



Ringworm in Cats and Dogs

What is Ringworm?

Ringworm is not a worm at all but a skin disease of animals that causes hair loss and a crusty dermatitis. It affects many species of animals, not only cats and dogs. This is commonly caused by fungal infection, normally a fungus called *Microsporum canis*, but other species can cause this disease. Significantly, humans can catch this disease from contact with infected animals. Children are particularly at risk.

How is infection acquired?

Infection is transmitted by direct contact with infected animals, or contact with infected hairs, skin scale or fungal elements (spores) that have been shed into the environment. The environmental contamination is very significant, as spores can survive in the environment for between 13-18 months. Spores can be found in carpets, air conditioning filters and heating vents, as well as bedding and any other surfaces in the home. Grooming equipment can also spread infection between animals.

What does Ringworm look like?

Ringworm lesions in animals can be very variable in appearance. Typically, there are discrete, roughly circular areas of hair loss with scaly, sometimes inflamed skin. These lesions are more common on the face, front paws and ears. Some lesions however, resemble other skin diseases, and some animals can be infective, even though they have a completely normal appearance.

In humans, it can produce a round, red lesion that has a ring of scale around the periphery. It is often itchy.

How is Ringworm diagnosed?

Ringworm is sometimes impossible to identify by visual identification of gross lesions in most cases, as it is so variable in presentation. A typical appearance (see above) is simple to recognize, but it can have no symptoms or resemble other lesions. Sometimes hairs will fluoresce under an ultraviolet light (Wood's Lamp) but this is not consistent, and ringworm cannot be ruled out if hairs do not fluoresce.

Laboratory methods (fungal culture and microscopy) are most reliable, however fungal culture can take some weeks to give a result.

Because of this, animals are often treated for ringworm without definite confirmation, but just on the basis of a high index of suspicion.

How is Ringworm Treated?

Ringworm will resolve spontaneously in most healthy animals over a period of some weeks with no treatment. However, to reduce the risk of contamination of the environment and transmission of disease to people they are exposed to, animals are treated to hasten resolution of the infection.

This is usually a matter of clipping the hair around the edges of each lesion to reduce spread. In long-haired cats especially, a full body clip may be needed.

A combination of topical and oral medications is often used. Human and animal antifungal ointments are not commonly used, as they are often difficult to apply to animals and relatively infective.

Normally, twice weekly use of antifungal rinses and shampoos are recommended, and oral drugs are prescribed. This may need to be done for several weeks till lesions resolve, or fungal culture is negative.

More intensive therapy regimes may be needed in multiple cat households or breeding establishments. Typically, with a high number of cats in the household, it is harder, and takes longer, to eliminate infection.

Decontamination of the environment

This is especially important in getting rid of spores, and thus stopping ongoing infection of animals and owners.

Once a diagnosis is made, it is easier to control if the animals are restricted in where they can go in the house. Confinement to a single (tiled) room often makes disinfection a lot simpler. If not possible, letting the pet into as few rooms as practicable, will make cleaning easier.

Decontamination involves physical removal of infective spores and chemical disinfection of the environment.

1. Physical Decontamination

Thorough vacuuming on a daily basis is mandatory. Heating and ventilation ducts should be included. Burn the vacuum cleaner bag after completion. Steam cleaning is unlikely to produce temperatures high enough to sterilize infective spores.

2. Chemical Disinfection

Household bleach at a 1 in 10 dilution is the cheapest and most readily available product that is suitable. However, this cannot be used on carpet or soft furnishings. Tiles floors should be done daily. Contaminated materials such as bedding, collars, baskets, cubbys, soft tools and grooming tools that cannot be disinfected should be disposed of, preferably by burning. Use cardboard boxes for bedding during the treatment period, changing weekly and burning the old box.