

Managing asthma in children and young people

A booklet for parents, carers and family members

Acknowledgments

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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Who is this booklet for?

This booklet is for you if:

- You have a child who has or might have asthma
- You are a family member or carer of a child or young person who has or might have asthma.

The booklet explains:

- diagnosis
- who will be involved in looking after your child's asthma
- medicines
- how you can help control your child's asthma
- asthma attacks
- asthma in young people
- where to find out more about asthma.

What is this booklet about?

This booklet explains the recommendations in a clinical guidelines produced by the British Thoracic Society, the National Institute for Health and Care Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN) about the care and treatment of children and young people with asthma.

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.

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

On page 43 you can find out more about how guidelines are produced.

There are two different types of recommendations in the booklet



Recommendation based on the research evidence



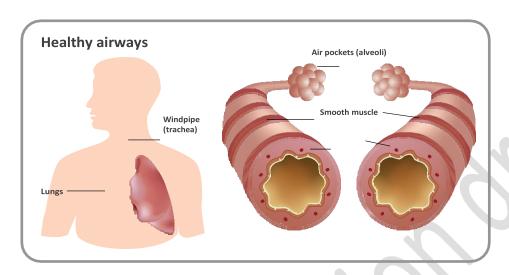
Recommendation based on clinical experience

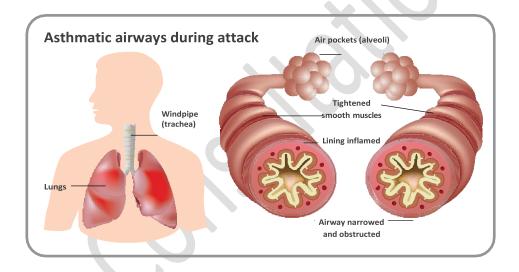
If you would like to see the clinical guideline, please visit www.sign.ac.uk

Details of support organisations and other places where you can get more information are on pages 41 to 42.

What is asthma?

Asthma is a condition that affects your child's airways (the small tubes that carry air in and out of your child's lungs). Asthma can start at any age and there are many different causes.





Asthma symptoms include:

- coughing a lot
- wheezing (a whistling sound in their chest)
- noisy breathing
- difficulty breathing or feeling out of breath
- tightness in their chest.

Asthma symptoms come and go. You might find your child has symptoms at different times of the day (particularly during the night), and even at different times of the year.

Some things can make your child's asthma worse. They are called asthma triggers Examples of common asthma triggers are:

- a cold
- dust
- pollen and hayfever
- cigarette smoke and e-cigarette vapour
- changes in weather, and temperature
- pets
- air pollution
- mould and damp
- exercise
- stress and emotions.

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

When your child comes into contact with their asthma triggers, a few things happen.

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

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

It helps to learn more about the condition, to see how everything fits into place. Because asthma affects a child's whole life: at school, the playground, sport going out, etc. The more I knew about his condition the more I was able to explain it to myself, my son and to other people, like teachers and other parents to get their help.

Because asthma is most of the time an invisible disease." Martine

How is asthma diagnosed?

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

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

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

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

Recommendation based on the research evidence

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

- Symptoms. They will ask if they have had wheezing (a whistling sound when they
 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 their symptoms worse, like exercise, cold air or allergens.
- Medical history. They will ask if you or anyone in your family has had asthma or allergic rhinitis (hay fever). They will also ask if your child was born prematurely, and if they have any history of illness, hospital admissions, as well as allergies and eczema.
- Other conditions. They will check if your child's symptoms could be caused by something other than asthma.



Recommendation based on the research evidence

Your doctor will listen to your child's breathing for a specific type of wheeze and look for signs of other conditions. Even if everything seems normal, they could still have asthma.



Recommendation based on the research evidence

Your doctor should not confirm if your child has asthma unless their symptoms and medical history suggest it, and a test supports the diagnosis. Until then, they will consider it "suspected asthma."

What tests will doctors do?



