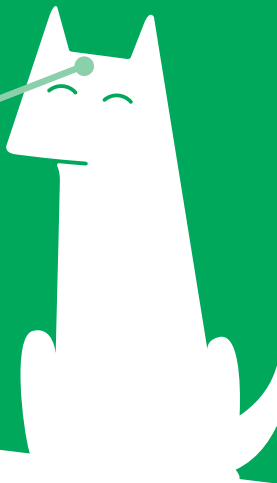


Itchy cats and skin disorders



CATS PROTECTION
VETERINARY GUIDE 4



One of the largest organs in the body, the cat's skin has a number of functions. It provides a protective barrier, helping to maintain body temperature and produces a range of substances, including glandular secretions, hair and claws. Like many mammals, cats are susceptible to a range of skin disorders, which may affect areas with specialised skin, such as the outer ear canal, the pads and the claws, as well as the skin covering the rest of the body. Skin disorders are a common source of discomfort to cats and a concern to owners. This guide outlines some of the more common skin problems in cats.

Causes of skin disease

There can be many causes of feline skin disease and sometimes cats may be affected by more than one of these problems.

Infectious causes:

- parasites – such as fleas, ear mites or harvest mites. Flea infestations and allergy to flea bites are a very common cause of skin disease in cats. For further information, see *Veterinary Guide: Fleas and other parasites*.
- fungal infections – ringworm is the most common fungal cause of skin disease in cats – and is discussed in more detail later in the guide – but some yeasts can also cause skin disease
- bacteria can be a primary cause of skin disease. However, bacteria are also frequently present as secondary invaders in skin disease, causing infection when the skin is damaged for other reasons
- viruses – some viral infections can cause skin disease, such as feline cowpox virus, which is transmitted to cats through contact with infected rodents

Non-infectious causes:

- defects in the formation of normal skin can result in conditions such as feline acne or seborrhoea
- disorders of the immune system, including:
 - allergies – a flea allergy is a very common cause of skin disease in cats. Cats can also become allergic or intolerant of substances in their diet, including foods they have previously eaten without problem
 - Hypereosinophilic syndrome, also known as feline eosinophilic granuloma complex. This occurs when excessive numbers of a type of white blood cell, called eosinophils, are activated – which can lead to itchiness, skin damage and self-inflicted trauma, as well as ulcers on the lips
- sun damage – just like people, too much sun can be a problem to feline skin, particularly for white cats which have very sensitive skin. White ears, noses and eyelids are particularly susceptible to sun damage
- cancers – a variety of growths and tumours are seen in cats, some of which are more serious than others. Some examples include:
 - squamous cell carcinoma – more common in cats which have suffered sun damage
 - injection-site sarcomas – associated with inflammation and scarring at the site of a previous injection, just under the skin
- chemicals – contact dermatitis may be seen when chemicals a cat is sensitive to come into contact with the skin
- drug reactions – cats can occasionally react adversely to medications leading to skin damage
- other feline disorders may cause skin signs:
 - obesity, arthritis or dental disease can make it difficult for the cat to groom itself properly. This leads to poor coat condition, hair matting and scurf or dandruff

- stress – may cause cats to trigger a problem through over-grooming. However, stress is rarely a single cause of skin disease but frequently aggravates other skin problems
- other medical conditions such as hyperthyroidism, diabetes mellitus, liver disease or infection with FIV or FeLV can also lead to skin signs
- pain elsewhere in the body – for example, cats with feline lower urinary tract disease frequently over-groom the skin on their abdomen, leading to baldness of their tummies. Cats with disorders of their anal glands may lick or chew around their tails.
- trauma
 - cat bites, fight wounds and involvement in road accidents can all cause skin damage
 - poorly fitting collars can also cause nasty skin wounds if a cat's front leg becomes trapped inside the collar. This is one of the reasons why Cats Protection recommends microchipping as the best way for identification of your pet – if you do choose to fit collars, ensure they fit well and have a quick-release mechanism
 - foreign bodies can also cause skin damage

