ANZCOR Guidelines

RECENT UPDATES

Updated on 13/05/2026

Paediatric Advanced Life Support

Guideline 12.4 – Paediatric resuscitation in special circumstances

Major changes from previous guideline:

The main changes made in this latest update to the ANZCOR Guideline 12.4 include:

Section 2.0:

- **Updated Guidance:** Added a new section on children with cardiac arrest due to hypovolaemia.
- **Previous Guidance:** Nil

Section 4.0:

- **Updated Guidance:** Added a new section on children with cardiac arrest due to electrolyte or metabolic disorders.
- **Previous Guidance:** Some advice previously covered in 12.2

Section 7.0:

- **Updated Guidance:** Added a new section on children with cardiac arrest due to pulmonary embolism.
- **Previous Guidance:** Nil

Section 9.0:

- **Updated Guidance:** Added new guidance on management of children with LVADs.
- **Previous Guidance:** Nil

Section 9.0:

- **Updated Guidance:** Added new ILCOR Good Practice Statement: In children who develop signs of pulmonary hypertensive crisis, low cardiac output, or right ventricular failure despite optimal medical therapy, extracorporeal membrane oxygenation (ECMO) may be considered before

cardiac arrest or for refractory cardiac arrest as a bridge to recovery or as a bridge to the evaluation for organ replacement and transplantation in very select cases.
- **Previous Guidance:** Nil

Go to guideline:
https://anzcor.org/home/paediatric-advanced-life-support/guideline-12-4-paediatric-resuscitation-in-special-circumstances

Updated on 5/05/2026

Paediatric Advanced Life Support

Guideline 12.5 – Management after Return of Spontaneous Circulation (ROSC)

Major changes from previous guideline:

The main changes made in this latest update to the ANZCOR Guideline 12.5 include:

Section: 1.0

- **Updated Guidance:** ANZCOR suggests that infants and children with ROSC who have been resuscitated after cardiorespiratory arrest should be admitted to a facility with the necessary resources for post cardiac arrest care.
- **Previous Guidance:** ANZCOR suggests that infants and children with ROSC who have been resuscitated after cardiorespiratory arrest should be admitted to a facility with the necessary resources for proper post-ROSC neuroprotective care, organ- and/or life supporting treatments, comprehensive neurological assessment and psychosocial support.

Section 2.0:

- **Updated Guidance:** ANZCOR recommends that for infants and children after ROSC, a systolic or mean arterial blood pressure >10th percentile for age should be targeted.
- **Previous Guidance:** ANZCOR recommends that for infants and children after ROSC, parenteral fluids and/or inotropes or vasopressors should be used to maintain a systolic blood pressure of at least greater than the fifth percentile for age.

Section 3.0

- **Updated Guidance:**

  ANZCOR suggests that rescuers measure partial pressure of arterial carbon dioxide ($PaCO_2$) after ROSC and target normocapnia. Consider adjustments to the target $PaCO_2$ for specific patient populations where

normocapnia may not be desirable (e.g. chronic lung disease, congenital heart disease, increased intracranial pressure).

ANZCOR suggests that rescuers measure partial pressure of arterial oxygen (PaO_2) after ROSC and target a value appropriate to the specific patient condition and suggest rescuers target normoxemia after ROSC.

ANZCOR suggests that, to achieve normoxia, targeting an oxygen saturation of 94 to 99% may be a reasonable alternative to measuring PaO_2.

- **Previous Guidance:**

ANZCOR suggests that rescuers measure $PaCO_2$ after ROSC and target normocapnia. Consider adjustments to the target $PaCO_2$ for specific patient populations where normocapnia may not be desirable (e.g. chronic lung disease with chronic hypercapnia, congenital heart disease with single-ventricle physiology, increased intracranial pressure with impending herniation).

ANZCOR suggests that rescuers measure PaO_2 after ROSC and target a value appropriate to the specific patient condition. In the absence of specific patient data, we suggest rescuers target normoxemia after ROSC. Given the availability of continuous pulse oximetry, targeting an oxygen saturation of 94% to 99% may be a reasonable alternative to measuring PaO_2 and titrating oxygen when feasible to achieve normoxia.

