SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/07/13 **Protocol: P-004.1**
Supersedes: 01/11/11

ORAL ENDOTRACHEAL INTUBATION

SUBJECTIVE FINDINGS

- Respiratory arrest or disease history.
- Previous airway management interventions.
- Head trauma.
- Recent ingestions/potential allergic reaction.

OBJECTIVE FINDINGS

- Apnea.
- Hyperventilation.
- Inability to otherwise establish or maintain airway or ventilation.
- Evidence of head injury, especially facial trauma.
- Decreased mental status (patient will tolerate an OPA).

BLS Treatment	ALS Treatment
• Routine Medical Care • Pulse oximetry if available. • Assist with preparation of ETT equipment if qualified. • Pre-oxygenate with 100% O2.	• Prepare ETT equipment. • Apply cricoid pressure if needed. • Insert laryngoscope and visualize glottic opening. • Suction if necessary. • Pass ET Tube & inflate cuff. • Remove stylet. Ventilate patient on 100% FiO2. • Confirm tube placement: - Auscultation, observe for chest rise and fall, ETCO2 detection device (electronic capnography or CO2 detector) and/or esophageal detection device. - Secure tube and note depth of tube at patient's lip. - Prepare for transport. • **Reconfirm tube placement each time patient is moved or tube is manipulated in any way.**

BASE HOSPITAL CONTACT CRITERIA

- Post intubation sedation for conscious patients without suspected head injury. **Midazolam** 2.5 mg slow IV push to a maximum dose of 5 mg (may be repeated every five minutes).
- Consider use of **Morphine sulfate** 2-4 mg slow IVP titrated to effect for analgesia; max dose 20 mg.
- For coughing, biting, tearing of the eyes, or other signs of agitation post intubation. (See precautions and comments).

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DOCUMENTATION

- Oxygen saturation post intubation.
- Number of attempts (passage of ETT past teeth).
- Confirmation of ETT placement with End Tidal CO2 device (if successful).
- Depth of tube at patient's lip after placement.

PRECAUTIONS AND COMMENTS

- Intubation attempts should not be protracted or persisted with if unsuccessful. The provider team should make no more than 2 attempts before resorting to a Supraglottic Airway (Protocol 004.2) for adults, Needle Cricothyroidostomy (Protocol 004.4) for adults or children, or a BLS Airway if compliance is adequate**.** Each ET intubation attempt should be halted if oxygen saturation decreases <93%.
- If suctioning is necessary, maintain oxygenation and ventilation between suction attempts. Each suctioning should last no more than 10 seconds.
- Failure to achieve airway patency requires immediate transport to closest Receiving Hospital.
- ETT can be inserted into patients in c-spine precautions using 3 responders:
  - One to stabilize head and neck;
  - One to perform laryngoscopy and intubation;
  - One to perform cricoid pressure.
- End-tidal CO2 colormemetric devices are not reliable in cardiac arrest patients. Utilize a capnometer or esophageal detector device in these patients.
- Agitation post intubation can be a sign of unsuspected hypoxia/hypoperfusion. Always re-assess patient including oxygen saturation before utilizing Midazolam or Morphine to control agitation post intubation.