Signs of skin disease

A variety of signs may be seen, dependent on the condition and cause. Unfortunately, the pattern of signs seen may not be specific to any particular disorder. A cat may show one or more of the following signs which may be in one focal place – such as the ears, face, the back or tail base – or more generalised over the body, and signs may be symmetrical or asymmetrical. Signs include:

- skin wounds which may also be moist, oozing or discharging
- irritation of the ears – leading to shaking of the head or scratching at the ears
- itchiness which leads to scratching and biting
- redness of the skin
- spots or scabs
- crusting and dandruff
- ulcers
- lumps
- baldness
- colour changes
- matting of the hair
- excessive grooming activity
- possible vomiting of hair balls or constipation – due to over-grooming
- disorders affecting the feet – such as the claws, nail beds or pads – which may lead to limping

Many skin disorders can cause cats to feel itchy, but they can be very secretive about this – often only scratching and biting themselves when their owners are absent. Because they have such rough tongues, cats can actually break and damage their hairs when grooming themselves excessively,

as well as traumatising the skin. Often your vet needs to examine hair under a microscope to tell whether your cat is traumatising itself.

Diagnosis of skin diseases

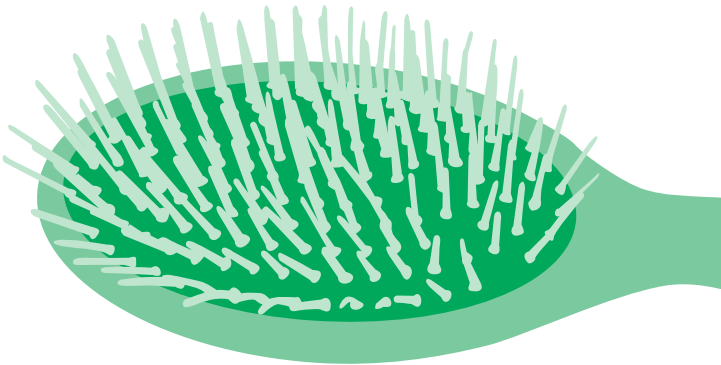
Your vet will need to piece together a number of clues when considering the cause of your cat's skin problems. Knowledge of the history – including any changes to your cat's lifestyle and the signs you have seen – is helpful. Your vet will examine the cat and assess the pattern of these signs developing. This can help the vet to select appropriate tests to further help pinpoint the possible causes. Often the signs seen are not specific to a disease. For example 'miliary dermatitis' refers to multiple small, scabby lesions over the body but has no single cause – it may be triggered by a variety of factors, including fleas or other parasites, bacterial infection, feline cowpox virus, ringworm or an allergy.

Further diagnostic tests may include:

- looking at coat and hair brushings
- examination of samples under the microscope
- culture of samples for fungi and bacteria
- analysis of scabs and/or skin biopsies
- allergy tests – by blood testing or performing direct skin allergy tests

Your vet may assess your cat's response to certain treatments. In some cases they may only be able to make a diagnosis by testing for – and excluding – various other diseases which cause the same symptoms.

- the response to suitable parasite treatment and other medications may be assessed
- your vet may recommend an exclusion diet trial – where the cat is only given specific foods, as advised by the vet, to find out if there is a food allergy causing problems. Each diet often needs to be fed for at least eight weeks to see if there is an improvement – so it is important to ensure the diet is balanced. Sometimes successive exclusion diet trials are needed and if the issue is resolved, the original diet will often be resumed to see if the problem flares up again – identifying the trigger
- other tests, such as blood tests, may be needed to assess the cat's overall health. Different diseases can lead to skin problems, such as hyperthyroidism or diabetes mellitus
- in some cases, your vet may recommend referral to specialist veterinary dermatologists



Treatment of skin disease

The treatment needed depends on the cause identified.

Your cat may need a combination of treatments to manage the underlying cause together with symptomatic treatment to relieve any itchiness, discomfort or secondary infections.

