



Healthcare
Improvement
Scotland

SIGN

Evidence-based
clinical guidelines

Managing asthma in adults

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

Area for cover image

Acknowledgements

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

Parts of this booklet were generated using AI to summarise the clinical guideline. The draft was then reviewed and amended as necessary by guideline group members.

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First published month 2017

Revised edition published 2025

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Who is this booklet for?

This booklet is for you if:

- You have or think you might have asthma
 - 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 clinical guidelines, produced by the British Thoracic Society (BTS), National Institute for Health and Care Excellence (NICE) and 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.

Recommendations in the guideline are based on different types of evidence. Some of it comes from current research, some from the clinical experience and opinions of healthcare professionals, and some from people with lived experience.

On page 41 you can find more about how guidelines are produced.

On page 40 we give details of support organisations and other places where you can get more information about asthma.

There are two different types of recommendations in the booklet



**Recommendation
based on the research evidence**



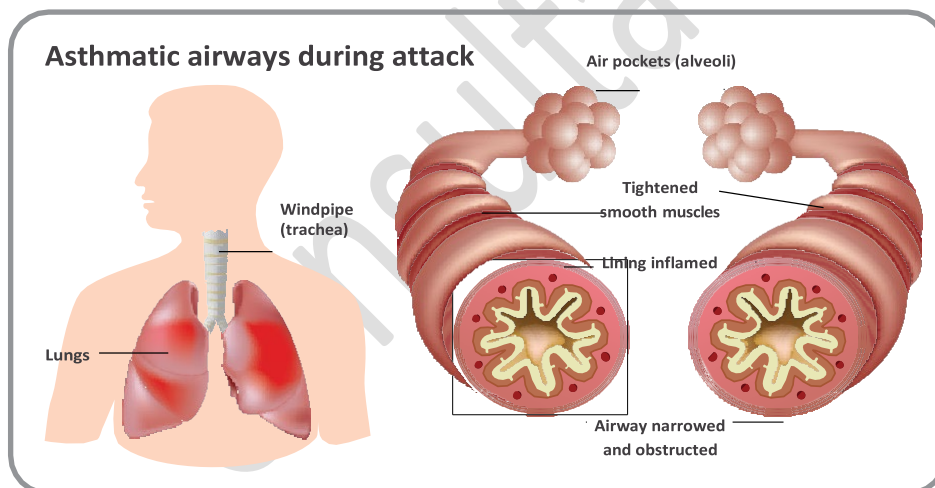
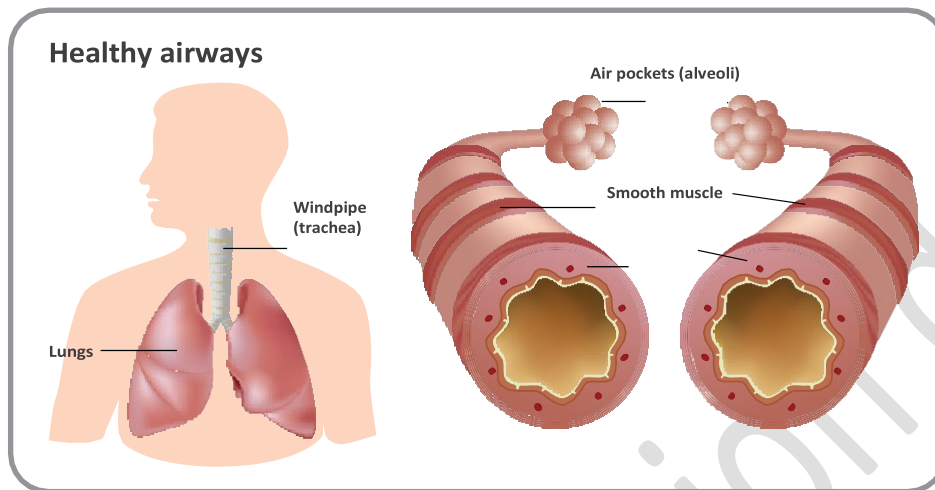
**Recommendation
based on clinical experience**

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)
- noisy breathing
- 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, or viral infection
- dust
- pollen
- cigarette smoke and e-cigarette vapour
- changes in weather, and temperature
- pets
- air pollution
- mould and damp
- exercise
- stress and emotions
- hormonal changes of menstrual cycle, puberty, pregnancy and menopause.

