

## ACUTE MANAGEMENT OF INFANTS AND CHILDREN WITH CROUP

*This PCP relates to*

**NSW Health PD**

*NSW PD 2005\_392: Children and Infants with Croup – Acute Management*

**PCP number**

*NSW PD 2005\_392:PCP 5 Acute management of infants and children with croup*

**Sites where PCP applies** Bulahdelah Community Hospital - Emergency Department (ED)

**Target audience** Clinicians in ED where infants and children present with cough, inspiratory stridor and shortness of breath.

**Description** Provides evidence based practice guidelines for the treatment of infants and children with croup

**Subject** Acute management of croup in children

**Keywords** Acute, management, croup, children, infants

**Replaces existing PCP** No

**Document number and/or name of superseded document/s**

**Related Legislation (including OHS legislation), Australian Standards, NSW Health Policy or Circular, other HNEH Documents, Professional Guidelines, Codes of Practice or Ethics:**  
NSW Health Paediatric Clinical Practice Guidelines

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### Summary

- This PCP is a clinical pathway in the assessment of the severity and management of croup in infants and children,
- Provides guidelines on appropriate disposition, transfer/retrieval based on clinical assessment and response to treatment or discharge planning
- PCP includes relevant fact sheet for parent information.

**Distribution:** General Manager, DON, Paediatrician, NUM ED, ED Physician, Director of Medical Services CYP&FCN Stream Leaders

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**PCP authorised by:** Professor Trish Davidson - Clinical Leader CYP&FCN

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**PCP Review Due Date:** May 2009

**TRIM Number:** Pending

Hunter New England Area Health Service

**Bulahdelah Community Hospital**

**PAEDIATRIC CROUP MANAGEMENT**

Surname \_\_\_\_\_ Sex \_\_\_\_\_

Given Names \_\_\_\_\_

DOB \_\_\_\_\_ MRN \_\_\_\_\_

AFFIX PT LABEL HERE

Pt. Weight \_\_\_\_\_ kg

**ALERT:**  
**Evidence of life threatening airway obstruction: (ie cyanosis, decreased LOC)**  
**Apply 100% O2 via non re-breather mask, Give Neb Adrenaline (5ml 1:1000 undiluted)**  
**Contact senior medical officer immediately**  
**Find the most senior person available to intubate child urgently.**  
**Consider NETS (1300 362 500)**

Any child with stridor, fever, toxic appearance and no cough is to be seen immediately by Senior Doctor/Staff Specialist to rule out Epiglottitis or Tracheitis.

INITIAL ASSESSMENT			
Symptoms	Mild	Moderate	Severe
Central cyanosis	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> Yes or extreme pallor
Level of consciousness	<input type="checkbox"/> Normal	<input type="checkbox"/> Can be placated, interested in surroundings	<input type="checkbox"/> Apathetic or restless
Pulse rate	<input type="checkbox"/> Normal for age	<input type="checkbox"/> Tachycardia	<input type="checkbox"/> Extreme tachycardia/ bradycardia
Accessory muscle use or Tracheal tug	<input type="checkbox"/> Nil to minimal	<input type="checkbox"/> Minimal to moderate	<input type="checkbox"/> Moderate to excessive
Barking cough	<input type="checkbox"/> Present	<input type="checkbox"/> Present	<input type="checkbox"/> Present
Inspiratory stridor	<input type="checkbox"/> Nil or intermittent	<input type="checkbox"/> Persisting at rest * * If only this present still moderate	<input type="checkbox"/> Persisting at rest
Severity Score <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe			
Print Name _____ Signed: _____ <input type="checkbox"/> Medical Officer/ <input type="checkbox"/> Nurse			

INITIAL MANAGEMENT – ASSESSMENT OF ACUTE ATTACK		
Mild <input type="checkbox"/>	Moderate <input type="checkbox"/>	Severe <b>CONTACT SENIOR MEDICAL OFFICER IMMEDIATELY <input type="checkbox"/></b>
No specific treatment unless a previous history of severe croup then consider an oral dose of Dexamethasone or Prednisolone  <b>**If fits into 'risk factors criteria' reconsider</b>	Oral (in order of preference) Dexamethasone 0.15 – 0.3mg/kg OR Prednisolone (oral) 1- 2 mg/kg OR Nebulisd Budesonide (2mg) (4ml) -Especially if oral steroids not tolerated works within 30 min)  Observe for > 4 hours  If no improvement treat as severe	<b>CONTACT SENIOR MEDICAL OFFICER</b> Do not disturb child unnecessarily Give 100% oxygen via an appropriate sized non re-breather face mask and monitor vital signs Give nebulised adrenaline 5mls 1:1,000 undiluted in the nebuliser with oxygen (may repeat within 15 minutes. Monitor vital signs continuously  Dexamethasone 0.15- 0.3 mg/kg (IV or IM) Budesonide 2mg (4mls neat nebulised) Reassess/review Consider intubation – find most experienced person available
Parental explanation Discharge home with croup fact sheet	<b>1. If Marked Improvement after 4hrs:</b> → <b>Discharge-Only If no risk factors present</b> <b>** (see below)</b> And when no stridor at rest Provide parental explanation Give croup fact sheet Written follow-up plan with GP <b>2. If Partial Improvement only after 4 hrs:</b> <b>Transfer to a higher level facility</b> Repeat oral steroids at 12 hours Provide parental explanation Give croup fact sheet	<b>Transfer to a higher level facility</b>  <b>Consider NETS transfer</b>

\*\*Consider admission if **risk factors** for more severe disease exist

- Age < 6 months, Pre-existing airway disease / abnormalities, history of severe croup, stridor at rest in daylight hours, poor parental understanding of illness, social requirements eg. no phone or transport, distance from hospital