

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 CO<sub>2</sub> detector. Observe for the characteristic waveform on CO<sub>2</sub> monitor screen.
  - Secure the endotracheal tube in place.
  - Reconfirm correct tube placement frequently and with each movement of the patient.
9. End Tidal CO<sub>2</sub> 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.

- Ensure appropriate volume of each ventilation. Too much volume can divert air into the stomach.

- If unable to ventilate, ensure the correct size was chosen and placement is correct with adequate lubrication. If continued inability to ventilate, revert to BVM ventilations.

#### 7. Ongoing Use

- End-tidal CO<sub>2</sub> detector, if available, shall be attached and used with every supraglottic airway device insertion.

- Secure the device with tape, endotracheal tube holder or supplied securing straps.

- If gastric lumen present, insert lubricated nasogastric tube through the gastric lumen and connect to suction to evacuate air and contents from the stomach.

- Any patient who meets field termination requirements (other than intubation with an endotracheal tube) who can be successfully ventilated with a supraglottic airway device can be considered for field termination.

#### F. One-Person Bag-Valve-ET Tube/Supraglottic Airway Ventilation [BLS/ALS]

1. Attach valve of bag-valve device to end-tidal CO<sub>2</sub> sensor adapter.

2. Verify position of endotracheal tube by noting depth of incisor teeth according to centimeter (cm.) markings on tube.

3. Tube should be secured in place.

4. Ventilate the patient by using a one second ventilation which produces visible chest rise.

5. Adjust the rate of ventilations as per in-charge paramedic.

6. Constantly monitor depth of endotracheal tube, and oxygen supply. Replace oxygen supply when ¼ or less of tank is available.

7. Immediately notify paramedic of any changes in airway (e.g., bag becoming difficult to squeeze, blood/fluid visible in the tube, etc.).

8. Monitor for air leakage which may require repositioning or replacement of ET Tube or Supraglottic airway.

#### G. Airway Foreign Body Removal (Adult/Adolescent) [BLS/ALS]

1. Partial Airway Obstruction in Responsive Patient

- If the patient can cough, speak or breathe – allow the patient to attempt to clear the obstruction by forceful coughing.

- If the patient demonstrates a weak, ineffective cough, high pitch noise while inhaling, extreme respiratory difficulty, and/or cyanosis, treat the patient as having a complete airway obstruction.

2. Complete Airway Obstruction in Responsive Patient

- Use abdominal thrust maneuver with standing patient. If the patient is in late stages of pregnancy or the rescuer is unable to encircle the abdomen with arms, utilize chest thrusts.

- Stand behind the victim with your arms wrapped around the patient's waist.

- Place the thumb side of your fist against the patient's abdomen, in the midline slightly above the navel and well below the xiphoid process.

- Grasp the fist with the other hand and press the fist into the patient's abdomen with a quick inward and upward thrust.

- Repeat the thrusts until the object is expelled or the patient becomes unresponsive.

3. Complete Airway Obstruction in an Adult Patient Who Becomes Unresponsive

- Carefully support the patient to the ground.

- Without a pulse check, immediately begin chest compressions followed by ventilations at a 30:2 ratio.

- Each time the airway is opened in CPR, look for an object in the patient's mouth and remove