

# Allergy Awareness



#### What is an Allergy?

An allergy is the response of the body's immune system to normally harmless substances, such as pollens, foods, and house dust mite. Whilst in most people these substances (allergens) pose no problem, in allergic individuals their immune system identifies them as a' threat' and produces an inappropriate response.

Allergies are classified into IgE mediated and non-IgE mediated allergies. In IgE mediated allergies the immune system produces exaggerated amounts of a distinct class of antibodies known as IgE antibodies that are, specific for the particular offending allergens. This process is called sensitisation, and at this stage there are no physical symptoms of an allergy.

The immune system may also respond to allergens without the production of the IgE antibody. The mechanisms of these so called non-IgE mediated allergies are far less well understood and are likely to involve multiple cells that react inappropriately to the presence of an allergen. In these cases it can be much harder to determine whether the problem is allergic in nature and if so which particular allergen is causing the problem

Allergy is widespread and affects approximately one in four of the population in the UK at some time in their lives. Each year the numbers are increasing with as many as half of all those affected being children.



#### What is Causing Your Allergy?

Allergic reactions are caused by substances in the environment known as allergens. Almost anything can be an allergen for someone. Proteins are organic substances which contain hydrogen, oxygen and nitrogen, and form an important part of all living organisms. There are also found in food, along with fats, carbohydrates and other substances. However, only proteins can cause true allergic reactions.

The most common causes of allergic reactions are:

- •pollen from trees and grasses
- proteins secreted from house dust mites
- moulds
- •foods such as peanuts, tree nuts, milk and eggs
- •pets such as cats and dogs, and other furry or hairy animals such as horses, rabbits and guinea pigs
- •insects such as wasps and bees
- medicines



## What Happens When You Have an Allergic Reaction?

When a person who is allergic to a particular allergen comes into contact with it, an allergic reaction occurs.

Common symptoms associated with allergic conditions include:

- sneezing
- wheezing
- •sinus pain
- •runny nose
- •coughing
- •nettle rash / hives
- •swelling
- •itchy eyes, ears, lips throat and mouth
- shortness of breath
- •sickness, vomiting & diarrhoea
- •increase in nasal and airway secretions

There may be many reasons why you may experience any of the above symptoms, however, if you think that you have an allergy or an intolerance you should seek advice from your GP.



### Management of Allergies

Most allergic reactions are mild and do not cause life-threatening reactions, although they can be very troublesome for the person experiencing them.

A small number of people may experience a severe allergic reaction called anaphylaxis. It is a serious condition which requires immediate life-saving treatments and it is

important that your family, friends and work colleagues are aware of how to help you if you suffer an anaphylactic reaction.

Managing Your Allergy Involves Two Steps:

- 1. Reducing the risk of an allergic reaction by avoiding the allergen, wherever possible.
- 2. Medical treatments to reduce symptoms including medications and immunotherapy.

For more information about allergies and how to manage them for yourself and your family members, check out the fact sheets on the Employees area of our website and visit the Allergy UK website at <u>www.allergyuk.org</u>

For more information about anaphylaxis, how to recognize and assist someone suffering from an anaphylactic episode visit the Anaphylaxis Campaign website at <u>www.anaphylaxis.org.uk</u>