A parasite is an organism that lives and feeds on another to the detriment of the host. Both outdoor and indoor cats are at risk from infection.

**How do I tell if my cat has parasites?**
You should not assume that a cat showing no signs of infection is parasite free. In many cases, infections only become apparent when the number of parasites is too great for the cat to sustain comfortably.

**How do I treat parasites?**
Veterinary products are highly effective and safe, but it is essential to follow product instructions carefully. Some products are potentially toxic to both cats and other animals (especially fish) and all products must be allowed to dry before handling the animal. Cats have no immunity to parasites so re-infection is possible if treatment is irregular.
External parasites

Fleas

Fleas are the most common skin parasite of the cat. They are not fussy about which species of animal they live on. The most common flea found on cats and dogs is the cat flea.

Flea lifecycle

Adult fleas live permanently on their animal host and the female flea produces eggs at a rate of 50 a day. The eggs fall off the cat and hatch into larvae in 2–16 days. They then change into an immobile pupae in a cocoon. An adult flea develops in the cocoon and awaits signals suggesting the presence of a host, such as heat, carbon dioxide and vibrations. The flea can emerge and attach to the host in seconds. If no host is present, the flea can wait in the cocoon for up to two years. In the right conditions, eg warm and humid, the whole cycle can be completed quickly. Centrally heated homes with fitted carpets provide ideal conditions for fleas to develop all year round.
What are the signs of fleas?
An itchy cat or insect bites on human ankles may be the only signs of infestation. Unless cats are allergic to flea bites, they often show remarkably little response.

Fleas move around at great speed, making them difficult to spot. The best way to check is to place your cat on a sheet of white paper and comb him meticulously. A fine-toothed flea comb may trap one or two fleas, but black specks of ‘flea dirt’ – flea droppings consisting of undigested cat blood – can usually be found on the paper. When placed on damp cotton wool, flea dirt slowly dissolves, producing bloody streaks. Flea dirt or white eggs may also be found where the cat sleeps.

Flea allergies
Many cats are allergic to flea saliva, so bites make them very itchy. They may develop:

• inflamed skin
• hair loss (due to over grooming)
• thickened, oozing or crusty skin
• lots of small scabs (especially at base of the tail or around the neck)

The condition should be treated by a vet but treatment will only be effective if the cat’s environment is totally cleared of both fleas and their eggs – just one flea can cause a problem in allergic individuals.
How can fleas be treated?

For effective control, adult fleas on the cat must be killed and re-infestation from the environment prevented. Products intended for dogs should not be used on cats as they can be toxic. Your vet should be made aware of any flea treatments that have been used before they prescribe other flea-control products or medication, or when they are contemplating sedation or anaesthesia of your cat.

The new, safe and most effective flea-control products are only available from veterinary surgeries where advice on their use is provided.

Killing adult fleas

A wide range of products are available to kill adult fleas on the cat including collars, shampoos, sprays, foams, powders, injections, tablets and spot-on products (applied directly to the skin in between the shoulder blades). Finding the right product for your cat is important because a product that is difficult to apply is unlikely to succeed. Shampoos and powders have a very short duration of action and there is no residual effect. Collars are usually not very effective. Your vet will be able to advise you on the best type for your cat.

Removing fleas in the environment

If fleas are present in your home you should use a product (usually a spray) designed specifically for environmental use. These should never be used directly on a cat. Anything that is heavily infested, such as pet bedding, should be disposed of. Frequent vacuuming can help to reduce, but not eliminate, environmental infestation.
**How can fleas be prevented?**

Re-infestation can be prevented by using a product that kills adult fleas on the cat that may have been picked up from outside. Products that provide environmental control by interrupting the flea’s life cycle are also available. Treatment must be regular.

Remember, all cats in the household must be treated, as well as any dogs or house rabbits (using the appropriate products for their species).

**Why control fleas?**

While many cats live with fleas and show minimal signs of infestation, control is advisable because:

- the cat flea carries the larval stage of a tapeworm and cats can ingest these while grooming
- adult fleas feed on cats’ blood – this can cause life-threatening anaemia (blood loss) in young kittens
- fleas can transmit other infectious agents
- some cats develop an allergy to flea bites
- cat fleas can cause itchy bites on humans
Ticks

Ticks are most commonly found on moorland or in long grasses or woodland. Cats generally seem unperturbed by ticks but they can transmit disease.

