

✓ **Mow high.** Set the mower blade to a height of 8 cm (3"). This promotes root development, shades out weeds and conserves soil moisture. Leave your grass clippings on the lawn as they naturally help to fertilize and add moisture. Sharpen your blade every spring to prevent tearing and stressing of grass blades.



✓ **Don't over water.** A healthy lawn can survive several weeks in a brown or dormant state. During the dormant stage grass tends to wilt but will recover when wet weather returns. If you wish to maintain a green lawn all summer then give your lawn 2.5 cm (1") of water early in the morning once a week. Use

a rain gauge or a tuna can under your sprinkler to measure the 2.5 cm (1") level of watering. If rain has occurred, then wait 7 days before considering watering. Watering infrequently and deeply promotes deep root growth.



✓ **Monitor your lawn for pests (insects, weeds and diseases).** Use these techniques to avoid pest problems and visually inspect your lawn and soil for damage from time to time. This will help you identify potential pest problems before they become severe. Make note of any problem you observe and consult with your local gardening store, public library or the resources listed on this brochure's back panel. Understanding pests is necessary to help you decide if and when remedial action is warranted. Remember that pesticides not only kill pests, but often kill or harm other living things that are beneficial to your garden, like earthworms and lady bugs.



✓ **Use Reduced Risk Products only as a last resort.** Tolerate some pests and try hand digging to control weed problems. A small pest population in a healthy lawn is hardly noticeable and not demanding of action. If the pest begins to threaten the health of the lawn then consider using a Health Canada approved product that is lower risk to your health and the environment. Refer to www.region.york.on.ca or call Health Connection at 1-800-361-5653 for a list of reduced risk products.



Early recognition of symptoms and an immediate appropriate response are essential. **If you suspect pesticide poisoning, contact your physician or the Poison Control Centre at 1-800-268-9017 immediately.**

¹ Sanborn M., Cole D., Kerr K., Vakili K., Sanin HL., Bassil K. (2004). *Systematic review of pesticide human health effects*. Toronto, Ont.: The Ontario College of Family Physicians, p. 4.



For More Information Contact:

York Region Health Services
Health Connection
1-800-361-5653 or www.region.york.on.ca

York Region sponsors free water-efficient landscape audits and workshops. To book an appointment or register visit www.waterfortomorrow.com or 1-888-967-5426

Health Canada's Healthy Lawns
Tips for Homeowners
www.healthylawns.net

Pest Management Regulatory
Agency Information Service
1-800-267-6315 or www.pmra.ca

Ontario Ministry of the Environment
www.ene.gov.on.ca or 1-800-376-4547

Ontario Ministry of Agriculture and Food
www.omaf.gov.on.ca or 1-800-567-8898

Guelph Turfgrass Institute
www.uoguelph.ca/GTI or 519-767-5009

The Composting Council of Canada
www.compost.org



A Healthy Lawn.
A Healthy Family.



Reduce the Use
of Pesticides



LAWN AND GARDEN PESTICIDES AND HUMAN HEALTH



There is increasing concern about the impact of lawn and garden pesticides on our health and our environment. This brochure offers suggestions for natural lawn care and reduced pesticide use. A well cared for lawn should not need pesticides. A healthy lawn will out-compete weeds and be less susceptible to insect problems. You *can* create a beautiful lawn and

garden without putting your health, the health of others, or the environment at risk.

WHAT IS A PESTICIDE?

A pesticide is any substance used to repel, destroy or prevent the development of a pest such as insects, weeds or rodents.

Many household products are pesticides:

- Cockroach sprays or traps (**insecticides**)
- Flea and tick sprays for pets (**insecticides**)
- Mosquito or black fly sprays or creams (**repellents**)
- Some kitchen, laundry and bath sanitizers (**hard surface disinfectants**)
- Mice or rat poisons (**rodenticides**)
- Lawn and garden products such as weed killers (**herbicides**)
- Some swimming pool chemicals (**fungicides**)



HOW ARE PESTICIDES REGULATED?

