

Managing asthma in adults

A booklet for adults, partners, friends, family members and carers



We would like to thank everyone who contributed to this booklet.

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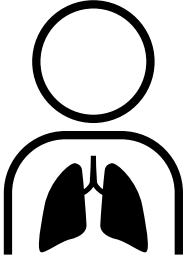
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Who is this booklet for?

This booklet is for you if:



You have or think you might have asthma.

or

You are a family member or carer of someone who has or might have asthma.

This booklet explains:

- diagnosis
- who will be involved in looking after your asthma
- medicines
- how you can help control your asthma
- asthma attacks
- asthma in young people
- work-related asthma, and
- where to find out more about asthma.

What is this booklet about?

This booklet explains the recommendations in the clinical guideline, produced by the British Thoracic Society (BTS) and the Scottish Intercollegiate Guidelines Network (SIGN), about:

- how you can get assessed and diagnosed for asthma, and
- the approaches that can help after diagnosis.

It gives you information about the care you are likely to get and can expect.

On pages 59–61 we give details of support organisations and other places where you can get more information about 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 manage your care.

On page 64 you can find more about us at SIGN and how we produce our 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

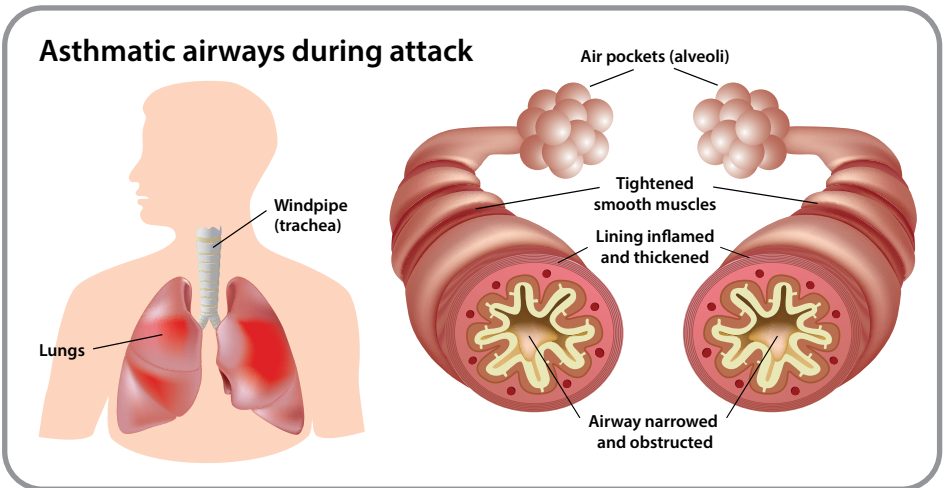
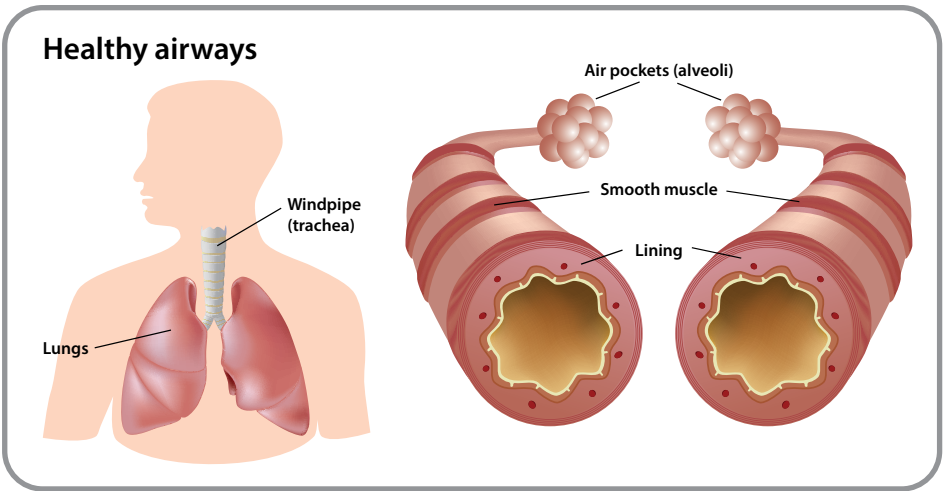
If you would like to see the clinical guideline, please visit

www.sign.ac.uk

What is asthma?

Asthma is a condition that affects your airways (the small tubes that carry air in and out of your lungs). You can get asthma at any age and it is hard to say what causes it.

Airways



What are some of the symptoms of asthma?

Asthma symptoms (signs) could be:



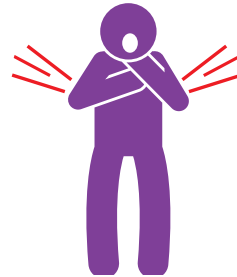
- coughing a lot



- wheezing (a whistling sound in your chest)



- difficulty breathing



- tightness in your chest

You might have all these symptoms or only some.

Asthma symptoms come and go. You may find you have symptoms at different times of the day and even different times of the year.

Some things can make your asthma worse. They are called asthma triggers.

Examples of common asthma triggers are:



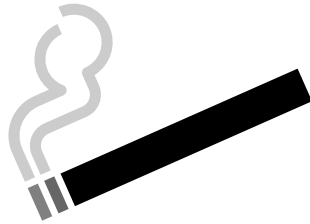
- a cold



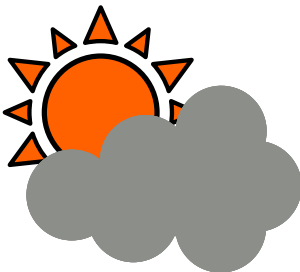
- dust



- pollen



- cigarette smoke



- changes in the weather



- pets

People have different asthma triggers and most people have more than one trigger.