Section 6.0

- **Updated Guidance:** ANZCOR suggests continuous electroencephalogram (EEG) monitoring should be considered post-arrest within the first 24 hours and the treatment of seizures is suggested for children post–cardiac arrest. Routine use of prophylactic anti-seizure medication is not advised.
- **Previous Guidance:** Nil

Section 7.0

- **Updated Guidance:**

ANZCOR recommends that no single test be used in isolation to predict good neurological outcome in children after cardiac arrest. Clinicians should use multiple tests in combination for good neurological outcome prediction.

ANZCOR recommends that no single test be used in isolation to predict poor neurological outcome in children after cardiac arrest. Clinicians should use multiple tests in combination for poor neurological outcome.

- **Previous Guidance:** ANZCOR suggests that practitioners use multimodal tools to predict neurologic outcomes for infants and children after cardiac arrest.

Section 9.0

- **Updated Guidance:** ANZCOR suggests performing post-event debriefing after paediatric cardiac arrest in all settings.
- **Previous Guidance:** NZCOR suggests data-driven, performance-focused debriefing of rescuers after IHCA or OHCA in children.

Go to guideline:
https://anzcor.org/home/paediatric-advanced-life-support/guideline-12-5-management-after-return-of-spontaneous-circulation-rosc

Updated on 5/05/2026

Paediatric Advanced Life Support

Guideline 12.1 – Paediatric Basic Life Support (PBLS) for health professionals

Major changes from previous guideline:

The main changes made in this latest update to the ANZCOR Guideline 12.1 include:

Section 8.0

- **Updated Guidance:** Addition of statement: ANZCOR suggest that external cardiac compression should be started while rescuers wait for a bag-mask ventilation (BMV) device to arrive. If a BMV device is immediately available, 2 initial ventilations should be provided before commencement of external cardiac compression.
- **Previous Guidance:** Always suggested 2 rescue breaths.

Section 9.0

- **Updated Guidance:**

  Palpation of a pulse (or its absence) is not reliable as the sole determinant of cardiac arrest and need for chest compressions.

  ANZCOR suggest that, in infants and children who are unresponsive and breathing is absent (or agonal), healthcare providers should begin cardiopulmonary resuscitation (CPR

- **Previous Guidance:** ANZCOR suggest that in infants and children who are unresponsive and not breathing normally, healthcare providers should begin CPR unless they can definitely palpate a pulse within 10 seconds.

Section 9.2

- **Updated Guidance:**

  ANZCOR suggest that chest compression for an infant be performed with the two-thumb encircling technique as it results in consistently greater chest compression depth and less fatigue.

  Chest compression for an infant using the heel of one hand may be considered if the rescuer is unable to achieve optimal compression depth using the two-thumb encircling technique.

- **Previous Guidance:** Chest compression for an infant can be performed with two-thumb

technique or two finger technique. The two-thumb technique is the strongly preferred technique for healthcare rescuers.

Section 10.0

- **Updated Guidance:** CPR providers using manual defibrillation in infants and children, should place pads in an anterior-posterior position.
- **Previous Guidance:** Nil

Section 13.0

- **Updated Guidance:** Addition of section on management of Foreign Body Airway Obstruction (FBAO) in children.
- **Previous Guidance:** Refer to ANZCOR Guideline 4

Go to guideline:
https://anzcor.org/home/paediatric-advanced-life-support/guideline-12-1-paediatric-basic-life-support-pbls-for-health-professionals

Updated on 28/04/2026

Paediatric Advanced Life Support

Guideline 12.3 – Management of other arrhythmias in infants and children

Major changes from previous guideline:

The main changes made in this latest update to the ANZCOR Guideline 12.3 include:

Section 2.0

- **Updated Guidance:**

  (Previous Sections 2.0-2.2 combined)

  ANZCOR suggests that, for patients with bradycardia and hemodynamic compromise not responsive to oxygenation and ventilation commence CPR, follow the standard paediatric advanced life support algorithm and treat underlying causes.

- **Previous Guidance:**

  2.1 ANZCOR suggests that, for the treatment of children with bradycardia:

  IV/IO Adrenaline (epinephrine) 10 micrograms/kg (maximum 1mg per dose) may be administered to infants and children with bradycardia and poor perfusion that is unresponsive to treating the underlying cause, for example hypoxia.

IV/IO Atropine 20 micrograms/kg (maximum 600 micrograms) may be administered for bradycardia caused by increased vagal tone.

2.2 ANZCOR suggests that, for the treatment of children with bradycardia:

Transthoracic pacing may be lifesaving in selected cases of life-threatening bradycardia caused by complete heart block or abnormal function of the sinus node. Specialist advice should be sought.

