CARDIAC ARREST MANAGEMENT

EMR

- Routine Medical Assessment and Intervention.
- **Immediately initiate CPR at a rate of 100 to 120 per minute** per current AHA guidelines for approx 2 minutes while attaching AED.
- **Analysis of rhythm – Deliver Shock if AED advises**
- **Continue CPR immediately –** making efforts to minimize interruptions of chest compressions & analyze rhythm every two minutes until advanced life support arrive.
- Ensure concurrent use of Airway guideline(s).
- Determine underlying cause of arrest if able – see Hs and Ts on next page
- Pause compressions for ventilations if simple airway adjunct is in place.
- Rotate crew member performing chest compressions every two minutes.

EMR

EMT

- Consider placement of **King airway** if authorized and trained
- Initiate **capnography** if available/trained.

EMT

AEMT

- **Initiate peripheral IV line.**
- **Normal saline infusion** at TKO rate unless volume loss suspected. If volume loss, give 250 to 500cc fluid challenge.

AEMT

EMT-I

- **Consider Adult IO if no peripheral IV line**
- **May utilize manual defibrillation when indicated per manufactures recommendation**
- During 2 minute periods of CPR administer medications of possible benefit as outlined below:

ALL RHYTHMS:

- **Epi 1:10,000, 1 mg IVP,** repeat q 3-5 min throughout resuscitation efforts.

SHOCKABLE RHYTHMS (VF/VT):

- Administer anti-arrhythmic medication***:***
  - **Amiodarone 300 mg IVP** (dilute to 20 ml with NS), repeat 150 mg IVP (dilute to 20 ml with NS) in 5 min **OR**
  - **Lidocaine 1.5 mg/kg IVP**, repeat 0.75 mg/kg every 5-10 min, to max dose of 3 mg/kg.

NON-SHOCKABLE RHYTHMS (PEA/Asystole):

- **Normal saline** up to max of 1000mL

EMT-I

PARAMEDIC

- Intubation as indicated.

SHOCKABLE RHYTHMS (VF/VT)

- Suspected torsades de pointes or hypomagnesemia condition
  - **Magnesium Sulfate 2 grams** (dilute in 20 ml NS) for a 10% solutions and administer IV over 2 minutes.

PARAMEDIC

CARDIAC ARREST MANAGEMENT CONT.

Clinical Care Pearls

- Consider Hs and Ts for potential reversible causes and treat according to appropriate clinical guideline(s).
    - **H**ypovolemia – see shock guideline; **H**ypoxia; **H**ydrogen Ion (acidosis) – see respiratory & sodium bicarbonate guidelines; **H**yper/**H**ypokalemia – see dialysis emergencies guideline; **H**ypothermia – see environmental emergencies guideline
    - **T**ension pneumothorax – see chest decompression procedure; **T**amponade (cardiac) – see shock guideline; **T**oxins – see toxic exposures guideline; **T**hrombosis (Pulmonary/cardiac) – see respiratory guidelines