

MWLC EMSS Skills Sheet Advanced Airway: I-Gel

Name:	1 st attempt:	Meets Standard	Does not meet standard
Date:	2 nd attempt:	Meets Standard	Does not meet standard

Instructions: The purpose of this skills sheet is to outline the requirements for I-Gel insertion. This skills sheet shall be utilized when evaluating using an I-Gel Airway in training and skills validation by both practicing MWLC EMSS personnel and students.

Required items to meet standards are indicated with an asterisk.

Performance standard	1 st attempt	2 nd attempt
NP=Step not performed. 0=Does not meet standard. Unsuccessful; critical or excess prompting; improper technique. 1=Meets Standard. Successful; minimal to no prompting; proper technique.		

* BSI: Gloves, Eye Protection (minimum required)		
<p>* State intended purpose, advantages, and features of using an I-Gel airway:</p> <p>Purpose: The I-Gel (BIAD) is an <i>alternate advanced airway</i> indicated for placement to manage an airway in the following circumstances:</p> <ol style="list-style-type: none"> After failed endotracheal intubation attempts. In rare circumstances when deemed appropriate as a first attempt due to unusual complications or presentations. In MWLC EMSS, when advanced EMS personnel are not available to manage the airway. <p>BLS EMS personnel are authorized to place an iGel (BIAD) if:</p> <ol style="list-style-type: none"> The BLS EMS personnel have successfully passed skill competency. The BLS EMS personnel remain current on successfully passing quarterly skill testing. <p><input type="checkbox"/> Advantages: Ease and speed of blind insertion with a non-inflating cuff.</p> <p><input type="checkbox"/> Features: Latex free, sterile, single patient use device.</p>		
<p>* State indications for using an I-Gel airway:</p> <ol style="list-style-type: none"> After failed endotracheal intubation attempts. In rare circumstances when deemed appropriate as a first attempt due to unusual complications or presentations. In MWLC EMSS, when advanced EMS personnel are not available to manage the airway. 		
<p>* State at least 4 contraindications:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Gag reflex. <input type="checkbox"/> Caustic ingestion. <input type="checkbox"/> Trismus (Lockjaw). <input type="checkbox"/> Limited mouth opening. <input type="checkbox"/> Abscess, trauma, or mass in oropharynx. 		
<p>State Precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Do not use excessive force to insert the device or suction catheters/nasogastric tube. <input type="checkbox"/> Inadequate sedation with retained gag reflex may lead to coughing, bucking, excessive salivation, retching, laryngospasm or breath holding. <input type="checkbox"/> Do not reuse or attempt to reprocess the I-Gel. <input type="checkbox"/> Patients with any condition which may increase the risk of a full stomach e.g. hiatal hernia, extreme obesity, pregnancy or a history of upper GI surgery etc. Have suction ready. 		

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* Demonstrate preparing patient

<p>* Patient Preparation:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Position patient's head per procedure unless head/neck movement is inadvisable or contraindicated. <input type="checkbox"/> Ensure airway is unobstructed (remove dentures or removable plates from the mouth, clear obstruction) before attempting insertion. 		
<p>* Preoxygenation Procedure:</p> <ul style="list-style-type: none"> <input type="checkbox"/> If patient spontaneously breathing, attempt preoxygenation w/ NRM <input type="checkbox"/> If assist needed: Insert NPA/OPA and ventilate with BVM for 3 minutes w/ ETCO2 monitoring. <ul style="list-style-type: none"> • Provide just enough air to see chest rise – avoid high pressure & gastric distention. • Ventilate at 10 BPM (1 every 6 sec); Hx asthma/COPD: 6-8 BPM 		

* Demonstrate preparing equipment

<p>* State preparing suction equipment:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prepare suction (attach DeCanto) and turn on. <input type="checkbox"/> Suctions as needed. <input type="checkbox"/> Ensure that laryngeal structures are as dry as possible – suction secretions prior to insertion. 		
<p>* State preparing I-Gel device:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Choose correct size I-Gel. (Reference included sizing table below) <input type="checkbox"/> Inspect packaging; ensure no damage prior to opening; within expiration date. <input type="checkbox"/> Inspect device, check airway patency; confirm no FB or lubricant obstructing distal opening or gastric channel. <input type="checkbox"/> Inspect inside the bowl, ensuring surfaces are smooth and intact & patent gastric channel. <input type="checkbox"/> Inspect / discard if airway tube or body of the device looks abnormal or deformed. <input type="checkbox"/> Check the 15mm connector is secure. <input type="checkbox"/> Maintain sterile technique <input type="checkbox"/> Apply lubricant to cradle and apply to I-Gel (back, sides, and front of cuff) per procedure. <input type="checkbox"/> I-Gel is placed back into cradle until removed to insert. <ul style="list-style-type: none"> • Shall not place I-Gel (that is not in cradle) onto patient's chest or other surface waiting for insertion. <input type="checkbox"/> Prepare all supplies needed to secure a properly placed I-Gel. (BVM, ETCO2, tape, strap, head immobilizer, stethoscope. 		

