

Tension Pneumothorax Decompression

- ABCs
- Oxygen 100%
- Assist Ventilations, prn

Select site: affected side, 2nd intercostal space, mid-clavicular line

Cleanse site with antiseptic. Nick skin with scalpel.

Insert 10-14 g needle: advance over the superior aspect of the 3rd rib. Attempt to aspirate with an attached syringe as you advance. ①

If under tension, air will fill the syringe

If blood is aspirated, consider hemothorax

Advance catheter and remove needle and syringe

Attach Heimlich Valve

Secure Heimlich Valve to the patient's chest

Auscultate breath sounds FREQUENTLY

Monitor SpO₂, cardiac rhythm, clinical status, and if intubated End Tidal CO₂

- Items Needed:
- IV needle 10-14 g with catheter
 - Heimlich Valve
 - Scalpel
 - Antiseptic solution
 - Tape



- Document:
- ABCs
 - Respiratory status
 - SpO₂
 - Vitals Signs
 - Cardiac Rhythm
 - Lung sounds before and after decompression
 - Skin color
 - Chest rise
 - Capillary refill
 - Response to treatment
 - Site selection

- Signs & Symptoms to look for when assessing Tension Pneumothorax
- Shock
 - Respiratory distress
 - Decreased breath sounds on the affected side
 - Hyperinflated affected side
 - Distended neck veins
 - Tracheal deviation
 - Increased resistance to positive ventilation
 - Asymmetrical chest rise

1 Syringe: you can, as an option, add sterile NS to the syringe. If air enters the syringe bubbles will surface in the syringe. This will give you a visual clue that air is escaping from the chest during insertion.

TENSION
PNEUMOTHORAX
DECOMPRESSION