# Cardiac Arrest - Non-traumatic

### History Signs and Symptoms **Differential** Medical vs. trauma • Code status (DNR or POLST) Unresponsive · Events leading to arrest Apneic VF vs. pulseless VT · Estimated downtime Pulseless Asystole · History of current illness PFA · Past medical history Primary cardiac event vs. respiratory arrest or drug • Medications Existence of terminal illness Decomposition **AT ANY TIME** Rigor mortis Criteria for death/no resuscitation Yes Review DNR/POLST form Return of spontaneous Do not begin resuscitation circulation Follow Operations 10 -No Determination of Death Go to Post Resuscitation TP Begin continuous chest compressions Push hard (> 2 inches) and fast (110/min) **Exit to Obvious Death** Suspected traumatic arrest? Use metronome to ensure proper rate No Change compressors every 2 minutes (Limit changes/pulse checks to < 5 seconds) Yes **Mechanical Device Field** Procedure if available Exit to Traumatic Arrest No ALS available? Yes Apply AED if available Cardiac monitor EtCO<sub>2</sub> monitoring Shockable rhythm? Yes Shockable rhythm? Yes No Exit to VF/VT Exit to and Airway Field Asystole/PEA Procedure and Airway Field Continue CPR Automated defibrillation **Procedure** if indicated 2 minutes if indicated Repeat and assess Continue CPR Within Mills-Peninsula 2 minutes catchment area Repeat and assess Exit to Within Mills-Peninsula **Airway Field Procedure** catchment area Exit to Airway Field Procedure **Exit to ECMO** if indicated Notify receiving facility. **Consider Base Hospital** for medical direction

# Adult Cardiac Arrest — Non-traumatic Treatment Protocols

## Cardiac Arrest – Non-traumatic

## **Pearls**

- Move patient to floor in an area where a 5-person crew have adequate space, and begin compressions.
- 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.
- Use pediatric BVM with EtCO2 and deliver ventilation with every 10<sup>th</sup> compression on the upstroke.
- 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 obvious traumatic arrest with PEA or asystole, epinephrine is not indicated. 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 30 minutes to maximize chance of ROSC.
- If resuscitative efforts do not attain ROSC, consider cessation of efforts per Operations 10 Determination of Death and Procedure 27 High Performance CPR.
- Do not interrupt chest compressions to place ETT.
- Airway preferred 1) Video Laryngoscopy, 2) Direct Laryngoscopy, 3) Continued BVM, 4) King Airway
- See Cardiac Arrest Management Utilizing High Performance CPR Triangle of Life Procedure for High Performance CPR outline. (Procedure 27)
- 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 EtCO<sub>2</sub> frequently, after every move, and at transfer of care.
- Maternal arrest: Treat mother per appropriate TP with immediate notification to the Base Hospital along with rapid transport. Manually displace fetus from inferior vena cava to ensure continued fetal blood circulation by pushing the uterus to the left. Defibrillation is safe at all energy levels.
- Defibrillation vests should be removed by EMS personnel before compressions, but do not cut vests. Once removed, disengage battery to prevent alarming.

