



Pesticide Education Center

Consumer Pesticide Safety Series

2 Lawn Care

(Revised August 2002)

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What You Should Know about Lawn Care Chemicals

- ◆ Lawn care pesticides are poisons that kill insects, weeds, and organisms that cause plant diseases. Many are known or suspected to cause cancer, birth defects, and infertility. They can also damage the brain and nervous system, lungs, kidneys, liver, endocrine, and immune systems.
- ◆ Pesticides used on your lawn or your neighbor's can end up inside your home even when the windows are closed. Pesticide residues are tracked indoors by family members and pets, and drift in through cracks and crevices and small openings around windows and doorways.
- ◆ Once pesticides are inside your home they can stay there for a long time, contaminating furniture, upholstery, carpets, even children's toys. Pesticide residues last much longer indoors, for months or even years — since there is no sunlight, air, wind or rain to break them down or wash them away. The highest levels are in house dust, especially carpet dust.
- ◆ Lawn care pesticides are easily absorbed into the body especially through the skin. Children crawling or playing on lawns and carpets, or with their toys, readily absorb pesticides through the skin and by swallowing. Children whose hands and skin are wet from saliva absorb 100% more pesticides than if their hands and skin were dry.
- ◆ Just because you do not get any symptoms from pesticides does not mean you are not being exposed and are not at risk. Long-term effects such as cancer and brain damage, especially in children, may occur from low level exposures over time that do make them acutely ill.

Health Problems from Lawn Care Chemicals

- ◆ Lawn care pesticides can cause short-term (acute) effects, including rashes, burning of the eyes and throat, breathing problems, and flu-like symptoms such as headache, nausea, muscle aches and fatigue. They can also aggravate or cause asthma, allergies and multiple chemical sensitivity.
- ◆ Long term (chronic) effects linked to pesticides include cancer, infertility, birth defects, Parkinson's disease, and damage to the brain and nervous system. The types of cancer seen in children include leukemia, brain cancer, non-Hodgkin lymphoma, and soft tissue sarcoma. The same cancers are seen in adults as well as multiple myeloma, cancer of the pancreas, breast, prostate, kidney/bladder, eye and colon-rectum.

What About Children and Pets?

- ◆ Children are much more susceptible to health effects of pesticides than adults. At the same level of exposure they will absorb more pesticides, because they have more skin surface for their size, and take in more breaths per minute. Children's ability to degrade pesticides in the liver and their immune system protections are not fully developed.
- ◆ Your pets can be poisoned by lawn chemicals, especially snail and other baits. Dogs are more likely to get a type of cancer called canine malignant lymphoma if their owners use lawn care chemicals.

How to Have a Healthy Non-Toxic Lawn

- ◆ Remember that before the aggressive marketing of toxic lawn chemicals, Americans did have beautiful natural lawns. They did it by using common sense and working with natural ecosystems, not destroying them.
- ◆ Do not hire a company to put toxic chemicals (including chemical fertilizers, and herbicides) on your lawn, even on a one time basis. Many people are under the false impression that glyphosate (Roundup) and other herbicides are not pesticides. Do not give your lawn “junk food“ by using chemical fertilizers, which greens it up but stresses the lawn and makes it more vulnerable to pests. Use compost and natural organic materials instead.
- ◆ While you transition from a chemical to a natural lawn *be patient*. It takes time to create a natural, non-chemical dependent system. Seek out a neighbor or organic gardener who uses natural methods. Or hire a lawn company that does natural lawn care without chemical fertilizers and toxic pesticides.
- ◆ Do not over water or water on a schedule. Wait until your lawn is really thirsty and then give it a long slow deep drink of water. This will help control pests by enabling roots to grow deeper and downward.
- ◆ Do not cut your lawn too short; keep it about 2½ to 3½ inches high. Mowing high results in longer thicker grass with more surface to take in sunlight and a deeper root system. Healthier grass is more pest resistant and it is harder for weeds to take hold.
- ◆ Do not be misled by lawn care companies who tell you that they only use pesticides registered by the Environmental Protection Agency (EPA). *All* legal pesticides are registered by the EPA. It is against the law to advertise or market pesticides as “safe”.
- ◆ Do not be misled by companies who tell you that herbicides and chemical fertilizers are compatible with a natural lawn. They are not. Or by companies that tell you they use IPM (Integrated Pest Management). IPM can include the use of toxic pesticides.
- ◆ Even if you are not concerned for yourself, remember that your use of lawn chemicals can put your neighbors at risk. Most pesticides never reach the target pest — 85 to 90 percent drift off target, travelling a mile or more, contaminating air, water, soil, other people’s property and children’s play areas. Your lawn chemical use can make other people sick, and expose pregnant women, cancer survivors, the elderly, and others on medication, or with serious health problems.

Safer Alternatives to Toxic Pesticides

- ◆ **Common Insecticides:** Diazinon, Dursban (chlorpyrifos), Kelthane, Lindane, Malathion, Orthene, Sevin (carbaryl), among others. **Safer alternatives:** insecticidal soaps, diatomaceous earth, and neem products.
- ◆ **Common herbicides:** Atrazine, 2,4-D, Dicamba, MCPA, Roundup (glyphosate), Trichlopyr, and Trifluralin among others. **Safer alternatives:** corn gluten, hand weeding, hot water and vinegar, weed wackers, and proper mowing and watering.
- ◆ **Common fungicides:** Benomyl, Captan, Daconil (chlorthalonil), Maneb, and Mancozeb among others. **Safer alternatives:** sulfur, baking soda, some copper products cultural controls, and proper watering.

For more information about pesticides, see the book by Dr. Marion Moses “*Designer Poisons: How to Protect Your Health and Home from Toxic Pesticides*”.

How To Order Designer Poisons

\$22.50 book rate \$24.50 priority mail

CALIFORNIANS ADD \$1.50 SALES TAX.

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