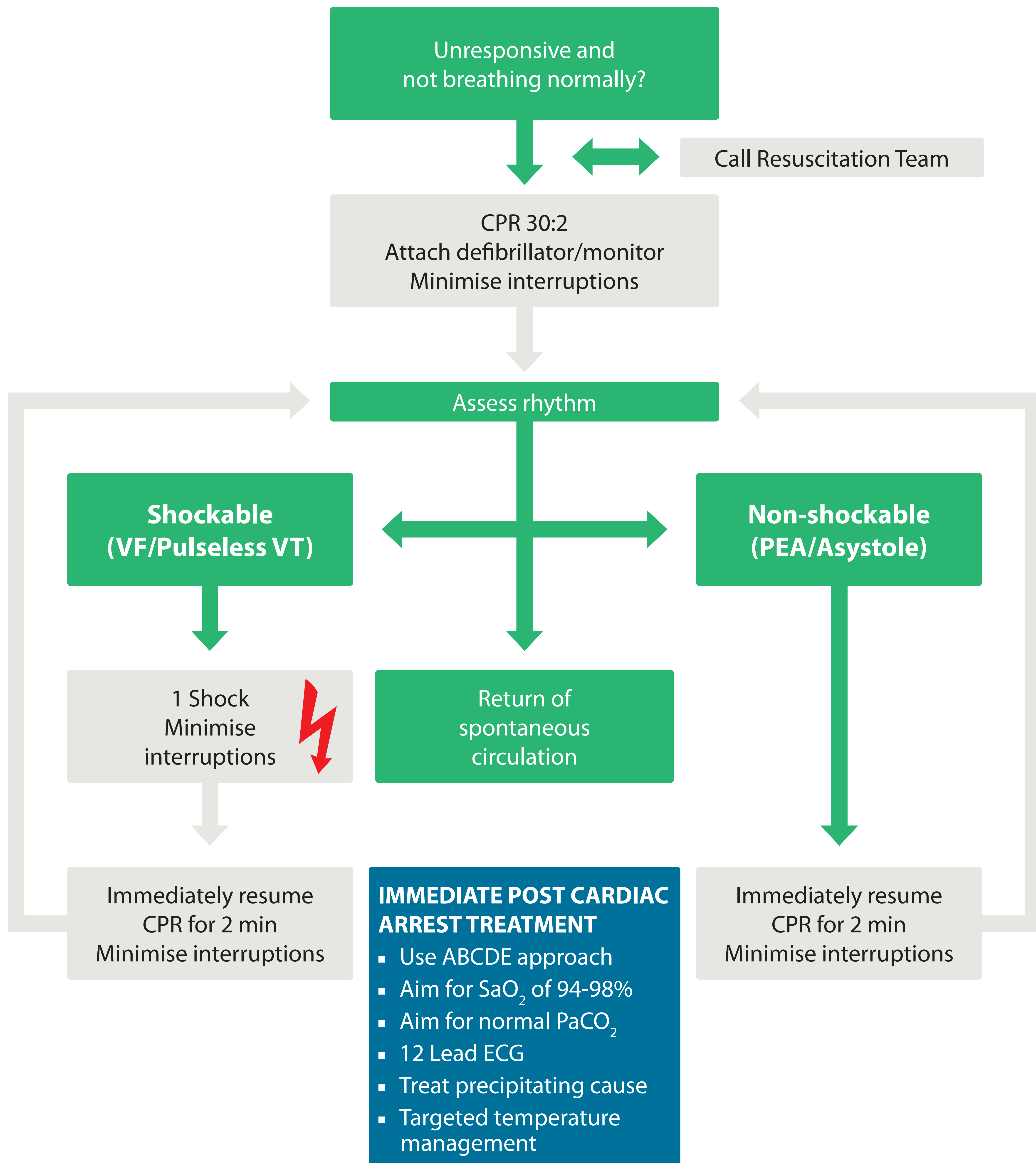




Advanced Life Support



DURING CPR

- Ensure high quality chest compressions
- Minimise interruptions to compressions
- Give oxygen
- Use waveform capnography
- Continuous compressions when advanced airway in place
- Vascular access (intravenous or intraosseous)
- Give adrenaline every 3-5 min
- Give amiodarone after 3 shocks

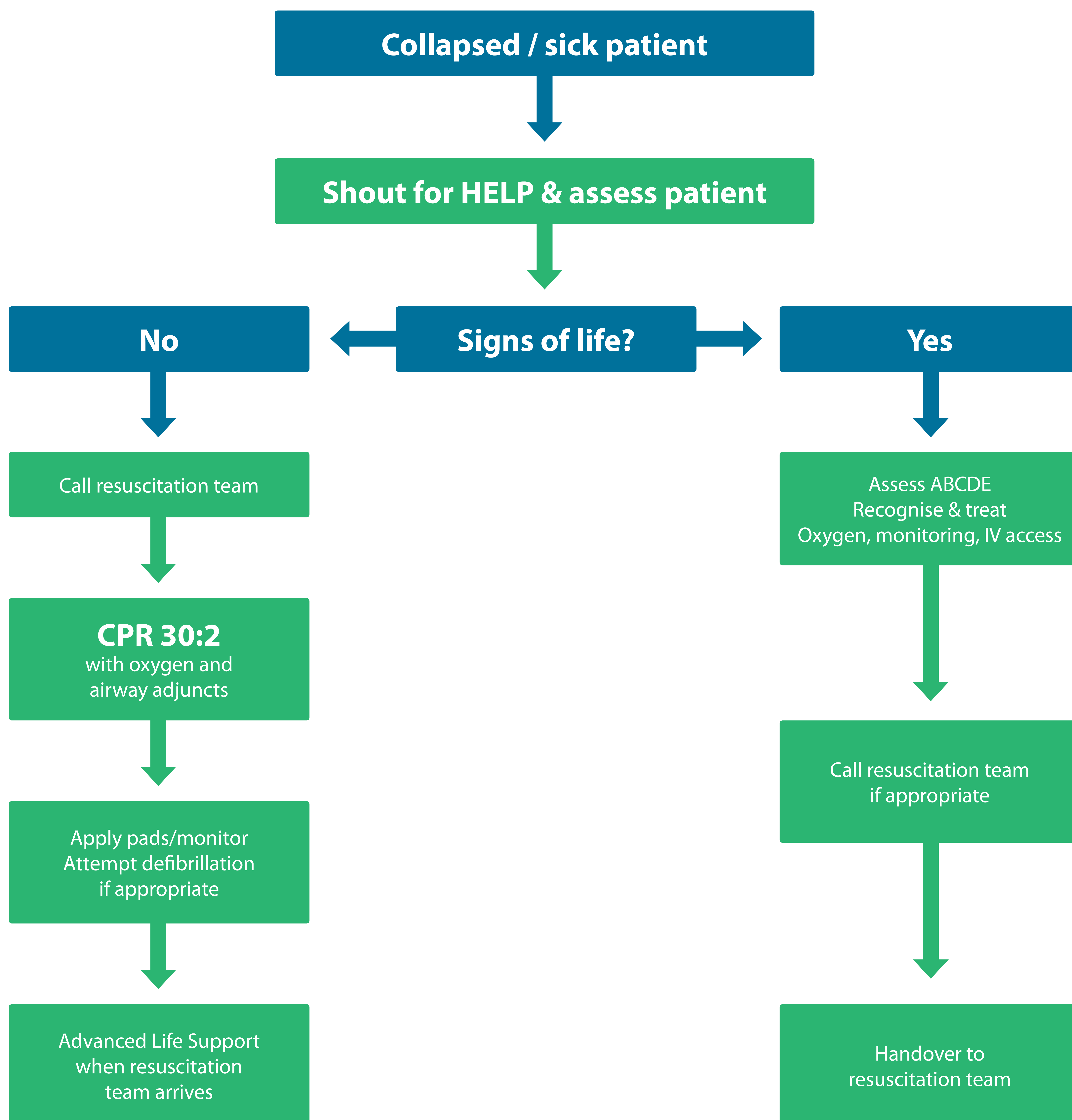
TREAT REVERSIBLE CAUSES

- | | |
|-------------------------------|------------------------------------|
| Hypoxia | Thrombosis – coronary or pulmonary |
| Hypovolaemia | Tension pneumothorax |
| Hypo-/hyperkalaemia/metabolic | Tamponade – cardiac |
| Hypothermia/hyperthermia | Toxins |

CONSIDER

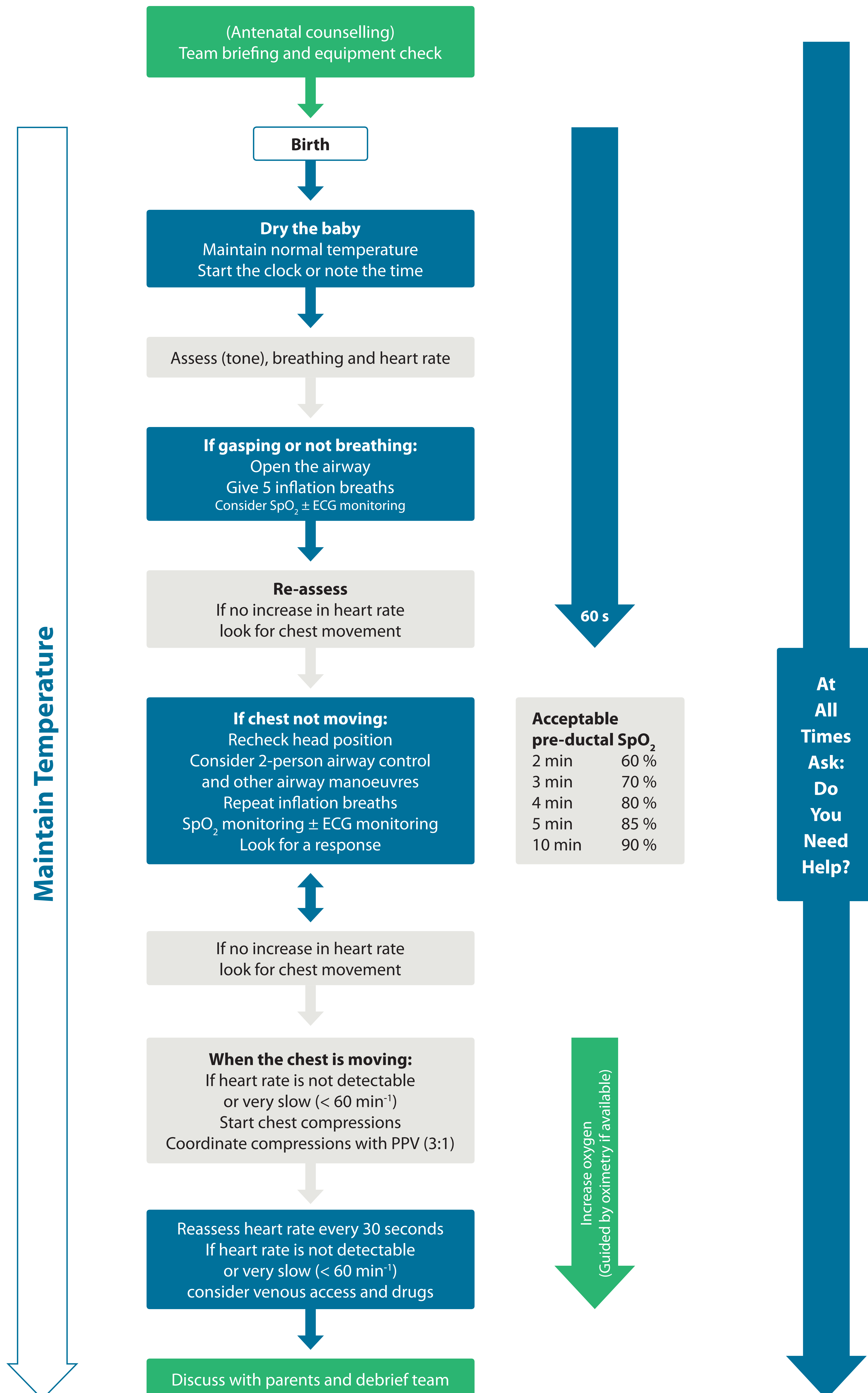
- Ultrasound imaging
- Mechanical chest compressions to facilitate transfer/treatment
- Coronary angiography and percutaneous coronary intervention
- Extracorporeal CPR

In-hospital Resuscitation





Newborn Life Support





Basic Life Support and Automated External Defibrillation (AED)

