



Healthcare
Improvement
Scotland

SIGN
Makes sense
of evidence

Asthma in adults

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



PLAIN
LANGUAGE
COMMISSION
CLEAR
ENGLISH
STANDARD

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

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

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www.healthcareimprovementscotland.scot



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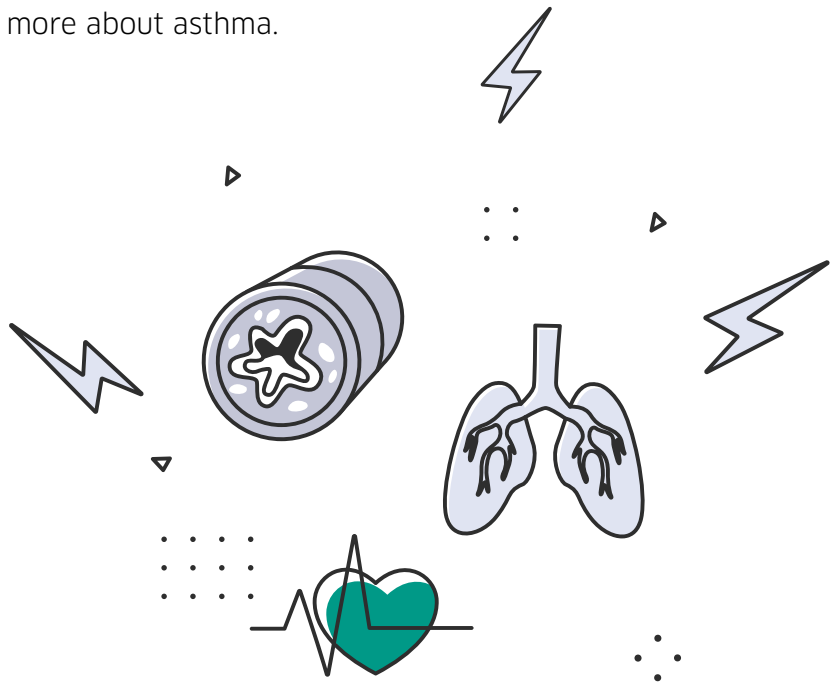
Who is this booklet for?

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
- where to find out more about asthma.



What is this booklet about?

This booklet explains the recommendations in clinical guidelines produced by the Scottish Intercollegiate Guidelines Network (SIGN), the British Thoracic Society (BTS) and the National Institute for Health and Care Excellence (NICE). It gives you information about the care you are likely to get and can expect.

Recommendations in the guidelines 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.

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 guidelines, please visit www.sign.ac.uk

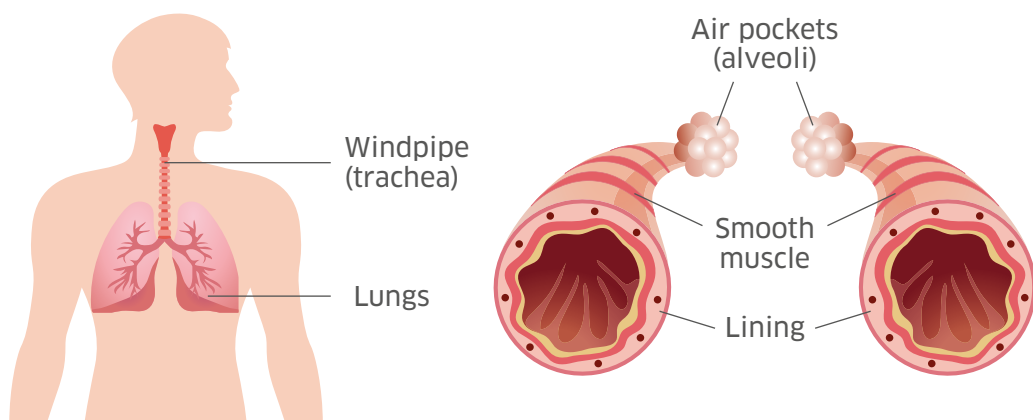
On page 48 you can find more about how guidelines are produced.

On page 46 we give details of support organisations and other places where you can get more information about asthma.

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 there are many possible causes.

Healthy 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 the menstrual cycle, puberty, pregnancy and menopause.

