

ASTHMA CARE PROGRAMME



CONTENTS

Introduction	1	Other inhaler devices	7
Be aware of your asthma symptoms	2	Asthma triggers	7
Asthma classification and control	2	Asthma during pregnancy	9
Warning signs	3	Peak flow meter	9
Asthma medicine	4	Self-management guidelines	10
Other medicine	5	Monitoring your symptoms	11

ASTHMA CARE PROGRAMME

INTRODUCTION

What is asthma?

A person with asthma has episodes of a tight chest, shortness of breath, coughing and wheezing. Asthma is a common illness which affects people of all ages and mostly develops in childhood. Fortunately it can be controlled with treatment and most people can live normal lives. However, people experience problems if it is not properly treated. People who have allergies, for example, hay fever and eczema, are more likely to develop asthma.

What happens in the lungs if you have asthma?

There is inflammation of the small breathing pipes in the lungs, called airways. Inflammation of the airways means that:

- · there is swelling in the walls of the airways
- too much mucus is produced
- the airways narrow easily because the muscle layer around the airways becomes 'twitchy' and goes into spasm at the slightest trigger.

Things that cause an asthma attack, for example house dust, fumes and excessive exercise, are called triggers.

Why do the lungs of a person with asthma react this way?

The exact cause of asthma is not well understood. Asthma is often inherited – it tends to run in families. It is often a lifelong (chronic) illness that requires long-term treatment, although more than half of children with asthma will outgrow it.



BE AWARE OF YOUR ASTHMA SYMPTOMS

Another way of seeing asthma

- In asthma, there is inflammation of the airways. Think of inflammation as the 'glowing coals' of a fire.
- The 'glowing coals' may burst into flames. When this happens, you have an asthma attack coughing, wheezing and shortness of breath.
- If you take action to control the heat of the 'glowing coals', you can prevent the flare-up.
- It is important to be aware of your asthma symptoms at all times, as they warn you if there is danger of a flare-up.
- It's difficult to put the 'coals' out completely. That is why asthma is a chronic condition.

REMEMBER: It is easier to prevent the coals from flaring up than to put out a raging fire.

ASTHMA CLASSIFICATION AND CONTROL

Classification of asthma

Doctors will decide how serious your asthma is by how often you get symptoms and by doing a lung function test (peak flow readings). This will help your doctor decide on how to treat you. Your treatment plan may change from time to time depending on how well you control your asthma. If you get asthma symptoms more than twice a week during the day, or more than once a night, you need preventer medicine and not just a reliever.



How to achieve good asthma control

- You are the most important person in the management of your asthma.
- Prevention is better than cure.
- Avoid things that trigger your asthma attacks.
- Preventers prevent inflammation in your lungs, so use your preventer every day as directed by your doctor. Your chest will be less likely to feel tight.
- If you use an inhaler, make sure that you are using it correctly, with a spacer if necessary.
- Monitor and record your symptoms. Regular peak flow readings should be recorded to keep track of your asthma.
- Watch out for warning signs of an asthma attack.
- Take action, follow your asthma self-management guidelines (see page 10).

For information on how to use your inhaler and spacer correctly, see page 5.

WARNING SIGNS

Warning signs to watch out for:

- Waking up at night due to asthma symptoms.
- Using more reliever medicine than normal.
- More breathless than usual.
- Persistent coughing, often at night.
- A tight chest in the mornings.
- Not being able to exercise.
- Your peak flow readings are getting worse.

ASTHMA MEDICINE

There are three main types of medicine used to treat asthma – relievers, preventers and controllers.

Relievers

The medical name for relievers is bronchodilators. Relievers are also known as 'rescue medicine'. During an asthma attack, the muscle layer around the airways goes into spasm, causing the airways to close up. Relievers work by relaxing the muscles around the airways so that they open up again. They work quickly to relieve the symptoms of tightness, wheezing and shortness of breath. The inhaler technique is extremely important for your reliever medicine to work effectively.

Remember:

- · Always carry your reliever with you.
- · Use your reliever, when necessary, for flare-ups.
- Relievers do not help to reduce the underlying inflammation ('glowing coals') of the airway lining.
- If you use your reliever more than twice a week during the day or anytime at night, you also need to use preventer medicine.
- If you find that you are using your reliever more than usual, it may mean that your asthma is not under control and you must ask your doctor for advice about increasing your preventer medicine.
- If you have to use your reliever more than two puffs every four hours, get medical help immediately.

