Cardiac Arrest - Pediatric

EMT/ADVANCED EMT STANDING ORDERS

- Routine patient Care—with focus on CPR
- Immediate chest compressions.
- Apply AED and use as soon as possible (with minimum interruption of chest compressions). From birth to age 8 years use pediatric AED pads.
 - If pediatric AED pads are unavailable, providers may use adult AED pads, provided the pads do not overlap.
- Monitor capnography, if available, throughout resuscitation to assess and monitor airway placement, CPR quality and to monitor for signs of Return of Spontaneous Circulation.
- Consider termination of efforts or not attempting resuscitation, see <u>DNR</u>, <u>POLST & Advanced Directives Policy 8.8</u> and/or <u>Resuscitation Initiation & Termination 8.16</u>.
- Consider treatable causes: hypoxia, overdose/poisoning, hypoglycemia, hypothermia, and hypovolemia (treat as per specific protocol).

PARAMEDIC STANDING ORDERS

- If Return of Spontaneous Circulation occurs see <u>Post Resuscitative Care</u> <u>Protocol 3.4.</u>
- If ventilation is adequate with BVM, routine placement of advanced airway can be deferred.
- Placement of an advanced airway during cardiac arrest should not interrupt chest compressions. In this setting, supraglottic airways and ETTs can be considered equivalent.
- For suspected metabolic acidosis, suspected or known hyperkalemia (dialysis patient), or known tricyclic antidepressant overdose, consider sodium bicarbonate 2 mEq/kg IV.

For Ventricular Fibrillation (VF)/Pulseless Ventricular Tachycardia (VT):

- Defibrillate at 2 J/kg; perform CPR for 2 minutes and recheck rhythm; if still a shockable rhythm, defibrillate at 4 J/kg; perform CPR for 2 minutes; reassess every 2 minutes and continue to defibrillate at 4J/kg.
- If no response after first defibrillation, administer:
 - Epinephrine (0.1 mg/mL concentration) 0.01 mg/kg (0.1 ml/kg) IV OR
 - Epinephrine (1 mg/mL concentration) 0.1 mg/kg (0.1 ml/kg) via ETT.
 - Repeat every 3 5 minutes.
- If no response after second defibrillation, consider:
 - Amiodarone 5 mg/kg (maximum 300 mg) IV, OR
 - Lidocaine 1 mg/kg (maximum 100 mg),
 - For Torsades de Pointes: magnesium sulfate 25 50 mg/kg (maximum 2 grams) IV over 1 2 minutes.

For Asystole or Pulseless Electrical Activity (PEA):

- Epinephrine (0.1 mg/mL concentration) 0.01 mg/kg (0.1 ml/kg) IV OR
- Epinephrine (1 mg/mL concentration) 0.1 mg/kg (1ml/kg) via ETT
 - Repeat every 3 5 minutes.
- Give 2 minutes of CPR, then check rhythm:
 - o If asystole or PEA, continue epinephrine and 2 minutes of CPR until:
 - o Pulse obtained, OR
 - Shockable rhythm obtained, OR
 - Decision made to discontinue further efforts.

