

General Practice Service  
Willows Information Sheets

## Ectoparasites (fleas and other skin parasites) in dogs



*Flea**Tick**Mite**Louse*

## Ectoparasites (fleas and other skin parasites) in dogs

### What types of skin parasites can affect dogs?

#### **Fleas**

Fleas are the most common skin parasites found on dogs, in fact it is almost impossible for a dog not to be infested with fleas at some point during his or her lifetime. Adult fleas live on the dog and feed on blood. Each female flea lays up to 50 eggs per day and these fall off the dog into the surrounding area. The development of the next flea generation then takes place in the house, the car or anywhere else that the dog has access to. It is very important to remember this when treating a flea problem, as these areas need to be treated, too. Some animals with fleas do not show any obvious skin disease, whereas others can develop severe irritation, hair loss and inflamed or secondarily-infected skin, depending on the sensitivity of the individual animal. As flea infestations can quickly get out of hand, sometimes up to the point where professionals may have to be employed to decontaminate the house, it is important either to prevent a flea problem or to treat it thoroughly as soon as it is noticed.

**Ticks**

Ticks are commonly found on dogs, but can also latch onto other animals and humans. Several types of ticks are found in the UK. In most cases they only cause local irritation and localised infections. However, in some parts of the UK ticks can transmit more generalised diseases, and in other countries they commonly transmit a variety of unpleasant infections. Ticks will not stay long on the dog, they burrow their heads into the skin, fill their bodies with the dog's blood and then drop off. Ticks are a problem from spring to autumn, and especially in late spring and early autumn.

**Mites**

Mites come in different shapes and sizes.

**Scabies**

The Sarcoptes mite or 'fox mite', causes scabies. This condition, a very itchy and uncomfortable skin disease, is common in dogs. Cats and foxes can also be affected by scabies. Although the mites spend their entire life-cycle on the dog, they can survive for up to 3 weeks away from their host. The mites burrow tunnels through the skin where they live and lay their eggs. Because they actually live inside the skin, they cannot be seen on the outside, and brushing and bathing will not remove them. In the early stages of the disease many dogs are not itchy, so the problem may not always be immediately apparent to the owner. Later, however, the discomfort becomes extreme.

**Cheyletiella**

Cheyletiella mites live on the surface of the skin and their eggs can be found stuck to hairs. The condition can affect dogs, cats and rabbits, and the mites spend their entire life on the animal. Adult mites can live in the environment for 10 to 14 days. Affected animals are often presented with crusty or scabby skin, and although most patients have only mild or no itchiness, occasionally severe discomfort develops. Sometimes mites can be seen on the hair ('walking dandruff').

**Demodex**

Demodex is a special type of mite. It is present in small numbers in the majority of normal dogs and usually does not cause any clinical signs. Occasionally, however, the Demodex mite can cause disease and it may then result in one of the most challenging skin problems encountered in veterinary practice. Young dogs (about 3 to 11 months of age) occasionally show a localised form of the disease consisting of one or more focal areas of thinning hair or red and scaly skin. These lesions are not usually itchy and may go unnoticed. In most cases they disappear without treatment. In some instances, however, the lesions can grow until the most of the body is affected. This more severe form is occasionally also seen in adult dogs without previous development of localised lesions. Dogs with normal immune systems seem to have no problem in keeping demodex mites in check. In cases of generalised demodex infection, a significant underlying problem with the immune system can be suspected and further investigations may well be necessary to find out what is going on. Animals affected by Demodex are often not as itchy as may be expected with other types of mite infestation.

**Harvest mites**

Harvest mites are generally only a problem in summer and early autumn. Mite larvae are found mainly on the feet (especially between the toes), but also on the legs, occasionally the head/ears and the tummy of affected dogs. They will not stay, but only feed for several days and then leave the dog. Infested animals can show signs ranging from no symptoms at all to intense itching. Larvae are often visible as small orange/red patches on the skin. Itchiness may persist for a while after the mites have gone.

**Lice**

Infestation with lice, a common problem in humans, is actually rare in dogs. Dogs have different lice from humans, so humans cannot catch lice from dogs and vice versa. The entire life cycle of lice is completed on the dog within 3 weeks. Clinical signs range from no symptoms at all to severe skin disease. Occasionally, a heavy infestation with blood-sucking lice can lead to anaemia in small dogs or puppies. Most affected animals are presented with a dry scruffy looking coat, some hair loss and varying degrees of itchiness.

**How do dogs get skin parasites?****Fleas**

Fleas are easily transmitted from dog to dog or from other animals (e.g. cats, hedgehogs) to dogs. Fleas can also be picked up when dogs enter an environment, e.g. a house or car, where developing fleas are lying in wait. Lastly, fleas can be carried by humans who handle dogs even if the human carrier is not subjected to bites.

