



**REGION 11
CHICAGO EMS SYSTEM
PROCEDURE**

Title: Needle Cricothyrotomy
Section: Airway / Ventilatory Management
Approved: EMS Medical Directors Consortium
EMS Level: ALS

NEEDLE CRICOTHYROTOMY

INDICATIONS

- Respiratory obstruction
- Anaphylaxis
- Traumatic airway
- Suspected croup
- Epiglottitis with airway obstruction
- Failed endotracheal intubation “with” inability/contraindication to use supraglottic airway

CONTRAINDICATIONS

To be done with caution in patients:

- less than 8 years old or
- suspected barotrauma

EQUIPMENT

- 10 or 14 gauge angiocath
- 10 ml syringe
- 3.0 or 3.5mm ET tube adapter

PROCEDURE

1. Hyperextend neck unless suspected neck trauma.
2. Identify thyroid cartilage and cricoid cartilage. Locate cricothyroid membrane located between these two landmarks.
3. Use angiocath attached to a 10cc syringe; insert catheter through the cricothyroid membrane at a 90-degree angle until a “popping” sensation is felt.
4. Aspirate air to verify placement.
5. Remove syringe; advance catheter tilting it at a 30-degree angle, aiming towards the feet. Remove the needle while advancing the catheter.
6. Once in place, reconnect the syringe and re-verify placement (should aspirate air easily).
7. Connect adapter from 3.0 or 3.5 ET tube to angiocath.
8. Attach bag valve mask and initiate ventilation; you will have difficulty ventilating due to narrowed airway.
9. Auscultate breath sounds.
10. May repeat for total of 2 attempts. Transport with catheter in place.