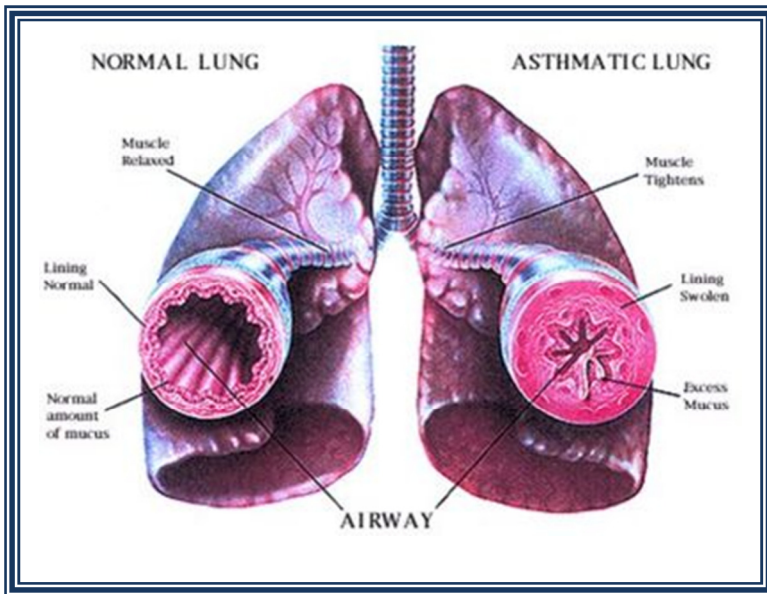


Asthma

In the United Kingdom - UK - over 1.1 million children have asthma and this article is to give a little bit of information on how to support children in school with asthma. Most of the information has been taken from Asthma UK, which is the UK's leading asthma charity. Thank you to Rebecca Salloway Specialist Nurse in Asthma at the Royal Derby Hospital for contributing to this article.



Asthma is a condition that affects the airways or the small tubes that carry air in and out of the lungs. When a person with asthma comes into contact with an asthma trigger, the muscles around the walls of the airways tighten and the airways become narrower. The lining of the airways becomes red and swollen and often sticky mucus or phlegm is produced. All these reactions cause the airways to become narrower and irritated which leads to the symptoms of asthma.

The 1.1 million children with asthma in the UK make it the most common long-term condition in childhood. An Asthma UK survey of children with asthma from across

the UK found that nearly two thirds have had an asthma attack at school.

A recent survey by Asthma UK found that 64 per cent of children with asthma have at some point been unable to access a working inhaler in school, having either forgotten, lost, broken or run out of their own.

43 per cent of children with asthma who took part in the Blue Peter/Asthma UK survey say that they often have to use their inhaler when they do sport.

Overall 28,000 children are admitted to hospital each year because of asthma.

Asthma can start at any age. It is difficult to know what causes asthma, but so far it is known that know that...

- If one or both parents have asthma you are more likely to have it.
- Many aspects of modern lifestyles, such as changes in housing and diet and a more hygienic environment, may have added to the rise in asthma.
- Smoking during pregnancy increases the chance of a child developing asthma.
- Being exposed to cigarette smoke increases the chance of developing asthma.
- Irritants in the workplace such as dust and chemicals may lead to a person developing asthma.
- Environmental pollution can make asthma symptoms worse.

Asthma triggers

The symptoms of asthma can have a range of triggers, but they do not affect everyone in the

same way.

Triggers include...

