

# I-GEL AIRWAY



# WHAT IS THE I-GEL AIRWAY?

- The i-gel® is the innovative second generation supraglottic airway device from Intersurgical. The first major development since the laryngeal mask airway.
- Made from a medical grade thermoplastic elastomer, i-gel has been designed to create a non-inflatable, anatomical seal of the pharyngeal, laryngeal and perilaryngeal structures whilst avoiding compression trauma.
- Pediatric sizes in the range, ideal for use with patient weights between 2-90+kg.
- In 2012, the indications for use were expanded to include use as a conduit for intubation (with fiber optic guidance).

# WHY THE I-GEL AIRWAY ?

The consideration was multi-faceted.

- ~First, we would like to provide a back up airway device (secondary to failed intubation) that is suitable for all patient age ranges.
- ~Second, ease of use. The i-gel has a soft, gel-like, non-inflatable cuff, designed to provide an anatomical impression fit over the laryngeal inlet. There is a built in integral bite block and the i-gel has a channel for an OG tube (Advanced EMT and above) to be placed.
- ~Third, cost consideration.

## WHAT ARE THE INITIAL SUCCESS RATES ?

- i-gel is emerging as a popular choice for maintaining and securing the airway during prehospital cardiopulmonary resuscitation. Success rates for i-gel insertion are higher (92% - 94%) than endotracheal (ET) tube insertion (86% - 90%).

- Regional trial

Amherst County Public Safety

6 month trial, 28 patients

Complications: difficulty with bloody airway

displacement with CPR

## ARE THERE ANY KNOWN DISADVANTAGES?

- Ensure that the support strap that holds the airway in place, is tight. If not tightly secured, the airway can become easily displaced during CPR.
- Some agencies utilizing the i-gel have noted difficulty when used for hypothermic patients.

# Airway – I-GEL

## Indications:

- Adult cardiac or respiratory arrest.
- Adult unresponsive medical or trauma patients without gag reflexes.
- I-Gel is a back-up airway to the ET [Intermediate/Paramedic Only].
- I-Gel is a back-up airway to the oropharyngeal and nasopharyngeal airway for [EMT-B and Advanced].

EMT	EMT	EMT
A	Advanced EMT	A
I	Intermediate	I
P	Paramedic	P

## Contraindications:

- Responsive patients with an intact gag reflex.
- Severe facial swelling from anaphylaxis.
- Severe neck swelling/trauma and/or neck hematoma.
- Caustic burns.
- Patient with known esophageal disease.
- Patients who have ingested caustic substances.
- Foreign body obstruction.
- Laryngectomies and tracheostomy.

## Caution:

- Because of the chance of regurgitation, the provider operating the BVM should assure they use proper BSI procedures to protect them from splash that may come from the gastric tube port (this port is not to be blocked when there is no gastric tube in place).

## Procedure:

1. Estimate ideal body weight.
2. Pre-oxygenate the patient.
3. Open packaging and prepare I-gel, securing strap, and suction.
4. Open the lubricant and place a small bolus on the inner side of the main shell of the package.
5. Lubricate the back, sides, and front of the I-gel with a thin layer of enclosed lubricant.
6. Position the head: "sniffing" position is ideal, "neutral" position is acceptable.
7. Hold the I-Gel by the bite block with the dominant hand. With non-dominant hand, hold mouth open and apply chin lift. Position the device so that the I-gel O2 cuff outlet is facing the patient. Introduce the leading soft tip into the mouth of the patient in the direction of the hard palate.
8. Glide the device downward and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt.
9. The tip of the airway should be located into the upper esophageal opening with the cuff located against the laryngeal framework. The incisors should be resting on the bite block.
10. Secure the device by sliding the strap underneath the patient's neck and attaching to the hook ring. Take care to ensure that the strap is secured appropriately.
11. Commence with positive pressure ventilation per appropriate protocols.
12. Complete all applicable airway confirmation fields including chest rise, equal bilateral breath sounds, absence of epigastric sounds and end-tidal CO<sub>2</sub> reading.
13. Secure the device. Reconfirm airway placement after device is secured, after every patient movement and at regular intervals.
14. Document the time, provider, provider level, and success for the procedure.

## Considerations

- Insertion can be achieved in less than 5 seconds
- Sometimes a feel of "give-away" is felt before the end point resistance is met. This is due to the passage of the bowl of the I-gel through the facial pillars. It is important to continue to insert the device until a definitive resistance is felt
- Once correct insertion is achieved and the teeth are located on the integral bite block, do not repeatedly push down or apply excessive force during insertion
- If there is resistance, remove, re-lubricate, and reposition the airway before repeat insertion. No more than three attempts on one patient should be attempted.
- It is not necessary to insert fingers or thumbs into the patient's mouth during insertion
- Sizes 3 and 4 accept a 12 French suction catheter for insertion through the gastric channel to empty fluid from the stomach. Size 5 accepts a 14 French suction catheter for insertion through the gastric channel to empty fluid from the stomach.

# I-GEL TRAINING VIDEO

- [https://www.youtube.com/watch?time\\_continue=21&v=jjBozQjBwok](https://www.youtube.com/watch?time_continue=21&v=jjBozQjBwok)