



Drug Therapy Protocols: Naloxone

Policy code	DTP_NAL_0722
Date	July, 2022
Purpose	To ensure a consistent procedural approach to naloxone administration.
Scope	Applies to all Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless specifically mentioned.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
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Naloxone

July, 2022

Drug class^[1,2]

Opioid antagonist

Pharmacology

Naloxone is an opioid antagonist that prevents or reverses the effects of opioids including respiratory depression, sedation and hypotension. Naloxone antagonises the opioid effects by competing for the same receptor sites.^[1,2]

Metabolism

Hepatic.^[1]

Indications

- **Respiratory depression** (secondary to the administration of narcotic drugs)

Contraindications

- Allergy AND/OR Adverse Drug Reaction
- The newly born patient

Precautions

- Use with caution on patients with pre-existing cardiac disease

Side effects^[1,2]

- Narcotic reversal can cause combativeness, vomiting, sweating, tachycardia and hypertension
- May produce acute withdrawal convulsions in the chronic narcotic user
- Pulmonary oedema

Presentation

- Ampoule, 400 microg/mL *naloxone hydrochloride dihydrate*

Onset	Duration	Half-life
3–5 minutes (IM) /1–3 minutes (IV)	≈ 60 minutes	60 minutes

Schedule

- S₃ (Pharmacist Only).

Routes of administration

Intramuscular injection (IM)

Intravenous injection (IV)



Special notes^[4,5,6]

- Ambulance officers must only administer medications for the listed indications and dosing range. Any consideration for treatment outside the listed scope of practice requires mandatory approval via the *QAS Clinical Consultation and Advice Line*.
- Naloxone should only be administered following adequate patient oxygenation and ventilation.
- Naloxone should be administered cautiously to patients who are known or suspected to be physically dependent on narcotics.
- In the vast majority of cases, naloxone should not be required and the patient will need only supportive therapy followed by transport to a medical facility.
- The duration of the narcotic may exceed that of naloxone and renarcotisation is always a possibility.
- Administration of naloxone in the pre-hospital environment may unmask potentially unwanted side effects in the setting of poly pharmacy overdose.
- Naloxone should not be administered to the newly born, even in the setting of suspected or identified opiate exposure/overdose, as administration of naloxone may lead to acute withdrawal and seizures.

Adult dosages^[1-4]

Respiratory depression (secondary to the administration of narcotic drugs)

ACP1	ACP2	CCP	Route	Dose
↓	↓	↓	IM	1.6 mg Single dose only.
		↓	IV	50 microg Repeated PRN to facilitate airway management. No maximum dose.

Paediatric dosages^[1-4]

Respiratory depression (secondary to the administration of narcotic drugs)

ACP1	Route	Dose																											
↓	IM	Single dose of naloxone to be administered using the following scale:																											
		<table border="1"> <thead> <tr> <th>Weight</th> <th>Dose</th> <th>Volume</th> </tr> </thead> <tbody> <tr> <td>< 5 kg</td> <td>100 microg</td> <td>0.25 mL</td> </tr> <tr> <td>5 – < 10 kg</td> <td>200 microg</td> <td>0.5 mL</td> </tr> <tr> <td>10 – < 15 kg</td> <td>300 microg</td> <td>0.75 mL</td> </tr> <tr> <td>15 – < 20 kg</td> <td>400 microg</td> <td>1 mL</td> </tr> <tr> <td>20 – < 25 kg</td> <td>500 microg</td> <td>1.25 mL</td> </tr> <tr> <td>25 – < 30 kg</td> <td>600 microg</td> <td>1.5 mL</td> </tr> <tr> <td>30 – 35 kg</td> <td>700 microg</td> <td>1.75 mL</td> </tr> <tr> <td>> 35 kg</td> <td>800 microg</td> <td>2 mL</td> </tr> </tbody> </table>	Weight	Dose	Volume	< 5 kg	100 microg	0.25 mL	5 – < 10 kg	200 microg	0.5 mL	10 – < 15 kg	300 microg	0.75 mL	15 – < 20 kg	400 microg	1 mL	20 – < 25 kg	500 microg	1.25 mL	25 – < 30 kg	600 microg	1.5 mL	30 – 35 kg	700 microg	1.75 mL	> 35 kg	800 microg	2 mL
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> 35 kg	800 microg	2 mL																											
ACP2	CCP	IM	20 microg/kg Single dose only, not to exceed 800 microg.																										