



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 70mg
Thiopentone (2-4 mg/kg)	70 - 140mg
Fentanyl (1-5 micrograms/kg)	35 - 175micrograms
Propofol (2-5 mg/kg)	70 - 175mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	35mg
Rocuronium (1mg/kg)	35mg
Vecuronium (0.1mg/kg)	3.5 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	3.5ml
Atropine (20micrograms/kg)	700micrograms
Adenosine (0.1 - 0.5 mg/kg)	3.5-12mg
Amiodarone (5mg/kg)	175mg
Calcium gluconate 10% (0.5ml/kg)	17.5ml
Sodium Bicarbonate 8.4% (1ml/kg)	35ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	3.5mg
Phenytoin (20mg/kg - over 20 mins)	700mg
Phenobarbitone (20mg/kg)	700mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	20ml PR max
Mannitol dose (0.25 - 0.5 g/kg)	9 - 18grams
Mannitol volume Peripheral: 10% solution	88 - 175 ml
Mannitol volume Central: 20% solution	44 - 88 ml
3% saline (3ml/kg)	105ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	35mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	100mg	D5/D10/DS/NS	50ml	0.5 - 3.2 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 300mg in 30ml			2.1 - 3.5 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	210mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	6.6 - 26.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 525mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	6.6 - 26.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 525mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	1.05-52.5ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 8mg	D5/D10/NS	50ml	0.13-6.56ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 8mg	D5/DS	50ml	0.13-6.56ml/hr	0.01 -0.5micrograms/kg/min	
Ductal patency drugs omitted as patient over 10kg						
-	-	-	-	-	-	
-	-	-	-	-	-	
Asthma drugs						
Salbutamol	For Salbutamol bolus dose please refer to BNFC					
	<i>Infusion Peripheral</i> 10mg	D5/NS	50ml	10.5 - 21.0 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	4.2 - 8.4 ml/hr	1 - 2micrograms/kg/min	
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min						
Aminophylline	Loading dose:		175mg over 20 minutes; use 500mg/500ml concentration as per infusion			
Use ideal wt if obese	500 mg	D5	500ml	35 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	2.8 ml	D5/NS	70 ml	210 ml/hr	1400 mg over 20 mins	
DKA drugs						
Insulin	50units	D5/D10/NS	50ml	3.5ml/hr	0.1units/kg/h	

*Diluent key: D5 = 5% glucose D10 = 10% glucose NS = 0.9% saline DS = 0.45% saline and 5% glucose