# Airway: Supraglottic Airway Device

## **Definitions:**

1. Supraglottic Airway Device ("SAD") – A device that is placed into the oral pharynx and subsequently placed over the glottic opening. This is done via a 'blind' maneuver without the aid of a laryngoscope. SADs are designed to aid in oxygenation and ventilation of a patient. i-gel is a SAD.

	Applies to:		
Ε	EMT		
Р	Paramedic		

### **Clinical Indications:**

- 1. Cardiac arrest
- 2. Respiratory arrest with no immediate reversible causes (e.g., hypoglycemia or opioid overdose)
- 3. Inability to adequately ventilate a patient with a bag valve mask ("BVM") and basic airway adjunct
- 4. An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort

### **Contraindications:**

- 1. Pediatric patient who can be measured on a length-based tape (< 37 kg)
- 2. Gag reflex
- 3. Caustic ingestion or esophageal burns
- 4. Known esophageal disease (e.g., cancer, varices, or stricture)
- 5. Laryngectomy with stoma; if present, place in ETT in stoma
- 6. Severe airway trauma
- 7. Trismus

# **Complications:**

- 1. Airway and/ or esophageal trauma
- 2. Regurgitation
- 3. Aspiration

#### Procedure:

- 1. Prepare, position patient's head in the sniffing position if not in SMR, and oxygenate with 100% oxygen. If in cervical spine injury is suspected or in SMR, position the patient's head in the neutral position.
- 2. Paramedics must document EtCO<sub>2</sub> reading preplacement.
- 3. Select proper i-gel size using weight-based chart.
- 4. Lubricate the device with water-based lubricant. Prepare suction.
- 5. If present, remove dentures or dental plates from mouth.



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6. Position the i-gel so the cuff outlet is facing towards the chin of the patient. Introduce the device into the mouth towards the hard palette.

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- 7. Glide the i-gel downward and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt. **DO NOT APPLY EXCESSIVE FORCE DURING INSERTION.**The tip of the airway should be in the upper esophageal opening and the cuff should be located against the laryngeal framework; the incisors should be resting on the integrated bite block.
- 8. Attach BVM, EtCO<sub>2</sub>, and ventilate the patient at a rate of 6/minute.
- 9. Auscultate for breath and epigastric sounds while watching for rise and fall of chest.
- 10. Paramedics must confirm device placement using EtCO<sub>2</sub> and waveform capnography. SAD shall be continuously monitored via waveform capnography (paramedics) and pulse oximetry (EMTs and paramedics.
- 12. Secure device to patient using the approved securing device. If an i-gel securing device is not available, the i-gel should be securing using tape; tape from maxilla to maxilla.
- 13. If, after placement, an i-gel device is ineffective, the device should be removed. Paramedics may remove an i-gel device to place an ETT.

Patient Weight (kg)	Patient size	i-gel size
37-60 kg	Small adult	3
50-90 kg	Medium adult	4
90+ kg	Large adult	5