



## CHECKLIST

# Paediatric cardiac arrest

APLS / RCUK 2021 algorithm as a running checklist



EM Orbit

Patient reference

Date

Time zero

Completed by

Most paediatric arrests are hypoxic. Ventilate first, compress well, get the weight, and treat the reversible cause.

### Start

- ☐ **Unresponsive, not breathing normally: 5 rescue breaths, then CPR 15 : 2 at 100–120/min, depth one-third of the chest**  
Two-thumb encircling technique for infants; one or two hands for children.
- ☐ **Call the arrest team; attach the defibrillator; weight estimated (paediatric calculator) or Broselow tape**
- ☐ **Bag-valve-mask with 100% oxygen; oral airway; consider a supraglottic airway or intubation by an experienced operator**  
Once an advanced airway is in: continuous compressions, 25 breaths/min (infant), 20 (1–8 y), 15 (8–12 y), 10 (over 12 y).
- ☐ **IV or intraosseous access within 60 seconds — go straight to IO if IV fails**

### Rhythm every 2 minutes

- ☐ **Shockable (VF / pVT): shock 4 J/kg, resume CPR immediately**
- ☐ **After the 3rd shock: adrenaline 10 mcg/kg IV/IO AND amiodarone 5 mg/kg; adrenaline every 3–5 minutes thereafter; amiodarone again after the 5th shock**  
Lidocaine 1 mg/kg if amiodarone unavailable.

- ☐ **Non-shockable (PEA / asystole): adrenaline 10 mcg/kg IV/IO as soon as access is obtained, then every 3–5 minutes**

- ☐ **Waveform capnography: confirms the airway, guides CPR quality, signals ROSC**

### Reversible causes — 4 H's and 4 T's

- ☐ **Hypoxia · Hypovolaemia (fluid 10 mL/kg boluses) · Hypo/hyperkalaemia and metabolic incl. hypoglycaemia (check glucose) · Hypothermia**
- ☐ **Tension pneumothorax · Tamponade · Toxins · Thrombosis**
- ☐ **Consider: 10 mL/kg blood for haemorrhage; calcium for hyperkalaemia, hypocalcaemia or calcium-channel blocker; bicarbonate for hyperkalaemia or tricyclic**

### Team and family

- ☐ **Team leader stands back; roles assigned; time-keeper calls each 2-minute cycle and each drug**
- ☐ **Parents offered the chance to be present with a dedicated staff member**
- ☐ **ROSC → post-ROSC bundle with paediatric targets; no ROSC → senior decision on stopping, then debrief**

Newborn at delivery follows the newborn life support algorithm (3 : 1, air first), not this one. · Every dose here is in the paediatric calculator by weight.



A drafted aid to memory, awaiting senior review. It does not replace your local protocol or your clinical judgement. Source: Resuscitation Council UK Paediatric ALS 2021 · APLS 7th ed.  
EM Orbit · Emergency medicine, in one orbit · paed-arrest · red rows are the steps that must not be missed