



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 **2.8** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 5.6mg
Thiopentone (2-4 mg/kg)	5.6 - 11.2mg
Fentanyl (1-5 micrograms/kg)	2.8 - 14micrograms
Propofol (2-5 mg/kg)	5.6 - 14mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	5.6mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	2.8mg
Vecuronium (0.1mg/kg)	0.28 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.28ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.28 - 1.4mg
Amiodarone (5mg/kg)	14mg
Calcium gluconate 10% (0.5ml/kg)	1.4ml
Sodium Bicarbonate 8.4% (1ml/kg)	2.8ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.28mg
Phenytoin (20mg/kg - over 20 mins)	56mg
Phenobarbitone (20mg/kg)	56mg
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 - 14 ml
Mannitol volume Central: 20% solution	4 - 7 ml
3% saline (3ml/kg)	8ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	2.8mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	8.4mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.17 - 0.28 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	16.8mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 42mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 42mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 42mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 42mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 0.84mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min	
	<i>Central</i> 0.84mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 0.84mg	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 - 3.4 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.8 - 3.4 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	0.8 - 1.7 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.3 - 0.7 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 14mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	2.8 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.224 ml	D5/NS	5.6 ml	16.8 ml/hr	112 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	7.0units	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