I-Gel Size	Patient Size	Patient Weight (kg)	Broslow Color	Suction Size (fr)
1.5	Infant	5-12	Pink, Red, Purple	10
2	Small Child	10-25	Yellow, White, Blue	10
3	Small Adult	30-60	Green	12
4	Medium Adult	50-90		12
5	Large Adult	90+		14

Note regarding sizing by weight: While size selection on a weight basis is applicable to most patients, individual anatomical variations mean the weight guidance provided should always be considered with a clinical assessment of the patient's anatomy. Those with cylindrical necks or wide thyroid/cricoid cartilages may require a larger size than would normally be recommended on a weight basis. Patients with a broad or stocky neck or smaller thyroid/cricoid cartilage, may require a smaller size. Patients with central obesity, where the main weight distribution is around the abdomen and hips, might require an I-Gel of a size commensurate with the ideal body weight for their height rather than their actual body weight.

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* Demonstrate insertion

<p>* Sedation as needed.</p> <ul style="list-style-type: none"> <input type="checkbox"/> State why sedation is indicated. <input type="checkbox"/> Utilizes procedures as outlined in Region IX MWLC EMSS SOP for Drug Assisted Intubation. 		
<p>* Insertion (Proficient users can insert in < 5 sec)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Remove I-Gel from protective cradle. <input type="checkbox"/> If SMR indicated, head stabilization is provided and maintained throughout procedure. <input type="checkbox"/> Grasp lubricated I-Gel firmly along the integral bite block. Position device so the cuff outlet is facing towards patient's chin. <input type="checkbox"/> Gently press down on chin to open mouth (no fingers or thumbs in mouth). <input type="checkbox"/> Introduce leading soft tip into mouth in a direction towards hard palate. <input type="checkbox"/> Glide the device downwards and backwards along the hard palate with a continuous but gentle push until definitive resistance is felt. <ul style="list-style-type: none"> • Do not repeatedly push I-Gel up and down, or apply excessive force during insertion • No more than 2 placement attempts. <input type="checkbox"/> Placed I-Gel tube is manually held in position. <input type="checkbox"/> Properly placed I-Gel should result in teeth incisors resting on the integral bite block. <ul style="list-style-type: none"> • (Teeth incisors at the horizontal line on the bite block for sizes 3, 4, and 5) • (Teeth incisors anywhere on the bite block for sizes 1.5, and 2) 		

* Demonstrate ventilation and assessment

<p>* Ventilate at proper rate and volume and CONFIRM proper tube position (listed in order)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Auscultation bilateral breath sounds over midaxillary lines & anterior chest. <input type="checkbox"/> Evaluate ETCO₂. <input type="checkbox"/> Absent or minor gastric sounds. Excessive leak means device is incompletely inserted. <ul style="list-style-type: none"> • If I-Gel NOT positioned accurately and/or no confirmation of breath sounds and ETCO₂, remove tube & ventilate with NPA/OPA & BVM. May reattempt X 1. <input type="checkbox"/> Maintain proper ventilations at 10 breaths per minute (asthma 6-8) 		
<p>Preceptor ask, "How would you know if you are delivering appropriate volumes with each ventilation?" (Chest rise, good breath sounds to periphery bilaterally; good capnography number and waveform; SpO₂ if not in cardiac arrest)</p>		
<p>* Secure I-Gel</p> <ul style="list-style-type: none"> <input type="checkbox"/> When good ventilations and appropriate positioning established, tape in place from 'maxilla to maxilla' or secure with head strap. <input type="checkbox"/> Keep I-Gel midline in mouth. 		
<p>* Serial reassessments <= 5 minutes OR following moving patient / condition changes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Utilizes assessment criteria as per Region IX MWLC EMSS SOP. 		

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* Suction

* Demonstrate suction procedure

- Obtain properly sized suction catheter. (must verbalize method used to size determine size)
- Properly lubricate per procedure.
- Insert and properly suction per procedure.
- Verbalize contraindications to inserting catheter for suction:
 - An excessive air leak through the gastric channel
 - Esophageal varices or evidence of GI bleed
 - Esophageal trauma
 - Hx of upper GI surgery
 - Hx of bleeding/clotting abnormalities

* Troubleshooting and considerations

* Verbalize troubleshooting / consideration criteria:

- Peak airway pressure of ventilation must not exceed 40cm H2O in order to prevent barotrauma.
- If an excessive air leak is detected, use one or more of the following:
 - Hand ventilate patient with gentle and slow squeezing of the BVM
 - Limit tidal volume to no more than 5ml/kg
 - Limit peak airway to 15-20cm of H2O
 - Assess the depth of sedation to ensure the patient is not fighting the tube
- If all else fails, a one-size larger I-Gel should be considered.

Risks and Complications

- Laryngospasm Sore throat Tongue numbness Cyanosis
- Trauma to the pharyngo-laryngeal framework
- Down-folding of epiglottis (more common in children)
- Gastric insufflation, regurgitation and inhalation of the gastric contents
- Nerve injuries, vocal cord paralysis, lingual or hypoglossal nerve injuries
- If placed too high in the pharynx, may result in a poor seal and cause excessive leakage
- If tip of I-Gel enters glottic opening, will have an excessive air leak through gastric channel and obstruction to airflow. If NG or suction catheter is inserted through I-Gel gastric channel, it will enter the trachea and lungs. If suspected, remove and reinsert with gentle jaw thrust.

Evaluator printed name and signature:

Evaluator Comments: