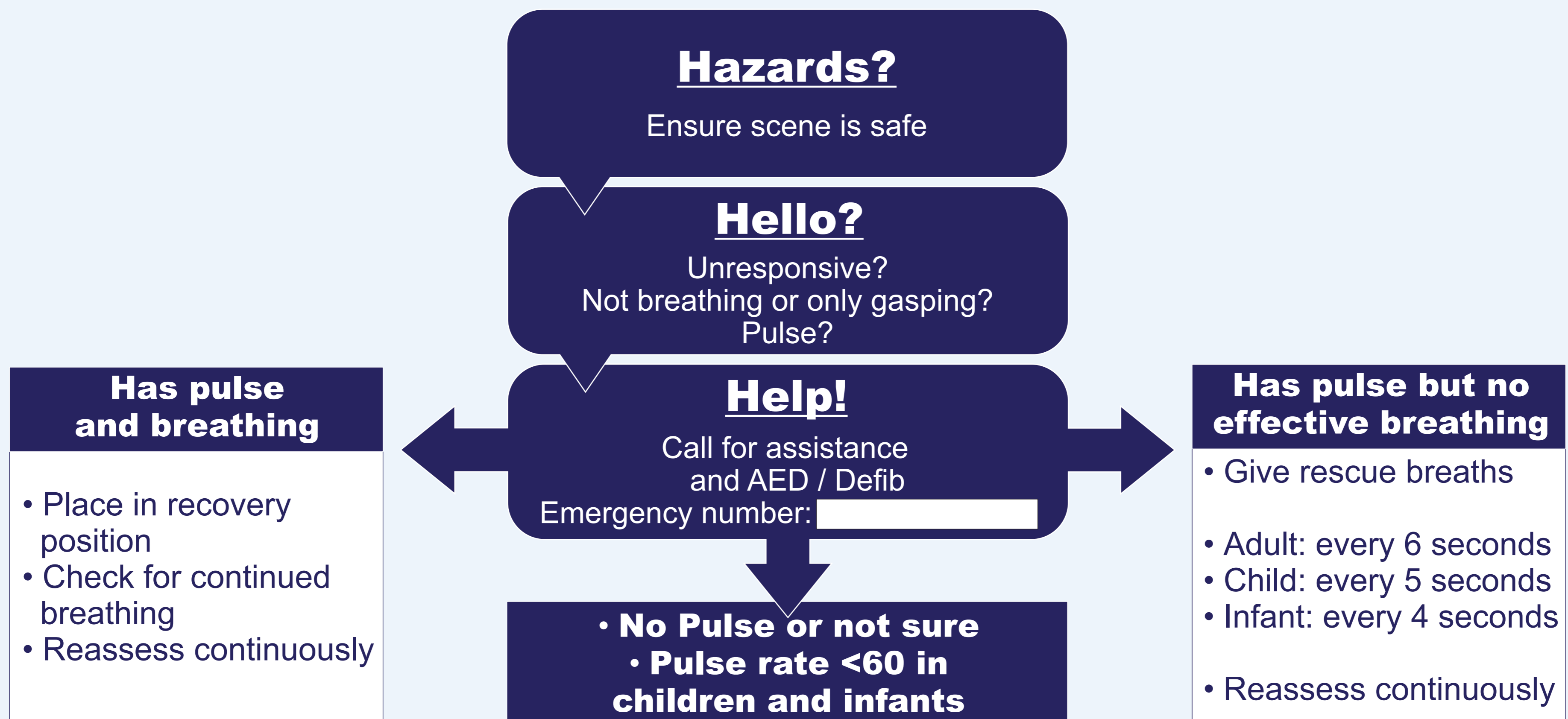


ADVANCED CARDIAC ARREST ALGORITHM

Adult and Paediatric



Start Compressions
Compress the chest fast (almost 2 per second)
Push hard / Ensure full chest recoil /
Minimize interruptions

High Quality CPR:

- Compression rate 100 – 120 per minute
- Avoid excessive ventilation;
1 breath every 6 seconds if advanced airway
- Rotate compressors every 2 minutes
- Consider capnography and arterial monitoring