**Unresponsive and
not breathing normally**



Call Emergency Services



Give 30 chest compressions



Give 2 rescue breaths



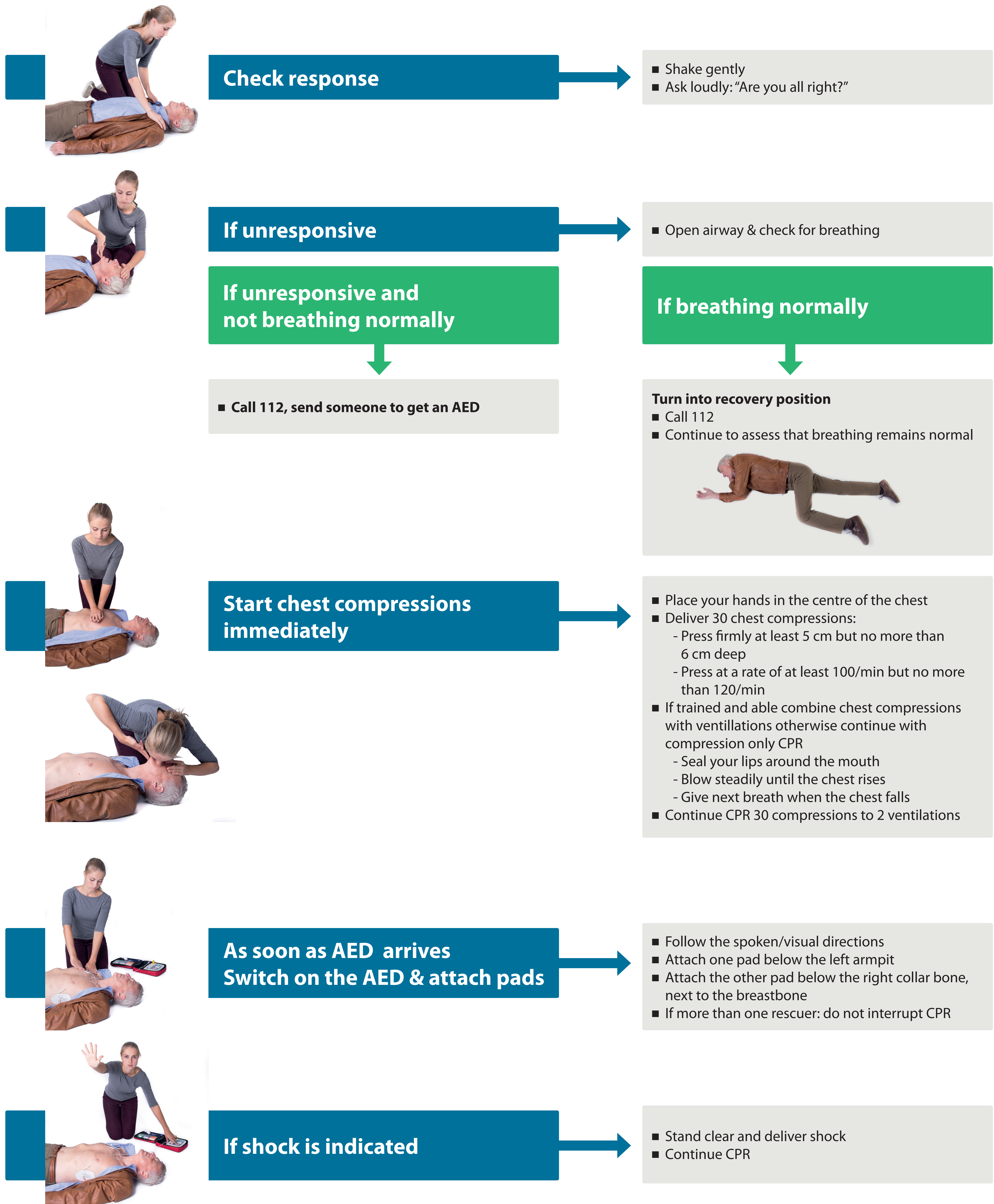
Continue CPR 30:2



**As soon as AED arrives -
switch it on and follow
instructions**



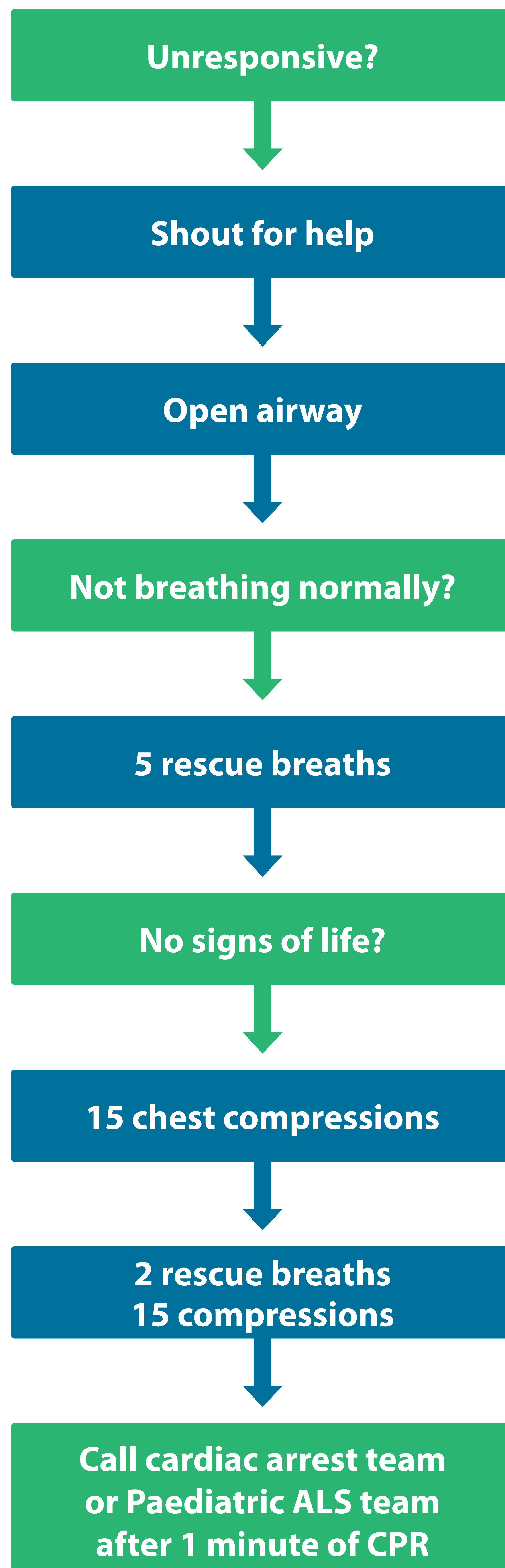
Basic Life Support with the use of an Automated External Defibrillator (AED)



