Managing asthma in children

A booklet for parents, carers, and family members
We would like to thank all the parents and carers, patient organisations, healthcare professionals, and every other individual who contributed to this booklet.
Who is this booklet for?

This booklet is for you if:

- you have a child who has or might have asthma.
- or
- you are a family member or carer of someone who has or might have asthma.

The booklet explains:

- diagnosis
- who will be involved in looking after your child’s asthma
- medicines
- how you can help control your child’s asthma
- asthma attacks
- asthma in young people, and
- where to find out more about asthma.
What is this booklet about?

This booklet explains the recommendations in a clinical guideline produced by the British Thoracic Society and the Scottish Intercollegiate Guidelines Network (SIGN) about the care and treatment of children with asthma.

The clinical guideline is based on what we know from current medical research. It also gives advice based on the opinion of healthcare professionals who are trained on how best to treat your child’s asthma.

Your child’s doctor or asthma nurse should be following this guideline when looking after your child’s asthma.

On page 55 you can find out more about SIGN and how we produce guidelines.

There are four different types of recommendations in this booklet.

- **Strong recommendation** based on good-quality research evidence
- **Recommendation** based on the research evidence
- **Recommendation** based on clinical experience
- **Not enough research evidence** to tell us if something is of benefit

If you would like to see the clinical guideline, please visit [www.sign.ac.uk](http://www.sign.ac.uk).

Details of support organisations and other places where you can get more information are on page 52.
What is asthma?

Asthma is a condition that affects your child’s airways (the small tubes that carry air in and out of your child’s lungs). Asthma can start at any age and there are many different causes.
If your child has asthma, you may find they sometimes have symptoms.

Asthma symptoms include at least two of the following:

- Shortness of breath
- Wheezing (a whistling sound coming from your child’s chest)
- Coughing a lot (especially after exercise or at night)
- A tight feeling in the chest

Asthma symptoms come and go. You might find your child has symptoms at different times of the day (particularly during the night), and even at different times of the year.
Some things can make your child’s asthma worse. They are called asthma triggers.

Examples of common asthma triggers are:

- dust
- pets
- pollen
- cigarette smoke
- changes in the weather
- a cold or flu

People have different asthma triggers and most people have more than one trigger.
When your child comes into contact with their asthma triggers, a few things happen:

- The muscles around their airways tighten.
- The lining of their airways becomes swollen and inflamed.
- Lots of mucus (phlegm) is produced in the airways.

These make your child’s airways narrower and lead to asthma symptoms.

“It helps to learn more about the condition, to see how everything fits into place. Because asthma affects a child’s whole life: at school, the playground, sports, going out, etc. The more I knew about his condition the more I was able to explain it to myself, my son and to other people, like teachers and other parents to get their help. Because asthma is most of the time an invisible disease.”  

-Martine

You can use this space to write down any concerns you have about your child’s asthma symptoms or triggers.
How is asthma diagnosed?

How will the doctor and I know if my child has asthma?

You will need to see your child’s doctor to find out if your child has asthma. Unfortunately, asthma can be difficult to diagnose, particularly in young children.

There is no single test or X-ray that allows the doctor to say for certain that your child has asthma, so the doctor will do a full check. Your child might not have any symptoms or signs when they see the doctor, so they may need to check your child again in the future when they are having asthma symptoms.

“My daughter was never poorly when we had an appointment at the chest clinic, however her consultant’s questions helped us to feel included and that our concerns were noted.”

Donna
Some conditions such as eczema and allergies go hand in hand with asthma so make sure you tell your doctor:

- if your child has a history of other conditions such as eczema, hay fever or other allergies
- if anyone else in your family has a history of asthma or other allergic conditions such as hay fever, eczema or food allergy.

**Recommendation based on research evidence**

Your child’s doctor might ask:

- what symptoms your child is having
- how often and when they get symptoms
- if their symptoms are worse during the night or in the early morning (or both)
- if their symptoms come on after they exercise or play
- what you think triggers your child’s asthma symptoms
- if your child only gets symptoms when they have a cold or at certain other times
- you to fill in a symptom questionnaire.

Some conditions such as eczema and allergies go hand in hand with asthma so make sure you tell your doctor:
Recommendation based on research evidence

Your doctor will:

- look and listen to your child’s chest
- make a note and tell you if they hear wheezing, and
- if your child is old enough (primary-school age), do some breathing tests to see how well their lungs are working (lung function). The main tests are peak flow and spirometry.

It can be difficult for some children to take the breathing tests. Your child may need time to learn how to blow out air and the results may not be reliable until they have mastered this. Usually children have to be over 5 years old before they can do lung-function tests reliably.