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.

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. You may be asked to do breathing tests with your doctor, record breathing in a diary at home, have blood tests or in some cases be referred to the hospital for tests to confirm that you have asthma.



Recommendation based on the research evidence

If your doctor thinks you might have asthma, they will ask you about your symptoms and medical history. Here's what they will check for:

- **Symptoms.** They will ask if you have had wheezing (a whistling sound when you breathe), noisy breathing, coughing, shortness of breath or chest tightness. They will also ask if these symptoms get worse at night, early in the morning or during certain seasons
- **Triggers.** They will ask if anything specific makes your symptoms worse, like exercise, cold air or allergens
- **Personal or family history.** They will ask if you or anyone in your family has had asthma or allergic rhinitis (hay fever)
- **Other conditions.** They will check if your symptoms could be caused by something other than asthma.



Recommendation based on the research evidence

The tests you might get include:

- **Eosinophil count.** A blood test to check the number of eosinophils, a type of white blood cell that can be high in people with asthma
- **FeNO (Fractional exhaled Nitric Oxide).** A breath test to measure nitric oxide, which can indicate lung inflammation
- **Spirometry.** A test to measure how much air you can breathe out and how fast
- **PEF (Peak Expiratory Flow).** A test to measure how fast you can blow air out of your lungs, done before and after using a bronchodilator (a medicine that opens your airways).



Recommendation based on the research evidence

If you are very unwell or have severe symptoms, tests may be delayed until you are feeling better. If you get worse while waiting for these tests, contact your healthcare professional immediately.

Be aware that if you have been using inhaled steroids (a type of asthma medicine), it might affect the results of spirometry and FeNO tests, making them more likely to be normal.



Recommendation based on the research evidence

Your doctor will not confirm you have asthma unless your symptoms and medical history suggest it, and a test supports the diagnosis. Until then, they will consider it "suspected asthma."



Recommendation based on the research evidence

If asthma is confirmed, your doctor will note this in your medical records.



Recommendation based on the research evidence

If asthma is not confirmed by blood test or breath test your healthcare professional will consider doing the following tests:

- **Bronchodilator reversibility (BDR) with spirometry:** If your lung function improves significantly after using a bronchodilator, it suggests asthma.
- **PEF variability:** checking how much air you can blow out of your lungs (called Peak Expiratory Flow or PEF) twice a day for two weeks. If the amount you can blow out changes a lot during this time, it might mean you have asthma.

Bronchodilator is a type of medicine that helps open up the airways in the lungs by relaxing the muscles around them. This makes breathing easier



Recommendation based on the research evidence

If these tests do not confirm asthma but your doctor still thinks you might have it, you might be referred for a **bronchial challenge test**. This test checks how your airways react to a substance that can cause them to narrow. If your airways are overly responsive, it confirms asthma.

Read more about asthma tests on Asthma and Lung UK's [website](#).

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

Once you have been diagnosed with asthma, you should expect to have an asthma review with your doctor or nurse at least once a year.



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



Recommendation based on the research evidence

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

- **Time off work or school.** They will ask if you have missed any work or school because of your asthma
- **Reliever inhaler use.** They will check how often you use your reliever inhaler (the one you use when you have symptoms) and look at your prescription records
- **Steroid tablets** (a type of medicine that reduces inflammation). They will count how many times you have needed to take these for your asthma
- **Hospital visits.** They will ask if you have had to go to the hospital or emergency department because of your asthma.

If your asthma is not well controlled, your doctor will adjust your treatment.



Recommendation based on the research evidence

Your doctor might ask you to fill in a short questionnaire which includes questions like, ‘During the last 4 weeks, how much of the time has your asthma kept you from getting as much done at work, school or home?’ This helps them to work out how well your asthma is controlled.



Recommendation based on the research evidence

Regular **peak expiratory flow (PEF) monitoring** (measuring how fast you can blow air out of your lungs) is not usually needed unless it is part of your personalised asthma action plan



Recommendation based on the research evidence

Your doctor might do breath tests during your regular check-ups and before and after changing your asthma treatment. This is done to measure the amount of nitric oxide in your lungs, which can indicate inflammation in your lungs.

Your **personal asthma action plan (PAAP)** is 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.

What medicines can help control my asthma?

