

Canine Demodicosis (Red Mange, Demodectic Mange, Demodicosis, Demodectic Acariasis, Follicular Mange)

Demodicosis is a parasitic disease caused by an increased population of the mite *Demodex canis* in the skin. Healthy dogs normally harbor small numbers of the mite but are asymptomatic. The reason that some animals develop clinical disease is not completely understood. Several theories exist including a hereditary predisposition. Animals with generalized disease should not be used for breeding.

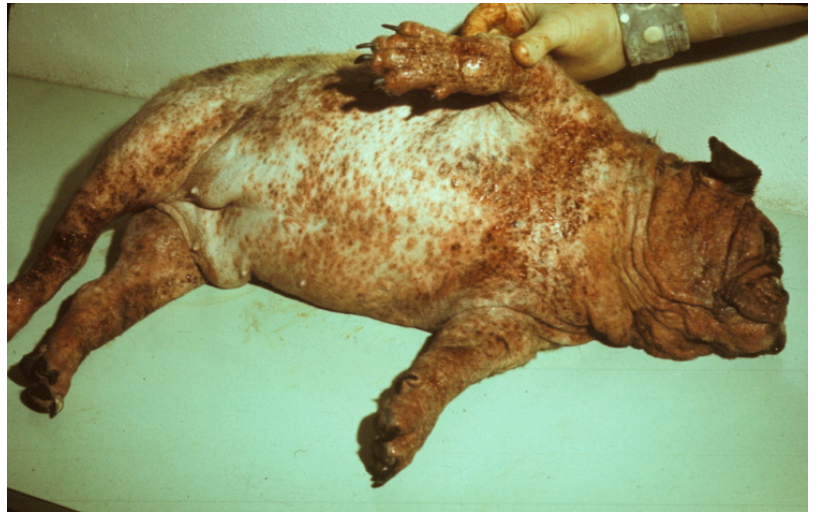
Transmission of mites is thought to occur from mother to offspring while they are nursing. The mite lives in hair follicles in the skin. Adult mites cannot survive off the host.

There are two clinical forms of canine demodicosis; localized and generalized. Localized demodicosis is a common form seen in younger dogs 3-11 months of age. Typical lesions consist of focal areas of either scaling, thinning of the hair, and hair loss with or without redness. Lesions are primarily found on the face and front legs but can also be found throughout the body. About 70% of cases will self-cure while the remaining 30% will develop into the generalized form.



Skin lesions seen in generalized demodicosis can be extremely varied with widespread areas of hair loss, scaling, dandruff, redness, ulcers, crusts, and red bumps with or without pus. Some animals can be very itchy and secondary bacterial infections are common.

Dogs with the generalized form are often debilitated, lethargic, depressed, and have a fever. Enlarged lymph nodes are often present. In addition, some dogs may only have lesions on their feet. The feet become swollen and develop cysts between the toes. Cases that have lesions of the feet are more difficult to treat.



Canine demodicosis is diagnosed through microscopic examination of skin scrapings taken from lesions.

Since approximately 70% of localized demodicosis cases resolve spontaneously, no treatment may be necessary. Re-examinations are recommended to determine if the case is resolving or progressing to the generalized form of demodicosis. Treatment of localized cases may be instituted to prevent progression to a generalized case.



One method of treatment for demodicosis is amitraz dips given bi-weekly. Medium- and long-haired dogs are often clipped. The dips are continued for 4-6 weeks beyond the point where skin scrapings are negative for mites. Six to twenty dips may be necessary. Animals not cured will be clinically improved but skin scrapings will still contain mites. Some animals exhibit relapse once treatment is stopped so symptoms are managed through repeated dips at 4-6 week intervals. Amitraz dips may cause mild sedation in some animals but this side effect often decreases with subsequent treatments.

Demodicosis can also be treated with daily oral dosing of ivermectin or milbemycin. Approximate cure rate for milbemycin is 85% and ivermectin 95%. Animals are examined, and skin scrapings are taken, at 6 week intervals and animals are treated 6 weeks beyond the point of

negative skin scrapings. Animals that relapse may require maintenance dosing at 3-week intervals. Side effects, such as unbalance, may occur with both medications but will often disappear with lower doses. Collies, collie mixes, and some herding breeds cannot be treated with ivermectin due to neurologic side effects. Secondary bacterial infections are treated with antibiotics.