Recommendation based on research evidence

If your child doesn’t have symptoms at the time of the breathing test, results can be normal. In that case, your doctor may want to repeat the rest when your child has symptoms.
Peak flow is a breathing test that measures how fast your child can blow air out of their lungs. It is done using a small device called a peak-flow meter.

Your doctor may ask you to carry out peak-flow monitoring at home for a period of time.

Spirometry measures the amount and the speed of air your child can blow out. It is done using a machine called a spirometer.
What if the doctor thinks my child has asthma?

**Recommendation based on clinical experience**
If your child’s doctor thinks your child is likely to have asthma, they may give asthma medicines to try. This is called a treatment trial. The medicine is usually an inhaled steroid (a preventer inhaler) for 6–8 weeks.

Your child will be asked to see their doctor after the treatment trial to talk about whether the medicine is working. If the treatment helps your child’s symptoms, this means your child is highly likely to have asthma. If the medicines have helped, your doctor may stop the medicine to check if your child stays well without them. If symptoms come back, your doctor will start the medicines again for a longer time. They will then arrange an asthma review. You can find more information on asthma reviews on page 12.

What if the doctor thinks asthma is unlikely?

**Recommendation based on clinical experience**
If the treatment is not helping your child, the doctor will:
- stop the asthma medicines
- consider doing more tests
- consider making a different diagnosis, and
- refer your child to a specialist.
Who will help me look after my child’s asthma?

Your child’s doctor or asthma nurse will help you look after your child’s asthma. You will need to take your child to their doctor or asthma nurse to have an asthma review at least once a year.

Asthma reviews with your doctor or nurse

**Strong recommendation based on good-quality research evidence**

Your child should have regular asthma reviews with their doctor or asthma nurse. At the review the doctor or asthma nurse will ask about your child taking their medicines. They will ask how well your child manages to follow the routine you have agreed with them.

“Seeing the dedicated asthma nurse was a huge breakthrough for us she spent time going through inhalers, techniques and imparted a wealth of knowledge.” Alex
In an asthma review your child’s doctor or asthma nurse will ask you and your child about your child’s asthma. This is to make sure their asthma is being controlled and that they are on the right medicines for them. Here are some examples of questions you may be asked. Your answers will help your doctor or asthma nurse discuss and decide with you and your child what would be the best treatment.

- Has your child had difficulty sleeping because of their asthma symptoms (including cough)?
- Has your child had their usual symptoms during the day (coughing, wheezing, chest tightness or breathlessness)?
- Has your child’s asthma prevented them doing their usual activities (for example, going to school)?

Your child’s doctor or asthma nurse will also ask your child specific questions such as ‘How often do you use your blue inhaler?’.

You can read about inhalers on page 30.
Recommendation based on clinical experience

Your child’s doctor or asthma nurse will also check and record the following:

- Whether your child has had any asthma attacks since their last review and, if so, how many.
- Whether your child has had any time off school or nursery because of their asthma since their last review.
- How many inhalers and medicines your child has been prescribed since their last review, and how many your child has used.
- Whether your child has needed any courses of steroid tablets since their last review and, if so, how many.
- Whether your child is or has been exposed to tobacco smoke.
- Your child’s height and weight.
- Whether your child has a personal asthma action plan and, if so, you know how to use it. There is more information about this on the following pages.
The doctor or asthma nurse will also watch your child use their inhaler to check they’re using it properly. Always remember to take your child’s inhalers to their asthma review.

If you feel your child’s asthma is not well controlled, you can ask for an asthma review at any time. You don’t have to wait for their regular asthma review.

“I encourage my 7-year-old son to take some responsibility for his asthma. When we see the consultant, she asks him how he thinks he’s been coping with his asthma. He really enjoys being involved in the discussion and can offer details of how he copes at school and during sports which helps to inform decisions about his treatment.” Karen
Children who have a personal asthma action plan are more likely to have better control over their asthma. This means they have fewer asthma symptoms, are less likely to have an asthma attack and are less likely to have to go to hospital because of their asthma.

You can give other people who care for your child a copy of the plan, and send a copy to their school.

“When we got a personal asthma plan written for our son, it was a game changer. We had defined ‘targets’ and if he slipped below, we knew exactly what to do. Without it we might have left it too long to intervene or conversely panicked before we need to!” Diane
**Strong recommendation based on good-quality research evidence**

Your child’s doctor or asthma nurse will draw up the plan with you and your child once your doctor thinks your child has asthma. It should include your and your child’s preferences and opinions.

If asthma is stopping your child doing things they want to do, ask their nurse or doctor to include how to manage these things in their action plan. You will be able to discuss it with them at your child’s asthma review. It’s important that you understand and agree with the action plan.

Your child’s doctor or asthma nurse will also go through the plan with you and your child at other times when they discuss your child’s asthma with you.

