



# Clinical Practice Guidelines: Resuscitation/Post return of spontaneous circulation (ROSC) management

<b>Policy code</b>	CPG_RE_PRM_0721
<b>Date</b>	July, 2021
<b>Purpose</b>	To ensure consistent management of post return of spontaneous circulation management (ROSC)
<b>Scope</b>	Applies to Queensland Ambulance Service (QAS) clinical staff.
<b>Health care setting</b>	Pre-hospital assessment and treatment.
<b>Population</b>	Applies to all ages unless stated otherwise.
<b>Source of funding</b>	Internal – 100%
<b>Author</b>	Clinical Quality & Patient Safety Unit, QAS
<b>Review date</b>	July, 2024
<b>Information security</b>	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
<b>URL</b>	<a href="https://ambulance.qld.gov.au/clinical.html">https://ambulance.qld.gov.au/clinical.html</a>

While the QAS has attempted to contact all copyright owners, this has not always been possible. The QAS would welcome notification from any copyright holder who has been omitted or incorrectly acknowledged.

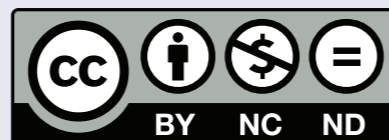
All feedback and suggestions are welcome. Please forward to: [Clinical.Guidelines@ambulance.qld.gov.au](mailto:Clinical.Guidelines@ambulance.qld.gov.au)

## Disclaimer

The Digital Clinical Practice Manual is expressly intended for use by appropriately qualified QAS clinicians when performing duties and delivering ambulance services for, and on behalf of, the QAS.

The QAS disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this manual, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.

© State of Queensland (Queensland Ambulance Service) 2021.



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives V4.0 International License

You are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute the State of Queensland, Queensland Ambulance Service and comply with the licence terms. If you alter the work, you may not share or distribute the modified work. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/deed.en>

For copyright permissions beyond the scope of this license please contact: [Clinical.Guidelines@ambulance.qld.gov.au](mailto:Clinical.Guidelines@ambulance.qld.gov.au)

There is increasing recognition that systematic post-cardiac arrest care can improve the likelihood of patient survival with a good quality of life.<sup>[1,2]</sup>

Resuscitation continues after a return of spontaneous circulation (ROSC).

- Primary aims after initial resuscitation care include:
  - support circulation, airway and breathing
  - maintain cerebral perfusion
  - manage cardiac dysrhythmias.
- Determine and manage the cause of the cardiac arrest giving consideration to those that are reversible:
  - hypoxia
  - hypo/hyperthermia
  - hypovolaemia
  - hypo/hyperkalaemia
  - hydrogen ion (acidosis)
  - tension pneumothorax
  - tamponade
  - toxins
  - thrombosis
- All ROSC patients require a 12-Lead ECG.
- Following out of hospital cardiac arrest (suspected to be of cardiac aetiology) patients should, where possible, be transported to a PCI capable facility.

## Clinical features



- ROSC

## Risk assessment



- Not applicable

CPG: Paramedic safety  
CPG: Standard cares

- 12-Lead ECG
- Treat presenting dysrhythmias
- Consider and manage reversible causes

*Note: Officers must only perform procedures for which they have received specific training and authorisation by the QAS.*

**OPTIMISE VENTILATION AND OXYGENATION**

- Maintain SpO<sub>2</sub> ≥ 94%
- Consider advanced airway
- Maintain EtCO<sub>2</sub> of 30–40 mmHg
- If no EtCO<sub>2</sub> ventilate at rate of 8–12 per minute
- Do not hyperventilate

**OPTIMISE CIRCULATION:**

- Aim for SBP ≥ 100 mmHg for adults
- Aim for SBP ≥ 80 mmHg for children

**Consider:**

- Appropriate posturing
- Adrenaline (epinephrine)

Transport to hospital  
Pre-notify as appropriate