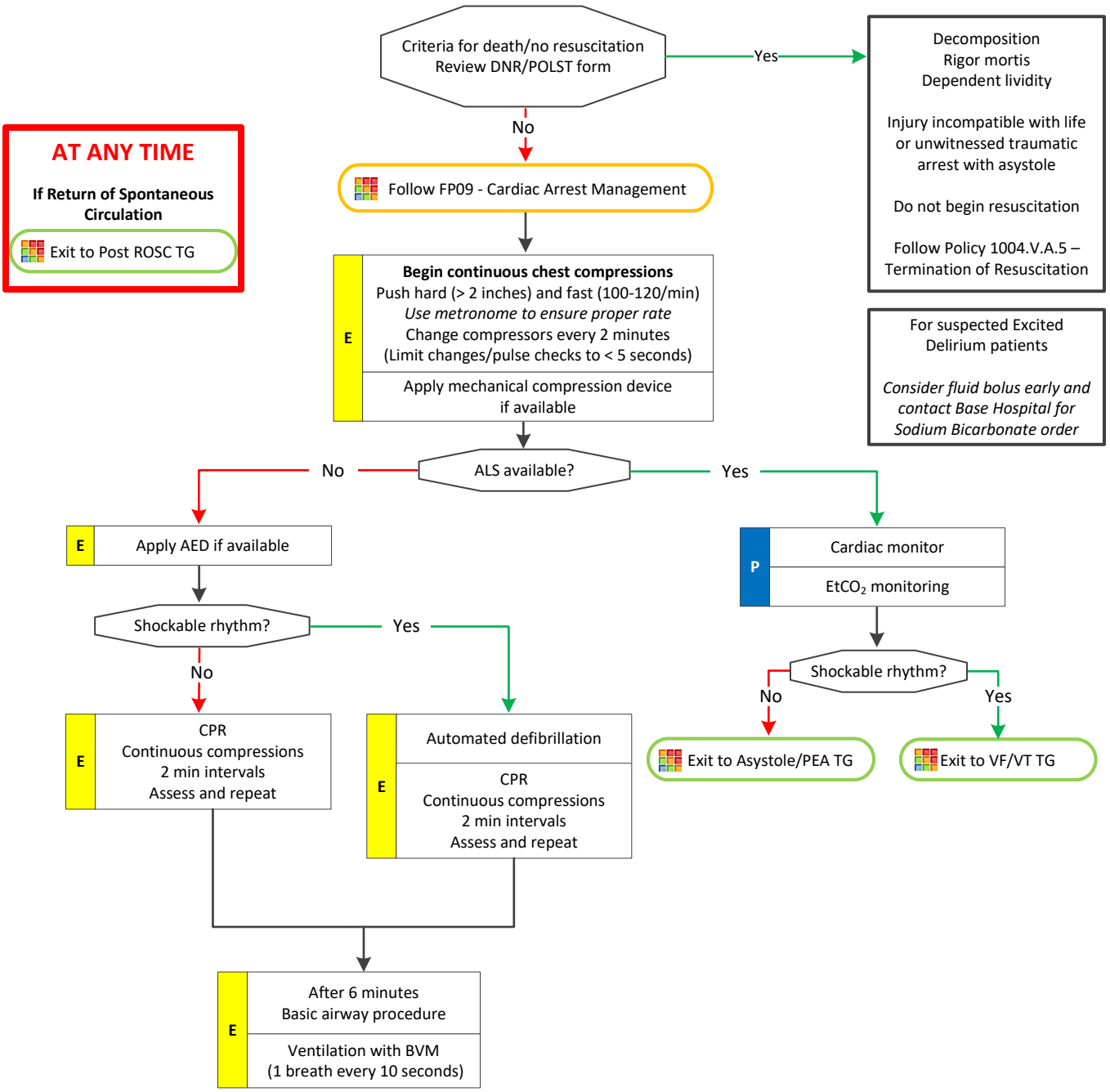
Contra Costa County Emergency Medical Services

Cardiac Arrest

History
- DNR, POLST, Living will
- Events leading to arrest
- Estimated downtime
- History of current illness
- Past medical history
- Medications
- Existence of terminal illness

Signs and Symptoms
- Unresponsive
- Apneic
- Pulseless

Differential
- Medical vs. trauma
- VF vs. pulseless VT
- Asystole
- PEA
- Primary cardiac event vs. respiratory arrest or drug overdose



Adult Cardiac Treatment Guidelines

Cardiac Arrest

- Passive ventilation for the first three cycles (6 minutes) of CPR. After that time, the patient should be ventilated using a BLS airway and BVM at a rate of 6 ventilation/minute (1:10 seconds) with continuous CPR.
- Placement of an advanced airway is recommended in patients who achieve ROSC or when the provider is unable to ventilate the patient with a BLS airway and BVM.
- Use a metronome during chest compression to ensure proper rate unless a mechanical CPR device is deployed.
- Reassess and document advanced airway placement and $EtCO_2$ frequently, after every move, and at transfer of care.
- If a non-shockable rhythm persists for 30 minutes despite aggressive resuscitative efforts, consider cessation of efforts as outlined in the Determination of Death policy.

Pearls

- Maternal arrest: Treat mother per appropriate TG with immediate notification to the Base Hospital along with rapid transport. Place pillows or padding underneath mother to displace fetus from inferior vena cava as to ensure continued fetal blood circulation; left lateral position. IV/IO access should be preferably placed above the diaphragm. Defibrillation is safe at all energy levels.
- Resuscitation is based on proper planning and organized execution. Procedures require space and patient access. Make room to work. Utilize a team focused approach assigning responders to predetermined tasks.
- Per AHA 2020 guidelines, “It is reasonable for providers to first attempt establishing IV access for drug administration in Cardiac Arrest. IO access may be considered if attempts at IV access are unsuccessful or not feasible.”
- Efforts should be directed at high quality and continuous chest compressions with limited interruptions.
- Do not delay chest compressions while applying any device or intervention.
- In cases of clear-cut traumatic arrest, epinephrine is not indicated in PEA or asystole. Epinephrine will not correct arrest caused by a tension pneumothorax, cardiac tamponade, or hemorrhagic shock. If there is any doubt as to the cause of arrest, treat as a non-traumatic arrest.
- The AutoPulse device is limited to 80 compressions/minute, which is acceptable when using this device during cardiac arrest.