



NEONATAL Medication Monograph


DOPamine

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

Restricted: Requires Neonatologist review within 24 hours of initiation

 **HIGH RISK Medication**





 Ensure correct medication is selected, may be confused with DOBUTamine

Presentation	Ampoule: 200mg/5mL
Description	Inotropic agent that increases cardiac output and renal perfusion
Indications	<ul style="list-style-type: none">• Severe Shock• Hypotension
Contraindications	Phaeochromocytoma
Precautions	<ul style="list-style-type: none">• Vials contain sodium metabisulfite which may cause allergic reactions in susceptible patients.• Hypovolaemia should be corrected before treatment. <div> Use extreme caution when titrating dosage and changing lines/fluids as sudden changes to rates can result in blood pressure fluctuations.</div>
Dosage	Continuous IV Infusion 2 to 20 microgram/ kg/ minute Begin at 2 to 5 microgram/ kg/ minute, then titrate dose according to response Maximum: 20 microgram/ kg/ minute
Dosage Adjustment	Adjust dose according to response

Adverse Reactions	Common: bradycardia/tachycardia, arrhythmias, hypertension, vasoconstriction, diuresis			
	Serious: tissue ischaemia, hypotension if patient is hypovolemic			
Interactions	Incompatible with acyclovir, sodium bicarbonate, indomethacin			
Compatible Fluids	Glucose 5%, Glucose 10%, Sodium Chloride 0.9%			
	<u>Compatibility with Heparin</u>			
		Sodium Chloride 0.9% with Heparin	Glucose 5% with Heparin	Glucose 10% With Heparin
	Dopamine	24 hours at room temperature	24 hours at room temperature	No Information (avoid use)
Preparation	<p><u>IV Infusion:</u> Available from CIVAS (KEMH/PCH) If unavailable prepare the below solution:</p> <p><i>Dilution</i> Dilute 30 mg (0.75 mL) of dopamine per kg of baby's weight and dilute to 50 mL with a compatible fluid</p> <p><u>Concentration:</u> 0.5mL/hour = 5 microgram/ kg/ minute 1mL/hour = 10 microgram/ kg/ minute</p> <p>E.g. To prepare an infusion for a 780 g infant Weight = 0.78 kg Dose in Infusion = 30 mg x 0.78 kg = 23.4 mg Dilute 23.4 mg (≈ 0.59 mL) to 50 mL with a compatible fluid</p>			
Administration	Administer via continuous infusion via a syringe pump			
Monitoring	Continuous cardiac monitoring, blood pressure, urine output			
Storage	Ampoule: Store at room temperature, below 25°C			

Guidelines	CAHS Neonatology Guidelines Congenital Diaphragmatic Hernia (CDH) Cardiac: Neonatal Circulation Changes / Unbalanced Circulation Cardiac: Routine Post-Operative Care Hypoxic Ischaemic Encephalopathy (HIE) and Therapeutic Hypothermia Sepsis: Neonatal
References	<p>Plover C, Porrello E. Paediatric injectable guidelines 2019 ed. Flemington (Victoria): The Royal Children's Hospital Melbourne; 2019.</p> <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index : a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2019</p> <p>Truven Health Analytics. Dopamine. In: Micromedex [Internet]. Greenwood Village (CO): Truven Health Analytics; 2020 [cited 2020 Jan 20]. Available from: http://www.micromedexsolutions.com/</p> <p>Society of Hospital Pharmacists of Australia. Dopamine. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2020 Jan 20]. Available from: http://aidh.hcn.com.au</p>

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Standards Applicable:	NSQHS Standards: 1  Governance, 3  Infection Control, 4  Medication Safety, 8  Acute Deterioration
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