KIDS Clinical Guideline - Drug dose calculator

Date

Weight (kg):	Name:
insert here 3.4	write name here

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	Dose
Ketamine (2 mg/kg)	6.8mg
Thiopentone (2-4 mg/kg)	6.8 - 13.6mg
Fentanyl (1-5 micrograms/kg)	3.4 - 17micrograms
Propofol (2-5 mg/kg)	6.8 - 17mg
Muscle relaxants for intubation	
Suxamethonium (Weight <10kg: 2mg/kg)	6.8mg
Suxamethonium (Weight >=10kg: 1mg/kg)	-
Rocuronium (1mg/kg)	3.4mg
Vecuronium (0.1mg/kg)	0.34 mg
Emergency drugs for cardiac arrest	
Adrenaline 1:10,000 (0.1ml/kg)	0.34ml
Atropine (20micrograms/kg)	100micrograms
Adenosine (0.1 - 0.5 mg/kg)	0.34 - 1.7mg
Amiodarone (5mg/kg)	17mg
Calcium gluconate 10% (0.5ml/kg)	1.7ml
Sodium Bicarbonate 8.4% (1ml/kg)	3.4ml
Anticonvulsants and drugs for raised ICP	
Lorazepam (0.1mg/kg)	0.34mg
Phenytoin (20mg/kg - over 20 mins)	68mg
Phenobarbitone (20mg/kg)	68mg
Paraldehyde 50%:Olive oil 50% (0.8ml/kg)	3ml PR
Mannitol dose (0.25 - 0.5 g/kg)	1 - 2grams
Mannitol volume Peripheral: 10% solution	9 - 17 ml
Mannitol volume Central: 20% solution	4 - 9 ml
3% saline (3ml/kg)	10ml

Drug doses for infusion:

Sedation		Amount	Dilutent - see key*	Total Volume	Rate	Dose
Morphine		3.4mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam		10.2mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis						
Rocuronium		Neat solution 100mg in 10ml			0.2 - 0.34 ml/hr	0.6 - 1mg/kg/h
Vecuronium		20.4mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs						
Dopamine	*Peripheral*	51mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	Central	51mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	*Peripheral*	51mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	Central	51mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	*Peripheral*	1mg	D5/D10/NS	50ml	0.1-5.1ml/hr	0.01 - 0.5 micrograms/kg/min
	Central	1.02mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	*Central*	1.02mg	D5/DS	50ml	0.1 - 5 ml/hr	0.01 -0.5micrograms/kg/min
Ductal patency						
Alprostadil (E1)		50micrograms	D5/D10/NS	50ml	1.0 - 4.1 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)		50micrograms	D5/D10/NS	50ml	1.0 - 4.1 ml/hr	5 - 20nanograms/kg/min
Asthma drugs						
Salbutamol		For Salbutamol bolus dose please refer to BNFc				
Infusion	*Peripheral*	10mg	D5/NS	50ml	1.0 - 2.0 ml/hr	1 - 2micrograms/kg/min
Infusion	*Central*	25mg	D5/NS	50ml	0.4 - 0.8 ml/hr	1 - 2micrograms/kg/min
Aminophylline	*Loading dose:*	17mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese		500 mg	D5	500ml	3.4 ml/hr	1mg/kg/h
		If patient is aged greater than 12 years please refer to BNFc for aminophylline dosing				
Magnesium sulphate 50%		0.272 ml	D5/NS	6.8 ml	20.4 ml/hr	136 mg over 20 mins
DKA drugs	***Note: decimal point below***					
Insulin		8.5units	D5/D10/NS	50ml	2 ml/hr	0.1units/kg/h

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