

APPENDIX A : TRAUMA AIRWAY ASSESSMENT

Trauma Airway Management		
Airway Assessment		
<ul style="list-style-type: none"> All trauma airways are potentially high-risk. Anticipate a difficult airway. Identify critical team members and verbalize role assignments. Initiate pre-oxygenation (1,2). Consider Ketamine (0.5-1.0 mg/kg IV/IO) for delayed sequence intubation if combative or otherwise uncooperative patient (3,4,5). Recall that the neutral position ("C-spine stabilization") degrades the laryngoscopic view. 		
Rapid Sequence Induction (RSI) and Intubation Pathway		
<p>1. Confirm equipment availability and function IV/IO, suction, self-inflating bag and mask, oxygen source, laryngoscope- direct and video (5), ETT with stylet and/or gum elastic bougie, oral & nasal airways, surgical airway kit, drugs, CO2 detector, monitors, other rescue equipment</p> <p>2. Pre-Oxygenate (Denitrogenate) the lungs (1,2,6)</p> <ul style="list-style-type: none"> Prolongs tolerance of apneic period Goal is ≈ 3 minutes of tidal volume breathing at 90% FiO₂ With standard reservoir facemask set flow rate of oxygen as high as possible Recommend augmenting with nasal cannula at 15L/min oxygen in preparation for apneic oxygenation, leave in situ throughout procedure (2,8) Elevate head of bed if not contraindicated <p>3. Maintain cervical spine stabilization</p> <p>4. Remove front of cervical collar</p> <p>5. Consider cricoid pressure simultaneous w/ medication administration (9,10)</p> <p>6. Administer medications : Initiate RSI</p> <p>Sedative/hypnotic</p> <ul style="list-style-type: none"> Ketamine (First Line): 2 mg/kg IV/IO Etomidate (Second Line): 0.3 mg/kg IV/IO <p>Unstable patients require reduced dosage of induction agent.</p>	<p>Neuromuscular Blockade</p> <ul style="list-style-type: none"> Rocuronium: 1.2 mg/kg IV/IO or Vecuronium: 0.1 mg/kg IV/IO or Succinylcholine: 1.5 mg/kg IV/IO <p>7. Perform laryngoscopic tracheal intubation</p> <ul style="list-style-type: none"> Following onset of neuromuscular blockade Recommend gum elastic bougie as primary ETT stylet <p>8. If laryngoscopic view is poor:</p> <ul style="list-style-type: none"> Apply external laryngeal manipulation technique(s) Consider alternative visualization method or Supraglottic airway device <p>9. Confirm tracheal intubation</p> <ul style="list-style-type: none"> Visualize tube passing between the vocal cords (First Line) Wave form or digital capnography when available (Second Line) Easy chest rise, equal axillary breath sounds/absence of gastric insufflation, CO₂ Calorimeter, and "fog" in ETT Esophageal detector bulb or fiber optic confirmation during cardiac arrest <p>10. Provide continuing care IAW Anesthesia CPG</p>	
Recommendations for Pediatric Patients		
<ol style="list-style-type: none"> Train to expect pediatric patients. Have a dedicated pediatric airway cart, including Broselow tape or equivalent. Pre-dose with atropine IV/IO (0.02mg/kg, minimum dose 0.1mg, maximum dose 0.5mg) in all <1 years old, those <5 who are receiving succinylcholine, and in all who receive a 2nd dose of succinylcholine Induction - <ul style="list-style-type: none"> Ketamine (first line) 2mg/kg IV/IO Etomidate (second line) 0.3mg/kg IV/IO Neuromuscular blockade - <ul style="list-style-type: none"> Succinylcholine 1.5mg/kg IV/IO (2mg/kg <5 years old) or Rocuronium 1mg/kg IV/IO Avoid surgical airway in <12 years old - use needle cricothyroidotomy (12-14 gauge), tracheostomy preferred over surgical cricothyroidotomy 		
Unable to Intubate: Can You Mask Ventilate?		
<p>Mask Ventilation Pearls</p> <ul style="list-style-type: none"> Skilled operator Good seal Jaw thrust Oral airway Nasal airway(s) Two operator mask ventilation 	<p>YES</p> <ul style="list-style-type: none"> Improve position, change blade/operator, laryngeal manipulation technique, gum elastic bougie. Attempt alternate technique: Fiber optic, video laryngoscope, tracheal trans illumination device. More than ≈ 3 attempts at intubation may abolish your ability to mask ventilate due to edema caused by laryngoscopy. Surgical airway (Cricothyroidotomy or tracheostomy) 	
	<p>NO</p> <ul style="list-style-type: none"> Emergency pathway...seconds matter. Supraglottic airway or Surgical cricothyroidotomy 	