Procedure Guidelines

<table>
<thead>
<tr>
<th>Protocol Title:</th>
<th>Needle Cricothyrotomy</th>
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<tbody>
<tr>
<td>Original Adoption Date:</td>
<td>08/2000</td>
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<tr>
<td>Date of Most Recent Update:</td>
<td>December 26, 2013</td>
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<tr>
<td>Medical Director</td>
<td>Chad Torstenson M.D.</td>
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**Indications:**
1. Inability to gain airway access by other means
2. Upper airway obstruction

**Contraindications:**
1. Pre-existing laryngeal pathology
2. Anatomical barriers
3. Anticoagulation therapy

**Possible Complications:**
1. Injury to surrounding structures
2. Hemorrhage
3. Infection
4. Edema
5. Aspiration of blood
6. Subcutaneous and mediastinal emphysema

**Procedure:**
1. Stabilize the patients head in the neutral position.
2. Identify the cricothyroid membrane and prepare the skin.
3. Stabilize the cricoid and thyroid cartilages with the non-dominant hand.
4. Insert 14 gauge needle catheter attached to a syringe into the membrane at a 45-degree angle caudally, aspirating during insertion.
5. Ability to aspirate air indicates entrance into trachea.
6. Remove the needle and ventilate through the 14 gauge catheter with a 3.0 mm ETT end connected to the catheter hub using a ratio of 1:4 for ventilation:exhalation.
After placement, monitor the patient with ETCO2 to ensure proper ventilation and needle placement.