

Objective confirmation of wheeze in child aged 1-5 years by physician

**Initial Step:**

Detailed history and examination to exclude diseases such as suppurative lung disease, foreign body aspiration, stridor, etc

Treat any underlying lung disease detected

**Acute attack:**

Assess for hypoxia and supplement to maintain oxygen saturations >94%

Trial of short acting  $\beta$ -2agonist and/or ipratropium bromide using metered dose inhaler and spacer if no hypoxia; consider nebulized short acting  $\beta$ -2agonist for severe attack

Clinical deterioration:

Consider systemic corticosteroids, azithromycin, inhaled or intravenous magnesium

Clinical response:

Continue bronchodilator therapy until wheeze improves

**Maintenance therapy:** assess treatable traits

Atopy and/or peripheral eosinophilia (>300/mcl)

Step1: Trial of low dose maintenance inhaled corticosteroids (400mcg/day budesonide equivalent for 6-12 weeks). Ensure correct device and technique

Step 2: Stop inhaled corticosteroids (ICS).

- If symptoms do not improve despite ICS, re-check device, technique, adherence – and consider alternative diagnosis

- Step 3: If symptoms had improved on ICS and recur, re-start ICS at lowest dose needed to maintain control.

Bronchodilator responsive airflow obstruction – assess for wheeze by auscultation before and after bronchodilator

If no atopy or peripheral eosinophilia, treat symptoms only, with as needed short acting bronchodilators (beta-2 agonists or ipratropium bromide)

Moist cough with wheeze ?bacterial bronchitis / other diagnosis

Investigate for an underlying cause, including aspiration, chronic suppurative lung disease and treat underlying disease (see box 1)

Oral Antibiotics