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

What are some of the symptoms of asthma? Continued

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 healthcare professional know if I have asthma?

You will need to see a healthcare professional to find out if you have asthma. This could be a doctor, nurse or other qualified professional. Asthma can be difficult to diagnose because you might not have symptoms at the time of your appointment. Asthma and its symptoms vary over time.

Your healthcare professional will ask if you have any asthma symptoms. You may be asked to do breathing tests, record peak flow in a diary at home or have blood tests. You might also be referred to the hospital for tests to confirm you have asthma.



Recommendation based on the research evidence

If your healthcare professional 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
 - noisy breathing
 - coughing
 - shortness of breath
 - 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 what 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 have hay fever (allergic rhinitis).
- **Other conditions.** They will check if your symptoms could be caused by something other than asthma.

How is asthma diagnosed? Continued



Recommendation based on the research evidence

The tests you might get include:

- A blood test called an eosinophil count. This test checks for high levels of eosinophils, a type of white blood cell often increased in people with asthma.
- A breath test to measure nitric oxide, which can indicate lung inflammation. This is called a fractional exhaled nitric oxide (FeNO) test.
- Spirometry. A test to measure how much air you can breathe out and how fast.
- 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). This is called peak expiratory flow (PEF).



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 breath tests, making them more likely to be normal.



Recommendation based on the research evidence

Your healthcare professional will confirm that you have asthma if your symptoms and medical history suggest it. A test is also needed to support the diagnosis. Until then, healthcare professionals will consider it 'suspected asthma'.

How is asthma diagnosed? Continued



Recommendation based on the research evidence

If asthma is confirmed, your healthcare professional 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 some more tests.

- Bronchodilator reversibility (BDR) with spirometry. If your lung function improves a lot after using a bronchodilator, it could suggest asthma.

A **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.

- Peak expiratory flow (PEF) variability. You will be asked to check how much air you can blow out of your lungs 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.



Recommendation based on the research evidence

If these tests do not confirm asthma but your healthcare professional 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 over-responsive, it confirms asthma.

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

How will my healthcare professional help me look after my asthma?

Once you have been diagnosed with asthma, you should expect to have an asthma review with your healthcare professional at least once a year. This may be done remotely (online, telephone or video) or face to face.

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

It's OK to ask

When you go to your healthcare appointments, we encourage you to ask four key questions that will help you and your healthcare professionals make decisions together. This will make sure that the care is right for you.

- 1 – What are the benefits of my treatment?**
- 2 – What are the risks of my treatment?**
- 3 – What alternative treatments can I try?**
- 4 – What if I do nothing?**

Learn more about [“It's OK to ask”](#)

Learn more about [realistic medicine](#)

How will my healthcare professional help me look after my asthma? Continued



Recommendation based on the research evidence

At your asthma reviews, your healthcare professional will 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 to take these for your asthma.
- Hospital visits. They will ask if you have had to go to hospital or an emergency department because of your asthma.

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



Recommendation based on the research evidence

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

How will my healthcare professional help me look after my asthma? Continued



Recommendation based on the research evidence

Measuring how fast you can blow air out of your lungs (peak expiratory flow) is not usually needed unless it is part of your personal asthma action plan. This written action plan explains what to do when your asthma is under control, when it gets worse, and during an emergency.



Recommendation based on the research evidence

Your healthcare professional 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.



Information

If you feel your asthma is not well controlled or you have had a flare-up, 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 healthcare professional will start you on a treatment plan to help control your symptoms. Usually, with the right medicines, you should have very few or no asthma symptoms during the day and not have asthma attacks. If you're using your reliever inhaler more than three times a week or waking up at night one or more times a week because of asthma, it might mean your asthma isn't well controlled.

Having the right medicines means 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

It can sometimes take time to find the right medicines for you. Your healthcare professional may have to try 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 can help control my asthma? Continued

Using your blue inhaler too much can be harmful. In April 2025, the Medicines and Healthcare Regulatory Agency (MHRA) reminded people that overusing a short-acting beta agonist (SABA) inhaler – often called a blue reliever inhaler – can lead to serious asthma attacks and even death. This can happen even if you're also using a regular preventer inhaler.