Recommendation based on the research evidence

If your child is over 5 years old, your doctor will do a breath test called FeNO (Fractional exhaled Nitric Oxide test. This breath test measures the level of nitric oxide which, when raised can suggest lung inflammation. If FeNO testing is unavailable or the result is normal, doctors move on to other tests.



Recommendation based on the research evidence

Your child may be asked to have a spirometry test (which checks how the lungs function) and to have it repeated after taking medicine to open their airways. If their lung function improves after the medicine, this indicates asthma. This is called Bronchodilator Reversibility (BDR) test.

If spirometry can't be done or results are delayed, doctors may ask you to measure your child's peak flow at home twice a day for 2 weeks. Asthma is likely if the difference between the best and worst results is 20% or more over the 2 weeks.

Spirometry measures is a breathing test that measures the amount and speed of air that your child can blow out air from their lungs. It is done using a machine called a spirometer. You can watch this <u>video</u> to show you how this is done.

Peak flow is a breathing test that measures how fast your child can blow air out of their lungs. It is done using a small device called a peak flow meter. You can watch this <u>video</u> to show you how it's done.

Recommendation based on the research evidence



If asthma is confirmed, your doctor will note this in your child's medical records. If these tests don't confirm asthma but it still seems likely that they have it, your doctor will do some further tests.

Recommendation based on the research evidence



If asthma still seems likely, your doctor may do tests for allergies or inflammation. This includes:

- skin prick tests
- blood tests.

If these tests don't provide clear answers, your child may need to see a specialist for more advanced tests.

How is asthma diagnosed in children under 5?

Diagnosing asthma in children under 5 is more challenging because many tests are hard for young kids to perform.

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Recommendation based on the research evidence

Instead of tests, the doctor may treat your child with a trial of inhaled steroids (medicines to reduce inflammation in the airways). The doctor will review their symptoms regularly to see if the inhaled steroids help. If your child still has asthma-like symptoms when they turn 5, testing may begin at that time.



Recommendation based on the research evidence

If your child struggles with tests at age 5, the doctor will:

- 1. Try again every 6 to 12 months.
- 2. Refer your child to a specialist if symptoms don't improve with treatment.



Recommendation based on the research evidence

If your preschooler (under 5) has been admitted to the hospital for asthma or wheezing, or needed to go to the emergency department for wheezing two or more times in 12 months, you should ask for a referral to a specialist respiratory pediatrician.

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

Who will help me look after my child's asthma?

Your child's doctor and asthma nurse will help you look after your child's asthma. You will need to take your child to their doctor or asthma nurse to have an asthma review at least once a year and following every asthma attack which required treatment in emergency care.

Recommendation based on the research evidence



At your child's asthma reviews, your doctor or asthma nurse will check and record the following:

- **Time off nursery or school**. They will ask if your child has missed school because of their asthma.
- **Reliever inhaler use**. They will check how often your child uses their reliever inhaler (the one they use when they have symptoms) and look at their prescription records.
- **Steroid inhaler use**. They will check to see if your child is using their steroid inhaler as regularly as recommended by their doctor or nurse.
- Inhaler technique. They will check to make sure your child is using their inhaler correctly.
- Oral steroid (a type of medicine that reduces inflammation that was prescribed as either a
 tablet or syrup during asthma worsening). They will count how many times your child has
 needed to take these for their asthma
- **Hospital visits**. They will ask if your child has had to go to the hospital or emergency department because of their asthma.

If your child's asthma is not well controlled, your doctor will adjust their treatment.



Recommendation based on the research evidence

Your child's doctor or asthma nurse might also ask questions like, 'How much of a problem is your asthma when you run, exercise or play sports?'



Recommendation based on the research evidence

If regular peak flow monitoring is part of your child's personalised action plan, your doctor or asthma nurse will do this.

"Seeing the dedicated asthma nurse was a huge breakthrough for us. She spent time going through inhalers, techniques and imparted a wealth of knowledge." Alex

Information



The doctor or asthma nurse will also watch your child use their inhaler to check they're using it properly. Always remember to take all your child's inhalers and spacers to the asthma review.

