



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:**
 insert here **7** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 14mg
Thiopentone (2-4 mg/kg)	14 - 28mg
Fentanyl (1-5 micrograms/kg)	7 - 35micrograms
Propofol (2-5 mg/kg)	14 - 35mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	14mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	7mg
Vecuronium (0.1mg/kg)	0.7 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.7ml
Atropine (20micrograms/kg)	140micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.7 - 3.5mg
Amiodarone (5mg/kg)	35mg
Calcium gluconate 10% (0.5ml/kg)	3.5ml
Sodium Bicarbonate 8.4% (1ml/kg)	7ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.7mg
Phenytoin (20mg/kg - over 20 mins)	140mg
Phenobarbitone (20mg/kg)	140mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	6ml PR
Mannitol dose (0.25 - 0.5 g/kg)	2 - 4grams
Mannitol volume Peripheral: 10% solution	18 - 35 ml
Mannitol volume Central: 20% solution	9 - 18 ml
3% saline (3ml/kg)	21ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	7mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	21mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.42 - 0.7 ml/hr	0.6 - 1 mg/kg/h	
Vecuronium	42mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4 micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.3 - 5.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 105mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	1.3 - 5.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 105mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.21-10.5ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 2.1mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 2.1mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	2.1 - 8.4 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	2.1 - 8.4 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	2.1 - 4.2 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.8 - 1.7 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 35mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	7 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.56 ml	D5/NS	14 ml	42 ml/hr	280 mg over 20 mins	
DKA drugs <i>Note: decimal point below</i>						
Insulin	17.5units	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