

## DOPAMINE

Indication	Route	Dose	Effect
Inotropic support	I.V. infusion	Range (2-20 microgram/kg/min)	
		Low dose (2-5 microgram/kg/min)	Increase in renal blood flow and urine output
		Intermediate dose (5-10 microgram/kg/min)	Increase in heart rate, cardiac contractility, cardiac output and blood pressure
		High dose (10-20 microgram/kg/min)	Increase in blood pressure, vasoconstriction and vascular resistance

### Administration Details

Dilute in either 0.9% Sodium Chloride or Glucose 5%. Can be given neat via a central line in fluid restricted patients.

#### 5-20micrograms/kg/min and $\leq$ 2.6kg

Prepare infusion by taking 60mg PER KILO from a 40mg/ml ampoule and DILUTE to 20ml. A rate of 0.1ml/hr = 5micrograms/kg/min.

#### 5-20micrograms/kg/min and $>$ 2.6kg

Prepare infusion by taking 60mg PER KILO from a 40mg/ml ampoule and DILUTE to 50ml. A rate of 0.25ml/hr = 5micrograms/kg/min.

#### 2-5micrograms/kg/min (low dose)

Prepare infusion by taking 60mg PER KILO from a 40mg/ml ampoule and DILUTE to 50ml. A rate of 0.1ml/hr = 2micrograms/kg/min. (Rate may go higher if volume not a problem)

### Peripheral administration

Dopamine is a vasoconstrictor which may cause venous irritation and tissue damage in cases of extravasation. Administration via a central line is preferable. If a central line is not available, consider using dobutamine due to less vasoconstrictive action peripherally.

Maximum concentration for peripheral administration is 3.2mg/ml. Monitor for signs of ischaemia and extravasation.

### Further Information

Solution is colourless or slightly yellow. Do not if discoloured.

Monitor blood pressure and heart rate.

## **Compatibility**

<b>Compatible</b>	<b>NOT compatible</b>
Dobutamine Parenteral Nutrition Fentanyl Milrinone Morphine	Sodium Bicarbonate Alkaline solutions

### References:

Dopamine hydrochloride. Accessed via <https://medusa.wales.nhs.uk> (10/08/2022)

Paediatric Formulary Committee. *British National Formulary for Children App*. London: British Medical Association, the Royal Pharmaceutical Society of Great Britain, the Royal College of Paediatrics and Child Health, and the Neonatal and Paediatric Pharmacists Group. Accessed on 10/08/2022.

Guy's and St. Thomas', King's College and University Lewisham Hospitals. Paediatric Formulary. Online edition. Accessed via <http://cms.ubqo.com/public/d2595446-ce3c-47ff-9dcc-63167d9f4b80> (10/08/2022)

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