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| Metropolitan Ambulance Service | | Rural Ambulance Victoria | |
| Clinical Practice Guideline | CHEST INJURIES (PAEDIATRIC) | | CPG:P1504 |
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1. Initial Management

- Treat as for *Clinical Approach*
- Provide pain relief
- Position patient upright if possible unless inadequate or extremely poor perfusion, altered consciousness, associated barotrauma or potential spinal injury.



2. Assess Respiratory Status

- If **open chest wound**, apply sterile dressing with 3 sided seal.
- If **large flail segment**, with a decreased tidal volume, assisted ventilation may be required.
- Assisted ventilation in any chest injury may result in tension pneumothorax necessitating decompression. Note that in the setting of assisted ventilation, assessment of air entry is an unreliable exclusion for tension pneumothorax.
- If **tension pneumothorax suspected**, i.e. some of the following signs are present in the setting of a chest injury and/or respiratory distress
 - decreased breath sounds on affected side
 - increasing distension of neck veins
 - tracheal shift to opposite side
 - surgical emphysema
 - inadequate perfusion,

Then manage as per *Point 3 Tension Pneumothorax*

..... this guideline continued

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3. Tension Pneumothorax

- If tension pneumothorax suspected, but the assessment is not obvious, **test for a Tension Pneumothorax.**
- If needle test is suggestive of pneumothorax, withdraw needle and insert 16G IV cannula
- If needle test is not suggestive of pneumothorax, withdraw needle, cover insertion site with a clear adhesive dressing and circle the insertion site with a pen.
- If some of the above signs are present and the patient is deteriorating with decreasing conscious state and poor perfusion, **attempt Immediate Chest Decompression** by inserting a 16 gauge cannula
- If no air escapes but copious blood flows through the cannula then a major haemothorax is present. Remove the cannula and cover the insertion site as above
- If air escapes, or air and blood bubble through the cannula, leave insitu and secure.



4. Reassess Physiological Status

- If less than adequate perfusion persists then consider other causes, e.g., hypovolaemia, and manage as per *CPG:P1601 Hypovolaemia (Paediatric)*
- If pain persists manage as per *CPG:P1401 Pain relief – Paediatric*