



# 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:

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

<b>Single drug doses:</b>	
<b>Induction agents for intubation</b>	
<b>Ketamine (2 mg/kg)</b>	Dose 60mg
<b>Thiopentone (2-4 mg/kg)</b>	60 - 120mg
<b>Fentanyl (1-5 micrograms/kg)</b>	30 - 150micrograms
<b>Propofol (2-5 mg/kg)</b>	60 - 150mg
<b>Muscle relaxants for intubation</b>	
<b>Suxamethonium (Weight &lt;10kg: 2mg/kg)</b>	-
<b>Suxamethonium (Weight &gt;=10kg: 1mg/kg)</b>	30mg
<b>Rocuronium (1mg/kg)</b>	30mg
<b>Vecuronium (0.1mg/kg)</b>	3 mg
<b>Emergency drugs for cardiac arrest</b>	
<b>Adrenaline 1:10,000 (0.1ml/kg)</b>	3ml
<b>Atropine (20micrograms/kg)</b>	600micrograms
<b>Adenosine (0.1 - 0.5 mg/kg)</b>	3-12mg
<b>Amiodarone (5mg/kg)</b>	150mg
<b>Calcium gluconate 10% (0.5ml/kg)</b>	15ml
<b>Sodium Bicarbonate 8.4% (1ml/kg)</b>	30ml
<b>Anticonvulsants and drugs for raised ICP</b>	
<b>Lorazepam (0.1mg/kg)</b>	3mg
<b>Phenytoin (20mg/kg - over 20 mins)</b>	600mg
<b>Phenobarbitone (20mg/kg)</b>	600mg
<b>Paraldehyde 50%:Olive oil 50% (0.8ml/kg)</b>	20ml PR max
<b>Mannitol dose (0.25 - 0.5 g/kg)</b>	8 - 15grams
<b>Mannitol volume Peripheral: 10% solution</b>	75 - 150 ml
<b>Mannitol volume Central: 20% solution</b>	38 - 75 ml
<b>3% saline (3ml/kg)</b>	90ml

<b>Drug doses for infusion:</b>			<b>Total</b>		
<b>Sedation</b>	<b>Amount</b>	<b>Diluent - see key*</b>	<b>Volume</b>	<b>Rate</b>	<b>Dose</b>
<b>Morphine</b>	30mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
<b>Midazolam</b>	90mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
<b>Paralysis</b>					
<b>Rocuronium</b>	Neat solution 200mg in 20ml			1.8 - 3 ml/hr	0.6 - 1mg/kg/h
<b>Vecuronium</b>	180mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
<b>Vasoactive drugs</b>					
<b>Dopamine</b>	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	5.6 - 22.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 450mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Dobutamine</b>	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	5.6 - 22.5ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 450mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Adrenaline</b>	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.9-45ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 8mg	D5/D10/NS	50ml	0.11-5.63ml/hr	0.01 - 0.5micrograms/kg/min
<b>Noradrenaline</b>	<i>Central</i> 8mg	D5/DS	50ml	0.11-5.63ml/hr	0.01 -0.5micrograms/kg/min
<b>Ductal patency drugs omitted as patient over 10kg</b>					
-	-	-	-	-	-
-	-	-	-	-	-
<b>Asthma drugs</b>					
<b>Salbutamol</b>	<b>For Salbutamol bolus dose please refer to BNFC</b>				
	<i>Infusion Peripheral</i> 10mg	D5/NS	50ml	9.0 - 18.0 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	3.6 - 7.2 ml/hr	1 - 2micrograms/kg/min
<b>Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min</b>					
<b>Aminophylline</b>	<b>Loading dose:</b>		150mg over 20 minutes; use 500mg/500ml concentration as per infusion		
<b>Use ideal wt if obese</b>	500 mg	D5	500ml	30 ml/hr	1mg/kg/h
<b>If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing</b>					
<b>Magnesium sulphate 50%</b>	2.4 ml	D5/NS	60 ml	180 ml/hr	1200 mg over 20 mins
<b>DKA drugs</b>					
<b>Insulin</b>	50units	D5/D10/NS	50ml	3.0ml/hr	0.1units/kg/h

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