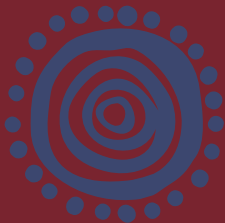


6 kg



6 kg

| Intubation – prepare ONE size tube above and below recommended size | | | |
|---|--------|----------|----------|
| ETT size – mm – CUFFED | 3 mm | NG tube | 6 - 8 Fr |
| ETT size – mm – UNCUFFED | 3.5 mm | ICC tube | 8 12 Fr |
| ETT at lips – cm | 10 cm | LMA | 1.5 |
| ETT at nose – cm | 12 cm | IDC | 6 Fr |

| ANAPHYLAXIS | | |
|--|---------|--------------|
| IM Adrenaline (Epinephrine) 1:1000 (1 mg/mL) | | |
| Dose | Volume | Autoinjector |
| 60 microg | 0.06 mL | 150 microg |

*Use autoinjector only if adrenaline 1:1000 not available

| Resuscitation | Vial concentration | Recommended dose/kg | Preparation | | Dose | Final volume to administer | Administration | |
|--|--------------------|---------------------|--|---------------------|---------------|----------------------------|----------------|---|
| | | | Dilution – Sodium Chloride 0.9% | Final concentration | | | | |
| Adrenaline (Epinephrine) 1:10 000 (1 mg/10 mL) | 100 microg/mL | 10 microg/kg | Undiluted | | 100 microg/mL | 60 microg | 0.6 mL | Push |
| DC shock – VF/ pulseless VT | | 4 Joule/kg | Round up energy level to next highest setting on defibrillator | | | 24 Joule | | Use infant or paediatric pads |
| AmiODAROne (150 mg/3 mL) | 50 mg/mL | 5 mg/kg | <i>Dilute 3 mL (150 mg) to 15 mL in glucose 5%</i> | | 10 mg/mL | 30 mg | 3 mL | Push over 5 mins |
| Fluid Bolus | | 10 mL/kg | Sodium Chloride 0.9% | | | | 60 mL | Push |
| Fluid Bolus | | 20 mL/kg | Sodium Chloride 0.9% | | | | 120 mL | Push |
| Glucose 10% | 100 mg/mL | 2 mL/kg | Glucose 10% | | 100 mg/mL | | 12 mL | Push |
| Adenosine (6 mg/2 mL) – 1st dose | 3 mg/mL | 0.1 mg/kg | Undiluted | | 3 mg/mL | 0.6 mg | 0.2 mL | Push via proximal vein or CVL – Follow immediately by a 10 - 20 mL fast flush |
| Adenosine (6 mg/2 mL) – 2nd dose | 3 mg/mL | 0.2 mg/kg | | | | 1.2 mg | 0.4 mL | |
| Adenosine (6 mg/2 mL) – 3rd dose | 3 mg/mL | 0.3 mg/kg | | | | 1.8 mg | 0.6 mL | |
| Synchronised Cardioversion | | 1 Joule/kg | Round up energy level to next highest setting on defibrillator | | | 6 Joule | | Use infant or paediatric pads |
| | | 2 Joule/kg | | | | 12 Joule | | |
| Atropine (600 microg/mL) | 600 microg/mL | 20 microg/kg | Dilute 1 mL (600 microg) to 6 mL | | 100 microg/mL | 120 microg | 1.2 mL | Push |
| Push dose pressors – Doses may be repeated if required | | | | | | | | |
| Adrenaline (Epinephrine) 1:10 000 (1 mg/10 mL) | 100 microg/mL | 1 microg/kg | Dilute 1 mL (100 microg) to 10 mL | | 10 microg/mL | 6 microg | 0.6 mL | Push |
| Metaraminol (Syringe 5 mg/10 mL) | 500 microg/mL | 10 microg/kg | Consider Adrenaline (Epinephrine) Push Dose Pressor | | Consult | Consult | Consult | Push |

| Induction agents | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|----------------------------|--------------------|---------------------|--|---------------------|-----------|--------------|----------------------|
| Fentanyl (100 microg/2 mL) | 50 microg/mL | 2 - 5 microg/kg | Dilute 2 mL (100 microg) to 10 mL | 10 microg/mL | 12 microg | 1.2 mL | Push over 1 - 3 mins |
| Ketamine (200 mg/2 mL) | 100 mg/mL | 1 - 2 mg/kg | Dilute 2 mL (200 mg) to 20 mL | 10 mg/mL | 6 mg | 0.6 mL | Push over 60 secs |
| PropOFol (200 mg/20 mL) | 10 mg/mL | 2 - 3 mg/kg | Undiluted | 10 mg/mL | 12 mg | 1.2 mL | Push over 30 secs |
| Midazolam | Various strengths | 0.1 - 0.2 mg/kg | Dilute to 1 mg/mL regardless of ampoule strength | 1 mg/mL | 0.6 mg | 0.6 mL | Push over 30 secs |

