

# Ringworm (Dermatophytosis)

## DISEASE IN ANIMALS

Dermatophytosis is a superficial infection of keratinized parts of the body, including skin, hair, and nails caused by one of several fungi.

**Reporting:** Dermatophytosis is not required to be reported in animals. However, it is encouraged that confirmed animal cases from a commercial source or exhibition, and cases that maybe related to human illness, be voluntarily reported to the [local health department](#) (LHD).

**Transmission:** Transmission occurs via contact with an infected individual or spores in the environment.

**Clinical signs:** Signs and localization vary by animal group and fungal species. Dermatological lesions are often described as circular with crusting and flaking skin. Infected hairs become brittle leading to localized alopecia. Some cases are asymptomatic, and most are self-limiting.

### **Diagnostics:**

- Cytology of affected hair and nails: may recognize the genus
- Wood's light: Microsporum spp. exhibit a bright, blue-green fluorescence
- Culture: can identify the species by examining conidia

### **Case classification:**

- Suspected: a clinical case with signs consistent with ringworm.
- Probable: a clinically suspect case with laboratory evidence from a screening or unvalidated test (e.g. woods lamp, cytology).
- Confirmed: a case that meets confirmatory testing criteria determined by a state or federal diagnostic laboratory (e.g. culture).

COMMON GEOPHILIC AND ZOOPHILIC DERMATOPHYTES	
Animal	Dermatophyte
Cats and Dogs	<i>M. canis</i> , <i>T. mentagrophytes</i>
Cattle	<i>T. verrucosum</i>
Horses	<i>T. equinum</i> , rarely <i>M. equinum</i>
Rodents and Lagomorphs	<i>T. mentagrophytes</i>
Sheep and Goats	<i>T. verrucosum</i> , <i>M. canis</i>
Swine	<i>M. nanum</i>
Fowl	<i>T. gallinae</i>

## DISEASE IN HUMANS

**Reporting:** Ringworm infection involving multiple human infections is required to be reported to the LHD as an outbreak. Individual human cases of dermatophytosis are not required to be reported. However, a single human case linked with animals from a commercial source or exhibition is encouraged to be voluntarily reported to the LHD, so that additional cases may be prevented.

**Human illness:** The skin lesions are erythematous with scaling. Central clearing is sometimes seen resulting in the formation of the classic "bull's eye" lesion associated with ringworm. Pruritus is also a common symptom.

**Personal protection:** Gloves and protective clothing should be worn when working with animals known or suspected to have dermatophytosis. Contaminated areas and fomites should be thoroughly cleaned and disinfected. Infected persons should cover their lesions to prevent further spread of infection.

## FOR MORE INFORMATION

### **Disease in Animals**

[Iowa State University Center for Food Security and Public Health Animal Disease Factsheets](#)  
[The Merck Veterinary Manual -- Dogs and Cats](#)

### **Disease in Humans**

[ODH Infectious Disease Control Manual](#)  
[CDC Ringworm](#)