History
- Code status (DNR or POLST)
- Events leading to arrest
- Estimated downtime
- History of current illness
- Past medical history
- Medications
- Existence of terminal illness

Contra Costa County Emergency Medical Services
Cardiac Arrest

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

Decomposition
- Rigor mortis
- Dependent lividity
- Injury incompatible with life or traumatic arrest with asystole
- Do not begin resuscitation
- Follow Policy 1004 – Determination of Death

For suspected Excited Delirium patients
Consider fluid bolus early and contact Base Hospital for Sodium Bicarbonate order

Criteria for death/no resuscitation
Review DNR/POLST form

AT ANY TIME
Return of spontaneous circulation
Go to Post Resuscitation TG

Begin continuous chest compressions
Push hard (> 2 inches) and fast (100-120/min)
Use metronome to ensure proper rate
Change compressors every 2 minutes
(Limit changes/pulse checks to < 5 seconds)
Apply mechanical compression device if available

For suspected Excited Delirium patients
Consider fluid bolus early and contact Base Hospital for Sodium Bicarbonate order

P Cardiac monitor
EtCO₂ monitoring

Shockable rhythm?
Yes
No

E Apply AED if available

Shockable rhythm?
Yes
No

E Continue CPR
5 cycles over 2 minutes
Repeat and assess

E Automated defibrillation

E Continue CPR
5 cycles over 2 minutes
Repeat and assess

P Follow Asystole/PEA and Airway TG as indicated
Follow VF/VT and Airway TG as indicated

ALS available?
Yes
No

Follow Airway TG

Notify receiving facility.
Contact Base Hospital for medical direction
**Pearls**

- Efforts should be directed at high quality and continuous chest compressions with limited interruptions. Consider early IO placement if available or direct IV access if anticipated.
- Passive ventilation for the first three cycles (6 minutes) of CPR. After that time, the patient should be ventilation using a BLS airway and BVM at a rate of 6 ventilation/minute (1:10 seconds) with continuous CPR.
- Placement of an advanced airway should be deferred unless a provider is unable to ventilate the patient with a BLS airway and BVM.
- Do not delay chest compressions while applying any device or intervention.
- Use a metronome during chest compression to ensure proper rate.
- 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.
- Provide resuscitative efforts on scene for up to 30 minutes to maximize chance of ROSC.
- If resuscitative efforts do not attain ROSC, consider cessation of efforts per Policy 1004 – Determination of Death.
- The AutoPulse device is limited to 80 compressions/minute, which is acceptable when using this device during cardiac arrest.
- Do not interrupt chest compressions to place ETT. Consider King Airway first to limit interruptions.
- Consider breathing and airway management after second shock or two (2) rounds of chest compression (2 minutes each round).
- If a limited number of providers are available, breathing/BVM utilization is of secondary importance. Passive oxygenation (e.g. placing a non-rebreather or nasal cannula on the patient) may be utilized until an appropriate provider is available to actively manage the airway. Consider passive oxygenation, especially in cases in which the patient was possibly hypoxic prior to arrest.
- 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.
- Reassess and document ETT placement and EtCO₂ frequently, after every move, and at transfer of care.
- 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.