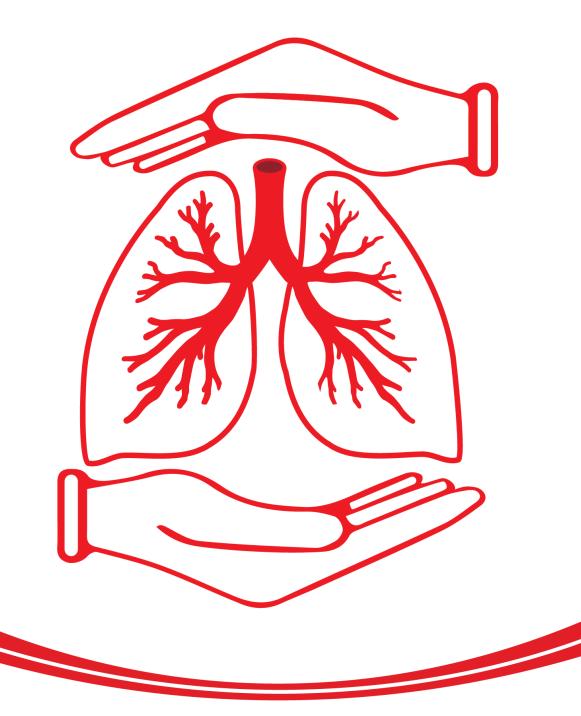


# Asthama Patient Information





A Unit of **The Aga Khan Hospital and Medical College Foundation**, Licensed under Section 42 of the Companies Ordinance, 1984 Registered Office: Stadium Road, P.O. Box 3500, Karachi 74800, Pakistan.



## What is Asthma?

Asthma is a disease of the airways that causes abnormal narrowing of the breathing tubes and restricts the passage of air. This causes problems in breathing.

#### How common is Asthma?

Asthma is a common problem all over the world with over 300 million people affected by the disease. The prevalence of asthma has increased in recent years, especially amongst young children.

# What happens in Asthma?

Our lungs consist of breathing tubes called bronchi that carry air to the lungs. The transfer of oxygen from the air to the blood, and carbon dioxide from the blood back to the air takes place in the alveoli. The airways are normally open and allow the air to flow through them easily. In asthmatics (people suffering from asthma) during an asthma attack, the bronchi become swollen and narrowed, which results in difficulty in passage of air through them. In addition, the bronchi also produce significantly more mucus, which causes further obstruction.

#### What are the symptoms of Asthma?

- Difficulty in breathing
- Wheezing (whistling sounds while breathing)
- Chest tightness
- Cough (which is worse at night)

## What are the triggers of an Asthma attack?

- Animals with fur (e.g. cats, dogs)
- Dust mites (usually breeding in carpets, curtain and stuffed toys)
- Flowers with pollen
- Cigarette smoke
- Environmental pollution
- Strong fragrances (perfumes)
- Viral infections
- Certain drugs
- Anxiety and stress

#### Who can get Asthma?

Asthma can affect anyone. People with a family history of asthma have a higher chance of being asthmatics. It is more common in children but can affect adults of any age. In many children, asthma may disappear by adolescence.

#### Can Asthma be cured?

There is no cure for asthma. However, asthmatics can live absolutely normal lives through a combination of a healthy lifestyle, avoiding triggers and using prescribed medications.





#### What are the medications used for Asthma control?

There are 2 kinds of medicines that can be used to control asthma:

- **Controller medications:** these are used to prevent an asthma attack. They are usually taken once or twice a day. Steroid inhalers are the most potent and beneficial medicines. In severe cases, oral medicines including leukotriene inhibitors, theophylline or steroids may be required, in addition to the inhaler.
- **Reliever medications:** these are used only if you are having an asthma attack and work very rapidly. Beta-agonist inhalers are the most effective medications. Contrary to common belief, these inhalers are very safe and not addictive.

#### What should I do in case of an Asthma attack?

If you develop any symptoms of Asthma please take the following measures:

- Immediately remove yourself from the trigger (if the trigger is known).
- Use the reliever medication immediately.
- Make sure you have some help available.
- If symptoms persist, repeat the reliever medication.
- If your symptoms do not improve or get worse, visit your physician.