Pacing is not helpful in children with bradycardia secondary to a post-arrest hypoxic/ischemic myocardial insult or respiratory failure.

Go to guideline:
https://anzcor.org/home/paediatric-advanced-life-support/guideline-12-2-paediatric-advanced-life-support-pals-2

Updated on 28/04/2026

Paediatric Advanced Life Support

Guideline 12.2 – Paediatric Advanced Life Support (PALS)

Major changes from previous guideline:

Summary of Changes

The main changes made in this latest update to the ANZCOR Guideline 12.2 include:

Section 5:

- **Updated Guidance:** In infants and children who are unresponsive and breathing is absent (or agonal), healthcare providers should begin cardiopulmonary resuscitation (CPR).
- **Previous Guidance:** In infants and children who are unresponsive and not breathing normally, healthcare providers should begin CPR unless they can definitely feel a pulse within 10 seconds.

Section 9.1:

- **Updated Guidance:** ANZCOR suggest that external cardiac compression should be started while rescuers wait for a bag-mask ventilation (BMV) device to arrive. If a BMV device is immediately available, 2 initial ventilations should be provided before commencement of external cardiac compression.
- **Previous Guidance:** ANZCOR suggest that two initial ventilations should be provided before commencement of external cardiac compressions because asphyxial causes are more common

than cardiac causes in paediatric cardiorespiratory arrest. In circumstances where the usual equipment used to provide ventilations (e.g. BVM) is not immediately available, CPR should be commenced immediately with chest compressions.

Section 9.2

- **Updated Guidance:** ANZCOR suggest the use of BMV rather than endotracheal tube (ETT) or supraglottic airway (SGA) insertion in the management of children during cardiac arrest in the out-of-hospital setting. ANZCOR suggest that clinicians consider transitioning to an advanced airway intervention (SGA or ETT) when the team has sufficient expertise, resources, and equipment to allow SGA/ETT placement to occur with minimal interruptions to chest compressions or when BMV is not providing adequate oxygenation/ventilation.
- **Previous Guidance:** ANZCOR suggest the use of BVM ventilation rather than ETT or SGA insertion in the management of children during cardiac arrest in the out-of-hospital setting.

Section 9.5

- **Updated Guidance:** ANZCOR suggest that cuffed tracheal tubes are used for emergency intubation of infants (>28 days and >3kg) and children. If cuffed tracheal tubes are used, avoid excessive cuff pressures.
- **Previous Guidance:** ANZCOR suggest that both cuffed and uncuffed tracheal tubes are acceptable for use in infants and children undergoing emergency intubation.

Section 9.7

- **Updated Guidance:** ANZCOR suggest that, after placement of a secure airway, ventilation rates close to age-appropriate respiratory rates should be used, with avoidance of hypoventilation and hyperventilation. ANZCOR suggest a ventilation rate approximating 30 breaths/minute for infants and 25 breaths/minute for older children (>1 year).
- **Previous Guidance:** ANZCOR suggest that, after placement of a secure airway, avoid hyperventilation of infants and children during resuscitation from cardiac arrest, whether asphyxial or arrhythmic in origin. A reduction in minute ventilation to less than baseline for age is reasonable to provide sufficient ventilation to maintain adequate ventilation-to-perfusion ratio during CPR while avoiding the harmful effects of hyperventilation.

Section 10.2

- **Updated Guidance:** ANZCOR suggest that chest compression for an infant be performed with the two-thumb encircling technique as it results in consistently greater chest compression depth and less fatigue. Chest compression for an infant using the heel of one hand may be considered if the rescuer is unable to achieve optimal compression depth using the two-thumb encircling technique.
- **Previous Guidance:** Chest compression for an infant can be performed with the two-thumb technique or two-finger technique. The two-thumb technique is the strongly preferred technique for healthcare rescuers.

Section 12.2

- **Updated Guidance:** If hypovolaemia is suspected as the cause of cardiorespiratory arrest, intravenous (IV) or intraosseous (IO) crystalloid (e.g. 0.9% Sodium Chloride) may be used initially for resuscitation as a bolus of 10mL/kg.
- **Previous Guidance:** If hypovolaemia is suspected as the cause of cardiorespiratory arrest, IV or IO crystalloid may be used initially for resuscitation as a bolus of 10 to 20mL/kg.