When a person with asthma comes into contact with their asthma triggers, a few things happen:

- The muscles around their airways tighten.
- The lining of their airways become swollen and inflamed.
- Sometimes sticky mucus (phlegm) builds up in the airways.

These lead to asthma symptoms and make breathing difficult.

"Be aware of your triggers. If your asthma is severe, ensure that others are aware of them too." Jill

You can use this space to write down any concerns you have about your asthma symptoms or triggers.

How is asthma diagnosed?

How will my doctor know I have asthma?

You will need to see your doctor to find out if you have asthma. Asthma can be difficult to diagnose as you might not have symptoms at the time of your doctor's appointment. Asthma and its symptoms vary over time.

Your doctor will ask if you have any asthma symptoms. On page 4 there is a list of some common symptoms.



Recommendation based on research evidence

Your doctor will ask more about your symptoms, particularly:

- if they are worse at night or in the early morning
- if they are worse when you exercise
- what you think your asthma triggers are
- if you have symptoms after taking aspirin (blood-thinning medicine) or beta blockers (drugs that lower your blood pressure and treat heart conditions), and
- if your symptoms improve when you're away from work (there's more about work-related asthma on page 56).



Recommendation based on research evidence

Your doctor will:

- ask if you have any history of allergic conditions such as hay fever or eczema
- ask if anyone else in your family has asthma or a history of other allergic conditions such as hay fever, eczema or food allergies
- listen to your chest to hear if you are wheezing, and
- do some breathing tests to see how well your lungs are working. These are sometimes called lung function tests. The main ones are **peak expiratory flow** and **spirometry**.

Your doctor will do these things to try to establish how likely it is you have asthma. If it is likely, treatment will start immediately. If your doctor is not certain you have asthma, they will suggest further tests which are explained on page 12.



Peak expiratory flow is a breathing test that measures how fast you can blow air out of your lungs. It is done using a small device called a peak flow meter.



Spirometry measures the amount and the speed of air you can blow out. It is done using a machine called a spirometer.

What if my doctor thinks I have asthma?

If your doctor thinks the results of your tests mean you are likely to have asthma, they will give you an asthma medicine to try. This is known as a treatment trial, and will be carefully monitored by your doctor.

The medicine they usually give you to try is an inhaled steroid (a preventer inhaler). You can read more about preventer inhalers on page 19. If that medicine doesn't work, your doctor may try you on some other asthma medicines. These may be inhalers or tablets or both.

At the end of the trial your doctor may repeat the breathing tests (peak flow or spirometry).

Another test is FeNO, which measures exhaled nitric oxide in your breath. This can show that your lungs are inflamed (as shown in the diagram on page 3).

You can read more about asthma tests at www.asthma.org.uk/advice/diagnosis

It can sometimes take a bit of time to find the right asthma medicines for you.

If the readings on the spirometer or peak flow meter are lower than expected, this will help your doctor diagnose asthma.

If the readings on a FeNO test are higher than expected, this increases the likelihood that you have asthma.

As asthma comes and goes, the readings may often be normal. This doesn't necessarily mean you don't have asthma.

If you don't respond well to different treatments, your doctor will do more tests.



Recommendation based on research evidence

To help confirm an asthma diagnosis, your doctor may repeat the tests on a day you have symptoms.

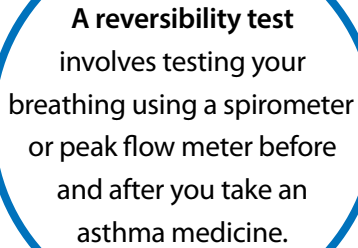
What if my doctor isn't sure I have asthma?



Recommendation based on clinical experience

Your doctor may not be sure you have asthma if the first tests are unclear, or if the medicine given during the treatment trial doesn't help. If this happens, your doctor:

- will check if you are using your inhaler properly, and ask you how often you are using it
- will give you further tests to find out if you have asthma
- may give you a **reversibility test** or medicines for a set period of time to see if they work.



A reversibility test
involves testing your
breathing using a spirometer
or peak flow meter before
and after you take an
asthma medicine.

Your doctor may also ask you to do a spirometry test during a treatment trial. They will then give you some treatment for a longer time. This will either be:

- a preventer inhaler (steroid inhaler) twice a day for six to eight weeks, or
- a two-week course of prednisolone (steroid tablets). When you are given this for the reversibility test, the recommended dose is 30 mg, usually taken every morning for two weeks.

You can read more about these treatments on pages 19–22.

Once you have finished the course of treatment, you will need to go back to your doctor for another breathing test. If your breathing has improved, your doctor will confirm you have asthma and discuss the best treatment for you.



Recommendation based on clinical experience

If there is no improvement after the reversibility test or if the treatment trial is not helping, your doctor may consider testing you for other conditions. This may involve a chest X-ray, heart tests, more detailed breathing tests (lung function tests), blood tests and skin-prick tests if your doctor thinks these would help diagnose your condition.



Recommendation based on research evidence

If your doctor thinks it's necessary, they may refer you to a specialist. The specialist might use **challenge tests** to help confirm you have asthma, or suggest you might have another condition instead of asthma.

In a **challenge test** the doctors try to trigger a mild wheezy episode while in hospital.

How will my doctor or nurse help me look after my asthma?