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**Information**

Your child’s personal asthma action plan should contain information on:

- your child’s medicines (for example, what they take and when)
- how to recognise when their asthma is getting worse
- what to do when their asthma is getting worse, and
- what to do if your child has an asthma attack.
And what to do when your asthma gets worse.

Your asthma plan tells you when to take your asthma medicines.

Name:

1 My daily asthma medicines

- My preventer inhaler is called _______ _______ and its colour is _______.
- I take _______ puff/s of my preventer inhaler in the morning and _______ puff/s at night. I do this every day even if I feel well.
- Other asthma medicines I take every day:

- My reliever inhaler is called _______ _______ and its colour is _______.
  I take ___ puff/s of my reliever inhaler (usually blue) when I wheeze or cough, my chest hurts or it’s hard to breathe.
- My best peak flow is _______

2 When my asthma gets worse

I’ll know my asthma is getting worse if:

- I wheeze or cough, my chest hurts or it’s hard to breathe, or
- I’m waking up at night because of my asthma, or
- I’m taking my reliever inhaler (usually blue) more than three times a week, or
- My peak flow is less than _______

If my asthma gets worse, I should:

Keep taking my preventer medicines as normal.

And also take _______ puff/s of my blue reliever inhaler every four hours.

If I’m not getting any better doing this I should see my doctor or asthma nurse today.

Remember to use my inhaler with a spacer (if I have one)

Does doing sport make it hard to breathe?

If YES I take:

_______ puff/s of my reliever inhaler (usually blue) beforehand.
Recommendation based on research evidence

If your child has to go into hospital because of their asthma, their personal asthma action plan should be reviewed before they leave.

You should speak to your child’s doctor or asthma nurse if your child doesn’t have a personal asthma action plan.

You can also download or order one from Asthma UK by visiting www.asthma.org.uk/advice-personal-action-plan.

“Our school seems to be a lot more prepared in responding to asthma exacerbations, there was a time when we used to worry about how they would recognise our sons asthma was getting worse, but we now feel a lot more confident with good training in place and a well written asthma action plan to hand.” Debbie
What medicines can help control my child’s asthma?

Your child’s doctor or asthma nurse will give you medicines to help you control your child’s asthma. If their asthma is controlled well, your child should:

- have no asthma symptoms during the day
- not be woken up at night because of their asthma
- not need to use their reliever inhaler, and
- not have asthma attacks.

Having the right medicines will also mean their asthma won’t interfere with their daily life (including exercise). It can take time to find the best medicines to suit your child.

<table>
<thead>
<tr>
<th>Asthma medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of medicine</strong></td>
</tr>
<tr>
<td>Reliever inhaler (usually blue). This is also sometimes called a short-acting reliever. Everyone with asthma should be given a reliever inhaler.</td>
</tr>
</tbody>
</table>
### Asthma medicines

<table>
<thead>
<tr>
<th>Type of medicine</th>
<th>When to take it</th>
<th>How it helps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventer inhaler (usually a brown, red or orange inhaler containing steroids).</td>
<td>Your child will be given a preventer inhaler if they: • use their reliever inhaler three or more times a week • have asthma symptoms three or more times a week • wake up at least one night a week because of their asthma. Your child should take their preventer inhaler every day even when they feel well, to keep their airways healthy. A good way to remember this is to put the inhaler by their toothbrush.</td>
<td>It reduces inflammation in your child’s airways and prevents future asthma symptoms. It can take between two and four weeks to work. Persevere with the treatment even if your child still has symptoms in the first few weeks. You should not stop or reduce the preventer inhaler without first discussing it with your doctor or asthma nurse.</td>
</tr>
</tbody>
</table>
Your child’s doctor or asthma nurse may consider trying your child on other medicines to help control their asthma. These may include some of the medicines below.

<table>
<thead>
<tr>
<th>Other asthma medicines</th>
<th>How it helps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-acting reliever inhaler</strong></td>
<td>It contains a reliever medicine that lasts for 12 hours. These open up your child’s airways by relaxing the muscles that surround them.</td>
</tr>
<tr>
<td><strong>Leukotriene receptor antagonists</strong></td>
<td>These are preventer tablets (which also come as granules for very young children). They don’t contain steroids. They work by blocking one of the chemicals that is released when your child comes into contact with an asthma trigger. They are taken once a day, ideally in the evening.</td>
</tr>
<tr>
<td><strong>Theophylline</strong></td>
<td>This medicine is available as a tablet or syrup. It doesn’t contain steroids. Theophylline works by relaxing the muscles that surround your child’s airways. This makes it easier for them to breathe.</td>
</tr>
<tr>
<td><strong>Steroid tablets</strong></td>
<td>Steroid tablets work by reducing the inflammation in your child’s airways.</td>
</tr>
</tbody>
</table>
How will the doctor or asthma nurse decide which medicines are best for my child?