If you're using your blue inhaler more than twice a week or your asthma is getting worse, speak to your healthcare professional. They may need to change your treatment.

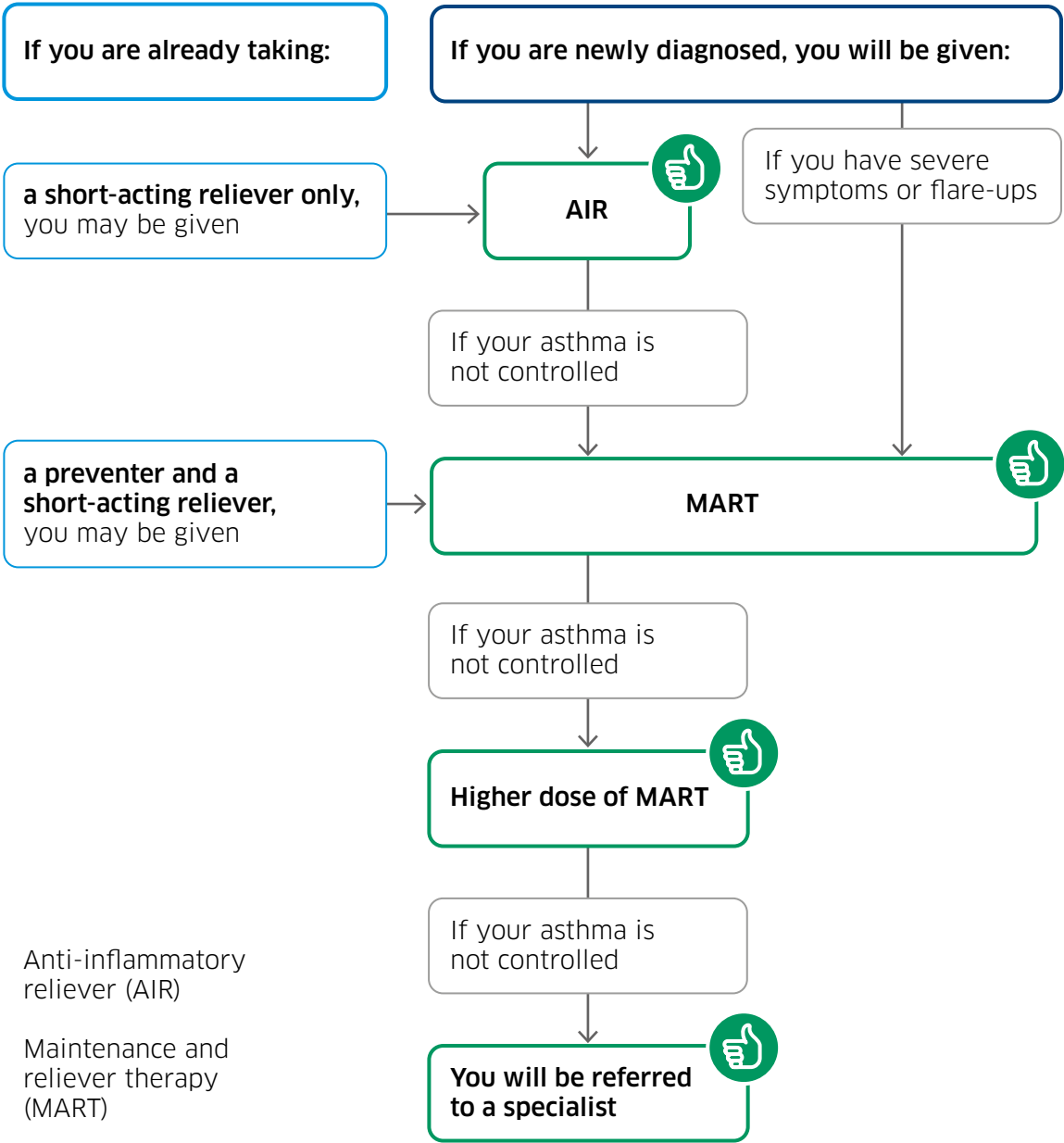
You might be offered a new medicine at your yearly asthma check-up or after an asthma attack to help keep your asthma under control.

Asthma medicines usually come as inhalers, and there are two main types: preventers and relievers.

