

Patient leaflets from the BMJ Group

Asthma in children

Lots of children have asthma. But there are good treatments that can prevent asthma symptoms or treat them when they happen.

We've looked at the best and most up-to-date research to produce this information. You can use it to talk to your doctor and decide which treatments are right for you.

What is asthma in children?

Asthma is a condition that can make it hard to breathe. It happens when the tiny air passages in your lungs get swollen or inflamed. This makes it harder for air to get in and out.

Like allergies, asthma can be triggered by substances in the air. Common asthma triggers include dust mites, pollen or animal fur. Other things that can cause asthma symptoms are tobacco smoke, air pollution, exercise or an illness (such as a cold).

Children under around 5 or 6 years old can have problems with wheezing. But it's hard to know whether their wheezing is caused by asthma. Babies and young children often wheeze if they have a cold, for example. It's best for children not to take asthma medicines unless they really need them. Doctors sometimes suggest a trial of asthma medicines, and check on the child every so often to make sure the treatment is the right one.

What are the symptoms?

The symptoms of asthma vary from child to child. Some children just get a cough. Other symptoms include wheezing, difficulty breathing or a tight feeling in their chest.

Children with mild asthma may only get occasional wheezing and coughing. Children with more severe asthma may get symptoms more often or need time off school.

Some children get bad asthma attacks from time to time. Signs of a serious asthma attack include struggling to breathe, finding it hard to talk or having a fast heartbeat. Your child may also become confused or get a bluish tinge to their lips or fingernails. If any of these things happen, your child needs emergency treatment. You should dial 999 straight away. If you're ever worried about your child's asthma, for any reason, it's always best to be on the safe side and call an ambulance.

What treatments work?

Most asthma treatments are given using an inhaler. An inhaler is a metal container that holds the medicine and fits into a plastic case with a mouthpiece. Pressing down on the container releases a puff of medicine, which your child breathes in through the mouthpiece. There are other types of inhaler too, including ones that work automatically when your child breathes in.

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Quick-relief inhalers

Most children with asthma will have a blue, quick-relief inhaler. These help to get rid of asthma symptoms when they happen. Your child will usually need two, three or four puffs from their inhaler to relieve their symptoms.

Your child should carry their quick-relief inhaler with them all the time. Ask your child's school what arrangements they make for children with asthma. Some schools prefer children to leave their medication with a teacher or the school nurse, especially younger children. This means they'll have to ask for it when they need it. But it's important that your child is able to get to their inhaler quickly. It should be kept nearby if your child is doing PE or playing at break time. It's probably best for older children to carry their inhaler themselves.

Quick-relief inhalers contain medicines such as salbutamol (brand names Ventolin and Airomir) or terbutaline (Bricanyl). They work quickly to help your child breathe normally again. If your child has mild asthma, one of these inhalers may be the only treatment they need.

These inhalers don't usually have any serious side effects. They can make your child's heart beat faster, and some children get trembling, especially of their hands. Your child may have trouble sleeping if they use their inhaler just before bedtime.

Preventer inhalers

As well as a quick-relief inhaler, your doctor may suggest a treatment to prevent asthma symptoms. The best preventer treatment is a steroid inhaler. There's lots of good research to show that steroid inhalers help to prevent asthma attacks, reduce wheezing, help your child's lungs work better and stop your child needing their quick-relief inhaler so often.

Steroid inhalers don't help to stop an asthma attack once it's started. They work too slowly. Your child should use their quick-relief inhaler if they get asthma symptoms. Steroid inhalers aim to prevent asthma symptoms in the long term.

There are other types of inhalers and also tablets to prevent asthma. But these aren't as good at preventing asthma symptoms as a steroid inhaler. Doctors sometimes prescribe them in addition to a steroid inhaler, if needed.

Steroid inhalers are usually brown, although some are beige, orange or red. Most types should be used once or twice a day. The names of some steroid inhalers are beclometasone (brand names Beclazone Easi-Breathe and Qvar), budesonide (Pulmicort) and fluticasone (Flixotide).

There are no definite rules about when a child needs a preventer inhaler. But doctors often recommend them for children who need to use their quick-relief inhaler more than two or three times a week, have trouble sleeping because of their asthma or get serious asthma attacks.

To keep the chance of side effects as low as possible, your child's doctor will prescribe the smallest dose of steroids that work for your child. If your child hasn't had any problems

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with asthma for a few months, it may be possible to reduce the amount of steroids he or she is taking.

Side effects of steroids

Many parents worry about the side effects of steroids. It's important to remember that the steroids used for asthma aren't the same as the steroids used by athletes and bodybuilders. Those are anabolic steroids. The steroids used for asthma are corticosteroids. They're very similar to chemicals that your child's body makes naturally.

Some research has found that corticosteroids can slow down how quickly children grow when they first start taking them. But long-term studies have shown that children probably grow to their normal adult height. Having asthma that's not treated properly can also affect your child's growth. So this side effect isn't a good reason to avoid steroids.

The most common side effect of a steroid inhaler is a sore mouth. It's caused by a fungal infection called oral thrush. But these infections aren't serious and are easy to treat. They may be less likely if your child rinses out his or her mouth after using their inhaler. Another common problem is sounding a bit hoarse after taking steroids.

In some very rare cases, steroids have stopped children's adrenal glands working properly. Your adrenal glands make hormones that help your heart and kidneys work properly. They also affect how your body uses energy. But problems with adrenal glands have only happened to children who've been taking a higher dose of steroids than normal.

How to use an inhaler

It's important that your child knows how to use an inhaler properly. They may not get the benefit of their medicine otherwise.

Here's how to use an inhaler. It's best for your child to use it standing up. First, they should shake the inhaler and take the cap off. They should breathe out and then put the inhaler in their mouth. It's best if they keep their chin up. As they breathe in slowly, they should press down and trigger a puff from the inhaler. Once they take the inhaler out of their mouth, they should close their mouth and hold their breath for ten seconds.

Ask your doctor or nurse what to do if your child has trouble with their inhaler. Some inhalers don't need you to press on the canister to trigger them. They work automatically as your child breathes in. Some children find this kind of inhaler easier to use. Remember, your child will still need to hold their breath for 10 seconds after breathing in their medicine.

A spacer can also make it easier for your child to take their medicine. Spacers are always recommended for children under about 5 or 6. A spacer is a plastic container about the size of a soft drink can. It has a hole at one end that fits onto the inhaler. There's a mouthpiece at the other end. When your child presses down on their inhaler, the asthma medicine mixes with the air in the main body of the spacer. This gives them extra time to breathe in their medicine, as they can do it in more than one breath.

What if my child's treatment isn't working?

If your child has a quick-relief inhaler and a steroid inhaler, but still gets asthma symptoms, they should see a doctor. The doctor will want to check that your child is using their inhaler properly. If the inhaler isn't the problem, there are more treatments that your child can try. This could be another inhaler or tablets. Your doctor may also suggest trying to avoid things that trigger asthma symptoms, such as animal fur or tobacco smoke.

If your child has an asthma attack, the first thing they should do is use their quick-relief inhaler. If this doesn't help, make sure they see a doctor or get to hospital straight away. There are lots of good treatments for asthma attacks.

What will happen to my child?

Most children with asthma live very happily. It doesn't usually stop them from taking part in everyday activities, such as playing outdoors and doing sports.

A bad asthma attack may mean your child needs treatment in hospital. Asthma attacks can sometimes be dangerous if they're not properly treated, but it's very rare for children to die of asthma in the UK.

Up to three-quarters of children with asthma grow out of it. But not all do. Girls, and all children with severe asthma, are more likely still to have asthma when they grow up.

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