The aim is to get your child’s asthma well controlled on the lowest possible dose of medicines. The doctor or asthma nurse will check your child’s asthma and start on the most appropriate treatment for them. If that doesn’t work, they will consider increasing the medicine or adding new medicines.

Increasing your child’s medicines

**Recommendation based on clinical experience**

Before giving your child more asthma inhalers and medicines, the doctor should always check they are not having any problems with the medicines they are currently using. This includes:

- checking that your child is taking their current asthma medicine regularly
- checking that your child is using their inhaler and spacer correctly (see page 31)
- discussing your child’s asthma triggers, and how to avoid them, with you and your child.
Decreasing your child’s medicines

Recommendation based on research evidence

Once your child’s asthma has been well controlled for at least three months, it may be possible for their medicines to be reduced. It’s important they keep seeing their doctor or asthma nurse regularly for an asthma review. When deciding which medicine to reduce, you and your child’s doctor will consider:

- how well controlled your child’s asthma has been on their current medicines
- how long your child has been taking their current medicines
- any side effects from current treatment, and
- how you feel about the medicines your child is taking.

When your child’s asthma medicines are reduced, this should be done gradually. Watch out for any symptoms returning, and tell your doctor or asthma nurse about them.
What medicines will my child be given if exercise brings on their asthma?

Recommendation based on clinical experience

Exercise can trigger asthma symptoms in some children. If this happens to your child, their doctor might suggest they take two puffs of a reliever inhaler before exercising. If this is an ongoing problem, the doctor might consider increasing your child’s preventer medicines.

“He had a very poor lung function before the right treatment was started. And he never ever complained. He was so used to stop exercising before getting breathless, so there were no symptoms. The first time he was able to do sport with all his energy, he was so proud!”

Martine
What could the side effects of my child’s asthma medicines be?

Reliever inhalers
Reliever inhalers have few side effects but they can temporarily increase your child’s heartbeat or give them mild muscle shakes (tremor). These effects are more common if your child is taking a high dose. They wear off in a few minutes or a few hours at the most.

Preventer inhalers
Preventer inhalers have been tested on many patients. The possibility of your child having side effects from taking their preventer medicine is low. There is a small risk of side effects including sore tongue, sore throat, hoarse voice, and mouth infection (oral thrush).

These side effects are less likely if your child rinses their mouth out, or brushes their teeth after using their inhaler. Using a spacer with the inhaler can also help.
Recommendation based on clinical experience

For a few children, high doses of inhaled steroids may be linked with growth problems. There is a very small risk of reduction in adult height (no more than 1 cm).

Although these side effects are rare, your child’s height and weight will be monitored every year by their doctor, especially if they are on a high dose of steroids. If your child is on a high dose of preventer inhaler, their doctor will refer them to hospital to see a children’s specialist doctor.

You can use this space to note any concerns about side effects of your child’s medicines.
Steroid tablets

Your child’s doctor will usually only give your child steroid tablets if their asthma is going through a very bad patch. Usually steroid tablets are only needed for three to five days. At these times it’s much safer to take steroids than try to manage without them. Your child should continue to take their preventer inhaler during this time.

Very rarely your child will need to take steroid tablets for more than a few days. Although there are side effects associated with taking steroid tablets over a long period of time (more than two weeks), these are outweighed by the benefit of good asthma control.

Possible effects of taking steroid tablets for long periods of time include:

- feeling depressed or having mood swings
- feeling hungry and wanting to eat more
- a rounder face
- feeling overactive and finding it difficult to sleep
- heartburn and indigestion
- bruising easily
- brittle bones
- risk of having diabetes
- risk of having cataracts.

A short course of steroid tablets (three to five days) is not associated with any of these side effects.
Recommendation based on clinical experience

If your child is taking steroid tablets regularly for bad asthma, they should have their growth and weight monitored every year and may be screened for cataracts (eye problems) through community eye-care services. This is done under the care of hospital specialists who will also discuss and monitor your child’s:

- blood pressure
- bone mineral density (how thick and strong your child’s bones are)
- urine or blood sugar to check for diabetes, and
- cholesterol level.

If your child takes steroid tablets over long periods of time, their body might stop producing its own natural steroid. This means they should not stop taking their steroid tablets suddenly. If your child is on steroid tablets, their doctor or asthma nurse should give them a steroid card to carry. It tells other healthcare professionals what medicines they are on.

The doctor or asthma nurse should also give you a plan of what to do if your child is ill and unable to take their steroid tablets. This is known as a ‘sick day plan’.

In general, the risks of side effects from the medicines are far outweighed by the benefits to your child and you of good asthma control. Your child’s doctor or asthma nurse can discuss with you any side effects and concerns you have.
Spacers and inhalers

How should my child take their asthma medicines?

