

## Skill Sheet

### Emergency Surgical Airway Using the Cric-Key

**Objective:** DEMONSTRATE the procedure for a surgical airway (cricothyroidotomy) using the Cric-Key.

**References:**

0102PP03A TCCC-MP Tactical Field Care #1 150603.pptx from TCCC-MP Curriculum Update 150603.

**Evaluation:** Students will be evaluated as a Pass/Fail (P/F). The instructor will verify the accuracy of the student's ability to perform an emergency surgical cricothyroidotomy using the Cric-Key on an airway trainer by means of observing the student's procedures and technique.

**Materials:**

Student Checklist

Surgical Cricothyroidotomy Simulator, Betadine/Alcohol Prep, #10 or #15 scalpel, Cric-Key, 5.0 cuffed Melker cricothyroidotomy airway cannula, 10cc Syringe, Gauze pads (4x4), circumferential tie, Ambu Bag.

**Instructor Guidelines:**

1. Provide each instructor with a Student Checklist.
2. Ensure student has all student-required materials
3. Read the Learning Objective and the evaluation method to the student.
4. Explain the grading of the exercise.

**Performance Steps:**

1. Assemble and test all necessary equipment.
2. Verbalize that body substance isolation (BSI) precautions were considered.
3. Assess the upper airway for visible obstruction.
4. Identify the cricothyroid membrane between the thyroid and cricoid cartilages. On a buddy, identify to an instructor the location of the top of the thyroid cartilage, the thyroid prominence (on males), the bottom of the thyroid cartilage, the top of the cricoid cartilage, and the cricothyroid membrane.
5. Identify the site of the skin incision. On a buddy, draw a mid-line dotted line from the bottom of the thyroid cartilage to the top of the cricoid cartilage that overlies and bisects the cricothyroid membrane where the skin incision would be made for an actual cricothyrotomy.
6. Palpate the cricothyroid membrane and (while stabilizing the cartilage) make a vertical incision through skin directly over the cricothyroid membrane.
7. While continuing to stabilize the larynx, use the scalpel to dissect the tissues to expose the cricothyroid membrane.
8. While continuing to stabilize the larynx, use the scalpel to make a horizontal incision through the cricothyroid membrane.
9. Insert the Cric-Key with the Melker airway cannula into the trachea, directed towards the lungs, until the flange contacts the skin of the neck. Verbalize feeling tracheal rings with the tip of the Cric-Key during the insertion.
10. Remove the Cric-Key, leaving the Melker cannula in place.

11. Inflate the cuff with 10ml of air.
12. Check for air exchange and verify placement of the Melker cannula by listening and feeling for air passing in and out of the tube causing the tube to mist and looking for bilateral rise and fall of the chest. If the casualty does not breathe spontaneously, connect the Ambu bag to the cuff of the Melker cannula and ventilate. Check for breath sounds bilaterally.
13. If position is correct, secure the tube with cotton tape.
14. Apply a dressing to further protect the tube and incision site.
14. Monitor the casualty's respirations. Ventilate if required.

**Perform an Emergency Surgical Airway (Cricothyroidotomy) Using the Cric-Key**

Task	Completed		
	1st	2nd	3rd
Verbalized that body substance isolation (BSI) precautions were considered.	P / F	P / F	P / F
Assessed the upper airway for visible obstruction.	P / F	P / F	P / F
Correctly identified key surface landmarks on the anterior neck and the cricothyroid membrane on a buddy.	P / F	P / F	P / F
Correctly marked the site for the skin incision over the cricothyroid membrane on a buddy.	P / F	P / F	P / F
Palpated the cricothyroid membrane and (while stabilizing the cartilage) made a vertical incision through the skin directly over the cricothyroid membrane.	P / F	P / F	P / F
While continuing to stabilize the larynx, used the scalpel to dissect the tissues to expose the cricothyroid membrane.	P / F	P / F	P / F
Used the scalpel to make a horizontal incision through the cricothyroid membrane.	P / F	P / F	P / F
Inserted the Cric-Key and Melker cannula through the cricothyroid membrane directed distally towards the lungs until the flange contacted the skin of the neck.	P / F	P / F	P / F
Verbalized feeling for tracheal rings while inserting the Cric-Key and Melker cannula.			
Removed the Cric-Key, leaving the Melker cannula in place.			
Inflated the cuff of the Melker cannula with 10 ml of air.	P / F	P / F	P / F
Checked for air exchange and verified placement of the tube by listening and feeling for air passing in and out of the tube, observed tube misting, and looked for bilateral rise and fall of the chest.	P / F	P / F	P / F
If air exchange was adequate, secured the Melker cannula in place.	P / F	P / F	P / F
Applied a dressing to further protect the tube and incision site.	P / F	P / F	P / F

Monitored the casualty's respirations.	<b>P / F</b>	<b>P / F</b>	<b>P / F</b>
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**Critical Criteria:**

\_\_\_\_\_ Did not obtain a patent airway with the emergency surgical airway.

\_\_\_\_\_ Did not correctly identify the location of the cricothyroid membrane.

\_\_\_\_\_ Performed procedure in a manner that was dangerous to the casualty.

**Evaluator's Comments:**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_ Pass: \_\_\_\_\_ Fail: \_\_\_\_\_