



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 **16** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 32mg
Thiopentone (2-4 mg/kg)	32 - 64mg
Fentanyl (1-5 micrograms/kg)	16 - 80micrograms
Propofol (2-5 mg/kg)	32 - 80mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	16mg
Rocuronium (1mg/kg)	16mg
Vecuronium (0.1mg/kg)	1.6 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	1.6ml
Atropine (20micrograms/kg)	320micrograms
Adenosine (0.1 - 0.5 mg/kg)	1.6 - 8mg
Amiodarone (5mg/kg)	80mg
Calcium gluconate 10% (0.5ml/kg)	8ml
Sodium Bicarbonate 8.4% (1ml/kg)	16ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	1.6mg
Phenytoin (20mg/kg - over 20 mins)	320mg
Phenobarbitone (20mg/kg)	320mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	13ml PR
Mannitol dose (0.25 - 0.5 g/kg)	4 - 8grams
Mannitol volume Peripheral: 10% solution	40 - 80 ml
Mannitol volume Central: 20% solution	20 - 40 ml
3% saline (3ml/kg)	48ml

Drug doses for infusion:				Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose	
Morphine	16mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h	
Midazolam	48mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min	
Paralysis						
Rocuronium	Neat solution 200mg in 20ml			0.96 - 1.6 ml/hr	0.6 - 1mg/kg/h	
Vecuronium	96mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min	
Vasoactive drugs						
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.0 - 12.0ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 240mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	3.0 - 12.0ml/hr	5 - 20micrograms/kg/min	
	<i>Central</i> 240mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min	
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.48-24ml/hr	0.01 - 0.5 micrograms/kg/min	
	<i>Central</i> 4.8mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min	
Noradrenaline	<i>Central</i> 4.8mg	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	4.8 - 9.6 ml/hr	1 - 2micrograms/kg/min	
	<i>Infusion Central</i> 25mg	D5/NS	50ml	1.9 - 3.8 ml/hr	1 - 2micrograms/kg/min	
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min						
Aminophylline	Loading dose:		80mg over 20 minutes; use 500mg/500ml concentration as per infusion			
Use ideal wt if obese	500 mg	D5	500ml	16 ml/hr	1mg/kg/h	
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing						
Magnesium sulphate 50%	1.28 ml	D5/NS	32 ml	96 ml/hr	640 mg over 20 mins	
DKA drugs Note: decimal point below						
Insulin	40.0units	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