When you are diagnosed with asthma, your doctor or asthma nurse will start you on a treatment plan to help control your symptoms. 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.



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







"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

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.



What medicines may be considered to control my asthma

The most common treatment for asthma is inhalers. This is because inhalers help get the medicines to your airways.

Type of medicine	When to take it	How it helps
Anti-inflammatory reliver (AIR). A single inhaler that works as both ‘preventer and reliever.’ 	<p>Take your inhaler when you have asthma symptoms.</p> <p>You do not need to take this inhaler regularly, or when you don’t have symptoms.</p>	<p>The combination of ‘reliever’ and ‘preventer’ helps your symptoms immediately, and provides anti-inflammatory treatment to your lungs to prevent further symptoms.</p>
Maintenance and Reliever Therapy (MART). A single inhaler that works as both ‘preventer’ and ‘reliever.’ 	<p>Take your inhaler twice a day, morning and night, but also use the same inhaler when you have symptoms.</p>	<p>This inhaler helps keep inflammation under control to maintain your health. When you have symptoms, taking extra doses not only eases those symptoms but also adds more anti-inflammatory treatment to prevent more symptoms developing.</p>
Fixed dose regimen inhaler. A combination of inhaled steroid, and one or two long-acting bronchodilators (a medication that relaxes the muscles around the airways, making it easier to breathe by widening airways). 	<p>Take this as prescribed. It may be once or twice a day. These inhalers are not to be used as relievers.</p>	<p>They reduce the inflammation in your airways and prevent future asthma symptoms.</p>
Reliever inhaler (usually blue). This is sometimes called a short-acting reliever. You will have a separate reliever inhaler if you have a separate preventer inhaler. 	<p>You should only take your reliever inhaler when you get your asthma symptoms – for example when you start to cough or wheeze. You do not need to take a reliver before you do exercise, or regularly through the day.</p>	<p>It helps relieve your asthma symptoms for a few hours. 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>

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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.

Type of medicine	How it helps
Leukotriene receptor antagonists These are preventer tablets. They don't contain steroids. 	These work by blocking one of the chemicals that is released when you come into contact with an asthma trigger.
Long-acting anti-muscarinic. These inhaled medicines can be given in a separate inhaler, or in a single combination inhaler. They can only be used as a preventer. 	They work by providing a long-acting dilation of the airways, to allow better airway entry to your lungs.

Steroids



Recommendation based on the research evidence

You should not need long term steroid tablets to control your asthma symptoms. There are other options for treating asthma that should be considered by a hospital specialist before long term steroids so you should discuss a referral to hospital with your doctor or nurse. A very small number of people with asthma may require long term steroid tablets, after all other treatment options have been explored.

Why might my asthma be uncontrolled despite taking medication?



Recommendation based on the research evidence

If your asthma isn't under control, it's important to figure out why before changing your medicines. There are many possible reasons, including:

- **Alternative diagnoses or other conditions.** Sometimes, other health conditions like allergies, acid reflux or sinus infections can make asthma worse. Your doctor may check for these.
- **Not taking medicines as prescribed (adherence).** If you don't take your medicines regularly or correctly, your asthma might not improve. This could be because of forgetfulness, side effects, or misunderstanding the instructions.
- **Inhaler technique.** Using your inhaler the wrong way can stop the medicine from reaching your lungs. A healthcare provider can show you how to use it correctly and you can watch [videos](#) on how to use it.
- **Smoking or vaping.** Smoking, even second-hand smoke, or vaping can irritate your lungs and worsen asthma.
- **Exposure at work (occupational asthma).** Breathing in fumes, dust, or chemicals at work can trigger asthma symptoms.
- **Stress and mental health.** Anxiety, depression, or stressful situations can affect how well you manage your asthma.
- **Seasonal changes.** Allergies during certain times of the year, like spring or fall, can worsen asthma.
- **Environmental factors.** Things like air pollution, indoor mould, or pet dander might be triggers.
- **Weight.** Having a high weight makes it much less likely that you will respond to the asthma treatments. If you are overweight or obese, you should aim to reach a healthy weight as part of your asthma treatment plan.

Addressing these issues can help control your asthma without needing extra medicines.