- **Airway and chest infections** - Upper respiratory infections, which affect the upper airways, are often caused by cold and flu viruses and are a common trigger of asthma.
- **Allergens** – Pollen, dust mites, animal fur or feathers for example, can trigger asthma.
- **Airborne irritants** – Cigarette smoke, chemical fumes and atmospheric pollution may trigger asthma.
- **Medicines** – The class of painkillers called non-steroidal anti-inflammatory drugs - NSAIDs, including aspirin and ibuprofen, can trigger asthma for some people, although are fine for most. Children under 16 years of age should not be given aspirin.
- **Emotional factors** – Asthma can be triggered by emotional factors, such as stress or laughing.
- **Foods containing sulphites** – Sulphites are naturally occurring substances found in some food and drink. They are also sometimes used as a food preservative. Food and drinks high in sulphites include concentrated fruit juice, jam, prawns and many processed or pre-cooked meals. Most people with asthma do not have this trigger, but some may. Certain wines can also trigger asthma in susceptible people.
- **Weather conditions** – A sudden change in temperature, cold air, windy days, poor air quality and hot, humid days are all known triggers for asthma.
- **Indoor conditions** – Mould or damp, house dust mites and chemicals in carpets and flooring materials may trigger asthma.
- **Exercise** – Sometimes, people with asthma find their symptoms are worse when they exercise.
- **Food allergies** – Although uncommon, some people may have allergies to nuts or other food items, known as an anaphylactic reaction. If so, these can trigger severe asthma attacks.

The common symptoms of asthma are:

- coughing
- shortness of breath
- wheezing
- tightness in the chest
- being unusually quiet
- difficulty speaking in full sentences
- sometimes younger children express feeling tight in the chest as a tummy ache.

How is asthma treated?

There are two main types of asthma medicines called **relievers** and **preventers**, and they work in different ways. Most asthma medicines are breathed in through an inhaler. This is a very effective way of taking the medicine, as it goes straight to the lungs.

Inhalers can be in a spray form as in an aerosol or a dry powder form. Aerosol inhalers can be

taken through a device called a spacer. Spacers make it easier for the child to use an inhaler and make it more effective. Inhalers and Spacers should have the child's name on...

- Reliever inhalers help to relieve symptoms when they happen.
- Preventer inhalers help to protect the airways and reduce the chance of getting asthma symptoms.
- Other medicines that are available are long-acting reliever and preventer tablets.



Reliever inhalers - Everyone with asthma should have a reliever inhaler, usually Ventolin. Reliever inhalers are usually blue. Relievers are medicines that children can take immediately when asthma symptoms appear. They quickly relax the muscles surrounding the narrowed airways. This allows the airways to open wider, making it easier to breathe again...

- Relievers are essential in treating asthma attacks. Children should take a dose of reliever inhaler when they start having asthma symptoms.
- Children with asthma need to keep their reliever inhalers with them or close at hand at all times. You

may never know when they might need it. If a child is using their reliever inhaler three or more times a week, it could mean their asthma is not controlled properly and they can see their doctor or asthma nurse to review the child's asthma.



Preventer inhalers

- Preventers protect the lining of the airways. Preventer inhalers come in a variety of colours, including Flixotide which is an orange inhaler, Beclomethasone is brown and Seretide is a purple inhaler.
- They help to calm down the swelling in the airways and stop them from being so sensitive. This means that the child is less likely to react badly when she/he comes across an asthma trigger. However, not all children and young people will need a preventer inhaler.

- Preventer inhalers are usually prescribed for children and young people using their reliever inhaler three or more times a week.
- Most children or young people who need preventer medicines will receive a preventer inhaler from their doctor or asthma nurse that contains inhaled steroids. There are several kinds of inhaled steroids, but they all work in the same way.
- Preventers reduce the risk of severe attacks.
- Their protective effect builds up over a period of time, so they need to be taken every day, usually morning and evening, even if the child is feeling well.
- When a child first starts using them, it may take up to 14 days before you notice any improvement in asthma symptoms.

What is a spacer?

Spacers ensure that children, especially young children, take the whole dose of medicine that is delivered through an inhaler.

If you have a concern about a child in school with asthma then please speak to your School Nurse.

Information can be found about a school asthma policy in the Asthma UK School policy guidelines, see link below:

<http://www.asthma.org.uk/Handlers/Download.ashx?IDMF=11bd4971-3139-4c33-9ec1-ab7cd8740643>

More information on asthma in both adults and children can be found from the www.asthma.org.uk website.

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