



ADULT



# MAGNESIUM SULPHATE INJECTION

This document should be read in conjunction with this [DISCLAIMER](#)

**HIGH RISK Medication** 

<p><b>Presentation</b></p>	<p><i>Not to be confused with <a href="#">Magnesium Sulphate Infusion</a></i></p> <p><b>Ampoule:</b> 10mmol/5mL (2.47g MgSO<sub>4</sub> in 5mL) Each 5mL contains 10mmol Magnesium &amp; 10mmol Sulphate ions</p>
<p><b>Dose</b></p>	<p><b><u>Advanced Life Support:</u></b></p> <p><b>IV:</b> 5mmol (2.5mL) bolus. May be repeated once. An infusion of 20mmol over 4 hours may follow</p> <p><b><u>Blunting of Pressor Response to Intubation:</u></b></p> <p><b>IV:</b> 5 - 10mmol (2.5mL to 5mL) as part of induction sequence</p>
<p><b>Administration</b></p>	<p><b><u>IV Injection:</u></b></p> <p style="text-align: center;"><b>Option A (as per anaesthetics)</b></p> <p>Inject undiluted SLOWLY at a maximum rate of 150mg/minute (0.6mmol/minute of magnesium). For example, 5mL bolus is given over 15 minutes (0.3mmol/minute)</p> <p style="text-align: center;"><b>Option B (to facilitate slow administration)</b></p> <p><b><i>Dilution:</i></b> Dilute 5mL ampoule with at least 7.5mL of Sodium Chloride 0.9%, Glucose 5% or Hartmann's. Concentration is 200mg/mL (0.8mmol/mL of magnesium)</p> <p><b><i>Administration:</i></b> Inject SLOWLY at a maximum rate of 150mg/minute (0.6mmol/minute of magnesium).</p> <p><b><u>IV Infusion:</u></b></p> <p><i>Preparation as per Option B above. Practical example as follows:</i></p> <p><b><i>Dilution:</i></b> Dilute 5mL in 100mL of Sodium Chloride 0.9%, Glucose 5% or Hartmann's. Concentration is 25mg/mL (0.1mmol/mL of magnesium)</p> <p><b><i>Administration:</i></b> Infuse over 30 to 60 minutes</p>

<b>Pregnancy</b>	<p><b>1<sup>st</sup> Trimester:</b> Safe to use</p> <p><b>2<sup>nd</sup> Trimester:</b> Safe to use</p> <p><b>3<sup>rd</sup> Trimester:</b> Safe to use</p>
<b>Breastfeeding</b>	Safe to use
<b>Monitoring</b>	<p><b>Treatment of Toxicity:</b></p> <p><a href="#">Calcium Gluconate</a> 1g IV over 3 to 10 minutes</p>
<b>Clinical guidelines and Policies</b>	<p><a href="#">Recognising and Responding to Clinical Deterioration</a></p> <p><a href="#">Adult Resuscitation Protocol: Magnesium Sulfate</a></p> <p><a href="#">Intravenous Medications - Procedure for Reconstitution and Administration</a></p>
<b>References</b>	<p>Australian Medicines Handbook. Magnesium Sulphate. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2017 [cited 2018 Jan 08]. Available from: <a href="https://amhonline-amh-net-au">https://amhonline-amh-net-au</a></p> <p>The Royal Women's Hospital. Magnesium Sulphate In: Pregnancy and Breastfeeding Medicines Guide [Internet]. Parkville (Victoria): The Royal Women's Hospital; 2018 [cited 2018 Jan 18]. Available from: <a href="https://thewomenspbmg-org-au">https://thewomenspbmg-org-au</a></p> <p>Society of Hospital Pharmacists of Australia. Magnesium Sulphate. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2017 [cited 2018 Jan 18]. Available from: <a href="https://aidh-hcn-com-au">https://aidh-hcn-com-au</a>.</p>

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