

- the choice of which pMDI device and spacer to use should be determined by the specific needs of the child and how well it works for them. Once these factors have been taken into account the choice should be made on the basis of reducing costs.

Clinicians should review their current clinical practice for the management of chronic asthma in children under the age of 5 years against this guidance.

The appropriate selection of inhaler devices as described is only one aspect for the provision of a comprehensive approach to all aspects of managing asthma. In particular, parents/carers need education, support and guidance, on how to manage their child's condition. General practitioners, the practice nurse, the specialist asthma nurse, the health visitor and school nurse and other community health carers have an essential role in the provision of this service and advice on general management may result in additional improvements in clinical and cost effectiveness.

If your child or a child you care for has asthma, you should discuss this guidance with a health professional at your next appointment.

Yes. This guidance will be reviewed in August 2003.

**Further
Information**

Further information on NICE, and the full guidance issued to the NHS is available on the NICE web site (www.nice.org.uk). It can also be requested from 0541 555 455, quoting reference 22197.

This leaflet is also available in Welsh, (Ref no 22200).

Mae'r daflen hon hefyd ar gael yn Gymraeg (rhif cyfeirnod 22200).

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**Guidance on
the use of
inhaler systems
(devices) in
children
under the age
of 5 years with
chronic asthma
- Patient
Information**

What should I do?

Will NICE review its guidance?

What is NICE Guidance?

The National Institute for Clinical Excellence (NICE) is part of the NHS. It produces guidance for both the NHS and patients on medicines, medical equipment and clinical procedures and where they should be used.

When the Institute evaluates these things it is called an appraisal. Each appraisal takes about 12 months to complete and involves the manufacturers of the drug or device, professional organisations and the groups who represent patients.

NICE was asked to look at the available evidence on inhaler devices and provide guidance that would help the NHS decide which should be used for childhood asthma for children under five.

What is asthma?

Asthma is a common condition that affects the airways – the small tubes that carry air in and out of the lungs. It causes a narrowing of these airways and this makes breathing more difficult. Patients may have wheezy episodes and quickly become out of breath. Asthma can be triggered by a number of factors that include infection, allergy or exercise. It is more widespread in urban than rural communities.

How do inhaler devices help asthma?

In children under the age of 5 years around 9 out of 100 boys and 6 out of 100 of girls are currently being prescribed inhalers.

Most asthma medication is delivered using an inhaler device. This ensures that very small amounts of medication are delivered directly into the lungs. Asthma treatment aims to prevent an increase in the severity of the disease, increase lung function and reduce the number of attacks. There are two main types of asthma medication: relievers (usually blue) that provide relief from asthma and preventers (brown, white, red or orange) which work over a period of time to help calm the inflammation of the airways making them less likely to react.

What are inhalers?

Inhalers are small devices which ensure that very small amounts of medication are delivered directly into the lungs. It is important to ensure that an inhaler device delivers the drugs to the airways consistently and in the right quantity. There are a variety of inhaler devices that can be used in the management of asthma including:

- Pressurised Metered Dose Inhalers (pMDIs)

What has NICE recommended about the use of inhaler devices?

- Dry-Powder Inhalation systems (DPIs)
- nebulisers.

All the Metered Dose Inhalers require the patient to be able to activate the device and breath in at the same time. For this reason they may be difficult for younger children to use and they should therefore be combined with a spacer device in young children. The purpose of the spacer device is to act as an intermediary chamber into which the Pressurised Metered Dose Inhaler (pMDI) can deposit the drug allowing the child to inhale the drug over several breaths.

NICE has recommended that for children under the age of 5 years who have chronic stable asthma:

- both corticosteroids and bronchodilator therapy should routinely delivered by Pressurised Metered Dose Inhaler (pMDI) and spacer system, with a facemask where necessary.
- where this combination is not clinically effective for the child, and depending on the child's condition, nebulised therapy may be considered and in the case of children aged 3 to 5 years, a dry powder inhaler (DPI) may also be considered.