Your doctor or asthma nurse will help you look after your asthma. You should expect to have an asthma review at least once a year.



Recommendation based on clinical experience

In an asthma review your doctor or asthma nurse will ask you questions about your asthma symptoms and how you are using your inhalers.

Depending on your answers, they may ask you further questions to try to find out how well your asthma symptoms are being controlled.

The answers you give will help your doctor or asthma nurse discuss with you the best treatment for you.



Recommendation based on clinical experience

Your doctor or asthma nurse should also ask you specific questions such as 'How many times a week do you use your blue (reliever) inhaler?' You can read more about these inhalers on page 19.



Information

Make a note of your good and bad days, particularly how you felt and how much medicine you used. You should take these notes with you to your asthma review.

"Having my regular asthma review is what has made all the difference to my ability to manage my asthma." **Mark**



Recommendation based on clinical experience

At your asthma reviews, your doctor or asthma nurse will also check and record the following:

- Your breathing (lung function) using spirometry or a peak flow meter (see page 9). If your lung function is lower than before, it may suggest your asthma is getting worse and your doctor will need to do a detailed assessment.
- Whether you have had any asthma attacks.
- How well you use your inhaler and spacer (if you use one). They will check this by watching you take it. **Always remember to take your inhalers with you when you go to see the doctor.**
- How many inhalers and medicines you have been prescribed since your last asthma review.
- How many courses of steroid tablets you have had since your last review.
- If you have had any time off work since your last review.
- Whether you have a **personal asthma action plan** and, if so, that you know how to use it. There is more about this on page 35. If you haven't got a personal asthma plan, they should write one with you.

Your **personal asthma action plan** is written information provided by your doctor or asthma nurse to help you understand how to recognise if your asthma is getting worse, and if you're having an asthma attack, how to control it.



Information

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

"You need to work with your GP to understand how to look after yourself, it's a bit of a partnership really." Sarah

What medicines can help control my asthma?

Your doctor or asthma nurse will give you medicines to help you control your asthma. Usually, with the right medicines, you should:


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

Having the right medicines will also mean your asthma won't interfere with your daily life (including exercise), and your breathing tests (peak flow and spirometry) will be normal.


It can sometimes take a bit of time to find the right medicines for you. Your doctor may have to try you on a few different inhalers and medicines to get your asthma under control.

"Monitor your medication levels closely. Make sure that repeat prescriptions are up-to-date and that you have time to request a new one." Jill

What medicines will be used to control my asthma?





Asthma medicines		
Type of medicine	When to take it	How it helps
<p>Preventer inhaler (usually a brown, red or orange inhaler containing steroids).</p> <p>Preventer inhalers are the main treatment for asthma. They can take some time to work.</p>  <p>You should be given a preventer inhaler if you have asthma symptoms (wheeze, cough, breathlessness, chest tightness), especially if you also:</p> <ul style="list-style-type: none"> - wake up at least one night a week because of your asthma symptoms - use your reliever inhaler three times or more a week. 	<p>You have to take most preventer inhalers twice a day. Once your asthma is well controlled, you may be able to take your preventer inhaler once a day. You can agree this with your doctor or nurse when you discuss your action plan.</p>	<p>They reduce the inflammation in your airways and prevent future asthma symptoms.</p> <p>Smoking stops your preventer inhaler from working properly. If you smoke or used to smoke, your doctor may need to give you a higher dose of preventer inhaler.</p>

Asthma medicines

Type of medicine	When to take it	How it helps
<p>Reliever inhaler (usually blue).</p> <p>This is sometimes called a short-acting reliever.</p> <p>Everyone with asthma should be given a reliever inhaler.</p> 	<p>You should only take your reliever inhaler when you get your asthma symptoms – for example, when you start to cough or wheeze.</p>	<p>It helps relieve your asthma symptoms for a few hours.</p> <p>Reliever inhalers don't treat asthma – they temporarily open your airways by relaxing the muscles that surround them, allowing you to breathe more easily.</p>

You can use this space to write down information about your medicines, and how you have agreed with your doctor or nurse that you will take them.




Your doctor may consider trying you on other medicines to help control your asthma. These may include some of the medicines in the table below.

Other asthma medicines	
Type of medicine	How it helps
<p>Long-acting reliever inhaler</p>  <p>It contains a reliever medicine that lasts 12 hours. You should always take it with a preventer inhaler</p> 	<p>It opens up your airways by relaxing the muscles that surround them.</p>
<p>Combination inhaler (one inhaler that acts as both preventer and reliever)</p> 	<p>Your doctor will tell you to take your combination inhaler twice a day and when you get your asthma symptoms.</p> <p>Combination inhalers can be used to relieve your asthma symptoms as well as reduce the inflammation in your airways.</p>
<p>Leukotriene receptor antagonists</p>  <p>These are preventer tablets. They do not contain steroids</p>	<p>These work by blocking one of the chemicals that is released when you come into contact with an asthma trigger.</p>



If your asthma is not well controlled with these medicines, your doctor may refer you to an asthma specialist who will look at how you are managing your asthma. The specialist might suggest other medicines.

Other asthma medicines

Type of medicine	How it helps
<p>Tiotropium</p>  <p>This is an alternative long-acting reliever inhaler that may be tried if other treatments don't control your symptoms. It doesn't contain steroids</p>	<p>This works by opening your airways by relaxing the muscles that surround them.</p>
<p>Theophylline</p>  <p>This medicine is available as tablets, syrup and injection. It doesn't contain steroids</p>	<p>Theophylline works by relaxing the muscles that surround your airways. This makes it easier for you to breathe.</p>
<p>Steroid tablets</p> 	<p>Steroid tablets work by reducing the inflammation in your airways.</p>

How will my doctor or asthma nurse decide which medicines are best for me?