Information

Your child may be given a spacer to use with their inhaler. Spacers help deliver the medicine to your child’s airways and make the inhaler easier for your child to use. They are plastic or metal containers with a mouthpiece or mask at one end and a hole for the inhaler at the other.

Spacers can be used with a pressurised metered dose inhaler. This type of inhaler contains the medicine in a liquid form.
How to use a spacer

Different inhalers fit different spacers. The spacer and inhaler should fit together properly. Changing to a different spacer may affect the amount of medicine delivered.

After shaking the inhaler, attach it to the spacer. Place the spacer in your child’s mouth or place the mask attached to the spacer over their face. Then press the metered dose inhaler once into the spacer. Your child should then take 5 normal breaths. Breathing normally for 5 breaths is as effective as taking one breath and then holding it. If more than one puff is needed, you should repeat the whole process.

Recommendation based on clinical experience

Spacers should be cleaned every month. They should be washed in detergent and allowed to dry in air. The mouthpiece should be wiped clean of detergent before use.

Spacers should be replaced at least every 12 months but some may need changing at six months.

Information

You can watch a demonstration of how to use an inhaler and spacer on Asthma UK’s website at www.asthma.org.uk/Sites/healthcare-professionals/pages/inhaler-demos
How can I help control my child’s asthma?

It’s important that you and your child keep good control of your child’s asthma. Having good control means:

- they don’t have asthma symptoms during the day
- they are not woken up at night because of their asthma
- they rarely need to take their reliever inhaler
- they don’t have asthma attacks, and
- their asthma will not interfere with their daily life including exercise and going to school.

To have good control it’s important that your child takes their asthma inhalers and medicines and, if possible, stays away from their asthma triggers such as pollen and cigarette smoke.

Information

If you are worried about your child taking regular treatment, ask your child’s asthma nurse or doctor to explain why the medicines help and they will answer your questions. Having good asthma control is important because it reduces the risk of your child having an asthma attack and needing to be admitted to hospital.
The table below explains some ways you and your child can help control their asthma.

<table>
<thead>
<tr>
<th>What can I do?</th>
<th>How can this help?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make sure your child takes their asthma medicines when they should.</td>
<td>For good asthma control it’s important for your child to take their medicines, even when they feel well.</td>
</tr>
<tr>
<td>Learn about your child’s asthma from their doctor or asthma nurse.</td>
<td>Many children live with troublesome asthma symptoms (such as coughing, and wheezing) and think this is normal.</td>
</tr>
<tr>
<td>It’s important they give you all the information you need.</td>
<td>Good asthma control means your child doesn’t have asthma symptoms day or night. If they often have asthma symptoms, this is serious and can lead to an asthma attack and long-term lung damage.</td>
</tr>
<tr>
<td>They should give you simple information (face-to-face or written, or both),</td>
<td></td>
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<tr>
<td>especially about your child’s asthma medicines.</td>
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<tr>
<td>Tell your child’s doctor or asthma nurse if you have any concerns. They will</td>
<td></td>
</tr>
<tr>
<td>ask if you have any worries.</td>
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</tr>
<tr>
<td>Keep your child away from cigarette smoke.</td>
<td>Smoking or being around cigarette smoke will definitely make your child’s asthma worse.</td>
</tr>
<tr>
<td></td>
<td>If you smoke, try to stop. If you would like to stop, your doctor, asthma nurse or pharmacist can offer advice and support to help you.</td>
</tr>
<tr>
<td></td>
<td>You should not smoke in front of your child and you should encourage other people not to smoke near them.</td>
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</tbody>
</table>
**What can I do?**
Encourage your child to lose weight if necessary.

**How can this help?**
If your child is overweight, your doctor or asthma nurse will support them to lose weight. Losing weight may help improve your child’s asthma control.

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**Recommendation based on research evidence**
There is no need to get rid of house mites as this doesn’t help prevent or reduce asthma symptoms.

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**Recommendation based on research evidence**
Your child should have all the recommended vaccines including the flu vaccine. There is no evidence that these vaccines increase the risk of your child developing asthma.

If your child is on high-dose steroids for their asthma, the vaccines may not be as effective so you need to speak to your child’s doctor about this.
What happens in an asthma attack and how will it be treated?

Asthma can usually be controlled with medicines, but sometimes triggers can lead to asthma attacks.

An asthma attack is when your child’s airways become swollen and the muscles around the airways become very tight, which makes it harder to breathe.
Asthma attacks don’t usually come out of the blue. Most are triggered by viral infections, particularly the group of viruses called rhinoviruses that cause the common cold. Your child will probably feel their asthma getting worse over a few days before the attack, for example:

- coughing and wheezing more
- they may find it more difficult to breathe
- they may develop a runny nose
- their chest may start to feel tight, or
- they may become lethargic.

