



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 **28** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 56mg
Thiopentone (2-4 mg/kg)	56 - 112mg
Fentanyl (1-5 micrograms/kg)	28 - 140micrograms
Propofol (2-5 mg/kg)	56 - 140mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	28mg
Rocuronium (1mg/kg)	28mg
Vecuronium (0.1mg/kg)	2.8 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	2.8ml
Atropine (20micrograms/kg)	560micrograms
Adenosine (0.1 - 0.5 mg/kg)	2.8-12mg
Amiodarone (5mg/kg)	140mg
Calcium gluconate 10% (0.5ml/kg)	14ml
Sodium Bicarbonate 8.4% (1ml/kg)	28ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	2.8mg
Phenytoin (20mg/kg - over 20 mins)	560mg
Phenobarbitone (20mg/kg)	560mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	20ml PR max
Mannitol dose (0.25 - 0.5 g/kg)	7 - 14grams
Mannitol volume Peripheral: 10% solution	70 - 140 ml
Mannitol volume Central: 20% solution	35 - 70 ml
3% saline (3ml/kg)	84ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	28mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	84mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 200mg in 20ml			1.68 - 2.8 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	168mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	5.3 - 21.0ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 420mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	5.3 - 21.0ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 420mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.84-42ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 8mg	D5/D10/NS	50ml	0.11-5.25ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 8mg	D5/DS	50ml	0.11-5.25ml/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	8.4 - 16.8 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	3.4 - 6.7 ml/hr	1 - 2micrograms/kg/min	
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min						
Aminophylline	Loading dose:		140mg over 20 minutes; use 500mg/500ml concentration as per infusion			
Use ideal wt if obese	500 mg	D5	500ml	28 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	2.24 ml	D5/NS	56 ml	168 ml/hr	1120 mg over 20 mins	
DKA drugs						
Insulin	50units	D5/D10/NS	50ml	2.8ml/hr	0.1units/kg/h	

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