### Respiratory Allergies

Advice provided by allergyuk.org



Allergic reactions are caused by substances (allergens) to which allergic people have become sensitised (see What is causing your allergy?). Severe allergic reactions (anaphylaxis) tend to be due to food, insect stings or medicines. Nonetheless, many people can be allergic to allergens in the air and general environment (aeroallergens), including:

- pollen from trees and grasses
- house dust mite
- moulds
- pets such as cats and dogs

While these do not normally cause anaphylaxis, they can cause very troublesome symptoms that can seriously affect a person's health and quality of life.

The most common allergies due to aeroallergens are:

- allergic rhinitis (when seasonal this is called hay fever) which affects the nose and eyes
- asthma which affects the lung
- both rhinitis and asthma together
- more rarely eczema or urticaria (hives) which affect the skin

However, not all patients with these conditions will have an allergic cause for their symptoms. It is therefore important to discuss with your health professional whether allergy may be contributing to these conditions.

# > What are the symptoms caused by respiratory allergens?

Indoor allergens most commonly affect the nose, chest, skin and eyes:

- itchy, runny or congested nose, sneezing
- irritable airways, coughing, tight chest, wheezing, shortness of breath
- itching, watering, inflammation of both eyes
- itchy skin, rashes, wheals
- congested sinuses and headache
- disturbed sleep
- poor concentration
- symptoms worse indoors, in bed or in the early morning

Unlike hay fever which is caused by pollen, indoor allergens can cause symptoms throughout the year, although symptom severity may vary from day to day and is normally worse in winter. Symptoms may improve abroad in a hot or very cold but dry place.

What are the main causes of indoor allergies?

### House dust mites

House dust mites are present in all houses in the UK and are the most prevalent of all allergens, causing allergic reactions in 85% of



For more help, contact the Allergy UK helpline: 9am to 5pm, Monday to Friday

01322 619 898

### Key facts

Indoor allergens cause symptoms all year

> Allergy to mould spores is often overlooked

AllergyUK

If you have any comments about this factsheet, contact the Allergy UK Helpline - 01322 619 898.

Last review date: 07/2015

Next review: 07/2018

# Respiratory Allergies Advice provided by allergyuk org



asthmatic children. The warmth and humidity in modern UK homes make an ideal breeding environment for them. They cannot survive in extremely dry or cold conditions. Like most living creatures, they require warmth, food and water, and, as they cannot drink, they need to absorb moisture through their skin. Our beds provide the ideal environment, with a supply of our shed skin cells (their food source), water from our sweat and expired breath, and warmth. They also find skin cells and other proteins to eat in carpets, upholstered furniture, fabrics and furry toys. The allergen which triggers the immune system is mainly in the mite droppings, which are very dry and fragment into fine particles. These become airborne and are easily inhaled deep into our airways and lungs. The particles settle quickly into the depths of our pillows, mattresses, duvets, upholstery and carpets.

Animal allergens

Animal allergens are the next most frequent cause of allergic reactions. The allergen that triggers allergic responses to animals is found in their saliva, skin and urine. When the animal grooms, the allergen coats the skin, fur or feathers, and is spread by shed skin cells (dander) as well as by licking. The particle size of the allergen is extremely small and therefore easily airborne and breathed in, causing respiratory symptoms, itchy eyes, sneezing and skin irritation. Cat allergen, particularly, may be found on walls and ceilings many months, or even years, after the animal has left the house. It can also be found on the clothes and shoe soles of people with a cat, so is easily spread. Parrots and other birds are another common cause of allergic reactions however the actual feathers are rarely a cause of allergy, although the dust in feather pillows can be a cause of symptoms, as can the mites and moulds that grow in them.

Smaller domestic animals, such as guinea pigs and hamsters distribute allergen in the urine in their bedding. This allergen easily becomes airborne when the animal scurries around in its cage. It is not advisable to keep these pets in the bedrooms of allergic people. Any animal, insect or creature can be a cause of allergic reactions. Even fish are not always the solution, as there are many allergenic proteins in fish food granules, and moulds can flourish in the damp environment.

#### Mould spores

Allergy to mould spores is quite common and is often overlooked. Moulds are ubiquitous and present indoors for most of the year. Moulds also prefer damp, warmer environments so are commonly found in bathrooms, kitchens, on refrigerator door seals, shower curtains and particularly in houses that have obvious damp patches and black mould on window frames. Due to the high level of humidity, they are also found in our beds. The water reservoirs of dehumidifiers can be a breeding ground for moulds. Spores are sometimes hidden underneath wallpaper and commonly present in the soil of houseplants. Houses built in areas of underlying water, and in river valleys, are often damp.

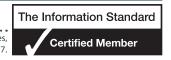
Symptoms from mould allergy may be better in hot, dry weather and become troublesome on damp, cloudy and misty days.



If you have any comments about this factsheet, contact the Allergy UK Helpline - 01322 619 898.

Last review date: 07/2015

Next review: 07/2018



## Respiratory Allergies

Advice provided by allergyuk.org



### > Identifying the causal allergen

Allergy sufferers are rarely offered allergen diagnosis or advice. Identifying the causal allergen can be an important step in taking control of your allergy, allowing you to reduce exposure to those substances that trigger your symptoms.

Speak to your GP about a referral to an allergy specialist or GP with a special interest in allergies, for diagnosis. Taking a detailed allergy history, examination and allergy tests will enable the specialist to correctly diagnose your condition and plan your future management.



If you have any comments about this factsheet, contact the Allergy UK Helpline - 01322 619 898.

Last review date: 07/2015

Next review: 07/2018

