

## ➤ ADVANCED LIFE SUPPORT SKILLS LIST

The following skills may be performed by Contra Costa County paramedics following treatment guidelines or base hospital orders:

1. Adult oral endotracheal intubation
2. Esophageal Airway (King LTS-D)\*
3. Removal of foreign body obstruction with magill forceps
4. Defibrillation
5. Cardioversion
6. Intravenous therapy
7. Drug therapy (see drug list)
8. Needle thoracostomy
9. Intraosseous infusion\*
10. Pediatric oral endotracheal intubation\* (*limited to patients > 40 kg*)
11. Use of pulse oximeter
12. End-tidal CO<sub>2</sub> monitoring (ETCO<sub>2</sub>)
13. Glucose Testing
14. External Cardiac Pacing\*
15. 12-Lead ECG
16. Continuous Positive Airway Pressure (CPAP)

**\* Only paramedics who are currently accredited in Contra Costa County may perform these skills.**

## ➤ AIRWAY MANAGEMENT

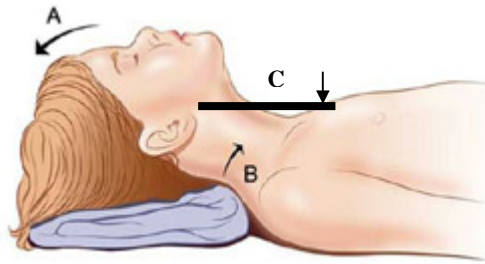
The goal of airway management is to ensure adequate ventilation and oxygenation. Initial airway management should **always** begin with BLS maneuvers.

- BLS airway management is the **preferred method** in all patients who can be adequately ventilated (visible chest rise) using bag-mask ventilation.
- All cardiac arrest patients should have initial BLS airway management. Advanced airway management should not interfere with initial CPR and defibrillation efforts.
- **Intubation should not be used in pediatric patients weighing less than 40 kg.**
- **Intubation should not be used in trauma patients** (arrest or non-arrest) unless BLS airway management has failed to produce adequate ventilation.

Initial BLS airway maneuvers are to include:

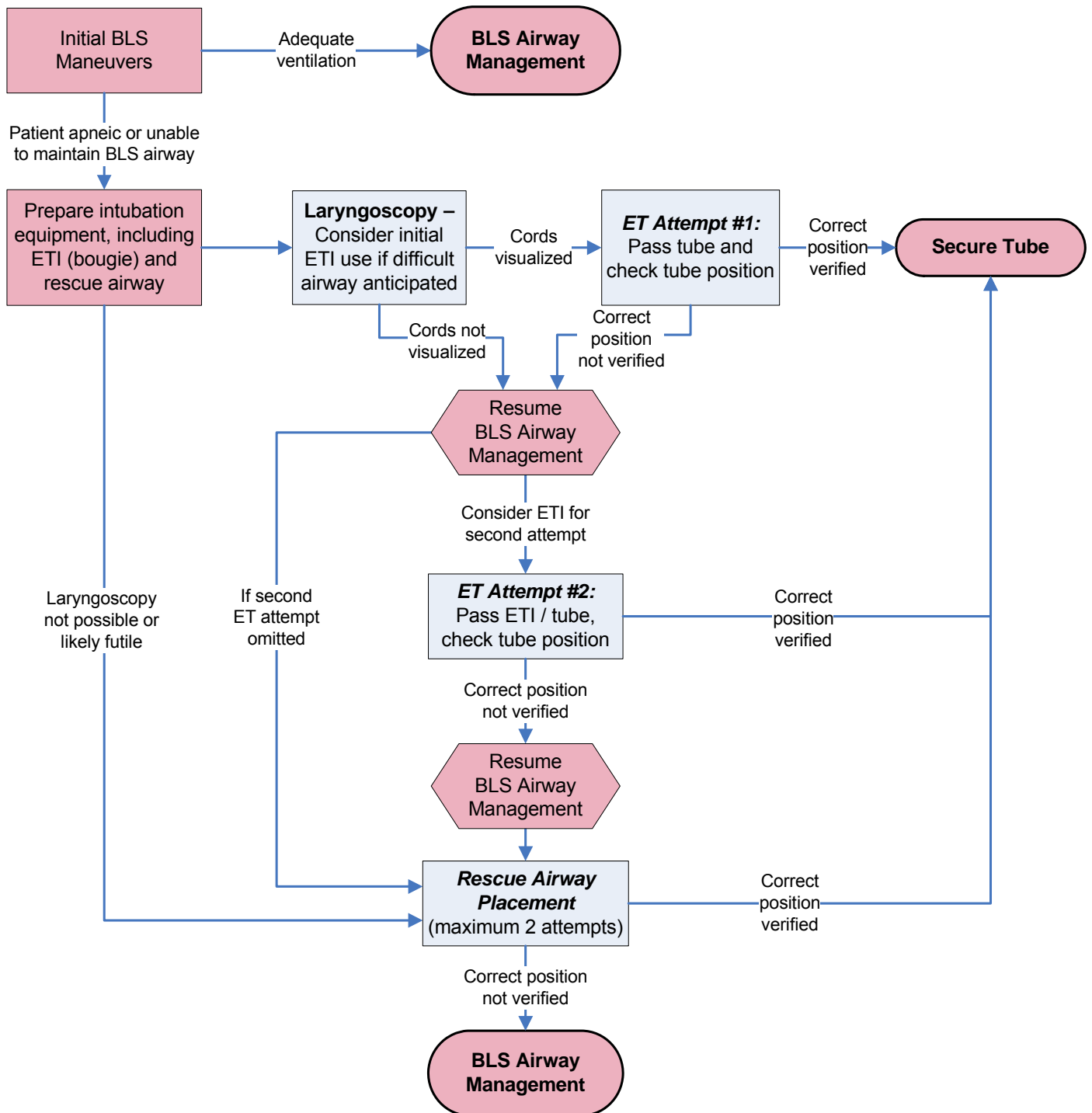
- Follow the “JAWS” mnemonic:
  - J** Use **jaw thrust** maneuvers to open airway
  - A** Use oral or nasal **airway**
  - W** **Work together.** Ventilation using a bag-valve mask is enhanced using two rescuers to manage airway
  - S** **Slow** and **small** ventilations

- Ventilation Rates (avoid hyperventilation):
  - Adults – 10/minute
  - Children – 20/minute
  - Infants (< 1 yr) – 30/minute
- Deliver ventilation over one second to produce **visible chest rise** and to avoid distention of the stomach (do not squeeze hard or fast). Ventilation volumes will vary based on patient size.
- Position the patient to optimize airway opening and facilitate ventilations:
  - Use **“sniffing” position** – head extended (A) and neck flexed forward (B) – unless suspected spinal injury.
  - Position with head/shoulders elevated – **anterior ear at same horizontal level as sternal notch (C)**. This is especially advantageous in larger or morbidly obese patients.



**Avoid prolonged / multiple interruptions in ventilation:**

- Interrupt ventilation for no more than two periods of up to 30 seconds during laryngoscopy or intubation attempt
- No more than two (2) endotracheal intubation attempts should be made
- Endotracheal Tube Introducer (ETI / bougie) may be helpful on first or second attempt
- Oxygenate using BLS techniques for 60 seconds (if possible) between attempts (ET or Rescue Airway)



**Tube verification / monitoring:**

- ☐ Check end-tidal CO<sub>2</sub> initially (colorimetric or capnography)
- ☐ If ET<sub>CO</sub><sub>2</sub> is negative, use Esophageal Detector Device (EDD) with endotracheal tubes
- ☐ View chest rise / listen for lung sounds and gastric sounds
- ☐ All intubated patients require continuous ET<sub>CO</sub><sub>2</sub> monitoring until transfer of patient care at hospital
- ☐ Documentation of findings is **critical**