Section 13.1

- **Updated Guidance:** CPR providers using manual defibrillation in infants and children, place pads in an anterior-posterior position.
- **Previous Guidance:** Pads allow chest compression to continue while charging, probably permit faster resumption of chest compression after delivery of a shock, may be safer and may allow easier use of an antero-posterior position which may be more efficacious than the standard antero-lateral positions of pads.

Section 13.3

- **Updated Guidance:** ANZCOR suggest a single-shock strategy followed by immediate CPR (beginning with chest compressions) for children with out-of-hospital cardiac arrest (OHCA) or in-hospital cardiac arrest (IHCA) with ventricular fibrillation (VF) or pulseless ventricular tachycardia (pVT).
- **Previous Guidance:**

  Three stacked shocks may be considered when the onset of a shockable rhythm is witnessed (with monitoring) in special circumstances such as:

  · In the cardiac catheter laboratory

  · In the ICU or cardiac ward post cardiac surgery

  · In other circumstances when a defibrillator is already attached.

Section 16.3

- **Updated Guidance:** ANZCOR suggest that end tidal carbon dioxide ($ETCO_2$) be considered as a part of cardiac arrest monitoring in infants and children to provide feedback on the quality of CPR and to help early identification of return of spontaneous circulation (ROSC).
- **Previous Guidance:** A recommendation is still too speculative.

Section 16.5

- **Updated Guidance**: ANZCOR suggest targeting an intra-arrest diastolic blood pressure of ≥25 mmHg for infants <1 year and ≥30 mmHg for children 1 to 18 years when invasive blood pressure monitoring is in place at the time of cardiac arrest.
- **Previous Guidance:** For children with IHCA and an arterial line already in place, hemodynamic-directed CPR may be considered but at present the confidence in effect estimates is so low that a recommendation is too speculative.

Section 18

- **Updated Guidance**: ANZCOR suggest that family members be provided with the option to be present during resuscitation from cardiac arrest.

  Policies or protocols about family presence during resuscitation should be developed to guide and support health care professional decision-making.

  When implementing family presence procedures, healthcare providers should receive education about family presence during cardiac arrest resuscitation, including how to manage these stressful situations, family

distress and their own responses to these situations.

- **Previous Guidance**: ANZCOR suggest that family members of patients undergoing resuscitation should be given the option to be present, ideally with an assigned support person. Each healthcare institution should have a family presence policy and staff education strategy in place.

Go to guideline: https://anzcor.org/home/paediatric-advanced-life-support/guideline-12-2-paediatric-advanced-life-support-pals

Updated on 23/04/2026

First Aid

Guideline 9.1.6 – First Aid Management of Suspected Spinal Injury

Major changes from previous guideline:

Recent extensive scoping review, no major updates.

Go to guideline: https://anzcor.org/home/first-aid/guideline-9-1-6-management-of-suspected-spinal-injury

Updated on 8/04/2026

Adult Advanced Life Support

Guideline 11.6.1 – Targeted Oxygen Therapy in Adult Advanced Life Support

Major changes from previous guideline:

No major changes to the clinical aspects of the guideline. Updating of review evidence, references, and terminology to increase consistency with GRADE terminology.

Go to guideline: https://anzcor.org/home/adult-advanced-life-support/guideline-11-6-1-targeted-oxygen-therapy-in-adult-adv

anced-life-support

Updated on 17/03/2026

First Aid

Guideline 9.3.3 - First Aid Management of Hypothermia and Cold-Related Injuries

Major changes from previous guideline:

The problem with rapid rewarming of non-freezing cold injuries has been included.

Go to guideline:
https://anzcor.org/home/first-aid/guideline-9-3-3-first-aid-management-of-hypothermia-and-cold-related-injuries

Updated on 17/03/2026

First Aid

Guideline 9.2.3 – Recognition and First Aid Management of the Seriously ILL person, including Shock and Sepsis

Major changes from previous guideline:

Exact diagnosis has been de-emphasised and recognition and treatment combined in the one guideline.

Guidelines superseded:	9.2.3 – Shock: First Aid Management of the Seriously Ill or Injured Person November 2019 9.2.12 – Recognition and First Aid Management of the Seriously Ill person including Sepsis April 2021

Go to guideline:
https://anzcor.org/home/first-aid/guideline-9-2-3-shock-first-aid-management-of-the-seriously-ill-or-injured-person