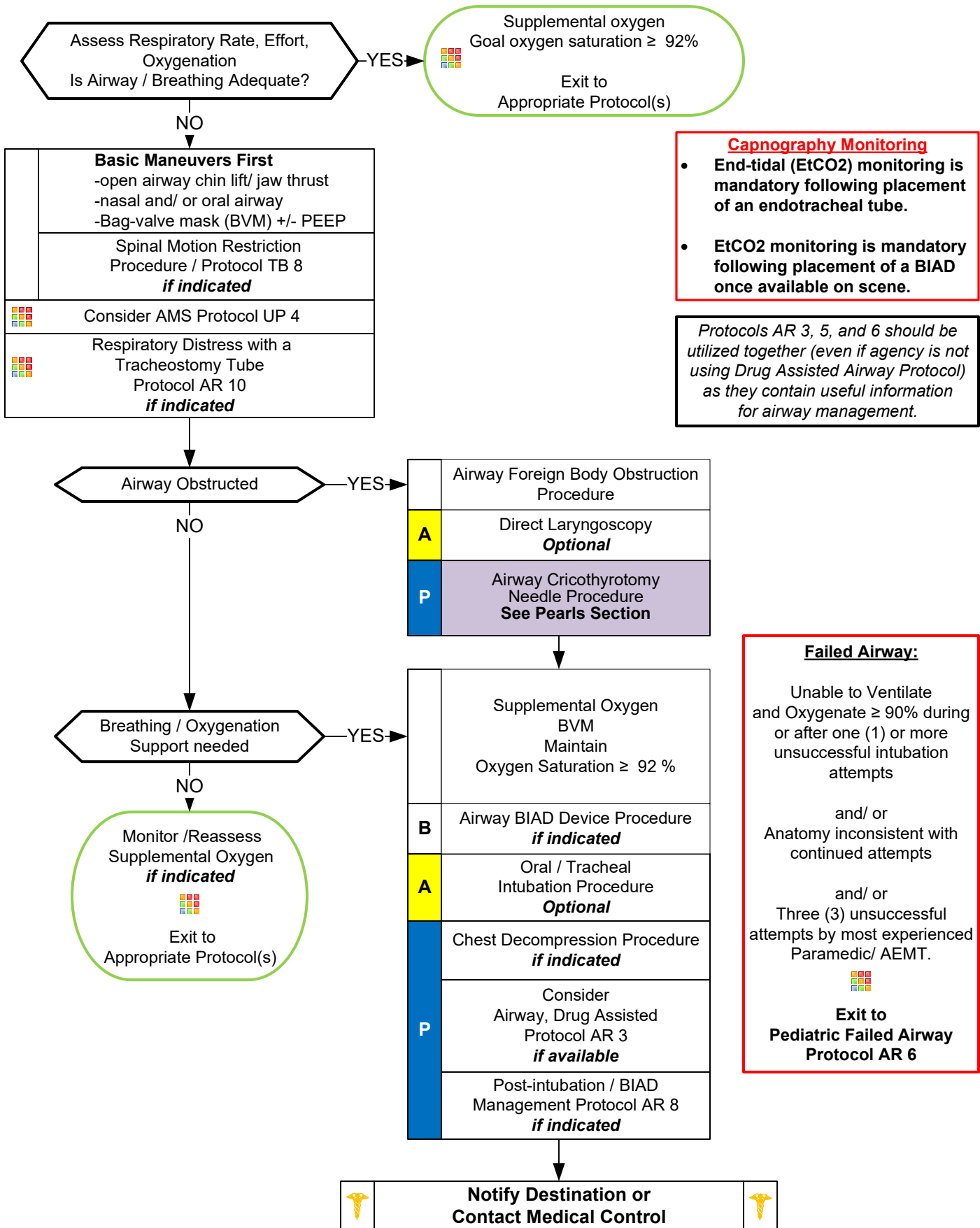




Pediatric Airway





Pediatric Airway

Pearls

This protocol is for use in patients who FIT within a Pediatric Medication/ Skill Resuscitation System Product.

- For the purposes of this protocol, a secure airway is when the patient is receiving appropriate oxygenation and ventilation.
- If an effective airway is being maintained by BVM with continuous pulse oximetry values of $\geq 90\%$, it is acceptable to continue with basic airway measures.
- Ventilation rate:
30 for Neonates, 25 for Toddlers, 20 for School Age, and for Adolescents the normal Adult rate of 10 - 12 per minute. Maintain EtCO₂ between 35 - 45 and avoid hyperventilation.
- Ketamine for airway intervention and/ or sedation purposes:
Ketamine may be used in pediatric patients (fit within a Pediatric Medication/Skill Resuscitation System product, ≤ 15 years of age, or ≤ 49 kg) with DIRECT ONLINE MEDICAL ORDER by the system MEDICAL DIRECTOR only.
Agencies using Ketamine in the pediatric population must also be using in their adult population.
- KETAMINE:
Ketamine may be used with or without a paralytic agent in conjunction with either an OPA, NPA, BIAD or endotracheal tube. BIAD is preferred over endotracheal tube until hypoxia and/ or hypotension are corrected.
Ketamine may be used during the resuscitation of hypoxia or hypotension in conjunction with airway management. Once hypoxia and hypotension are corrected, use of a sedative and paralytic can proceed if indicated.
Ketamine may be used in the dangerously combative patient requiring airway management IM. IV/ IO should be established as soon as possible.
Ketamine may be used for sedation once a BIAD or endotracheal tube are established and confirmed.
Agencies using Ketamine must follow Standards Policy: Medial Policy Section Ketamine Program Requirements. Medical Policy 2.
- Intubation:
Attempt defined as laryngoscope blade passing the teeth or endotracheal tube passed into the nostril.
Use of a stylet is recommended in all pediatric intubations.
Endotracheal tube: Depth = 3 x the diameter of the ETT. Estimated Size = 16 + age (years) / 4. Term newborn = 3.5 mm.
If First intubation attempt fails, make an adjustment and try again: (Consider change of provider in addition to equipment)
- NC EMS Airway Evaluation Form:
Fully complete and have receiving healthcare provider sign confirming BIAD or endotracheal tube placement.
Complete online in region specific *ReadyOp* and upload completed form.
Complete when Ketamine, Etomidate, Succinylcholine and/ or Rocuronium or used to facilitate use of a BIAD and/ or endotracheal intubation. Paramedics/ AEMT should consider using a BIAD if endotracheal intubation is unsuccessful.
- Secure the endotracheal tube well and consider c-collar in pediatric patients (even in absence of trauma) to better maintain ETT placement.
Manual stabilization of endotracheal tube should be used during all patient moves / transfers.
- Airway Cricothyrotomy Percutaneous Needle Procedure:
Indicated as a lifesaving / last resort procedure in pediatric patients < 10 years of age.
Very little evidence to support it's use and safety.
A variety of alternative pediatric airway devices now available make the use of this procedure rare.
Agencies who utilize this procedure must develop a written procedure, establish a training program, maintain equipment and submit procedure and training plan to the State Medical Director/ Regional EMS Office.
 ≥ 10 years: Surgical cricothyrotomy or commercial kits based on agency preference recommended.
- DOPE: Displaced tracheostomy tube/ ETT, Obstructed tracheostomy tube/ ETT, Pneumothorax and Equipment failure.