Recommendation based on the research evidence

If you are taking a moderate dose of MART, your doctor may suggest a FeNO test to measure the level of nitric oxide in your breath. This can show how much inflammation is in your airways. If your FeNO level is high, it might mean:

- You aren't taking your medication regularly
- You might need a higher dose of your inhaled steroids, a medicine that reduces inflammation in your lungs.
- You might benefit from being referred to hospital for 'biologic' therapy

Your doctor may suggest checking your eosinophil (a type of white blood cell) count. If it is high, it might mean:

- You have uncontrolled inflammation
- You might benefit from being referred to hospital for consideration of 'biologic therapy.'

How will I know if medicines are working?



Recommendation based on the research evidence

After starting or changing your asthma medicines, you should see your doctor again in 8 to 12 weeks. This check-up is important to see if:

- your symptoms have improved
- your asthma is under control
- any further adjustments are needed.

Regular follow-ups help make sure your treatment plan is right for you.

If your asthma is poorly controlled on moderate doses of MART, or high doses of fixed dose treatment, you may be referred to hospital to see an asthma specialist.

Decreasing your asthma medicines

The approach to decreasing your medicines will be different depending on whether you are on AIR, MART or a Fixed Dose regimen.

Type of treatment	Treatment plan
Anti-inflammatory reliever (AIR)	If you have no symptoms you will not need to take any inhaler.
Maintenance and reliever therapy (MART)	If you have not used your inhaler as a reliever, have minimal symptoms and have not had any asthma attacks, you should speak to your doctor about reducing the regular inhaler component.
A fixed dose regimen inhaler	If you have not used your reliever inhaler, have minimal symptoms and have not had any asthma attacks, you should speak to your doctor about reducing the regular inhaler component, or stepping down to MART.



Recommendation based on clinical experience

At your yearly asthma review, your doctor will talk to you about the benefits and risks of lowering your medicines. This includes:

- Whether the treatment you are taking is up to date and fits the recommended treatments available.
- Your treatment may be increased, decreased, or changed, depending on how well your asthma is controlled.
- Steps to reduce medicines. Medicines will be reduced or stopped gradually, based on how well they worked for you and any side-effects you experienced. You'll wait at least 8 to 12 weeks after each adjustment to see how your asthma responds before making further changes.
- Monitoring and follow-up. You'll agree with your doctor or nurse on how to track your symptoms and check progress during this time. This may include keeping a symptom diary or using a peak flow meter if part of your personalised asthma management plan.
- Asthma action plan update. Your doctor or nurse will update your personalised asthma action plan. This plan includes:
 - what medicines you should take
 - how to recognise if your asthma is getting worse
 - what to do in case of an emergency.

This step-down approach ensures you're taking the least amount of medicine while keeping your asthma well controlled.



"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.

Spacers and inhalers

When managing your asthma, your doctor will talk to you about several important topics to help you understand and manage your condition. This includes how your inhaler medications work, when to use them and the proper way to use your 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. You can watch a demonstration of how to use your inhaler on Asthma and Lung UK's [website](#).



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. You can watch a demonstration of how to use an inhaler and spacer on Asthma and Lung UK's [website](#).



Recommendation based on the research evidence

Your doctor should discuss the following with you:

- Medications that are in your inhaler and how they help manage your asthma.
- How the medications work to relieve your symptoms and prevent asthma attacks.
- The specific times and situations when you should use your inhaler.
- The proper way to use your inhaler. Your doctor will demonstrate how to use it and will ensure you can do it correctly.
- If you use a metered dose inhaler, they will explain the benefits of using a spacer and how to use it.
- The environmental impact of different inhalers and help you choose the most eco-friendly option.
- Dose counter and how to use it on your inhaler, if it has one, to keep track of your medication usage.
- Routine checks on your inhaler technique during asthma reviews and consultations.
- Alternative devices if you have trouble using your inhaler.



Recommendation based on the research evidence

Your doctor will recommend using the same type of device if you need more than one inhaler.



Recommendation based on the research evidence

You should take any used or expired inhalers to the pharmacy for disposal.



Recommendation based on the research evidence

Your doctor should always take your preferences into account when discussing inhalers and spacers, ensuring that the treatment plan is tailored to your needs and comfort. If you have any questions or concerns, your doctor can provide further explanations and support.



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

Can other approaches help control my asthma?

You may wish to think about other ways to manage your asthma alongside your medicines.

Breathing-exercise programmes



Recommendation based on the 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

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.

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.

How can I help control my asthma?