| Paralytic agents | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|-----------------------------|--------------------|---------------------|---|---------------------|--------|--------------|----------------|
| Rocuronium (50 mg/5 mL) | 10 mg/mL | 1.2 mg/kg | Undiluted | 10 mg/mL | 7.2 mg | 0.72 mL | Push |
| Suxamethonium (100 mg/2 mL) | 50 mg/mL | 2 mg/kg | Dilute 2 mL (100 mg) to 10 mL | 10 mg/mL | 12 mg | 1.2 mL | Push |
| Vecuronium (10 mg) | 10 mg | 0.1 mg/kg | <i>Reconstitute vial with 10 mL WFI</i> | 1 mg/mL | 0.6 mg | 0.6 mL | Push |

| Reversal agents | Vial concentration | Recommended dose/kg | Preparation | | Dose | Final volume to administer | Administration |
|---|--------------------|---------------------|---------------------------------|---------------------|------------------|----------------------------|--|
| | | | Dilution – Sodium Chloride 0.9% | Final concentration | | | |
| Sugammadex (200 mg/2 mL) Rocuronium reversal | 100 mg/mL | 16 mg/kg | Undiluted | 100 mg/mL | 96 mg | 0.96 mL | Push |
| Flumazenil (500 microg/5 mL) Benzodiazepine reversal | 100 microg/mL | 5 microg/kg | Undiluted | 100 microg/mL | 30 microg | 0.3 mL | Push – Every 60 secs Max single dose 200 microg Max total dose 2000 microg |
| Naloxone (400 microg/mL) Opioid reversal | 400 microg/mL | 10 microg/kg | Undiluted | 400 microg/mL | 60 microg | 0.15 mL | Push – Every 2 - 3 mins May be given IM |

| Respiratory | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|---|--------------------|---------------------|--|---------------------|----------------|--------------|---|
| Nebulised Adrenaline (Epinephrine) 1:1000 | 1 mg/mL | | Undiluted | | 5 mg | 5 mL | Via nebuliser |
| Dexamethasone (4 mg/mL) | 4 mg/mL | 0.3 mg/kg | Undiluted | 4 mg/mL | 1.8 mg | 0.45 mL | IV or IM |
| Magnesium Sulfate (10 mmol/5 mL) | 2 mmol/mL | 0.2 mmol/kg | Dilute 5 mL (10 mmol) to 50 mL | 0.2 mmol/mL | Consult | Consult | Infuse over 20 mins |
| Hydrocortisone (100 mg + 2 mL diluent) | 50 mg/mL | 4 mg/kg | <i>Reconstitute vial with 2 mL WFI</i> | 50 mg/mL | 24 mg | 0.48 mL | Push over 30 secs or IM |
| Methylprednisolone (40 mg/mL) sodium succinate | 40 mg/mL | 1 mg/kg | Dilute 1 mL (40 mg) to 4 mL | 10 mg/mL | Consult | Consult | Push over 5 mins Sodium succinate ONLY |
| Salbutamol (5 mg/5 mL) | 1 mg/mL | 0.1 mg/kg | Dilute 5 mL (5 mg) to 50 mL | 0.1 mg/mL | Consult | Consult | Load – Infuse over 20 mins |
| Aminophylline (250 mg/10 mL) | 25 mg/mL | 5 mg/kg | Dilute 10 mL (250 mg) to 50 mL | 5 mg/mL | Consult | Consult | Load – Infuse over 30 mins |