The aim is to get your asthma well controlled on the fewest possible medicines. Your doctor will assess your asthma and start you on the most appropriate treatment for you. If that doesn't help, they may increase your medicines or add new medicines.

Increasing your medicines



Recommendation based on clinical experience

Before giving you more inhalers and medicines, your doctor or asthma nurse should always:

- check that your symptoms are caused by your asthma
- check that you are taking your current asthma medicine correctly
- check how you are using your inhaler, and
- discuss with you your asthma triggers and possible ways to avoid them.



Recommendation based on clinical experience

If your asthma is not adequately controlled on the medication your doctor has given you (see pages 19–22), you should be seen by an asthma specialist.

Decreasing your medicines



Recommendation based on clinical experience

Once your asthma is well controlled, it is important that you still regularly see your doctor or asthma nurse for an asthma review.

If your asthma has been controlled for a while (usually at least three to six months), your doctor or nurse may suggest you decrease your medicines to see if your symptoms will stay controlled on a lower dose of medicine.

When deciding which medicine to decrease first, you and your doctor or asthma nurse must consider:

- how well controlled your asthma has been on your current medicines
- how long you have been taking your current medicines
- any side effects of current treatment, and
- how you feel about the medicines you are taking.

Asthma medicines should only be decreased slowly. Watch out for any symptoms and tell your doctor or nurse about these.

What medicines will I be given if exercise brings on my asthma?



Recommendation based on clinical experience

You may find that exercise can trigger your asthma symptoms, especially if your asthma is not well controlled. If your asthma is well controlled by a preventer inhaler, but you find exercise to be a problem, your doctor will review your medicine.

Your doctor may also consider giving you one of the following medicines:

- Long-acting reliever inhaler.
- Preventer tablets (leukotriene receptor antagonists).
- Inhaled anti-inflammatory medicine (chromones).
- Tablets that relax the muscles surrounding your lungs (theophyllines).

You can read more about these on page 21 and 22.

“Using a spacer with my inhalers helps me be sure that the drug is going where it’s needed – into my lungs.” *Sophie*

What are the side effects of my asthma medicines?

Reliever medicine

Reliever inhalers have very few side effects but they can temporarily increase your heartbeat or give you mild muscle shakes. These effects are more common if you're taking a high dose. They wear off after a few minutes or a few hours at the most.

Preventer medicine

The risk of side effects from taking your preventer inhaler is low, but side effects can include sore tongue, sore throat, hoarse voice, and mouth infection (oral thrush).

Preventer inhalers have been tried and tested on many patients. The risks of side effects from them are far outweighed by the benefits of having good control of your asthma.

To reduce the risk of side effects, you can rinse your mouth and gargle with water after using your preventer inhaler. For some people, using a spacer with a pressurised metered-dose inhaler can also help with these side effects.

Steroid tablets

Your doctor will only give you a short course of steroid tablets (no more than two weeks) if your asthma is going through a very bad patch (an asthma attack). At these times it is much safer to have the steroids than to try to manage without them.

Occasionally, if your asthma is very severe or difficult to control, your doctor may give you a longer course of steroid tablets.

There are risks associated with taking steroid tablets over a long period of time (more than two weeks). If your asthma is difficult to control, these may be outweighed by the benefit of better asthma control.



Recommendation based on clinical experience

If you often need to take steroid tablets or if you need to take them for more than two weeks, you should be seen by an asthma specialist.

Your doctor should discuss the benefits and side effects of taking steroid tablets with you and monitor:

- your blood pressure
- your urine or blood sugar to check for diabetes
- your cholesterol levels
- your bone mineral density (the thickness and strength of your bones).

Your doctor may refer you to a community eye specialist to check the health of your eyes.

Spacers and inhalers

How do I take my asthma medicines?



Information

You may be given a spacer to use with your inhalers. Spacers help deliver the medicine to your airways. They are plastic or metal containers with a mouthpiece or mask at one end and a hole for your inhaler at the other. The picture below shows someone using a spacer with their inhaler.





Information

It's important to use your inhalers properly to make sure you are getting the most benefit from them. When you're first given inhalers, your doctor or asthma nurse will show you how to use them. They should then regularly check how you are using them to make sure you're doing it correctly. Your local pharmacist will also be able to show you how to use your inhaler correctly.



Strong recommendation based on good-quality research evidence

If your asthma is well controlled, a **pressurised metered-dose inhaler (pMDI)** with a spacer is as effective as a **dry powder inhaler (DPI)**.



Recommendation based on clinical experience

Your doctor will discuss the different reliever inhalers with you and take your preferences into account.

A **pMDI** contains the medicine in a liquid form.

A **DPI** contains the medicine in a powdered form.



Recommendation based on clinical experience

You should expect your inhaler prescription to be the same brand every time. This ensures you get the inhaler you know how to use.

“Correct technique is key; it ensures that you get the absolute maximum benefit from your medications.” **John**

Can other approaches help control my asthma?

Complementary therapies

Some people like to consider complementary therapies as a way to treat medical conditions such as asthma.

You should not use complementary therapies instead of the treatments your doctor or asthma nurse recommend, but they can be used alongside them. If you are thinking about using them, it's best to discuss it with your doctor or asthma nurse first.



