



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 **18** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 36mg
Thiopentone (2-4 mg/kg)	36 - 72mg
Fentanyl (1-5 micrograms/kg)	18 - 90micrograms
Propofol (2-5 mg/kg)	36 - 90mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	18mg
Rocuronium (1mg/kg)	18mg
Vecuronium (0.1mg/kg)	1.8 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	1.8ml
Atropine (20micrograms/kg)	360micrograms
Adenosine (0.1 - 0.5 mg/kg)	1.8 - 9mg
Amiodarone (5mg/kg)	90mg
Calcium gluconate 10% (0.5ml/kg)	9ml
Sodium Bicarbonate 8.4% (1ml/kg)	18ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	1.8mg
Phenytoin (20mg/kg - over 20 mins)	360mg
Phenobarbitone (20mg/kg)	360mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	14ml PR
Mannitol dose (0.25 - 0.5 g/kg)	5 - 9grams
Mannitol volume Peripheral: 10% solution	45 - 90 ml
Mannitol volume Central: 20% solution	23 - 45 ml
3% saline (3ml/kg)	54ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	18mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	54mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 200mg in 20ml			1.08 - 1.8 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	108mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.4 - 13.5ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 270mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.4 - 13.5ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 270mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.54-27ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 5.4mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 5.4mg	D5/DS	50ml	0.1 - 5 ml/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	5.4 - 10.8 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	2.2 - 4.3 ml/hr	1 - 2micrograms/kg/min	
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min						
Aminophylline	Loading dose:		90mg over 20 minutes; use 500mg/500ml concentration as per infusion			
Use ideal wt if obese	500 mg	D5	500ml	18 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	1.44 ml	D5/NS	36 ml	108 ml/hr	720 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	45.0units	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