Some skin conditions cannot be cured, but may be controlled through lifelong treatment. Your vet may recommend one or more of the following treatments:

- parasite control
- anti-inflammatory medications
- anti-histamine medications
- omega 3 fatty acid dietary supplements
- topical treatments, such as washes, creams, ear cleaner and/or drops
- antibiotic treatment
- antifungal treatment
- exclusion diets
- clipping of the hair
- surgery may be required for some disorders such as severe longstanding ear infections, or to treat some cancers
- treatment of any primary causes such as hyperthyroidism or diabetes mellitus
- Elizabethan or veterinary inflatable/cushion collar to prevent self-trauma while other treatments are given time to work
- stress management is helpful when stress is thought to be a factor in the disease
- multiple treatments may be needed if more than one disorder coexists – which is not uncommon with some of the allergic conditions

Prevention of skin disease

Some skin disorders cannot be prevented but can be managed with appropriate care and treatments. However, the following options may be helpful for some owners:

- maintain good flea control for all pets in your home. Get advice from your vet, as it is much easier to prevent a problem than to deal with an infestation, which can take a few months to get under control. See Cats Protection's *Veterinary Guide: Fleas and other parasites*
- offer a good, balanced diet and worm your cat regularly
- have a cat-friendly home to minimise stress – see Cat's Protection's *Essential Guide: Caring for your cat*
- Have your cat neutered – this can reduce any involvement in cat fights as well as bringing other health benefits. See Cats Protection's *Essential Guide: Neutering – family planning for felines*
- groom your cat regularly to remove dead hairs and prevent matting
- avoid exposure of cats to allergens when it is known they are hypersensitive to them – eg avoid giving them diets you know they react to
- seek veterinary advice before using washes or creams. Cats don't usually like being bathed and shampoos, creams and ear cleaners or drops can upset the skin's natural oil balance and cause or exacerbate skin disease
- keep white cats and those with white ears, noses and eyelids out of the sun between 11am and 4pm during the summer months

Ringworm

Ringworm is the common name given to an infection of the surface of the skin, hair or nails with a type of fungus called a dermatophyte – so it is not caused by a worm. There are different types of dermatophyte and some are more common in cats than others. Ringworm can affect other animals and people too, so care should be taken when handling any suspected cases.

Which cats are most susceptible to ringworm infection?

Ringworm can affect any cat, but it is most often seen in:

- young or very old cats
- ill, debilitated cats, or those with an impaired immune system
- long-haired cats

How do cats catch ringworm?

The infective part of the fungus, called a spore, is shed on the hairs of affected animals and people and can survive, blown by the wind, for many months or even years. Cats become infected through exposure to these spores, either through contact with an infected animal or exposure to a contaminated object or environment. Cats with poor immune systems, sores on the skin, or skin parasites such as fleas, are more susceptible to infection.

Do all cats that come into contact with ringworm spores become infected?

No, some cats seem more resistant to infection, but they can still carry the spores and infect other animals and people.

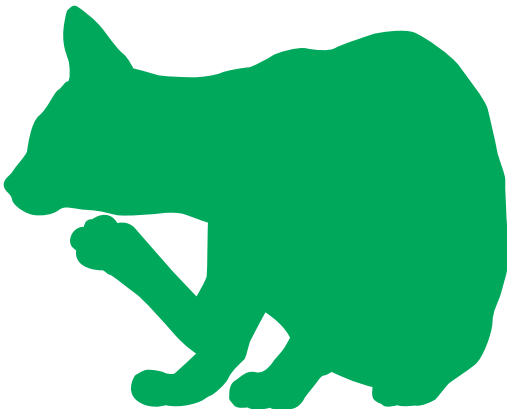
What are the signs of ringworm?

Ringworm is most commonly seen on the face, ears and forelimbs, but will be present throughout the coat. The fungus invades the hair shafts and surface layer of the skin leading to:

- itching
- hair loss
- crusting and scaling

More unusual signs include scabs all over the body or sore, ulcerated areas of skin. Ringworm can sometimes mimic other skin diseases.

