


Section: ALS Protocols
Subject: CHEST DECOMPRESSION (NEEDLE THORACOSTOMY)
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1. Procedure:
 - a. Use standard body fluid isolation techniques with sterile gloves.
 - b. Identify the intended puncture site:
 - i. The second (2nd) intercostal space at the mid-clavicular line, **OR**
 - ii. The fifth (5th) intercostal space in the mid-axillary line.
 - iii. For pediatric patients, **ONLY** the mid-clavicular site will be use.
 - c. Prep the site:
 - i. Clean, if necessary, with alcohol or sterile water.
 - ii. Use povidone iodine swab in an expanding circular motion to cover an area about 4 – 6 inches wide.
 - d. Insert the needle / catheter at the top of the rib because the artery and nerve run along the bottom of the rib.
 - e. Advance the needle / catheter carefully; a "pop" and rush of air indicates entry into pleural space filled with air under tension.
 - f. Advance slightly.
 - g. Remove needle from the catheter.
 - h. Secure the catheter.
 - i. Document thoroughly in the ePCR
 - j. Notify the QA Officer via email once you return to quarters.
2. QA Points:
 - a. Avoid Z-tracking, which may pinch and collapse the catheter.
 - b. If first tap is unsuccessful, or if ventilation becomes more difficult and signs and symptoms of tension pneumothorax reappear consider inserting a second catheter adjacent to the first.