KIDS Clinical Guideline - Drug dose calculator

Date

Weight (kg):

insert here 1

Name:

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

Drug doses for infusion:

Sedation		Amount	Dilutent - see key*	Total Volume	Rate	Dose
Morphine		1mg	D5/D10/NS	50ml	0.5 - 2 ml/hr	10-40micrograms/kg/h
Midazolam		3mg	D5/D10/DS/NS	50ml	0.5 - 3 ml/hr	0.5-3 micrograms/kg/min
Paralysis						
Rocuronium		Neat solution 100mg in 10ml			0.06 - 0.1 ml/hr	0.6 - 1mg/kg/h
Vecuronium		6mg	D5/D10/NS	50ml	0.5 - 2ml/hr	1 - 4micrograms/kg/min
Vasoactive drugs						
Dopamine	*Peripheral*	15mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	Central	15mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Dobutamine	*Peripheral*	15mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
	Central	15mg	D5/D10/NS	50ml	1 - 4 ml/hr	5 - 20micrograms/kg/min
Adrenaline	*Peripheral*	0.3mg	D5/D10/NS	50ml	0.1 - 5ml/hr	0.01 - 0.5micrograms/kg/min
	Central	0.3mg	D5/D10/NS	50ml	0.1 - 5 ml/hr	0.01 - 0.5micrograms/kg/min
Noradrenaline	*Central*	0.3mg	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 - 1.2 ml/hr	5 - 20nanograms/kg/min
Dinoprostone (E2)		50micrograms	D5/D10/NS	50ml	0.3 - 1.2 ml/hr	5 - 20nanograms/kg/min
Asthma drugs						
Salbutamol		**For Salbutamol bolus dose please refer to BNFc**				
Infusion	*Peripheral*	10mg	D5/NS	50ml	0.3 - 0.6 ml/hr	1 - 2micrograms/kg/min
Infusion	*Central*	25mg	D5/NS	50ml	0.1 - 0.2 ml/hr	1 - 2micrograms/kg/min
Aminophylline	*Loading dose:*	5mg over 20 minutes; use 500mg/500ml concentration as per infusion				
Use ideal wt if obese		500 mg	D5	500ml	1 ml/hr	1mg/kg/h
		If patient is aged greater than 12 years please refer to BNFc for aminophylline dosing				
Magnesium sulphate 50%		0.08 ml	D5/NS	2 ml	6 ml/hr	40 mg over 20 mins
DKA drugs	***Note: decimal point below***					
Insulin		2.5units	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