

4. Position head. Hyperextend the head, flex the neck; “sniffing position” for non-trauma patients. Trauma patients with suspected spinal injury are to be intubated with the c-collar removed and manual in-line stabilization of the c-spine by a second provider performed.
5. Open patient’s mouth. Suction patient’s oropharynx. Insert blade into right side of patient’s mouth and gently advance blade to correct depth while sweeping blade and tongue to the left and observing landmarks - look for epiglottis, arytenoid cartilages and vocal cords.
 - Maintain visualization of the vocal cords.
 - Advance endotracheal tube or bougie between vocal cords and beyond. Visualize tube/bougie between the vocal cords on video camera screen or by direct visualization.
6. If the bougie is used, have an assistant place the ET tube over the bougie and advance to the fingers of the intubating medic. While keeping the blade in the patient’s mouth, slide the ET tube over the bougie and into the trachea to the appropriate depth while visualizing with the camera or with direct visualization. Gently remove the bougie from the ET tube while holding the ET tube tightly while maintaining visualization of the cords, then remove the laryngoscope blade from the mouth and verify ET tube placement.
 - In all patients, the correct tube depth can be estimated by the formula

$$\text{ET Depth (cm)} = 3 \times \text{ET Tube Size}$$

In an adult patient, a 7.0 tube should generally be placed around the 21 cm mark at the teeth/gumline. In a pediatric patient, a 3.0 tube should generally be placed around the 9 cm mark at the teeth/gumline. Utilize pediatric dosing guidelines for pediatric ET tube size.
 - If the bougie is not used, remove the ET tube stylet without moving the ET tube while maintaining visualization of the cords and then remove the laryngoscope blade from the mouth and verify ET tube placement as described below.
 - Inflate cuff before removing the stylet or bougie.
 - Auscultate over epigastric area. If no sounds are heard over epigastric area, auscultate for breath sounds over lateral chest walls. If sounds are heard over epigastric area, visually reconfirm placement of tube between vocal cords or reattempt intubation after re-oxygenating the patient. When in doubt – TAKE IT OUT.
 - Attach end-tidal CO₂ detector. Observe for waveform on CO₂ monitor screen.
 - Reconfirm endotracheal tube placement with absence of ventilatory sounds over epigastric area and auscultation of equal breath sounds at lateral chest wall locations, as well as continued presence of an end tidal CO₂ waveform.
 - Reconfirm placement with each movement of the patient (floor to backboard, into ambulance, etc.).
 - Reconfirm correct placement of endotracheal tube upon arrival at hospital, just prior to exiting ambulance. Document ETCO₂ in record or by printing rhythm strip on the LifePak 15.
7. End Tidal CO₂ monitoring shall be used on each and every intubated patient for confirmation of tube placement and continuous monitoring.
8. No more than three intubation attempts shall occur on each individual patient.

D. Nasotracheal Intubation [ALS]

1. Eligibility of patient confirmed:
 - Patient is NOT apneic (patient is breathing).
 - Patient does NOT have injury to bones of the face.
 - Patient does NOT have evidence of basilar skull fracture (ecchymosis beneath eyes or behind ears and no CSF from the nose or ears).
2. Pre-oxygenate patient with high flow O₂ by non-breather mask or Bag-Valve-Mask as appropriate.
3. Examine nostrils and select correct size endotracheal tube.

4. Lubricate distal end of endotracheal tube.
5. Advance the tube into nostril, guiding it in an anterior-to-posterior direction.
6. As the tube is advanced, LISTEN closely for breath sounds coming from the end of the tube.
7. When the breath sounds are loudest, and the misting is greatest within the tube during exhalation, have the patient take a deep breath and advance the tube during the INHALATION (if the patient is not conscious, try to time advancing the tube with one of the patient's inhalations).
8. Check that misting continues to occur during exhalation that can be felt exiting the end of the tube.
 - The patient should not be able to speak, if conscious, as the tube should be positioned between the vocal cords; if the patient can speak – the tube is not properly placed.
 - Confirm proper tube placement by auscultating the epigastric area for breath sounds; if none heard, auscultate lateral chest walls for equal breath sounds indicating good tube placement.
 - Attach end tidal CO₂ detector. Observe for the characteristic waveform on CO₂ monitor screen.
 - Secure the endotracheal tube in place.
 - Reconfirm correct tube placement frequently and with each movement of the patient.
9. End Tidal CO₂ monitoring shall be used on each and every intubated patient for confirmation of tube placement and continuous monitoring.

E. Supraglottic Airway [BLS/ALS]

1. Members shall be responsible for knowing which supraglottic airway is available and what sizes are distributed.
2. Indications for Use
 - Supraglottic airways are to be used as the initial advanced airway in adult and pediatric respiratory arrest and cardiac arrest resuscitations (*Ref. 8.02 A.1. Cardiac Arrest Emergencies Philosophy/Practices*).
3. Contraindications for the use of supraglottic airways are:
 - Responsive patient with an intact gag reflex
 - Patient with known esophageal disease or history of ingestion of caustic substances
 - Severe maxillofacial trauma
 - Patient height and/or weight for which a supraglottic airway device of the appropriate size is not available
4. Patient Position
 - Patient should be placed supine with the airway and head in the sniffing position. For patients who need cervical spine immobilization, the head may be kept in a neutral position.
5. Insertion
 - Choose the correct size supraglottic airway based on training materials for the specific airway.
 - Ensure the device is lubricated with water-based lubricant to allow placement.
 - Hold the supraglottic device at the connector with the dominant hand. With non-dominant hand, hold open mouth and apply chin lift unless contraindicated by c-spine precautions.
 - Advance the supraglottic device into the oropharyngeal cavity, consistent with training for that specific device. Generally, this entails gentle advancement of the device along the hard palate until it 'seats' in the appropriate position.
 - Never utilize excessive force when advancing the device. If there is resistance, the device should be removed and the re-lubricated and the patient's airway repositioned.
 - If the device requires inflation of a bulb, inflate consistent with device requirements.
6. Ventilation
 - With a BVM bag, ventilate the patient and ensure equal and adequate chest rise.