

What you need to know about Asthma in your child?

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

Asthma is a condition that affects the smaller airways in the lungs and makes it difficult for a person to breathe. This occurs because the air passages in the lungs swell, get narrower and fill with mucus. The extent of the narrowing and duration of each episode varies greatly in different people.

Asthma can start at any age, but the majority of cases start in childhood. Asthma also runs in some families but many people with asthma have no other family members affected.

The main symptoms of asthma include:

- Wheeze
- Cough
- Chest Tightness
- Shortness of breath

These symptoms can vary in severity from mild to severe. Most children with mild asthma usually have mild episodes of wheeze and cough that occur 1 or 2 nights per week but are often fine during the day.

Children with severe attacks of asthma are usually very wheezy, tight chested, have difficulty in breathing, and an inability to talk due to breathlessness. Severe symptoms may develop suddenly in some people who usually just have mild symptoms. If your child's symptoms become severe or worse, you must see a doctor immediately.

Asthma is usually treated with inhalers and this treatment usually works well to reduce or prevent symptoms. A person with asthma will typically take a preventer inhaler every day to prevent symptoms from developing and use a reliever inhaler if symptoms flare up.

There is no cure for asthma, but it can be well controlled. About half of the children who develop asthma usually outgrow it by the time they are adults. Children wit.

## WHAT CAUSES ASTHMA?

Asthma is caused by inflammation in the airways of the lungs. This inflammation causes the muscles around the airways to contract thereby narrowing the airways and making it difficult for air to get in and out of the lungs. The inflammation also causes excess mucus to form in the airways leading to cough and further obstruction to airflow.

People with asthma have sensitive airways that becomes inflamed when they are exposed to triggers. Triggers are factors in the environment that can worsen or cause asthma symptoms. They include:

- Infections particularly common colds and chest infections.
- Exercise. Sport and exercise may worsen asthma symptoms in some children. If this is the case with your child, you should ensure he or she uses an inhaler before exercise to prevent symptoms from developing.
- Certain medicines such as aspirin, ibuprofen, diclofenac.
   Ask your doctor about the list of medicines to avoid in your child.
- Smoke from cigarette fumes.

  Both active and passive smoking can make asthma worse. Even when you smoke away from the presence of your child, smoke on your clothes, hair, etc, may still worsen asthma symptoms.
- Emotional factors such as stress, crying or laughing.
- Pollens, moulds, and allergens such as animal dander from pets and house dust mites.

# WHEN SHOULD YOUR CHILD SEE A DOCTOR?

It is important that your child sees a primary care doctor immediately if:

- If you're worried your child has asthma.
- Symptoms fail to improve, become more frequent or get worse after treatment.

# HOW IS ASTHMA DIAGNOSED?

To make a diagnosis of asthma, your doctor will take a medical history, perform a physical examination and order some lungfunction tests.

Asthma is also more likely to be diagnosed if your child's symptoms:

- Are worse at night or in the early morning.
- Are clearly triggered by exercise, allergies or infections, or have a seasonal pattern.
- Improve quickly with reliever medicine.

It is usually difficult to diagnose asthma in children under 5, as they may find breathing tests difficult. Your doctor will assess the symptoms and your explanation of your child's symptoms and may give your child asthma medicine to measure its effect. This is called a 'treatment trial'. Your doctor will monitor the effect of this medicine on your child and will use the results to help make a diagnosis.

# WHAT YOUR DOCTOR WILL DO

If your child's asthma is very serious, he or she will be given fast-acting medicines to help reduce the breathing problem.

Your child may need to be admitted to hospital until the symptoms resolve.

### **ASTHMA ACTION PLAN**

Upon discharge from hospital or after a review with your doctor, you will be given a personalised plan for dealing with your child's asthma.

An Asthma Action Plan is a list of instructions agreed by you with your doctor. It tells you what medicines your child should use at home each day, the warning symptoms to watch out for, how to adjust the dose of your child's inhalers, based on symptoms and other medicines to give, if the symptoms get worse.

# HOW IS ASTHMA TREATED?

There are different kinds of medicines for treating asthma.

These medicines can be inhalers, liquid or pills. Treatment will depend on your child's age and the seriousness of the asthma.

Inhalers: Most children with asthma are treated with inhalers. Inhalers deliver a small dose of medicine directly to the lungs. There are different inhaler devices, but your doctor will advise on which one is ideal for your child. Medicines given by inhalers can be classified into 3 groups:

- Reliever inhalers contain medicine which reduces asthma symptoms by widening the airways. Examples include Salbutamol and Terbutaline
- Preventer inhalers contain steroids that reduce airway inflammation and so prevent symptoms from developing. The effect of steroid takes 7-14 days to build up and up to six weeks for maximum benefit. Children with frequent symptoms or severe episodes might need to take this medicine each day. Examples include Fluticasone and Beclomethasone.
- Long-acting relievers may be given in addition to a preventer inhaler. They relieve symptoms by widening the airways for up to 12 hours at a time. Examples include Salmeterol and formoterol.

Steroid tablets: These are used for reducing inflammation in the airways. If your child has severe asthma, your doctor may prescribe a short course of steroid tablets such as prednisolone to reduce his or her symptoms.

Nebulisers. These are machines that change the liquid form of your reliever inhaler into an aerosol. They are useful in people who are very breathless. Nebulisers are typically used mainly in hospital for moderate or severe attacks of asthma.



## SYMPTOMS TO WATCH OUT FOR:

If your child, has any of the following symptoms, call an ambulance or go immediately to an Emergency Department or Paediatric Emergency Centre:

- SEVERE WHEEZING
- DIFFICULTY IN BREATHING
- WORSENING COUGH
- BLUISH-COLOURED LIPS
- CHEST TIGHTNESS OR PAIN WHILE BREATHING
- GRUNTING IN BABIES
- CONFUSION
- DIFFICULTY IN TALKING DUE TO BREATHLESSNESS

ALWAYS MAKE SURE YOUR
DOCTOR KNOWS ALL THE
MEDICINE YOUR CHILD IS
TAKING AND WHETHER OR NOT
HE OR SHE HAS ANY ALLERGIES

You can prevent or reduce the number of asthma attacks in your child by doing the following:

- Ensure your child's inhaler and spacer are always with him or her.
- If your child is allergic to pet dander, keep pets away from them.
- Avoid smoking around your child, in your home or in the car with them. This could trigger a potentially fatal asthma attack in your child.
- Ensure your child follows the action plan given by the doctor and takes his or her long-term control medicine as directed.
- Children who are overweight should reduce their weight to improve their asthma symptoms.
- Ensure your child is up to date with their vaccinations and gets vaccinated against influenza every year.

TOP-TIP: It is important that your child knows how to use their inhalers correctly. Failure to use inhaler correctly may cause symptoms to persist as the medicine from the inhaler does not get into the airways properly. See your doctor to learn the correct technique.

### **ADDITIONAL INFORMATION**

The Ministry of Public Health has published a National Clinical Guideline advising doctors on how to treat children with Asthma. The Guideline is available to the public from the MOPH website: <a href="https://www.moph.gov.ga">www.moph.gov.ga</a>

