



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.....

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 15mg
Thiopentone (2-4 mg/kg)	15 - 30mg
Fentanyl (1-5 micrograms/kg)	7.5 - 37.5micrograms
Propofol (2-5 mg/kg)	15 - 37.5mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	15mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	7.5mg
Vecuronium (0.1mg/kg)	0.75 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.75ml
Atropine (20micrograms/kg)	150micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.75 - 3.75mg
Amiodarone (5mg/kg)	37.5mg
Calcium gluconate 10% (0.5ml/kg)	3.75ml
Sodium Bicarbonate 8.4% (1ml/kg)	7.5ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.75mg
Phenytoin (20mg/kg - over 20 mins)	150mg
Phenobarbitone (20mg/kg)	150mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	6ml PR
Mannitol dose (0.25 - 0.5 g/kg)	2 - 4grams
Mannitol volume Peripheral: 10% solution	19 - 38 ml
Mannitol volume Central: 20% solution	9 - 19 ml
3% saline (3ml/kg)	23ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	7.5mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	22.5mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.45 - 0.75 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	45mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.4 - 5.6ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 112.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.4 - 5.6ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 112.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.23-11.3ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 2.25mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 2.25mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	2.3 - 9.0 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	2.3 - 9.0 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	2.3 - 4.5 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.9 - 1.8 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 37.5mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	7.5 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.6 ml	D5/NS	15 ml	45 ml/hr	300 mg over 20 mins	
DKA drugs <i>Note: decimal point below</i>						
Insulin	18.8units	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