

Your quick guide to: Pet/animal allergy

An introduction to pet/animal allergy

This Factsheet will provide information on pet allergy with the main focus on cat and dog allergy. It includes possible signs and symptoms of pet allergy, advice on what to do if you suspect one and provides practical advice on avoiding pet allergens.

Cat and dog allergy is common, especially in people who also have allergic asthma or hay fever.¹ It is also possible to be allergic to other types of animals including those with hair (fur), feathers or even scales, including:

- Rabbits
- Rodents such as guinea pigs, mice and hamsters
- Birds
- Horses
- Reptiles, such as iguanas⁵
- In addition allergy to pet bedding is a possibility

What causes pet allergy?

Pet allergy is caused by the protein in a pet's saliva, urine or dander (shed skin particles). Cats and dogs produce multiple proteins with the potential to cause a pet allergy. It is commonly thought that the hair causes symptoms, however it is the pet's dander that is mainly responsible. This is spread when pets shed their hair or feathers or groom themselves. Cat allergen is found on the skin and fur and is due to their sebaceous and salivary glands: when a cat licks itself the allergen is transferred onto the hair. Dog allergen is found mainly in the hair, dander and saliva. The main source of allergen for rodents, such as mice, is in their urine.

Allergic signs and symptoms are seen in people whose immune system mistakenly recognises pet dander, saliva, or urine, as a harmful substance (allergen) and, as a result, produces IgE antibodies as a defence

mechanism. On further exposure to that pet allergen, allergic signs and symptoms may be seen as an allergic reaction.

In addition to pet dander alone, pet hair itself can also act as a carrier of other airborne allergens: pollen, house dust mite and mould, which can cause allergic symptoms in individuals with hay fever, asthma, or eczema.²

Having a cat or dog allergy is also a risk factor for the development of allergic rhinitis or asthma.³

Exposure to pet dander in the environment

It is possible to develop an allergy to an animal or pet at any time, even if the pet has been owned for a considerable length of time or where a pet does not live in your home. Workplace exposure can occur for occupations such as vets, farmers, and laboratory scientists.

Pet allergens can also be found in schools and public places where they have been transferred on clothing and shoes from pet owners. Exposure to cat allergen in schools can exacerbate symptoms in asthmatic children with cat allergy.

Cat allergen is particularly persistent and can remain in homes long after a cat is no longer there. Pet dander can become airborne as hair is shed by grooming and collects on furniture and other surfaces.

Horse allergy is an important problem even in a young urban population. It causes a wide range of allergic symptoms from urticaria (rash) to respiratory problems. This type of allergen can also be carried on clothing with the dander being transferred.⁶

Hypo-allergenic pets

There is no such thing as a truly non-allergenic dog or cat.

Key facts:

Cat and dog

allergy is common in people who also have allergic asthma or hay fever

Pet allergy is caused by the **protein in a pet's saliva, urine or dander** (shed skin particles)

Pet hair can also act as a carrier of other airborne allergens: pollen, house dust mite and mould which can cause symptoms in people with hay fever, asthma, or eczema

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Signs and symptoms of a pet allergy

Allergic symptoms of a pet allergy can be mild, moderate or severe, depending upon the individual's sensitivity and level of exposure. They can start within minutes of exposure or can be delayed (late phase response) and include:

- Sneezing
- Runny nose
- Coughing
- Breathing difficulties
- Wheeze
- Watery, red, itchy eyes
- Skin rash/hives
- Eczema flare
- Anaphylaxis

Diagnosing a pet allergy

Identifying allergic triggers is an important part of managing an allergy.

If you suspect pet allergy it is important to discuss this with your GP or Health Professional, especially if you have other allergic conditions such as asthma, rhinitis or eczema.

Your GP/Health Professional may refer you for allergy testing to confirm or exclude a pet allergy.

This can be done by a blood test for specific IgE to the suspected animal and/or by skin prick testing. Referral to an allergy specialist may be needed.

Allergy testing before getting a pet for people without any symptoms of allergy is unhelpful. This is because subsequent exposure may still lead to allergy in a person who has previously not been allergic to pets

Practical advice on reducing animal dander exposure

Using a combination of the following pet allergen control measures may help to reduce symptoms and control existing allergic symptoms that are triggered by pet allergen.

Inside the home:

- Keep pets outside at all times where possible and always out of the bedroom
- Do not allow pets to sit or sleep on soft furnishings such as sofas, cushions, or beds within the home
- Wash pet bedding regularly on a hot wash
- Remove horse-riding clothes before entering the home. Bag and wash them and shower after riding
- Using an air purifier may help reduce indoor airborne allergens

Outside the home:

- Avoid contact with relevant animals
- If possible avoid visiting homes/areas where pets live
- If exposure is likely, try taking an antihistamine for a few days beforehand so that they are circulating in the bodies system, make sure that asthma is well controlled and use your prescribed preventative treatment for asthma symptoms
- Avoid touching the pet or being in the same room
- Wash hands after touching or being licked by a pet
- Washing and grooming pets regularly (by a non-allergic person) may help reduce allergen shedding

By cleaning:

The aim of these recommendations is to reduce the amount of allergen in the air and environment, including on surfaces, soft and hard furnishings and the floor. As emphasised above, the surest way to reduce the amount of allergen in the home environment is to keep pets (safely and comfortably) outside the house at all times.

- Damp dust as often as possible to help keep pet dander (as well as dust mites and other allergens) to a minimum
- Get someone other than the person with animal allergy to clean carpets using a vacuum (it must be one with a HEPA (high efficiency particulate air) filter⁴ and wash hard floor surfaces with hot, soapy water
- Wash soft furnishings like duvet covers, curtains, cushions, soft toys on a hot wash cycle
- Super-heated steam cleaning has the potential to disrupt allergens so that they no longer cause symptoms
- Clean animal cages outside and replace any bedding or litter that has urine on it.

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Pet allergy management and treatment

1. Avoid the pet or animal where possible
2. If this is impossible or insufficient, then medication(s) to help alleviate the symptoms can be used after advice from a healthcare professional (GP or pharmacist). In general these must be taken regularly to be fully effective. Medicines include:
 - Non-sedating antihistamines
 - Antihistamine and steroid nasal sprays
 - Eye drops
 - Asthma inhalers
 - Allergen barrier balm
3. In moderate to severe animal induced allergy, allergen-specific immunotherapy may be appropriate. This requires initial GP assessment then referral to allergy/immunology specialist. It is used in exceptional circumstances only where there is a clear impact on quality of life ie a vet that has developed an allergy to dogs.

Clinical contributions:

Allergy UK Health Advisory Board

Dr Glenis Scadding, Honorary Consultant Allergist/Rhinologist

Professor Christopher Corrigan

Allergy UK Clinical Team

Amena Warner Head of Clinical services

Additional resources

Our webpage on allergies [At Home](#) include information and advice on conditions related to pet/animal allergy, such as FREE Factsheets on:

- Cat Allergy
- Indoor Air Quality
- House Dust Mite

Visit our Allergy House for tips and advice on managing allergens around the home:

www.allergyhouse.co.uk

References

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