

## **Asthma in the under 5's**

### **SUPPORTING NOTES**

#### **INTRODUCTION**

Asthma is common in childhood—approximately 1 in 5 children will suffer from symptoms of asthma at some time.

About 50% of children with asthma have onset of their symptoms in the first 3 years, and about 80% will have developed their asthma by 7 years of age.

Asthma in the pre-school age occurs most commonly with viral respiratory tract infections, such as the common cold, and in many children symptoms occur only with these viral infections.

The tendency to wheeze with colds improves and even disappears in many children after the pre-school years, as the frequency of viral respiratory infections decreases.

#### **DIAGNOSIS**

Children with “bronchitis” or “viruses” may in fact have asthma as the cause of their symptoms.

Symptoms which should suggest the possibility of asthma include:

- episodes of cough and/or wheeze (whistling sound) associated with colds
- persistent night-time cough during and/or between colds
- breathlessness, cough and/or wheeze with exercise or excitement

Often a trial of asthma treatment may be necessary to confirm the suspected diagnosis of asthma.

#### **WHAT IS ASTHMA?**

Asthma can best be described as a condition in which the airways (breathing tubes) are more sensitive than normal and tend to narrow in response to certain triggers.

This narrowing is due to:

- swelling of the lining of the airway
- increased mucus in the airway
- “bronchospasm” (contraction of the muscle layer surrounding the airway)

This narrowing leads to the symptoms of asthma, cough if the narrowing is mild, wheeze if the narrowing is moderate and breathlessness and breathing difficulty if the narrowing is severe.

Triggers which can produce this narrowing include viral infections, exercise allergens (e.g. house dust mite) weather change and various irritants (e.g. cigarette smoke).

#### **ASTHMA SEVERITY**

Although asthma is common in the pre-school age group, the majority of children have a mild form of the disease.

Asthma may be divided into the following forms:

1. Mild episodic asthma—this form occurs in about 75% of children, with episodes occurring only with colds and less than every 2 months. Some children may only have 2-3 episodes in their lifetime.

2. Frequent episodic asthma—this form occurs in about 20% of children. The episodes occur every 6-8 weeks or even more frequently and sometimes there are some mild symptoms such as night-time cough or exercise cough/wheeze between episodes.

3. Chronic asthma—this form occurs in less than 5% of children. These children have daily symptoms of cough and/or wheeze, often at night or on waking and also with exercise. They also may have acute episodes of wheezing with other triggers.

#### **MANAGING ASTHMA**

An asthma management plan has recently been devised for children. The plan is designed to ensure that asthma is correctly assessed and treated.

The six step asthma management plan is as follows:

1. Assess severity
2. Achieve “best lung function”
3. Maintain “best lung function”
4. Optimise medications
5. Develop an action plan
6. Educate child and family and review regularly

“Best lung function” in pre-school children is usually assessed by absence of symptoms as breathing tests are unreliable in children under 5 years of age.

The achievement and maintenance of “best lung function” involves a combination of avoidance of trigger factors where possible (e.g. cigarette smoke) and prescription of medication appropriate for the severity of asthma symptoms.

**Medications used in the treatment of asthma can be divided into:**

1. Relieving medications (bronchodilators)—these medications open the airways by relaxing the muscle around the airway wall. They therefore relieve the symptoms of asthma. Examples include Ventolin, Respolin, Bricanyl, Atrovent and Theophyline medications.

2. Preventive medications—these medications make the airways less sensitive and therefore less likely to narrow when triggered. They must be taken regularly. Examples include Intal and the inhaled steroids Becotide, Aldecin and Pulmicort.

Children with mild episodic asthma may only require relieving medications during the acute episodes of cough/wheeze. Children with frequent episodic asthma and chronic asthma should have regular preventive therapy as well as using relieving medications for treatment of symptoms.

All children should be provided with an action plan which indicates what regular medication should be given during an acute episode of wheezing and when further help is required during an acute attack.

Regular review of the child's asthma by their doctor is important to ensure that the current level of treatment is appropriate and that the asthma is well controlled.

**LIVING WITH ASTHMA**

It is important to understand your child's asthma—seek literature about asthma and discuss your child's asthma management with your doctor.

The Asthma Foundation can be a useful resource centre, providing information, support groups and swimming classes.

Encourage your child to exercise normally—exercise-induced symptoms can usually be prevented by appropriate treatment.

Provide your child care or pre-school with information about your child's asthma:

- its nature and severity
- medications
- an action plan

**VIDEO: Asthma In The Under 5's**

Length: 17 mins Year of production: 1992

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Presenter: Noni Hazelhurst

Produced by Iguana Films Pty Ltd for Film Australia Limited Produced for The National Health Promotion Program Commonwealth Department of Health, Housing and Community Services

ISBN 0 642 175977

2nd Edition Notes Film Australia © 1999

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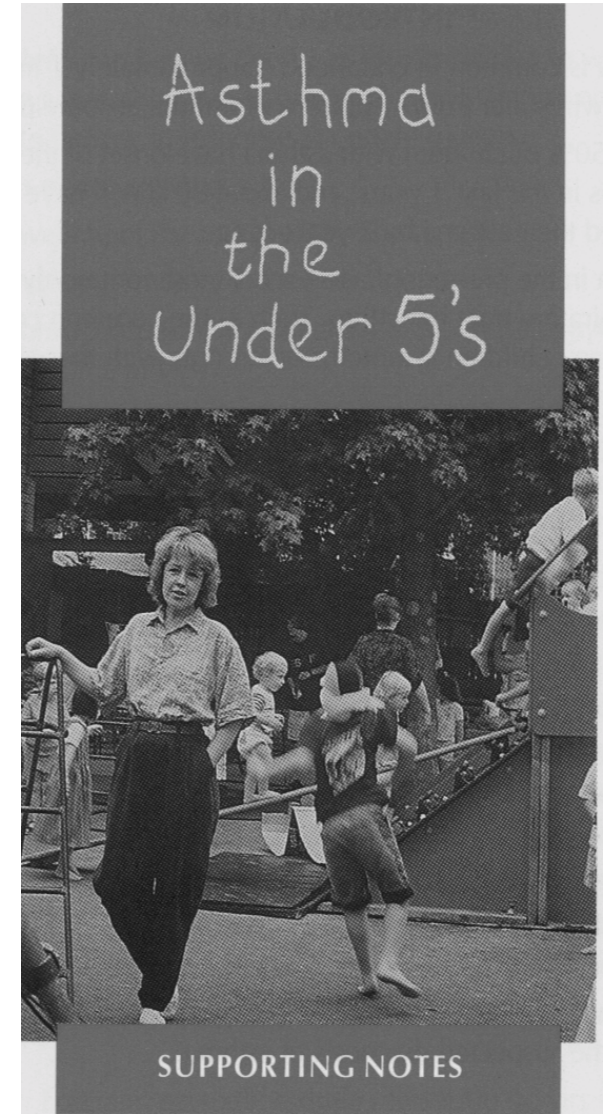
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