| Neurology/seizures | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|--|--------------------|---------------------|--|---------------------|---------------|--------------|---|
| Midazolam – IV | Various strengths | 0.15 mg/kg | Dilute to 1 mg/mL regardless of ampoule strength | 1 mg/mL | 0.9 mg | 0.9 mL | Push |
| Midazolam – IM | 5 mg/mL | 0.2 mg/kg | Undiluted | 5 mg/mL | 1.2 mg | 0.24 mL | IM |
| Midazolam – Buccal/Nasal | 5 mg/mL | 0.3 mg/kg | Undiluted | 5 mg/mL | 1.8 mg | 0.36 mL | Drip dose into alternate nostrils or inside cheek |
| Phenytoin (100 mg/2 mL) (250 mg/5 mL) | 50 mg/mL | 20 mg/kg | Dilute 5 mL (250 mg) to 25 mL | 10 mg/mL | 120 mg | 12 mL | Infuse over 20 mins *use 0.22 micron filter* |
| Phenobarbitone (Phenobarbital) (200 mg/mL) | 200 mg/mL | 20 mg/kg | Dilute 1 mL (200 mg) to 10 mL | 20 mg/mL | 120 mg | 6 mL | Infuse over 20 mins |
| Levetiracetam (500 mg/5 mL) | 100 mg/mL | 60 mg/kg | Dilute 5 mL (500 mg) to 10 mL | 50 mg/mL | 360 mg | 7.2 mL | Push over 5 mins |
| Mannitol 20% | 0.2 g/mL | 0.5 g (2.5 mL)/kg | Pre-mixed bag | 0.2 g/mL | 3 g | 15 mL | Infuse over 10 mins *use 5 micron filter* |
| Sodium Chloride 3% – Hypertonic *For raised ICP or hyponatremic seizures* | 0.5 mmol/mL | 3 mL/kg | Pre-mixed bag | 0.5 mmol/mL | 18 mL | 18 mL | Infuse over 10 mins via central/large vein |

| Electrolytes | Vial concentration | Recommended dose/kg | Preparation | | Dose | Final volume to administer | Administration |
|---|--|---------------------|-------------------------------------|---------------------|------------------|----------------------------|--|
| | | | Dilution – Sodium Chloride 0.9% | Final concentration | | | |
| Hypokalaemia (↓ Potassium) Potassium Chloride 10 mmol in 0.29% sodium chloride (100 mL) | 0.1 mmol/mL | 0.3 mmol/kg | Pre-mixed bag | 0.1 mmol/mL | 1.8 mmol | 18 mL | Infuse over 1 hour |
| Hyperkalaemia (↑ Potassium) Calcium gluconate (2.2 mmol/10 mL) | 0.22 mmol/mL | 0.11 mmol/kg | Undiluted | 0.22 mmol/mL | 0.66 mmol | 3 mL | Large vein push over 3 - 5 mins DO NOT give with sodium bicarbonate |
| Salbutamol Nebules | 2.5 mg/2.5 mL | Age based | Dilute to 4 mL | – | 2.5 mg | – | Inhale via nebuliser |
| Frusemide (Furosemide) (20 mg/2 mL) | 10 mg/mL | 1 mg/kg | Dilute 2 mL (20 mg) to 20 mL | 1 mg/mL | 6 mg | 6 mL | Push over 5 mins |
| Glucose 10% (with insulin below) | See Infusion guide for doses and administration directions | | | | | | |
| Insulin – Actrapid (300 units/3 mL) | | | | | | | |
| Sodium Bicarbonate 8.4% | 1 mmol/mL | 1 mmol/kg | Dilute 10 mL (10 mmol) to 20 mL | 0.5 mmol/mL | 6 mmol | 12 mL | Large vein push over 5 mins DO NOT mix with other drugs |
| Resonium A | – | 0.25 g/kg | Mix 1 scoop (15 g) with 60 mL water | 0.25 g/mL | 1.5 g | 6 mL | Oral, nasogastric or rectal |
| Hypocalcaemia – Critical (↓ calcium) Calcium gluconate (2.2 mmol/10 mL) | 0.22 mmol/mL | 0.11 mmol/kg | Undiluted | 0.22 mmol/mL | 0.66 mmol | 3 mL | Large vein push over 3 - 5 mins DO NOT give with sodium bicarbonate |
| Hypomagnesaemia or Arrhythmia Magnesium Sulfate (10 mmol/5 mL) | 2 mmol/mL | 0.2 mmol/kg | Dilute 5 mL (10 mmol) to 50 mL | 0.2 mmol/mL | 1.2 mmol | 6 mL | Pulse absent – Push over 3 - 5 mins Pulse present – Infuse over 20 mins |

| Trauma | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|---------------------------------|--------------------|---------------------|----------------------------------|---------------------|--------------|--------------|-------------------------|
| Blood – Initial | | 10 mL/kg | | | 60 mL | 60 mL | As clinically indicated |
| Tranexamic Acid – 1000 mg/10 mL | 100 mg/mL | 15 mg/kg | Dilute 10 mL (1000 mg) to 100 mL | 10 mg/mL | 90 mg | 9 mL | Infuse over 10 mins |