Preventers (like inhaled corticosteroids) help stop symptoms from happening. Relievers (such as short-acting beta agonists or SABAs) work quickly to ease symptoms when they happen. Some inhalers contain both types of medicine. Your healthcare professional will help you find the treatment that works best for you.



What medicines can help control my asthma? Continued

How will my asthma be managed




What medicines can help control my asthma? Continued

Asthma medicines

Type of medicine	When to take it	How it helps
<p>Anti-inflammatory reliever (AIR). This new approach uses a single inhaler that works as both ‘preventer and reliever’. This inhaled corticosteroid and long-acting beta agonist (LABA) combination reliever inhaler, is licensed for people aged 12 years and over. It is sometimes also called preferred reliever therapy.</p> 	<p>Use as needed only. Take your inhaler when you have asthma symptoms, not daily.</p> <p>It replaces the blue reliever inhaler (like salbutamol), offering both quick relief and anti-inflammatory action.</p>	<p>This inhaler helps keep inflammation under control to maintain your health. When you have symptoms, taking extra doses not only eases the symptoms but adds more anti-inflammatory treatment to prevent more symptoms developing.</p>
<p>Maintenance and reliever therapy (MART). MART, also known as SMART (Single-Inhaler Maintenance and Reliever Therapy) uses one inhaler that combines two medicines:</p> <ul style="list-style-type: none">• Inhaled corticosteroid to reduce inflammation.• Long-acting beta agonist (LABA), which works quickly to relieve symptoms. 	<p>Take your inhaler every day to prevent symptoms. You also use the same inhaler when you have symptoms. This replaces the blue inhaler (like salbutamol).</p>	<p>This inhaler helps keep inflammation under control to maintain your health. When you have symptoms, taking extra doses not only eases the symptoms but also adds more anti-inflammatory treatment to prevent more symptoms developing.</p> <p>If MART isn't effective, you should talk to your healthcare professional.</p>



What medicines can help control my asthma? Continued

Type of medicine	When to take it	How it helps
<p>Separate preventer inhaler and reliever inhaler. You may still be on this traditional approach, which uses a combination preventer inhaler and a reliever inhaler. Use of these will be reviewed at your asthma review.</p> 	<p>Take these as prescribed. You may need to take the preventer inhaler once or twice a day to prevent symptoms. These inhalers are not to be used as relievers.</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>The preventer builds up long-term protection by reducing swelling and sensitivity in your airways.</p> <p>The reliever acts fast to open your airways when you're struggling to breathe, giving quick relief during an asthma attack or flare-up.</p>

Your healthcare professional may consider trying you on other medicines to help control your asthma. These are called add-on treatments and may include some of the medicines in the table on page 18. They are used alongside your regular treatment and should not be the first option.

What medicines can help control my asthma? Continued

Other asthma medicines

Type of medicine	How it helps
<p>Leukotriene receptor antagonists</p> <p>These are preventer tablets, for example montelukast. They don't 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>
<p>Long-acting anti-muscarinic receptor antagonists</p> <p>These inhaled medicines can be given in a separate inhaler, or in a single combination inhaler. An example of this is tiotropium. They can only be used as a preventer.</p> 	<p>They work by providing a long-acting dilation of the airways, to allow better airway entry to your lungs.</p>

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 healthcare professional. A few people with asthma may require long-term steroid tablets, after all other treatments have been tried.

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:

- **other diagnoses or other conditions.** Sometimes, other health conditions like allergies, acid reflux (heartburn) or sinus infections can make asthma worse. Your healthcare professional may check for these
- **not taking medicines as prescribed.** If you find it difficult to 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 reaching your lungs. Your healthcare professional can show you how to use it correctly and you can watch [videos](#) on how to use it
- **smoking or vaping.** Smoking, even breathing in 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 autumn, can worsen asthma
- **environmental factors.** Things like air pollution, indoor mould, or pet dander might be triggers
- **weight.** Having a high weight makes it harder for you to respond well to the asthma treatments. If you are overweight or obese, you should try to reach a healthy weight as part of your asthma treatment plan.

