Australian Resuscitation Council

ALS1 & ALS2 Course Manual Addendum and Correction Notice

Manual Editions Affected: 3rd Australian Edition, March 2016 (1st reprint) Issue Date: 28/07/2026

Important Notice

This Addendum and Correction Notice has been issued to advise of information identified within the current editions of the Australian Resuscitation Council ALS1 and ALS2 Course Manuals that requires clarification, correction or updating. Recipients who possess an affected edition should retain this notice with their manual until a revised edition is published.

Who Should Read This Notice?

Current ALS1 and ALS2 instructors, provider course centres, and provider course candidates who retain affected editions, or any Individuals using the manuals as a reference.

Summary of Amendments

Note: This notice highlights the most significant changes since the release of the Advance Life Support 3rd Australian edition 2016 manuals and is not an exhaustive list of all updates or corrections.

Advanced Life Support for Adults flowchart

ALS 1: p.iv & Ch. 4 p.33 and ALS2: Ch.1 p.3 & Ch.6 p.55

Refer to: ANZCOR Guidelines - Advanced Life Support flowchart, reviewed September 2024

ANZCOR ALS Algorithim

Summary of change: Reversible cause “Hyper/hypokalaemia/metabolic disorders” updated to “High or low electrolytes (K, Ca, Mg) & metabolic disorders”

Post Resuscitation Care “Targeted temperature management” updated to “Temperature control”

Cardiac Causes of Cardiac Arrest

Refer to: ANZCOR Guidelines – Acute Coronary Syndromes

https://www.anzcor.org/home/acute-coronary-syndromes

Refer to: National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Acute Coronary Syndrome (ACS) Clinical Guidelines
https://www.heartfoundation.org.au/for-professionals/fp-acs-guidelines

Local protocols based on these guidelines should be consulted by clinicians who manage ACS.

Clarification regarding the management of extremely fine VF

ALS 1: Ch.4 p.36 and ALS2: Ch.6 p.58

Current wording:

If there is any doubt about whether the rhythm is asystole or extremely fine VF, do not attempt defibrillation; instead, continue chest compressions and ventilation as continuing high quality CPR may improve the amplitude and frequency of the VF and improve the chance of subsequent successful defibrillation to a perfusing rhythm. If the rhythm is clearly identified as VF, attempt defibrillation.

Replace with:

Avoid excessive interruptions in chest compressions for rhythm analysis. Do not spend time attempting to distinguish fine VF from coarse VF, or extremely fine VF from asystole during the rhythm check. If the rhythm appears to be VF (of any amplitude), attempt defibrillation. If it appears to be asystole continue chest compressions.

ALS 1: Ch.4 p.37 and ALS2: Ch.6 p.59

Current wording:

During CPR with a 30:2 ratio, the underlying rhythm may be seen clearly on the monitor as compressions are paused to enable ventilation. If VF is seen during this brief pause, do not attempt defibrillation at this stage; instead, continue with CPR until the 2-min period is completed. Knowing that the rhythm is VF, the team should be fully prepared to deliver a shock with minimal delay at the end of the 2-min period of CPR.

Replace with:

During CPR with a 30:2 ratio, there should be minimal interruption in compressions (even for ventilations with a bag-mask) so rhythm assessment during the 2 min of CPR will not be easy. If VF is suspected during this brief pause, recommence CPR until the 2-min period is completed. Suspecting that the rhythm is VF, the team should be fully prepared to deliver a shock with minimal delay at the end of the 2-min period of CPR.

Management of severe local anaesthetic toxicity

ALS2: Ch.12 pp.139-140

Replace with:

Local anaesthetic toxicity occurs typically in the setting of regional anaesthesia, when a bolus of local anaesthetic inadvertently enters an artery or vein. Systemic toxicity involves the central nervous system, and the cardiovascular system. Severe agitation, loss of consciousness, with or without tonic-clonic convulsions, sinus bradycardia, conduction blocks, asystole and ventricular tachyarrhythmia can all occur. Toxicity can be potentiated in pregnancy, extremes of age, or hypoxaemia.

Follow standard resuscitation measures. In addition, patients with both cardiovascular collapse and cardiac arrest attributable to local anaesthetic toxicity may benefit from treatment with intravenous 20% lipid emulsion in addition to standard advanced life support. Give an initial intravenous bolus of 1.5 mL kg-1 20% lipid emulsion followed by an infusion at 15 mL kg-1 h-1. Give up to three bolus doses of lipid at 5–min intervals and continue the infusion until the patient is stable or has received up to a maximum of 12 mL kg-1 of lipid emulsion.

