



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 insert here **Weight (kg):** **Name:**

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 40mg
Thiopentone (2-4 mg/kg)	40 - 80mg
Fentanyl (1-5 micrograms/kg)	20 - 100micrograms
Propofol (2-5 mg/kg)	40 - 100mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	20mg
Rocuronium (1mg/kg)	20mg
Vecuronium (0.1mg/kg)	2 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	2ml
Atropine (20micrograms/kg)	400micrograms
Adenosine (0.1 - 0.5 mg/kg)	2 - 10mg
Amiodarone (5mg/kg)	100mg
Calcium gluconate 10% (0.5ml/kg)	10ml
Sodium Bicarbonate 8.4% (1ml/kg)	20ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	2mg
Phenytoin (20mg/kg - over 20 mins)	400mg
Phenobarbitone (20mg/kg)	400mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	16ml PR
Mannitol dose (0.25 - 0.5 g/kg)	5 - 10grams
Mannitol volume Peripheral: 10% solution	50 - 100 ml
Mannitol volume Central: 20% solution	25 - 50 ml
3% saline (3ml/kg)	60ml

Drug doses for infusion:			Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	20mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	60mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 200mg in 20ml			1.2 - 2 ml/hr	0.6 - 1mg/kg/h
Vecuronium	120mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.8 - 15.0ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 300mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.8 - 15.0ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 300mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.6-30ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 6mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 6mg	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	6.0 - 12.0 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	2.4 - 4.8 ml/hr	1 - 2micrograms/kg/min
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min					
Aminophylline	Loading dose:		100mg over 20 minutes; use 500mg/500ml concentration as per infusion		
Use ideal wt if obese	500 mg	D5	500ml	20 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	1.6 ml	D5/NS	40 ml	120 ml/hr	800 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	50.0units	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