

History

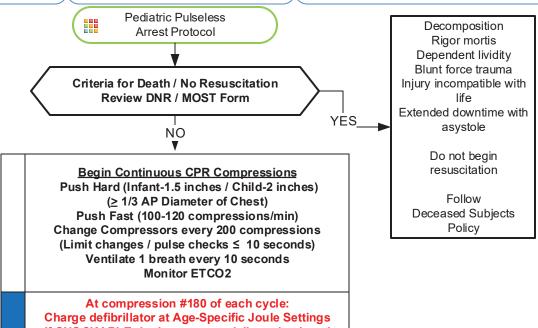
- Events leading to arrest
- Estimated downtime
- SAMPLE
- Existence of terminal illness
- Airway obstruction
- Hypothermia
- Suspected abuse

Signs and Symptoms

- Pulseless
- Apneic
- No electrical activity on ECG
- No heart tones on auscultation

Differential

- Respiratory failure
- Foreign body
- Infection (croup, epiglotitis)
- Congenital heart disease
- See Reversible Causes below



AT ANY TIME

Return of Spontaneous Circulation



Go to
Post Resuscitation
Protocol

If SHOCKABLE rhythm present, deliver shock and P immediately continue chest compressions If NONSHOCKABLE rhythm present, utilize DISARM soft key AED Procedure if available Search for Reversible Causes Blood Glucose Analysis Procedure Cardiac Monitor P Consider Chest Decompression-Needle Procedure IV / IO Procedure Epinephrine 1:10,000 0.01 mg/kg IV / IO (Maximum Single Dose 1mg) A Repeat every 3 – 5 minutes **Normal Saline Bolus** 10 - 20 mL/kg IV / IO May repeat as needed (Maximum 60 mL/kg) Consider Р Dopamine 5 - 20 mcg /kg / min IV / IO

Reversible Causes

Hypovolemia Hypoxia Hydrogen ion (acidosis) Hypothermia Hypo / Hyperkalemia

Tension pneumothorax Tamponade; cardiac Toxins Thrombosis; pulmonary

Thrombosis; coronary

(MI)

Notify Destination or Contact Medical Control

See Pearls



Pediatric Cardiac Protocol Section

Pediatric Asystole / PEA



Pearls

- Recommended Exam: Mental Status
- Beginning compressions first is recommended in pediatric patients during CPR. However, the majority of pediatric arrests stem from a respiratory insult or hypoxic event. Compressions should be coupled with ventilations.
- Efforts should be directed at high quality and continuous compressions with limited interruptions and early defibrillation when indicated. Compress ≥ 1/3 anterior-posterior diameter of chest, in infants 1.5 inches and in children 2 inches. Consider early IO placement if available and / or difficult IV access anticipated.
- DO NOT HYPERVENTILATE: Ventilate 1 breath every 10 seconds with continuous, uninterrupted compressions.
- Do not interrupt compressions to place endotracheal tube. Consider BIAD first to limit interruptions.
- High-Quality CPR:

Make sure chest compressions are being delivered at 100 – 120 / min.

Make sure chest compressions are adequate depth for age and body habitus.

Make sure you allow full chest recoil with each compression to provide maximum perfusion.

Minimize all interruptions in chest compressions to < 10 seconds.

Do not hyperventilate, ventilate 1 breath every 10 seconds only.

- Use AED or apply ECG monitor / defibrillator as soon as available.
- Airway is a more important intervention in pediatric arrests. This should be accomplished quickly with BVM or BIAD. Patient survival is often dependent on proper ventilation and oxygenation / Airway Interventions.
- Success is based on proper planning and execution. Procedures require space and patient access. Make room to work.
 Consider Team Focused Approach / Pit-Crew Approach assigning responders to predetermined tasks. Refer to optional protocol.
- Vasopressor agents:

Dopamine 5 – 20 mcg / kg / min IV / IO

Epinephrine 0.1 – 1 mcg / kg / min IV / IO

Norepinephrine 0.1 – 2 mcg / kg / min IV / IO

Dose Calculation: mL / hour = kg x dose(mcg / kg / min) x 60 (min / hr) / concentration (mcg / mL)

- In order to be successful in pediatric arrests, a cause must be identified and corrected.
- If no IV / IO access may use Epinephrine 1:1000 0.1 mg/kg (0.1 mL/kg) via ETT (Maximum 2.5 mg)