



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 insert here **Weight (kg):** **Name:**

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 4.4mg
Thiopentone (2-4 mg/kg)	4.4 - 8.8mg
Fentanyl (1-5 micrograms/kg)	2.2 - 11micrograms
Propofol (2-5 mg/kg)	4.4 - 11mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	4.4mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	2.2mg
Vecuronium (0.1mg/kg)	0.22 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.22ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.22 - 1.1mg
Amiodarone (5mg/kg)	11mg
Calcium gluconate 10% (0.5ml/kg)	1.1ml
Sodium Bicarbonate 8.4% (1ml/kg)	2.2ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.22mg
Phenytoin (20mg/kg - over 20 mins)	44mg
Phenobarbitone (20mg/kg)	44mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	2ml PR
Mannitol dose (0.25 - 0.5 g/kg)	1 - 1grams
Mannitol volume Peripheral: 10% solution	6 - 11 ml
Mannitol volume Central: 20% solution	3 - 6 ml
3% saline (3ml/kg)	7ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	2.2mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	6.6mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.13 - 0.22 ml/hr	0.6 - 1 mg/kg/h	
Vecuronium	13.2mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4 micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 33mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 33mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 33mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 33mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 0.66mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min	
	<i>Central</i> 0.66mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 0.66mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	0.7 - 2.6 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.7 - 2.6 ml/hr	5 - 20nanograms/kg/min	
Asthma drugs						
Salbutamol	For Salbutamol bolus dose please refer to BNFC					
	<i>Infusion Peripheral</i> 10mg	D5/NS	50ml	0.7 - 1.3 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.3 - 0.5 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 11mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	2.2 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.176 ml	D5/NS	4.4 ml	13.2 ml/hr	88 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	5.5units	D5/D10/NS	50ml	2 ml/hr	0.1units/kg/h	

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