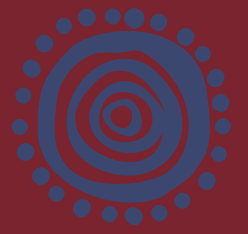


4.5 kg



4.5kg

# 4.5 kg

| Intubation – prepare ONE size tube above and below recommended size |        |          |           |
|---|--------|----------|-----------|
| ETT size – microcuff  | 3.5 mm | NG tube  | 6 Fr      |
| Laryngoscope blade  | 0/1    | ICC tube | 8 - 12 Fr |
| ETT at lips – cm  | 9 cm   | LMA      | 1         |
| ETT at nose – cm  | 11 cm  | IDC      | 6 Fr      |

| ANAPHYLAXIS                                  |        |
|--|--------|
| IM Adrenaline (Epinephrine) 1:1000 (1 mg/mL) |        |
| Dose   | Volume |
| 100 microg                                   | 0.1 mL |

| 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       | <b>45 microg</b>  | 0.45 mL                    | Push  |
| DC shock – VF/ pulseless VT                                   |                    | 4 Joule/kg          | Round up energy level to next highest setting on defibrillator |                     | <b>18 Joule</b>   |                            | 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            | <b>22.5 mg</b>    | 2.3 mL                     | Push over 5 mins  |
| Fluid Bolus   |                    | 10 mL/kg            | Sodium Chloride 0.9%   |                     |                   | 45 mL                      | Push  |
| Fluid Bolus   |                    | 20 mL/kg            | Sodium Chloride 0.9%   |                     |                   | 90 mL                      | Push  |
| Glucose 10%   | 100 mg/mL          | 2 mL/kg             | Glucose 10%  |                     | 100 mg/mL         | 9 mL                       | Push  |
| Adenosine (6 mg/2 mL) – 1st dose                              | 3 mg/mL            | 0.1 mg/kg           | Undiluted  | 3 mg/mL             | <b>0.45 mg</b>    | 0.15 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           |  |                     | <b>0.9 mg</b>     | 0.3 mL                     |   |
| Adenosine (6 mg/2 mL) – 3rd dose                              | 3 mg/mL            | 0.3 mg/kg           |  |                     | <b>1.35 mg</b>    | 0.45 mL                    |   |
| Synchronised Cardioversion                                    |                    | 1 Joule/kg          | Round up energy level to next highest setting on defibrillator |                     | <b>5 Joule</b>    |                            | Use infant or paediatric pads   |
|   |                    | 2 Joule/kg          |  |                     | <b>9 Joule</b>    |                            |   |
| Atropine (600 microg/mL)                                      | 600 microg/mL      | 20 microg/kg        | Dilute 1 mL (600 microg) to 6 mL                               | 100 microg/mL       | <b>90 microg</b>  | 0.9 mL                     | Push  |
| <b>Push dose pressors – Doses may be repeated if required</b> |                    |                     |  |                     |                   |                            |   |
| 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        | <b>4.5 microg</b> | 0.45 mL                    | Push  |
| Metaraminol (Syringe 5 mg/10 mL)                              | 500 microg/mL      | 10 microg/kg        | Consider Adrenaline (Epinephrine) Push Dose Pressor            | Consult             | <b>Consult</b>    | 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        | <b>9 microg</b> | 0.9 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            | <b>4.5 mg</b>   | 0.45 mL      | Push over 60 secs    |
| PropOFol (200 mg/20 mL)    | 10 mg/mL           | 2 - 3 mg/kg         | Undiluted  | 10 mg/mL            | <b>9 mg</b>     | 0.9 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             | <b>0.45 mg</b>  | 0.45 mL      | Push over 2 - 3 mins |