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

"I encourage my 7-year-old son to take some responsibility for his asthma. When we see the consultant, she asks him how he thinks he's been coping with his asthma. He really enjoys being involved in the discussion and can offer details of how he copes at school and during sports which helps to inform decisions about his treatment." Karen

Personal asthma action plan

Children who have a personal asthma action plan are more likely to have better control over their asthma. This means they have fewer asthma symptoms, are less likely to have an asthma attack and are less likely to have to go to hospital because of their asthma.

A personal asthma action plan
(PAAP) is a document created by
your child's doctor or asthma
nurse in discussion with you to
help you and your child
understand how to recognise if
their asthma is getting worse, or
if they're having an asthma attack
and how to control it

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

When we got a personal asthma plan written for our son, it was a game changer. We had defined 'targets' and if he slipped below, we knew exactly what to do. Without it we might have left it too long to intervene or conversely panicked before we needed to!" Diane



Recommendation based on the research evidence

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

Information



Yourchild'spersonalasthmaactionplanshould containinformation on:

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

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

You can also download a blank personal action plan from Asthma and Lung UK.

"Our school seems to be a lot more prepared in responding to asthma exacerbations. There was a time when we used to worry about how they would recognise our son's asthma was getting worse, but we now feel a lot more confident with good training in place and a well written asthma action plan to hand." Debbie

What medicines can help control my child's asthma?

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

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

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

be given a reliever inhaler, either as a part of the Maintenance and Reliever Therapy (MART – a combined inhaler), or as a separate inhaler (likely blue).

Some children above the age of 12 might be given a combination inhaler like the one described above, but to be used only for the relief of symptoms. This is called Anti-Inflammation-and-Reliever Therapy (AIR). Your doctor or nurse will explain that in detail.



Preventer inhaler (usually a brown, red or orange inhaler containing steroids).

Preventer inhalers are the main treatment for asthma.

They can take between two and four weeks to start working.

The preventer inhaler can be a single inhaler that contains only inhaled steroid to treat the inflammation in the lungs, or a combination inhaler containing medication relaxing the lungs and a steroid. The latter is a part of the Maintenance and Reliever Therapy (MART) and your child will use the

Your child should be given a preventer inhaler if they were diagnosed with asthma or, if under 5, have a suspected asthma.

Your child should take their preventer inhaler every day even when they feel well, to keep their airways healthy. A good way to remember this is to put the inhaler beside their toothbrush.

It reduces inflammation in your child's airways and prevents future asthma symptoms.

Persevere with the treatment even if your child still has symptoms in the first few weeks.

Your child should not stop or reduce the preventer inhaler without discussing it with your doctor or asthma nurse.

same inhaler also for acute relief of the symptoms.	

Your child's doctor or asthma nurse may consider trying your child on other medicines to help control their asthma. These may include some of the medicine below. These should along with their regular inhaled steroid inhaler.

Type of medicine	How it helps
Long-acting reliever inhaler (long-acting antimuscarinic receptor antagonist) alongside combined inhaler.	It contains a reliever medicine that opens up your child's airways by relaxing the muscles that surround them.
Leukotriene receptor antagonists tablets (like Montelukast).	These are preventer tablets (which also come as granules for very young children). They don't contain steroids. They work by blocking the receptors used by one of the chemicals that is released when your child comes into contact with an asthma trigger. They are taken once a day, ideally in the evening.
Oral steroids (tablets or syrup).	Oral steroids work by reducing the inflammation in your child's airways and are used for acute asthma exacerbation (flare up).

Recommendation based on the research evidence



If symptoms don't improve with a trial of the medicines in the table above, the doctor will:

- check that your child is using the inhaler correctly and regularly
- look for possible triggers at home, like mould or smoke
- consider if another condition might be causing the symptoms.

If asthma is still not well controlled, your child should be referred to a specialist.

Decreasing your child's medicines

When your child's asthma has been well controlled for a while, your doctor may talk to you and your child about reducing their regular medicines. This process helps ensure they're not taking more medication than they need, but it must be done carefully.

Well controlled asthma means your child:

- rarely has symptoms during the day or night
- hardly ever need to use their reliever inhaler
- haven't had asthma attacks recently.



