

# CMG 5 – PAEDIATRIC CARDIAC ARREST

(Revised: June 2017)



For the purposes of this guideline, paediatrics include infants and children aged from 24 hours to 8 years.

If defibrillator is *already attached AND arrest is witnessed*:  
 Precordial thump  
**If VF or VT: 3 stacked shocks (each of 4J/kg)**

**Start CPR**  
 2 breaths : 15 compressions  
 Minimise interruption

Attach  
**defibrillator / monitor**

**C.O.A.C.H.E.D.**

**SHOCKABLE**

**Shock (4J/kg)**

**CPR**  
 for 2 minutes

**NON-SHOCKABLE**

**CPR**  
 for 2 minutes

Return of  
 spontaneous  
 circulation?

**Post-resuscitation care**  
 (CMG 5a)

**REMINDER**

**Commence CPR on a paediatric when:**

- unresponsive and not breathing normally AND / OR
- no pulse felt (check for no more than 10 secs) OR
- slow pulse (<60/min) and no other signs of circulation

**CORRECTABLE CAUSES**

Hypoxia	Tension pneumothorax
Hypovolaemia	Tamponade
Hyper/hypokalaemia or metabolic disorder	Toxins
Hyperthermia/hypothermia	Thrombosis (pulmonary/coronary)

Compressions continue  
 Oxygen away  
 All else clear  
 Charging  
 Hands off/I'm safe  
 Evaluate rhythm  
 Defibrillate or disarm

**continued over**

## CMG 5 (cont.) – PAEDIATRIC CARDIAC ARREST



### \*\*\* SHOCKABLE RHYTHM \*\*\*

#### DURING CPR:

ICP	<b>CHECK AGGRESSIVELY FOR (AND ADDRESS) CORRECTABLE CAUSES</b>	AP
ICP	Basic airway manoeuvres and airway adjuncts	AP
ICP	Add oxygen	AP
ICP	EtCO <sub>2</sub>	AP
ICP	Intravenous or	AP
ICP	intraosseous access	
ICP	Plan actions before interrupting CPR (i.e. COACHED)	AP
ICP	Consider advanced airway management (when sufficient assistance)	AP
ICP	Consider placing intragastric tube (APs: via LMA gastric port only)	AP

#### MEDICATIONS

ICP	<b>Adrenaline – 0.01mg/kg</b> after 2 <sup>nd</sup> shock (then in every second loop)	AP
ICP	<b>Amiodarone – 5mg/kg</b> (max 150mg) after 3 <sup>rd</sup> shock	
ICP	Consider fluid bolus – <b>normal saline</b> – up to 20ml/kg	AP
ICP	<b>Magnesium sulphate – 50mg/kg</b> (max 2.5g) <ul style="list-style-type: none"> <li>first drug in Torsades de Pointes (no amiodarone), or</li> <li>after 4<sup>th</sup> shock if still in VF</li> </ul>	
ICP	<b>Sodium bicarbonate – 1mMol/kg</b> <ul style="list-style-type: none"> <li>prolonged arrest (&gt;15 minutes), or</li> <li>as otherwise indicated (hyperkalaemia, tricyclic OD)</li> </ul>	

### \*\*\* NON-SHOCKABLE RHYTHM \*\*\*

#### DURING CPR:

ICP	<b>CHECK AGGRESSIVELY FOR (AND ADDRESS) CORRECTABLE CAUSES</b>	AP
ICP	Basic airway manoeuvres and airway adjuncts	AP
ICP	Add oxygen	AP
ICP	EtCO <sub>2</sub>	AP
ICP	Intravenous or	AP
ICP	intraosseous access	
ICP	Plan actions before interrupting CPR (i.e. COACHED)	AP
ICP	Consider advanced airway management (when sufficient assistance)	AP
ICP	Consider placing intragastric tube (APs: via LMA gastric port only)	AP
ICP	Asystole/PEA: check alternate leads	AP

#### MEDICATIONS

ICP	<b>Adrenaline – 0.01mg/kg</b> immediately (then in every second loop)	AP
ICP	If hypoxia is <i>not</i> the apparent cause of arrest: <b>normal saline</b> – 20ml/kg	AP
ICP	<b>Sodium bicarbonate – 1mMol/kg</b> <ul style="list-style-type: none"> <li>prolonged arrest (&gt;15 minutes), or</li> <li>as otherwise indicated (hyperkalaemia, tricyclic OD)</li> </ul>	