

AIRWAY MANAGEMENT

Airway management is an essential part of the care of all patients. It is an ongoing process which requires assessment of many different signs and symptoms. Evaluating and recognizing respiratory distress, respiratory failure, and respiratory arrest are critical in determining what level of intervention is required to properly treat the patient. The key areas to be assessed include: general impression, patency of airway, presence or absence of protective reflexes, and adequacy of breathing.

- A. Assess airway for patency and protective reflexes.
- B. Determine adequacy of breathing by assessing the rate, depth, effort, and adequacy of ventilation by inspection and auscultation.
- C. If airway is patent and spontaneous breathing is adequate, and:
 - 1. No or mild to moderate distress, administer oxygen at 2 - 6 LPM nasal cannula to maintain SpO₂ at 94 - 99%.
 - 2. Severe distress, administer oxygen at 15 LPM non-rebreather mask to maintain pulse oximeter at 94 to 99%.
- D. If airway is not patent, request ALS backup, then:
 - 1. Attempt to open airway by using head tilt/chin lift if no spinal trauma is suspected, or modified jaw thrust if spinal trauma is suspected.
 - 2. If foreign body obstruction of airway is suspected, then refer to **Airway Obstruction Protocol 6305**.
 - 3. If anatomical obstruction is occurring and airway cannot be maintained with positioning and the patient is unconscious, consider placing an oropharyngeal or nasopharyngeal airway adjunct.
- E. If breathing is inadequate, ventilate with 100% oxygen.
- F. If airway cannot be maintained by the above means, including attempts at assisted ventilations, prolonged assisted ventilation is anticipated, or protective mechanisms are absent:
 - 1. Insert size appropriate (weight based) supraglottic airway (SGA) (iGel®) per manufacturer's recommendations after completing the following steps:

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- a. Adult sizes 3, 4, and 5 should be purchased as iGel® O2 Resus Packs which contain a strap and have a port to allow for the attachment of passive oxygenation via supply tubing. (The Resus Pack only comes in adult sizes).
- b. Pediatric sized 1, 1.5, 2, and 2.5 do not come as Resus Packs.
2. Preload the i-Gel® SGA with the correct size gastric tube.
 - a. First determine which size NG/OG/or suction catheter to use as an SGA-gastric suction tube:
 - i. A size 5 iGel® takes a 14 Fr catheter
 - ii. Sizes 2 to 4 take a 12 Fr catheter
 - iii. Size 1.5 takes a 10 Fr catheter and an infant size 1 does not have a gastric tube port.
 - b. Measure the appropriate depth to which the gastric tube should be inserted. The distal tip should be placed at the xiphoid process then run the tube up to the ear lobe and then to the corner of the mouth. The point at the corner of the mouth is the depth to which it should be inserted once the SGA's placement has been confirmed, mark that point with a piece of tape.
 - c. Place a bead of water-based lubricant over the orogastric port at the top of the iGel®. Introduce the distal tip of the gastric tube through that bead of lubricant and advance it into the i-Gel® all the way to the tip. Work the gastric tube back and forth several times to assure the pathway is completely lubricated. Do not allow the distal end of the gastric tube to protrude from the distal tip of the iGel®.
3. Insert the SGA (iGel®) per manufacturer recommendations.
 - a. Secure the airway with the provided strap, tight enough to maintain a constant downward pressure on the iGel®. If the iGel® is a pediatric size that does not come with a strap, secure it with a piece of tape running from one maxilla around the tube and attaching to the other maxilla.
 - b. Confirm placement of the iGel® by confirmation of ETCO2 and auscultation showing no air movement over the epigastrium and the presence of bilateral breath sounds. Assure the utilization of continuous ETCO2 monitoring and that passive oxygenation, via supply tubing at 6-

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10 lpm, has been attached to the passive oxygenation port (only available on sizes 3, 4, and 5 of the Resus models).

- c. Once SGA placement is confirmed, advance the gastric tube to the taped depth and secure it with tape. Attach the SGA-gastric tube to suction to drain the stomach contents. If there is no return of stomach contents, you may attach a Toomey syringe to the gastric tube and auscultate over the epigastric area, while injecting air, to confirm placement.
- d. Continue ventilation with just enough air to make the chest rise and fall but not enough to cause an air leak by breaking the seal of the laryngeal mask portion of the iGel® with the glottic opening.

G. Continue ventilation with 100% oxygen.

H. Contact **Medical Command**.



Note: Any patient with suspected spinal trauma needs in-line stabilization with any airway procedure.

IDEAL BODY WEIGHT CHART

MALE			FEMALE		
Height in Feet	Height in Meters	Ideal Weight	Height in Feet	Height in Meters	Ideal Weight
4' 6"	1.3524	28 - 35 Kg	4' 6"	1.3524	28 - 35 Kg
4' 7"	1.3778	30 - 39 Kg.	4' 7"	1.3778	30 - 37 Kg.
4' 8"	1.4032	33 - 40 Kg.	4' 8"	1.4032	32 - 40 Kg.
4' 9"	1.4286	35 - 44 Kg.	4' 9"	1.4286	35 - 42 Kg.
4' 10"	1.454	38 - 46 Kg.	4' 10"	1.454	36 - 45 Kg.
4' 11"	1.4794	40 - 50 Kg.	4' 11"	1.4794	39 - 47 Kg.
5' 0"	1.5	43 - 53 Kg.	5' 0"	1.5	40 - 50 Kg
5' 1"	1.5254	45 - 55 Kg.	5' 1"	1.5254	43 - 52 Kg.
5' 2"	1.5508	48 - 59 Kg.	5' 2"	1.5508	45 - 55 Kg.
5' 3"	1.5762	50 - 61 Kg.	5' 3"	1.5762	47 - 57 Kg.
5' 4"	1.6016	53 - 65 Kg.	5' 4"	1.6016	49 - 60 Kg.
5' 5"	1.627	55 - 68 Kg.	5' 5"	1.627	51 - 62 Kg.
5' 6"	1.6524	58 - 70 Kg.	5' 6"	1.6524	53 - 65 Kg.
5' 7"	1.6778	60 - 74 Kg.	5' 7"	1.6778	55 - 67 Kg.
5' 8"	1.7032	63 - 76 Kg.	5' 8"	1.7032	57 - 70 Kg.
5' 9"	1.7286	65 - 80 Kg.	5' 9"	1.7286	59 - 72 Kg.
5' 10"	1.754	67 - 83 Kg.	5' 10"	1.754	61 - 75 Kg.
5' 11"	1.7794	70 - 85 Kg.	5' 11"	1.7794	63 - 77 Kg.
6' 0"	1.8	72 - 89 Kg.	6' 0"	1.8	65 - 80 Kg.