



Pediatric Pulseless Arrest

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INFANT CPR

CHILD CPR

- Perform chest compressions with minimal interruptions (≤10 secs)
 - 1 rescuer: 2 finger compressions
 - 2 rescuer: 2 thumbs with hands encircling chest
- Rate: 100-120/min
- Depth: 1/3 diameter of the chest (approx. 1 ½")
- Compression/ventilation ratio:
 - 1 rescuer: 30:2
 - 2 rescuer: 15:2
- Perform CPR during AED/defibrillator charging & resume CPR immediately after shock

- Perform chest compressions with minimal interruptions (≤10 secs)
 - 1 or 2 hand compressions
- Rate: 100-120/min
- Depth: 1/3 diameter of the chest (approx. 2")
- Compression/ventilation ratio:
 - 1 rescuer: 30:2
 - 2 rescuer: 15:2
- Perform CPR during AED/defibrillator charging & resume CPR immediately after shock

DEFIBRILLATION & OVERALL MANAGEMENT

ADVANCED AIRWAY MANAGEMENT

- Analyze rhythm & check pulse after every 2 min CPR cycle
- AED detail:
 - Use child pads, if available, for infants & children <8 years old
 - If child pads not available, use adult pads, make sure pads do not touch each other or overlap
 - Adult pads deliver a higher shock dose, but a higher shock dose is preferred to no shock
- Manual defibrillation detail (**AEMT II**):
 - Initial dose: 2 J/kg, subsequent doses: 4 J/kg
- Movement of pt may interrupt CPR or prevent adequate depth and rate of compressions
- Consider resuscitation on scene up to 20 mins

- Consider/establish advanced airway (LALS only) at appropriate time during resuscitation
- Do not interrupt chest compressions to establish an advanced airway
- Waveform capnography shall be used on all pts with an advanced airway in place
 - An abrupt increase in PETCO₂ is indicative of ROSC
 - Persistently low PETCO₂ levels (<10 mmHG) suggest ROSC is unlikely

TREAT REVERSIBLE CAUSES

TERMINATION OF RESUSCITATION

- Hypovolemia
 - Hypoxia
 - Hydrogen Ion (acidosis)
 - Hypo-/hyperkalemia
 - Hypothermia
 - Tamponade, cardiac
 - Tension pneumothorax
 - Thrombosis, pulmonary
 - Thrombosis, cardiac
 - Toxins
- ① Refer to Hypothermia & Avalanche/Snow Immersion Suffocation Resuscitation Protocol (E-2) or Traumatic Pulseless Arrest Protocol (T-6) as appropriate
- ① Contact the base/modified base hospital for consultation & orders as appropriate
- ① Consider early transport of pts who have reversible causes that cannot be adequately treated in the prehospital setting

- Base/Modified Base Hospital Physician Order Only**
- If non-shockable rhythm persists, despite appropriate, aggressive ALS interventions for 30 mins (or if EtCO₂ is <10 mm Hg after 20 mins in a pt with an advanced airway), consider discontinuation of CPR

SEE PAGE 2 FOR TREATMENT ALGORITHM



Pediatric Pulseless Arrest

BLS

- CPR (with BVM & 100% O₂) x 2 mins - apply AED as soon as possible
- Deliver **SS AED SHOCK SS**, if indicated by AED, & immediately resume CPR
- Analyze rhythm/check pulse after every 2 min CPR cycle

LALS

Cardiac & EtCO₂
Monitoring
(AEMT II)

ASYSTOLE/PEA

VF/VT

IV/IO NS (may bolus 20 mL/kg)

IV/IO NS (may bolus 20 mL/kg)

SS Defibrillation SS

Shockable
Rhythm?

YES

Treat
VF/VT

NO

• **Epinephrine 1:10,000 (AEMT II)**

- IV/IO: 0.01 mg/kg
- Repeat every 3-5 mins for continued/
relapsed pulseless arrest
- Max: 4 total doses

Shockable
Rhythm?

NO

Treat
Asystole/
PEA

YES

SS Defibrillation SS

Shockable
Rhythm?

NO

YES

• **SS Defibrillation SS every 2 mins for
continued/relapsed shockable rhythm**

• For VF/VT refractory to defibrillation:

Epinephrine 1:10,000 (AEMT II)

- IV/IO: 0.01 mg/kg
- Repeat every 3-5 mins for continued/
relapsed pulseless arrest
- Max: 4 total doses

• For VF/VT refractory to defibrillation &
epinephrine:

Lidocaine (AEMT II)

- IV/IO: 1-1.5 mg/kg
- Repeat x 2: IV/IO 0.5-0.75 mg/kg every
5 mins for continued/relapsed VF/VT
(max total: 3 mg/kg)

• If narcotic OD suspected:

Naloxone

- 0.1 mg/kg IV/IO (max: 2 mg)