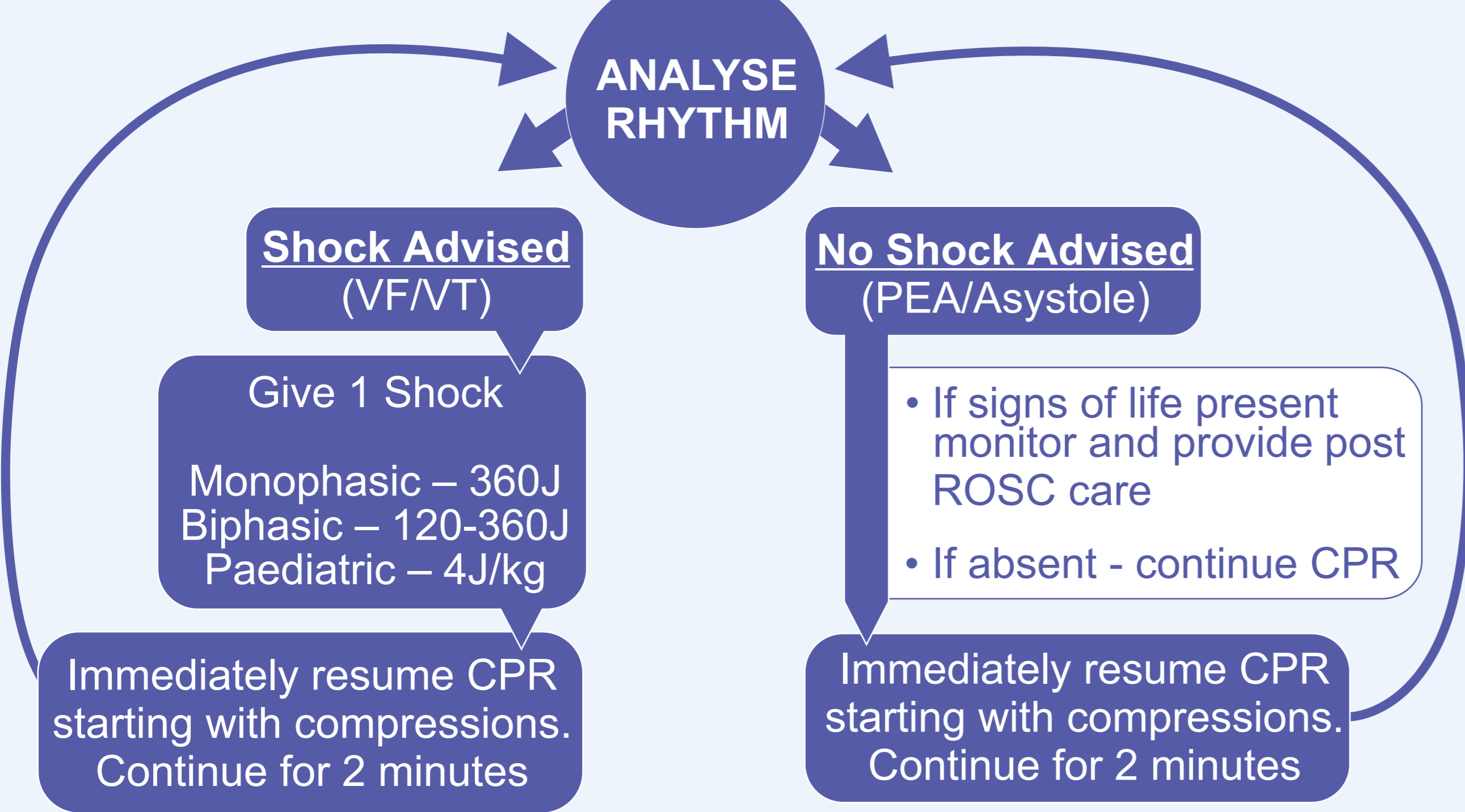
Breaths
Attempt 2 breaths at 1 breath/second
(with O₂ if available) after every 30 compressions
Adult ratio 30:2 | Children/Infants 30:2 (2-rescuer 15:2)
Continue until AED / Defib arrives

If unable to perform breaths, do continuous compressions until equipment arrives

Advanced Considerations:

- Correct contributory causes
- Obtain IV/IO access, take ABG/VBG
- Give high levels of FiO₂ and consider advanced airway if required
- Continuous chest compressions after advanced airway in place
- Consider Adrenaline and antiarrhythmics:
 - Adrenaline 1mg every 3 - 5 min (0.01mg/kg in paed)
 - Amiodarone 300mg followed by 150mg (5mg/kg in paed)
 - or if not available**
 - Lignocaine 1.5mg/kg initial, followed by 0.5mg/kg (max 3mg/kg)

Attach AED / Defib immediately



Contributory Causes:

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

Additional considerations:

- VA ECMO might be considered in appropriate centres when available;
- Ultrasound can be considered as a diagnostic and procedural tool where training and resources exist.