



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 insert here **Weight (kg):** **Name:**

Weight checked by: Name..... Signed..... Prescriber : Name..... Signed.....

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 5.2mg
Thiopentone (2-4 mg/kg)	5.2 - 10.4mg
Fentanyl (1-5 micrograms/kg)	2.6 - 13micrograms
Propofol (2-5 mg/kg)	5.2 - 13mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	5.2mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	2.6mg
Vecuronium (0.1mg/kg)	0.26 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.26ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.26 - 1.3mg
Amiodarone (5mg/kg)	13mg
Calcium gluconate 10% (0.5ml/kg)	1.3ml
Sodium Bicarbonate 8.4% (1ml/kg)	2.6ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.26mg
Phenytoin (20mg/kg - over 20 mins)	52mg
Phenobarbitone (20mg/kg)	52mg
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	7 - 13 ml
Mannitol volume Central: 20% solution	3 - 7 ml
3% saline (3ml/kg)	8ml

Drug doses for infusion:				Total	
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	2.6mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	7.8mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 100mg in 10ml			0.16 - 0.26 ml/hr	0.6 - 1mg/kg/h
Vecuronium	15.6mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 39mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 39mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 39mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 39mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 0.78mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min
	<i>Central</i> 0.78mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 0.78mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency					
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	0.8 - 3.1 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.8 - 3.1 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	0.8 - 1.6 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.3 - 0.6 ml/hr	1 - 2micrograms/kg/min
Aminophylline	Loading dose: 13mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese	500 mg	D5	500ml	2.6 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	0.208 ml	D5/NS	5.2 ml	15.6 ml/hr	104 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	6.5units	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