Preventers

Preventers reduce the 'heat' of the 'glowing coals' and help to protect against flare-ups. They reduce inflammation of the airways, making them less sensitive to triggers. Preventers are slow acting and take time to build up their effect. They do not provide immediate relief in flare-ups. Preventers are also known as anti-inflammatories. The preventer is usually in the form of cortisone (steroid) that must be breathed in (inhaled) twice a day. Sometimes a bad 'trigger', such as a cold, may cause an asthma attack. You may then need an extra preventer to get the inflammation under control and may need to use your inhaled steroid in double doses for a short while.

Remember:

- The most important rule is to use your preventer medicine every day.
- Never stop using your preventer, even when you feel well! This means your preventer is working. Only use it less frequently after consulting your doctor.

Controllers

Controllers are used to control the symptoms you still have, even though you use your preventer regularly and correctly. They are used together with your daily preventer. Controllers are long-acting reliever (bronchodilation) medicine. Their action lasts for up to 12 hours, therefore they are taken twice a day. Controllers take longer to start working than relievers. Therefore they should never be used in emergencies. They are often added to reduce night-time symptoms.

OTHER MEDICINE

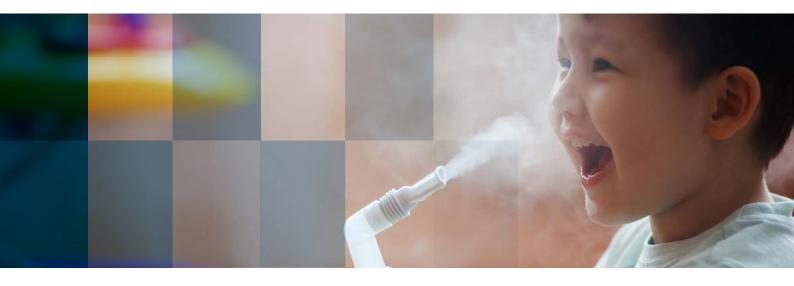
Inhalers

Inhalers are prescribed for most forms of asthma medicine. They allow the medicine to get directly to the lungs, which ensures that the medicine is more effective and has fewer side effects. There are a number of different inhaler devices. Your doctor will prescribe the right one for you. It is extremely important to use inhalers correctly. Even if you have been using inhalers for a long time, please check with your doctor or pharmacist that you are using the right technique for the specific inhaler prescribed for you.

If you notice a puff of 'vapour' around your mouth or nose while using your inhaler, there could be a problem with your technique. Good technique takes practice.

How to use a metered dose inhaler (MDI)

- Take off the cap and shake inhaler thoroughly.
- Sit upright and tilt your head back. Tilting your head back opens your throat.
- Breathe out with a sigh.



- Hold the inhaler upright and close your mouth around the mouthpiece.
- Breathe in slowly and deeply, pressing your inhaler once just after you begin to breathe in.
- Hold your breath for five to 10 seconds.
- Remove the MDI from your mouth and close your mouth. Gently breathe through your nose a few times.
- Wait 15 to 30 seconds before taking the next puff.

Spacers

Your doctor may suggest the use of a spacer together with an inhaler. Only use a spacer if it has been prescribed, because it can increase the effect of the medicine by up to 50%. The spacer is useful for children or anyone with problems using the inhaler correctly. Ask your doctor about different kinds of spacers for infants, children and adults.

How to use a spacer

- A spacer can be used with both a reliever and preventer inhalers.
- Many inhalers contain a one-way valve. When you breathe through the mouthpiece, the valve opens, allowing the medicine to be breathed in. However, when you breathe out, the valve closes up. This prevents any of the medicine from escaping from the chamber.
- Shake the inhaler (MDI) well.
- Insert it into the spacer.
- Breathe out and close your lips around the mouthpiece.
- Press the canister down once. Then breathe in slowly and deeply through the mouthpiece.
- Hold your breath for at least five seconds before breathing out through the mouthpiece.
- Repeat the procedure for the next dose.

Taking care of your spacer

Wash your spacer with dishwashing liquid every week and allow it to drip dry without rinsing. This prevents static electricity build-up which can alter the amount of medicine that gets into your lungs.



OTHER INHALER DEVICES

There are other inhaler devices available. They usually require you to load the device, trigger, then inhale as deeply as you can. If you use one of these devices, make sure you use it correctly. You may have to breathe in more than once to get all the medicine into your lungs. Your doctor or pharmacist can help you with this.

