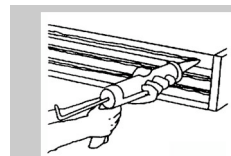


Household Pesticides

Hazards & Alternatives

A Fact Sheet from Toxic Free NC

Many household pesticides are toxic chemicals that should not be used around children, sensitive individuals or pets. This list of common products and alternatives will help you make safer decisions for pest control around your home. Check the labels on products you are considering using. For the most effective pest control, *prevent* pest problems with the checklist below. Once you have discovered and removed the pest's sources of food, water and entry to your home, they will go away – but it can take time, so be patient before you reach for a poison.



Caulking cracks can keep out ants and other pests.

PESTICIDE	PRODUCT INFORMATION	ALTERNATIVES
Sprays & foggers	There are many spray and fogger products available. Spraying spreads a fine chemical mist throughout your home, which is easy to inhale and creates residues that can persist for a long time.	Try prevention first. Use targeted methods such as baits, traps, gels and pastes (also known as “crack and crevice” treatments) instead of sprays.
Imidacloprid	Widely used in agriculture and home pest control, especially in topical flea & tick solutions like <i>Advantage</i> , as well as for wood treatment. Toxic to the nervous system; suspected of causing reproductive problems. ¹ Breaks down very slowly.	Minimize use; baits or spot applications are preferable to sprays. Alternatives include flea combing, boric acid and diatomaceous earth.
Lindane	A miticide used in prescription lice shampoo and lotions such as <i>Nix</i> . Extremely hazardous, especially to children and pregnant women. May cause cancer in humans. ²	Lice can be eliminated with vigilant use of lice combs. Choose less hazardous formulations.
Fipronil	An insecticide used in pet flea treatments such as <i>Frontline & Topspot</i> , and ant & roach products such as <i>Combat</i> . Can irritate pets' skin and cause hair loss; causes cancer in rats and “possible” carcinogen in humans. ³	See alternatives to Imidacloprid, above.
Pyrethroids	A large group of chemicals including permethrin, tetramethrin, cyfluthrin and others widely used in various insect control products. Pyrethroids are suspected of damaging the human reproductive system; some are suspected of causing cancer. ⁴	Choose targeted application methods such as baits instead of spraying these products. Diatomaceous earth, boric acid and mechanical controls such as cleaning up messes and caulking cracks are good alternatives.
Piperonyl butoxide	One of the most common ingredients in pesticide products such as <i>Raid</i> spray and <i>RID</i> lice shampoo; a “possible” carcinogen & reproductive toxin. ⁵	See alternatives to Imidacloprid and Lindane, above.

Pest prevention checklist

- ❑ Install and repair screens on windows & doors.
- ❑ Seal cracks around windows and doors with caulk or weather-stripping.
- ❑ Inspect groceries and used furniture for insects before bringing them home.
- ❑ Trim plants and shrubs to keep them at least one foot away from the structure.
- ❑ Remove piles of scrap wood, mulch or leaves from around the outside of the house.
- ❑ Clean up all spills and messes.
- ❑ Keep trash tightly sealed; empty trash and recycling containers often.
- ❑ Don't leave out dirty dishes.
- ❑ Store all food (including pet food) in pest-proof containers with tight-fitting lids.
- ❑ Clean out grease and crumbs from your kitchen regularly.
- ❑ Repair leaky pipes and plumbing.
- ❑ Get rid of old piles of paper and cardboard.

References

¹ US EPA. Office of Prevention, Pesticides and Toxic Substances, Registration Division. 1993. Imidacloprid. Evaluation of toxicity data submitted and identification of outstanding toxicology data requirements.

² IARC Group 2B, Possible Carcinogens. International Agency for Research on Cancer. Viewed on August 10, 2003. US EPA Group B2, Probable human carcinogen (based on animal data). *Office of Pesticide Programs List of Chemicals Evaluated for Carcinogenic Potential*, August 25, 1999, U.S. Environmental Protection Agency.

³ US EPA Group C, Possible human carcinogen (based on limited data). *Office of Pesticide Programs List of Chemicals Evaluated for Carcinogenic Potential*, August 25, 1999, U.S. Environmental Protection Agency.

⁴ "Hormonal and Environmental Factors Affecting Cell proliferation and Neoplasia in the Mammary Gland." *Progress in Clinical and Biological Research (PCBR)*. 394:211-53, 1996

⁵ Cox, Caroline 2002. "Piperonyl Butoxide." *Journal of Pesticide Reform* 22:2 (12-20).

