Advanced Airway Management

Confirmation of Endotracheal tube placement:

- *Following direct visualization of the ET tube through the cords, verify breath sounds/chest rise, absence of gastric sounds. Quantitative $ETCO_2$ is the preferred next step to confirm initial tube placement though it does require ongoing metabolism/CO_2 production. EDD may also be used.
- When available, continuous $ETCO_2$ should be used to confirm initial tube placement and verify ongoing maintenance of proper placement throughout transport especially after any moves until transfer to ED staff.

King LTD Sizing Chart

Size	Patient height	Connector Color †	Inflation Volume
2	35-45 in	Green	25-35ml
2.5	41-51 in	Orange	30-40ml
3	4-5 ft	Yellow	45-60ml
4	5-6ft	Red	60-80ml
5	>6 ft	Purple	70-90ml

† Note: Connector Colors for King LTD do **NOT** correlate with Broselow® colors. Broselow® tape lists LMA size which approximates sizing for King LTD and may be used as a guide for pediatric sizing.

WARNINGS

- ! Repeated or prolonged attempts to intubate may be detrimental to patient.
- ! Cricothyroidotomy is contraindicated in children under10 years.

Care: Adults and Pediatrics

Inadequate Ventilations with basic maneuvers, prolonged transport or need to protect airway.

B E

All ages: Place King Airway if no gag reflex present (tolerating OP airway).

If successful King placement with improved ventilations, ventilate at age-appropriate rate and monitor SpO_2. If unsuccessful continue BLS efforts and seek assistance from higher level of care.

I

Peds: Place King Airway if no gag reflex present (tolerating OP airway).

Adults: Consider King Airway if no gag reflex present (tolerating OP airway).

If successful King placement with improved ventilations, ventilate at age-appropriate rate and monitor SpO_2 and $ETCO_2$.

For pediatrics, if unsuccessful continue BLS efforts and seek assistance from higher level of care.

For adults, if unsuccessful **or *elect* to intubate**: Attempt to intubate up to 3 times. (consider utilizing Bougie).

P

All ages: Consider King Airway if no gag reflex present (tolerating OP airway).

If successful King placement with improved ventilations, ventilate at age-appropriate rate and monitor SpO_2 and $ETCO_2$.

For all ages, if unsuccessful **or *elect* to intubate**: Attempt to intubate up to 3 times. (consider utilizing Bougie).

Successful intubation with placement confirmed?*

Yes → Ventilate at age appropriate rate at and monitor SpO_2 and $ETCO_2$.

No → (P)**

If unsuccessful *and unable to ventilate*: **Age 10 and up only**, perform surgical cricothyroidotomy.

Pearls

- Continuous $ETCO_2$ monitoring shall be used for all intubated patients and with King airway as authorized (EMT E/I/P).
- Utilize cervical collar and commercial tube holder to maintain ET-tube placement.
- Bougie may be utilized on the 1st, 2nd or 3rd attempt based on initial airway assessment.
- Consider bi-manual laryngoscopy and head elevation to assist with visualization during intubation.
- I/P providers should consider utilizing King airway if anticipate difficult airway or as a more rapid means of improving ventilation/oxygenation in unconscious patients.
- Bougie will fit into size 6.0 ETT and above
- Consider NP airway instead of OP airway if anticipate placing ETT or King.
- EMT-P(all ages) and EMT-I (non-pediatric) may elect to intubate first instead of using King airway at their discretion as resources allow.
- ***Surgical Cricothyrotomy is not included on the procedure schedule from the VA Department of Health for an EMT-I. In the event of an immediate threat to loss of life medical control may authorize an EMS provider with specific training to provide care not authorized under existing protocol.*

Performance indicators

- Timeliness of establishing proper ventilation regardless of means selected with minimal attempts to secure airway.
- Verification of initial tube placement and ongoing maintenance as outlined above shall be performed and documented as well as tube size/position at teeth.