Tick lifecycle

When a warm-blooded animal passes by, the tick jumps from the ground, climbs up the legs and attaches itself firmly to the animal with its biting mouthparts. The unfed tick is about the size of a pinhead. It remains on the host for about five days, gorging on blood. The tick can grow up to half an inch in length and will look greyish-blue or brownish-black in colour.

What are the signs of ticks?

The first sign is a small dot attached to your cat’s skin. As a tick feeds it gets larger and can sometimes be mistaken for a wart or lump.

How can ticks be treated?

Ticks should be removed by your vet. An attempt to remove ticks without veterinary advice often means the mouthparts are left behind which can lead to an infection or abscess. Never try to burn off a tick.

How can ticks be prevented?

Products to prevent tick infestation come in various forms and vets will be able to recommend the most appropriate type.
**Why control ticks?**
If untreated, ticks can cause infection, sore patches and abscesses.

Ticks can also carry Lyme disease. Although the disease is more prevalent in the USA, it can affect both humans and animals, so it is a good idea to have a tick removed as soon as possible.

If you take your cat abroad, tick control is particularly important as there are more tick-borne diseases in mainland Europe and other countries.

**Lice**
An infestation of lice is uncommon. Unlike fleas, lice are very host specific so those found on cats will not affect humans or any other animal. They can be passed from cat to cat by direct contact.

**What are the signs of lice?**
Translucent eggs cemented to the cat's hairs are usually noticed first. Cats may also be itchy, have broken hairs from scratching, or have some crusty patches on the skin.

**How can lice be treated and prevented?**
Some flea-control products will also kill lice but the major difference in lice control is that the lice eggs remain on the cat and are not killed straight away. A vet can prescribe a suitable product to ensure that hatching lice are killed as well as the adults. It is advisable to dispose of your cat's bedding but there is no need to treat the whole house.

**Why control lice?**
Scratching can result in injury to the skin and, in severe cases, infection.
Mites

Mites are minute parasites that are only just visible to the naked eye. They cause a range of skin conditions and are highly contagious, being passed from cat to cat by direct contact or via infected bedding or grooming equipment. The most common types of mites found on cats are:

Ear mites

Ear mites live deep inside the cat’s ear. They cause intense irritation to the ear canal, causing excessive amounts of dark wax. Cats suffering with ear mites may appear unconcerned or they may constantly shake their heads and scratch.

What are the signs of ear mites?
The wax can be easily seen inside the ear. To see the mites themselves, your vet will need to use an auroscope. Untreated ear mites can lead to secondary infections, swelling or chronic thickening of the ear.

How can ear mites be treated?
Products available from the vet to kill ear mites include ear drops and spot-on treatments. If the infestation is heavy, the vet may use an ear cleaner to loosen and soften the wax first. The treatment may need to be continued over several weeks as eggs hatch, releasing a new generation of mites to treat.
Harvest mites

Harvest mites, harvest bugs or bracken bugs are the names given to the larvae of the mite *Trombicula autumnalis*, a seasonal parasite. They feed on tissue fluid and may cause considerable discomfort to both humans and cats in certain areas of the country during late summer and autumn.

**What are the signs of harvest mites?**

In cats the irritation can cause reddening of the skin and crusted areas. Most often this affects areas where there is only a thin covering of hair, eg the ears and face.

**How can harvest mites be treated?**

Some flea control products prescribed by the vet can prevent and cure infestation. Confining the cat indoors during the mites’ active period or letting the cat out in the early morning or during dull or wet days when the mite is less active should help. Hypersensitive cats may require steroid treatment and an Elizabethan collar may be used to prevent self-inflicted injury to the itchy parts.
Mange mites

Mange mites are quite uncommon in cats. They generally cause itching and scabs and can only be diagnosed by microscopic examination of skin scrapings. Mange mites can only be treated by a vet.

Why control mites?
Scratching can result in injury to the skin and, in severe cases, infection.

