

Definition and incidence

- Intermittent, reversible
- Inflammation and narrowing of the airways
- Affects 5.4 million people in the UK
- Affects 1 in 12 adults
- Affects 1 in 11 children

Causes

- Cause is not fully understood – possibly a combination of genetic and environmental factors
- Smoking during pregnancy increases risk in child
- Exposure to cigarette smoke
- Workplace irritants (dust, chemicals)
- Common triggers – house dust mite, animal fur, pollen, tobacco / cigarette smoke, pollution
- Drug induced (aspirin, NSAIDs, beta-blockers)

Risk factors

- Family history (parents)
- Atopic conditions – eczema, allergic rhinitis etc
- Parents who smoked
- Born prematurely or with a low birthweight

Complications

- 75% of asthma related hospital admissions could be avoided
- Severe asthma attacks develop over 6 to 48 hours
- Signs of uncontrolled asthma:
 - waking at night, cough, wheeze
 - taking time off work
 - difficulty breathing
 - using inhalers more frequently

Signs and symptoms

- Cough – especially night / early morning
- Wheezing – bronchoconstriction
- Hypersecretion of mucus
- Breathlessness – difficulty expiring
- Tightness in the chest

Treatment

- No cure – but can be managed effectively
- Avoid triggers if known
- Prevent exacerbations by using inhalers regularly
- Treatment based on stepped approach – see BNF eg. chronic asthma:
 - Step 1: short-acting beta agonist ('reliever' - usually blue)
 - Step 2: add corticosteroid ('preventer' – brown / beige / red / orange)
 - Step 3: add long-acting beta agonist
- Combination inhalers available (red and white or purple)
- Spacers / nebulisers also available
- Inhalers to be kept handy at all times
- Check inhaler technique
- Peak flow meters

Lifestyle changes

- Increase activity – build up to 150 minutes a week; eg. 30 minutes activity 5 times a week
- Healthy diet - variety of foods; increase fruit and vegetables
- Reduce stress
- Smoking cessation
- Indoor environment – eg. good ventilation

Other support

- Asthma UK - www.asthma.org.uk
- British Lung Foundation - www.lunguk.org
- British Thoracic Society - www.brit-thoracic.org.uk
- NHS Choices - www.nhs.uk
- Patient.co.uk - www.patient.co.uk