Strong recommendation based on good-quality research evidence

Breathing-exercise programmes, including face-to-face methods taught by physiotherapists and audio-visual programmes, can be offered to people with asthma as an extra form of treatment to be used alongside their medicines. Some people with asthma may think about trying this to control their symptoms.

Complementary therapies and devices that are not proven to work



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.

Evidence from scientific research shows that air ionisers do not reduce asthma symptoms in people with asthma.



Strong recommendation based on good-quality research evidence

Air ionisers are **not** recommended for the treatment of asthma.

How can I help control my asthma?

It is important that you keep good control of your asthma. Having good control means you:

- have no asthma symptoms during the day
- are not woken up at night because of your asthma
- don't need to take your reliever inhaler, and
- don't have asthma attacks.



Strong recommendation based on good-quality research evidence

At your asthma review the doctor or asthma nurse will ask how well you manage to follow the routine you have agreed with them.

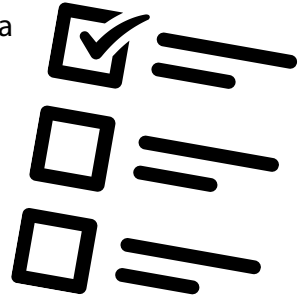
Many people worry about taking their asthma medicines. If you are worried about taking regular treatment, ask your asthma nurse or doctor to explain why the medicines help and to answer your questions. If you find it difficult to remember your regular treatment, discuss this with your asthma nurse or doctor. They may be able to change the dose to make it easier to remember, or suggest some practical tips and reminders.

Having good asthma control reduces the risk of asthma attacks. You can read more about asthma attacks on page 43.

Taking your preventer medicine regularly is the best way to control your asthma and will reduce the likelihood of having asthma attacks in the future.

Asthma UK has a helpful Asthma Attack Risk Checker online:

www.asthma.org.uk/advice/manage-your-asthma/risk/



Personal asthma action plan

A personal asthma action plan is written information to help you understand how to recognise when:

- your asthma is getting worse and how you can control it, and
- you're having an asthma attack and how you can control it.

A personal action plan is sometimes called a self-management plan.



Strong recommendation based on good-quality research evidence

Your doctor or asthma nurse will draw up your plan with you, and it should include your preferences and opinions. If asthma is stopping you doing things you want to do, ask your nurse or doctor to include them in your action plan.



Information

People who have a personal asthma action plan are more likely to have better control over their asthma than people who don't. 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. Speak to your doctor or asthma nurse if you don't have one.

Keeping a personal action plan can help keep your asthma under control. It will also give your GP or emergency practitioner invaluable information in the unfortunate instance of an attack." Stuart **Stuart**

When will I discuss my personal asthma action plan?



You will be able to discuss your action plan at your asthma reviews. It's important that you understand and agree with your action plan. Your doctor or asthma nurse should also go through it with you at other times when discussing your asthma with you.

You can download or order a blank personal asthma action plan from Asthma UK by visiting www.asthma.org.uk/advice/manage-your-asthma/action-plan and take it to your review. An example can be found on page 62–63. Your asthma nurse or doctor will help you fill it in.

Other ways I can help control my asthma

The table below explains some ways you can help to control your asthma.

What can I do to help my asthma?	How can this help?
<p>Take your asthma medicine regularly in line with your asthma action plan.</p> <p>Learn about your asthma from your doctor or asthma nurse. It's important they give you all the information you need. They should ask if you have any worries and you should tell them if you do.</p> <p>To help you control your asthma, they should give you simple information (face-to-face or written information, or both), especially about your asthma medicines.</p>	<p>For good asthma control it's important to take your medicines, even when you feel well. This will also reduce the likelihood of you having asthma attacks in the future.</p> <p>Many people live with troublesome asthma symptoms such as coughing and wheezing and think this is normal.</p> <p>Good asthma control means you don't have asthma symptoms day or night and rarely need to use your reliever inhaler.</p> <p>If you often have asthma symptoms, this can lead to an asthma attack and long-term lung damage.</p>

What can I do to help my asthma?	How can this help?
<p>Stay away from cigarette smoke.</p> 	<p>Smoking or being around cigarette smoke makes your asthma worse and may cause increased wheezing. It also means your inhaler won't work so well.</p> <p>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.</p>
<p>Maintain a healthy weight.</p> 	<p>If you are overweight, your doctor or asthma nurse will support you to lose weight. Losing weight may lead to improvements in your asthma symptoms.</p>

“I needed to learn about the illness and understand what was happening to me. I needed to understand that I could not think this illness away and that my delaying medications was making me dangerously ill. Now I can take my inhalers properly and just keep getting better and more active all the time.” **John**



Recommendation based on research evidence

The benefits of having vaccinations, such as the flu vaccine, outweigh the risks of triggering your asthma. Your doctor should discuss this with you. If you are on high-dose steroids for your asthma, the vaccine may not be as effective so you need to speak to your doctor about this.



Recommendation based on research evidence

Modern technologies such as 'apps' for your mobile phone, tablet or computer can be useful ways to keep a check on your asthma and may enable you to send a log of your symptoms or peak flows to your GP or nurse.