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

What medicines can help control my asthma? Continued



Recommendation based on the research evidence

If you are taking a moderate dose of MART, your healthcare professional may suggest a breath test or a blood test. These tests can show how much inflammation is in your airways. It might mean:

- you aren't taking your medication regularly
- you might need a higher dose of your usual inhaler(s)
- you might benefit from an additional medicine (see the table on page 18)
- you might benefit from being referred to hospital for 'biologic' therapy (a type of medicine made from living cells). It helps asthma by targeting the parts of the immune system that cause inflammation.

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 healthcare professional 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, you may be referred to hospital to see an asthma specialist.

What medicines can help control my asthma? Continued

Decreasing your asthma medicines

The approach to decreasing your medicines will be different depending on whether you are on AIR, MART or have separate preventer and reliever inhalers.

Type of treatment	Treatment plan
Anti-inflammatory reliever (AIR) 	If you have no symptoms, you will not need to take any inhaler regularly. You only take this inhaler when you have symptoms.
Maintenance and reliever therapy (MART) 	If you have not used your inhaler as a reliever, have few or no symptoms and have not had any asthma attacks, you should speak to your healthcare professional about reducing the regular inhaler dosage or stepping down to AIR.
Separate preventer and reliever inhalers 	If you have not used your reliever inhaler, have few or no symptoms and have not had any asthma attacks, you should speak to your healthcare professional about changing to AIR or MART.



Recommendation based on clinical experience

At your yearly asthma review, your healthcare professional will talk to you about the benefits and risks of lowering your medicines. These include:

- checking if the treatment you are taking is up-to-date and fits the recommended treatments available
- increasing, decreasing, or changing your treatment, depending on how well your asthma is controlled
- taking 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 discuss with your healthcare professional 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 it is part of your personal asthma management plan
- personal asthma action plan update. Your healthcare professional will update your personal asthma action plan. This plan includes:
 - what medicines you should take
 - how to recognise if your asthma is getting worse
 - what to do in an emergency.

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

Spacers and inhalers

Your healthcare professional will talk to you about several important topics to help you understand and manage your asthma. 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 healthcare professional 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 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](#).



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



Recommendation based on the research evidence

Your healthcare professional 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 healthcare professional will demonstrate how to use it and will ensure you can do it correctly.
- If you use a metered dose inhaler (a handheld device that delivers a set amount of medicine into your lungs in the form of a mist or spray), they will explain how using a spacer can help and show you how to use it.
- The environmental impact of different inhalers and help you choose the most eco-friendly option if you want this.
- If your inhaler has a dose counter, how to use it 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 healthcare professional will recommend using the same type of device (inhaler) 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 healthcare professional should always take your preferences into account when discussing inhalers and spacers, making sure that the treatment plan is tailored to your needs and comfort. If you have any questions or concerns, your healthcare professional 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 healthcare professional recommends, but they can be used alongside them. If you are thinking about using them, discuss it with your healthcare professional 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 personal asthma 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 healthcare professional to get started.



Recommendation based on the research evidence

Your healthcare professional should offer a self-management programme that includes:

1. A personal asthma action plan.
2. Education: Your healthcare professional 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 as bad air quality inside or outside can make it hard to breathe
- second-hand cigarette smoke, which is harmful to your lungs
- other personal triggers, which could be allergens like dust, pets or even stress.

Your personal asthma action plan will include ways to reduce your exposure to these triggers, like staying indoors on high-pollution days.

When should I review my personal asthma action plan?



Recommendation based on the research evidence

You should check your personal asthma action plan with your healthcare professional:

- after leaving the hospital if you've had an asthma attack
- during emergency visits or 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 need to take your inhaler more than 8 times in a 24-hour period, you should speak to your healthcare professional.

If you have a maintenance and reliever therapy (MART) inhaler, you should take more of your inhaler when you have symptoms. If you need to take your inhaler more than 8 times in a 24-hour period, you should speak to your healthcare professional.

If you have a fixed dose combination inhaler, you should follow your personal asthma action plan. This may involve temporarily increasing your preventer inhaler to four times the usual dose. If your symptoms do not settle, you should see your healthcare professional.

How can I help control my asthma? Continued

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 post
- offer educational tools such as digital apps and online platforms
- offer phone or online support from community pharmacists and workers.

