



2015

## ADVANCED CARDIAC ARREST ALGORITHM Adult and Paediatric



EARLY EARLY EARLY EARLY

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Reassess continuously	• Pulse rate < children and i	60 in nfants	Reassess continuously	
<b>Start Compress</b> Compress the chest fast (almost Push hard / Ensure full constructions Minimize interrupt	sions ost 2 per second) chest recoil / tions	<ul> <li>High Quality CPR:</li> <li>Compression rate 1</li> <li>Avoid excessive ve 1 breath every 6 se</li> <li>Rotate compressor</li> <li>Consider capnogra</li> </ul>	100 – 120 per minute entilation; econds if advanced airway is every 2 minutes phy and arterial monitoring	
$\frac{\text{Breaths}}{Attempt 2 breaths at 1 brown of the second stress of t$	eath/second v 30 compressions	If unable to perform breaths, do continuous compressions	<ul> <li>Advanced Considerations:</li> <li>Correct contributory causes</li> <li>Obtain IV/IO access, take ABG/VBG</li> <li>Give high levels of FiO<sub>2</sub> and consider advanced airway if required</li> </ul>	
Adult ratio 30:2   Children/Infants 3 Continue until AED / De	30:2 (2-rescuer 15:2) efib arrives	<ul> <li>until equipment arrives</li> <li>Continuous chest compressions after advanced airway in place</li> <li>Consider Adrenaline and antiarrhythmics:</li> </ul>		
Attach AED / Defib imm ANALYSE RHYTHM	mediately		<ul> <li>Adrenaline 1mg every 3 - 5 min (0.01mg/kg in paed)</li> <li>Amiodarone 300mg followed by 150mg (5mg/kg in paed)</li> <li>or if not available</li> <li>Lignocaine 1.5mg/kg initial, followed by 0.5mg/kg (max 3mg/kg)</li> </ul>	
Shock Advised	No Shock Advised		Contributory Causes:	





 If signs of life present monitor and provide post ROSC care

If absent - continue CPR

Immediately resume CPR starting with compressions. Continue for 2 minutes

- Hypoxia
- Hypovolaemia
- Hypothermia
- Hydrogen ion (Acidosis)
- Hypo- / Hyperkalaemia
- Hypoglycaemia
- Tension Pneumothorax
- Tamponade (Cardiac)
- Toxins
- Trauma
- Thrombosis (Coronary)
- Thrombosis (Pulmonary)

## **Additional considerations:**

1) VA ECMO might be considered in appropriate centres when available;

2) Ultrasound can be considered as a diagnostic and procedural tool where training and resources exist.

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