



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 3.6mg
Thiopentone (2-4 mg/kg)	3.6 - 7.2mg
Fentanyl (1-5 micrograms/kg)	1.8 - 9micrograms
Propofol (2-5 mg/kg)	3.6 - 9mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	3.6mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	1.8mg
Vecuronium (0.1mg/kg)	0.18 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.18ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.18 - 0.9mg
Amiodarone (5mg/kg)	9mg
Calcium gluconate 10% (0.5ml/kg)	0.9ml
Sodium Bicarbonate 8.4% (1ml/kg)	1.8ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.18mg
Phenytoin (20mg/kg - over 20 mins)	36mg
Phenobarbitone (20mg/kg)	36mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	1ml PR
Mannitol dose (0.25 - 0.5 g/kg)	0 - 1grams
Mannitol volume Peripheral: 10% solution	5 - 9 ml
Mannitol volume Central: 20% solution	2 - 5 ml
3% saline (3ml/kg)	5ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	1.8mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	5.4mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 100mg in 10ml			0.11 - 0.18 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	10.8mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 27mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 27mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 27mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 27mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 0.54mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min	
	<i>Central</i> 0.54mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 0.54mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency						
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	0.5 - 2.2 ml/hr	5 - 20nanograms/kg/min	
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.5 - 2.2 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	0.5 - 1.1 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.2 - 0.4 ml/hr	1 - 2micrograms/kg/min	
Aminophylline	Loading dose: 9mg over 20 minutes; use 500mg/500ml concentration as per infusion					
Use ideal wt if obese	500 mg	D5	500ml	1.8 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	0.144 ml	D5/NS	3.6 ml	10.8 ml/hr	72 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	4.5units	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