



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 20mg
Thiopentone (2-4 mg/kg)	20 - 40mg
Fentanyl (1-5 micrograms/kg)	10 - 50micrograms
Propofol (2-5 mg/kg)	20 - 50mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	10mg
Rocuronium (1mg/kg)	10mg
Vecuronium (0.1mg/kg)	1 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	1ml
Atropine (20micrograms/kg)	200micrograms
Adenosine (0.1 - 0.5 mg/kg)	1 - 5mg
Amiodarone (5mg/kg)	50mg
Calcium gluconate 10% (0.5ml/kg)	5ml
Sodium Bicarbonate 8.4% (1ml/kg)	10ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	1mg
Phenytoin (20mg/kg - over 20 mins)	200mg
Phenobarbitone (20mg/kg)	200mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	8ml PR
Mannitol dose (0.25 - 0.5 g/kg)	3 - 5grams
Mannitol volume Peripheral: 10% solution	25 - 50 ml
Mannitol volume Central: 20% solution	13 - 25 ml
3% saline (3ml/kg)	30ml

Drug doses for infusion:			Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	10mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	30mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 100mg in 10ml			0.6 - 1 ml/hr	0.6 - 1mg/kg/h
Vecuronium	60mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.9 - 7.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 150mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.9 - 7.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 150mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.3-15ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 3mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 3mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency					
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	3.0 - 12.0 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	3.0 - 12.0 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	3.0 - 6.0 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	1.2 - 2.4 ml/hr	1 - 2micrograms/kg/min
Aminophylline	Loading dose: 50mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese	500 mg	D5	500ml	10 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	0.8 ml	D5/NS	20 ml	60 ml/hr	400 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	25.0units	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