



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 4mg
Thiopentone (2-4 mg/kg)	4 - 8mg
Fentanyl (1-5 micrograms/kg)	2 - 10micrograms
Propofol (2-5 mg/kg)	4 - 10mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	4mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	2mg
Vecuronium (0.1mg/kg)	0.2 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.2ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.2 - 1mg
Amiodarone (5mg/kg)	10mg
Calcium gluconate 10% (0.5ml/kg)	1ml
Sodium Bicarbonate 8.4% (1ml/kg)	2ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.2mg
Phenytoin (20mg/kg - over 20 mins)	40mg
Phenobarbitone (20mg/kg)	40mg
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	5 - 10 ml
Mannitol volume Central: 20% solution	3 - 5 ml
3% saline (3ml/kg)	6ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	2mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	6mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.12 - 0.2 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	12mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 30mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 30mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 30mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 30mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 0.6mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min	
	<i>Central</i> 0.6mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 0.6mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	0.6 - 2.4 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.6 - 2.4 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	0.6 - 1.2 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.2 - 0.5 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 10mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	2 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.16 ml	D5/NS	4 ml	12 ml/hr	80 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	5.0units	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