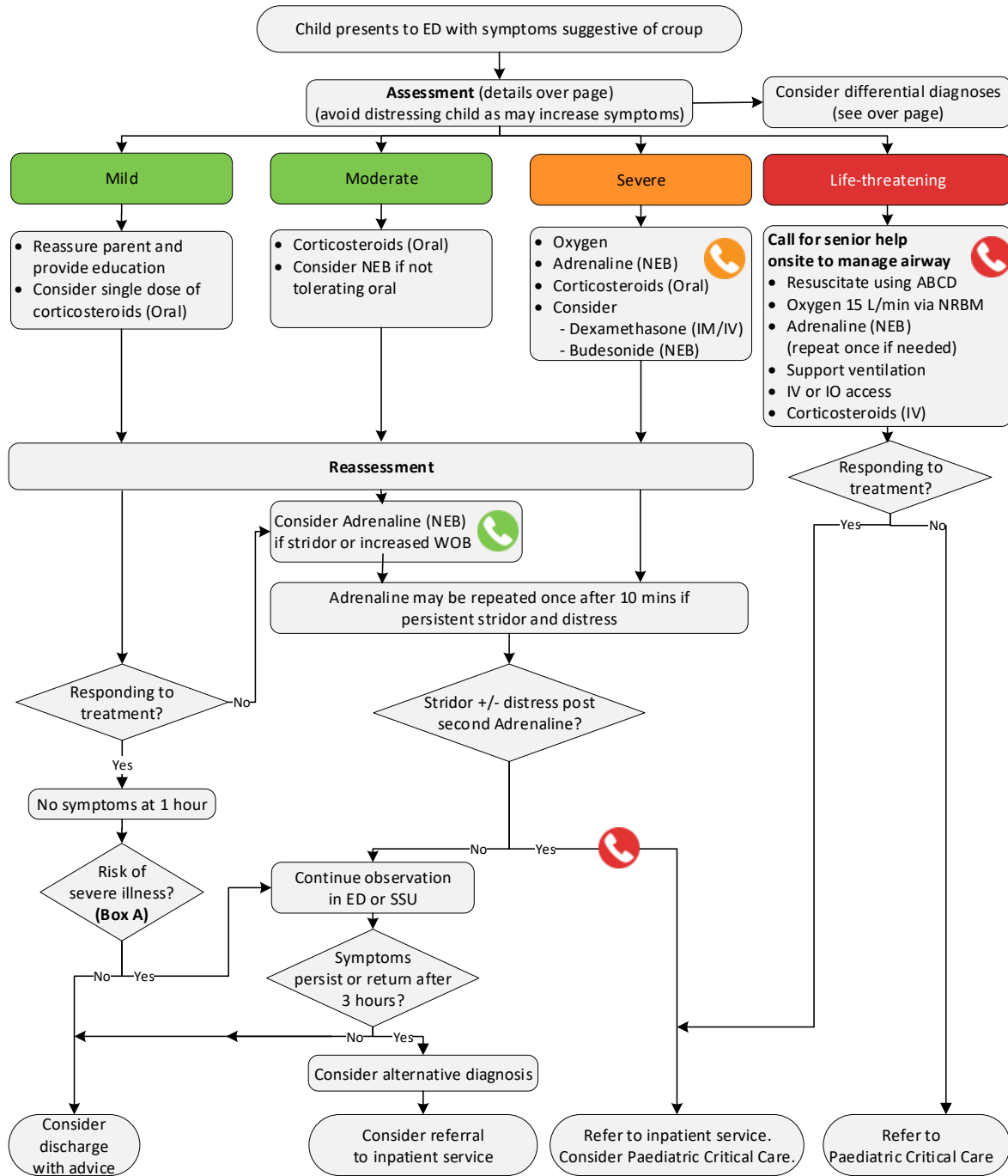


Queensland Paediatric Flowchart and Medications

Emergency

Croup – Emergency management in children – Flowchart



Box A: Risk factors for severe croup

- age less than 6 months
- underlying structural upper airway condition
- history of previous severe croup
- unplanned representation within 24 hours
- trisomy 21

Abbreviations
 WOB = Work of Breathing NRBM = Non-rebreather mask

- Consider seeking senior emergency/paediatric advice as per local practices
- Seek senior emergency/paediatric advice as per local practices
- Onsite assistance with airway may include ICU/ENT /Anaesthetics. Call Retrieval Services Queensland (RSQ) on 1300 799 127 if no paediatric critical care facility on site

CHQ-GDL-60004-Appendix 1 V2.0

For more information refer to [CHQ-GDL-60004 - Croup – Emergency management in children](#)



Croup – Emergency management in children – Medications

Assessment of severity of croup			
Mild	Moderate	Severe	Life -threatening
Occasional barking cough, no audible stridor at rest	Frequent barking cough, audible stridor at rest	Persistent stridor at rest (may be expiratory)	Audible stridor may be quieter
No or mild respiratory distress* at rest	Moderate respiratory distress	Severe respiratory distress	Exhausted, poor respiratory effort
Normal SpO ₂ [#] , no cyanosis	Normal SpO ₂ , no cyanosis	SpO ₂ ≤ 93% or cyanosis	SpO ₂ ≤ 93% or cyanosis
Alert	Little or no agitation	Fatigue or altered mental state	Lethargy or decreased level of consciousness

*Signs of respiratory distress include accessory muscle use, abdominal breathing, intercostal recession, subcostal recession and tracheal tug. [#] Oxygen saturations using pulse oximetry, commonly referred to as "sats"

Differential diagnosis of acute onset stridor and respiratory distress	
Toxic appearance	Non-toxic appearance
<ul style="list-style-type: none"> Bacterial tracheitis Epiglottitis Retropharyngeal abscess Peritonsillar abscess (quinsy) 	<ul style="list-style-type: none"> Spasmodic croup Angioneurotic oedema Laryngeal foreign body Subglottic haemangioma

Corticosteroid dosing for the treatment of croup	
Dexamethasone (Oral/IM)	0.15- 0.3 mg/kg 0.15 mg/kg has shown to be an effective dose but in practice clinicians may opt for a higher dose to ensure the desired dose is ingested in a child who is vomiting/having difficulty taking oral medicine. Preferred corticosteroid as associated with lower representation rate however not available at all hospitals and community pharmacies.
Dexamethasone (IV)	0.3 mg/kg
Prednisolone (Oral)	Day 1: 1 mg/kg/day Day 2: 1 mg/kg/day in evening

Budesonide (NEB) dosing for the treatment of croup	
Dose	2 mg nebulised with oxygen.
Side effects	Facial irritation – cover child's eyes while administering, wash face afterwards

Adrenaline (NEB) dosing for the treatment of croup	
Dose	5 mL of undiluted 1:1000 Adrenaline nebulised with oxygen as a single dose. Dose may be repeated if there is inadequate response.
Monitoring	Clinical observations every 15 minutes for the first hour.

For more information refer to [CHQ-GDL-60004 - Croup – Emergency management in children](#)