Not enough evidence to tell us if something is of benefit

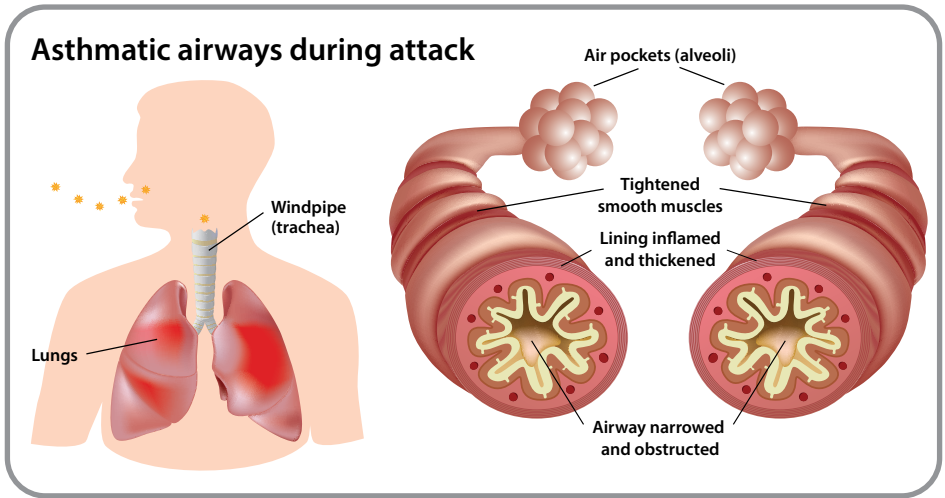
There is not enough research evidence to suggest that the following can help control asthma.

- Fish-oil supplements (capsules containing fish oils).
- Antioxidants (substances that may protect your body's cells against harmful effects when our body breaks down food or comes into contact with cigarette smoke).
- Probiotics (foods containing 'friendly' bacteria, such as yogurt drinks).
- Special action or equipment to control house-dust mites.
- Avoiding having house pets.
- Taking vitamin D supplements.
- Avoiding foods thought to cause allergies.

You can use this space to write down anything you feel helps control your asthma symptoms.

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 that can be serious.



An asthma attack is when your airways become swollen and the muscles around the airways become very tight, making breathing more difficult. Asthma attacks don't usually come out of the blue. Most are triggered by allergens (such as pollen or dust), or by viral infections, particularly the group of viruses called rhinoviruses that cause the common cold.

An asthma attack is also called acute asthma.

You will probably feel your asthma getting worse for a few days before the attack, for example:

- you may be coughing and wheezing more
- your chest may start to feel tight
- you may be waking up more often in the night coughing, wheezing or with a tight feeling in your chest, or
- you may need to use your reliever inhaler (usually blue) more often than usual.

An asthma attack is also known as acute asthma.

“I find a spacer is particularly useful when I’m having an asthma attack as I don’t have to worry as much about inhaler technique when I’m struggling to breathe.” *Jennifer*

How will I know that I'm having an asthma attack?

You are having an asthma attack if any of the following happen:



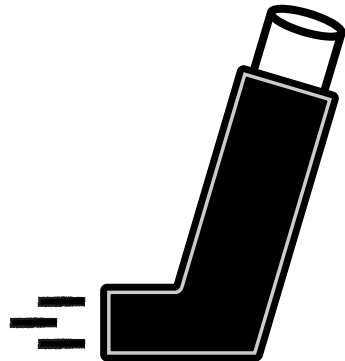
- Your asthma is getting worse (for example, you are coughing or wheezing more than usual or you feel more breathless or your chest feels tighter).



- You cannot breathe well and it is hard to talk, eat or sleep.



- Your reliever inhaler is not helping as much as usual.



- You need to use your reliever inhaler more often than usual.

If you are having an attack, follow the advice in your asthma action plan.

If you don't have an action plan or you can't find it, follow the advice from Asthma UK in the box below.

What to do in an asthma attack:



1 Sit up straight

Don't lie down. Try to keep calm.

2 Take your blue inhaler

Take one puff of your reliever inhaler every 30–60 seconds, up to a maximum of 10 puffs.

3 Call 999 if you don't feel better

Do this if you feel worse at any point, or if you don't feel better after using 10 puffs of your reliever inhaler.

4 Take your blue inhaler again after 15 minutes

If you're waiting for the ambulance longer than 15 minutes, take one puff every 30–60 seconds, up to a maximum of 10 puffs.

If the ambulance is delayed, and your symptoms are not eased by emergency use of the blue inhaler, repeat the 10 puffs of reliever inhaler every 15 minutes while you wait for the ambulance.

Important: The asthma attack information in the above box is **not** for people using a MART inhaler (maintenance and reliever therapy). MART is a combined asthma therapy.

If you are on MART and are having an asthma attack, follow the advice in your asthma action plan or speak to your GP or asthma nurse to get the right advice. If you feel worse or the advice given is not working, call 999.

Will I need to go to hospital if I have an asthma attack?

You don't always have to go to hospital if you have had an asthma attack. In most cases your symptoms will settle within 30 minutes of taking your reliever inhaler. You should still make an appointment with your doctor or asthma nurse for the same day, even if you are feeling better.

If you are showing signs of serious life-threatening asthma (increased wheezing, chest tightness and breathlessness), and finding it difficult to talk even after using your reliever inhaler, you need to go to hospital for urgent medical attention.









Recommendation based on clinical experience.

You should have appointments with a hospital specialist for at least a year if your asthma attack was so severe that you had to go into hospital.

What treatment will I be given if I have an asthma attack?

The table below describes the medicines used to treat asthma attacks.

