



## “MANGE”

Mange is a parasitic skin disease caused by microscopic mites. Two different mange mites cause skin disease in dogs. One (the demodectic mite) resides in the hair follicles, while the other (the sarcoptic mite) lives just under the surface of the skin. Although both mites share some similar characteristics, there are also important differences. It is important not to confuse the two types of mange because they have different causes, treatments, and prognoses.

### DEMODECTIC MANGE

#### What causes demodectic mange?

Demodectic mange, sometimes just called "demodex", is caused by the demodectic mange mite, a parasite which lives in the hair follicles of affected dogs. Under the microscope, this mite appears shaped like an alligator with 8 legs. All dogs (and many humans) have a few of these mites on their skin. As long as the body's immune system is functioning, these mites cause no harm.

Demodectic mange most often occurs when a dog has an immature immune system, allowing the mites to grow rapidly. Therefore, this disease occurs primarily in dogs less than 12-18 months of age. In most cases, as a dog matures, the immune system also matures. Adult dogs which have the disease usually have defective immune systems.

#### Does this mean that demodectic mange is not contagious?

Yes. Since the mite is found on virtually all dogs, exposure of a normal dog to one with demodectic mange is not dangerous.

#### Why doesn't the immune system mature correctly in some dogs?

Development of the immune system is under genetic control. Thus, an affected dog usually comes from a litter containing other affected puppies. Owners of litter mates should be put on the alert to watch for it. Because the disease is often due to a genetic defect, affected dogs should not be bred. Also, parents of the affected dog should not be bred again.

Sometimes the disease can occur as a result of treatment of the dog with immunosuppressant drugs including corticosteroids.

#### What does demodectic mange do to the dog?

Surprisingly, a dog with demodectic mange does not itch severely, even though it loses hair in patches. Areas of bare skin will be seen. The hair loss usually begins on the face, especially around the eyes. When there are only a few patches of hair loss, it is termed localised demodectic mange. If the disease spreads to many areas of the skin, it becomes generalised demodectic mange.

#### How is demodectic mange treated?

The localised form is usually treated with topical medication. The generalised form requires special shampoo and topical insecticides and sometimes medication either by injection or by mouth. Shampooing with special cleansing shampoos helps to flush out the hair follicles prior to the application of special insecticidal shampoos.

For dogs with generalised demodectic mange, secondary skin infections may represent a complicating factor requiring antibiotic therapy. Dogs with skin infections have very red, inflamed skin and these dogs are usually itchy.

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### **What is the prognosis for my dog?**

Treatment of the localised form is generally successful. Treatment of the generalised form is also usually successful. However, if the abnormality in the immune system is severe the dog may require regular treatment for the rest of its life.

### **Following successful treatment, is it likely to recur?**

Because the immune system does not mature until 12-18 months of age, a dog with demodectic mange may have relapses until that age. It is important for retreatment to begin promptly to minimise the possibility of developing uncontrollable problems. Demodectic mange may also occur in very old dogs because function of the immune system often declines with age. Dogs who have immune suppression due to illness or medication are also candidates for demodectic mange.

The special shampoo commonly used for demodectic mange contains the insecticide amitraz. The manufacturer's instructions must be carefully followed. The product can have side effects both to your dog and yourself if not properly used. If in doubt consult your veterinary surgeon. After the treatment it will be necessary to examine your dog for the presence of live mites or mite eggs. Further treatment will be determined by the results. When applying amitraz be sure to wear rubber gloves to prevent getting it on your hands.

Sometimes treatment will involve the use of products that are not licensed for specific use in the dog. Your veterinary surgeon will discuss these with you and the implications involved. It is sometimes necessary to use these products since the risk surrounding their use is less than the risk of untreated demodectic mange.

### **Side Effects Of Treatment**

Follow the instructions carefully.

**If your dog goes off food, is sick or unusually quiet, please contact us.  
Please return as requested.  
This is important.**

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## **SARCOPTIC MANGE**

### **What causes sarcoptic mange?**

Sarcoptic mange is caused by a mite that burrows just beneath the surface of the skin. It may also crawl around on the skin surface. The mite feeds on material in and on the skin.

### **What does it do to the dog?**

The presence of the sarcoptic mite causes severe itching. The dog will chew and scratch its skin constantly. This leads to the loss of large amounts of hair, especially on the legs and belly. Eventually, the skin will become thickened and will darken due to pigmentation.

### **Is it contagious?**

Sarcoptic mange is highly contagious to other dogs; it is also contagious to humans, and is known as scabies. The dog's bedding should be discarded or if this is not possible, it should be regularly washed in hot water with bleach or one of the specific anti-scabies shampoos. Although the mites are not able to complete their life cycle on humans, they will cause quite a bit of itching before they finally die. If you have developed an itch and your dog has scabies contact your family doctor to discuss the various treatment options available.

### **How is sarcoptic mange diagnosed?**

Diagnosis is made by a skin scraping that is examined under the microscope. However if only a small number of mites are present on the dog all skin scrapings may be negative. A presumptive diagnosis is then made because the signs are so suspicious and treatment is commenced without the confirmation of a skin scraping. Age is not a significant factor in sarcoptic mange. Although most common in puppies, it affects dogs of all ages.

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## How is it treated?

There are several insecticides which are effective against this mite. Various dips and shampoos are available. Bathing should occur weekly for at least 4 weeks, at which time your dog should be re-examined to determine if further treatment is needed. Should bathing not prove effective injections with a preparation called ivermectin may be successful but this product is not licensed for use in dogs. Your veterinary surgeon will discuss the implications prior to its use. It is important to remember that **all** in contact animals are also treated.

## Instructions

We have supplied shampoo and a rinse. Please follow the instructions carefully. After applying the rinse.....should be allowed to dry naturally or with a hairdrier. This shampoo and rinse should be repeated weekly for four treatments.

Preferably discard any bedding or alternatively wash in bleach and soak in the diluted rinse.

If your dog is still scratching in 4-5 days please contact us..

Your dog should be re-examined in \_\_\_\_ days.

If any member of the family develops an itching skin rash, please contact your doctor immediately. Tell your doctor that you have been exposed to sarcoptic mange (also known as scabies). In people, the mite cannot complete its life cycle so it will die in a few days. However, it may cause itching during that time. Reinfestation from the dog or the premises can result in continued itching.

Remember to treat **all** in contact animals.

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