



CLINICAL GUIDELINE	
Pneumothorax	
Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NETS WA
<p align="center">Child Safe Organisation Statement of Commitment</p> <p>CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.</p>	
<p align="center">This document should be read in conjunction with this DISCLAIMER</p>	

This is a quick reference guide for transportation purposes only. For further information please refer to the CAHS Neonatology '[Pneumothorax](#)' Clinical Guideline located [here](#).

Clinical Considerations

Should be considered in any ventilated baby or baby on CPAP who acutely deteriorates, **OR** any baby who:

- Has a sudden increase in work of breathing
- Worsening hypoxemia
- Worsening respiratory acidosis
- Reduced breath sounds
- Rising Transcutaneous / end-tidal CO₂

Management

- Chest X-Ray if available at referring hospital.
- Transillumination with a cold light source may be attempted.
- **For emergencies such as acute deterioration / bradycardia / hypotension, do not wait for Chest X-ray.** Needle chest with 22G or 24G cannula. ([Needle Aspiration of the Chest](#)).
- Positive pressure respiratory support can result in further deterioration by increasing the air leak and placing it under tension.
 - Drain the air first to stabilise the infant and then intubate under controlled conditions.
- For small pneumothorax / mild respiratory distress travelling via road / air: consider conservative management. (Cot O₂ to improve oxygen saturations).
- For significantly large / symptomatic pneumothorax, or for air transports, consider insertion of chest drain (pneumothorax is likely to expand with increasing altitude) ([Intercostal Catheter \(ICC\) insertion and management](#)). Ensure appropriate drainage device fitted e.g. Heimlich Valve or Pneumostat drain.





Heimlich valve



Pneumostat
Chest Drain

- Transcutaneous (CPAP) or end-tidal CO₂ monitoring (Intubated) should be used in all patients with Air Leaks.
- Consider ongoing pain management
- For flight transports - Discuss with on call NETS consultant and pilot of the need for flying at Sea Level. ([Special Features of an Air Transport](#))
- Note: Nitrogen 'washout' technique is **not recommended**.

This document can be made available in alternative formats on request for a person with a disability.

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Compassion

Excellence

Collaboration

Accountability

Equity

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