Visit the closest emergency room in case you experience:

- Severe shortness of breath.
- Palpitations (rapid breathing of the heart) or dizziness.
- Chest pain or chest tightness.
- Lips or fingertips turning blue.
- That repeated doses of quick-relief medicine are not working.

#### How can I assess the status of my Asthma?

A peak flow meter is a small portable device that is commonly available and is used to monitor the severity of asthma. It has a mouthpiece and a gauge with a small marker.

Peak flow measurement should be obtained and recorded once in the morning and again in the evening.

The following steps should be followed in using peak flow meter:

- Slide the little marker to the zero point on the meter.
- Stand up and hold the meter in your hand in such a way that your fingers do not cover the meter gauge.
- Take in a maximal deep breath with your mouth open and wrap your lips around the mouthpiece. Avoid placing your tongue on the mouthpiece. With one effort, blow out as hard and as rapidly as you can.
- The marker will go up. Note the number at which the marker has stopped. Record the readings and discuss with your physician the next time you meet them.
- Repeat the procedure 2 more times and note down the numbers.

#### How should I use a metered dose inhaler?

Before using the inhaler fully understand which inhaler you have been prescribed to use and at what time of the day. When using and inhaler, follow the steps described below:

- 1. Hold the inhaler so that the nozzle is under your thumb and your index finger is at the base.
- 2. Shake the inhaler and then remove the cap. The inhaler is now ready to be used.
- 3. Breathe out slowly till your lungs are empty.





- 4. Without breathing in, place the mouthpiece in your mouth, and wrap your lips around it firmly.
- 5. Press the canister down and take in a deep breath.
- 6. Without removing the inhaler, hold your breath and count from 1 to 10. Remove the inhaler from your mouth and slowly breathe out.
- 7. Repeat all the steps above, according to the number of puffs recommended. Gargle your mouth after taking the inhalers, so that any residual medication left in the mouth is removed.

#### How should I use a spacer?

A spacer device is recommended for those who have difficulty taking an inhaler. When using a spacer, follow the steps described below:

- 1. Identify the mouthpiece and the slot for the inhaler
- 2. Shake the inhaler, remove the cap and place it in the spacer inhaler slot so that it fits tightly.
- 3. Breathe out slowly and place the mouthpiece in your mouth and wrap your lips around it firmly.
- 4. Press the inhaler once and take in a deep breath and hold it. Breathe out slowly through your nose. Take in 3 to 4 breaths this way.
- 5. Repeat steps 3 and 4 the number of times advised by your physician.
- 6. Remove the spacer from your mouth.
- 7. Gargle with warm water.
- 8. Make sure the spacer stays clean. It may be washed with warm water and air dried.

#### How should I use a dry powder inhaler?

Dry powder inhaler contains medication in dry powder form and delivers it to the lungs when the user breathes in (i.e. breath activated).

Dry powder inhaler comes in two main types:

- a. QSingle dose device
- b. Multiple dose device

The following are general instructions to use Dry Powder Inhalers:

- 1. Remove the cap for single dose devices. Load a capsule into the device.
- Breath out slowly and completely (do not blow into the inhaler device).
  Place the mouthpiece between the front teeth and seal the lips around it.
- 4. Breathe in through the mouth quickly and deeply over 2 to 3 seconds.
- 5. Take the inhaler out of your mouth and hold your breath for 10 seconds. Then slowly breathe out.

#### What do I need to know to do to help me control my asthma?

- Try to identify potential triggers and avoid them.
- Visit your physician regularly to plan your treatment regimen. Even when you are feeling well, • visit your physician 2 to 3 times a year. Visit your doctor more frequently if your symptoms are flaring up.
- Understand the concept of controller and reliever medications. Discuss these with your physician.
- Follow the instructions of use of an inhaler and spacer carefully.

#### **Clearing common misconceptions about Asthma**

- Asthma is not caused by food products. The use of food items like rice, dairy products and fruit is safe for asthmatics.
- Asthma is not a communicable disease. You cannot catch asthma from someone who has it.





- Inhalers are safe and non-addictive. They are the best treatment for asthma. Oral medications may be used along with inhalers.
- Asthmatics can live a normal life. They can exercise and play all sports provided their asthma is properly managed and controlled

