

EQUIPMENT AND DRUGS FOR RESUSCITATION OF A NEONATE

Based on the recommendations of the Australian and New Zealand Council on Resuscitation: Neonatal Guideline 13.1 (December 2010)

Appropriate area for resuscitation of the newborn

- Infant resuscitaire with inbuilt heater and light, or
- A firm, padded resuscitation surface and an overhead warmer
- Clock with timer in seconds
- Good light in the resuscitation area

Temperature maintenance

- Warmed towels or warm wraps
- Polyethylene bag or sheet (food grade, heat resistant) for infants less than 28 weeks gestation or less than 1500 grams birth weight
- Woolen hats (various sizes)

Medical gases

- A source of medical oxygen (cylinder or reticulated)
- Oxygen flow meter allowing a flow rate of up to 10 L/minute
- A source of medical air (cylinder or reticulated)
- Air flow meter allowing a flow rate of up to 10 L/minute
- Oxygen and air tubing (green argyle)
- Air/oxygen blender

Monitoring equipment

- Stethoscope (neonatal size)
- Pulse oximeter and neonatal probe
- Posy to secure oximeter sensor

Suction equipment

- Suction catheters: Fg 6 and Fg 8 and either Fg 10 or Fg 12
- Suction tubing
- Access to a suction unit set at a negative pressure of 100 mmHg (133 cmH₂O, 13 kPa or 1.9 Psi)

Positive pressure ventilation equipment

Either:

- T-piece device or
- Flow inflating bag with a pressure safety valve and a manometer

And:

- Self inflating bag with a removable oxygen reservoir (plus a manometer and a PEEP valve, if available)
- Face masks in a range of sizes suitable for premature and term infants (not Rendell Baker type)
- Laryngeal mask airway: size 1
- Oropharyngeal (Guedel) airways sizes 00 & 0

Intubation equipment

- Laryngoscope handle with straight blades: sizes 00, 0 & 1
- Spare bulbs & batteries (unless using a fiber optic laryngoscope handle)
- Endotracheal tubes (un- cuffed): sizes 2.5, 3.0, 3.5, 4.0 mm
- Endotracheal stylet or introducer (for oral intubation only)
- Magill's forceps, neonatal size (optional)
- End tidal carbon dioxide detector (Pedi-Cap™) or similar
- Meconium aspirator to apply suction directly to the endotracheal tube (optional)

Equipment for gastric decompression

- Feeding tubes: sizes Fg 8 and/or Fg 10
- 10 mL syringe for aspirating the gastric contents

Equipment for umbilical venous catheterization

- Paediatric instrument set
- Umbilical catheters:
 - o Fg 5.0 > 1000 gram infant or
 - o Size Fg 5 feeding tube if umbilical catheters are unavailable.
 - o Fg 3.5 < 1000 gram infant (in a tertiary birth centre)

Equipment for peripheral intravenous cannulation or intra-osseous cannulation

- Intravenous cannula: size Fg 24
- Intra-osseous needle Fg 18
- Three way tap and extension tubing primed with 0.9% sodium chloride
- Arm board

Equipment for securing IV's, UVC's and endotracheal tubes

- Non-latex adhesive tape (Leukoplast™ & Elastoplast™)
- Cotton or silk ties
- Thin DuoDerm™ (or similar) to protect the skin on the face
- Scissors

Equipment for drug administration

- Syringes: 2 mL, 5 mL, 10 mL & 20 mL
- Needles: Fg 19, Fg 21, Fg 23, Fg 25 and blunt drawing up needles

Drugs

- Adrenaline 1: 10,000 concentration (0.1 mg/mL)
- Volume expanders:
 - o 0.9% sodium chloride
 - o O Rh negative blood (needs to be readily available)
- 0.9% sodium chloride for priming and flushing intravenous lines
- Sterile water for injection

Resuscitation Record Sheet

Equipment list as per

http://www.neoresus.org.au/pages/documents/Recommended_equipment_anddrugs_March_2011.pdf