



**County of Santa Clara**  
Emergency Medical Services System  
**ADMINISTRATIVE ORDER**

<b>Number:</b>	<b>AO 2025-003</b>
<b>Issued:</b>	<b>February 27, 2025</b>
<b>Title:</b>	<b>Immediate change to EMS Policy 700- M01 - Airway Management</b>
<b>Effective:</b>	<b>March 3, 2025 8:00AM</b>

**I. Declaration**

The Santa Clara County Emergency Medical Services (EMS) Agency has determined that an immediate change is necessary to EMS Policy 700-M01 – AIRWAY MANAGEMENT. Consistent with *Santa Clara County Prehospital Care Policy 109: Policy Development and Implementation*, the EMS Director, or designee, may issue Administrative Orders when immediate changes are necessary.

**II. Statement of Change and Rationale**

Changes to protocol 700-M01 were required due to video laryngoscope equipment changes county wide. Changes to 700-M01 include:

- Added Patient Care Goals section
- Reordered BLS airway interventions
- Removed requirement to use bougie on all intubation attempts
- Added process for pre-intubation setup of patient and equipment
- Updated intubation verification and reverification process
- Added key documentation elements

**Execution**

Administrative Order # 2025-003 is in effect as of March 3, 2025 at 8:00AM. This Administrative Order will remain in effect until further notice.

A blue ink signature of Ken Miller, MD, PhD.

Ken Miller, MD, PhD  
EMS Medical Director

A blue ink signature of Nicholas Clay.

Nicholas Clay,  
EMS Agency Director

Please direct any questions to Dustin Gonzalez, EMS Specialist by phone at 408.794.0643, or via email at [Dustin.Gonzalez@ems.sccgov.org](mailto:Dustin.Gonzalez@ems.sccgov.org).



## AIRWAY MANAGEMENT

**Effective:** March 3, 2025  
**Replaces:** January 1, 2022

### 1. Patient Care Goals

- 1.1. Maintain a patent airway
- 1.2. Provide effective oxygenation and adequate ventilation using the least invasive method to achieve those goals with confirmation from pulse oximetry and end-tidal capnography
- 1.3. Anticipate, recognize and alleviate respiratory distress
- 1.4. Quickly and safely provide respiratory support when needed
- 1.5. Optimize the patient prior to attempting any advanced airway

### 2. Airway Interventions (BLS)

- 2.1. Oropharyngeal Airway (OPA) can be used to secure a patient's airway if LMA Supreme placement fails or prior to LMA Supreme placement to determine the presence of a gag reflex. OPAs will be indicated in patients that are unresponsive without the presence of a gag reflex. The provider will ensure appropriate sizing prior to placement.
- 2.2. Nasopharyngeal Airway (NPA) can be used as an alternative method to secure a patient's airway if both (LMA Supreme and OPA) placement fail or the patient has the presence of a gag reflex. The provider will ensure appropriate sizing prior to placement. NPA is contraindicated for patients with facial trauma.
- 2.3. The LMA Supreme should be used as the preferred BLS method if BVM is insufficient to maintain ventilation/oxygenation. Use of the LMA Supreme is not approved for pediatric use for BLS providers.
  - 2.3.1. Contraindications for the LMA Supreme for BLS application:
    - 2.3.1.1. Responsive patients with a gag reflex
    - 2.3.1.2. Pediatric patients
- 2.4. Bag Valve Mask (BVM) Ventilations will be delivered in sufficient tidal volume to achieve visible chest rise at the following rates. Ventilation rate shall be verified by ETCO<sub>2</sub> waveform if available.
  - 2.4.1. Adults 10-12 respirations per minute
  - 2.4.2. Infants/children 20-30 respirations per minute
  - 2.4.3. Neonates 40-60 respirations per minute

### 3. Laryngoscopy (Airway Visualization, non-intubation attempt)

- 3.1. Airway visualization is defined as the introduction of a laryngoscope or video laryngoscope into the oral cavity with the intent to:
  - 3.1.1. Visualize a foreign body airway obstruction and/or remove the foreign body using McGill's forceps
  - 3.1.2. Visualize and/or physically manipulate the tongue, for the purpose of suctioning secretions, blood or emesis from the pharynx

### 4. Adult Endotracheal Intubation

- 4.1. Intubation will be indicated for the treatment of adult patients with a Glasgow Coma Scale rating of less than eight (8) and one (1) or more of the following:
  - 4.1.1. Insufficient BLS airway patency, verified by capnography