Follow AED instructions

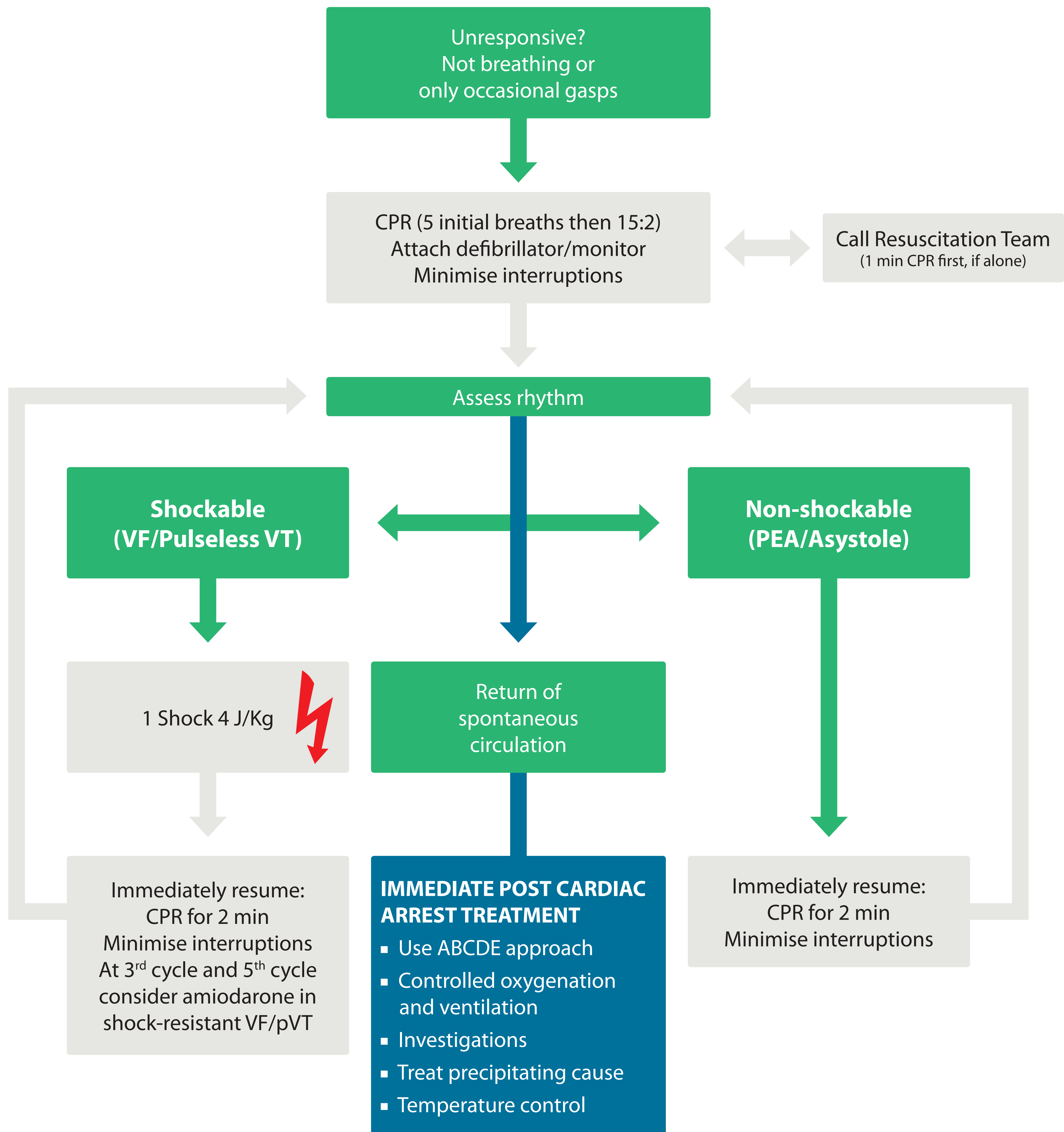
Continue CPR unless you are certain the victim has recovered and starts to breathe normally.

Paediatric Basic Life Support





Paediatric Advanced Life Support



DURING CPR

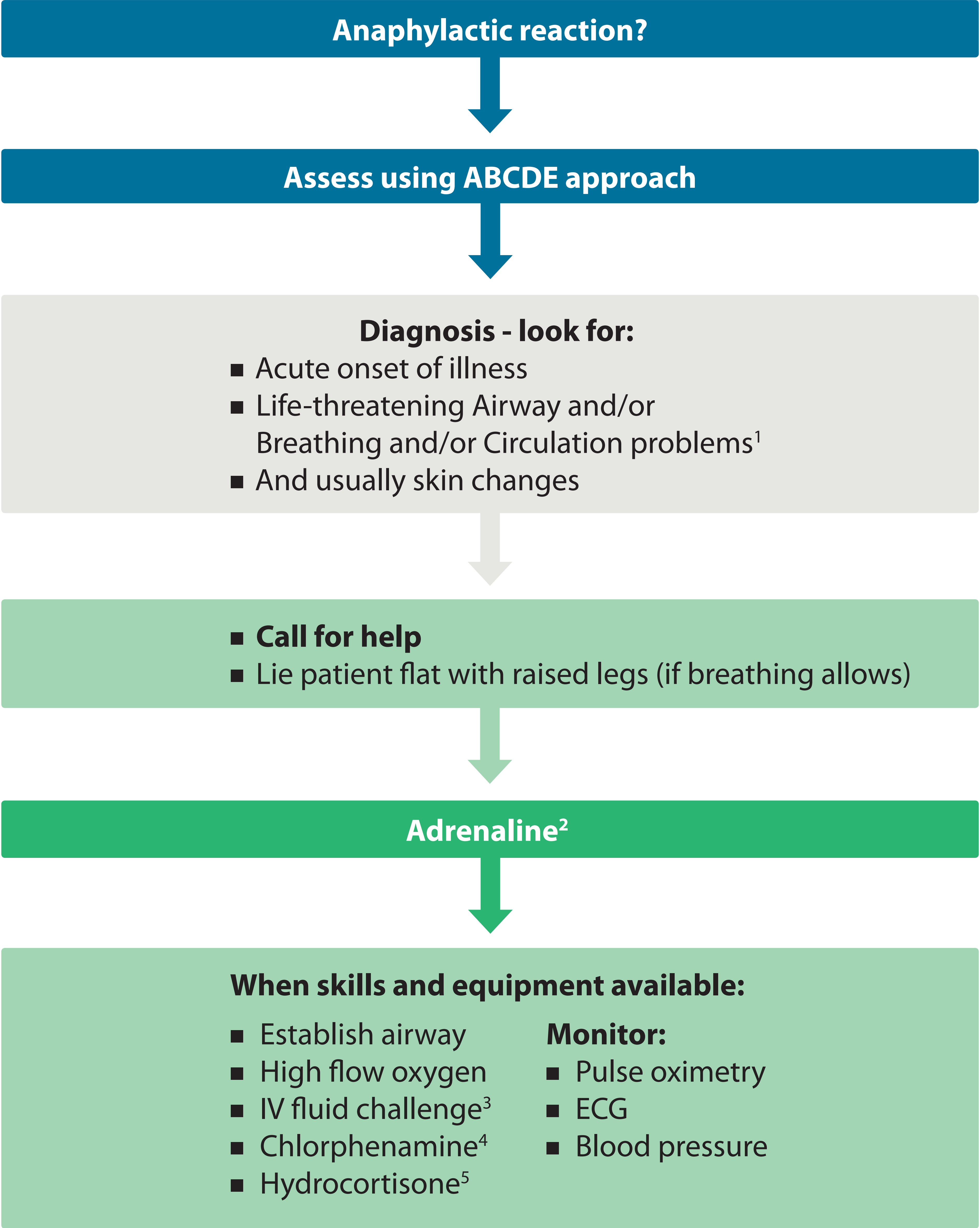
- Ensure high-quality CPR: rate, depth, recoil
- Plan actions before interrupting CPR
- Give oxygen
- Vascular access (intravenous, intraosseous)
- Give adrenaline every 3-5 min
- Consider advanced airway and capnography
- Continuous chest compressions when advanced airway in place
- Correct reversible causes