All pesticides for sale or use in Canada are registered under the Federal *Pest Control Products Act* and managed through Health Canada's Pest Management Regulatory Agency (PMRA). Provincially, the *Pesticides Act* is regulated by the Ontario Ministry of the Environment (MOE). The MOE oversees the sale, use, storage, transportation and disposal of pesticides. To dispose of pesticide containers contact the York Region Household Hazardous Waste Depots (hhw@region.york.on.ca).

WHAT IS THE CONCERN ABOUT PESTICIDES?

It is the misuse or overuse of pesticides which pose significant risk to humans and can cause environmental damage. People can be exposed to pesticides in three ways:

- Inhaling pesticides
- Absorbing pesticides through the skin or mucous membranes
- Ingesting pesticides

Symptoms of pesticide exposure may include difficulty breathing, headaches, blurred vision, dizziness, nausea, skin and eye irritation, cramps and vomiting. Be alert for the early signs and symptoms of pesticide poisoning in yourself and others.

ARE CHILDREN AT GREATER RISK?

The Ontario College of Family Physicians says that children are particularly vulnerable to the effect of pesticides¹. This is because compared to adults children breathe more, eat more, have more sensitive skin, have more frequent hand to mouth contact and have increased exposure as they play on lawns where pesticides are applied. Children also have faster metabolisms and many sensitive body systems that are growing and developing.

FOLLOW A NATURAL LAWN CARE APPROACH



Homeowners can achieve a healthy lawn while reducing the need for pesticides by following the principles of Plant Health Care (PHC) and Integrated Pest Management (IPM). These approaches focus on preventative maintenance practices to create healthy grass that is more resistant to pest infestations.

Follow these eight straightforward steps when caring for your lawn:

- ✓ **Test your soil.** Consider purchasing a do-it-yourself test kit from your local gardening centre or contact an accredited soils laboratory or nursery to perform a soils test. Follow the instructions on the kit to determine the pH, Nitrogen (N), Phosphorus (P) and Potassium (K) levels of your soil. Appropriate levels are vital for proper plant growth. The results of your soil test may indicate a need to adjust the soil's N, P, or K levels by adding certain fertilizers or a buffer solution may be needed to obtain the optimal pH of 6.7.
- ✓ **Core aerate your lawn** lawn in the spring and fall before fertilizing, top dressing and overseeding. Core aeration is one of the most important steps to achieve a healthy lawn using PHC and IPM techniques. Core aerating physically removes a plug of soil and turf, leaving it on the grass. It helps to remove deep thatch and reduces soil compaction. Core aeration encourages deeper rooting and allows water, nutrients and organic matter to penetrate the soil. Rent a mechanical aerator or hire a lawn care company to carry out the job.



- ✓ **Fertilize** your lawn in the spring and fall. Use your soil test results to help you decide if fertilizing is necessary and which product your lawn needs. Environmentally friendly options include slow release fertilizers that are preferably organic or phosphorus free, such as compost or corn gluten meal. Leaving the grass clippings on the lawn is a great way to naturally fertilize your lawn. Compost can assist you in your soil adjustment requirements and also acts as a soil enhancer by providing vital microbes that help to break down thatch and inhibit pests.



- ✓ **Top dress and overseed** your lawn by spreading a 0.5 cm (1/8") to 1 cm (1/2") layer of finished or mature compost mixed with hardy, drought tolerant, pest-resistant grass species. Early fall is the best time to top dress and over seed. Apply more top dressing and seeds to sparse areas. Select a mixture of grasses rather than a single variety and try to get grass that is enriched with endophyte. Endophyte helps protect the plant and make it more robust. Consider seed types such as mixtures of perennial ryegrass, fescues, clover and native grasses and wildflowers. The type you choose will depend on the sun, soil and moisture conditions of your lawn. After application apply 2.5 cm (1") of water. Be careful when using triple mix or top soil as a top dress, because these products often contain weed seeds. Properly produced compost is disease and weed free, since the high temperatures of the composting process kills disease, bacteria and most weed seeds.