

Student Name: \_\_\_\_\_ Level:  EMT- I A CC P Date \_\_\_\_\_

Total time: \_\_\_\_\_

Evaluator Name: \_\_\_\_\_ Start time: \_\_\_\_\_ End time: \_\_\_\_\_

## Needle Cricothyroidotomy

<b>Conditions</b>	The candidate should perform this skill on a simulated under existing indoor, ambulance, or outdoor lighting, temperature, and weather conditions.
<b>Indications</b>	A patient whose airway cannot be managed by BLS or other ALS airway procedures
<b>Red Flags</b>	This procedure cannot be used if the trachea is transected, or if there is significant trauma to the cricoid cartilage or larynx. This technique is designed for short-term use only. Requires a highpressure source of oxygen, which poses a great risk for spraying blood and body fluids on rescuers, and can cause barotrauma in patients (pneumothorax, subcutaneous air, etc.). Does not isolate the airway; thus, aspiration of blood, emesis, etc., is a continued risk

Don appropriate standard precautions	
<b>Prepare Equipment</b>	
Attach 3-way stopcock to oxygen source via tubing	
Attach extension tubing to stopcock	
Test to make sure flow is not obstructed	
Attach a 10 mL syringe to a large-bore plastic catheter with needle	
<b>Prepare Patient</b>	
Position patient supine (if possible), hyperextending the head	
Maintain neutral cervical alignment if cervical trauma is suspected	
Locate cricothyroid membrane	
Inferior to thyroid cartilage	
Superior to cricoid cartilage	
Palpate the "notch" between the two	
Cleanse site thoroughly	
Iodine or alcohol preferred (iodine must be dry to be effective)	
<b>Insert Needle Into Cricothyroid Membrane</b>	
Stabilize cricoid and thyroid cartilages with one hand	
Insert needle/catheter, bevel up through skin and lower half of cricothyroid membrane	
Toward the feet at approximately a 45-degree angle	
Gently aspirate with attached syringe while inserting	
When syringe is able to aspirate air, stop advancing needle	
Continue to advance catheter downward and withdraw needle	
Immediately place needle in approved sharps container	
Advance catheter so that hub is flush with skin	
Attach oxygen source to catheter hub	
Ventilate at approximately 6 breaths per minute with 100% oxygen	
Allow an inspiratory/expiratory ratio of 1:3	
Tape catheter to skin	
<b>Monitor Patient Closely</b>	
Auscultate lung fields	
Look for improvement in patient condition	
Continuously monitor for complications and correct as needed	
Localized bleeding: Control with direct pressure	
Esophageal perforation: Discontinue insufflation	
Subcutaneous emphysema: Discontinue insufflation	

Pneumothorax: Discontinue insufflation	
Obstruction or kinking of catheter: Adjust position or recannulate	

Critical Criteria:

- \_\_\_ Don standard precautions (gloves, mask, and eye protection recommended)
- \_\_\_ Insert needle/catheter at a 45-degree angle toward feet
- \_\_\_ Aspirate syringe as needle is advanced
- \_\_\_ Recognize incorrect placement
- \_\_\_ Dispose of needle immediately into appropriate sharps container once
- \_\_\_ Monitor patient continuously for desired effects and complications associated with procedure