

1080 NEEDLE THORACOSTOMY FOR TENSION PNEUMOTHORAX DECOMPRESSION

EMR	EMT	EMT-IV	AEMT	INTERMEDIATE	PARAMEDIC
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Indications:

- A. All of the following clinical indicators must be present:
 - 1. Severe respiratory distress
 - 2. Hypotension
 - 3. Unilateral absent or decreased breath sounds

OR

- B. Traumatic pulseless arrest with trauma to trunk

May also see tracheal deviation, distended neck veins, increased resistance to bagging, subcutaneous emphysema, persistent cyanosis

Technique:

- A. Expose entire chest
- B. Choose insertion site, size of angiocath, and clean skin overlying site with available skin prep
 - 1. Insert angiocath either at 2nd intercostal space at midclavicular line, or 5th intercostal space at midaxillary line are acceptable locations. Either approach is acceptable, generally the site with the least soft tissue overlying ribs is preferred
 - 2. For adult, use largest, longest available angiocath (generally 10g).
 - 3. For children, a shorter angiocath is appropriate (10-16g depending on size)
- C. Insert angiocath and attach syringe, aspirate as advancing
 - 1. Insert needle at top margin of rib to avoid neuro-vascular bundle that travels along lower margin of rib
- D. Notify receiving hospital of needle decompression attempt

Precautions:

- A. Angiocath may become occluded with blood or by soft tissue
- B. A simple pneumothorax is NOT an indication for needle decompression
- C. Extra care is needed when performing on a pediatric patient.