



# 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 7.2mg
<b>Thiopentone (2-4 mg/kg)</b>	7.2 - 14.4mg
<b>Fentanyl (1-5 micrograms/kg)</b>	3.6 - 18micrograms
<b>Propofol (2-5 mg/kg)</b>	7.2 - 18mg
<b>Muscle relaxants for intubation</b>	
<b>Suxamethonium (Weight &lt;10kg: 2mg/kg)</b>	7.2mg
<b>Suxamethonium (Weight &gt;=10kg: 1mg/kg)</b>	-
<b>Rocuronium (1mg/kg)</b>	3.6mg
<b>Vecuronium (0.1mg/kg)</b>	0.36 mg
<b>Emergency drugs for cardiac arrest</b>	
<b>Adrenaline 1:10,000 (0.1ml/kg)</b>	0.36ml
<b>Atropine (20micrograms/kg)</b>	100micrograms
<b>Adenosine (0.1 - 0.5 mg/kg)</b>	0.36 - 1.8mg
<b>Amiodarone (5mg/kg)</b>	18mg
<b>Calcium gluconate 10% (0.5ml/kg)</b>	1.8ml
<b>Sodium Bicarbonate 8.4% (1ml/kg)</b>	3.6ml
<b>Anticonvulsants and drugs for raised ICP</b>	
<b>Lorazepam (0.1mg/kg)</b>	0.36mg
<b>Phenytoin (20mg/kg - over 20 mins)</b>	72mg
<b>Phenobarbitone (20mg/kg)</b>	72mg
<b>Paraldehyde 50%:Olive oil 50% (0.8ml/kg)</b>	3ml PR
<b>Mannitol dose (0.25 - 0.5 g/kg)</b>	1 - 2grams
<b>Mannitol volume Peripheral: 10% solution</b>	9 - 18 ml
<b>Mannitol volume Central: 20% solution</b>	5 - 9 ml
<b>3% saline (3ml/kg)</b>	11ml

<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>	3.6mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
<b>Midazolam</b>	10.8mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
<b>Paralysis</b>					
<b>Rocuronium</b>	Neat solution 100mg in 10ml			0.22 - 0.36 ml/hr	0.6 - 1mg/kg/h
<b>Vecuronium</b>	21.6mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
<b>Vasoactive drugs</b>					
<b>Dopamine</b>	<i>Peripheral</i> 54mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 54mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Dobutamine</b>	<i>Peripheral</i> 54mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 54mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Adrenaline</b>	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.11-5.4ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 1.08mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
<b>Noradrenaline</b>	<i>Central</i> 1.08mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
<b>Ductal patency</b>					
<b>Alprostadil (E1)</b>	50micrograms	D5/D10/NS	50ml	1.1 - 4.3 ml/hr	5 - 20nanograms/kg/min
<b>Dinoprostone (E2)</b>	50micrograms	D5/D10/NS	50ml	1.1 - 4.3 ml/hr	5 - 20nanograms/kg/min
<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	1.1 - 2.2 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.4 - 0.9 ml/hr	1 - 2micrograms/kg/min
<b>Aminophylline</b>	<b>Loading dose: 18mg over 20 minutes; use 500mg/500ml concentration as per infusion</b>				
<b>Use ideal wt if obese</b>	500 mg	D5	500ml	3.6 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>	0.288 ml	D5/NS	7.2 ml	21.6 ml/hr	144 mg over 20 mins
<b>DKA drugs Note: decimal point below</b>					
<b>Insulin</b>	9.0units	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