| 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            | <b>5.4 mg</b>  | 0.54 mL      | Push           |
| Suxamethonium (100 mg/2 mL) | 50 mg/mL           | 2 mg/kg             | Dilute 2 mL (100 mg) to 10 mL           | 10 mg/mL            | <b>9 mg</b>    | 0.9 mL       | Push           |
| Vecuronium (10 mg)          | 10 mg              | 0.1 mg/kg           | <i>Reconstitute vial with 10 mL WFI</i> | 1 mg/mL             | <b>0.45 mg</b> | 0.45 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)<br>Rocuronium reversal         | 100 mg/mL          | 16 mg/kg            | Undiluted                       | 100 mg/mL           | <b>72 mg</b>       | 0.72 mL                    | Push   |
| Flumazenil (500 microg/5 mL)<br>Benzodiazepine reversal | 100 microg/mL      | 5 microg/kg         | Undiluted                       | 100 microg/mL       | <b>22.5 microg</b> | 0.23 mL                    | Push – Every 60 secs<br>Max single dose 200 microg<br>Max total dose 2000 microg |
| Naloxone (400 microg/mL)<br>Opioid reversal             | 400 microg/mL      | 10 microg/kg        | Undiluted                       | 400 microg/mL       | <b>45 microg</b>   | 0.11 mL                    | Push – Every 2 - 3 mins<br>May be given IM                                       |

| Respiratory                                       | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9%        | Final concentration | Dose           | Final volume | Administration                            |
|---|--------------------|---------------------|--|---------------------|----------------|--------------|---|
| Nebulised Adrenaline (Epinephrine)<br>1:1000      | 1 mg/mL            |                     | Undiluted                              | 1 mg/mL             | <b>5 mg</b>    | 5 mL         | Via nebuliser                             |
| Dexamethasone (4 mg/mL)                           | 4 mg/mL            | 0.3 mg/kg           | Undiluted                              | 4 mg/mL             | <b>1.35 mg</b> | 0.34 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         | <b>Consult</b> | 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            | <b>18 mg</b>   | 0.36 mL      | Push over 30 secs or IM                   |
| Methylprednisolone (40 mg/mL)<br>sodium succinate | 40 mg/mL           | 1 mg/kg             | Dilute 1 mL (40 mg) to 4 mL            | 10 mg/mL            | <b>Consult</b> | Consult      | Push over 5 mins<br>Sodium succinate ONLY |
| Salbutamol (5 mg/5 mL)                            | 1000 microg/mL     | 15 microg/kg        | Dilute 5 mL (5000 microg) to 100 mL    | 50 microg/mL        | <b>Consult</b> | Consult      | Load – Infuse over 10 mins                |
| AmiNOPHYLLine (250 mg/10 mL)                      | 25 mg/mL           | 5 mg/kg             | Dilute 10 mL (250 mg) to 50 mL         | 5 mg/mL             | <b>Consult</b> | 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 – <b>IV</b>  | Various strengths  | 0.15 mg/kg          | Dilute to 1 mg/mL regardless of ampoule strength | 1 mg/mL             | <b>0.68 mg</b> | 0.68 mL      | Push   |
| Midazolam – <b>IM</b>  | 5 mg/mL            | 0.2 mg/kg           | Undiluted  | 5 mg/mL             | <b>0.9 mg</b>  | 0.18 mL      | IM   |
| Midazolam – <b>Buccal/Nasal</b>  | 5 mg/mL            | 0.3 mg/kg           | Undiluted  | 5 mg/mL             | <b>1.4 mg</b>  | 0.28 mL      | Drip dose into alternate nostrils<br>or inside cheek |
| Phenytoin (100 mg/2 mL) (250 mg/5 mL)  | 50 mg/mL           | 20 mg/kg            | Dilute 2 mL (100 mg) to 10 mL                    | 10 mg/mL            | <b>90 mg</b>   | 9 mL         | Infuse over 20 mins<br>*use 0.22 micron filter*      |
| Phenobarbital (200 mg/mL)  | 200 mg/mL          | 20 mg/kg            | Dilute 1 mL (200 mg) to 10 mL                    | 20 mg/mL            | <b>90 mg</b>   | 4.5 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            | <b>270 mg</b>  | 5.4 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            | <b>2.25 g</b>  | 11.3 mL      | Infuse over 10 mins<br>*use 5 micron filter*         |
| Sodium Chloride 3% – Hypertonic<br>*For raised ICP or hyponatremic seizures* | 0.5 mmol/mL        | 3 mL/kg             | Pre-mixed bag                                    | 0.5 mmol/mL         | <b>13.5 mL</b> | 13.5 mL      | Infuse over 10 mins<br>via central/large vein        |

