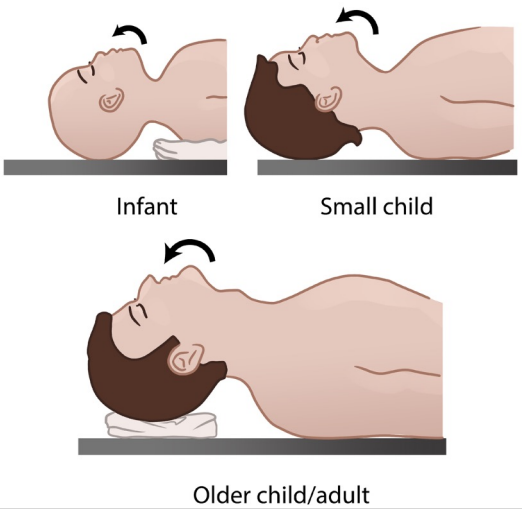
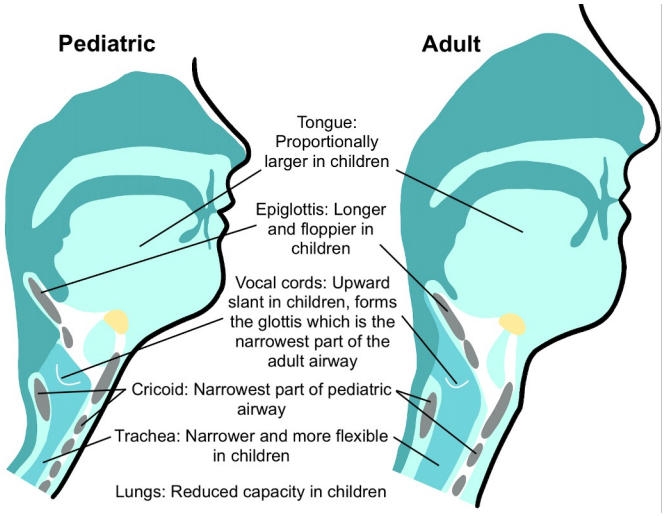
# Rapid Sequence Intubation (RSI)

| APPROACH TO RSI | |
|---|---|
| **1) Preparation** | • Identify patient factors that may impact medication choice such as cardiovascular status, raised ICP, bronchospasm, congenital heart defects, or syndromic child<br>• Identify risk factors for difficult airway management including airway trauma, obstruction, and anatomical abnormalities due to genetic syndromes<br>• Assemble and check equipment including monitors, IV, large-bore suction, endotracheal tube (ETT) and laryngoscope and discuss contingency plan |
| **2) Preoxygenation** | • Ideally with 100% FiO2 via nonrebreather mask or face mask<br>• Enrich environment with oxygen with a mask nearby patient's head in uncooperative child<br>• Apneic oxygenation via nasal cannula while intubating |
| **3) Pre-treatment** | • Atropine (an anticholinergic) to prevent bradycardia is optional and more often used in children <1 year of age<br>• Midazolam (a benzodiazepine) or ketamine (a dissociative anesthetic) in an uncooperative child to facilitate preoxygenation |
| **4) Induction** | • Choice of induction agent depends on factors such as hemodynamic stability, septic shock, raised ICP, status asthmaticus, and status epilepticus<br>• Etomidate, propofol, and ketamine are commonly used +/- opioids like fentanyl or remifentanil |
| **5) Paralysis** | • Rocuronium – preferred if sugammadex is available for reversal<br>• Succinylcholine – preferred otherwise, if not contraindicated such as in denervating neuromuscular disease, malignant hyperthermia, hyperkalemia, recent burns or multi-trauma |
| **6) Positioning** | • Sniffing position in children >6 years if no c-spine concerns and shoulder roll in infants<br>• Consider cricoid pressure in high-risk aspiration scenario is controversial<br>• Backward, upward, rightward pressure (BURP) to aid in positioning the view of the glottis<br>• Head-up positioning to improve functional residual capacity and preoxygenation in order to prolong time to desaturation |
| **7) Placement** | • Insert endotracheal tube and confirm position with end-tidal carbon dioxide and auscultation |
| **8) Maintenance** | • Set ventilator and provide ongoing sedation with opioids or benzodiazepines for example<br>• Confirm depth of ETT with chest x-ray if in emergency department/pediatric ICU |

## POSITIONING




## ANATOMY

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