Managing your asthma goes beyond just taking medicine—it's about equipping yourself with the tools and knowledge to stay in control. This is known as self-management. Self-management gives you the power to understand and manage your symptoms effectively. By following a personalised action plan and identifying your triggers, you can reduce the chances of asthma attacks, experience fewer symptoms and feel more confident in managing your health. Research shows that having a personal asthma action plan leads to better asthma control, fewer attacks and a lower risk of needing hospital care. If you don't have an action plan yet, talk to your doctor or asthma nurse to get started.

Self-Management programme

This is a plan made just for you that helps you stay on top of your asthma.



Recommendation based on the research evidence

You doctor or nurse will offer a Self-Management Programme that includes:

1. **A Personalised Action Plan (PAP):** This written plan explains what to do when your asthma is under control, when it gets worse, and during an emergency.
2. **Education:** Your doctor or nurse will teach you about asthma, your triggers (things that make your asthma worse), and how to avoid them.

Your plan might include tracking your **symptoms** or using a device called a **peak flow meter** to measure how well you can breathe (or both).



Recommendation based on the research evidence

Triggers are things that can make your asthma worse. These might include:

- Pollution. Bad air quality inside or outside can make it hard to breathe
- Second-hand tobacco smoke. This is harmful to your lungs.
- Other Personal Triggers. This could be allergens like dust, pets, or even stress.

Your action plan will include ways to reduce your exposure to these triggers, like staying indoors on high-pollution days or using air filters at home.

When should I review my asthma plan?



Recommendation based on the research evidence

You should check your action plan with your doctor or nurse:

- After leaving the hospital if you've had an asthma attack.
- During emergency visits or doctor appointments for asthma symptoms.
- At least once a year as part of your annual asthma review

This ensures your plan is always up to date and easy to understand.

What if my asthma gets worse?



Recommendation based on the research evidence

If you have an **Anti-inflammatory Reliever (AIR)** inhaler, you should take more of your inhaler when you have symptoms. If you take your inhaler more than 8 times in a 24-hour period you should speak to your doctor.

If you have a **Maintenance and Reliever Therapy (MART)** inhaler, you should take more of your inhaler when you have symptoms. If you take your inhaler more than 8 times in a 24-hour period you should speak to your doctor.

If you have a **Fixed Dose Regimen** inhaler, you should follow your personalised asthma action plan. This may involve temporarily increasing your preventer inhaler to four times the usual doses. If your symptoms do not settle, you should see your doctor or asthma nurse.

What extra help can I get?



Recommendation based on the research evidence





To make it easier for you to stick to your plan, your healthcare team might:

- send reminders for reviews or check-ups
- share educational materials by email or mail
- offer phone or online support work with community workers if you're in a deprived or ethnic minority group.

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>Learning about asthma gives you the confidence to take charge of your health. Your healthcare team will explain everything in plain language, answer your questions and make sure you feel prepared to manage your asthma every day.</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>

	<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. This can include dietary and physical exercise programmes. Physical exercise training should be seen as part of a general approach to improving lifestyle and rehabilitation.</p> <p>Losing weight may lead to improvements in your asthma symptoms.</p>
	<p>Have vaccinations such as the flu vaccination and the COVID vaccine if you are offered it.</p>	<p>The benefits of having vaccinations, 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.</p>
	<p>Keep a check on your asthma using technologies.</p>	<p>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.</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

By following these self-management steps and staying in touch with your healthcare team, you can take control of your asthma and lead a full, active life.

You can download a blank personal asthma action plan from [Asthma and Lung UK](https://www.asthmaandlunguk.org/).



