

INTRAVENOUS STAT DOSES

1.6 kg

Diluents:

NS = Sodium Chloride 0.9%, G5 = Glucose 5%, WFI = Water for Injections

● = Central or intraosseus route only

CD = Controlled drug

Maximum doses highlighted in red

NWTS
North West & North Wales
Paediatric Transport Service

ODN
NORTH WEST
NHS

Note: Ideal or adjusted body weight should be used where clinically appropriate

Intubation/Induction

Drug	Dose/kg	Calculated Dose	Dilution
Atracurium besilate	0.5 mg/kg	0.8 mg	Neat or with NS/G5 to convenient vol.
Atropine sulfate	20 microg/kg	32 microg	Neat or with NS/G5 to 30 - 60microg/mL
Fentanyl CD	1 - 5 microg/kg	1.6 - 8 microg	Neat or with NS/G5 to 10microg/mL
Ketamine CD	1 - 2 mg/kg	1.6 - 3.2 mg	Neat or with NS/G5 to convenient vol.
Midazolam CD	0.1 - 0.2 mg/kg	0.16 - 0.32 mg	Dilute to 1mg/mL with NS/G5
Rocuronium bromide	0.6 - 1 mg/kg	0.96 - 1.6 mg	Neat or with NS/G5 to 1mg/mL
Suxamethonium chloride	2 mg/kg	3.2 mg	Neat or with NS/G5 to 10mg/mL
Thiopental sodium	2 - 5 mg/kg	3.2 - 8 mg	Reconstitute to 25mg/mL with 20mL NS/G5/WFI

Fluid Bolus

Dose/kg	Calculated Volume
10mL/kg	16 mL
5mL/kg	8 mL

Maintenance Fluids

%	Daily Allowance	Rate
100%	160 mL/day	6.7 mL/hr
75%	120 mL/day	5.0 mL/hr
50%	80 mL/day	3.3 mL/hr

Cardiac Arrest/Arrhythmias

Drug	Dose/kg	Calculated Dose	Administer Over	Dilution
Adenosine	0.1 - 0.5 mg/kg	0.16 - 0.8 mg	2 seconds	Neat or dilute to 0.5mg/mL with 6mL NS
Adrenaline (1:10,000) [100microg/mL]	0.01 mg/kg	0.02 mg	Rapid injection	Neat
Amiodarone hydrochloride cardiac arrest loading dose - arrhythmias	5 mg/kg	8 mg	3 minutes	Neat or dilute to 7.5 - 15mg/mL with G5
	5 - 10 mg/kg	8 - 16 mg	20 minutes - 2 hours	Dilute to 0.6 - 2.4mg/mL with G5
Calcium GLUCONATE 10% [0.22mmol/mL]	0.11 mmol/kg	0.18 mmol	5 - 10 minutes	Neat or dilute each 1mL with 4mL of NS/G5
Glucose 10%	2 mL/kg	3.2 mL	2 - 5 minutes	Neat
Magnesium sulfate 50% [500mg/mL]	25 - 50 mg/kg	40 - 80 mg	20 minutes	Dilute each 1mL with 4mL of NS/G5
● Potassium chloride 15% [2mmol/mL] CD	0.4 mmol/kg	0.64 mmol	1 hour	Dilute to 0.5mmol/mL with NS (preferred)/G5
Sodium bicarbonate 8.4% [1mmol/mL]	1 mmol/kg	1.6 mmol	At least 3 minutes	<2 years: dilute with equal vol. of NS/G5/WFI

Seizures/Intracranial Pressure

Drug	Dose/kg	Calculated Dose	Administer Over	Dilution
Lorazepam CD	0.1 mg/kg	0.16 mg	Rapid injection over 1 minute	Dilute to 2mg/mL with equal volume of NS/G5
Levetiracetam	40 mg/kg	64 mg	5 minutes	Dilute to 50mg/mL (neonates: 100mg/mL) with NS/G5
Phenobarbital CD	20 mg/kg	32 mg	20 minutes	Dilute to 20mg/mL with WFI
Phenytoin	20 mg/kg	32 mg	20 minutes	Dilute to 5-10mg/mL with NS (use 0.22-0.5micron filter)
Sodium chloride 2.7 - 3%	3 - 5 mL/kg	4.8 - 8 mL	10 - 15 minutes	Neat (2.7% preferred as pre-made solution)
Mannitol 20%	0.25 - 1 g/kg	2 - 8 mL	15 - 30 minutes	Neat (15micron filter recommended)

Asthma

Drug	Dose/kg	Calculated Dose	Administer Over	Dilution
Magnesium sulfate 50% [500mg/mL]	40 mg/kg	64 mg	Over 20 minutes	Dilute to 20mL with NS
Salbutamol 1-23 months	5 microg/kg	8 microg	5-10 minutes	Dilute to 5mL with NS/G5
over 2 years	15 microg/kg	24 microg	5-10 minutes	Dilute to 5mL with NS/G5

