AIDAA 2016 Guidelines for Tracheal Intubation in the Intensive Care Unit

**STEP 1: Preoxygenation and induction of anaesthesia**
- Two persons (one experienced)
- Optimise preoxygenation with one of the following:
  - Noninvasive ventilation with 100% O₂, pressure support of 5-15 cm H₂O with PEEP of 5 cm H₂O for 3 minutes (nasal cannula with O₂ flow at 15 L/min)
  - HFNC O₂ therapy
- Induction - Etomidate or Ketamine with Succinylcholine (if not contraindicated) or Rocuronium
- Use cricoid pressure
- IPPV with bag-valve mask with reservoir bag (use external PEEP valve set to 5-10 cm H₂O if available) / IPPV with PEEP using the ventilator

**STEP 2: Laryngoscopy and tracheal intubation**
- Continue nasal oxygen using O₂ flow at 15 L/min OR HFNC O₂
- Direct/video laryngoscopy
- Maximum two attempts (repeat attempts only if SpO₂ ≥ 95%)
- Mask ventilation between attempts
- Optimise position, use external laryngeal manipulation, release cricoid pressure, use bougie/stylet if required
- Consider changing device/ technique/operator between attempts
- Maintain depth of anesthesia

**STEP 3: Insert SAD to maintain oxygenation**
- Continue nasal oxygen using O₂ flow at 15 L/min OR HFNC O₂
- Preferably use second generation SAD
- Maximum two attempts (only if SpO₂ ≥ 95%)
- Mask ventilation between attempts
- Consider changing size or type of SAD
- Maintain depth of anesthesia

**STEP 4: Rescue face mask ventilation**
- Continue nasal oxygen using O₂ flow at 15 L/min OR HFNC O₂
- Ensure neuromuscular blockade
- Final attempt at face mask ventilation using optimal technique and adjuncts

**STEP 5: Emergency cricothyroidotomy**
- Continue nasal oxygen using O₂ flow at 15 L/min OR HFNC O₂ and efforts at rescue face mask ventilation
- Perform one of the following techniques
  - Surgical cricothyroidotomy
  - Wide bore cannula cricothyroidotomy
  - Needle cricothyroidotomy (use pressure regulated jet ventilation and attempt to keep the upper airway patent)

This flow chart should be used in conjunction with the text

**FOB** = Fibreoptic bronchoscope  **PEEP** = Positive end-expiratory pressure
**HFNC** = High flow nasal cannula  **SAD** = Supraglottic airway device
**IPPV** = Intermittent positive pressure ventilation  **SpO₂** = Oxygen saturation

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**Post-procedure plan**
1. Further airway management plan
2. Treat airway oedema if suspected
3. Monitor for complications
4. Counselling and documentation

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