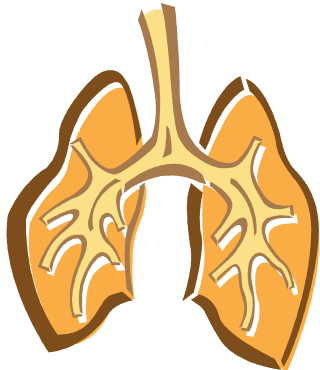


# PATIENT INFORMATION LEAFLET

## PHARMACY

### ASTHMA



#### **WHAT IS ASTHMA?**

Asthma is a chronic inflammatory condition. The airways become narrowed and obstructed, causing difficulty in breathing.

#### **WHAT HAPPENS DURING AN ATTACK?**

During an attack, the airway lining becomes inflamed and swollen. The airway muscles contract, and thick phlegm (mucus) is produced.

#### **SYMPTOMS OF AN ATTACK**

The patient may cough, wheeze (breathe with a high pitched sound) and experience difficulty breathing (shortness of breath). If untreated, a severe attack can be fatal. Severity varies amongst individuals.

#### **WHAT CAUSES ASTHMA?**

Asthma can be caused by genetic or environmental factors, i.e. it can be inherited. It is not contagious.

Certain environmental triggers may cause an attack in genetically predisposed people, including: animal dander (fur of pets), pollen, dust mites, insects or pests, respiratory infections, air pollution, weather or temperature changes, cigarette smoke, certain drugs e.g NSAIDs (a group of anti-inflammatory medicines including aspirin), or beta blockers (a group of medicines to lower blood pressure or heart rate). Triggers vary amongst patients.

#### **DOES ASTHMA AFFECT ONLY CHILDREN?**

Asthma can affect both children and adults. Some children may grow out of it but for others, it can be a chronic condition.

#### **WHAT CAN I DO ABOUT ASTHMA?**

Asthma cannot be cured but it can be controlled.

Patients can live normal, active lives and sleep through the night without symptoms.

#### **TYPES OF MEDICINES AVAILABLE**

Medicines may be oral, inhaled or injected. They can be divided into the relievers or controllers.

**Relievers** are used as and when an attack occurs.

Drug class	How it works	Examples	Things to note
Short acting $\beta_2$ receptor agonists	Opens up the airways	Salbutamol	Oral: May cause stomach discomfort; take after food
Anticholinergics	Prevent bronchospasm	Ipratropium	May cause dry mouth sensation
Corticosteroids (oral or injected)	Reduce swelling and inflammation	Prednisolone, hydrocortisone	Oral: May cause stomach discomfort; take after food. Usually not for long term use
Methylxanthines	Opens up the airways	Aminophylline (injected)	May require monitoring of blood levels.

**Controllers** are used regularly to control the asthma even if no symptoms occur.

Drug class	How it works	Examples	Things to note
Corticosteroids (inhaled)	Reduce swelling and inflammation	Fluticasone, beclomethasone	May cause sore throat or hoarseness of voice. To prevent this, rinse mouth with water after use.

Drug class	How it works	Examples	Things to note
Long acting $\beta_2$ receptor agonists	Opens up the airways	Salmeterol, formoterol	Not to be used alone. Usually added on to inhaled corticosteroids.
Methylxanthines	Opens up the airways	Theophylline, syrup or slow release (SR) tablets available	May require monitoring of blood levels. SR tablets can be cut into half but should not be crushed/ chewed.
Leukotriene antagonists	Reduce airway inflammation	Montelukast, tablets and granules available	Granules: store in original packet and administer within 15min of opening the pack.
Mast cell stabilizers	Reduce airway inflammation	Sodium cromoglycate	May cause headache or runny nose.

### **WHAT TO DO DURING ACUTE ATTACKS**

If there are signs of an asthma attack,

- 1) Stay calm, do not panic.
- 2) Use the reliever inhaler as directed by the doctor if available. Repeat at 10-20

minute intervals for 1 hour.

- 3) Monitor response for 10-60 minutes. If response is poor or a relapse occurs in 1-4 hours, seek medical care immediately for further treatment.

### **MONITORING OF ASTHMA CONDITION**

Your doctor can assess the asthma control by checking:

- Daytime symptoms
- Limitation of activities
- Nocturnal symptoms (symptoms at night)
- Need for reliever or rescue treatment
- Frequency of exacerbation or flares
- Lung function

There are some standardized tests to assess asthma control. One common example is the Asthma Control Test (ACT).

### **Asthma control test (ACT)**

**Asthma Control Test (ACT)**

- In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school or at home? score
- During the past 4 weeks, how often have you had shortness of breath?
- During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night, or earlier than usual in the morning?
- During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?
- How would you rate your asthma control during the past 4 weeks?

**patient total score**

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A maximum score of 25 indicates total control of asthma. In general, control is good if the score is

between 20 to 24. A score less than 20 implies poor control. However, it is important to check with your doctor if there is a personalized target for your condition.

### **PREVENTION OF ASTHMA ATTACKS**

Asthma can be controlled and patients can live normal, active lives. Some tips include:

- Follow the asthma action plan that you have discussed with your doctor.
- Take asthma medicines as prescribed.
- Identify your asthma triggers and find ways to avoid exposure to them.
  - o For example, if the trigger for that particular patient is dust mites, try to reduce dust mites by cleaning the house, vacuuming, reducing of or washing stuffed toys.
  - o One may consider using anti-dust mite mattress covers or anti-dust mite sprays.
- Track your asthma control and know what to do if the situation changes.
- Proactively find out and read up more about your condition and how to manage it. Take control of the condition.

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### **Disclaimer**

This information does not cover all possible uses, actions, precautions, side effects or interactions of the medications used to treat asthma. It should not replace the advice and guidance given to you from your doctor or pharmacist. If you have questions about this or other medications, please ask your doctor or pharmacist. Watsons does not endorse any brand name or generic medication listed in this pamphlet.