Pediatric BLS Standing Orders

- Universal Patient Protocol
- High quality uninterrupted CPR (See **CPR Policy)**
- Apply AED and follow device instructions (**AED Policy)**
- **If patient had arrest prior to EMS arrival, provide 2 minutes of CPR prior to defibrillation**
- BVM per **BVM Policy**
    - Adult without an advanced airway: 30:2 (30 compressions to 2 breaths)
    - Pediatric without an advanced airway: 30:2 for single rescuer
      15:2 for two (2) rescuers
    - Pediatric patients are generally classified for CPR as ≤ 55 kg (121 lbs) [Merck Manual]
- Continuous compressions between 100-120 bpm
- Provide airway support per **Airway Management Policy**
- Continuous pulse oximetry and Capnography should be monitored
- If Return of Spontaneous Circulation (ROSC) occurs after any intervention, transport to closest Imperial County approved receiving STEMI center if within 90 minutes of transport location
- Administer naloxone 0.1 mg/kg, max of 2 mg IN. May repeat up to three (3) times, q5min per **Poisoning Policy**
- Check blood glucose, treat hypoglycemia as noted in **Altered Mental Status Policy**
- BLS may contact Base Hospital Physician if ALS personnel are not able to reach the incident or make patient contact.
- **Early BHP contact is encouraged. Priority should be given to continuous, high-quality compressions, proper ventilations, and early epinephrine administration prior to patient transport. Ten minutes minimum of high quality on scene CPR is associated with improved outcomes.**
- All cardiac arrest compression and monitor data should be uploaded to the ePCR for quality assurance review to include compression quality, EtCO2, and defibrillation timing.

If applicable:

- **Determination of Death in the Field Policy**
- **Do Not Resuscitate Policy -** Do not delay care and/or CPR while confirmation is being made
- **Termination of Resuscitation Policy**

Pediatric LALS Standing Orders

- Establish IV
- Capnography

Suspected Hypovolemia

- NS 20 mL/kg bolus IV MR **x1**
- Use Shock Protocol for persistent hypotension

Suspected Opioid Overdose

- Naloxone 0.1 mg/kg, max of 2 mg IV. MR x2, q5min per **Poisoning Protocol**

Hypoglycemia

- Treat per **Altered Mental Status Policy** if BS is < 60 mg/dL pediatrics, < 45 mg/dL neonates

Pediatric ALS Standing Orders

- Monitor/EKG
- Establish IV/IO
- Capnography

Ventricular Fibrillation or Pulseless Ventricular Tachycardia

- Defibrillation at manufacturer's suggested values (or see **Pediatric Drug Guide**)
- Epinephrine (1:10,000) 0.01 mg/kg IV/IO (max 1 mg, see), every 3-5 minutes for the duration of the arrest

Refractory VF/Pulseless VT (Three (3) or More Rhythm Checks)

- Amiodarone 5 mg/kg (max 450 mg, see dosing chart) IV/IO **BHP**
- Lidocaine 1-1.5 mg/kg (max 100 mg, see dosing chart) IV/IO **BHP**

Asystole

- Epinephrine (1:10,000) 0.01 mg/kg IV/IO (max 1 mg), every 3-5 minutes for the duration of the arrest

Pulseless Electrical Activity

- Epinephrine (1:10,000) 0.01 mg/kg IV/IO (max 1 mg), repeat every 3-5 minutes for the duration of the arrest
- Treat any rhythm changes according to correct treatment protocol

Identify and Treat Reversible Causes

H's & T's	
• Hypovolemia • Hypoxia • Hydrogen ion excess (acidosis) • Hypoglycemia • Hypokalemia • Hypothermia	• Tension pneumothorax • Tamponade – cardiac • Toxins • Thrombosis (pulmonary embolus) • Thrombosis (myocardial infarction)

Hypovolemia:

- NS 20 ml/kg IV/IO MR x 1
- Use Shock Protocol for persistent hypotension

Hypoxia:

- Ensure that the patient is adequately ventilated, utilizing an airway adjunct and bag valve mask with a supplemental oxygen supply
- Ensure proper chest rise and fall

Suspected Hyperkalemia as source of cardiac arrest:
Peaked T-waves, with possible widening of the QRS complex

- Calcium Chloride 10 mg/kg IV / IO, max dose 1 gm, per dosing chart. **BH**
- Sodium Bicarbonate 1 mEq/kg IV/ IO, max dose 50 mEq (1 amp), per dosing chart **BH**

Hypothermia:

- Consider rewarming measures
- Patients that are hypothermic can be unresponsive to pharmaceutical therapy and electrical therapy

Hypothermic Cardiac Arrest (Ex: If patient is found down in near-freezing temperatures, or was pulled from near-frozen water)

- If no pulse is present, start CPR
- If defibrillation is indicated, limit to one (1) shock until patient is warm
- If patient presents with dysrhythmias, treat as appropriate
- If core temperature is less than 86°F, withhold IV medications until body temperature rises

Tension Pneumothorax:

- Perform pleural decompression per **BH**

Pediatric Base Hospital Orders

LALS

- BH: Additional NS bolus

ALS

Suspected Hyperkalemia as source of cardiac arrest:

- Peaked T-waves, with possible widening of the QRS complex
  - BH: Calcium Chloride 10 mg/kg IV / IO, max dose 1 gm, per dosing chart
  - BH: Sodium Bicarbonate 1 mEq/kg IV/ IO, max dose 50 mEq (1 amp), per dosing chart

Refractory VF/Pulseless VT

- BHP: Amiodarone 5 mg/kg (max 450 mg, see dosing chart) IV / IO
- BHP: Lidocaine 1-1.5 mg/kg (max 100 mg, see dosing chart) IV / IO

Notes

Pediatric cardiac arrest is often triggered by respiratory arrest. Ensure proper ventilation and oxygenation. BLS care, high-quality compressions and early defibrillation are the most important aspects of cardiac arrest care, and should be prioritized.

Goals for compressions include:

- Compression rate between 100-120 bpm (use a metronome at 110 bpm)
- Allowing full recoil of the chest between each compression
- Minimizing pauses to < 10 seconds, and prioritizing time performing compressions
- Adequate compression depth
  - 2 inches in adults
  - 1-1.5 inches in children
  - 0.5-1.0 inch in infants

Monitors with CPR feedback, real-time metronome use, and having CPR coaches for compressors should be used whenever possible to improve CPR quality.

APPROVED:
SIGNATURE ON FILE – 07/01/25
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