| Electrolytes  | Vial concentration   | Recommended dose/kg | Preparation                         |                     | Dose              | Final volume to administer | Administration  |
|---|--|---------------------|-------------------------------------|---------------------|-------------------|----------------------------|---|
|   |  |                     | Dilution – Sodium Chloride 0.9%     | Final concentration |                   |                            |   |
| <b>Hypokalaemia (↓ Potassium)</b><br>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         | <b>1.35 mmol</b>  | 13.5 mL                    | Infuse over 1 hour  |
| <b>Hyperkalaemia (↑ Potassium)</b><br>Calcium gluconate (2.2 mmol/10 mL)                          | 0.22 mmol/mL   | 0.11 mmol/kg        | Undiluted                           | 0.22 mmol/mL        | <b>0.5 mmol</b>   | 2.3 mL                     | Large vein push over 3 - 5 mins<br>DO NOT give with sodium bicarbonate                        |
| Salbutamol Nebules  | 2.5 mg/2.5 mL  | Age based           | Dilute to 4 mL                      | –                   | <b>2.5 mg</b>     | –                          | Inhale via nebuliser  |
| Furosemide (20 mg/2 mL)   | 10 mg/mL   | 1 mg/kg             | Dilute 2 mL (20 mg) to 20 mL        | 1 mg/mL             | <b>4.5 mg</b>     | 4.5 mL                     | Push over 5 mins  |
| Glucose 10% (with insulin below)  | See Infusion guide for doses and administration directions.<br>In a rare event of cardiac arrest due to hyperkalaemia, Glucose 10% and Insulin may be given more quickly see below |                     |                                     |                     |                   |                            |   |
| Insulin – Actrapid (300 units/3 mL)   |  |                     |                                     |                     |                   |                            |   |
| <b>Hyperkalaemia (Cardiac arrest)</b><br>Glucose 10%  |  | 5 mL/ kg            | Use a Glucose 10% bag undiluted     | 10%                 | <b>22.5 mL</b>    | 22.5 mL                    | ARREST dose only. Push over 3 - 5 mins followed by insulin dose                               |
| Insulin - Actrapid (300 units/3 mL)   | 100 units/mL   | 0.1 units/ kg       | Dilute 0.1 mL (10 units) to 10 mL   | 1 unit/mL           | <b>0.45 units</b> | 0.45 mL                    | ARREST dose only. Push over 3 - 5 mins.<br>High risk of hypoglycaemia.<br>Monitor BSL closely |
| Sodium Bicarbonate 8.4%   | 1 mmol/mL  | 1 mmol/kg           | Dilute 10 mL (10 mmol) to 20 mL     | 0.5 mmol/mL         | <b>4.5 mmol</b>   | 9 mL                       | Large vein push over 5 mins<br>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           | <b>1.13 g</b>     | 4.5 mL                     | Oral, nasogastric or rectal   |
| <b>Hypocalcaemia – Critical (↓ calcium)</b><br>Calcium gluconate (2.2 mmol/10 mL)                 | 0.22 mmol/mL   | 0.11 mmol/kg        | Undiluted                           | 0.22 mmol/mL        | <b>0.5 mmol</b>   | 2.3 mL                     | Large vein push over 3 - 5 mins<br>DO NOT give with sodium bicarbonate                        |
| <b>Hypomagnesaemia or Arrhythmia</b><br>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         | <b>0.9 mmol</b>   | 4.5 mL                     | <b>Pulse absent</b> – Push over 3 - 5 mins<br><b>Pulse present</b> – 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            |                                  |                     | <b>45 mL</b>   | 45 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            | <b>67.5 mg</b> | 6.8 mL       | Infuse over 10 mins     |

