Contra Costa County Emergency Medical Services

Adult Airway

Assess respiratory rate, effort, oxygenation is airway/breathing adequate?

- Yes
  - Supplement oxygen
    - Goal oxygen saturation ≥ 94%
    - Exit to appropriate TG

- No
  - Basic maneuvers first
    - Open airway chin lift/jaw thrust
    - Nasal or oral airway
    - Bag-valve mask (BVM)
    - Spinal motion restriction if indicated

Airway patent?

- Yes
  - Breathing/oxygenation support required?
    - Yes
      - Supplemental oxygen via BVM
      - Monitor continuous EtCO₂
      - Exit to appropriate TG
    - No
      - Reassess airway procedure and adjust if necessary
      - Notify receiving facility. Contact Base Hospital for medical direction

- No
  - Complete obstruction?
    - Yes
      - Abdominal thrusts (conscious)
      - Chest compression (unconscious)
      - Direct laryngoscopy
    - No
      - Breathing/oxygenation support required?
        - Yes
          - Monitor/reassess supplemental oxygen if indicated
          - Exit to appropriate TG
        - No
          - Reassess airway procedure and adjust if necessary
          - Notify receiving facility. Contact Base Hospital for medical direction

The maximum allowed attempts for an advanced airway placement is two (2).

If an attempt fails, reassess and approach with a different technique.
Always weigh the risks and benefits of endotracheal intubation in the field against transport. All prehospital endotracheal intubations are considered high risk. If ventilation/oxygenation is adequate, transport may be the best and safest option. The most important airway device is the BVM, not the laryngoscope.

Cormack-Lehane Difficult Airway Assessment:

<table>
<thead>
<tr>
<th>Grade I</th>
<th>Grade II</th>
<th>Grade III</th>
<th>Grade IV</th>
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</thead>
<tbody>
<tr>
<td>Complete view of glottic opening and surrounding structures</td>
<td>Partial view of the glottic opening</td>
<td>Only the epiglottis is visible</td>
<td>No distinguishable anatomy is visible</td>
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</tbody>
</table>

*Use King Airway*

**Trauma:** Utilize in-line cervical stabilization during intubation, BLS airway or BVM use. During intubation, the cervical collar front should be open or removed to facilitate translation of the mandible/mouth opening.

**Pearls**
- This TG is only for use with patients >15 years of age.
- Continuous capnometry (EtCO₂) is mandatory with all methods of airway management. Document results.
- If an effective airway is being maintained with a BVM and a basic airway adjunct with continuous pulse oximetry values of ≥ 90% or values expected based on pathophysiologic condition with otherwise reassuring vital sign (e.g. pulse oximetry of 85% with otherwise normal vital signs in a post-drowning patient), it is acceptable to continue with basic airway measures rather than placing an advanced airway.
- For the purposes of this TG, a secure airway is achieved when the patient is receiving appropriate oxygenation and ventilation.
- An intubation attempt is defined as passing the laryngoscope blade or advanced airway past the teeth with the intent to intubate.
- An appropriate ventilatory rate is one that maintains an EtCO₂ of 35 or greater. Avoid hyperventilation.
- A Bougie is strongly encouraged for all ET intubation attempts.
- Effective use of a BVM is best achieved with two (2) people.
- The airway should be reassessed with each patient move. Document findings and EtCO₂ readings for each.
- Maintain spinal motion restriction for patients with suspected spinal injury.
- Document visualization and grading scale in prehospital record.
- Hyperventilation in deteriorating head trauma should only be done to maintain an EtCO₂ of 30-35.
- It is important to secure the advanced airway well and consider c-collar use (in the absence of trauma) to better maintain advanced airway placement. Manual stabilization of advanced airway should be used during all patient moves/transfers.