

key points

SELECTED BY

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More than one million children in the UK are receiving treatment for asthma with the vast majority managed in primary care. The National Review of Asthma Deaths found that 43% of patients who died from asthma had had no primary care review in the previous 12 months. Fewer than one quarter of patients who died from asthma had a written asthma action plan. In children and young people there was a particular lack of adherence to medical advice and a lack of awareness about the risks of a poor outcome. Teenagers with asthma, particularly those with perceived mild or moderate disease are at greater risk of acute, severe and life-threatening exacerbations.

Features of asthma deterioration in children that parents should be aware of include: difficulty talking or walking, unable to feed, little relief with salbutamol, a drop in peak flow, hard and fast breathing, and coughing and wheezing a lot. In some patients the signs and symptoms may be more subtle including persistent nocturnal cough, chest pain, reduced energy or appetite. It is important to be aware that clinical signs sometimes correlate poorly with the degree of airway obstruction. In some cases of acute severe asthma, children may not appear distressed.

The BTS/SIGN guideline specifies that the accurate measurement of oxygen saturation is essential in the assessment of all children with acute wheezing. It recommends that oxygen saturation probes and monitors should be available for use by all healthcare professionals assessing acute asthma in primary care. It is important to use the appropriate size paediatric probe to ensure accuracy.

Any patient who presents to the GP practice with any features of a moderate exacerbation should be referred to an emergency department for further assessment and monitoring. It can be helpful to consult the emergency assessment and treatment pages on the BTS/SIGN asthma guideline smart phone app. Features of life-threatening asthma include: $\text{SpO}_2 < 92\%$, peak expiratory flow $< 33\%$ best or predicted, poor respiratory effort, silent chest, cyanosis, exhaustion, confusion, and hypotension.

All patients with asthma should have a personalised asthma action plan and be informed about how to respond in the event of deteriorating asthma control. Patients who have experienced acute asthma episodes should be reviewed as soon as practically possible. Each primary care practice should have a named healthcare professional for asthma care standards and staff education and ensure that their systems encourage and enable swift access to advice and clinical assessment. Practices should consider developing a high risk register for those patients who have had previous serious/life-threatening exacerbations.