REVERSIBLE CAUSES

- Hypoxia
- Hypovolaemia
- Hyper/hypokalaemia, metabolic
- Hypothermia
- Thrombosis (coronary or pulmonary)
- Tension pneumothorax
- Tamponade (cardiac)
- Toxic/therapeutic disturbances



Anaphylaxis



¹Life-threatening problems:

Airway: swelling, hoarseness, stridor

Breathing: rapid breathing, wheeze, fatigue, cyanosis, SpO₂ < 92%, confusion

Circulation: pale, clammy, low blood pressure, faintness, drowsy/coma

²Adrenaline *(give IM unless experienced with IV adrenaline)*

IM doses of 1:1000 adrenaline (repeat after 5 min if no better)

■ Adult	500 mcg IM (0.5 mL)
■ Child more than 12 years	500 mcg IM (0.5 mL)
■ Child 6-12 years	300 mcg IM (0.3 mL)
■ Child less than 6 years	150 mcg IM (0.15 mL)

Adrenaline IV to be given **only by experienced specialists**

Titrate: Adults 50 mcg; Children 1 mcg kg⁻¹

³IV fluid challenge (crystalloid):

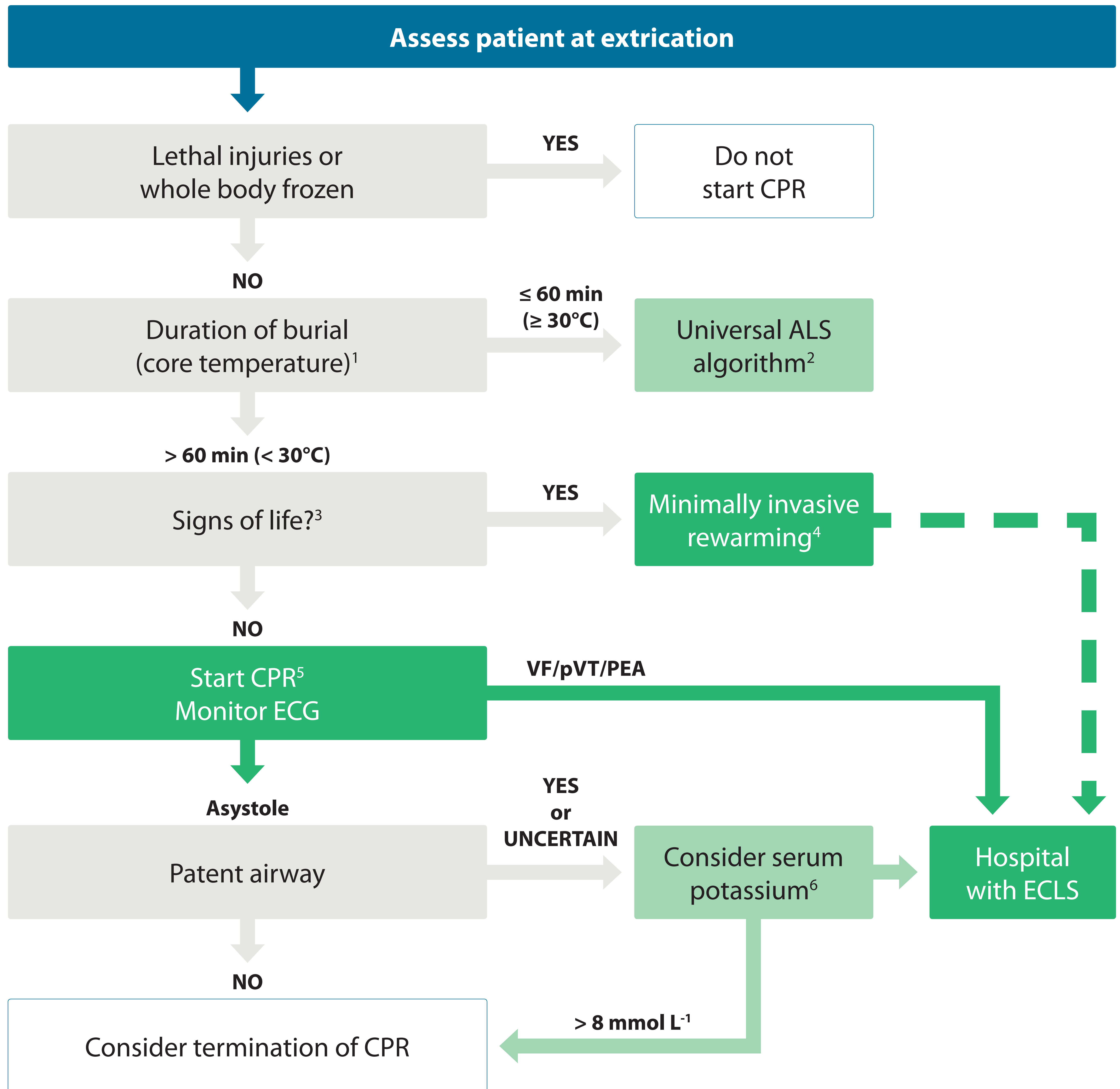
Adult	500 - 1000 mL
Child	20 mL kg ⁻¹

Stop IV colloid if this might be the cause of anaphylaxis

	⁴Chlorphenamine (IM or slow IV)	⁵Hydrocortisone (IM or slow IV)
Adult or child more than 12 years	10 mg	200 mg
Child 6 - 12 years	5 mg	100 mg
Child 6 months to 6 years	2.5 mg	50 mg
Child less than 6 months	250 mcg kg ⁻¹	25 mg



Avalanche Accident



¹ Core temperature may substitute if duration of burial is unknown

² Transport patients with injuries or potential complications (e.g. pulmonary oedema) to the most appropriate hospital

³ Check for spontaneous breathing and pulse for up to 1 min

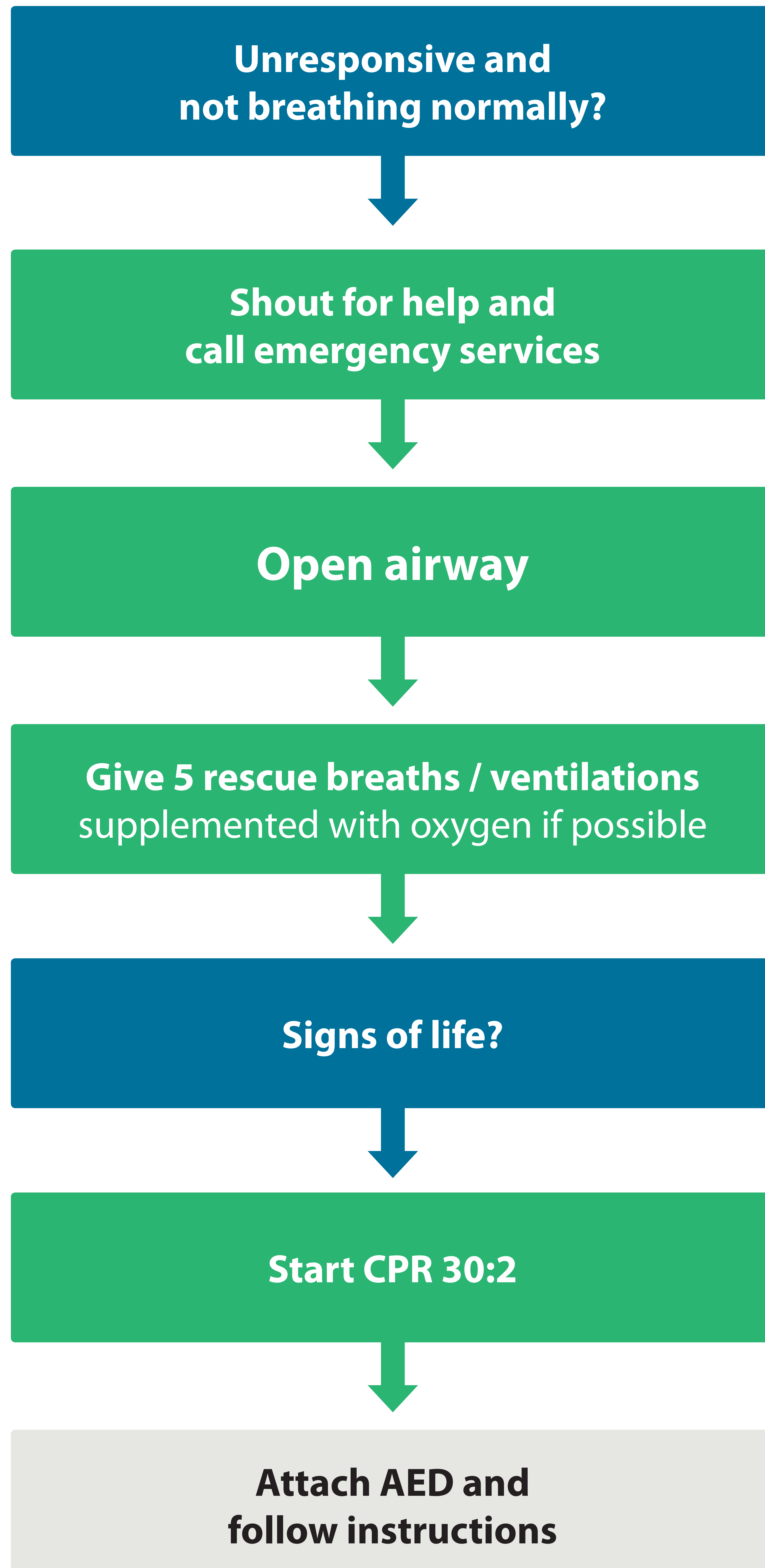
⁴ Transport patients with cardiovascular instability or core temperature < 28°C to a hospital with ECLS (extracorporeal life support)

