

Bronchiolitis – The Quick Guide

This is a clinical diagnosis
 Bronchiolitis is a viral illness predominately affecting children <12months but may affect those 12 – 24 months. History is of breathing difficulty, cough and poor feeding. Examination reveals wheeze with or without crackles. Children who present with a fever greater than 39 °C should have a careful evaluation to exclude other diagnoses before a diagnosis of bronchiolitis is made.

Assessment of Severity of Disease

Mild	Moderate	Severe
<ul style="list-style-type: none"> • Respiratory rate normal to mildly increased • Nil to mild chest wall retraction, • no supplemental oxygen requirement, • O₂ saturations > 95% • Normal feeding 	<ul style="list-style-type: none"> • Respiratory rate increased • Moderate respiratory distress, tracheal tug, moderate chest wall retraction, • O₂ saturations 90-95%. • Feeding 50-75% of feeds or above 	<ul style="list-style-type: none"> • Markedly increased respiratory rate • Marked chest wall retraction, nasal flare, grunting • Apnoeic episodes • O₂ saturations < 90% • Hypoxaemia – may not be corrected by oxygen. • Feeding < 50% of normal <p><i>Watch for the tiring child with frequent apnoeas – they may need ICU assessment</i></p>

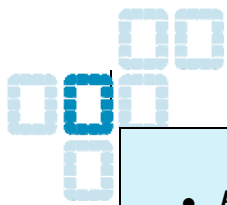
In addition children

- born at <36 weeks gestation,
- with congenital heart disease,
- with chronic respiratory disease,
- with immunodeficiency
- children less than 12 weeks of age

will require special consideration and should be discussed with a senior doctor

Initial Treatment

Mild	Moderate	Severe
<ul style="list-style-type: none"> • <i>Investigations</i> – no routine investigations are required • <i>Medications</i> – there are no proven medications for bronchiolitis • <i>Oxygen</i> – these children do not need supplemental oxygen therapy • <i>Monitoring</i> – these children do not require monitoring 	<ul style="list-style-type: none"> • <i>Investigations</i> – no routine investigations are required • NPA should be performed to cohort • <i>Medications</i> – there are no proven medications for bronchiolitis. • <i>Oxygen</i> – commence supplemental when O₂ saturations consistently < 92% or if ↑ Resp Distress • <i>Monitoring</i> – Intermittent with other observations, continuous NOT required 	<ul style="list-style-type: none"> • <i>Investigations</i> – no routine investigations are required • NPA should be performed to cohort • <i>Medications</i> – there are no proven medications for bronchiolitis but various options can be considered for a child requiring ICU care. • <i>Oxygen</i>, - should be given to maintain O₂ saturations ≥ 92% • <i>Monitoring</i> - may need apnoea monitor, continuous O₂ monitoring if in >50% or apnoeas or co-morbidities



<ul style="list-style-type: none"> • <i>Fluids</i> – maintain usual oral intake 	<ul style="list-style-type: none"> • <i>Fluids</i> – Maintain usual oral intake if taking >50% of feeds. Watch for signs of respiratory distress, if present reduce frequency to 2hly or consider NG feeds • These patients usually require admission – consider for peripheral hospital transfer • Social circumstances need to be considered 	<ul style="list-style-type: none"> • <i>Fluids</i> – most likely to require IV fluids –@ 2/3 maintenance. Can try NG feeds but cease if worsening respiratory distress. • Assess electrolytes before commencing IV fluids and then at least daily • Need admission, may need ICU review. <p><i>Watch for the tiring child with frequent apnoeas – they may need ICU assessment</i></p>
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ICU REFERRAL:

- Severe respiratory distress,
- Frequent prolonged apnoeic episodes with desaturations, requiring >50% oxygen to maintain saturations \geq 92%.
- Fatigue, altered conscious state

INFECTION CONTROL –

- Use alcohol gel if hands before and after contacting the patient, wash hands if visibly soiled.
- Gown and glove if likely to be contaminated with respiratory secretions.
- Use patient dedicated or disposable equipment where possible.

Discharge Criteria

Mild	Moderate	Severe
These patients can be discharged home with GP follow-up – give bronchiolitis information sheet and advise about worsening symptoms	Oxygen saturations of >92% in air (observe for at least 4 hours after cessation of O ₂) Taking >75% of usual fluids Review social circumstances	Oxygen saturations of >92% in air (observe for at least 4 hours after cessation of O ₂) Taking >75% of usual fluids Review social circumstances

HiTH provides home oxygen therapy for children with bronchiolitis based on the following criteria.

EXCLUSION CRITERIA	INCLUSION CRITERIA
<ol style="list-style-type: none"> 1. Pre-existing cardiac, pulmonary (eg BPD), neuromuscular disorders 2. History of apnoea 3. Prematurity <34 weeks (may be less relevant if a child is >12 months) 4. Children requiring >12 hourly beta-2 agonists (children with asthma or bronchial hyper-responsiveness should <u>not</u> receive home oxygen) 	<ol style="list-style-type: none"> 1. >2 months of age (corrected gestation) 2. Clinical diagnosis of acute bronchiolitis or other lower respiratory tract infection (eg pneumonia) 3. Adequate feeding and hydration (>50% normal feed) 4. Oxygen saturation \geq92% on <1litre/minute nasal cannula oxygen 5. No signs of deteriorating respiratory status 6. Paediatrician agrees that child is fit for home oxygen therapy

SEE [Checklist](#) for Home Oxygen for more details