

# Decontaminating Carpet of *Microsporum canis*

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## In the Literature

Moriello KA. Decontamination of carpet exposed to *Microsporum canis* hairs and spores. *J Feline Med Surg*. 2017;19(4):435-439.

## FROM THE PAGE ...

Environmental decontamination is an important component of dermatophytosis treatment. Clinicians frequently make recommendations for cleaning the home, but the efficacy of many such recommendations has not been evaluated. Decontamination of hard surfaces involves thorough mechanical cleaning followed by disinfectant application. Less is known about successful decontamination of carpet with dermatophyte spores.

This study evaluated 3 methods for decontaminating carpet: carpet shampooing (once and twice), carpet shampooing with disinfectant pretreatment, and commercial hot water extraction. Sterile swatches of Berber carpet were contaminated with infective *Microsporum canis* spores and hair. Contaminated carpet was vacuumed for 10, 30, and 60 seconds and cultured. The carpet was wiped with a disposable dust cloth, which was inoculated by being pressed to the surface of a fungal culture plate to obtain posttreatment fungal culture.

For all 3 time points, vacuuming removed infective hairs, but the carpet remained heavily contaminated with dermatophyte spores. After one carpet shampooing, there was no decrease in the number of fungal spores. In fact, the spore count increased 24 and 48 hours after a single carpet shampooing—likely because spores were brought to the surface of the carpet. However, cultures obtained after the second washing showed a marked decrease in spores.

Pretreatment with disinfectants (10-minute contact time) before shampooing was effective but frequently discolored the carpets. Several disinfectants labeled for use against *Trichophyton* spp were used, and all were effective at decontamination. Commercial hot water extraction showed good efficacy at decontamination.

## ... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Vacuuming alone does not decontaminate carpet but is an important first step in removing infective hairs.
- 2** Shampooing is effective for carpet decontamination but is more labor intensive because 2 cleanings are needed.
- 3** Disinfectants labeled against *Trichophyton* spp are effective pre-shampooing treatments but may discolor carpet. Pretreatment may be needed in high-risk situations or in situations that require a high level of decontamination.
- 4** Commercial hot water extraction effectively decontaminates and is the least labor-intensive option. Depending on cost of the extractor, it may be more expensive than carpet shampooing.

## Suggested Reading

Moriello KA, DeBoer DJ. Cutaneous fungal infections. In: Greene CE. *Infectious Diseases of the Dog and Cat*. 4th ed. St. Louis, MO: Elsevier Health Sciences; 2013.

Moriello KA. Decontamination of laundry exposed to *Microsporum canis* hairs and spores. *J Feline Med Surg*. 2016;18(6):457-461.