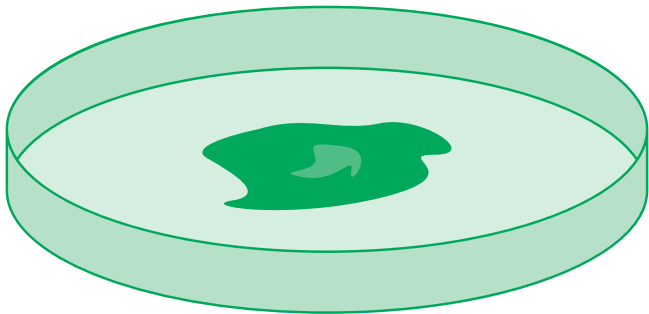
In affected people, the skin often shows small thickened red patches or patches of hair loss with scaling which may be itchy. People are more likely to be infected if they are children, very old or immunosuppressed, eg with AIDS or receiving chemotherapy. Consult your doctor if you develop skin lesions.



How is ringworm in cats diagnosed?

There are various ways a cat can be tested for ringworm including:

- Woods lamp – a special-frequency, ultraviolet light is carefully shone at affected hairs to look for apple-green fluorescence. This does not give a definite result because not all types of ringworm fluoresce and sometimes skin debris or other infection can fluoresce.
- microscope examination of hairs – sometimes fungal spores can be seen attached to the hairs
- culture – brushings of the coat or crusts are cultured in a lab and if present, ringworm will grow – this may take up to 14 days
- skin biopsy – occasionally a section of skin is needed for diagnosis when ringworm is suspected as a problem secondary to another disease



How is ringworm in cats treated?

Ringworm will spontaneously resolve in most healthy cats over a period of weeks or months. Treatment is highly recommended to speed up this process and limit the risk of it spreading to humans and other animals. All cats in contact with ringworm-positive cats should also be treated as they are likely to be carrying the fungal spores without showing signs. They can re-infect themselves or other individuals. Treatment may include:

- antifungal medicine given by mouth. Treated cats often look better before they are completely free of the fungus – which can take several weeks. It is therefore recommended to have three consecutive negative culture results from hair brushings taken weekly before treatment is stopped
- topical treatment on the coat eg shampoos or sprays, may be needed, in addition to treatment by mouth
- clipping of long-haired cats to help remove spores
- elimination of other problems affecting the skin, such as fleas or other skin diseases
- keeping affected cats in one room to reduce environmental build-up
- decontaminating the environment with thorough vacuuming and regular disinfection to remove spores. This is particularly important in multi-animal environments. Discard collars, brushes and fabric toys and use disposable bedding. Clean non-porous surfaces with a 1:10 bleach solution – after testing an area first – and leave for at least 10 minutes before rinsing. Allow the surfaces to dry before letting the cat have access to them and use disposable cloths

- avoiding grooming affected cats until they are better – if possible – to reduce the risk of spreading spores through the coat or environment
- minimising direct contact with infected cats – wear rubber gloves and protective clothing to reduce the risk of human infection

Will my cat get better?

The majority of affected cats respond well to treatment and are cured in several weeks. Ringworm affecting a cat in a single-cat household is usually easily contained and managed.

What causes treatment failure in some cats?

It is extremely rare for ringworm not to resolve. If initial treatment does fail it could be due to:

- re-infection occurring when a cat is exposed to a contaminated environment or other cats carrying the spores
- the cat being infected with a type of ringworm that is resistant to antifungal drugs
- the cat suffering with concurrent illness eg Feline Immunodeficiency Virus (FIV), Feline Leukaemia Virus (FeLV) or another disease that suppresses their immune system and makes recovery more difficult. See Cats Protection's *Veterinary Guide: Feline Immunodeficiency Virus (FIV) and Feline Leukaemia Virus (FeLV)*
- the cat being treated for another illness with medication that suppresses their immune system and makes recovery more difficult

Can I protect my cat against ringworm?

Unfortunately, there is no vaccine to protect cats against ringworm.

Learn more about your cat online!

Take a look at our free interactive tool to help you understand cats' origins and their behaviour within our homes. <http://learnonline.cats.org.uk/content/ufo>

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