Treatment	How the medicine is given
<p>Oxygen</p> 	<p>The doctors or nurses will check your oxygen levels. If they are low, you will be given oxygen through a mask.</p>
<p>Reliever medicine</p>  	<p>You 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 you breathe in through a mask. Occasionally in hospital you may be given reliever medicine through a drip or given frequent nebulisations. Nebulisers have the same role as an inhaler but are usually only used in hospital rather than at home.</p> <p>You may be given another reliever medicine in the nebuliser if your asthma attack is severe or is not responding to the first reliever medicine alone.</p>
<p>Steroid tablets</p> 	<p>You will be given steroid tablets until you have recovered from your asthma attack (this will be for at least five days).</p>
<p>Magnesium sulphate (medicine that reduces asthma symptoms)</p> 	<p>You may be given this through a drip if you have life-threatening asthma.</p>
<p>Aminophylline (medicine that helps to treat wheezing and shortness of breath)</p> 	<p>In hospital, your specialist may give you this medicine through a drip.</p>

Antibiotics don't usually help treat asthma symptoms as most asthma attacks are usually triggered by viral infections (such as the common cold).

When will I be able to leave hospital?



Information

To help decide when you are well enough to leave hospital, your hospital doctor will:

- check your breathing with a peak flow meter regularly to see if it improves
- discuss with you how to look after your asthma. This will include helping you monitor your asthma using a peak flow meter or keeping a symptom diary
- check how you use your inhaler.

Before leaving hospital, you should be given a written personal asthma action plan if you don't have one, or your current one should be discussed with you and updated. This is very important. You can read more about personal asthma action plans on page 35.



Recommendation based on research evidence

If you have to go into hospital because of your asthma, you should receive a personal asthma action plan, or a revised plan, before you leave hospital.



Recommendation based on clinical experience

At the time you leave, the hospital should tell your doctor about your hospital treatment.

The hospital should also arrange a follow-up appointment at the hospital for you within a month. It's important to make an appointment with your own doctor within two days of leaving hospital. This reduces the risk of similar problems in future.

Asthma in young people

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

Adolescence is when you are moving from childhood into adulthood. You are becoming more independent but it can be a difficult 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



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 about it 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 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 to recognise an asthma attack?
- Do you know what to do if you have an asthma attack?
- 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 medicine?
- If your doctor or asthma nurse asks you questions, how do you describe your asthma?
- 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

At this time in your life you are 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 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 as a way to treat medical conditions such as asthma. You should never use them instead of the treatments your doctor or asthma nurse recommends. Always tell your doctor or asthma nurse if you're thinking of using any complementary therapies. You can read more about complementary therapies on page 32 and 33.

What should happen as I get older?

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



Recommendation based on research evidence

You should have the chance to go to either 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. In most cases, looking after your asthma will involve your doctor. Only a few young people need to go to hospital.

You, your family, carers and other people who help manage your asthma should 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 doctor until you have settled in.

Will having asthma affect my career choice?



Recommendation based on clinical experience

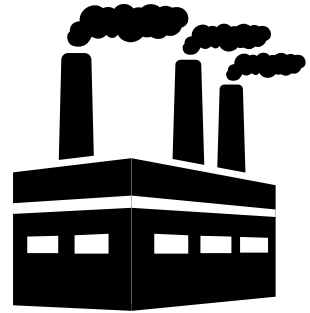
Your doctor or asthma nurse should discuss future career choices with you and tell you which jobs might increase your risk of work-related asthma symptoms.

You can read about occupational asthma on the following pages.

What is occupational asthma?

Asthma can be caused by substances you breathe in at work. This is called occupational asthma.

These substances include things like dust from flour and grain, certain chemicals used in spray paints and foam, wood dust, and dust from insects and animals. Examples of jobs that can cause occupational asthma include baking, spray painting, joinery and laboratory work with animals.



How is occupational asthma diagnosed?

If you develop asthma as an adult or if you used to have asthma as a child and it returns, your doctor should consider whether substances at your workplace are causing it.



Recommendation based on clinical experience

If your doctor thinks your asthma may be caused by your workplace, they will ask you the following questions.

- Is your asthma the same, better or worse on your days off work?
- Is your asthma the same, better or worse when you are on holiday?

If you answer yes to these questions, your doctor will start to investigate whether you have occupational asthma.



Recommendation based on research evidence

If your doctor suspects you have occupational asthma, they will refer you to a specialist in occupational asthma to investigate.



Recommendation based on research evidence

Before your specialist can confirm that your asthma is caused by a substance at your work, they will ask you to measure your breathing using a peak flow meter at different times of day.

- You should take at least four readings a day for four weeks.
- Your specialist will tell you to use your peak flow meter at times when you're at work and at times when you're away from work. You can read more about peak flow meters on page 9.
- If your breathing improves when you're away from work, it's possible you have occupational asthma.



Recommendation based on research evidence

You should discuss with your employer whether it's possible to remove the substance from your workplace or if you can move somewhere else at work to be away from the substance. They should take all reasonable and practical steps to do this. This should happen as soon as you are diagnosed or within 12 months of starting to have your asthma symptoms at work.



Information

For more information on occupational asthma, 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

General enquiries: info@asthma.org.uk

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

British Lung Foundation

Helpline: **03000 030 555**

Website: www.blf.org.uk

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

NHS 24

Phone: 111

Website: www.nhs24.scot

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

NHS 111

Phone: 111

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

Allergy UK

Helpline: 01322 619898

Website: www.allergyuk.org

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

ASH (Action on smoking and health)

England

Phone: 0207 404 0242

Website: www.ash.org.uk

Scotland

Phone: 0131 225 4725

Website: www.ashscotland.org.uk

ASH is the leading voluntary organisation campaigning for effective tobacco control legislation and provides an expert information service.

Useful websites

Department for working, jobs and pensions

Website: www.gov.uk/browse/working

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

Health Talk

Website: www.healthtalk.org

Health Talk lets you share 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.

