CARDIAC ARREST OVERVIEW - PEDIATRIC
(GENERAL GUIDELINES)

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Information Needed:
- History of arrest:
  - Witnessed/unwitnessed collapse, time down and preceding symptoms
  - Pre-arrival instructions, Bystander CPR and treatments, including first responder/bystander defibrillation, prior to arrival
- Past medical history: diagnoses (cardiac, respiratory, children with special health care needs), medications, recent illness/fever, recent trauma, recent medical care/treatments, suspicion of abuse/neglect, and birth history (e.g. prematurity, complicated delivery)
- Precipitating event(s): sleeping, eating, playing, bathing, swimming
- Scene: site of arrest (crib, adult bed, trauma scene, bath/pool), immediate surroundings (blankets, pillows, toys, medications, toxins), DNR/POLST form, medallion, or hospice patient
- Estimated age. Follow Neonatal Resuscitation Protocol as indicated
- Utilize the Broselow Tape to measure length and then SMC Pediatric Reference Card for determination of drug dosages, fluid volumes, defibrillation/cardioversion joules and appropriate equipment sizes

Objective Findings:
- Unresponsive; apneic, pulseless (check carotid and femoral pulses)
- Assess rhythm as asystole, PEA, or bradycardia
- Pulse oximetry

Treatment:
- Initiate standard pediatric cardiac arrest management: CAB's, CPR (American Heart Association BLS Standards), monitor, ventilate with 100% oxygen
- Plan actions before interrupting CPR
- Monitor cardiac rhythm and treat dysrhythmia according to appropriate protocol
- Establish IV/IO access

Precautions and Comments:
- Pediatric cardiopulmonary arrest is almost always the lack of oxygen or perfusion from one of many non-cardiac causes. In the pediatric patient, arrest usually follows a primary respiratory arrest.
- In the prehospital setting, trauma, SIDS, drowning, poisoning, choking, severe asthma, and pneumonia represent the most common causes of arrest.
- Ensure that effective CPR continues while advanced skills are carried out.

- Intraosseous infusion (IO) can be used on all children in cardiac arrest.
- AEDs should be used according to manufacturer's directions and/or AHA Guidelines. If AED is being used to defibrillate:
    - Pediatric attenuated shock for patient <8 years old
    - Adult shock for 8 years and older
- When defibrillating/cardioverting patients ≤ 10kg weight (GRAY, PINK, and RED color zones), use "pediatric" pads". Optimal placement of pads in this age group is anterior-posterior placement (one pad over the heart, the other on the back).
- When defibrillating/cardioverting patients ≥10 kg weight (PURPLES through GREEN color zones), use "adult" pads with standard placement or follow manufacturer's directions for hands free defibrillation.
- If patient is hypothermic, transport may be indicated to re-warm patient in hospital setting prior to termination of efforts.
- Consider termination of efforts if there is no response to ALS measures. (see Guidelines for Determining Death in the Field)
- Provide emotional support as appropriate. Contact Public Safety Communications for grief support referral.