



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 7.6mg
Thiopentone (2-4 mg/kg)	7.6 - 15.2mg
Fentanyl (1-5 micrograms/kg)	3.8 - 19micrograms
Propofol (2-5 mg/kg)	7.6 - 19mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	7.6mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	3.8mg
Vecuronium (0.1mg/kg)	0.38 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.38ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.38 - 1.9mg
Amiodarone (5mg/kg)	19mg
Calcium gluconate 10% (0.5ml/kg)	1.9ml
Sodium Bicarbonate 8.4% (1ml/kg)	3.8ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.38mg
Phenytoin (20mg/kg - over 20 mins)	76mg
Phenobarbitone (20mg/kg)	76mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	3ml PR
Mannitol dose (0.25 - 0.5 g/kg)	1 - 2grams
Mannitol volume Peripheral: 10% solution	10 - 19 ml
Mannitol volume Central: 20% solution	5 - 10 ml
3% saline (3ml/kg)	11ml

Drug doses for infusion:				Total	
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	3.8mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	11.4mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 100mg in 10ml			0.23 - 0.38 ml/hr	0.6 - 1mg/kg/h
Vecuronium	22.8mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 57mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 57mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 57mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 57mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.11-5.7ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 1.14mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 1.14mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency					
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	1.1 - 4.6 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	1.1 - 4.6 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	1.1 - 2.3 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.5 - 0.9 ml/hr	1 - 2micrograms/kg/min
Aminophylline	Loading dose: 19mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese	500 mg	D5	500ml	3.8 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	0.304 ml	D5/NS	7.6 ml	22.8 ml/hr	152 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	9.5units	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