Recommendation based on the research evidence

At your child's yearly asthma review, your doctor will talk to you and your child about:

- The benefits and risks of lowering their medicines. Potential benefits include fewer side effects and less reliance on medication. There is the potential risk of your child's asthma becoming less controlled.
- Steps to reduce medicines. Medicines will be reduced or stopped gradually, based on how well they worked for your child and any side effects they experienced.
 Your child will wait at least 8 to 12 weeks after each adjustment to see how their asthma responds before making further changes.
- Monitoring and follow-up. You and your child will agree with your doctor on how
 to track symptoms and check progress during this time. This may include keeping a
 symptom diary or using a peak flow meter (a small device that measures how well
 you can blow air out of your lungs).
- Asthma action plan update. Your doctor will update your child's personalised asthma action plan. This plan includes:
 - what medicines they should take
 - how to recognise if your child's asthma is getting worse
 - what to do in case of an emergency.

This step-down approach ensures your child is taking the least amount of medicine while keeping their asthma well controlled.

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

Reliever inhalers

Reliever inhalers have few side effects but they can temporarily increase your child's heartbeat or give them mild muscle shakes (tremor). These effects are more common if your child is taking a high dose. They wear off in a few minutes but occasionally can last for an hour or so.

Preventer inhalers

The possibility of your child having serious side effects from taking their preventer medicine is low. There is a small risk of localised side effects including sore tongue, sore throat, hoarse voice, and mouth infection (oral thrush). These side effects are less likely if your child rinses their mouth out, or brushes their teeth after using their inhaler. Using a spacer with the inhaler can also help.

Oral steroids

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

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

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

Spacers and inhalers

When managing your child's asthma, your doctor will talk to you and your child about several important topics to help you understand and manage their condition. This includes how the inhaler medications work, when to use them and the proper way to use the inhaler.

Information



If your child is using an aerosol based inhaler, thy should be given a spacer to use with their inhaler. Spacers help deliver the medicine to your child's airways and make the inhaler easier for your child to use. They are typically plastic containers with a mouthpiece or mask at one end and a hole for the inhaler at the other.

Spacers should always be used with a pressurised metered dose inhaler. You can watch a demonstration of how to use an inhaler and spacer on Asthma and Lung UK's <u>website</u>.

Recommendation based on the research evidence



Your child's doctor or nurse should discuss the following with you and your child:

- Medications that are in your child's inhaler and how they help manage your child's asthma.
- How the medications work to relieve your child's symptoms and prevent asthma attacks.
- The specific times and situations when your child should use their inhaler.
- The proper way to use their inhaler. Your doctor or nurse will demonstrate how to use it and will ensure your child can do it correctly.
- If your child uses 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 your child to choose the most ecofriendly option.
- Dose counter and how to use it on your child's inhaler, if it has one, to keep track of your child's medication usage.
- Routine checks on your child's inhaler technique during asthma reviews and consultations.
- Alternative devices if your child has trouble using their inhaler.



Recommendation based on the research evidence

Your child's doctor or nurse should always take your child's preferences into account when discussing inhalers and spacers, making sure that the treatment plan is tailored to their needs and comfort. If you or your child has any questions or concerns, your doctor or nurse can provide further explanations and support.



Recommendation based on the research evidence

Your child's doctor or nurse will recommend using the same type of device for both preventer and reliever treatments if your child needs more than one inhaler.



Recommendation based on the research evidence

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

How to use a spacer

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

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

How can I help control my child's asthma?

It's important that you and your child keep good control of your child's asthma. Managing asthma goes beyond just taking medicine—it's about equipping you and your child with the tools and knowledge to stay in control. This is known as self-management. By following a personalised action plan and identifying your child's triggers, you can reduce the chances of asthma attacks, experience fewer symptoms and feel more confident in managing your child's 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 your child doesn't have an action plan yet, talk to your doctor or child's asthma nurse to get started.

How can a self-management programme help you and your child stay in control of their asthma?