For ongoing bleeding refer to local Massive Haemorrhage Protocol for blood and product replacement

| Analgesia | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose | Final volume | Administration |
|--|--------------------|---------------------|-----------------------------------|---------------------|-----------------|--------------|--|
| Fentanyl – Nasal (100 microg/2 mL) Use Mucosal Atomiser Device (MAD) | 50 microg/mL | 1.5 microg /kg | Undiluted | 50 microg/mL | 9 microg | 0.18 mL | Add 0.1 mL to initial dose to accommodate (MAD) dead space May repeat after 5 - 10 mins |
| Fentanyl – IV (100 microg/2 mL) | 50 microg/mL | 0.5 - 1 microg/kg | Dilute 2 mL (100 microg) to 10 mL | 10 microg/mL | 3 microg | 0.3 mL | Dose may be repeated after 5 mins if required |
| Morphine – IV (10 mg/mL) | 10 mg/mL | 0.05 - 0.1 mg/kg | Dilute 1 mL (10 mg) to 10 mL | 1 mg/mL | 0.3 mg | 0.3 mL | Dose may be repeated after 5 mins if required |

| Analgesia if intraosseous IO drug or fluid administration causes pain | Vial concentration | Recommended dose/kg | Preparation | Final concentration | Dose | Final volume to administer | Administration |
|---|--------------------|---------------------|-------------|---------------------|-------------|----------------------------|--|
| Lignocaine (Lidocaine) 1% IO | 10 mg/mL (1%) | 0.5 mg/kg | Undiluted | 10 mg/mL | 3 mg | 0.3 mL | Instil dose - Follow with 1 mL slow push of sodium chloride 0.9% over 1-2 minutes. Allow to dwell for 1 minute. Rapid flush with 5 mL. Half original dose can be repeated as above |

| Antiarrhythmics - only in consultation with a Paediatric Cardiologist | Vial concentration | Recommended dose/kg | Preparation | Final concentration | Dose | Final volume | Administration |
|---|--|---------------------|--------------------------------|---------------------|----------------|----------------|---|
| AmiODARone (Load) 150 mg/3 mL | See Infusion guide for doses and administration directions | | | | | | |
| Esmolol 100 mg/10 mL | 10 mg/mL | 0.25 - 0.5 mg/kg | Undiluted | 10 mg/mL | 1.5 mg | 0.15 mL | LOAD – Push over 1 - 2 mins. Continuous infusion may be considered after loading dose |
| Verapamil 5 mg/2 mL | 2.5 mg/mL | 0.1 mg/kg | Dilute 2 mL (5 mg) up to 10 mL | 0.5 mg/mL | Consult | Consult | Infuse over 5 - 10 mins |

| Acute behavioural disturbance Oral | Medication preparation | Recommended dose | Preparation | Final concentration | Dose | Final volume | Administration |
|------------------------------------|-------------------------------|-------------------|---|---------------------|----------------|----------------|---|
| Diazepam | Liquid 1 mg/mL 5 mg tablet | 0.2 mg/kg | If liquid unavailable dissolve 5 mg tablet in 5 mL of water | 1 mg/mL | Consult | Consult | If tablet preferred round dose to nearest half or full tablet |
| Lorazepam | 1 mg tablet | 0.5-1 mg | Tablet may be dissolved in small volume of water | | Consult | Consult | |
| Olanzapine | 2.5 - 5 mg wafer | 2.5 - 5 mg | Place wafer on top of tongue | | Consult | Consult | Max daily dose not to exceed 20 mg |
| Risperidone | 1 mg/mL liquid or tablets | 0.02 - 0.04 mg/kg | If liquid unavailable tablets may be dissolved to make 1 mg/mL solution | 1 mg/mL | Consult | Consult | Dose has been rounded |

| Acute behavioural disturbance IM | Vial concentration | Recommended dose/kg | Preparation | Final concentration | Dose | Final volume | Administration |
|----------------------------------|--------------------|---------------------|-----------------------------------|---------------------|----------------|----------------|---|
| Droperidol | 2.5 mg/mL | 0.1 - 0.2 mg/kg | Undiluted | 2.5 mg/mL | Consult | Consult | Max single dose not to exceed 10 mg. Total daily dose 0.4 mg/kg not to exceed 20 mg |
| Olanzapine | 10 mg/mL | 2.5 - 5 mg | Reconstitute vial with 2.1 mL WFI | 5 mg/mL | Consult | Consult | Max single dose not to exceed 10 mg. Total daily dose 0.4 mg/kg not to exceed 20 mg |

| Reversal dystonia | Vial concentration | Recommended dose/kg | Preparation | Final concentration | Dose | Final volume | Administration |
|---|--------------------|---------------------|-------------|---------------------|----------------|----------------|----------------|
| Benztropine (Benzatropine) IV or IM 2 mg/2 mL | 1 mg/mL | 0.02 mg/kg | Undiluted | 1 mg/mL | Consult | Consult | IV or IM |

