

Your quick guide to: Cat Allergy

What is cat allergy?

Cat allergy is an abnormal response of the human body's immune system to allergens produced in the salivary glands (mouth) and sebaceous glands in the skin of a cat. The human body produces specific immunoglobulin to the cat allergen (called specific IgE). The major allergen causing cat allergy is called Fel d 1 a sticky protein that with grooming gets on a cats fur and with shedding gets dispersed into the environment.

This allergen is then breathed in by the people in the house and the susceptible people who make the IgE to cat allergen (mainly those who have a family history of eczema, asthma, hay fever or other allergy, although it can be those who do not) become sensitised to the cat allergen and may start to develop symptoms. These symptoms caused by the cat allergen are known as cat allergy. The level of how severe this is depends on the individual and their allergen tolerance threshold levels.

Is cat allergy common?

Allergies to cats are the most common animal-origin allergy and affect approximately one in five adults worldwide. It is estimated that approximately 25% of people in the UK own a cat.

In modern life we are spending almost 90% of our time indoors and pet allergy is the second most common cause of allergy in the home (the first being house dust mite allergy). As many as 35% of Brits who own a pet suffer some form of allergic reaction to the animal. Allergy to cats is twice as common as allergy to dogs and it is possible to be allergic to both. Allergy to cats is a major risk factor for the development of asthma and rhinitis. The Cats Protection charity reported that in 2019 1,320 cats were relinquished because of owner allergy.

What are the symptoms of cat allergy?

Allergic symptoms of cat 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
- Itchy nose
- Runny nose
- Blocked nose
- Itchy eyes
- Red eyes
- Post nasal drip (the feeling of mucous dripping down the back of the nose/throat)
- Cough
- Bronchospasm (tight chest/asthma/wheezy chest/difficulty breathing: only in asthmatics)

You may not suffer from all of these symptoms at all times and you may not even realise that the cat can cause these symptoms.

Tell me about the major cat allergen Fel d 1 and why it is important?

All cats produce the cat allergen Fel d 1, the major component in cat allergy, regardless of breed, age, hair length, sex or body weight, but at differing levels. This means that not all cats are equally allergenic. However, there are no cats that are hypoallergenic (don't cause allergy) even though there have been attempts to breed these. Intact male cats produce more Fel d 1 than females, while neutered males produce similar levels to females.

It is often thought that cat hair itself is the allergen, but it's what is on the hair, the Fel d 1 protein produced in the cat's mouth and skin that is the main allergen. The cat spreads this through its hair during the grooming process as it licks itself and it then gets into the indoor environment and with shedding it then gets onto the furniture and walls.

Fel d 1 is very sticky, light in weight and easily becomes airborne. It has a very small protein structure that can easily get deep down into the airways of the lungs to cause problems, that can exacerbate asthma in sensitised individuals. As it is so sticky, it attaches itself to hair and clothing and gets in places you would not suspect, even behind radiators and skirting boards. It can last for many months before breaking down, which makes it a real

Key facts:

There is **no such thing** as a truly **hypo-allergenic** or non-allergic cat.

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Allergy testing before getting a cat for people without any symptoms of allergy is unhelpful. This is because subsequent **exposure may still lead to allergy.**

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Good ventilation in the home and/or using an **air purifier** may help reduce indoor

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Cat hair itself can also act as a carrier of other airborne allergens: **pollen, house dust mite** and **mould**

Allergy UK Helpline

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nuisance allergen to get rid of. It is often transported out of the home on clothes.

Thresholds

Cat 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.

Some people have multiple allergies and it is not uncommon for someone to be allergic to other animals, house dust mite, pollens etc. This can make the immune system work very hard and may push someone above a threshold of reactivity. In people with multiple allergies, reducing the total "allergen load" (the amount of allergens to which the person with allergy is exposed) if possible, is the best approach to relieving symptoms.

Cat dander alone can also be an allergic trigger in these allergic conditions. Having a cat allergy is also a risk factor for the development of allergic rhinitis or asthma.

Pet allergens can 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 for at least six months and probably longer after a cat is no longer there.

Managing cat allergy

- Wash your hands after touching or being licked by a cat.
- Brush the cat outside, if possible, and away from soft furnishings. Do not allow pets to sit or sleep on soft furnishings such as sofas, cushions, or beds.
- Avoid touching a cat.
- Wash cat bedding regularly on a hot wash
- Grooming pets regularly (by a non-allergic person) may help reduce allergen.
- Shedding.
- Good ventilation in the home and/or Using an air purifier may help reduce indoor airborne allergens. (Look for

ones which have been proven to remove cat hair/dander. Allergy UK's website has information on these).

- Vacuum regularly - using a vacuum cleaner with a Hepa filter.

Check to see if friends and family have a cat before visiting. However, if exposure is likely, be prepared and try taking antihistamine every day for a week beforehand, making sure your asthma/allergic rhinitis is controlled using your prescribed preventative treatment and always have your rescue inhaler with you (in line with however you have been advised by your doctor/asthma nurse to deal with your asthma).

Keeping your cat

If you are diagnosed with a cat allergy and choose not to relinquish your cat or use avoidance measures, a feline friendly approach to managing Fel d 1 is through a specific cat food that neutralises the Fel d 1 and reduces the active allergen load in both saliva and dander.

This food does not change the physiological make-up of the cat. It will still produce the Fel d 1 protein but the Fel d 1 is neutralised and therefore is not active. This food does not cure cat allergy and the cat needs to be continuously fed with it to be effective. Once started, it can take up to three weeks for symptoms to be improved and owners still need to take anti allergy medications if affected by any allergy symptoms, especially initially as there will still be cat dander with active cat allergen around in the home. Remember that this is only effective for the cat that is having this specific food and it does not mean that you won't react to other people's cats.

If you have asthma (provoked by cat allergy or any other cause) and have an inhaler(s) to manage this, you must seek medical advice before thinking about reducing or stopping this medication. It may be that the inhaler is reducing inflammation in the airways of the lungs and keeping the asthma under control, so it may be dangerous to just stop using it.

It may be best to use a combination of different approaches to manage your cat allergy. This approach can be your 'toolkit'

of ways you can manage your allergy and retain your cat. The information above lists some of the approaches to consider. The most important thing is that your symptoms are under control or, better still, that you do not experience any symptoms at all.

Treatments for cat allergy

In moderate to severe cat-induced allergy, allergen-specific immunotherapy may be appropriate. This requires an initial GP assessment. Referral to an allergy specialist may be needed, especially if you have a job which entails coming into frequent contact with cats from occupational exposure i.e. vets/nurses/ doctors/police/social workers/care workers/cleaners or requires you to enter people's homes where cats are present. These occupations can be criteria for treatment with immunotherapy to cat allergen, which would need to be discussed with an allergist/ immunologist. It is an effective treatment for reducing symptoms, but it is not a cure.

The contents of this Factsheet was written by a clinical expert and independently peer reviewed. It was made possible by the support of Nestlé Purina PetCare

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