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

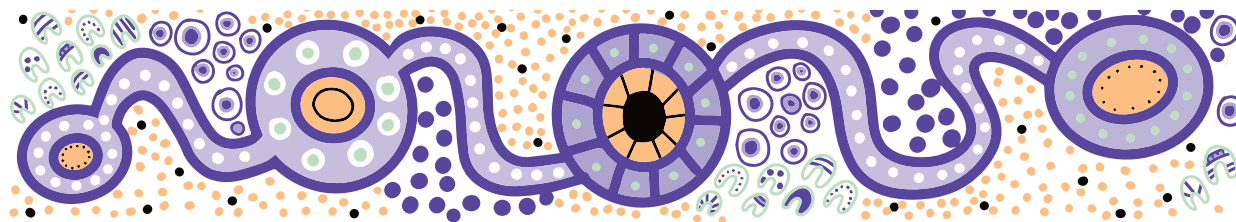
| Analgesia  | Vial concentration | Recommended dose/kg | Preparation                       |                     | Dose               | Final volume to administer | Administration   |
|--|--------------------|---------------------|-----------------------------------|---------------------|--------------------|----------------------------|--|
|  |                    |                     | Dilution – Sodium Chloride 0.9%   | Final concentration |                    |                            |  |
| Fentanyl – <b>Nasal</b> (100 microg/2 mL)<br>Use Mucosal Atomiser Device (MAD) | 50 microg/mL       | 1.5 microg /kg      | Undiluted                         | 50 microg/mL        | <b>6.75 microg</b> | 0.14 mL                    | Add 0.1 mL to initial dose to accommodate (MAD) dead space. May repeat after 5 - 10 mins |
| Fentanyl – <b>IV</b> (100 microg/2 mL)   | 50 microg/mL       | 0.5 - 1 microg/kg   | Dilute 2 mL (100 microg) to 10 mL | 10 microg/mL        | <b>2.25 microg</b> | 0.23 mL                    | Dose may be repeated after 5 mins if required  |
| Morphine – <b>IV</b> (10 mg/mL)  | 10 mg/mL           | 0.05 - 0.1 mg/kg    | Dilute 1 mL (10 mg) to 10 mL      | 1 mg/mL             | <b>0.23 mg</b>     | 0.23 mL                    | Dose may be repeated after 5 mins if required  |

| Analgesia if intraosseous <b>IO</b> drug or fluid administration causes pain | Vial concentration | Recommended dose/kg | Dilution – Sodium Chloride 0.9% | Final concentration | Dose           | Final volume | Administration  |
|--|--------------------|---------------------|---------------------------------|---------------------|----------------|--------------|---|
| Lidocaine 1% <b>IO</b>   | 10 mg/mL (1%)      | 0.5 mg/kg           | Undiluted                       | 10 mg/mL            | <b>2.25 mg</b> | 0.23 mL      | Instill dose - Follow with 1 mL slow push of Sodium Chloride 0.9% over 1 - 2 mins. Allow to dwell for 1 min. 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 | Dilution – Sodium Chloride 0.9% | 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            | <b>1.1 mg</b>  | 0.11 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           | <b>Consult</b> | <b>Consult</b> | Infuse over 5 - 10 mins   |

# Queensland Paediatric Sepsis Program

Reducing the burden of sepsis on Queensland Children and families  
[childrens.health.qld.gov.au/sepsis](http://childrens.health.qld.gov.au/sepsis)



