



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 **55** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 110mg
Thiopentone (2-4 mg/kg)	110 - 220mg
Fentanyl (1-5 micrograms/kg)	55 - 275micrograms
Propofol (2-5 mg/kg)	110 - 275mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	55mg
Rocuronium (1mg/kg)	55mg
Vecuronium (0.1mg/kg)	5.5 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	5.5ml
Atropine (20micrograms/kg)	1mg max
Adenosine (0.1 - 0.5 mg/kg)	5.5-12mg
Amiodarone (5mg/kg)	275mg
Calcium gluconate 10% (0.5ml/kg)	20ml max
Sodium Bicarbonate 8.4% (1ml/kg)	50ml max
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	4mg max
Phenytoin (20mg/kg - over 20 mins)	1100mg
Phenobarbitone (20mg/kg)	1g max
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	20ml PR max
Mannitol dose (0.25 - 0.5 g/kg)	14 - 28grams
Mannitol volume Peripheral: 10% solution	138 - 275 ml
Mannitol volume Central: 20% solution	69 - 138 ml
3% saline (3ml/kg)	165ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	55mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	100mg	D5/D10/DS/NS	50ml	0.8 - 5.0 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 300mg in 30ml			3.3 - 5.5 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	330mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	10.3 - 41.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 625mg max	D5/D10/NS	50ml	1.3 - 5.3 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	10.3 - 41.3ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 625mg max	D5/D10/NS	50ml	1.3 - 5.3 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	1.65-82.5ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 8mg	D5/D10/NS	50ml	0.21-10.31ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 8mg	D5/DS	50ml	0.21-10.31ml/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	16.5 - 33.0 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	6.6 - 13.2 ml/hr	1 - 2micrograms/kg/min	
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min						
Aminophylline	Loading dose:		275mg over 20 minutes; use 500mg/500ml concentration as per infusion			
Use ideal wt if obese	500 mg	D5	500ml	55 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	4ml	D5/NS	100 ml	300 ml/hr	2 grams over 20 mins	
DKA drugs						
Insulin	50units	D5/D10/NS	50ml	5.5ml/hr	0.1units/kg/h	

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