Other ways I can help control my asthma

The table below explains some ways you can help 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 control of your health. Your healthcare professional 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. 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>

How can I help control my asthma? Continued

What can I do to help my asthma?	How can this help?
<p>Stay away from cigarette smoke or e-cigarette vapour.</p> 	<p>Smoking, vaping or being around cigarette smoke or e-cigarette vapour can make your asthma worse and cause more wheezing. It also means your inhaler won't work so well.</p> <p>If you smoke or vape, try to stop. If you would like to stop, your healthcare professional can offer advice and support to help you.</p>
<p>Maintain a healthy weight.</p> 	<p>If you are overweight, your healthcare professional 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 healthcare professional 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 healthcare professional about this.</p>
<p>Use technology to keep a check on your asthma.</p> 	<p>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>

How can I help control my asthma? Continued



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](#).

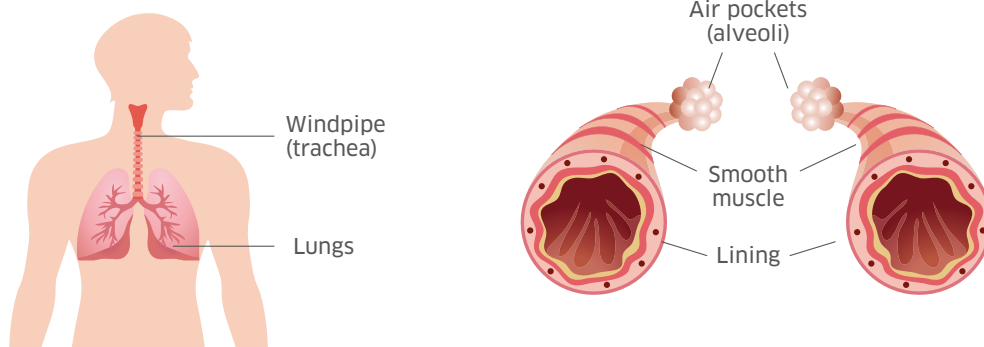
There is not enough research evidence to suggest that the following can help control asthma:

- 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.

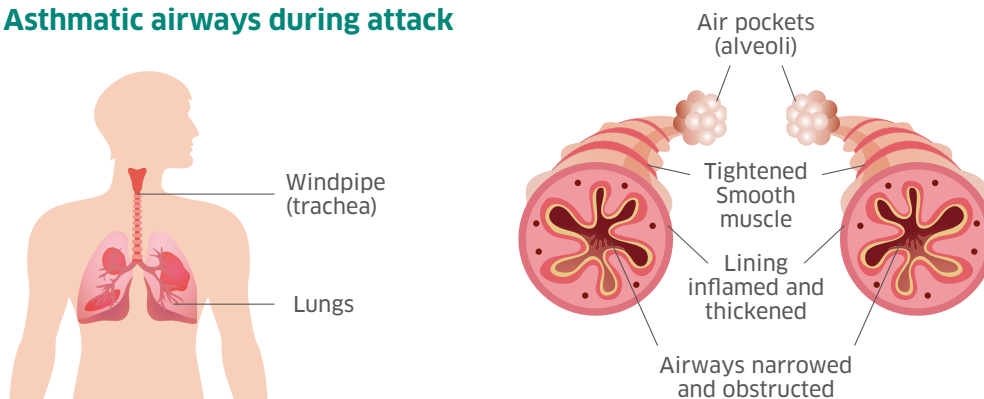
What happens in an asthma attack and how will it be treated?

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

Healthy airways



Asthmatic airways during attack



An asthma attack happens 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.

What happens in an asthma attack and how will it be treated? Continued



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 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.

What happens in an asthma attack and how will it be treated? Continued

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

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

Asthma attack advice for someone using a MART and AIR inhaler:

1. Sit up and try to keep calm.
2. Take one puff of your inhaler every 1 to 3 minutes. Total: up to 6 puffs.
3. If you feel worse at any point or you do not feel better after 6 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 inhaler, call 999 straight away.

Asthma attack advice for blue reliever inhaler:

1. Sit up and try to keep calm.
2. Take one puff of your blue reliever inhaler every 30-60 seconds. Total: 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 reliever inhaler, call 999 straight away.