**How will I know that my child is having an asthma attack?**

Your child is having an asthma attack if any of the following happen:

- Their asthma is getting worse (for example, they are coughing or wheezing more than usual or they feel more breathless or their chest feels tight).
- They cannot breathe easily and it’s hard for them to talk, eat or sleep.
- They have to use their reliever inhaler more often than usual.
- Their reliever inhaler doesn’t help.
If your child is having an asthma attack, they should do the following:

1. Sit up and try to take slow, steady breaths.

2. Take one to two puffs of their reliever inhaler (usually blue) through a spacer immediately.

3. If they don’t start to feel better, your child should continue to take a single puff every 30 to 60 seconds until they start to feel better. They should not take more than 10 puffs in total.

4. If they don’t feel better after taking their inhaler as described above, or if you are worried, call 999 or 112. If an ambulance doesn’t arrive in 10 minutes and they’re still not feeling any better, repeat step 3 above.

Don’t be afraid of causing a fuss, even at night. If their asthma gets better and you don’t need to call 999 or 112, they still need to see a doctor or asthma nurse that day.

Check your child’s personal asthma action plan and follow the advice you have been given.

It would be helpful for your child to carry an asthma attack card with them. It has been designed to inform or remind people with asthma, and their family and friends, what to do in an asthma attack.

You can download a card from Asthma UK by visiting www.asthma.org.uk/globalassets/health-advice/resources/easy-read/easy_read_asthma_attack_card.pdf
Will my child need to go to hospital if they have an asthma attack?

Your child won’t always have to go to hospital if they have an asthma attack. Often children only need to go into hospital if their asthma attack is very severe. If your child does have a severe attack, you need to get medical help urgently. When they are in hospital they will need to be looked after by a specialist.

What treatment will my child be given if they have an asthma attack?

The table below describes the medicines used to treat asthma attacks and how they help.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>How treatment is given</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>Your child’s oxygen levels should be checked. If they are low, your child will be given oxygen through a mask.</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Reliever medicine</td>
<td>Your child will be given a high dose of reliever medicine through an inhaler and spacer or a nebuliser. A nebuliser creates a mist of medicine that your child breathes through a mask. Your child may be given another reliever medicine in the nebuliser if the attack is severe or isn’t responding to the first reliever medicine alone. In hospital, the medicine used in the reliever inhaler is also available through a drip.</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>Treatment</td>
<td>How treatment is given</td>
</tr>
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<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Steroids</td>
<td>Your child may be given steroid tablets.</td>
</tr>
<tr>
<td>Magnesium sulphate (medicine that reduces asthma symptoms)</td>
<td>Your child may be given this through a drip if they have severe asthma.</td>
</tr>
<tr>
<td>Aminophylline (medicine that helps to treat shortness of breath and wheezing)</td>
<td>In hospital, your child’s specialist may give them this medicine through a drip.</td>
</tr>
</tbody>
</table>

Treatment of asthma attacks varies depending on your child’s age

Antibiotics don’t usually help treat asthma symptoms as most asthma attacks are triggered by viral infections such as the common cold.
Treating asthma attacks in children aged two and over

If your child is having an asthma attack at home, you should follow the steps outlined on page 37.

Information

While your child is waiting to go to hospital the ambulance staff may give them more doses of reliever inhaler and start them on a course of steroid tablets to stop the attack. It’s important that your child is taken to hospital in an ambulance. This is because the ambulance staff can give them more oxygen and reliever medicine on the way to the hospital if they need it.

Once at hospital, your child will be treated with one or more of the medicines shown in the table on page 38–39.

Treating asthma attacks in children under two years

If your child is under two and has an asthma attack at home, they should be given a reliever inhaler through a spacer with a face mask. You should then follow the steps outlined on page 37. If your child needs to go to hospital because of an asthma attack, they may be given one or more of the medicines shown in the table on page 38–39. However, children under two are not usually given magnesium sulphate or aminophylline.
To help decide when your child is well enough to leave hospital, their hospital doctor or nurse will:

- regularly check their breathing rate
- check how hard they are breathing
- monitor their oxygen saturation level
- discuss with you how to look after your child’s asthma, including showing you how to monitor it using a peak flow meter or keeping a diary to monitor their symptoms
- watch your child use their inhaler to make sure they are taking it properly, and
- give them a new personal asthma action plan. This is very important.

You can read more about personal asthma action plans on page 16.
When your child leaves hospital

Recommendation based on clinical experience

The hospital will tell your child’s doctor about their treatment in hospital and will also arrange a follow-up appointment in a clinic for children with asthma.

Once your child has left hospital, you should make an appointment with your child’s doctor within two days of leaving hospital to discuss the next steps about your child’s asthma management.
Can I prevent my child developing asthma?

Breastfeeding

**Recommendation based on research evidence**
All women are encouraged to breastfeed their babies for its many benefits. Breast milk may reduce the chances of a child developing asthma.