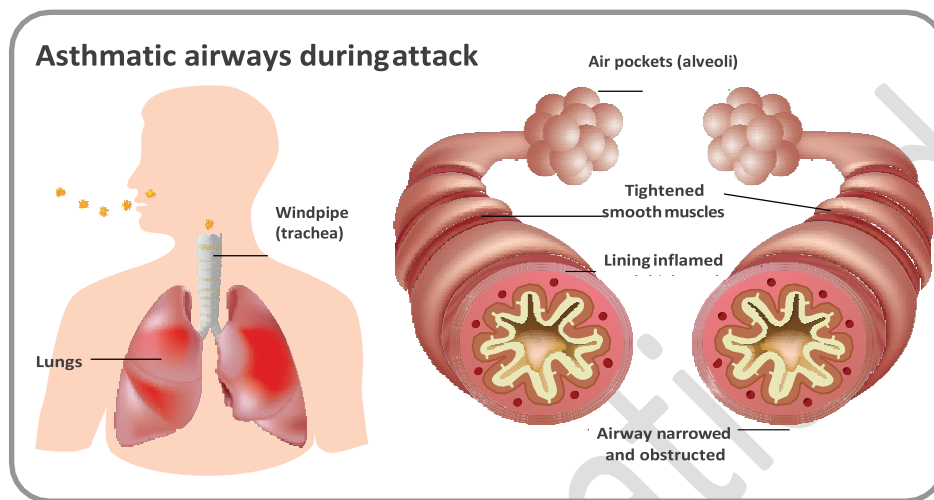
Keeping a personal action plan can help keep your asthma under control. It will also give your GP or emergency practitioner invaluable information in the unfortunate instance of an attack.” Stuart

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

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 also known as asthma exacerbation.



An asthma attack or asthma exacerbation 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.

Information

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
- you may need to use your inhaler as a reliever more often

An asthma attack is also known as acute asthma.



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 symptoms are quickly getting worse
- your reliever inhaler is not helping as much as usual or you need more of it
- you're finding it difficult to walk or talk.

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 and Lung UK in the box below.

Asthma attack advice for a MART and AIR inhaler:

1. Sit up – try to keep calm.
2. Take one puff of your MART inhaler every 1 to 3 minutes up to six puffs
3. If you feel worse at any point or you do not feel better after six puffs, call 999 for an ambulance.
4. If the ambulance has not arrived after 10 minutes and your symptoms are not improving, repeat step 2.
5. If your symptoms are no better after repeating step 2, and the ambulance has still not arrived, contact 999 immediately.

If you do not have your MART inhaler, call 999 straight away.

Asthma attack advice for blue reliver inhaler:

1. Sit up – try to keep calm.
2. Take one puff of your blue reliver inhaler every 30-60 seconds up to 10 puffs.
3. If you feel worse at any point or you do not feel better after 10 puffs, call 999 for an ambulance.
4. If the ambulance has not arrived after 10 minutes and your symptoms are not improving, repeat step 2.
5. If your symptoms are no better after repeating step 2, and the ambulance has still not arrived, contact 999 immediately.

If you do not have your blue reliver inhaler, call 999 straight away.

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 the research evidence

You should be offered at least one review appointment in the hospital asthma clinic if you have an asthma attack that is severe enough to be admitted.

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

Treatment	How treatment is given
Oxygen 	The doctors or nurses will check your oxygen levels. If they are low, you will be given oxygen through a mask.
Reliever medicine 	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. 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.

Steroid tablets 	You will be given steroid tablets until you have recovered from your asthma attack (this will be for at least five days).
Magnesium sulphate (medicine that reduces asthma symptoms) 	You may be given this through a drip if you have life-threatening asthma.
Aminophylline (medicine that helps to treat wheezing and shortness of breath) 	In hospital, your specialist may give you this medicine through a drip.

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

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
- 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.

The hospital should also arrange a follow-up appointment at the hospital for you within a month. If your symptoms do not settle within 48 hours of discharge, you should contact your doctor or asthma nurse.

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 and Lung UK's [website](#).

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.



Information

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?

There are specific things you can do to stay healthy and in control of your asthma. Managing asthma during your teenage years might seem challenging, but understanding your condition and making informed choices can make a big difference.



Recommendation based on the research evidence

It's important that you:

- Avoid smoking or vaping (this can increase the risk of asthma attacks, damaging your airways and reduces the benefits of your asthma medicines). If you vape or smoke, talk to your doctor or nurse about quitting. They can give you advice and connect you with NHS stop-smoking services to help you quit.
- Talk to your doctor or asthma nurse about your career plans so you can choose a job that won't trigger your asthma. Some jobs can make asthma worse because of the things you might be exposed to like dust, chemicals or allergens.
- Let your doctor or asthma nurse know if you don't use your inhaler in public or at school because you feel awkward. They can help find ways to make it easier for you to manage your asthma in these situations.

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 does self-management help you stay in control?

Self-management means having a clear plan for how to take care of your asthma.