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

Recommendation based on the research evidence

Your doctor will offer a programme that includes:

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

This plan will help you and your child manage asthma based on symptoms.

Recommendation based on the research evidence

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

- Pollution. Bad air quality inside or outside can make it hard to breathe
- Second-hand tobacco smoke and vapour from e-cigarettes is harmful to your child's lungs
- Other Personal Triggers such as allergens like dust, pets, or even stress.

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





Recommendation based on the research evidence

If your child is under 5, your doctor may also offer a self-management programme that includes a written action plan and education for your family. The self-management programme will also include advice on when to contact a healthcare professional if asthma deteriorates.



Recommendation based on the research evidence

To make it easier for your child to stick to their 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 your community workers.

When should your child's action plan be reviewed?



Recommendation based on the research evidence

You should check your child's action plan with your doctor or nurse:

- after leaving the hospital if your child has had an asthma attack
- during emergency visits or doctor appointments for asthma symptoms
- at least once a year as part of your child's yearly asthma review.

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

Ways you and your child can help control their asthma

What can I do?	How can this help?
Make sure your child takes their asthma medicines when they should and ensure inhalers are replaced once close to being empty.	For good asthma control it's important for your child to take their medicines, even when they feel well.
Learning about asthma gives you and your child the confidence to take charge of their health. Your child's healthcare team will explain everything in plain language, answer any questions and make sure you and your child feel prepared to manage their asthma every day.	Many children live with troublesome asthma symptoms (such as coughing and wheezing) and think this is normal. But good asthma control means your child doesn't have asthma symptoms day or night. If they often do, this is serious and can lead to an asthma attack and long-term lung damage. Knowing your child's personal triggers (things that make asthma worse) can also help to improve the control. You can find more information on how to control the triggers on Asthma and Lung Uk's website.
Keep your child away from cigarette smoke.	Smoking or being around cigarette smoke will definitely make your child's asthma worse. If you smoke, try to stop. If you would

It would also be beneficial if your child is kept away from other substances such as vapour from e-cigarettes.	like to stop, your doctor, asthma nurse, or pharmacist can offer advice and support to help you. You should not smoke in front of your child and you should encourage other people not to smoke near them. Aim to avoid exposing your child to any form of smoke or vapour.
Encourage your child to have a healthy lifestyle, which includes maintaining a body weight within the normal range, eating nutritious foods, and engaging in regular physical activity.	If your child is overweight, your doctor or asthma nurse will support them to lose weight. Losing weight may help improve your child's asthma control.

By following these steps and staying in touch with your healthcare team, your child can lead a full, active life.

You can download a blank personal asthma action plan from <u>Asthma and Lung UK</u>. Your child's asthma nurse or doctor will fill it in with you.

Recommendation based on the research evidence



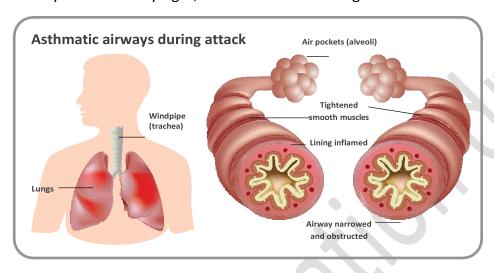
Your child should have all the recommended vaccines including the flu vaccine. The vaccines can help your child avoid serious infections of the lungs, such as pneumonia.

If your child is on high-dose steroids for their asthma, the vaccines may not be as effective so you need to speak to your child's doctor about this.

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

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

An asthma attack is when your child's airways become swollen and the muscles around the airways become very tight, which makes breathing more difficult.



Asthma attacks don't usually come out of the blue. Most are triggered by viral infections, particularly the group of viruses called rhinoviruses that cause the common cold. Your child will probably feel their asthma getting worse over a few days before the attack, for example:

- coughing and wheezing more
- they may find breathing more difficult
- they may develop a runnynose
- their chest may start to feel tight
- they may become lethargic.

