

What is Asthma?

Asthma is a common chronic lung disease in which the airways (bronchi) become inflamed and are abnormally sensitive to certain triggers. Asthma can affect people of all races and ages, and although there is no known cure, there are many ways to control it. The symptoms of asthma include coughing, shortness of breath, wheezing and chest tightness.

There are two related changes that take place in the airways of a person with asthma. First, the lining of the airways becomes inflamed and swollen, and produces excess mucus. Second, the muscles around these over-sensitive airways start to spasm, causing them to constrict. These changes that cause the airways to narrow, make it difficult to breathe.

With proper asthma management, this can generally be reversed so that breathing becomes, and stays, normal.

Things that can make asthma worse vary from person to person. They can be organized into two groups: allergic triggers and non-allergic triggers. The most common allergic triggers include animal allergens, dust mites, pollens, moulds, cockroaches and sometimes food. Non-allergic triggers include tobacco smoke, colds and chest infections, extreme temperatures and weather changes, exercise, fumes, and even emotional responses such as stress, excitement and fear. ASA and other medications can also trigger asthma symptoms.

TYPES OF ASTHMA

Childhood Asthma

Asthma onset in children usually occurs before their fifth birthday.

The majority of children with asthma are sensitive to household allergens and irritants, and they can benefit from a smoke-free, dust-free and pet-free environment.

When someone has asthma, they usually have it for life. However, asthma usually gets better as a child gets older and there are often periods where there are no symptoms, such as during adolescence.

Exercise Induced Asthma (EIA)

EIA is characterized by symptoms that occur due to exercise. People with asthma benefit from exercise because it increases their lung efficiency and their tolerance of physical activity. Factors such as humidity, temperature, allergen levels, air pollution and the type and duration of exercise can adversely affect a person with asthma. Workouts that begin with a continuous, progressive warm up for at least 15 minutes can help decrease asthma symptoms. If asthma is controlled properly and certain precautions are taken, exercise will not usually cause any significant limitations to physical activity. If asthma causes limitations in your ability to exercise, people should see your physician since your asthma may not be managed as well as possible.

Occupational Asthma

Occupational asthma is caused by exposure to certain irritants in the workplace. There are more than 200 substances including gases, dust particles and chemicals that are known to cause asthma in the workplace. Adequate ventilation, proper

masks, protective clothing and changes in work practices, such as using different chemicals, can reduce the risk of developing occupational asthma.

Adult Onset Asthma

While many believe adult onset asthma to be rare, it actually accounts for 10 per cent of all new asthma cases. Unlike childhood asthma, adults are less likely to react to allergic triggers, and more likely to be affected by non-allergic triggers.

ASTHMA MONITORING AND TREATMENT

Peak Flow Meter

A peak flow meter is a fast, easy-to-use device that measures lung function. It is used to measure the speed of air blown out of the lungs and can indicate how well a person is responding to his or her medication, as well as indicate a worsening condition.

Relievers

Short-acting bronchodilators, or "relievers", are used to open the airways during an asthma attack or when there are asthma symptoms, making it easier to breathe. Everyone with asthma should carry a reliever medication with them always.

Controllers

Anti-inflammatory controllers work by reducing and controlling the swelling and mucus production in the airways, making it easier for a person to breathe. These include corticosteroids, leukotriene receptor antagonists and anti-allergics. These medications must be taken regularly.

Controller medications also include long-acting bronchodilators, theophylline and ipratropium, which are usually taken in conjunction with inhaled corticosteroids.

Tips for Asthma Control

- Individuals with asthma should identify their particular triggers, and reduce exposure or avoid them whenever possible.
- It is important for those people with asthma, or their caregivers, to try to maintain a trigger-free home.
- Individuals with asthma should follow their physician's written asthma action plan, which allows them to take more control of their condition.
- Asthma medication should be taken as prescribed by a physician.
- People with asthma and their caregivers must understand the warning signs of an attack and always carry, or have quick access to, reliever medication.
- Individuals with asthma and their caregivers should regularly discuss their symptoms with their doctor and health care providers, in addition to receiving proper asthma education in order to understand and better manage their condition.