4.5kg

| Antimicrobials                          | Vial concentration | Recommended dose/kg | Preparation  |                     | Dose          | Dose in mL | Administration - 1st dose   |
|---|--------------------|---------------------|--|---------------------|---------------|------------|---|
|   |                    |                     | Dilution - Sodium Chloride 0.9%  | Final concentration |               |            |   |
| Aciclovir (250 mg/10 mL) (500 mg/20 mL) | 25 mg/mL           | 20 mg/kg            | Dilute 10 mL (250 mg) to a final volume of 50 mL   | 5 mg/mL             | <b>90 mg</b>  | 18 mL      | Infuse over 60 mins   |
| Amoxicillin (1 g)                       | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 20 mL   | 50 mg/mL            | <b>225 mg</b> | 4.5 mL     | Infuse over 30 mins. Doses of 100 mg/kg may be required for meningitis                                      |
| AMPicillin (1 g)                        | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 10 mL   | 100 mg/mL           | <b>225 mg</b> | 2.3 mL     | PUSH over 3 - 5 mins. Doses of 100 mg/kg may be required for meningitis                                     |
| Benzylpenicillin (1.2 g)                | 1200 mg            | 60 mg/kg            | Reconstitute 1.2 g vial with 6 mL WFI - Withdraw entire volume and further dilute to a final volume of 20 mL | 60 mg/mL            | <b>270 mg</b> | 4.5 mL     | Infuse over 30 mins   |
| cefaZOLin (1 g)                         | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 10 mL   | 100 mg/mL           | <b>225 mg</b> | 2.3 mL     | PUSH over 3 - 5 mins. NEONATE - seek ID/specialist advice   |
| cefOTAXIME (1 g)                        | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 10 mL   | 100 mg/mL           | <b>225 mg</b> | 2.3 mL     | PUSH over 3 - 5 mins  |
| cefOTAXIME <b>Intramuscular</b> (1 g)   | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 2.6 mL of WFI   | 330 mg/mL           | <b>225 mg</b> | 0.68 mL    | <b>IM:</b> Max 0.5 mL per IM injection site   |
| cefTAZIDIME (1 g)                       | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 10 mL   | 100 mg/mL           | <b>225 mg</b> | 2.3 mL     | PUSH over 3 - 5 mins  |
| cefTRIAxONE (1 g)                       | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI - Withdraw entire volume and further dilute to a final volume of 25 mL   | 40 mg/mL            | <b>225 mg</b> | 5.6 mL     | PUSH over 5 mins. NEONATE - contraindicated (risk of kernicterus) USE cefOTAXIME                            |
| cefTRIAxONE <b>Intramuscular</b> (1 g)  | 1000 mg            | 50 mg/kg            | Reconstitute 1 g vial with 2.3 mL Lidocaine 1%   | 350 mg/mL           | <b>225 mg</b> | 0.64 mL    | <b>IM:</b> Max 0.5 mL per IM injection site. NEONATE - contraindicated (risk of kernicterus) USE cefOTAXIME |

If final volume to administer less than 5 mL it is reasonable to dilute the dose up to a practical volume for the pump to infuse.

