

## Ringworm



### Disease Vectors

Ringworm (also called dermatophytosis) refers to a collection of fungal diseases of the skin. Ringworm is a common name that reflects its appearance in skin infections in humans. Species of fungus that cause dermatophytosis in humans fall within three genera that live in the soil or have animal hosts: *Microsporum*, *Trichophyton* and *Epidermophyton*. The first two genera can be zoonotic. In dogs and cats, *Microsporum canis* is the principal cause of dermatophytosis. Several species of *Trichophyton* are zoonotic and originate on dogs, horses, hedgehogs, rodents, rabbits, monkeys and birds; one species (*T. mentagrophytes*) accounts for 10% of canine cases.

### Symptoms, Diagnosis & Treatment

#### Humans

The symptoms of ringworm in humans are itchy, red, raised, scaly patches often with sharply defined edges; the patches are often redder around the outside giving the appearance of a ring. Bald patches result from ringworm in the hair, and discolored nails are seen when the fungus affects the hands and feet (Medline 2013). A number of over-the-counter antifungal medicines are effective in treating ringworm. In cases where topical treatment does not cure the infection, or where ringworm is accompanied by extreme inflammation, prescription oral antifungals combined with steroids are appropriate.

#### Animals

According to the Merck Veterinary Manual, clinical signs of dermatophytosis in cats are variable but the disease manifests itself in hair loss, scaling and crusting, generally around the ears and face and extremities. Kittens are affected more commonly than adult cats. Some cats will not have symptoms but are still capable

of spreading the fungus to humans. In dogs, dermatophytosis often presents as hair loss with scaly patches and broken hairs. In some cases, follicles may become infected and furunculosis (skin boils) develops.

Infection in dogs, cats, guinea pigs and rats often occurs in younger animals and can be self-limiting, but treatment with topical antifungals may hasten recovery. Some evidence suggests that clipping the hair of long-haired cats or cats with generalized dermatophytosis may aid in preventing spreading infection to other pets or to humans.

#### Prevention

To prevent the spread of fungus, pets with symptoms should be seen by a veterinarian. Wash hands with soap and water after handling pets that may be infected. Because fungal spores may persist in shed skin cells and hair from animals, it is important to clean pet bedding with bleach solution or dispose of it appropriately. Pets treated for dermatophytosis should be monitored to make sure the infection has been successfully cleared.

### References

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