

5.2 Cricothyrotomy - Percutaneous

This procedure cannot be performed until the provider has received training from their EMS unit on the commercial device selected and is deemed competent. The device and training must be approved by the EMS unit's Medical Director. **Written notification will be provided to the Medical Resource Hospital's EMS Medical Director, Hospital EMS Coordinator, and Bureau of EMS within 48 hours of an event.** Use of this procedure documented under "Procedures Used" in the Patient Care Report constitutes notification of the Bureau of EMS.

PARAMEDIC STANDING ORDERS

This protocol is intended for the use of commercially prepared rapid cricothyrotomy devices. Devices requiring use of a guide wire may not be used. Approved devices have a plastic cannula preloaded onto a metal introducer (e.g., Rusch QuickTrach).



- Devices may be utilized on patients of any age for which they are designed and appropriate sizes are available.
- If anatomical landmarks cannot be identified the procedure should not be performed.

INDICATIONS:

Inability to adequately oxygenate and ventilate using less invasive methods including BVM, supraglottic airways and endotracheal intubation.

EQUIPMENT:

- Commercially prepared percutaneous cricothyrotomy device.
- Chlorhexidine wipes.
- Bag-valve-mask.
- Quantitative Waveform ETCO₂.

PROCEDURE:

(May vary slightly with different devices)

1. Position the patient supine and extend the neck as needed to improve anatomic view.
2. Prepare neck with Chlorhexidine.
3. Using non-dominant hand, stabilize larynx and locate the following landmarks: thyroid cartilage (Adam's apple) and cricoid cartilage (solid ring below the thyroid cartilage). The cricothyroid membrane lies between these cartilages.
4. Insert needle bevel through soft tissue and cricothyroid membrane at 90-degree angle while aspirating with syringe.
5. As soon as air is freely aspirated stop advancing the needle as this indicates entry into the trachea.
6. Direct the needle tip inferiorly by modifying angle to 60-degrees from the patient's head. Advance the assembly until the stopper is in contact with the skin. (Note: If air is not freely aspirated and the stopper has contacted the skin the stopper may need to be removed in order to reach the trachea. Be aware that if the stopper is removed there is increased risk of perforating the posterior aspect of the trachea.)
7. Remove the stopper while holding assembly firmly in place.
8. Hold the needle firmly in place and advance only the plastic cannula off the needle into the trachea until the flange rests on the neck. Carefully remove the needle and syringe.
9. Secure cannula in place with neck strap.
10. Inflate cuff if one is present.
11. Apply BVM with waveform ETCO₂ and ventilate the patient.
12. Confirm placement by assessing for bilateral lung sounds and presence of quantitative and qualitative ETCO₂.
13. Frequently reassess placement and continuously monitor ETCO₂.

