

PAEDIATRIC CARDIAC ARREST ALGORITHM

So, your patient has arrested and CPR is in progress. The EMS team arrives and attaches defibrillator leads.

1) **Whats the rhythm? Shockable or non-shockable?**

2) **Shockable rhythm: VF or VT**

- a. **DC shock, 2J per Kg**
- b. **2 mins CPR** while intubating/getting access
- c. **Check the monitor**
- d. **DC shock 4J per Kg**
- e. **2 minutes CPR** while intubating/getting access
- f. **Check monitor**
- g. **Adrenaline**, then **DC shock 4J per Kg**
- h. **2 minutes CPR**
- i. **Check monitor**
- j. **Amiodarone**, then **DC shock 4J per Kg**
- k. **2 minutes CPR**
- l. **Check monitor**
- m. **Go back to adrenaline + DC shock, and so it continues**

4 Hs and 4 Ts

Hypoxia

Hypovolemia

Hypo/hyperthermia

Hypo/hyperkalemia

Tension pneumothorax

Tamponade (cardiac)

Thrombus (cardiac or PE)

Toxins (random drug)

3) **Non-shockable rhythm: Asystole or PEA**

- a. **High flow oxygen**
- b. **CPR** while intubating/getting access
- c. **Check the monitor every 2 minutes**
- d. **Adrenaline every 3 minutes**

ADRENALINE: 10mcg/kg

AMIODARONE 5mg/kg

NON-SHOCKABLE RHYTHM

Asystole

- The most common arrest rhythm
- This is what happens to the hypoxic child: bradycardia, then asystole

PEA

- This is typically a prelude to asystole
- There may be an identifiable cause, eg. tension pneumothorax

Secondary assessment

- Detailed examination of the body
- Identify wounds / bruising / swelling
- Reexamine ABCs