Sierra – Sacramento Valley EMS Agency Treatment Protocol	PR-3
Pleural Decompression	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 07/2027

INDICATIONS

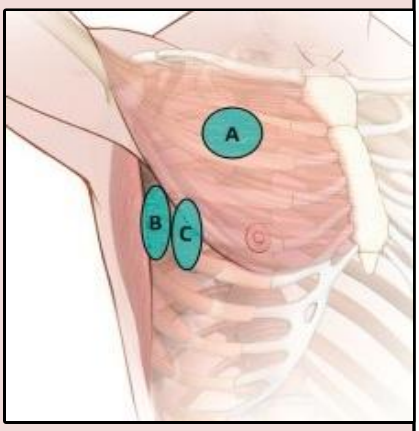
- Suspected tension pneumothorax with absent or diminished breath sounds & one or both of the following:
  - Combined hypotension (SBP <90) and SpO_2 <94%
  - Penetrating injury to the thorax
  - Traumatic cardiac arrest if chest or multi-system trauma is suspected

PRE-PROCEDURE

- Assess respiratory status, manage airway & assist ventilations as appropriate
- Administer high flow O_2 & monitor SpO_2
- Assess & continually monitor vital signs

PROCEDURE

- Identify & prep the site - approved sites in preferred order:
  - **A** - Mid-clavicular line in the 2nd intercostal space
  - **B** - Mid-axillary line in the 4th or 5th intercostal space above the nipple line
  - **C** - Anterior axillary line in the 5th intercostal space above the nipple line



- Capnospot® Pneumothorax Decompression Indicator Procedure:
  - Use a minimum 14g x 3.25" catheter specifically designed for needle decompression
  - Attach Capnospot® Decompression Indicator to the catheter prior to insertion
  - Insert needle with syringe attached at a 90^0 angle, just over the superior border of the rib, & advance until air is freely aspirated or a “pop” is felt, then advance only the catheter until the hub rests against the skin
  - Observe for color change from blue to yellow within 10 secs to confirm catheter placement. Color change may not be reliable in patients with an open pneumothorax. Observe for clinical indicators of successful placement.
- Simplified Pneumothorax Emergency Air Release (SPEAR®) Procedure:
  - Insert in accordance with manufacturer’s directions for use
- Adequately secure catheter
- If an initial attempt at 1 approved site is unsuccessful, consider utilizing an alternate approved site
- 2 attempts allowed on affected side(s) without base/modified base hospital contact

POST-PROCEDURE

- Reassess breath sounds
- Administer high flow O_2 & monitor SpO_2
- Continuous cardiac & $EtCO_2$ monitoring
- Assess & document vital signs every 3-5 mins (if possible)
- Monitor Capnospot® (if used) & breath sounds for signs of development of tension pneumothorax