| Drug | Vial concentration | Recommended dose/kg range | Preparation | | Final rate range | Administration/ route |
|----------------------------------|--------------------|----------------------------------|--|--------------------------------|----------------------|-----------------------|
| | | | Glucose 5% or Sodium Chloride 0.9% | Final concentration | | |
| Open Ductus Arteriosus | | | | | | |
| Alprostadil (Prostaglandin/PGE1) | 500 microg/mL | 50 to 100 nanogram/kg/min | Dilute 0.2 mL (100 microg) to 50 mL | 2 microg/mL (2000 nanogram/mL) | 9 to 18 mL/hr | IV |

| Inotropes | | | | | | |
|--------------------------------|-----------------|--------------------------------|---------------------------------------|--------------|-------------------------|----|
| Adrenaline (Epinephrine) | 1:1000; 1 mg/mL | 0.05 to 1 microg/kg/min | Dilute 1 mL (1 mg) to 50 mL | 20 microg/mL | 0.9 to 18 mL/hr | IV |
| Dobutamine | 250 mg/20 mL | 2 to 20 microg/kg/min | Dilute 6 mL (75 mg) to 50 mL | 1.5 mg/mL | 0.5 to 4.8 mL/hr | IV |
| Dopamine | 200 mg/5 mL | 2 to 20 microg/kg/min | Dilute 1.5 mL (60 mg) to 50 mL | 1.2 mg/mL | 0.6 to 6 mL/hr | IV |
| Noradrenaline (Norepinephrine) | 4 mg/4 mL | 0.05 to 1 microg/kg/min | Dilute 1 mL (1 mg) to 50 mL | 20 microg/mL | 0.9 to 18 mL/hr | IV |

| Antiarrhythmics - only in consultation with a Paediatric Cardiologist | | | | | | |
|--|--------------|--|--|----------|---|----|
| AmiODAROne <u>LOAD</u> | 50 mg/mL | 25 microg/kg/min (for 4 hrs) | Dilute 2 mL (100 mg) to 50 mL in Glucose 5% | 2 mg/mL | Dose 36 mg (18 mL) infuse at 4.5 mL/hr | IV |
| AmiODAROne [after loading dose] | 50 mg/mL | 5 to 15 microg/kg/min | Dilute 2 mL (100 mg) to 50 mL in Glucose 5% | 2 mg/mL | 0.9 to 2.7 mL/hr | IV |
| Esmolol | 100 mg/10 mL | 50 to 200 microg/kg/min | Undiluted – draw up 50 mL (500 mg) | 10 mg/mL | 1.8 to 7.2 mL/hr | IV |

| Sedation | | | | | | |
|-----------------|-------------------|-------------------------------|---|--------------|-------------------------|----|
| Fentanyl | 100 microg/2 mL | 1 to 10 microg/kg/hr | Dilute 10 mL (500 microg) to 50 mL | 10 microg/mL | 0.6 to 6 mL/hr | IV |
| Midazolam | Various strengths | 30 to 120 microg/kg/hr | Dilute 10 mg to 50 mL | 0.2 mg/mL | 0.9 to 3.6 mL/hr | IV |
| Morphine | Various strengths | 5 to 80 microg/kg/hr | Dilute 5 mg to 50 mL | 0.1 mg/mL | 0.3 to 4.8 mL/hr | IV |

| Paralytic Agents – only on discussion with Paediatric Intensivist | | | | | | |
|--|------------|-----------------------------|--------------------------------------|---------|-------------------------|----|
| Vecuronium | 10 mg vial | 1 to 3 microg/kg/min | Dilute 25 mL (50 mg) to 50 mL | 1 mg/mL | 0.4 to 1.1 mL/hr | IV |

| Electrolytes | | | | | | |
|--|----------------|------------------------|--|-----------|------------------|---|
| Hyperkalaemia Glucose 10% | – | 5 mL/kg/hr | Use a glucose 10% bag – Undiluted <i>Administer with Actrapid infusion</i> | 10% | 30 mL/hr | IV. Run insulin and glucose infusions (concurrently) until K+ within range monitor BSLs |
| AND ACTRAPID (Insulin neutral) | 300 units/3 mL | 0.1 units/kg/hr | Dilute 0.5 mL (50 units) to 50 mL with Sodium Chloride 0.9% <i>Administer with Glucose infusion</i> | 1 unit/mL | 0.6 mL/hr | |