



Drug Therapy Protocols: Nifedipine

Policy code	DTP_NIF_0924
Date	September, 2024
Purpose	To ensure a consistent procedural approach to nifedipine administration.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
Source of funding	Internal – 100%
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Review date	September, 2026
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

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Drug class

Calcium channel blockers

Pharmacology

Nifedipine blocks voltage gated L-type calcium channels in vascular smooth muscle and myocardial cells. This blockage prevents the entry of calcium ions into cells during depolarisation, reducing peripheral arterial vascular resistance and dilating coronary arteries. These actions reduce blood pressure and increase the supply of oxygen to the heart, alleviating angina.

Metabolism

Nifedipine is predominantly metabolised by CYP3A4. Nifedipine is 60–80% recovered in the urine as inactive water-soluble metabolites, and the rest is eliminated in the faeces as metabolites.

Schedule

- S4 (Restricted drugs).

Special notes

- Only credentialed QAS Flight paramedics are authorised to carry medications from the designated LifeFlight medication formulary.
- LifeFlight is responsible for the procurement of all medications in the LifeFlight response kits.

Adult/Paediatric dosages

As per LifeFlight standard operating procedures (SOP)



May only be administered on the authority of a LifeFlight Retrieval Medical Officer whilst under direct supervision.

Indications

- As per LifeFlight standard operating procedure (SOP)

Contraindications

- Cardiogenic shock
- Post proctocolectomy ileostomy
- Concomitant rifampicin
- Within eight days of acute MI
- Lactating female