! My asthma triggers

Taking my asthma medicine each day will help reduce my reaction to these triggers. Avoiding them where possible will also help.

i

People with allergies need to be extra careful as attacks can be more severe.

! My asthma review

I should have at least one routine asthma review every year. I will bring:

- My action plan to see if it needs updating.
- Any inhalers and spacers I have, to check I'm using them correctly and in the best way.
- Any questions about my asthma and how to cope with it.

Next asthma review date: _____

GP/asthma nurse contact

Name:

Phone number:

Out-of-hours contact number

(ask your GP surgery who to call when they are closed)

Name:

Phone number:



HA18 0R16 © 2016 Asthma UK, registered charity number in England and Wales 802929 and in Scotland SC09393. Last reviewed and updated 2018, next review 2019.

*Adams et al. Factors associated with hospital admissions and repeat emergency department visits for adults with asthma. *Thorax*. 2000;55:566-573

How to use it

Your written asthma action plan can help you stay on top of your asthma.

To get the most from it, you could...

1 Put it somewhere easy for you and your family to find – like your fridge door, noticeboard, or bedside table.

2 Keep a photo of it on your mobile phone or tablet – so you can check it whenever you are. You can also send it to a family member or friend, so they know what to do if your asthma symptoms get worse.

3 Check in with it regularly – put a note on your calendar, or a monthly reminder on your phone to read it through. Are you remembering to use your day-to-day asthma medicines? Do you know what to do if your symptoms get worse?

4 Take it to every healthcare appointment about your asthma – including A&E/consultant. Ask your GP or asthma nurse to update it if their advice for you changes.

Get more advice & support from Asthma UK:

Speak to a specialist asthma nurse about managing your asthma on: **0300 222 5800**

Get news, advice and download information packs at: **www.asthma.org.uk**

Follow us on Facebook for news and tips about your asthma: **www.facebook.com/asthmauk**

Follow us on Twitter for news and tips about your asthma: **@asthmauk**

The step-by-step guide that helps you stay on top of your asthma

Your asthma action plan

Fill this in with your GP or nurse



If you use a written asthma action plan you are four times less likely to be admitted to hospital for your asthma.*

Name and date:



Any asthma questions? Call our friendly helpline nurses **0300 222 5800** (9am – 5pm, Mon – Fri)

www.asthma.org.uk



Every day asthma care:

My asthma is being managed well:

- With this daily routine I should expect/aim to have no symptoms.
- If I've not had any symptoms or needed my reliever inhaler for at least 12 weeks, I can ask my GP or asthma nurse to review my medicines in case they can reduce the dose.
- My personal best peak flow is:

My daily asthma routine:

My **preventer** inhaler (insert name/colour):

I need to take my **preventer** inhaler every day even when I feel well

I take puff(s) in the morning and puff(s) at night.

My **reliever** inhaler (insert name/colour):

I take my **reliever** inhaler only if I need to
I take puff(s) of my reliever inhaler if any of these things happen:

- ★ I'm wheezing
- ★ My chest feels tight
- ★ I'm finding it hard to breathe
- ★ I'm coughing

Other medicines and devices (eg spacers) I use for my asthma every day:



When I feel worse:

My asthma is getting worse if I'm experiencing any of these:

- My symptoms are coming back (wheeze, tightness in my chest, feeling breathless, cough).
- I am waking up at night.
- My symptoms are interfering with my usual day-to-day activities (eg at work, exercising).
- I am using my reliever inhaler three times a week or more.
- My peak flow drops to below:

⚠ URGENT! If you need your reliever inhaler more than every four hours, you're having an asthma attack and you need to take emergency action now.

What I can do to get on top of my asthma now:

If I haven't been using my preventer inhaler, I'll start using it regularly again or if I have been using it...

Increase my preventer inhaler dose to puffs times a day until my symptoms have gone and my peak flow is back to my personal best.

Take my reliever inhaler as needed (up to puffs every four hours).

I carry my reliever inhaler with me when I'm out.

URGENT! See a doctor or nurse within 24 hours if you get worse at any time or you haven't improved after seven days.

Other advice from my GP about what to do if my asthma is worse (eg SMART/MART or rescue steroid tablets):



In an asthma attack

I'm having an asthma attack if I'm experiencing any of these:

- My reliever inhaler is not helping or I need it more than every four hours.
- I find it difficult to walk or talk.
- I find it difficult to breathe.
- I'm wheezing a lot or I have a very tight chest or I'm coughing a lot.
- My peak flow is below:

What to do in an asthma attack



1 Sit up straight – try to keep calm.



2 Take one puff of your reliever inhaler (usually blue) every 30 – 60 seconds, up to a maximum of 10 puffs.



3 If you feel worse at any point OR you don't feel better after 10 puffs call 999 for an ambulance.



4 Repeat step 2 after 15 minutes while you're waiting for an ambulance.

After an asthma attack:

See your GP within 48 hours to make sure you're not at risk of another attack. If you get worse see them urgently. Finish any medicines they prescribe you, even if you start to feel better. If you don't improve after treatment, see your GP urgently.

What to do in an asthma attack if I'm on SMART/MART:

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
Gather lived
experience



2
Identify the
questions



3
Search for the
evidence



4
Look at the
evidence



5
Make judgements
and
recommendations



6
Ask people for
feedback



7
Publish



8
Let everybody
know about our
guidelines

You can read more about us by visiting www.sign.ac.uk or you can phone **0131 623 4720** 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**.



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