Smoking

**Recommendation based on research evidence**
Your child’s doctor or asthma nurse will advise you about the risk to your child of smoking. If you smoke while you are pregnant, this can increase the chance of your child developing asthma and wheezing.

We know that quitting smoking is difficult, so if you are thinking of trying to quit speak with your doctor, nurse, midwife or pharmacist who can help offer you support to give up. You can also visit [www.nhs.uk/smokefree](http://www.nhs.uk/smokefree)
Diet

**Recommendation based on research evidence**
You don’t need to avoid certain foods while you are pregnant as a way to prevent your child developing asthma.

**Not enough evidence to tell us if something is of benefit**
There is not enough evidence to suggest that using dietary supplements while you are pregnant can prevent your child developing asthma.
Asthma in young people

This section has been written for teenagers to read with their parents or carers.

Adolescence is the time when you are moving from childhood into adulthood. At this time you are becoming more independent but it can be a challenging time for you.

You may think that having asthma can make things worse for you. It’s quite normal to feel anxious or depressed.

Information

If you do feel anxious or depressed, you should speak to your GP or asthma nurse. You can also find information from Asthma UK at www.asthma.org.uk/advice/manage-your-asthma/young-people as well as about your emotional health at www.asthma.org.uk/advice/manage-your-asthma/emotional-support/depression

Information

Your school can work with you to help control your asthma. It’s important that you keep your school up to date with changes in your medication, for example what you take and how much.
As you get older, your doctor or asthma nurse will encourage you to take more responsibility for your asthma by seeing you on your own, without your parents or carers, for part of the time. Your conversation will not be discussed with your parents or family unless you would like them to know what has been discussed or if the doctor or asthma nurse has concerns about your safety.

Your written asthma plan, developed between you and your doctor or asthma nurse, allows you to take control of your asthma by taking on responsibility and making some choices for yourself.

Answering the questions below will help you and your doctor or asthma nurse know you’re able to look after your asthma.

- Can you tell what things make your asthma worse?
- What medicines do you take for it?
- Do you know how each medicine helps you?
- How easy is it to remember to take your medicine?
- Do you have a plan that helps you remember to take your medicines?
- If your doctor or asthma nurse asks you questions about your asthma, how do you describe it?
- When you need to see your doctor or asthma nurse, how do you arrange to do this?
- If you can’t keep an appointment with your doctor or asthma nurse, do you know how to cancel it?
- How do you make sure you arrange new prescriptions before your medicine runs out?
Recommendation based on clinical experience

- Your doctor or nurse will discuss your treatment preferences with you, for example which inhaler suits you best.
- Your doctor or nurse should ask if you find it easy to use your inhaler at school or when you are out.
- If you use a spacer with your reliever inhaler, your doctor or nurse should consider giving you a reliever inhaler device (such as a dry powder inhaler) that’s easy for you to carry around and use when you are out and about.
- Your doctor or nurse should teach you how to use your inhaler and check you are using it correctly.

Recommendation based on clinical experience

When your doctor is giving you advice on controlling your asthma, they should take account of your needs. This means:

- offering help and advice for coping with feelings
- teaching you what you need to know in a respectful and encouraging way
- discussing information that is personal to you and offering you written copies of it, and
- working with your school.
Smoking and cigarette smoke

You are at a time in your life when you will be learning to take responsibility for your own choices. Never feel pressured to smoke just because your friends do. It’s important to know about the effects of smoking on your asthma and the rest of your health. For example, smoking:

- increases the risk of asthma attacks
- permanently damages your airways, and
- reduces the benefits of your asthma medicines.

Recommendation based on clinical experience

It’s better not to start smoking at all but if you do smoke, your doctor or asthma nurse will offer you advice and support to help you stop and can tell you about local NHS services to help you quit.

Living with someone who smokes may also affect your asthma. If your parents or carers smoke, they should also be encouraged to stop so you don’t have to breathe in their cigarette smoke. Don’t be afraid to discuss with your doctor, asthma nurse or parents about how you feel if any of these issues concern you.
Complementary therapies and devices

Some people like to consider complementary therapies and special devices as a way to treat medical conditions such as asthma. You should never use them instead of the treatments your doctor or asthma nurse recommend. Always tell your doctor or asthma nurse if you are using any complementary therapies.

Not enough evidence to tell us if something is of benefit

There is not enough evidence from scientific research to suggest that the complementary therapies and devices listed below can help control your symptoms.

- Acupuncture
- Herbal and traditional Chinese medicine
- Homeopathy
- Hypnosis and relaxation therapies
- Massage therapy

Strong recommendation based on good-quality research evidence

Air ionisers are not recommended as a way to help asthma symptoms.

