

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)		
* State intended purpose, advantages, and features of using an I-Gel airway: Purpose: The I-Gel (BIAD) is an <i>alternate advanced airway</i> indicated for placement to manage an airway in the following circumstances: <ol style="list-style-type: none"> 1. After failed endotracheal intubation attempts. 2. In rare circumstances when deemed appropriate as a first attempt due to unusual complications or presentations. 3. In MWLC EMSS, when advanced EMS personnel are not available to manage the airway. BLS EMS personnel are authorized to place an iGel (BIAD) if: <ol style="list-style-type: none"> a. The BLS EMS personnel have successfully passed skill competency. b. The BLS EMS personnel remain current on successfully passing quarterly skill testing. <input type="checkbox"/> Advantages: Ease and speed of blind insertion with a non-inflating cuff. <input type="checkbox"/> Features: Latex free, sterile, single patient use device.		
* State indications for using an I-Gel airway: <ol style="list-style-type: none"> 1. After failed endotracheal intubation attempts. 2. In rare circumstances when deemed appropriate as a first attempt due to unusual complications or presentations. 3. In MWLC EMSS, when advanced EMS personnel are not available to manage the airway. 		
* State at least 4 contraindications: <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. 		
State Precautions <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: