



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 12mg
Thiopentone (2-4 mg/kg)	12 - 24mg
Fentanyl (1-5 micrograms/kg)	6 - 30micrograms
Propofol (2-5 mg/kg)	12 - 30mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	12mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	6mg
Vecuronium (0.1mg/kg)	0.6 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.6ml
Atropine (20micrograms/kg)	120micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.6 - 3mg
Amiodarone (5mg/kg)	30mg
Calcium gluconate 10% (0.5ml/kg)	3ml
Sodium Bicarbonate 8.4% (1ml/kg)	6ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.6mg
Phenytoin (20mg/kg - over 20 mins)	120mg
Phenobarbitone (20mg/kg)	120mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	5ml PR
Mannitol dose (0.25 - 0.5 g/kg)	2 - 3grams
Mannitol volume Peripheral: 10% solution	15 - 30 ml
Mannitol volume Central: 20% solution	8 - 15 ml
3% saline (3ml/kg)	18ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	6mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	18mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.36 - 0.6 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	36mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.1 - 4.5ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 90mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.1 - 4.5ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 90mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.18-9ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 1.8mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 1.8mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	1.8 - 7.2 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	1.8 - 7.2 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	1.8 - 3.6 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.7 - 1.4 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 30mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	6 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.48 ml	D5/NS	12 ml	36 ml/hr	240 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	15.0units	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