Asthma

Jill Waldron
Respiratory Specialist Nurse
Asthma morbidity

• 15 – 20% of children

• In a class of c30 children likely to be 4-5 children with asthma

• In infancy more common in boys but becomes more common in girls during transition to adolescence
Asthma mortality

- c1400 deaths per year
- Rate falling since late 80s but still unacceptable
Causes of asthma

- Environment
- Hereditary
- Pollution
- Living conditions
Causes of asthma

- Maternal smoking is associated with significantly higher prevalence of wheezing illness in early childhood
Age at presentation

- The earlier the onset, the better the prognosis
- Majority presenting before two years of age, become asymptomatic by mid childhood.
What is asthma?

• An inflammatory condition of the lungs which causes the airways to become over sensitive to certain triggers eg dust, viral infections and pollens.

• This causes spasm of the airways leading to airway narrowing, excessive production of mucus and resulting in the symptoms of asthma.
Asthma - an inflammatory disease
Asthma triggers

Pets
Exercise
Smoke
Fumes
Strong smells
House dust mite
Viral infections
Pregnancy
Menstruation
Some drugs
Food allergies
Pollens
Cold air
Hot air

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ANYTHING!!
Asthma signs and symptoms

- Cough
- Wheeze
- Breathlessness
- Tight chest

- Often worse at night
- Can be sudden onset
- Response to triggers
- Symptoms could be chronic or acute
Asthma treatment

• Majority of asthma medication given in the form of inhalers

• Inhaled medication works quicker and has less side effects
Asthma management

• Preventer – usually a steroid inhaler, damps down inflammation and helps to prevent the symptoms of asthma.
• Inhaler could be brown, orange, red or purple.
• MUST be taken every day.
• No need for this inhaler to be in school
Asthma management

• Reliever – opens up narrowed airways

• Inhaler usually blue – only taken when needed.

• Increased use of reliever inhaler indicates worsening asthma

• Should be available always
Asthma and physical exercise

- Children with asthma should be encouraged to exercise

- Not all children with asthma will have exercised induced symptoms
Asthma and physical exercise

• Care with long distance running (especially on cold frosty days)

• Encourage child to take reliever inhaler
  20 – 30 minutes BEFORE exercise

• May need to build up exercise tolerance slowly following acute episode / hospital admission
Signs of deteriorating asthma

• There is often a period of recognisable deterioration before an acute attack happens

• This can be over a few days or even weeks

• In rare instances could be sudden and catastrophic (brittle asthma)
Deteriorating asthma

- Waking at night with coughing, wheezing or breathlessness
- Needing to use reliever inhaler more often than usual
- Effects of reliever inhaler does not last as long as usual
- Increased symptoms during or following exercise
Treatment for asthma attack

• Use reliever inhaler (usually blue) as soon as possible

• Stay calm and reassure child

• Ensure child is sitting upright and leaning forward
Asthma attack

- If the child has recovered return to normal school activities
- Inform parents
Acute severe attack

- Extreme breathlessness and/or cough
- Reliever medication does not work
- Child has difficulty with talking, or is unable to talk in sentences without taking a breath in the middle
- Child is becoming exhausted or distressed
Treatment acute/severe attack

• Stay calm! Do not put your arm around the child’s shoulders as this can be very restrictive
• Sit child upright and encourage slow deep breathing
• Give a further two puffs of the reliever inhaler, dial 999 and contact parents

• Schools Asthma Policy: Flow Chart page 11.
Treatment acute severe attack

• While waiting for medical help / ambulance up to 10 puffs of the reliever inhaler can be given if necessary.

• Schools Asthma Policy: Flow Chart page 11.
Asthma treatment

• Medicines and inhalers for asthma are prescription only medicines (POMS)

• Should only be used by the person for whom they have been prescribed

• What do you do if a child has lost or forgotten to bring their inhaler to school?
Asthma Emergency Kit

Provided, on request, for schools in Cornwall

Only to be used when:

• The child is known to have asthma
• The child is unable to take their own medication
• The child’s own medication is unavailable
• The child is having an attack of asthma
Asthma Emergency Kit

Instructions for use of this kit are on page 12 Schools Asthma Policy
Safe storage of medicines

• Children with asthma should be responsible for their own inhalers
• If not practicable, should be labelled and kept in a cupboard or drawer which is easily accessible
• Inhalers should be available when children are away from school eg on school trips or doing games
Safe storage of medicines

- Asthma inhalers are extremely safe and should not pose any threat or danger if they are inadvertently used by non-asthmatic individuals.
Schools’ Asthma Policy

- To ensure that asthmatic children in Cornwall and Isles of Scilly schools are able to safely take part in a full school life and to develop their potential, both academically and emotionally.
Any questions