Nebulisers

Nebulisers were popular in the past as a way of giving medicine to children. Now, with the development of effective spacers, there are very few situations that really require a nebuliser. When used correctly, spacers are better medicine delivery systems compared to home nebulisers. Frequent use of a home nebuliser for asthma attacks means that the underlying cause of the asthma – the inflammation – is not being treated properly.

ASTHMA TRIGGERS

There are all sorts of things that can trigger an asthma attack. Not everyone reacts to all of them. Triggers may be too small to see, but you can recognise them by noticing the times and places you get an asthma attack. You can then work out ways to avoid them. The most common triggers are pets (especially cats), cold weather, exercise, viral infections (colds and flu), tobacco smoke, pollen, dust, preservatives and colourants in food and certain medicine.

Pets

Avoid contact with cats and dogs if necessary.

Exercise

Exercise is a common 'trigger'. This does not mean that someone with asthma should not exercise. Exercise is important for everyone, even if they have asthma. It is especially important for children and teenagers to take part in sport. Proper use of the preventer medicine can make this possible. Symptoms during or after exercise can be avoided by using reliever medicine 15 minutes before physical exercise.

Smoke, fumes and chemicals

Passive smoking increases the severity of asthma symptoms. Children with parents who smoke have a 70% greater chance of being hospitalised for bronchitis and pneumonia before the age of two. Exposure to glue, paint and other chemicals can also trigger asthma.

Pollen

Be aware of worsening symptoms in spring when pollen counts are high.

Dust

Dust is everywhere – even in the cleanest home. It is in and on beds, pillows, carpets, furniture and fluffy toys.

- Keep rooms airy and dry.
- Use plastic covers on mattresses.
- Wash bedding and soft toys in water that is at least 60°C to kill tiny house-dust mites that trigger asthma. Alternatively place soft toys in the freezer for a few hours each week.
- Avoid wool and feather products (use synthetic products).
- Wipe surfaces with a damp cloth.
- Remove carpets from sleeping areas if possible, otherwise vacuum them daily.

Foods

Certain foods may trigger asthma. Common causes are preservatives such as sulphur dioxide and sodium benzoate as well as colourants such as tartrazine. They are often found in soft drinks and imitation juices.

Colds and flu

It is difficult to avoid viruses that cause colds and flu. Asthma is often worsened when you are battling with a cold or flu. Symptoms of asthma may be more intense for a few weeks afterwards. You can increase your preventer medicine, but first discuss your asthma self-management guidelines with your doctor.

ASTHMA DURING PREGNANCY

Women with asthma who become pregnant may find that the severity of asthma stays the same, increases or deteriorates. Asthma attacks are most common during the 24th to 36th weeks of pregnancy, but are rare during birth. Controlling asthma during pregnancy is extremely important for the health of the mother and the baby. Poorly treated asthma in pregnancy may result in an increased risk of complications.

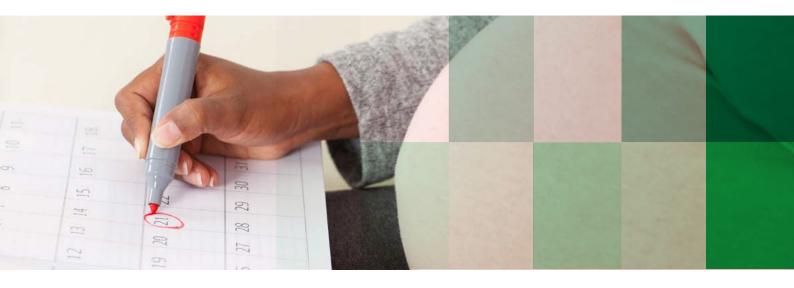
Asthma attacks are most common during the 24th to 36th weeks of pregnancy, but are rare during birth.

Management

The management of a pregnant woman's asthma is no different to that of a nonpregnant woman. Most asthma medicines, for example, inhaled steroids, are safe to use while pregnant.

PEAK FLOW METER

A peak flow meter measures how open the chest is. The more open your chest is, the harder and faster you can blow air out of your lungs. Peak flow readings are higher when your asthma is well controlled, and lower when your asthma is not well controlled. The peak flow readings can alert you to the worsening of your asthma condition even before symptoms become noticeable. Peak flow results give you and your doctor a more accurate measure of the severity of your asthma at any time, helping with treatment decisions. It is important to remember your best peak flow measurements when your asthma is well controlled. This serves as a basis for comparison. If you and your doctor struggle to control your asthma, or if you have been hospitalised for your asthma, you should record your peak flow readings twice daily at home. Your doctor will teach you how to use the meter, and tell you which values are normal for you and what steps you need to take if your values drop.