INTRAVENOUS INFUSIONS

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Affix Patient Label Here

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Inotropes/Vasoactives						
Infusion		Drug Amount	Diluent	Total Volume	Dose	Rate
● Adrenaline (1:1000) [1mg/mL]	central	0.48 mg	NS or G5	50 mL	0.1 - 1.5 microg/kg/min	1 mL/hr = 0.1 microg/kg/min
Adrenaline (1:1000) [1mg/mL]	peripheral	0.48 mg	NS or G5	500 mL	0.1 - 1.5 microg/kg/min	10 mL/hr = 0.1 microg/kg/min
● Amiodarone hydrochloride		24 mg	G5	20 mL	5 - 25 microg/kg/min	1 mL/hr = 12.5 microg/kg/min
Dinoprostone (Prostin®)	neonates only	48 microg	NS or G5	50 mL	5 - 100 nanog/kg/min	1 mL/hr = 10 nanog/kg/min
● Isoprenaline	under 12 years	0.048 mg	G5	50 mL	0.02 - 1 microg/kg/min	10 mL/hr = 0.1 microg/kg/min
	over 12 years	3 mg	G5	50 mL	0.5 - 20 microg/min	1 mL/hr = 1 microg/min
Milrinone	peripheral	5 mg	NS or G5	50 mL	0.25 - 0.75 microg/kg/min	0.48 mL/hr = 0.5 microg/kg/min
● Noradrenaline	central	0.48 mg	NS or G5	50 mL	0.1 - 1.5 microg/kg/min	1 mL/hr = 0.1 microg/kg/min
Noradrenaline	peripheral	0.48 mg	NS or G5	500 mL	0.1 - 1.5 microg/kg/min	10 mL/hr = 0.1 microg/kg/min
● Vasopressin (argipressin)		1.6 units	NS or G5	50 mL	0.0003 - 0.002 units/kg/min	1 mL/hr = 0.0003 units/kg/min
Sedatives/Analgesics/Muscle Relaxants						
Infusion		Drug Amount	Diluent	Total Volume	Dose	Rate
Fentanyl CD		80 microg	NS or G5	50 mL	1 - 10 microg/kg/hr	1 mL/hr = 1 microg/kg/hr
● Ketamine CD	central	48 mg	NS or G5	50 mL	8 - 30 microg/kg/min	1 mL/hr = 10 microg/kg/min
Ketamine CD	peripheral	48 mg	NS or G5	50 mL	8 - 30 microg/kg/min	1 mL/hr = 10 microg/kg/min
Morphine CD		1.6 mg	NS or G5	50 mL	5 - 60 microg/kg/hr	1 mL/hr = 20 microg/kg/hr
Midazolam CD		4.8 mg	NS or G5	50 mL	30 - 300 microg/kg/hr	1 mL/hr = 60 microg/kg/hr
Propofol 1%	maximum 12 hours	500 mg	Neat	50 mL	1 - 4 mg/kg/hr	0.16 mL/hr = 1 mg/kg/hr
Rocuronium bromide		500 mg	Neat	50 mL	300 - 1000 microg/kg/hr	0.16 mL/hr = 1000 microg/kg/hr
Bronchodilators						
Infusion		Drug Amount	Diluent	Total Volume	Dose	Rate
Aminophylline	loading dose	500 mg	NS	500 mL	9.6 mg (6mg/kg)	9.6 mL over 20 minutes
	followed by	500 mg	NS	500 mL	1 mg/kg/hr	1.6 mL/hr = 1 mg/kg/hr
	under 12 years	500 mg	NS	500 mL	0.5 - 0.7 mg/kg/hr	0.8 mL/hr = 0.5 mg/kg/hr
	over 12 years	500 mg	NS	500 mL	0.5 - 0.7 mg/kg/hr	0.8 mL/hr = 0.5 mg/kg/hr
Magnesium sulphate 50% [500mg/mL]		5 g	G5	50 mL	50 mg/kg/hr	0.8 mL/hr over 4 hours
Salbutamol	peripheral	10 mg	NS or G5	50 mL	0.5-1 microg/kg/min	0.24 mL/hr = 0.5 microg/kg/min
monitor for extravasation				maximum 20microg/min		

Disclaimer: All medicines to be given INTRAVENOUSLY 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. NWTS/ODN does not accept any liability. Use of these monographs is at the clinician's own risk. Due to stock shortages and regional variation in available preparations, not every dose can be rounded to a measurable volume - clinical judgement is required to determine the most appropriate dose.

Version 1.2 (updated December 2025), Ratified by: MFT Paediatric Medicines Management Committee (January 2025) Review date: January 2028