Anaphylaxis and Refractory Anaphylaxis

ALS 1: Appendix B p.93 and ALS2: Ch.12 pp.146-148

Refer to Anaphylaxis flowchart, reviewed July 2024

https://www.anzcor.org/assets/ANZCOR-Guidelines-/2024-08- 08_Anaphylaxis_Flowchart_CS.pdf

Also refer to Refractory Anaphylaxis flowchart, reviewed July 2026

https://www.anzcor.org/assets/ANZCOR-Guidelines-/GL-11/GL-11-10-Flowcharts/GL-11.10-Refractory-anaphylaxis-algorithm-July-2026.pdf

Post-resuscitation care: Temperature Management

ALS 1: Ch.8 p.78 and ALS2: Ch.13 pp.175-176

Disregard content related to 'Targeted Temperature Management"

Refer to ANZCOR guideline 11.8 – Temperature Control after Cardiac Arrest

https://www.anzcor.org/home/adult-advanced-life-support/guideline-11-8-targeted-temperature-management-ttm-after-cardiac-arrest

Current guidelines include:

• Actively preventing fever by targeting a temperature ≤37.5°C for patients who remain comatose after ROSC for at least 72 hours.

• Whether subpopulations of cardiac arrest patients may benefit from targeting hypothermia at 32 to 34o C is uncertain but may be considered.

• Comatose patients with mild hypothermia after ROSC should not be actively warmed to achieve normothermia. • Recommending against the routine use of pre-hospital cooling with rapid infusion of large volumes of cold intravenous (IV) fluid immediately after ROSC.

• Surface or endovascular temperature control techniques may be used in comatose patients after ROSC.

• Cooling devices if used, should include a feedback system based on continuous temperature monitoring to maintain the target temperature.

• Rapid infusion of ice-cold IV fluid, up to 30 ml kg-1 or ice packs are feasible, safe and simple methods for initially lowering core temperature up to 1.5 degrees. When IV fluids are used to induce hypothermia additional cooling strategies will be required to maintain hypothermia.

• Percutaneous coronary intervention during Temperature Control is feasible and safe and may be associated with improved outcome.

Pulse Oximetry

ALS 1: Ch.9 p.82 and ALS2: Ch.15 p.196

Disregard: “Pulse oximeters are not affected by… skin pigmentation”

Replace with:

Darker skin (e.g. black, asian and hispanic) may lead to an overestimation of the oxygen saturation value, so consider relative changes in an individual patient’s readings as well as the numerical result.

Pulse oximetry does not provide a reliable signal during CPR. It may also be difficult to record if the patient is hypovolaemic or hypothermic. Remember that the pulse oximeter will only measure blood oxygen saturations where the system can detect a pulse. If blood oxygen saturations are completely unrecordable, this is more likely to reflect a ‘C’ problem than a ‘B’ problem.

Targeted Oxygen Therapy

ALS 1: Ch.9 pp.82-83 and ALS2: 15 pp.196-197

Refer to: ANZCOR Guideline 11.6.1 Targeted Oxygen Therapy in Adult Advanced Life Support

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

Summary: Give high-concentration oxygen immediately to critically ill patients with acute hypoxaemia (initial SpO2 < 85%) or in the peri-arrest situation or when SpO2 cannot be measured. Give this initially with an oxygen mask and reservoir ('non- rebreathing' mask) and an oxygen flow of 15 L min-1. During cardiac arrest use 100% inspired oxygen concentration to maximise arterial oxygen content and delivery to the tissues. After an initial assessment you can then reduce the amount of oxygen given to the patient as appropriate.

Instructor Responsibilties

1. Review all amendments listed within this document.
2. Incorporate amended information into course delivery.
3. Advise learners of relevant changes.
4. Retain this notice with instructor materials.

Information for ALS Course Participants

ALS Provider Course candidates should retain an affected manual edition should review all amendments, retain this addendum with the manual and consider updated information as replacing the superseded content identified in the affected sections.

Version Control

Version	Date Issued	Description of Changes
V1.0.0	28/07/2026	First release of notice
V1.0.13	1/07/2026	Update link for Refractory Anaphylaxis to July 2026 flowchart

Approved by: Professor Peter Morley, Chair, Australian Resuscitation Council

Date Approved: 27/07/2026

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