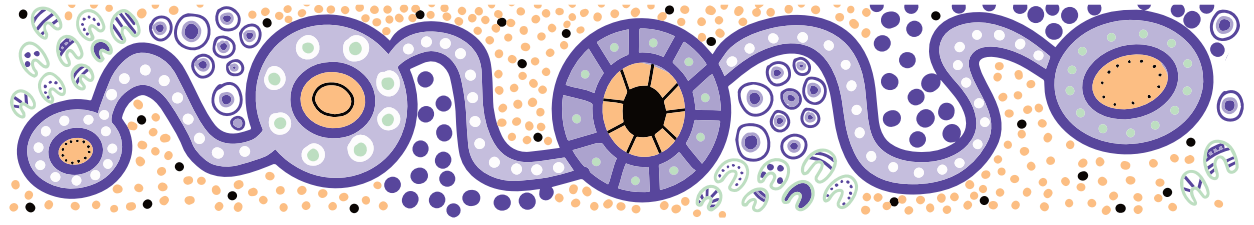
4.5kg

| Antimicrobials                                | Vial concentration  | Recommended dose/kg | Preparation   |                     | Dose           | Dose in mL | Administration - 1st dose                                       |
|---|---|---------------------|---|---------------------|----------------|------------|---|
|   |   |                     | Dilution - Sodium Chloride 0.9%   | Final concentration |                |            |   |
| Ciprofloxacin (200 mg/100 mL)                 | 2 mg/mL   | 10 mg/kg            | Undiluted   | 2 mg/mL             | <b>45 mg</b>   | 22.5 mL    | Infuse over 60 mins.<br>NEONATE - seek ID/specialist advice     |
| Clindamycin (600 mg/4 mL) - NEONATE           | 150 mg/mL   | 7 mg/kg             | Dilute 4 mL (600 mg) to a final volume of 60 mL   | 10 mg/mL            | <b>31.5 mg</b> | 3.2 mL     | Infuse over 30 mins   |
| Clindamycin (600 mg/4 mL)                     | 150 mg/mL   | 10 mg/kg            | Dilute 4 mL (600 mg) to a final volume of 60 mL   | 10 mg/mL            | <b>45 mg</b>   | 4.5 mL     | Infuse over 30 mins   |
| Flucloxacillin (1 g)                          | 1000 mg   | 50 mg/kg            | Reconstitute 1 g vial with 5 mL WFI -<br>Withdraw entire volume and further dilute to a<br>final volume of 20 mL  | 50 mg/mL            | <b>225 mg</b>  | 4.5 mL     | PUSH over 3 - 5 mins (phlebitis<br>risk) OR Infuse over 30 mins |
| Gentamicin (80 mg/2 mL) - NEONATE             | 40 mg/mL  | 5 mg/kg             | Dilute 2 mL (80 mg) to a final volume of 8 mL   | 10 mg/mL            | <b>22.5 mg</b> | 2.3 mL     | Infuse over 30 mins   |
| Gentamicin (80 mg/2 mL)                       | 40 mg/mL  | 7.5 mg/kg           | Dilute 2 mL (80 mg) to a final volume of 8 mL   | 10 mg/mL            | <b>33.8 mg</b> | 3.4 mL     | Infuse over 30 mins   |
| linCOMYCIN - NEONATE                          | No neonatal dosing recommendation for linCOMYCIN - use Clindamycin IV |                     |   |                     |                |            |   |
| Meropenem (1 g)                               | 1000 mg   | 40 mg/kg            | Reconstitute 1 g vial with 5 mL WFI -<br>Withdraw entire volume and further dilute to a<br>final volume of 20 mL  | 50 mg/mL            | <b>180 mg</b>  | 3.6 mL     | PUSH over 5 mins  |
| Metronidazole (500 mg/100 mL) - NEONATE       | 5 mg/mL   | 15 mg/kg            | Undiluted   | 5 mg/mL             | <b>67.5 mg</b> | 13.5 mL    | NEONATAL LOADING DOSE -<br>Infuse over 20 mins                  |
| Metronidazole (500 mg/100 mL)                 | 5 mg/mL   | 7.5 mg/kg           | Undiluted   | 5 mg/mL             | <b>33.8 mg</b> | 6.8 mL     | Infuse over 20 mins   |
| Piperacillin/Tazobactam<br>(4000 mg - 500 mg) | 4000 mg<br>Piperacillin<br>+ 500 mg<br>Tazobactam                     | 100 mg/kg           | Reconstitute 4 g vial with 20 mL WFI -<br>Withdraw entire volume and further dilute to a<br>final volume of 50 mL | 80 mg/mL            | <b>450 mg</b>  | 5.6 mL     | Infuse over 30 mins.<br>Dose based on Piperacillin<br>component |
| Vancomycin (500 mg)                           | 500 mg  | 15 mg/kg            | Reconstitute 500 mg vial with 3 mL WFI -<br>Withdraw entire volume and further to a<br>final volume of 100 mL     | 5 mg/mL             | <b>67.5 mg</b> | 13.5 mL    | Infuse over 60 - 120 mins                                       |

If final volume to administer less than 5 mL it is reasonable to dilute the dose up to a practical volume for the pump to infuse.

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| Drug                             | Vial concentration | Recommended dose/kg range        | Preparation                                |                                | Final rate range         | Administration/route |
|----------------------------------|--------------------|----------------------------------|--|--------------------------------|--------------------------|----------------------|
|                                  |                    |                                  | Glucose 5% or Sodium Chloride 0.9%         | Final concentration            |                          |                      |
| <b>Open Ductus Arteriosus</b>    |                    |                                  |  |                                |                          |                      |
| Alprostadil (Prostaglandin/PGE1) | 500 microg/mL      | <b>50 to 100 nanogram/kg/min</b> | Dilute <b>0.2 mL (100 microg)</b> to 50 mL | 2 microg/mL (2000 nanogram/mL) | <b>6.8 to 13.5 mL/hr</b> | IV                   |