Maggots

Cats occasionally become infected by maggots – when blow flies (otherwise known as blue-bottle flies) lay eggs in an open wound or soiled skin and hair. They are usually only found on incontinent animals or cats that have been injured and left untreated. Healthy cats are rarely affected, but any open wound or soiled fur should be cleaned daily.

Fly eggs hatch after 24-48 hours and develop into maggots. Maggots need food to turn into flies, so begin to eat the animal’s flesh. They start with diseased or dead tissue, but quickly progress to eating healthy areas.

Left untreated, cats lose considerable amounts of fluid and may suffer from toxic shock. Death can follow within a few days so any maggot infection should be treated by a vet immediately.
Internal parasites
The two groups of internal parasites most commonly found in cats are tapeworms and roundworms, both of which live in the intestinal tract (the gut).

Tapeworms
Tapeworms are flat, tape-like worms that are common in the bowel of most mammals, the cat included.

What are the signs of tapeworms?
Tapeworms consist of a scolex (head) which attaches itself to the wall of the gut by either suckers or hooks, and a series of segments containing eggs. These segments break off and are passed out with the faeces. They are sometimes visible in the faeces, around the cat’s anus or in bedding. They resemble small grains of rice and may move.
**Tapeworm lifecycle**

In the environment, the segments disintegrate, releasing eggs. The eggs themselves are not infectious to cats. They have to pass through a host to be able to complete their life cycle. The host varies for different types of tapeworm, but a cat will become infected when he ingests an infected host such as a flea or rodent.

As one type of tapeworm is transmitted by fleas, it should be assumed that a cat infected with fleas also has tapeworm and vice versa.

The worms live by absorbing pre-digested food in the bowel of the cat. They are rarely harmful except where heavy infestations cause obstruction of the gut or weight loss.
**Roundworms**

Roundworms are the most common intestinal parasite in cats. Adult roundworms look like a white earthworm. They can grow up to 10cm in length.

**Roundworm lifecycle**

Adult worms live in the cat’s intestine and feed on digested food. Their eggs are passed in the faeces; the entire worm is not usually passed. The eggs are not infectious to other cats when first passed but become infectious after a few days when they develop into larvae. They may remain infectious for years until eaten.

Roundworms can be passed through the milk of the queen (mother) to her kittens. This is a very common route of infection so we can assume that most kittens born to a mother with roundworm will be infected.

**How can worms be treated and prevented?**

Vets provide the only effective treatment for worms in cats. Some worming medications are effective against both roundworm and tapeworm, while others are only effective against one or the other.

**Kittens**

Information on worming kittens is currently limited. Most guidance is based on studies carried out in puppies. However, puppies can become infected while in the womb, whereas kittens only become infected via the mother’s milk.

Cats Protection recommends that if there is concern that a mother cat has worms which may have been passed to her kittens, they should be treated with a suitable product from four weeks of age. Veterinary guidance should be sought prior to treatment.
From six weeks of age, healthy kittens will require monthly treatment against roundworms. From six months of age, they will generally require treatment against roundworms and tapeworms every three months.

Kittens should be weighed prior to every worming treatment to ensure that the correct dosage is administered.

Adult cats
Adult cats need to be treated with a drug active against both roundworms and tapeworms every two to six months. The precise frequency of treatment recommended will vary slightly depending on the individual cat, eg whether the cat hunts and is regularly treated for fleas.

Veterinary guidance should be sought before deciding what to use and how often.

**Why control worms?**
Heavy burdens of worms in cats can cause weight loss, vomiting, diarrhoea and/or failure to thrive, particularly in young kittens.

Roundworms can occasionally infect humans, but provided the litter tray is emptied and cleaned daily, there is no risk from the fresh faeces.

Tapeworm infection of humans is not common but can occur occasionally, usually in children who have ingested a flea which contains the larvae of the tapeworm.

Worming your cat regularly and keeping it treated against fleas will ensure the risk is absolutely minimal.
This leaflet is one of a range provided by Cats Protection on issues surrounding cat care. Cats Protection is the UK’s leading feline welfare charity and helps more than 193,000 cats and kittens each year. We rely entirely on public generosity to finance this vital welfare work.

For more information on adopting a cat, volunteering for us or making a donation, visit [www.cats.org.uk](http://www.cats.org.uk)