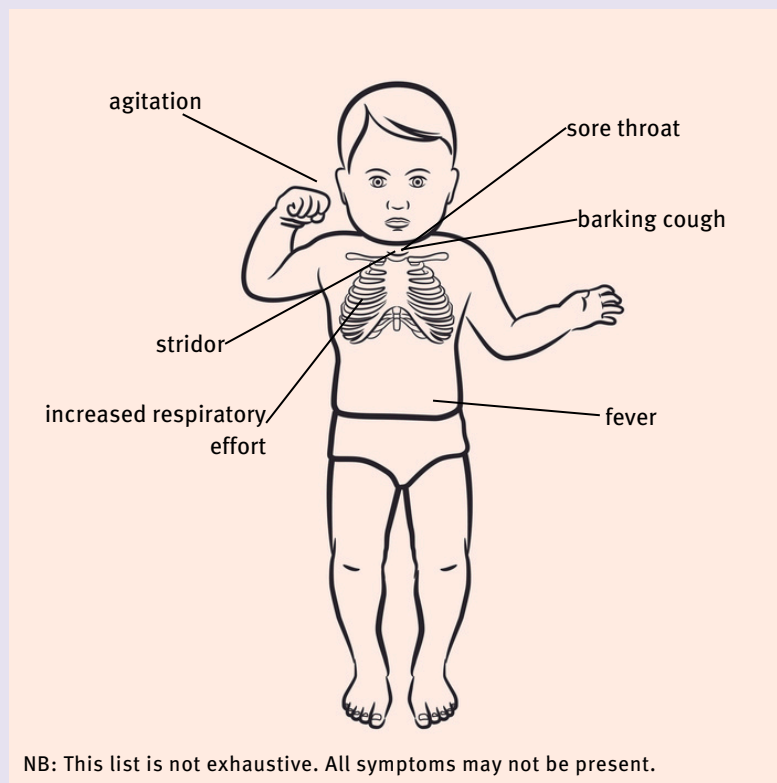


Croup - Common Emergency Presentations

Croup is a condition where inflammation to the upper airway, larynx and trachea is triggered by a virus. As infants and children have smaller and narrower airways this inflammation is problematic. In mild cases, children will often have a hoarse voice and a characteristic barking cough. In more severe cases, it causes obstruction to the airway, presenting in the form of an inspiratory stridor and result in increased respiratory effort. Croup usually occurs between 6 months and 5 years of age.

Signs and Symptoms



ALERT

Children with croup should be made as comfortable as possible. Take special care not to distress the child as this may exacerbate symptoms. Oxygen desaturation may herald an impending complete upper airway obstruction.

Risk factors for severe disease

- age less than six months
- underlying structural upper airway condition e.g. tracheomalacia, subglottic stenosis
- history of previous severe croup
- unplanned representation to ED within 24 hours of first croup presentation
- trisomy 21



Croup Severity Assessment

	Mild:	Moderate:	Severe:	Life threatening:
Bark and stridor	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
Respiratory distress	No or mild respiratory distress at rest	Moderate respiratory distress	Severe respiratory distress	Exhausted, poor respiratory effort
SpO ₂ on room air	Normal room air SpO ₂ , no cyanosis	Normal room air SpO ₂ , no cyanosis	Room air SpO ₂ equal to or less than 93% or cyanosis	Room air SpO ₂ equal to or less than 93% or cyanosis
Level of consciousness	Alert	Little or no agitation	Fatigue or altered mental state	Lethargy or decreased level of consciousness

Treatment

There is no definitive treatment for the viruses that cause croup. Therapy is aimed at decreasing airway oedema and providing supportive care (respiratory support and maintenance of hydration). For more information on the treatment of croup including medication dosages please refer to the "Management" section of the Queensland Paediatric Emergency Care (QPEC) Guideline: [Croup - Emergency management in children.](#)

Tips for caring for children with Croup

- Ensure regular vital signs and respiratory observations are carried out and documented. If stridor is present at rest or when upset, ensure prompt medical review. For guidance on the observation frequency for your patient, discuss with senior nursing staff and the treating medical officer. See the Queensland Health [Paediatric Early Warning and Response System Tools](#) page for the CEWT tool appropriate for use in your workplace.
- If nebulised adrenaline is administered, 15 minutely observations are required for the first hour.
- All nursing care should be centred around keeping the infant or child as settled as possible. If willing and able to help, actively involve caregivers in administering any prescribed medications.
- Croup is often worse at night. Many caregivers and their children will present overnight.
- Be mindful a laryngeal foreign body can present with similar symptoms (voice changes, stridor, increased respiratory effort). Croup is usually fairly quick in its onset, with patients often waking overnight with a barking cough +/- stridor. They may have had only a very mild coryza preceeding.
- Ensure that the correct PPE is worn when caring for children with respiratory symptoms to reduce transmission.

For further information:

Guideline:

[Queensland Paediatric Emergency Care Guideline: Croup - Emergency management in children](#)

Video:

[Children's Health Queensland: Croup](#)

Skill Sheets:

[Respiratory Assessment](#)

[Hydration Assessment](#)

[Vital Signs Assessment in Paediatrics](#)

[Parent Fact Sheet \(available in English, Arabic, Swahili, Chinese \(simplified\), Vietnamese, Somali \(written and audio\)\)](#)



References:

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Skill Sheet Disclaimer

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- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

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