- 4.1.2. Hypoxia and/or hypoventilation
- 4.1.3. Securing the airway from aspiration of a foreign substance in patients with a sustained level of altered consciousness
- 4.1.4. Airway edema resulting from respiratory tract burns or anaphylaxis
- 4.2. Optimize patient for first-pass success:
  - 4.2.1. If possible, move the patient to a location with 360-degree access to the patient's body
  - 4.2.2. Position the patient in ear to sternal notch position (if no suspected cervical spine injury)
  - 4.2.3. Ensure all equipment is present and working at patient's side prior to intubation attempt
  - 4.2.5. Discuss intubation and have backup plan in case intubation is unsuccessful
  - 4.2.6. In most cardiac arrest cases, intubation can be deferred until immediate resuscitation priorities have been completed (CPR, defibrillation, IV/IO, medications) and enough providers are present to facilitate intubation
- 4.3. A direct intubation attempt will consist of introduction of the laryngoscope, with or without Bougie, into the oral cavity with the intent of intubation
- 4.4. A video intubation attempt will consist of the introduction of the video laryngoscope, with or without Bougie, into the oral cavity with the intent of intubation
- 4.5. If the first intubation attempt fails, the provider has the following options:
  - 4.5.1. Make a second attempt at intubation if a correctable problem has been identified (i.e. patient positioning, airway suctioning)
  - 4.5.2. Place an LMA Supreme
  - 4.5.3. Return to a BLS airway
- 4.6. A combined total of two (2) attempts to successfully intubate will be allowed per patient
- 4.7. After two (2) failed intubation attempts, the provider(s) will place a supraglottic airway (LMA Supreme) or return to a BLS airway
- 4.8. If an advanced airway is successfully placed, consider placing a cervical collar on the patient to limit neck flexion/extension

## 5. Endotracheal Tube (ETT) Placement Confirmation

- 5.1. Endotracheal tube placement confirmation will consist of four steps before placement may be considered confirmed. The provider must complete all steps and properly document each step on the electronic patient care record (ePCR).
  - 5.1.1. Visualize the endotracheal tube pass through the patient's vocal cords
  - 5.1.2. Confirm the presence of bilateral lung sounds with the absence of epigastric sounds through auscultation
  - 5.1.3. The presence of continuous capnography waveform, corresponding to BVM ventilation
  - 5.1.4. Measurement of tube depth at teeth
- 5.2. Endotracheal tube placement must be reconfirmed by presence of bilateral lung sounds, measurement of tube depth at teeth, and corresponding capnography waveform, documented in the ePCR, at minimum:
  - 5.2.1. After any movement of the patient (i.e. floor to gurney, gurney to ambulance)
  - 5.2.2. Arrival at transport destination



- 5.3 Level A System Variance Report must be completed if suspicion of unrecognized esophageal intubation occurred

## 6. Capnography

- 6.1. Capnography will be used to monitor every ALS or BLS airway adjunct (If ETCO<sub>2</sub> monitoring capable)
- 6.2. Providers will look for corresponding ETCO<sub>2</sub> waveform for each ventilation administered
  - 6.2.1. If no ETCO<sub>2</sub> waveform is produced with ventilations, investigate airway adjunct
  - 6.2.2. If unable to resolve issue and produce ETCO<sub>2</sub> waveform, adjunct must be removed
- 6.3. The target range will be between 35-45 mmHg, in patients with a pulse, while providing adequate ventilation
- 6.4. Patients in cardiac arrest should have ETCO<sub>2</sub> > 10mmHg, look to optimize CPR if below 10mmHg

## 7. Adult and Pediatric LMA Supreme (Supraglottic Airway)

- 7.1. The LMA Supreme will be indicated in the treatment of unconscious patients with absent gag reflex, who require assisted ventilation or airway securement when endotracheal intubation cannot be accomplished. This includes poor visualization resulting in a partial glottic view. In such cases intubation may be bypassed and the LMA Supreme may be placed.
- 7.2. Contraindications of the LMA Supreme:
  - 7.2.1. Responsive patients with a gag reflex (ALS and BLS)
  - 7.2.2. Pediatric patients (BLS)

## 8. Key Documentation Elements

- 8.1. Interventions attempted, size of equipment used, complications encountered
  - 8.1.1. Suction procedures should include description of content
  - 8.1.2. Intubation procedures should include view of glottis, epiglottis, ETT passing through vocal cords
- 8.2. Airway confirmations at appropriate intervals specified in protocol
- 8.3. Waveform capnography attached to ePCR
- 8.5 Recordings of video laryngoscopy must be saved by the provider agency outside of the ePCR platform for review. Recordings are an essential piece of the continuous quality improvement process and are protected from discovery by California Evidence Code § 1157.