Don’t be afraid to discuss with your doctor, asthma nurse or parents about how you feel if any of these issues concern you.
How will my asthma care change as I get older?

If you’re under the care of a specialist, as you get older you will need health services designed to look after people in your age group. You will become more involved in managing your asthma.

**Recommendation based on research evidence**

You will have the chance to go to individual or group education sessions, delivered by healthcare professionals, so that you can gain a good understanding of asthma before moving into adult services.

To make this easier, there should be a clear plan about what should happen. It will mainly be your local doctor looking after your asthma. Only a few young people need to go to hospital.

You, your family and other people who help manage your asthma will be involved in the decisions about how and when you will move from child services to adult services.

**Recommendation based on clinical experience**

When you first move into adult services you should be able to see one named consultant until you have settled in.
Will having asthma affect my career choice?

Recommendation based on clinical experience
Your doctor or asthma nurse can discuss future career choices with you and tell you which jobs might increase your risk of work-related asthma symptoms.

Information
Asthma can be caused by substances you breathe in at work. This is called occupational asthma. These substances include things like wood dust, dust from flour and grain, latex and dust from insects and animals. Examples of jobs which can cause occupational asthma include joinery, spray painting, laboratory work or any job which involves using latex gloves such as nursing or dentistry.

For more information, visit www.asthma.org.uk/advice/understanding-asthma/types/occupational-asthma/
Where can I find out more?

National organisations for people who have asthma

**Asthma UK**
Phone: **0300 222 5800**
Asthma UK Helpline – speak to an asthma nurse specialist: **0300 222 5800** (9am–5pm, Mon–Fri)
Website: [www.asthma.org.uk](http://www.asthma.org.uk)
General enquiries: info@asthma.org.uk

Asthma UK is the charity dedicated to improving the health and well-being of people who are affected by asthma. They offer a range of information on asthma including fact sheets and booklets.

**British Lung Foundation**
Helpline: **08458 50 50 20**
Phone: **020 7688 5555**
Website: [www.lunguk.org](http://www.lunguk.org)

The British Lung Foundation aims to help people understand and live with lung disease. They run the Breathe Easy support network, which offers information, support and friendship to anyone affected by lung disease.
Other organisations

**Allergy UK**
Helpline: 01322 619898
Website: www.allergyuk.org

Allergy UK is a charity which aims to increase people’s understanding and awareness of allergies, and helps people manage their allergies.

**ASH (Action on smoking and health)**

**England**
Phone: 020 7739 4732
Website: www.ash.org.uk

**Scotland**
Phone: 0131 225 4725
Website: www.ashscotland.org.uk

**Wales**
Phone: 029 2049 0621
Website: www.ashwales.org.uk

ASH is the leading voluntary organisation campaigning for effective tobacco control legislation and provides an expert information service.
NHS 111
Phone: 111 (24 hours)

This is a 24-hour helpline for people in England and Wales. It is led by nurses who provide confidential healthcare advice and information 24 hours, 365 days a year.

NHS 24
Phone: 111
Website: www.nhs24.com

This is a 24-hour helpline for people in Scotland. It is led by nurses who provide confidential healthcare advice and information 24 hours, 365 days a year.

Useful websites

Department for Work and Pensions (DWP)
Website: www.gov.uk/government/organisations/department-for-workpensions

The website can give you details of state benefits you may be entitled to.

HealthTalk
Website: www.healthtalk.org

HealthTalk lets you share in other people’s experiences of health and illness. You can watch or listen to videos of interviews, read about people’s experiences and find reliable information about conditions, treatment choices and support.
How are SIGN guidelines produced?

Our guidelines are based on the most up-to-date scientific evidence. We read research papers to find evidence for the best way to diagnose, treat and care for patients. If we cannot find this out from the research evidence, we ask healthcare professionals to use their clinical experience and judgment to suggest treatments.

1. Identify questions
2. Search for evidence
3. Look at the evidence
4. Make judgements and recommendations
5. Publish
6. Let everybody know about our guidelines

You can read more about us by visiting [www.sign.ac.uk](http://www.sign.ac.uk) or you can phone [0131 623 4720](tel:0131%20623%204720) and ask for a copy of our booklet *SIGN guidelines: information for patients, carers and the public*.

The Scottish Intercollegiate Guidelines Network (SIGN) writes guidelines which give advice for healthcare professionals, patients and carers about the best treatments that are available. We write these guidelines by working with healthcare professionals, other NHS staff, patients, carers and members of the public.

If you would like a copy of this booklet in another language or format such as in large print, please phone [0131 623 4720](tel:0131%20623%204720).
The Healthcare Environment Inspectorate, the Scottish Health Council, the Scottish Health Technologies Group, the Scottish Intercollegiate Guidelines Network (SIGN) and the Scottish Medicines Consortium are key components of our organisation.