



Drug Therapy Protocols: Aspirin

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Date	April, 2023
Purpose	To ensure a consistent procedural approach to aspirin 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.
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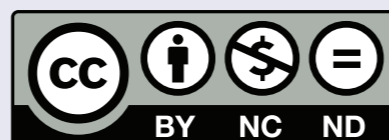
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Drug class^[1,2]

Antiplatelet

Pharmacology

Aspirin inhibits platelet aggregation by irreversibly inhibiting cyclo-oxygenase, reducing the synthesis of thromboxane A₂ (an inducer of platelet aggregation) for the life of the platelet. This action forms the basis of preventing platelets from aggregating to exposed collagen fibres at the site of vascular injury.^[1-3]

Metabolism

Aspirin is converted to salicylic acid in many tissues, but primarily in the GI mucosa and liver. It is subsequently excreted by the kidneys.^[1]

Indications^[1-3]

- Suspected ACS
- Acute cardiogenic pulmonary oedema

Contraindications

- Allergy AND/OR Adverse Drug Reaction to aspirin OR any non-steroidal anti-inflammatory drug (NSAID)
- Bleeding OR clotting disorders (e.g. haemophilia)
- Current GI bleeding OR peptic ulcers
- Patients less than 18 years of age

Precautions

- Possible aortic aneurysm or any other condition that may require surgery
- Pregnancy
- History of GI bleeding or peptic ulcers
- Concurrent anticoagulant therapy (e.g. warfarin)

Side effects^[1,2]

- Epigastric pain/discomfort
- Nausea and/or vomiting
- Gastritis
- GI bleeding
- NSAID induced bronchospasm

Presentation

- Tablet (white), 300 mg *aspirin*

Onset	Duration	Half-life
≈ 10 minutes (variable)	≈ 1 week (antiplatelet)	3.2 hours (300–650 mg)

Schedule

- S2 (Therapeutic poisons).

Routes of administration

Per oral (PO)



Special notes

- In suspected ACS or acute cardiogenic pulmonary oedema aspirin should be administered following the initial dose of GTN (if indicated).
- Aspirin administration is indicated for patients with suspected ACS or acute cardiogenic pulmonary oedema, even if pain free.
- Aspirin is classified as a non-steroidal anti-inflammatory drug (NSAID).

Special notes (cont.)

- 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*.
- Patients who have had less than 300 mg aspirin in the previous 24 hours and who present with suspected ACS or acute pulmonary oedema should be administered a dose of aspirin that equates to a total daily dose of 300–450 mg.

Adult dosages^[1–3]

- **Suspected ACS**
- **Acute cardiogenic pulmonary oedema**



PO ≥ 18 years – **300 mg**
Chewed and followed by a small sip of water (where possible).

Paediatric dosages

Note: QAS officers are **NOT** authorised to administer aspirin to patients under 18 years of age.