

Back To Lawn Pesticides: Placing Pets in Danger

(Beyond Pesticides, November 13, 2003) A recent widely circulated [story by Boston's WCVB-TV](#) has drawn attention to the potential of lawn pesticides to make pets sick. Although the story failed to mention specific chemicals (namely, 2,4-D discussed below), it did highlight a very real and commonly ignored hazard to children, dogs and other pets: The chemically-treated lawn.

The piece, which was also rerun by a [Florida TV](#) station, interviews a veterinarian doctor, an environmental health advocate and a citizen. Doug Haley, a citizen of Salem, Massachusetts, is convinced he lost his dogs to lawn chemicals. "Pesticides are death," he says, "Shoshie, our little border collie, had liver cancer, and Miss Marya, a big black Lab, died...of stomach cancer. They're a lot of other things that could have caused it, but our vet thinks it was the exposure to the golf course chemicals." As the piece implies, there's good reason to think Mr. Haley is right on the mark.

A 1991 National Cancer Institute [study](#) found that dogs whose owners' lawns were treated with 2,4-D ([2,4-dichlorophenoxy acetic acid](#)), four or more times per year, were twice as likely to contract canine malignant lymphoma than dogs whose owners did not use the herbicide. Incidentally, malignant lymphoma in dogs is considered very similar to non-Hodgkin's lymphoma in humans. Studies in rats have demonstrated that 2,4-D can migrate into nervous tissue and concentrate in certain areas of the brain. Not too surprisingly, behavioral changes have also been observed in treated rats (Evangelista de Duffard 1990).

In humans, seemingly minor dermal exposures have been known to cause irreversible loss of feeling in the extremities. Depression, lethargy and coma have also been documented in animals and humans. A bioassay conducted by the Food and Drug Administration found increased incidences of lymph sarcoma (malignant tumors) in both male and female rats, breast tumors in female rats and malignant blood cell tumors in mice and male rats exposed to 2,4-D.

An [EPA-funded study](#) published in the November 2001 issue of Environmental Health Perspectives found that 2,4-D and dicamba (another chemical used in herbicides) are easily tracked indoors, contaminating the air and surfaces inside residences and exposing children and pets at levels ten times higher than pre-application levels.

2,4-D is the most widely used herbicide in the non-agricultural sector with 23-27 million pounds used annually (U.S. EPA 1999). Yet, the U.S. Environmental Protection Agency (EPA) has admittedly registered the chemical without fully evaluating 2,4-D's effects on human health and the environment.

All 2,4-D products (such as LawnKeep, Malerbane, Planotox, Plantgard, Savage, Salvo, Weedone, and Weedtrine-II) are required to carry the signal word "DANGER" on the label, but that word may not suffice in expressing the real hazard of the product. For those who know the EPA labeling system, "danger" on the label indicates an EPA toxicity rating of I - the highest of four categories.

Many people assume that since lawn pesticides (also widely used on golf courses) are so common, they must not be harmful. The truth is that just because a pesticide is registered with the EPA does not necessarily guarantee its safety.

The piece by WCVB-TV may not be scientific, but it is a helpful reminder that if you are at all concerned about being exposed to pesticides, you should be doubly concerned for your pets.

Healthy lawns can be achieved with non-toxic methods. Soil aeration, correct mowing, organic fertilizers, vinegar and corn gluten are just some of the available alternatives to toxic chemicals. For more information, see Beyond Pesticides' [Least-toxic Control of Lawn Pests](#) fact sheet, and the *Pesticides and You* article [Lawn Mowers to Leaf Piles: Fall is Prime Time for Lawn Care](#). For information on pesticide application notification requirements, contact [Beyond Pesticides](#).