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

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

- Their asthma is getting worse for example, they are coughing or wheezing more than usual or they feel more breathless or their chest feels tight.
- They cannot breathe easily and it's hard for them to talk, eat or sleep.
- They have to use their reliever inhaler more often than usual.
- Their reliever inhaler doesn't help.
- If they are using a peak flow meter, the values will fall.

If your child is having an attack, follow the advice in their written asthma action plan.

If they don't have an action plan or you can't find it, follow the advice from Asthma 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 my child need to go to hospital if they have an asthma attack?

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

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

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

Treatment	How treatment is given
Oxygen	Your child's oxygen levels should be checked. If they are low, your child will be given oxygen through a mask or by nasal prongs.
Reliever medicine	Your child will be given an asthma reliever medicine through an inhaler and spacer or a nebuliser. A nebuliser creates a mist of medicine that your child breathes through a mask.
	Your child may be given another reliever medicine in the nebuliser if the attack is severe or isn't responding to the first reliever medicine alone.
	In hospital, the medicine used in the reliever inhaler may be given through a drip.
Steroids	Your child may be given oral steroids.
Magnesium sulphate (medicine that reduces asthma symptoms)	Your child may be given this through a drip if they have a severe asthma attack.
Aminophylline (medicine that opens the airways and helps to treat shortness of breath and wheezing)	In hospital, your child's specialist may give them this medicine through a drip if they have a severe asthma attack.

Treatment of asthma attacks varies depending on your child's age.

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

Before your child leaves hospital

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Information

To help decide when your child is well enough to leave hospital, their hospital doctor or nurse will:

- regularly check their breathing rate
- check how hard they are breathing
- monitor their oxygen level
- ensure they no longer need their reliver inhaler more frequently than once every 4 hours
- review medications
- · review adherence
- discuss triggers
- discuss with you how to look after your child's asthma, including showing you how to monitor it using a peak flow meter or keeping a diary to monitor their symptoms
- watch your child use their inhaler to make sure they are taking it properly, and
- give them a new personal asthma action plan.

When your child leaves hospital



Recommendation based on the research evidence

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

Once your child has left hospital, you should make an appointment with your child's doctor within two days of leaving hospital to discuss the next steps about your child's asthma management.

Can I prevent my child developing asthma?

Breastfeeding



Recommendation based on the research evidence

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

Smoking



Recommendation based on the research evidence

Your child's doctor or asthma nurse will advise you about the risk to your child of smoking.

If you smoke while you are pregnant, this can increase the chance of your child developing asthma and wheezing.

We know that quitting smoking is difficult, so if you are thinking of trying to quit speak with your doctor, nurse, midwife or pharmacist who can help offer you support to give up. You can also visit this website.

The evidence for harm related to vaping and second-hand exposure to vaping is still emerging. We advise avoiding vaping in front of children as they often copy the behaviours and the full long-term impact of exposure to vaping is yet to be established.

Diet



Recommendation based on the research evidence

There is not enough evidence to suggest that using dietary supplements while you are pregnant can prevent your child developing asthma.



Recommendation based on the research evidence

You don't need to avoid certain foods while you are pregnant as a way to prevent your child developing asthma.

Asthma in young people

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

Adolescence is when you are moving from childhood to 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 <u>Asthma and Lung UK</u>

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 do the following.

- 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.



Your doctor will work with you to create a personalised 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.

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 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're 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. 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.



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 recommend. Always tell your doctor or asthma nurse if you are using any complementary therapies.

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

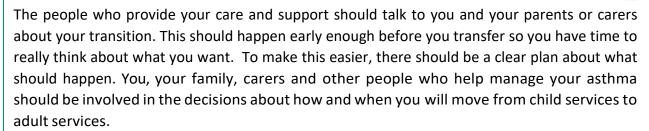
Recommendation based on the research evidence

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

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



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.

Beat Asthma

Website: www.beatasthma.co.uk

Beat Asthma improves asthma care for children and young people by educating and supporting families, healthcare professionals, and schools to empower patients in managing their asthma effectively.

Other organisations

NHS 24

Phone: **111**

Website: www.nhs24.scot

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

NHS 111 Phone: 111

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

Allergy UK

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

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

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.

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