



EXTERNAL PARASITE CONTROL ON DOGS, CATS AND BIRDS

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Pets have been recognized as important members of American society for years and often are regarded as irreplaceable members of the family. Pet owners realize many aesthetic, emotional and monetary benefits from ownership. They want healthy pets and spend vast amounts of money annually to purchase pet accessories and to groom, feed and provide for the general well-being of cats, dogs, birds and other small domestic pets. Control of external parasites is essential to a pet's health and is important for owners, since some parasites may also attack humans.

Parasite Control Requirements

Small domestic pets often are maintained in the home, an environment favorable to the year-round development of numerous external parasites. As a result, seasonal fluctuation in occurrence and abundance of parasites may not be detected as easily as on larger animals that are kept out-of-doors. Successful parasite control on dogs, cats and pet birds usually requires the proper use of approved pesticides on the pet, its bedding, pen and other areas in the yard or house that are visited by the pet. Treatment of only one of these areas probably will prove unsatisfactory because parasite maintenance and pet reinfestation may occur from several sources. For example, fleas that attack the dog or cat may be harbored in the pet's bedding, the carpet of the home or the yard grass. Recurring parasite problems require treatment of the pet and of all these areas simultaneously.

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Treatment of Premises

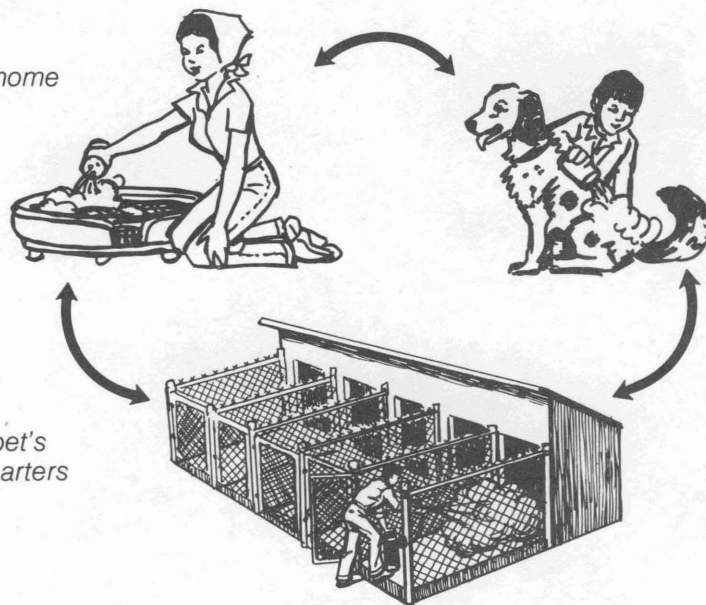
Careful treatment of indoor areas frequented by pets is important in effective parasite control programs. Approved residual pesticides may be applied to the pet's sleeping quarters, to baseboards, carpets, drapes and fabric-covered furniture. Reapplication of pesticides may be required to eliminate the parasite infestations completely. A certified pest control operator is familiar with the procedures and approved pesticides required to control animal parasites infesting the home and yard. During warm weather, pesticide treatment of outdoor areas frequented by pets may be necessary. Grass, crawl spaces, kennels and exercise areas are often infested with ticks, fleas and mites. Treatment of these areas with approved pesticides will eliminate these important sources of pet reinfestation.

Confinement of pets within the premises and prevention of infested stray animals visiting or crossing the premises is also important to effective external parasite control.

Pesticide Use Precautions

All pesticides are toxic and should be used only according to instructions on the container label. Dosage rates, treatment methods, application intervals and the names of animals that may be treated with the pesticide appear on the label. The information should be read thoroughly and understood by the applicator prior to using the pesticide.

Treat the pet's bedding inside the home



Treat the pet

Treat the pet's outside quarters

Figure 1. Successful pest control requires a multiple treatment approach.

