



# KIDS Clinical Guideline - Drug dose calculator

All drugs to be given by intravenous route unless otherwise stated. It is the responsibility of the clinician to ensure drugs are used appropriately according to the clinical situation and doses double checked. KIDS/NTS does not accept any liability.

Date  Weight (kg):  Name:

Weight checked by: Name..... Signed..... Prescriber : Name..... Signed.....

<b>Single drug doses:</b>	
<b>Induction agents for intubation</b>	<b>Dose</b>
Ketamine (2 mg/kg)	140mg
Thiopentone (2-4 mg/kg)	140 - 280mg
Fentanyl (1-5 micrograms/kg)	70 - 350micrograms
Propofol (2-5 mg/kg)	140 - 350mg
<b>Muscle relaxants for intubation</b>	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	70mg
Rocuronium (1mg/kg)	70mg
Vecuronium (0.1mg/kg)	7 mg
<b>Emergency drugs for cardiac arrest</b>	
Adrenaline 1:10,000 (0.1ml/kg)	7ml
Atropine (20micrograms/kg)	1mg max
Adenosine (0.1 - 0.5 mg/kg)	6-12mg
Amiodarone (5mg/kg)	300 mg max
Calcium gluconate 10% (0.5ml/kg)	20ml max
Sodium Bicarbonate 8.4% (1ml/kg)	50ml max
<b>Anticonvulsants and drugs for raised ICP</b>	
Lorazepam (0.1mg/kg)	4mg max
Phenytoin (20mg/kg - over 20 mins)	1400mg
Phenobarbitone (20mg/kg)	1g max
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	20ml PR max
Mannitol dose (0.25 - 0.5 g/kg)	18 - 35grams
Mannitol volume Peripheral: 10% solution	175 - 350 ml
Mannitol volume Central: 20% solution	88 - 175 ml
3% saline (3ml/kg)	210ml

<b>Drug doses for infusion:</b>			<b>Total</b>		
<b>Sedation</b>	<b>Amount</b>	<b>Diluent - see key*</b>	<b>Volume</b>	<b>Rate</b>	<b>Dose</b>
Morphine	70mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	100mg	D5/D10/DS/NS	50ml	1.1 - 6.3 ml/hr	0.5-3 micrograms/kg/min
<b>Paralysis</b>					
Rocuronium	Neat solution 300mg in 30ml			4.2 - 7 ml/hr	0.6 - 1mg/kg/h
Vecuronium	420mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
<b>Vasoactive drugs</b>					
Dopamine	Peripheral 80mg	D5/D10/NS	50ml	13.1 - 52.5ml/hr	5 - 20micrograms/kg/min
	Central 625mg max	D5/D10/NS	50ml	1.7 - 6.7 ml/hr	5 - 20micrograms/kg/min
Dobutamine	Peripheral 80mg	D5/D10/NS	50ml	13.1 - 52.5ml/hr	5 - 20micrograms/kg/min
	Central 625mg max	D5/D10/NS	50ml	1.7 - 6.7 ml/hr	5 - 20micrograms/kg/min
Adrenaline	Peripheral 1mg	D5/D10/NS	50ml	2.1-105ml/hr	0.01 - 0.5 micrograms/kg/min
	Central 8mg	D5/D10/NS	50ml	0.26-13.13ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	Central 8mg	D5/DS	50ml	0.26-13.13ml/hr	0.01 -0.5micrograms/kg/min
<b>Ductal patency drugs omitted as patient over 10kg</b>					
-	-	-	-	-	-
-	-	-	-	-	-
<b>Asthma drugs</b>					
Salbutamol	<b>For Salbutamol bolus dose please refer to BNFC</b>				
	Infusion Peripheral 10mg	D5/NS	50ml	21.0 - 42.0 ml/hr	1 - 2micrograms/kg/min
	Infusion Central 25mg	D5/NS	50ml	8.4 - 16.8 ml/hr	1 - 2micrograms/kg/min
<b>Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min</b>					
Aminophylline	Loading dose:		350mg over 20 minutes; use 500mg/500ml concentration as per infusion		
	Use ideal wt if obese	500 mg	D5	500ml	70 ml/hr
<b>If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing</b>					
Magnesium sulphate 50%	4ml	D5/NS	100 ml	300 ml/hr	2 grams over 20 mins
<b>DKA drugs</b>					
Insulin	50units	D5/D10/NS	50ml	7.0ml/hr	0.1units/kg/h

\*Diluent key: D5 = 5% glucose D10 = 10% glucose NS = 0.9% saline DS = 0.45% saline and 5% glucose