

# Monterey County EMS System Policy



Policy Number: 4507  
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## Pleural Decompression

### I. PURPOSE

To authorize and provide guidance allowing paramedics to provide pleural decompression for the patient with signs and symptoms of tension pneumothorax.

### II. DEFINITIONS

- A. Pneumothorax. Accumulation of air in the pleural space.
- B. Tension pneumothorax. An accumulation of air, under pressure, in the pleural space.
- C. Hemothorax. An accumulation of blood in the chest cavity.

### III. POLICY

- A. Pleural decompression is indicated for patients who have clinical signs of a tension pneumothorax and rapidly deteriorating vital signs.
- B. The second intercostal space at the mid-clavicular line on the affected side is the approved site for pleural decompression.
- C. Only one attempt on the affected side shall be made without Base Physician order. A second catheter placement may be made on the affected side, prior to base contact, should the first successful placement occlude.

### IV. INDICATIONS FOR PLEURAL DECOMPRESSION

- A. Assessment of the patient indicates that the patient has rapidly deteriorating vital signs with clinical signs and symptoms of a tension pneumothorax.
- B. Clinical signs and symptoms of tension pneumothorax include (All may not be present):
  - 1. Severe respiratory distress.
  - 2. Diminished breath sounds on the affected side.
  - 3. Tracheal deviation away from the affected side.
  - 4. Rapidly deteriorating vital signs or profound signs of shock.
  - 5. Jugular vein distention.

### V. PROCEDURE

- A. Procedure for pleural decompression
  - 1. Prep insertion site with multiple alcohol preps or other appropriate disinfectant.
  - 2. Insert 10-14g IV catheter with syringe attached until a “pop” is felt.

3. Remove the syringe and needle from the catheter.
4. Attach one-way device (Heimlich valve or other appropriate device).
5. Secure the catheter and one-way valve.

**VI. NOTE**

Assure that the tension pneumothorax is not caused by an occlusive dressing already applied to the patient. Allow air to escape from the dressed wound prior to using needle decompression.

Assess the patient carefully to avoid attempted chest decompression on a patient with a hemothorax or pneumothorax.

**END OF POLICY**