



# 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 **24** write name here

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 48mg
<b>Thiopentone (2-4 mg/kg)</b>	48 - 96mg
<b>Fentanyl (1-5 micrograms/kg)</b>	24 - 120micrograms
<b>Propofol (2-5 mg/kg)</b>	48 - 120mg
<b>Muscle relaxants for intubation</b>	
<b>Suxamethonium (Weight &lt;10kg: 2mg/kg)</b>	-
<b>Suxamethonium (Weight &gt;=10kg: 1mg/kg)</b>	24mg
<b>Rocuronium (1mg/kg)</b>	24mg
<b>Vecuronium (0.1mg/kg)</b>	2.4 mg
<b>Emergency drugs for cardiac arrest</b>	
<b>Adrenaline 1:10,000 (0.1ml/kg)</b>	2.4ml
<b>Atropine (20micrograms/kg)</b>	480micrograms
<b>Adenosine (0.1 - 0.5 mg/kg)</b>	2.4 - 12mg
<b>Amiodarone (5mg/kg)</b>	120mg
<b>Calcium gluconate 10% (0.5ml/kg)</b>	12ml
<b>Sodium Bicarbonate 8.4% (1ml/kg)</b>	24ml
<b>Anticonvulsants and drugs for raised ICP</b>	
<b>Lorazepam (0.1mg/kg)</b>	2.4mg
<b>Phenytoin (20mg/kg - over 20 mins)</b>	480mg
<b>Phenobarbitone (20mg/kg)</b>	480mg
<b>Paraldehyde 50%:Olive oil 50% (0.8ml/kg)</b>	19ml PR
<b>Mannitol dose (0.25 - 0.5 g/kg)</b>	6 - 12grams
<b>Mannitol volume Peripheral: 10% solution</b>	60 - 120 ml
<b>Mannitol volume Central: 20% solution</b>	30 - 60 ml
<b>3% saline (3ml/kg)</b>	72ml

<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>	24mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
<b>Midazolam</b>	72mg	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			1.44 - 2.4 ml/hr	0.6 - 1mg/kg/h
<b>Vecuronium</b>	144mg	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	4.5 - 18.0ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 360mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Dobutamine</b>	<i>Peripheral</i> 80mg	D5/D10/NS	50ml	4.5 - 18.0ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 360mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
<b>Adrenaline</b>	<i>Peripheral</i> 1mg	D5/D10/NS	50ml	0.72-36ml/hr	0.01 - 0.5 micrograms/kg/min
	<i>Central</i> 7.2mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
<b>Noradrenaline</b>	<i>Central</i> 7.2mg	D5/DS	50ml	0.1 - 5 ml/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	7.2 - 14.4 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	2.9 - 5.8 ml/hr	1 - 2micrograms/kg/min
<b>Caution - monitor for toxicity if salbutamol dose higher than 20mcg/min</b>					
<b>Aminophylline</b>	<i>Loading dose:</i>	120mg over 20 minutes; use 500mg/500ml concentration as per infusion			
<b>Use ideal wt if obese</b>	500 mg	D5	500ml	24 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>	1.92 ml	D5/NS	48 ml	144 ml/hr	960 mg over 20 mins
<b>DKA drugs</b>					
<b>Insulin</b>	50units	D5/D10/NS	50ml	2.4ml/hr	0.1units/kg/h

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