## **GET YOUR LAWN OFF DRUGS**

PROBLEM: Exposure to lawn & garden pesticides increases the risk of:

- leukemia
- cancer
- non-Hodgkins lymphoma
- soft tissue sarcoma (lung cancer)
- kidney damage
- genetic defects
- · asthma &. respiratory disorders
- learning & developmental disorder.
- · behavioral disorders.

**PROBLEM**: Lawn care companies can say they are "organic based" if only 50% of the product constituent is organic.

**SOLUTION:** Know what you put on your lawn. Read labels and avoid:

- insecticides: carbaryl, chlordane, chlopyrifos, DDT-DDE, diazinon, dicofol, isenphenfos, lindane, malathion, methoxychlor
- herbicides: 2, 4-D, dicamba, dacthal, MCPA, MCPF? trifluralin
- fungicides: chlorothalonil

Before contracting with a lawn care service, ask them:

- If they routinely use the least toxic method of pest control
- If they are familiar with alternatives to toxic herbicides, pesticides and fertilizers
- If they will alter operations according to your concerns
- If they use chemicals insist on a list and the MSDS (Material Safety Data Sheet) on each and study it.

If they cannot assure you of non-toxic treatment program, call someone else. The only way we can create a pesticide-free environment is to by choosing safer alternatives.

**FACT:** Under Federal Law, only active ingredients (a total of about 300) need to be listed by name and percentage on pesticide labels. "Inert" ingredients can be lumped as a group into one percentage.

PROBLEM: More than 20 of the "inert" chemicals listed on pesticide labels are on the EPA's list of priority pollutants found at superfund sites and 14 are considered extremely hazardous substances.

**SOLUTION:** Use alternative methods of pest control and or less toxic measures

**FACT** 2, 4-D was a main component of Agent Orange and is used in over 1,500 lawn products.

PROBLEM: Weedkiller 2, 4-D has been associated repeatedly with non-Hodgkin's Type Lymphoma (the 2nd fastest growing cancer in the U.S.)

**SOLUTION:** Test your soil. Weeds are a result of mineral & microbiological imbalance. Add natural, organic sources to restore nutrient balance.

**FACT:** Wood preservatives account for more than 30 percent of all pesticides used in the U.S.

PROBLEM: Wood preservatives, used in pressure treated wood (for decks, utility poles and railroad ties) are among the most toxic chemicals known to mankind.

**SOLUTION**; Avoid pressure "treated" wood. Use cedar, hardwood or pressurized wood.

## **GROWING GREEN FIELDS**

Lawns cover over 25 million acres in the U.S.

**Test Your Soil**: Test every 3-5 years. Your health begins with the soil. Know the mineral, biological and nutrient content as well as the pH (should be 6.5-7) so that you can make an educated decision on how to nourish your soil. Contact the U.C. Agricultural Extension Agent 415/499-4204 or look up www.soilfoodweb.org

**Mow High**: 2.5-3.5". Healthy grass has deep roots. Every  $\frac{1}{4}$ " of height =  $\frac{3}{4}$ " of roots. Weeds need sun to grow. Short grass & over watering promotes shallow root growth, weeds & thatch.

Leave Grass Clippings: Grass clippings provide nutrients equal to 4-1-3 fertilizer, about as perfect a combination as your lawn needs.

Fertilize: use slow release organic fertilizer such as seaweed compost, bone meal, or blood meal. Fresh compost teas will reestablish biological balance and feed the soil as opposed to chemical fertilizers that feed only the grass. They have long-term benefits, which improve the soil's ability to retain and release nutrients while contributing microorganisms, which speeds decomposition of clippings and thatch. Don't feed in summer (you only feed the weeds)

Aerate: you reduce compaction and encourage air exchange and penetration of both water and nutrients into soil and roots.

Reseed: with a variety of grass every spring!

Water Deeply & Less Frequently: Longer grass = deeper roots = less watering!

Improve the Health of Soil:

- Add a natural source of ground limestone to make pH more neutral (less acidic)
- Add organic matter such as alfalfa, compost, good topsoil, ground leaves. This increases biological activity.

## WHAT THE FUTURE HOLDS

"(In the U.S. today) we are operating with a regulatory framework that is 20 years out of date, built on the rudimentary science of the 1970's. EPA has required complete tests for developmental neurotoxicity for only 12 chemicals (9 pesticides and 3 solvents). Nearly 3/4 of the top high volume chemicals have undergone little or no neurotoxicity testing, despite the fact that 28% of the current inventory of 85,000 chemicals in commerce have neurotoxic potential. Under our 1970's statutes, TSCA (Tosca) and FIFRA, EPA cannot require testing unless it has evidence of danger, and it cannot prove it has evidence of danger without testing."

"Changing this increasingly dangerous situation will require a major shift in our approach to chemical regulation, and in our debate over education in America. We can no longer act to protect society, to protect children, from the impacts of chemicals only after scientific consensus is reached and hundreds of thousands or millions of Americans and their children have been exposed without their knowledge or consent. The disturbingly long time it took the federal government to act on dioxin, the most potent carcinogen ever identified, makes that clear."

"We must substitute a far more protective standard, and follow the Europeans in developing a broad precautionary principle approach to chemical regulation. Public health, economics and the future of our children demand it.

"The current debate over education presents us with a perfect opportunity to outline linkage between environment and health. The national stage is being set, and I urge you play on that stage - you have the knowledge and the world's children need your help"

Timothy Wirth, U N Foundation, June 20, 2000

## RESOURCES

#### Alternative Pesticides:

- diatomaceous earth (crushed fossils) effective for ticks and fleas, pet safe
- beneficial nematodes
- pheromone traps
- gel and paste baits
- insect growth regulators
- insecticidal soaps

Gardens Alive offers all of these products. Call for their catalogue at 513/354-1482 or use the web at www.gardensalive.com

Homemade garlic insecticide: pulverize in a blender 2 whole cayenne peppers, one large onion and whole bulb of garlic with a little water. Add a gallon of water. Let stand 24 hours, strain and store. Spray as needed.

Homemade rhubarb insecticide: Boil 1 lb of rhubarb leaves in 3 pints of water for 20 minutes. Cool, strain, add1 tablespoon dish detergent and spray on leaves as needed.

Homemade weed killer: Boil a quart of water, add 2 T salt & 5 T vinegar. Pour directly while hot.

Homemade fungicide: Mix one cup of milk to nine cups of water and spray twice weekly.

**Bio Intergral Resource Center** 510/524-2567 **Californians for Pesticide** Reform (CPR) 415/981-3939 **Environment California** 415/622-0086 Gardens & Gables 415/499-0331 Green Jeans Garden Supply 415/389-8333 **Marin County Stormwater Pollution Prevention Program** 415/485-3363 O'Donnells Fairfax Nursery 415/453-0372

415/663-9090

Permaculture Inst. Of N. CA



# **YOUR** LAWN

## **PERSONAL CHOICES**

# A GUIDE TO REDUCING **ENVIRONMENTAL RISKS**

Pesticide Free Zone Box 824 Kentfield, CA 94914 www.pesticidefreezone.org 888/590-3993