



## Drug Therapy Protocols: Glucose 10%

<b>Policy code</b>	DTP_GL10_0223
<b>Date</b>	February, 2023
<b>Purpose</b>	To ensure a consistent procedural approach to glucose 10% administration.
<b>Scope</b>	Applies to all Queensland Ambulance Service (QAS) clinical staff.
<b>Health care setting</b>	Pre-hospital assessment and treatment.
<b>Population</b>	Applies to all ages unless specifically mentioned.
<b>Source of funding</b>	Internal – 100%
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# Glucose 10%

February, 2023

## Drug class

Hyperglycaemic<sup>[1]</sup>

## Pharmacology

Glucose is a sugar that is the principal energy source for body cells, especially the brain.<sup>[1]</sup>

## Metabolism

Broken down in most tissues and distributed throughout total body water.<sup>[1]</sup>

### Indications



- **Symptomatic hypoglycaemia** (with the inability to self-administer oral glucose)
- **Unconscious hypoglycaemia** (as specifically authorised in AMP 001/23)

### Contraindications



- Nil

### Precautions



- Hyperglycaemia

### Side effects



- Nil

### Presentation

- Viaflex® plastic container, 250 mL *glucose monohydrate 10%*

### Onset

Rapid

### Duration

Not applicable

### Half-life

Not applicable

### Schedule

- Unscheduled.

### Routes of administration

Intravenous infusion (IV INF)

Intraosseous infusion (IO INF)



Adult dosages

**Symptomatic hypoglycaemia**

(with the inability to self administer oral glucose)

ACP2 CCP	IV INF	<b>15 g (150 mL)</b> Repeated at 10 g (100 mL) boluses every <b>5 minutes</b> until BGL > 4.0 mmol/L.
CCP	IO INF	<b>15 g (150 mL)</b> Repeated at 10 g (100 mL) boluses every <b>5 minutes</b> until BGL > 4.0 mmol/L.

**Special notes**

- 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*.
- Glucose 10% is the preferred treatment for hypoglycaemia for patients unable to take oral glucose. This is due to its rapid onset and ability to quickly restore blood glucose concentration to normal values.

Paediatric dosages

**Symptomatic hypoglycaemia**

(with the inability to self administer oral glucose)

ACP2 CCP	IV INF	<b>0.25 g/kg (2.5 mL/kg)</b> Repeated at 0.1 g/kg (1 mL/kg) boluses every <b>5 minutes</b> until BGL > 4.0 mmol/L.
CCP	IO INF	<b>0.25 g/kg (2.5 mL/kg)</b> Repeated at 0.1 g/kg (1 mL/kg) boluses every <b>5 minutes</b> until BGL > 4.0 mmol/L.

**Unconscious hypoglycaemia**

(as specifically authorised in AMP 001/23)

ACP2	IO INF	<i>QAS Clinical Consultation and Advice Line</i> approval required in all situations. <b>0.25 g/kg (2.5 mL/kg)</b> Repeated at 0.1 g/kg (1 mL/kg) boluses every <b>5 minutes</b> until BGL > 4.0 mmol/L.
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