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 → Supplemental oxygen via BVM

No → Abdominal thrusts (conscious)
Chest compression (unconscious)

Direct laryngoscopy

Breathing/oxygenation support required?

Yes → Supplemental oxygen via BVM

No → Monitor/reassess supplemental oxygen if indicated
Exit to appropriate TG

Complete obstruction?

Yes → Abdominal thrusts (conscious)
Chest compression (unconscious)

Direct laryngoscopy

No → Reassess airway procedure and adjust if necessary

The maximum allowed attempts for an advanced airway placement is two (2).
If an attempt fails, reassess and approach with a different technique.

Notify receiving facility. Contact Base Hospital for medical direction, as needed.

I-Gel, as indicated in cardiac arrest
I-Gel or intubation, as indicated
Consider, sedation if I-Gel or ETT in place
Midazolam IV/IO Maximum 5 mg total

Monitor continuous EtCO2

Notify receiving facility. Contact Base Hospital for medical direction, as needed.
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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<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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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
- 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 inserting the laryngoscope blade with the intent to intubate or inserting an advanced airway past the teeth.
- 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.