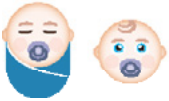


Common Emergency Presentations - Bronchiolitis

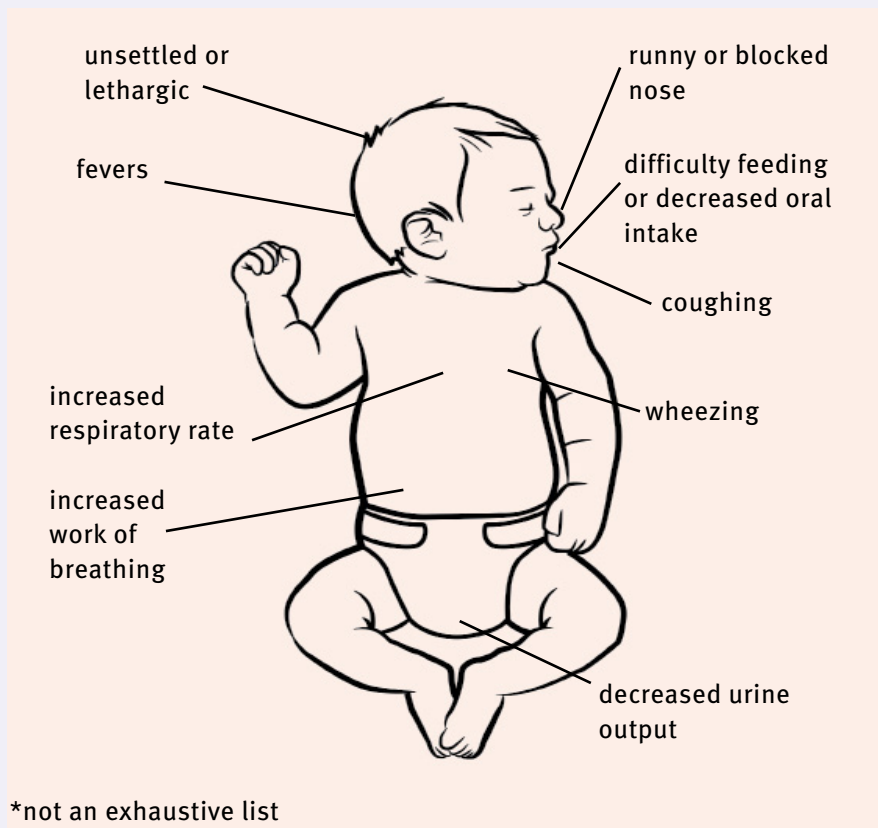
Bronchiolitis is a lower respiratory tract infection that can be caused by several different viruses including Respiratory Syncytial Virus, Adenovirus and Parainfluenza virus.

Age effected

Bronchiolitis occurs between 0-12 months of age



Bronchiolitis signs and symptoms*



Infants can present with a runny nose, lethargy, cough, wheezing and increased respiratory effort. The virus causes the bronchiolar mucosa to swell and the lumen to fill with mucus and exudate. This results in bronchial obstruction which contributes to the presentation of increased respiratory effort and wheezing. In the early months of an infant's life they are obligatory nasal breathers. Bronchiolitis can cause their nasal passages to be partially blocked. This obstruction may lead to increased respiratory effort and difficulty feeding resulting in varying degrees of dehydration. Bronchiolitis can last for 7-10 days with peak severity occurring day 2 or 3.



Assessment of severity of acute bronchiolitis

	Mild:	Moderate:	Severe:
Behaviour	Normal	Some/intermittent irritability	Increasing irritability and/or lethargy, fatigue
Respiratory rate	Normal to mild tachypnoea	Increased	Marked increase or decrease
Use of accessory muscles	Nil to mild chest wall contraction	Moderate chest wall retractions Tracheal tug Nasal flaring	Marked chest wall retractions Marked tracheal tug Marked nasal flaring
Room air oxygen saturations (FiO ₂ 21%)	SpO ₂ greater than 92%	SpO ₂ between 90% and 92%	SpO ₂ less than 90% May not be corrected by oxygen therapy
Apnoeic episodes	None	May have brief apnoea	May have increasingly frequent or prolonged apnoea
Feeding	Normal	May have difficulty with feeding or reduced feeding	Reluctant or unable to feed

