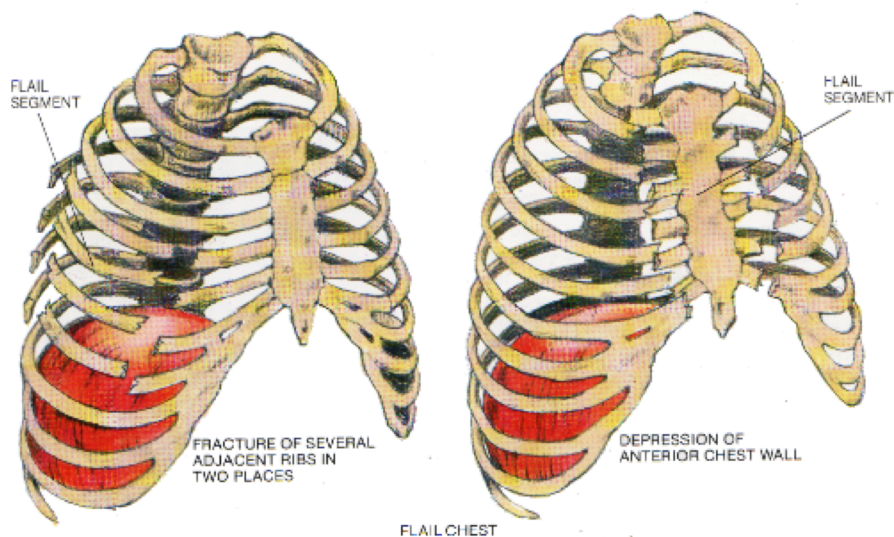


## 5.2 Chest Injuries

### Flail Chest

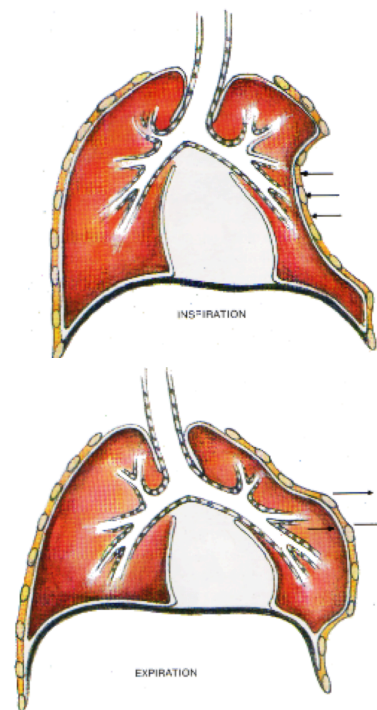
Definition: \_\_\_\_\_



### Signs & Symptoms:

\*\*A flail chest injury could lead to something more serious such as internal bleeding or pneumothorax.

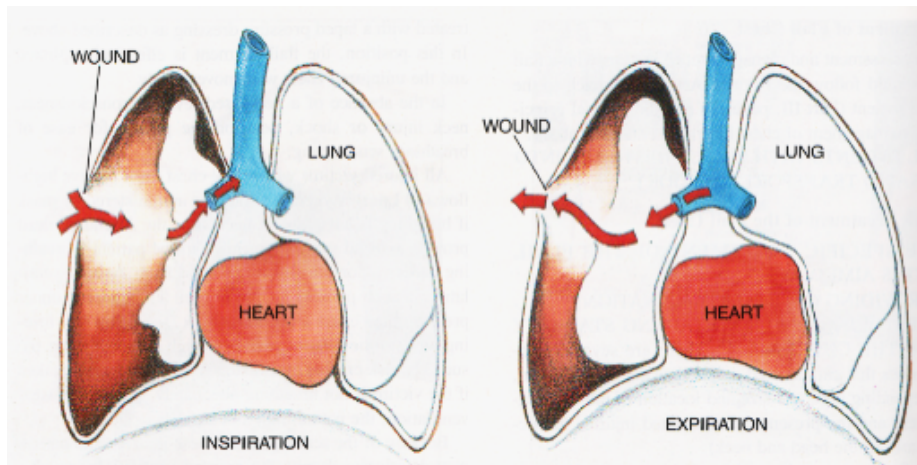
### Treatment:



## **Pneumothorax**

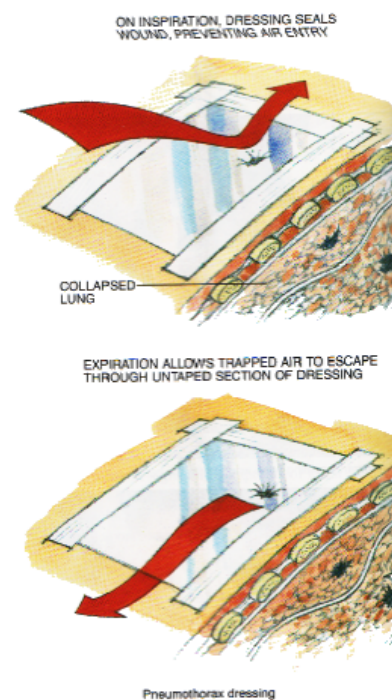
Definition:

### **Open Pneumothorax:**



### **Signs & Symptoms:**

### **Treatment:**



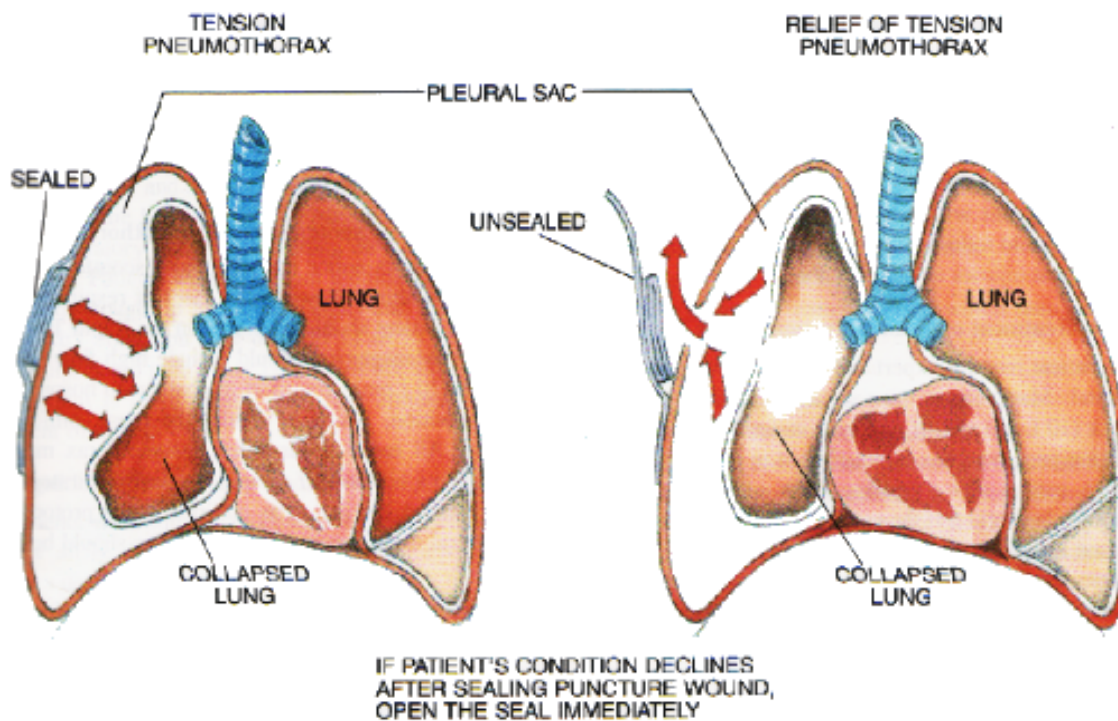
**Closed (Tension) Pneumothorax:**

Definition:

**Signs & Symptoms:**

**Treatment:**

If this condition develops after sealing an open wound, release the dressing and ensure that air has a chance to escape from the chest cavity if possible.

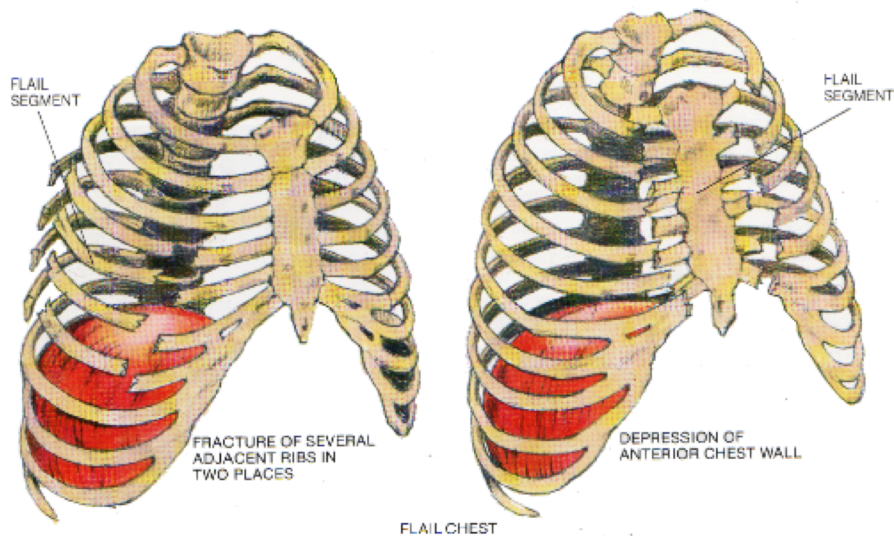


## Unit 2: First Aid (teacher)

### 2.8 Abdominal & Chest Injuries

#### Flail Chest

Definition: *a section of broken ribs*



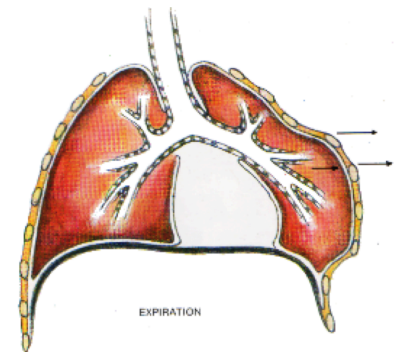
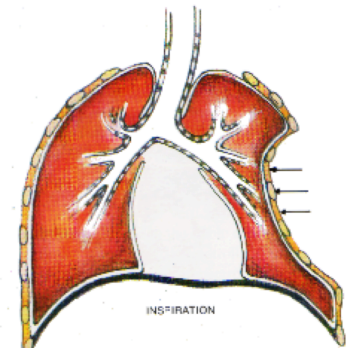
#### Signs & Symptoms:

- History of *trauma* to the chest
- *Paradoxal* movement (see picture)
- Deformity/bruising
- Difficulty breathing
- Signs of fracture
- Shock

\*\*A flail chest injury could lead to something more serious such as internal bleeding or pneumothorax.

#### Treatment:

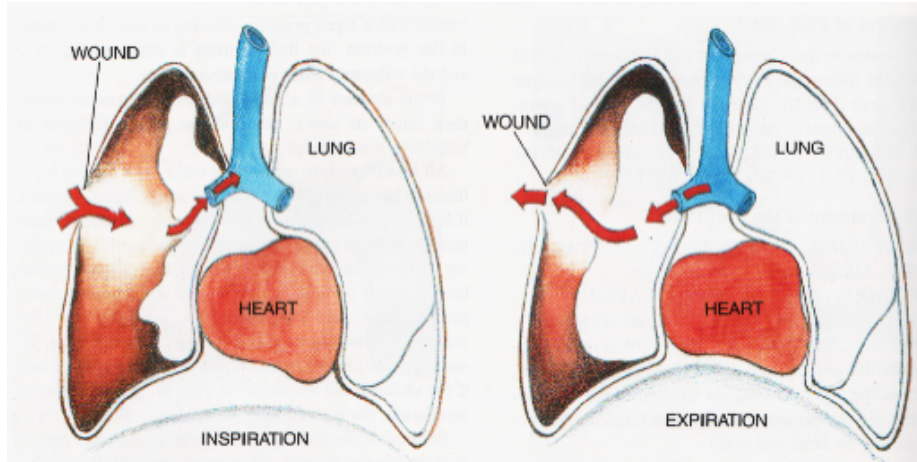
- ABC's
- EMS
- Assisted ventilations if necessary
- Stabilize chest wall (hold the paradoxal movement in the *depressed* position)
  - **Critical Intervention:** Initially hold *hand* firmly over the broken section
  - **Definitive Treatment:** A pad (ex.triangular) large enough to cover the flail section should be placed over the injury and taped firmly in place. Use lots of tape!



## Pneumothorax

Definition: *air in the chest cavity*

### **Open Pneumothorax:**

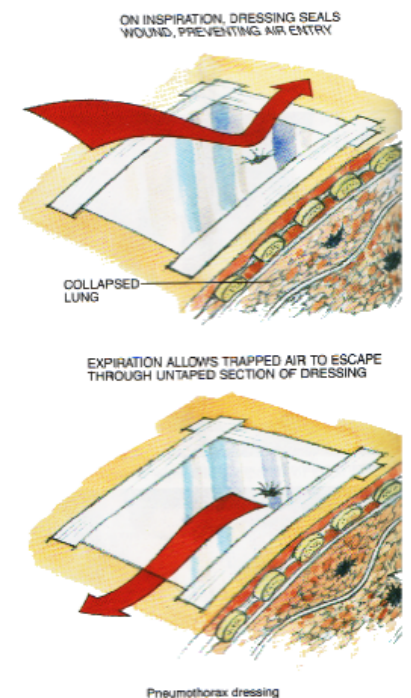


### **Signs & Symptoms:**

- History of *trauma* to the chest
- An open chest wound
- *Sucking* sound
- Blood bubbling from wound on exhalation
- Difficulty breathing
- Coughing blood
- Possible exit wound

### **Treatment:**

- ABC's
- EMS
- Assisted ventilations if necessary
- Lateral position with *injured* side down
- Check for *exit* wound
- Seal the wound
  - **Critical intervention:** Cover the injury with a *gloved hand* to prevent air from escaping the chest.
  - **Definitive treatment:** Tape a piece of *plastic* over the wound on *three* sides, with the open side down. This should act as a flutter-valve to prevent air from collecting in the chest cavity. (see picture)
- Monitor patient for signs of tension pneumothorax...



**Closed (Tension) Pneumothorax:**

This can occur from an internal lung injury, or from an open pneumothorax that is sealed. Notice that if the dressing is completely sealed, air can build up in the chest cavity effectively collapsing the lung.

**Signs & Symptoms:**

- Severe progressive respiratory distress
- Distended neck veins
- Over-expansion of the *injured* side
- *Trachea* shift towards uninjured side

If this condition develops after sealing an open wound, release the dressing and ensure that air has a chance to escape from the chest cavity if possible.