Using a peak flow meter

- Attach the mouthpiece to the meter.
- Slide the marker back to zero on the scale. When holding the meter, take care to keep your fingers away from the sliding scale.
- Stand or sit up straight and take a deep breath, holding the meter ready.
- Keeping the meter level, close your lips around the mouthpiece. Keep your tongue away from the mouthpiece.
- Blow as hard and fast as you can.
- Take the reading.
- Slide the mark back to zero. Repeat the process three times in the morning and three times at night before taking your medicine.
- Always record the best of the three blows as your peak flow for that time, for example: Morning PF = 420, 410, 450, Evening PF = 420, 430, 400.

SELF-MANAGEMENT GUIDELINES

Asthma self-management guidelines

A good asthma action plan can reduce asthma complications by up to 50%. The action plan must be drawn up in conjunction with your doctor. It is divided into three sections according to your symptoms and peak flow readings. The sections are green, yellow and red.

Regular treatment and changes in treatment are also written on the card.

- The green zone means that your asthma is well controlled and it indicates that your current medicine is working well.
- The yellow zone means that control is getting worse and that you should alter your medicine as indicated on the card.
- The red zone means you are in serious trouble. The card outlines what you should do while you are waiting for emergency assistance.

If your asthma is poorly controlled, or if you have been in hospital because of your asthma, discuss an action plan with your doctor. Ensure that your family and friends know how to help you when you have an attack.

- Make sure your inhaler technique is perfect.
- Never forget to take your preventer every day.
- Identify and avoid triggers if you can.
- Monitor these areas to help you make a decision concerning your asthma treatment:
 - peak flow
 - symptoms
 - medicine use (how often do you have to use your reliever?)
- Watch out for warning signs, which mean you are losing control.
- Take action: Use a double dose of your preventer medicine when you notice any warning signs or at the onset of a cold.
- If exercise causes symptoms, use your reliever 15 minutes before the activity starts.
- Learn to recognise when an attack is imminent. Well-known signs are a poor peak flow reading, coughing, wheezing or a tight chest.

Please refer to the Monitoring table on page 11.

- Blow into the peak flow meter three times and fill in the best reading in the relevant column.
- Try to measure your peak flow reading during the day and at night at the same time each day.
- Measure your peak flow reading before taking your medicine.
- You can take these measurements with you when you consult your doctor.

MONITORING YOUR SYMPTOMS	JAN	FEB	MAR
MONTH			
SYMPTOMS			
Fill in during daytime			
Daytime wheeze			
Yes / No			
Daytime shortness of breath			
Yes / No			
Daytime cough			
Yes / No			
Fill in at night-time			
Night-time cough/wheeze			
Yes / No			
MEDICINE			
Fill in at night-time (Record the number of times each medicine was taken within 24 hours)			
Medicine dose			
1 2			
3			
4 5			
PEAK FLOW			
Best peak flow reading on getting up (daytime)			
Best peak flow reading on going to bed (night-time)			
My best peak flow reading is			

APR	MAY	JUN



MONITORING YOUR SYMPTOMS	JUL	AUG	SEP
MONTH			
SYMPTOMS			
Fill in during daytime			
Daytime wheeze			
Yes / No			
Daytime shortness of breath			
Yes / No			
Daytime cough			
Yes / No			
Fill in at night-time			
Night-time cough/wheeze			
Yes / No			
MEDICINE			
Fill in at night-time (Record the number of times each medicine was taken within 24 hours)			
Medicine dose			
1 2			
3			
5			
PEAK FLOW			
Best peak flow reading on getting up (daytime)			
Best peak flow reading on going to bed (night-time)			
My best peak flow reading is			

OCT	NOV	DEC



Visit **www.gems.gov.za** for more information or call us on **0860 00 4367**

If you would like more information about asthma, please do not hesitate to call us on the **GEMS MEMBER CARE LINE 0860 109 900**.

Always discuss all health and treatment issues with your doctor.

Please note that this information provided by our Registered Healthcare Professionals is for educational, communication and information purposes only and is not intended to replace or represent medical advice or treatment.