What happens in an asthma attack and how will it be treated? Continued

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 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 healthcare professional 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 for you to be admitted.

What happens in an asthma attack and how will it be treated? Continued

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

Treatment	How treatment is given
Oxygen 	Your healthcare professional 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 	You may be given this through a drip if you have life-threatening asthma. It will help to reduce asthma symptoms.
Aminophylline 	In hospital, your specialist may give you this medicine through a drip. This opens the airways and helps to treat shortness of breath and wheezing.

What happens in an asthma attack and how will it be treated? Continued

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



Information

To help decide when you are well enough to leave hospital, your healthcare professional 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 make an appointment with your healthcare professional who helps you to look after your asthma.

Asthma in young people

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

Things can be tough enough when you are going through adolescence and you may feel like having asthma makes things worse. It's normal if that makes you 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 healthcare professional 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 be private and will not be discussed with your parents or family unless you would like them to know about it or if the healthcare professional has concerns about your safety.

Your written personal asthma action plan, developed between you and your healthcare professional, 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 healthcare professional know you're able to manage your asthma and look after yourself.

- 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?
- How do you describe your asthma?
- When you need to see your healthcare professional, how do you arrange to do this?
- If you can't keep an appointment with your healthcare professional, do you know how to cancel it?
- How do you make sure you arrange new prescriptions before your medicine runs out?

Asthma in young people Continued

There are specific things you can do to stay healthy and in control of your asthma. Managing asthma 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 do the following.

- Avoid smoking or vaping (as this can increase the risk of asthma attacks, damage your airways and reduce the benefits of your asthma medicines). If you vape or smoke, talk to your healthcare professional about quitting. They can give you advice and connect you with NHS stop-smoking services to help you quit.
- Talk to your healthcare professional about your career plans so you can learn how to manage asthma triggers at work. Some jobs can make asthma worse because of the things you might be exposed to like dust, chemicals or allergens.
- Let your healthcare professional 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 healthcare professional 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 personal asthma action plan that includes:

- when to take your medicine
- what to do if your symptoms get worse
- what to do in case of an asthma attack
- 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.

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



Recommendation based on the research evidence

It's important to regularly review your personal asthma action plan to make sure it works for you and you can follow it. 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 personal asthma action plan:

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

At these times, your healthcare professional 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?

If your symptoms get worse, follow your personal asthma action plan and contact your healthcare professional as soon as possible to review your treatment.

What if you need extra support?



Recommendation based on the research evidence

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

- alerts or reminders to schedule regular asthma reviews
- support healthcare professionals such as doctors, nurses, and community pharmacists
- receiving educational resources by email or post
- regular phone calls to check 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 will help you take better care of yourself.

By staying on top of your personal asthma action plan and staying in touch with your healthcare team, you can stay in control of your asthma and lead an 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 healthcare professional recommends. Always tell your healthcare professional 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 the health services you need will change. Moving from services for children to services for adults 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.

The people who provide your care and support should talk to you and your parents or carers about your transition. This should happen early and 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.

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 had asthma as a child and it returns, your healthcare professional should consider whether substances at your workplace are causing it.



Recommendation based on the research evidence

If your healthcare professional 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 better to these questions, your healthcare professional 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 healthcare professional suspects you have occupational asthma, they will refer you to a specialist in occupational asthma to investigate.

What is occupational asthma? Continued



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](#).

Where can I find out more?

The organisations we have listed below may be able to answer any questions you have and offer support.

SIGN accepts no responsibility for the information they give.



National organisations for people who have asthma

Allergy UK

www.allergyuk.org

Helpline: 01322 619898

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

www.asthmaandallergy.org.uk

Helpline: 01224 973001

The Asthma and Allergy Foundation 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

www.asthmaandlung.org.uk

Helpline: 0300 222 5800

Asthma and Lung UK aims to reduce deaths and ill-health caused by lung conditions through focused research, campaigns, and dedicated efforts in tackling critical issues like air pollution, smoking, and asthma care.

Other organisations

NHS 24

www.nhs24.scot

Phone: 111

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**

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.

We are happy to consider requests for other languages or formats.

Please phone 0131 623 4720 or email sign@sign.ac.uk

Asthma in adults



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