Recommendation based on the research evidence

Your doctor will work with you to create a **personalised action plan** that includes:

- when to take your medicine
- what to do if your symptoms get worse
- ways to avoid your asthma triggers, like air pollution or smoke.

This plan is designed just for you, so it's important to review it regularly, especially after a hospital visit or at your yearly asthma check-up.

What should you know about asthma and pollution?



Recommendation based on the research evidence

Air pollution, whether it's from outside (like car exhaust) or inside (like mould), can trigger asthma symptoms. Your action plan will include tips on how to reduce your exposure to these triggers.

By understanding your asthma and taking an active role in managing it, you can feel more confident, stay healthier and enjoy life without letting asthma hold you back

How can you make sure your asthma action plan is working for you?



Recommendation based on the research evidence

It's important to regularly review your **personalised asthma action plan** to make sure you understand it and are using it correctly. This plan helps you manage your asthma day-to-day and shows you what to do if your symptoms get worse.



Recommendation based on the research evidence

You should go over your asthma action plan:

- when you're admitted to the hospital, even if it's a virtual ward (a service where you are monitored at home but still under care)
- after a visit to your doctor, emergency room, or urgent care centre
- during your annual asthma check-up.

At these times, your doctor or nurse will check that your plan still fits your needs and that you know how to use it properly.

What should you do if your symptoms get worse?



Recommendation based on the research evidence

If you are taking AIR treatment or MART treatment, you should take your inhaler when you feel you have symptoms. If you take your inhaler more than 8 times a day, you should refer to your asthma action plan.

If your asthma isn't under control, your plan might include increasing the dose of your inhaled steroids. This helps to reduce inflammation in your airways and keep asthma symptoms under control. You may be asked to increase the dose for 7 days if your asthma worsens. You may be asked to take four times the usual amount but only for short time. Your action plan will clearly explain how and when to do this, and what to do if your symptoms don't get better. When increasing your inhaled steroids it's important that you don't exceed the maximum amount that your doctor has recommended.

What if you need extra support?



Recommendation based on the research evidence

If you're struggling to control your asthma, your action plan should also remind you to contact a healthcare professional for advice. There are also different strategies that can help with asthma care, like:

- alerts or reminders to schedule regular asthma reviews
- support from doctors, nurses, and community pharmacists
- receiving educational resources by email or mail
- regular phone calls to check on how you're doing and offer support
- using apps or websites to monitor your asthma.

How can you be more involved in your care?



Recommendation based on the research evidence

To stay in control of your asthma, it's important to be involved in your own care. Make sure you understand how your treatment works, what to do in case of an emergency, and how to adjust your medication when needed. This involvement will help you take better care of yourself.

By staying on top of your asthma action plan and communicating with your healthcare team, you can stay in control of your asthma and lead a more active life.

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.

How will your asthma care change as you 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. This is called a 'transfer.' The period of planning, transfer, and the support you have afterwards is called 'transition'. You will become more involved in managing your asthma



Recommendation based on the research evidence

The people who provide your care and support should talk to you and your parents or carers about your transition. This should happen early enough before you transfer so you have time to really think about what you want. To make this easier, there should be a clear plan about what should happen. 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.

Consultation draft

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 the research evidence

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. Your answers should be recorded for later review.



Recommendation based on the 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 the 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.
- If your breathing improves when you're away from work, it's possible you have occupational asthma.



Recommendation based on the 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 Asthma and Lung UK's [website](#).

Consultation Draft

Where can I find out more?

National organisations for people who have asthma

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.

Asthma and Allergy Foundation

Helpline: **01224 973001**

Website: www.asthmaandallergy.org.uk

The Asthma and Allergy Foundation, established in 2009, is Scotland's only dedicated Asthma Charity that provides evidence-based health information, confidential advice and support to people with asthma, their families and carers across Scotland. The organisation also provides asthma awareness training to businesses and healthcare professionals.

Asthma and Lung UK

Helpline: **0300 222 5800**

Website: www.asthmaandlung.org.uk

Asthma + Lung UK believe that every breath matters - and that the right to breathe freely applies to everybody, regardless of income, age, ethnicity, gender or background.

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.

How are guidelines produced?

Clinical guidelines are produced by looking at the latest scientific research to find the best ways to diagnose, treat and care for people. If the research doesn't provide clear answers, healthcare professionals use their experience and judgement to suggest treatments. This ensures the guidelines are both evidence-based and practical.



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