Common Parasites of Pets

Fleas

Fleas are common insect parasites of many pets. Dog and cat fleas feed on a number of hosts including man. The life cycle of the flea is composed of the egg, larva, pupa and blood-feeding adults. Fertilized female fleas can produce over 400 glistening white elongated eggs that hatch within 3 to 12 days depending on humidity and temperature. Eggs are deposited on the host but fall off the animal onto bedding and other areas frequented by the pet. Slender, yellow larvae hatch from eggs and feed on flea droppings and other debris found in the resting place of the host animal. Within 9 to 15 days larvae develop into a resting, non-feeding pupal stage lasting from 7 days to approximately 1 year. The time span of the adult stage is variable and individuals can survive prolonged periods of starvation caused by host detachment. Flea control is important since fleas can transfer a variety of disease agents, cause dermatitis and serve as the intermediate hosts of several internal parasites.

Ticks

Several species of ticks infest dogs and cats. The American dog tick and the brown tick are most common. The life cycle of the tick includes the egg, six-legged larvae (seed tick), nymph and adult. The larval, nymphal and adult stages require blood meals from warm-blooded hosts to mature. Blood-engorged, mated females lay 1,000 to 3,000 eggs in grass, cracks in walls, baseboards and other protected areas. After hatching, larvae and nymphs seek a warm-blooded host to secure a blood meal. Tick feeding results in

blood loss and irritation to the pet and the possible spread of disease-causing organisms. Pet paralysis caused by the injections of toxins during the feeding of some tick species is also possible.

Lice

Although several species of lice occur on pets, they are uncommon and usually restricted to a localized situation. Both biting and sucking lice attack pets. Sucking lice are blood feeders and may cause anemia and severe skin irritation when heavy infestations occur. Biting lice feed on skin debris and the hair coat. Irritation, damage and/or loss of hair often results from the feeding activities of biting lice. Mated females attach eggs to the hair shafts of host animals. Lice nymphs hatch from eggs in 7 to 10 days and mature into the adult stage. The entire life cycle is spent on the host and removal quickly results in death of the louse.

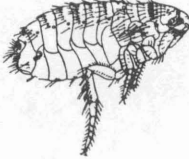

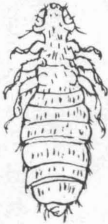



Mites


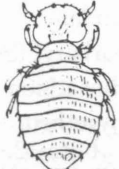




Several species of mites infest pets. These often microscopic parasites may burrow into the skin or may exist under scabs of serum exudate that result from mite feeding. Mated females lay eggs in burrows or on the surface of the pet's skin. Nymphs hatch from the egg and mature into adults after taking numerous blood meals. Mange symptoms (severe irritation leading to localized swelling, infection, and eventual loss of hair), result from mite burrowing and feeding. Extreme cases may kill the pet. Mites also attack the ears of dogs and cats, causing discomfort, loss of appetite and violent shaking of the head. Pets with a serious mite infestation often require treatment by a veterinarian.

Pesticides Commonly Used for External Parasite Control




When using pesticides, follow all instructions on the container label. Both common and trade names are given.

Pet Treatment

Pet	External parasite	Use products containing
Dog	fleas 	chlorpyrifos (Dursban®) dichlorvos (Vapona®) lindane carbaryl (Sevin®) dioxathion (Delnav®) pyrethrin + piperonyl butoxide
	ticks 	carbaryl (Sevin®) ronnel (Korlan®) dioxathion (Delnav®) malathion pyrethrin + piperonyl butoxide
	lice  	coumaphos (CoRal®) malathion methoxychlor ronnel (Korlan®)
	(Sucking louse) (Biting louse)	
	mites 	lindane
Cat	fleas 	carbaryl (Sevin®) malathion ronnel (Korlan®) lindane

Pet	External parasite	Use products containing
Cat	 ticks	carbaryl (Sevin®) malathion pyrethrin
	  (Biting louse) (Sucking louse) lice	carbaryl (Sevin®) rotenone pyrethrin
	 mites	lindane
Birds	 mites	pyrethrin + piperonyl butoxide
	 (Red louse) lice	pyrethrin piperonyl butoxide

Premise Treatment

Pest	Use products containing
Fleas 	carbaryl (Sevin®) ronnel (Korlan®) chlorpyrifos (Dursban®) diazinon (Spectracide®)
Ticks 	carbaryl (Sevin®) ronnel (Korlan®) diazinon (Spectracide®)
Flies 	naled (Dibrom®)

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