⁵ Withhold CPR if risk to the rescue team is unacceptably high

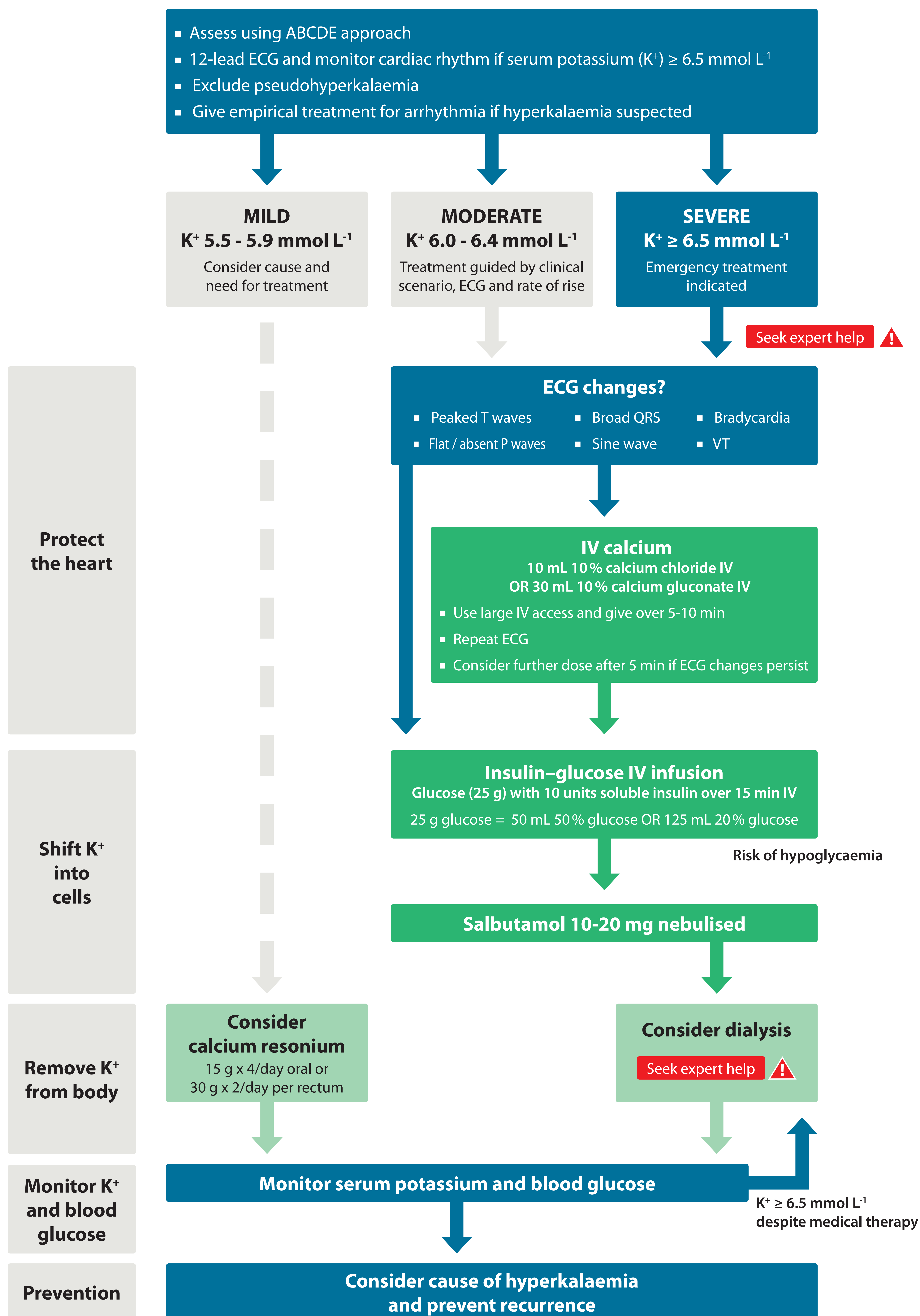
⁶ Crush injuries and depolarising neuromuscular blocking drugs may elevate serum potassium



Drowning



Hyperkalaemia





Traumatic Cardiac Arrest