**Ticks**

Ticks are found on trees, bushes and in areas of denser vegetation, and they are able to sense when a dog or other animal passes by. They then drop or crawl onto the dog and start sucking blood. Ticks are not transmitted from dogs to other animals or human beings.

**Sarcoptes**

Sarcoptes mites are often transmitted by direct contact. However, as the mites can live away from their host for up to 3 weeks, dogs can be infected even without coming in direct contact with an infected animal.

**Cheyletiella**

Cheyletiella mites are usually transmitted from animal to animal through direct contact. Very rarely, dogs can pick up mites from the environment.

**Demodex**

Demodex mites are probably only transmitted during the first hours of life from mother to newborn puppies. Most animals never show symptoms, as they will only appear if the immune system is unable to control the mites.

### **Harvest mites**

Harvest mites most commonly live in areas of well-drained ground with heavy vegetation so the larvae will infest dogs that frequent such areas. Even though the individual larvae do not stay long on the dog, it is possible for dogs to be infested on a regular basis when they often go to the areas where mites are found.

### **Lice**

Lice are transmitted by direct contact or by grooming a dog with a contaminated brush or comb. Louse infestations are more common when many dogs are together in a relatively small space, such as in a kennel, a rescue centre or a dog show.

## **What are the clinical signs of skin parasites in dogs?**

All skin parasites can cause pruritus (itchy skin). Depending on the type and number of parasites involved this can range from an occasional scratch to continuous and extreme itching and self-mutilation. Partly due to the parasite and partly due to scratching, other clinical signs develop, including hair loss, red spots, pustules, scales and crusts and sore areas of skin. Very often bacteria grow on the affected skin and cause a secondary bacterial infection, which aggravates the situation and confuses the issue, making diagnosis more difficult. Some animals can become generally unwell.

Even if the parasite cannot readily be seen, the pattern of affected areas on the body and/or the changes of the skin can occasionally point towards a diagnosis. However, further tests are usually necessary to determine what is going on. Ticks are an exception - they are usually very obvious once they have filled with blood.

## **Can humans get skin parasites from dogs?**

### **Fleas**

Fleas will often bite humans, causing itchy red spots on the skin. Treating the dog is sufficient to stop the problem, as animal fleas cannot live long on humans.

### **Lice**

Dog lice cannot be transmitted to humans and human lice will not go onto dogs.

### **Ticks**

Ticks and harvest mites can affect humans as well as animals. They are not transmitted by dogs, however - humans pick them up from the environment in the same way as dogs.

### **Sarcoptes and Cheyletiella**

Sarcoptes and Cheyletiella mites frequently pass from infected pets to their owners and cause intensely itchy red spots and crusts on human skin. However, after treating the mites on the dog, the disease in humans is usually self-limiting and does not require additional treatment.

### **Demodex**

Demodex mites are not transmitted from dogs to humans, although humans have their own version of demodex infection.

## **How can skin parasites be prevented or treated?**

### **Fleas**

Fleas should be treated with a quality spot-on preparation. In rare cases, a spray may also be used on the animal. Flea collars, shampoos and powders are no longer recommended. Treatment of the dog's environment (house, car etc) is very important, and the treatment of all pets should be continued over a period of at least 3 months to ensure all the next flea generations have gone. It is generally preferable to prevent rather than to treat a flea infestation, and to use spot-on preparations on a regular basis. This treatment has to be done every 4 to 8 weeks, depending on the product used.

### **Lice**

Lice can be treated with most of the spot-on preparations that are used to treat or prevent fleas. Treatment of the environment is not necessary, although grooming equipment (combs, brushes etc) should be thoroughly cleaned.

### **Ticks**

Ticks should be removed individually with a tick remover, taking care that the mouthparts are removed in order to avoid causing a nasty skin reaction. All other procedures, such as covering the tick in oil, alcohol or glue should never be used because, although transmission of disease by ticks is a rare problem in the UK, such methods of killing ticks encourage the transmission of disease, as the slowly dying tick regurgitates blood, and potential infection, back into the patient. Several - but not all - of the spot-on products will prevent ticks from biting, so if your dog is prone to getting ticks, please contact us for advice on suitable products.

### **Mites**

Mites are also treated by spot-on products and occasionally by use of medicinal shampoos or washes. As not all products are suitable for every type of mite, we will advise you of the most appropriate treatment in each individual case.

### **Demodex**

The treatment of demodex mites is different. Demodex mites are much more difficult to get rid of and the underlying immune problem also has to be taken into account. Treatment is intense and stretches over a considerable number of weeks. While treatment may be very successful, it can be frustrating and, depending on any underlying condition, the prognosis may be guarded.

***If you have any queries or concerns about ectoparasites and your dog, please do not hesitate to [contact us](#).***



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