| <b>Inotropes</b>               |                 |                                |                                       |              |                          |    |
|--------------------------------|-----------------|--------------------------------|---------------------------------------|--------------|--------------------------|----|
| Adrenaline (Epinephrine)       | 1:1000; 1 mg/mL | <b>0.05 to 1 microg/kg/min</b> | Dilute <b>1 mL (1 mg)</b> to 50 mL    | 20 microg/mL | <b>0.7 to 13.5 mL/hr</b> | IV |
| Dobutamine                     | 250 mg/20 mL    | <b>2 to 20 microg/kg/min</b>   | Dilute <b>6 mL (75 mg)</b> to 50 mL   | 1.5 mg/mL    | <b>0.4 to 3.6 mL/hr</b>  | IV |
| Dopamine                       | 200 mg/5 mL     | <b>2 to 20 microg/kg/min</b>   | Dilute <b>1.5 mL (60 mg)</b> to 50 mL | 1.2 mg/mL    | <b>0.5 to 4.5 mL/hr</b>  | IV |
| Noradrenaline (Norepinephrine) | 4 mg/4 mL       | <b>0.05 to 1 microg/kg/min</b> | Dilute <b>1 mL (1 mg)</b> to 50 mL    | 20 microg/mL | <b>0.7 to 13.5 mL/hr</b> | IV |

| <b>Antiarrhythmics - only in consultation with a Paediatric Cardiologist</b> |              |  |  |          |   |    |
|--|--------------|--|--|----------|---|----|
| AmiODAROne <u>LOAD</u>   | 50 mg/mL     | <b>25 microg/kg/min</b><br>(for 4 hrs) | Dilute <b>2 mL (100 mg)</b> to 50 mL in Glucose 5% | 2 mg/mL  | Dose <b>27 mg (13.5 mL)</b><br>infuse at <b>3.4 mL/hr</b> | IV |
| AmiODAROne [after loading dose]  | 50 mg/mL     | <b>5 to 15 microg/kg/min</b>           | Dilute <b>2 mL (100 mg)</b> to 50 mL in Glucose 5% | 2 mg/mL  | <b>0.7 to 2 mL/hr</b>                                     | IV |
| Esmolol  | 100 mg/10 mL | <b>50 to 200 microg/kg/min</b>         | Undiluted – draw up 50 mL (500 mg)                 | 10 mg/mL | <b>1.4 to 5.4 mL/hr</b>                                   | IV |

| <b>Sedation</b> |                   |                               |   |              |                         |    |
|-----------------|-------------------|-------------------------------|---|--------------|-------------------------|----|
| Fentanyl        | 100 microg/2 mL   | <b>1 to 10 microg/kg/hr</b>   | Dilute <b>10 mL (500 microg)</b> to 50 mL | 10 microg/mL | <b>0.5 to 4.5 mL/hr</b> | IV |
| Midazolam       | Various strengths | <b>30 to 120 microg/kg/hr</b> | Dilute <b>10 mg</b> to 50 mL              | 0.2 mg/mL    | <b>0.7 to 2.7 mL/hr</b> | IV |
| Morphine        | Various strengths | <b>5 to 80 microg/kg/hr</b>   | Dilute <b>5 mg</b> to 50 mL               | 0.1 mg/mL    | <b>0.2 to 3.6 mL/hr</b> | IV |

| <b>Paralytic Agents – only on discussion with Paediatric Intensivist</b> |            |                             |                                      |         |                         |    |
|--|------------|-----------------------------|--------------------------------------|---------|-------------------------|----|
| Vecuronium   | 10 mg vial | <b>1 to 3 microg/kg/min</b> | Dilute <b>25 mL (50 mg)</b> to 50 mL | 1 mg/mL | <b>0.3 to 0.8 mL/hr</b> | IV |

| <b>Electrolytes</b>                      |                |                        |   |           |                   |   |
|--|----------------|------------------------|---|-----------|-------------------|---|
| <b>Hyperkalaemia</b><br>Glucose 10%      | –              | <b>5 mL/kg/hr</b>      | Use a glucose 10% bag – Undiluted<br><i>Administer with Actrapid infusion</i>   | 10%       | <b>22.5 mL/hr</b> | IV. Run insulin and glucose infusions (concurrently) until K+ within range monitor BSLs |
| <b>AND</b><br>ACTRAPID (Insulin neutral) | 300 units/3 mL | <b>0.1 units/kg/hr</b> | Dilute <b>0.5 mL (50 units)</b> to 50 mL<br><u>with Sodium Chloride 0.9%</u><br><i>Administer with Glucose infusion</i> | 1 unit/mL | <b>0.5 mL/hr</b>  |   |