

- 1. Subject admitted within last 48 hours
- 2. Subject has blunt or penetrating chest wall injury, with one or more of:
 - a. 2 or more rib fractures
 - b. Pulmonary contusion
 - c. Sternal fracture
 - d. Clavicular or scapular fracture
 - e. SCI pts (T5 and above) deemed stable
 - f. Trauma/thoracic surgery pts. >= 24 hrs post-op.
 - g. Hemothorax
 - Pneumothorax w/ 1 or more chest tubes
- 3. Subject 18 years or older
- 4. Subject or Subject Family informed on study and signed subject consent



- 1. Subject have Glasco Coma Scale (GCS) score <= 13 @ 24 48 hrs. and no intracranial pressure monitoring?
- 2. Pregnant?
- 3. Less than 18 years old?
- 4. Unstable spinal injury?
- 5. Active hemoptysis and hemodynamic instability?
- 6. ICP > 20 mm Hg?
- 7. CPP of < 70?
- 8. Unstable pelvic fracture requiring Mast trousers or towel wrap which prevents rolling of patient?

