# 7.06 NEEDLE THORACOSTOMY-PUBLIC COMMENT JULY 2024

#### **INDICATION**

TENSION PNEUMOTHORAX: Air leak into pleural space through a hole in lung, acting as a one-way valve. Assessment confirmed by some of the following:

- Decreased breath sound, uni- or bilaterally
- Tracheal shift away from affected side
- Extreme dyspnea
- Neck vein distension
- Agitation
- Possible cyanosis
- Hypotension
- Hyper resonance to percussion

## **EQUIPMENT**

- #10 gauge #10 gauge angiocath or other appropriate over the catheter needle
- Large syringe
- Connecting tubing
- Heimlich valve or similar one-way valve device

### **LOCATION**

- PREFERRED: 4<sup>th</sup> or 5<sup>th</sup> intercostal space, mid-axillary, on the affected side.
- ALTERNATE: 2<sup>nd</sup> intercostal space in the mid-clavicular line on the affected side.

#### **PROCEDURE**

- 1. Introduce either angiocath or other appropriate over the catheter needle (attached to large syringe) just above the rib margin during expiration.
- 2. Continue until lack of resistance or "pop" as needle enters pleural space.
- 3. Once air returns under pressure or is aspirated with ease
  - a) Remove plunger.
  - b) Listen for air escaping.
- 4. Once air has ceased escaping
  - a) Remove syringe barrel from needle.
  - b) Advance the catheter.
  - c) Secure catheter with needle guard or tape.
  - d) Attach connecting tubing.
  - e) Attach one-way valve device or Heimlich valve with **BLUE** end toward patient.