## **Premises Flea Control**

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## **Indoor environment**

Mechanical control procedures can enhance the effectiveness of a control program. Mechanical control also can be used by pet owners who do not wish to use insecticides inside their homes. A vacuum cleaner with a rotary beater bar can remove some of the larvae and flea eggs in the carpet. Shampooing and or steam cleaning the carpet will reduce the number of fleas but rarely will eliminate a problem by itself. Cleaning the carpet before applying insecticides lifts the carpet fibers to allow for maximum penetration of the insecticide. After vacuuming, it is important to dispose of or freeze the vacuum bag because eggs and larvae will continue to develop inside the bag, resulting in a reservoir of fleas.

The pet's bedding should be washed weekly along with other material the pet might sleep on such as throw rugs or blankets. Thorough mechanical control should precede the use of insecticides indoors. While resistance can be a problem, synthetic pyrethroids may offer adequate adulticidal activity for several days. One or two applications at seven- to 14-day intervals is sufficient if the on-animal recommendations are followed. In an premises control program, the combined use of a residual insecticide and an insect growth regulator (methoprene or pyriproxyfen) will produce the best results.

After the initial application of insecticide and insect growth regulator to the home, the adult flea population usually will be drastically reduced or eliminated for several days. However, fleas will often reoccur within a few days. Reoccurrence of fleas is due primarily to the inability of currently available compounds to kill flea pupae developing deep within the carpet. After application of flea control products to the environment, pupae will continue to develop to adult fleas. Those fleas will then emerge for the next three to eight weeks. Be persistent and do not give up too quickly on a flea control program. Occasionally, a 2<sup>nd</sup> application to the entire home environment will be necessary.

## **Outdoor environment**

Elimination of fleas in the yard can be an important aspect of flea control. Stray dog, cats, opossums, raccoon, and foxes are common hosts of the fleas that infest our pets. As they move through our yards fleas eggs fall from their hair and "seed" the outdoor environment. Common outdoor source points for fleas include, under porches, crawl spaces under homes, along fence lines and under shrubs. Only areas protected from direct sunlight where the soil is moist will provide adequate conditions for flea development. When treating a yard, efforts should be concentrated around bushes, mulch or other moist, shaded areas. Spraying insecticides over the large expanse of a shade-free lawn generally will not be beneficial. Synthetic pyrethroids such as cyfluthrin and fenvalerate are available in convenient spray formulations and usually are effective.

## -Effective yard flea sprays from hardware stores

- Bayer Advanced Lawn<sup>TM</sup> Complete Insect Killer Imidacloprid 0.72% and Beta-cyfluthrin 0.36%
- Bayer Advanced Garden™ PowerForce® Multi-Insect Killer Ready-To-Spray Cyfluthrin 0.75%
  - Both come in 32 oz ready to use bottles that cover approximately 5,000sg ft
  - → Do not spray the product into fish pools, ponds, streams, or lakes.
  - → Remove animal feeding dishes prior to application.
  - → Keep children and pets away from treated areas until the spray has dried.
  - → Shake well before using.
  - → For severe infestations, repeat every 7-14 days as necessary.
  - → This product is ready to spray. Just attach this bottle to your hose according to directions. Water automatically mixes with the concentrate as you spray.

- $\rightarrow$  Also comes as -- Bayer Advanced  $^{\text{TM}}$  PowerForce  $^{\text{R}}$  Multi-Insect Killer Ready-to- spread Granules.
- → Also
  - o **Conquer**: Esfenvalerate 3.48%.
  - o **Tempo Ultra WP:** Cyfluthrin 10.00%

Additional information can be found at the following web site. Web site includes links to **meeting proceedings**, **published papers** and **extension bulletins** on fleas and ticks. <a href="http://www.vet.k-state.edu/depts/dmp/personnel/faculty/dryden.htm">http://www.vet.k-state.edu/depts/dmp/personnel/faculty/dryden.htm</a>