



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 8mg
Thiopentone (2-4 mg/kg)	8 - 16mg
Fentanyl (1-5 micrograms/kg)	4 - 20micrograms
Propofol (2-5 mg/kg)	8 - 20mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	8mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	4mg
Vecuronium (0.1mg/kg)	0.4 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.4ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.4 - 2mg
Amiodarone (5mg/kg)	20mg
Calcium gluconate 10% (0.5ml/kg)	2ml
Sodium Bicarbonate 8.4% (1ml/kg)	4ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.4mg
Phenytoin (20mg/kg - over 20 mins)	80mg
Phenobarbitone (20mg/kg)	80mg
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 - 20 ml
Mannitol volume Central: 20% solution	5 - 10 ml
3% saline (3ml/kg)	12ml

Drug doses for infusion:			Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	4mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	12mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 100mg in 10ml			0.24 - 0.4 ml/hr	0.6 - 1mg/kg/h
Vecuronium	24mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 60mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 60mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 60mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 60mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.12-6ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 1.2mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 1.2mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency					
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	1.2 - 4.8 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	1.2 - 4.8 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	1.2 - 2.4 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.5 - 1.0 ml/hr	1 - 2micrograms/kg/min
Aminophylline	Loading dose: 20mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese	500 mg	D5	500ml	4 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	0.32 ml	D5/NS	8 ml	24 ml/hr	160 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	10.0units	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