Risk factors for severe disease

- gestational age less than 37 weeks
- chronological age at presentation less than 10 weeks
- chronic lung disease
- congenital heart disease
- chronic neurological conditions
- Indigenous ethnicity
- failure to thrive
- Trisomy 21
- post-natal exposure to cigarette smoke
- breast fed for less than 2 months

Treatment

The management of bronchiolitis focuses on supportive cares to ensure adequate oxygenation and supporting hydration. Although an obstructive respiratory illness, bronchodilators are not recommended in treating infants with bronchiolitis. For information on treatment and medication dosages in the treatment of croup refer to the 'Management Tab' of the [Queensland Paediatric Emergency Care Guideline: Bronchiolitis - Emergency management in children](#)



Nursing skill sheets you can utilise when caring for an infant with bronchiolitis:

- [Respiratory Assessment](#)
- [Hydration Assessment](#)
- [Nasopharyngeal Suction](#)
- [Nasogastric Tube insertion](#)
- [High Flow Nasal Therapy](#)

Tips for caring for an infant with bronchiolitis:

- Ensure regular basic and respiratory observations are carried out and documented. For guidance on the frequency for your patient, discuss this with senior nursing staff and the treating medical officer. Please also ensure you follow the [CHQ Procedure: Use of Children's Early Warning Tool \(CEWT\)](#).
- Keep a strict fluid balance chart to ensure an accurate depiction of the infant's hydration status. This includes weighing nappies, timing breast feeds and recording vomits/possets.
- Where possible, nursing cares should be grouped together to reduce distress to the infant and promote maximal rest.
- Review with treating doctor the need for nasopharyngeal suctioning. This may clear the nostrils and assist feeding in infants with moderate distress.
- If there has been a significant decrease in feeding or transition to nasogastric feeds, ensure support is provided to breast-feeding mothers in the form of lactation advice and that equipment is provided to pump. You can learn more about supporting the breast-feeding mother here: [Children's Health Queensland Video: Supporting the breast-feeding mother](#).
- Infants who are discharged from emergency on day 1 or 2 of illness may get worse before they get better. Ensure parents understand this and provide discharge education to families on when to seek medical attention: [Queensland Paediatric Emergency Fact Sheet: Bronchiolitis](#).

For further information:

[CHQ Guideline: Nasal High Flow Therapy](#)

[Nursing Standard: Enteral Feeding Tubes: Insertion, care and management \(QH only\)](#)

Video:

[Bronchiolitis](#)

References:

This Queensland Paediatric Emergency Nursing Skill Sheet was developed by the Emergency Care of Children working group (funded by the Queensland Emergency Department Strategic Advisory Panel) with the help of the following resources:

Children's Health Queensland Hospital and Health Service. (2017a). Transition to Paediatric Practice Acute Paediatric Program. In Module 4 – Respiratory (5th ed., p. 19). Queensland Health.

Emergency Care of Children working group. (2019, December 23). Bronchiolitis – Emergency management in children. Queensland Paediatric Emergency Care. <https://www.childrens.health.qld.gov.au/guideline-bronchiolitis-emergency-management-in-children/>

Faan, P. R. P. M. H. J., & C(Inc), R. D. (2018a). The Child With Respiratory Dysfunction. In Wong's Nursing Care of Infants and Children (11th ed., pp. 906–909). Mosby.



Nursing Skill Sheet Legal Disclaimer

The information contained in the Queensland Paediatric Emergency Care nursing skill sheets are intended for use by nursing staff for information purposes only. The information has been prepared using a multidisciplinary approach with reference to the best information and evidence available at the time of preparation. No assurance is given that the information is entirely complete, current, or accurate in every respect. The nursing skill sheets are not a substitute for clinical judgement, knowledge and expertise, or medical advice. Variation from the nursing skill sheets, taking into account individual circumstances may be appropriate. This does not address all elements of standard practice and accepts that individual clinicians are responsible for the following:

- 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.

Children's Health Queensland disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this nursing skill sheet, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.

