

Tuolumne County Emergency Medical Services Agency  
EMS System Policies and Procedures

---

---

**Policy: Supraglottic Airways**

**#552.50**

Medical Director:



Creation Date: 05-23-2018

Revision Date:

EMS Coordinator:

Review Date: 05-2023

---

---

I. AUTHORITY

Division 2.5, California Health and Safety Code, Section 1797.220, California Code of Regulations, Title 22, Division 9, Section 100144 and 100145

II. DEFINITIONS

- A. "Supraglottic Airway" or "SGA": a device that is placed into the mouth and set over the glottis in order to provide ventilations and protect the patient's airway.
- B. "i-Gel": the supraglottic airway device authorized for use by Tuolumne County EMS Agency. Tuolumne County EMS Agency reserves the right authorize other supraglottic airway devices that it deems appropriate.

III. PURPOSE

The purpose of this policy is to establish training standards, criteria and procedures for the use of SGA as an advanced airway alternative to endotracheal intubation.

IV. POLICY

- A. Paramedics may use an approved SGA as a primary or secondary advanced rescue airway for patients weighing 2 kgs or more.

B. INDICATIONS FOR USE:

- 1. Cardiac arrest.
- 2. Respiratory arrest with no immediately reversible cause.
- 3. Obtunded patient with compromised airway.

C. CONTRAINDICATIONS FOR USE:

- 1. Intact gag reflex
- 2. Severe airway trauma
- 3. Severe airway edema
- 4. Airway obstruction

D. COMPLICATIONS:

- 1. Airway trauma
- 2. Regurgitation and aspiration

V. EQUIPMENT

- A. Appropriately-sized SGA
- B. Water based lubricant
- C. Suction device
- D. Strap or tape for securing SGA

- E. Bag valve mask
- F. Stethoscope.
- G. Pulse oximetry device.
- H. End tidal capnography device.

VI. PROCEDURE

- A. Don PPE.
- B. Assure patent airway, oxygenation & ventilation.
- C. Assure ECG & pulse oximetry is applied.
- D. Preoxygenate with 100% oxygen for 2 – 3 minutes, target  $\geq 95\%$  O<sub>2</sub> saturation.
- E. Apply chin lift and introduce the SGA into the mouth.
- F. Advance tip over the base of tongue.
- G. Without exerting excessive force, advance tube until definitive resistance is felt; the position guide should be aligned with teeth or gums.
- H. Attach BVM and ventilate at the appropriate rate.
- I. Connect ETCO<sub>2</sub> device.

VII. EDUCATION REQUIREMENTS

- A. Successfully complete a SGA class approved by Tuolumne County EMS Agency.
- B. Successfully complete semi-annual skills competency as defined in Tuolumne County EMS Agency Policy 254.10.

VIII. QUALITY ASSURANCE AND IMPROVEMENT

- A. A 100% audit of all SGA attempt will be reviewed by the ALS Providers Clinical Coordinator.
- B. A report will be provided by the ALS Providers Clinical Coordinator to the Tuolumne County EMS QA/QI Committee.

IX. QUALITY ASSURANCE METRICS

- A. Rescue device: – yes / no / not documented  
Rescue device is defined as a device used after failure of the initial device attempted for secondary airway management, after bag-mask-ventilation.
- B. Successful placement: – yes / no / not documented  
Successful placement is defined as the ability to ventilate the patient with minimal or no air leak, confirmed with all of the following: visible chest rise during ventilation, air movement on pulmonary auscultation, and ETCO<sub>2</sub> measurement with capnography.
- C. Number of attempts: – numeric in integers / not documented  
Attempt is defined as insertion of the supraglottic airway device (SAD) into the mouth.
- D. Time to insertion: – numeric in seconds / not documented  
Time to insertion is defined as the time from insertion of the supraglottic airway device into the mouth for the first attempt until the time of the first successful ventilation with minimal or no air leak.

E. Complications

1. Regurgitation/emesis: – yes / no / not documented  
Regurgitation/emesis is defined as the presence of gastric contents noted in the oropharynx or on device during or after placement.
2. Bleeding/trauma: – yes / no / not documented  
Trauma/bleeding is defined as the presence of blood noted in the oropharynx or on the device during or after placement, or any abrasion, laceration, dental trauma or other trauma occurring during placement or repositioning of the device. This excludes bleeding or trauma present prior to attempted device placement.

F. Hypoxia: – yes / no / not documented

Hypoxia is defined as any O<sub>2</sub> saturation ≤ 90% during or after placement in a patient previously normoxic prior to placement.

G. Dislodgement: – yes / no / not documented

Dislodgement is defined as loss of the ability to adequately ventilate the patient after successful placement was achieved.

H. If dislodgement after placement, successful replacement? – yes / no / not documented / not applicable

Successful replacement is defined the as the ability to ventilate the patient with minimal or no air leak, after dislodgement and replacement of the same device, confirmed with all of the following: visible chest rise during ventilation, air movement on pulmonary auscultation, and ET<sub>CO</sub><sub>2</sub> measurement with capnography.