



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 **14** write name here

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	Dose 28mg
Thiopentone (2-4 mg/kg)	28 - 56mg
Fentanyl (1-5 micrograms/kg)	14 - 70micrograms
Propofol (2-5 mg/kg)	28 - 70mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	-
Suxamethonium (Weight >=10kg: 1mg/kg)	14mg
Rocuronium (1mg/kg)	14mg
Vecuronium (0.1mg/kg)	1.4 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	1.4ml
Atropine (20micrograms/kg)	280micrograms
Adenosine (0.1 - 0.5 mg/kg)	1.4 - 7mg
Amiodarone (5mg/kg)	70mg
Calcium gluconate 10% (0.5ml/kg)	7ml
Sodium Bicarbonate 8.4% (1ml/kg)	14ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	1.4mg
Phenytoin (20mg/kg - over 20 mins)	280mg
Phenobarbitone (20mg/kg)	280mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	11ml PR
Mannitol dose (0.25 - 0.5 g/kg)	4 - 7grams
Mannitol volume Peripheral: 10% solution	35 - 70 ml
Mannitol volume Central: 20% solution	18 - 35 ml
3% saline (3ml/kg)	42ml

Drug doses for infusion:			Total		
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	14mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	42mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 200mg in 20ml			0.84 - 1.4 ml/hr	0.6 - 1mg/kg/h
Vecuronium	84mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	2.6 - 10.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 210mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	2.6 - 10.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 210mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.42-21ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 4.2mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 4.2mg	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	4.2 - 8.4 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	1.7 - 3.4 ml/hr	1 - 2micrograms/kg/min
Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min					
Aminophylline	Loading dose:		70mg over 20 minutes; use 500mg/500ml concentration as per infusion		
Use ideal wt if obese	500 mg	D5	500ml	14 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	1.12 ml	D5/NS	28 ml	84 ml/hr	560 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	35.0units	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