

KIDS Clinical Guideline - Drug dose calculator



Date: 22/08/2024

Weight (kg):
0.9

Name:

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.

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

Single drug doses:	
Induction agents for intubation	
Ketamine (2 mg/kg)	1.8mg
Thiopentone (2-4 mg/kg)	1.8 - 3.6mg
Fentanyl (1-5 micrograms/kg)	0.9 - 4.5micrograms
Propofol (2-5 mg/kg)	1.8 - 4.5mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	1.8mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	0.9mg
Vecuronium (0.1mg/kg)	0.09 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.09ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.09 - 0.45mg
Amiodarone (5mg/kg)	4.5mg
Calcium gluconate 10% (0.5ml/kg)	0.45ml
Sodium Bicarbonate 8.4% (1ml/kg)	0.9ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.09mg
Phenytoin (20mg/kg - over 20 mins)	18mg
Phenobarbitone (20mg/kg)	18mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	1ml PR
Mannitol dose (0.25 - 0.5 g/kg)	0 - 0grams
Mannitol volume Peripheral: 10% solution	2 - 5 ml
Mannitol volume Central: 20% solution	1 - 2 ml
3% saline (3ml/kg)	3ml

Drug doses for infusion:				Total	
Sedation	Amount	Diluent - see key*	Volume	Rate	Dose
Morphine	0.9mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam	2.7mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis					
Rocuronium	Neat solution 100mg in 10ml			0.05 - 0.09 ml/hr	0.6 - 1mg/kg/h
Vecuronium	5.4mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs					
Dopamine	<i>Peripheral</i> 13.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 13.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	<i>Peripheral</i> 13.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	<i>Central</i> 13.5mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	<i>Peripheral</i> 0.27mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min
	<i>Central</i> 0.27mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	<i>Central</i> 0.27mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency					
Alprostadil (E1)	50micrograms	D5/D10/NS	50ml	0.3 - 1.1 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)	50micrograms	D5/D10/NS	50ml	0.3 - 1.1 ml/hr	5 - 20nanograms/kg/min
Asthma drugs					
Salbutamol	For Salbutamol bolus dose please refer to BNFC				
	<i>Infusion Peripheral</i> 10mg	D5/NS	50ml	0.3 - 0.5 ml/hr	1 - 2micrograms/kg/min
	<i>Infusion Central</i> 25mg	D5/NS	50ml	0.1 - 0.2 ml/hr	1 - 2micrograms/kg/min
Aminophylline	Loading dose: 4.5mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese	500 mg	D5	500ml	0.9 ml/hr	1mg/kg/h
If patient is aged greater than 12 years please refer to BNFC for aminophylline dosing					
Magnesium sulphate 50%	0.072 ml	D5/NS	1.8 ml	5.4 ml/hr	36 mg over 20 mins
DKA drugs Note: decimal point below					
Insulin	2.3units	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

