

What is a pesticide?

By **Lucia Dolan**/ Special To The Tab

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A pesticide is a poison. It is designed to kill an insect, weed or fungus. Unfortunately pesticides do not limit themselves to just what we wish to kill. They travel. They run off into water. They vaporize and drift. They come into our home on shoes and pets.

Pesticides can spread very quickly. "Good Morning America" recently reported on an experiment in a classroom at PS 8 in New York City.

They applied Glo-Germ, a nontoxic powder visible only under ultraviolet light, in areas where pesticides are most likely to be sprayed or to settle, such as baseboards and windowsills. Then they invited the children to play. After 20 minutes, UV light showed traces of Glo-Germ all over the children's clothes, hands and faces.

No pesticide is safe. Federal laws prohibit pesticide manufacturers from making safety claims. The EPA, which has the authority to waive all chronic toxicity testing for consumer pesticides, does not require that pesticides be tested for effects on the immune system or on hormonal systems. Additionally, we know little about "real world" exposures - how pesticides interact with other pesticides or substances such as prescription medicines.

Several studies have shown that dogs are more likely to get cancer when their owners use pesticides. In 2004, Dr. Larry Glickman of Purdue University found that Scottish terriers were four to seven times more likely to get bladder cancer when their owners used pesticides on their lawns. The more time the dogs spent on a treated lawn, the higher their risk. Glickman is now measuring the chemicals levels in children from homes that use pesticides, and he is attempting to discover which chemicals in pesticides cause cancer, the active or the inert ingredients.

One to 3 percent of a pesticide product is "active" ingredients, chemicals designed to kill an unwanted insect, weed or fungus. The other 97 percent consists of ingredients are added to deliver the active ingredient and to make it longer lasting or more effective.

"Inert" ingredients, which are protected by trade secrecy laws, may be more dangerous than "active" ingredients. Pesticide manufacturers can conceal the identity of these ingredients from the public and even from the EPA.

Inert pesticide ingredients can be as benign as water or as toxic as benzene, toluene or xylene. Along with inert ingredients, contaminants, such as dioxin and DDT, sometimes form in pesticides as a result of the chemical production process. When pesticide products are used they interact with the environment, (soil, water, air) and can form toxic metabolites. Only a few of the 613 active pesticide ingredients have been tested for health or environmental effects. But solid knowledge of a pesticides dangers do not automatically lead to a government ban.

Methyle bromide is a neurotoxin, and its effects have been known for years. It destroys the ozone layer and has fatally poisoned farm workers in California. The U.S. government has signed an international treaty to ban methyle bromide in 2005, but it is currently negotiating an exemption to prevent "market disruption." Fifty-six farm

organizations, including the largest, the American Farm Bureau, oppose the ban on methyle bromide. Farmers insist that alternatives to methyle bromide are too costly.

Too costly to whom? When the EPA decides that a pesticide's benefits outweigh its risks, they do not factor into the equation the cost of illnesses, disabilities or environmental degradation. These costs are difficult or impossible to measure in the short term, but they are substantial and serious.

Pesticides are a quick fix, a short-term approach. Fortunately, there are alternatives to pesticides, such as Integrated Pest Management, which offer long-term solutions that focuses on correcting the cause of insect, weed or fungus problems. IPM protects drinking water, food, soil and air by minimizing, if not eliminating, pesticide use. It is an ecosystem approach that protects biodiversity.

In the coming months GreenCAP will have articles on these pages discussing safer approaches to common pest problems, weedy lawns, bees and wasps, and more. For more information visit www.beyondpesticides.org, www.pesticide.org, and www.greendecade.org.

Lucia Dolan, co-chairman of GreenCAP, is on the board of the Green Decade Coalition.