

WHAT IS AN ALLERGY?



When someone has a reaction to things in the environment that are harmless for most other people, the person is having a “hypersensitivity” reaction. An allergy occurs when the person’s immune system is causing this reaction. A non-immune hypersensitivity reaction is sometimes called an “intolerance”.

WHAT IS AN ALLERGEN?

Allergens are things in the environment that are harmless for most people, but to which people with allergy react. Allergens are substances to which you are allergic. Examples of potential allergens are house dust mites, pets, pollen, insects, moulds, foods and some medicines. These differ from patient to patient. There is no “one size fits all” list of triggers for people with allergy!

The most common causes of allergic reactions in South Africa are:

- dust mites
- pollen
- foods such as eggs, peanuts, cow’s milk, seafood and soy
- cockroaches
- cats and other furry or hairy animals such as dogs, horses, rabbits and guinea
- insect stings
- moulds
- medicines



WHAT IS ATOPY?

The chances of a child developing allergies is higher if other family members have allergy or asthma. Atopy is the inherited tendency to develop allergic diseases. People with atopy are said to be “atopic.”

WHAT IS AN ALLERGY?



HOW DOES AN ALLERGIC REACTION OCCUR?

When atopic people are exposed to allergens they can develop an allergic reaction that releases chemicals into their blood that causes allergic symptoms.

The first step is when the allergen (e.g pollen) enters the person's body ... say through the nose. The pollen causes the body to make allergic antibodies, called IgE. The IgE antibodies then go around the blood and attaches itself to cells called mast cells. This person is now "sensitised" and much more likely to have an allergy attack.

The second step happens when the pollen enters the person's body for a second time. The pollen comes into contact, and connects with the pollen IgE antibodies attached to the surface of the mast cells. This makes the mast cell burst open and release

its chemicals into the blood. One of the chemicals is histamine. It also causes a longer-lasting build-up of allergy cells called "inflammation" that causes swelling of the parts of the body involved. Inflammation is very irritating and uncomfortable and can damage those parts of the body.

ALLERGIC REACTION

Where do allergies occur?

The most common parts of the body involved are the

- **Nose, eyes, sinuses or throat:** causing hay fever (allergic rhinitis/conjunctivitis)
- **Skin:** causing eczema, hives (urticaria) or swelling
- **Lungs:** causing asthma
- **Gut:** causing food allergy

What is the most severe type of allergy?

When a severe life-threatening allergy occurs it is called "anaphylaxis".

Most allergies are not life-threatening but can still cause major problems for the person having them. A small number of people have a very severe anaphylactic reaction. This type of reaction can spread very fast and be very dangerous. Peanuts, shellfish, insect stings and medicines are the commonest triggers for anaphylaxis.

If you know you have a very severe allergy, you should have an Anaphylaxis Action Plan filled in by your doctor specifically for you.

WHAT IS AN ALLERGY?



The action plan explains how to reduce your risk by preventing exposure to triggers, recognizing early signs and being prepared for emergency treatment at any time. (see anaphylaxis brochure)

ACTION PLAN

How do I know what I am allergic to?

The first step is for the doctor to hear all the details about a possible reaction. This will help them tell whether the reaction was an allergy or not, and if it was an allergy, what kind of reaction it was and whether it was mild or severe.

People with allergies can have tests done to see whether they have the allergy antibody in their blood. These can be blood tests (the ImmunoCAP) or skin prick tests. If these tests are negative, the commonest type of allergy is almost always ruled out.

A “positive” result supports, but does not prove an allergy, unless the values are very high. Other tests that can be done for some type of allergies include blood tests, patch tests and challenge tests.

HOW DO WE TREAT ALLERGIES?

Management of allergies relies on 4 main pillars.

The most important pillar is education. Knowing about your allergies and how to treat them properly is your best defence against reactions.

The second pillar is to avoid (or reduce exposure to) your allergen. Avoiding your allergen relies on finding out exactly what your own personal trigger allergen is and then taking steps to reduce your exposure. For example, people who are allergic to dust mites should try reduce the house dust in their homes.

The third pillar is medication to treat allergies. Medications used to treat allergies include:

- Antihistamines. These are taken by mouth and block the action of the chemical released from the allergy cells and reduce many of the uncomfortable symptoms. All antihistamines are effective, but some antihistamines can cause you to be very sleepy so are not recommended unless they are the only option available. “Non-sedating” antihistamines are safe to use for a very long time, and many are available from a pharmacy without a prescription.

WHAT IS AN ALLERGY?



- Nose sprays containing an anti-inflammatory “corticosteroid” is the most effective treatment for hayfever (allergic rhinitis). They should be used every day because they help with the underlying swelling and inflammation (See using your nasal spray).
- Medicated eye drops. There are many different types of eye drops for the eye symptoms. Ask your doctor for advice.
- Non-medicated treatments such as nasal washouts and salt-water sprays are used for treating allergic rhinitis and sinusitis.
- Pumps and inhalers. There are lots of different ways for medicine to get into the lungs. This includes pumps, dry powder inhalers, nebulisers and others. See asthma brochure for details.
- Other oral medications may be prescribed if the standard treatment is not achieving adequate control. Adrenaline is used for emergency treatment of life-threatening severe allergic reactions (anaphylaxis). Adrenaline should preferably be given using an automatic injection device.

The final pillar is changing the immune system with allergen immunotherapy (also known as desensitisation) or biologic therapy. Immunotherapy means actually taking the thing that you are allergic to (as a drop under your tongue or as an injection) regularly to try to trick your body into becoming resistant to the allergy. This treatment needs a lot of dedication because the treatment must be taken for at least 3 years. (See allergen immunotherapy brochure). Biologics are new drugs that target specific immune pathways in allergy. They are very effective but can be costly.

ALLERGIES CAN BE CONTROLLED

You do not have to put up with the symptoms of allergy.

Most allergies cannot be cured but can be very well controlled. If your symptoms are not going away, make sure that you are actually suffering from an allergy, that tests have been done for your trigger, that the trigger is being avoided (where possible) and that the right medications are being given with the best possible technique.