

# Play it SAFE

# A CONSULTATION ON COSMETIC LAWN PESTICIDES

A number of other provinces and municipalities have taken steps to reduce human exposure to cosmetic lawn pesticides. While Manitoba already regulates pesticides, this paper provides background, explores options and raises awareness about the role cosmetic pesticides may have in the future in the province.





#### WHAT ARE COSMETIC LAWN PESTICIDES?

Pesticides include insecticides, fungicides, herbicides and other chemical compounds used for the control of insects, fungi, weeds and other pests.

The terms "non-essential" or "cosmetic" pesticides refer to the application of lawn care pesticides for the purpose of making the lawn look better by killing weeds, insects and other pests.

Pesticides in the agriculture and forestry sectors, on golf courses, on sod farms or to control noxious weeds and invasive species, control mosquitoes or protect health may be the same pesticides that are used for cosmetic purposes, but they are not referred to as "cosmetic pesticides" and are not the subject of this consultation.

This consultation focuses on concerns about chemical compound cosmetic pesticides for lawns and children's playing turf.

#### HOW ARE COSMETIC PESTICIDES CURRENTLY REGULATED?

#### Federal regulation

Health Canada's Pesticide Management Regulatory Agency (PMRA) has a review process for the registration of pesticides. It registers only those products for which there isn "...reasonable certainty that no harm to health, future generations and the environment will result from use or exposure when used according to label instructions". Health Canada says "...the main goal is to prevent unacceptable risks to people and the environment from the use of pesticides".

The federal government will phase out "weed-and-feed" products, which are herbicide and fertilizer combinations, by December 2012 regardless of provincial policies.

#### Provincial regulation

While Health Canada has the authority to register pesticides, municipalities and provinces have the authority to further impose restrictions on the transportation, sale, storage, use and disposal of these products.

The following provinces have implemented varying restrictions regarding the sale or use of cosmetic pesticides:

- Quebec (2003)
- Alberta (2008)
- Prince Edward Island (2009)
- Newfoundland and Labrador (2012)
- Ontario (2008)
- New Brunswick (2009)
- Nova Scotia (2010)

British Columbia is currently considering restricting cosmetic pesticides province-wide.



Manitoba Conservation and Water Stewardship administers a pesticide permit system that covers the use of pesticides on land normally accessible to the public. Users such as weed control districts, municipalities, railways, utilities, school divisions and golf courses obtain a permit each year in accordance with *The Pesticides Regulation* under *The Environment Act*. The permit lists the products approved for use and specifies where and when the products can be applied.

Manitoba Agriculture, Food and Rural Initiatives (MAFRI) administers *The Pesticides and Fertilizers License Regulation* under *The Pesticides and Fertilizers Control Act*. This regulation requires retail pesticide dealers and commercial pesticide applicators to be certified and licensed. Licensing is not required for retailers or users of "domestic class" products (products approved for home use). Agricultural producers are also exempt from applicator licensing.

MAFRI is also responsible for legislation about the control of certain pests through *The Noxious Weeds Act* and *The Plant Pest and Diseases Act*. MAFRI is consulting on whether there should be changes to remove many commonplace weeds from *The Noxious Weeds Act* and whether three distinct categories of weeds should be set out: prohibited, noxious and nuisance.

#### Municipal regulation

More than 170 municipalities across Canada have also enacted bylaws restricting cosmetic pesticide use, including 40 municipalities in British Columbia.

The City of Brandon has a bylaw restricting cosmetic pesticide use in public areas through an "integrated pest management" approach (see below). This provides a combination of methods to minimize environmental effects. Brandon has an integrated pest management advisory committee and a process to establish buffer zones around no-spray areas.

The City of Winnipeg has a bylaw requiring commercial applicators to post signs after the application of certain cosmetic pesticides, and helps fund an organic lawn care education project delivered by the Manitoba Eco-Network.

#### WHY IS THE PROVINCE CONSULTING ON COSMETIC PESTICIDES?

In 2009, the province committed to look at Manitoba's regulation of cosmetic lawn pesticides and consider improvements for the environment and health, and the province referred the matter to the Manitoba Round Table for Sustainable Development.

On the basis of the presented information on human health, environment and the existing restrictions in provinces across Canada, the Manitoba Round Table for Sustainable Development recommended that the province establish a full ban on the sale and use of pesticides for cosmetic purposes.

According to a 2007 Statistics Canada report, households in the three prairie provinces were the highest users of pesticide products (Saskatchewan: 48%; Manitoba: 47%; Alberta: 47%). The Manitoba government is seeking a more sustainable province with science-based strategic protections for both health and the environment. Before options for changes are considered by the government, it is important to have informed advice and public consultation on how we as Manitobans can best reduce exposure to cosmetic pesticides.



#### ARE COSMETIC PESTICIDES ACTUALLY DANGEROUS?

The U.S. Environmental Protection Agency states that "By their very nature, most pesticides create some risk of harm. Pesticides can cause harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms".

That observation must be tempered with a consideration of the balance between such risk and the positive benefits of pesticides. For example, pesticides can fight disease and invasive species that undermine critical food production.

#### WHO IS CONCERNED ABOUT COSMETIC PESTICIDES?

Health care professionals as well as scientists, academics, environmentalists, parents and women's organizations are increasingly advocating for action to reduce cosmetic lawn pesticide exposure.

Doctors Manitoba, in keeping with the relevant policy resolutions of the Canadian Medical Association, urges all levels of government to:

- show leadership by refraining from the cosmetic use of pesticides and aggressively employ safer alternatives to the use of chemicals;
- promote safe and rational pesticide use by using the precautionary principle in determining the impact of pesticides, including insecticides, herbicides and fungicides; and
- undertake a public education program to increase awareness of the potential risks associated with the cosmetic use of pesticides and promote safer alternatives to the use of chemicals.

In May 2012, the Ontario College of Family Physicians issued a systematic review of pesticide health effects, which examined 142 studies. The report looks at health outcomes and pesticide exposure and links pesticides to concerns with fetal development, noting that "...the results of this study would indicate that there are benefits to reducing exposure of pregnant women to commonly-used pesticides."

The report also notes that exposure to pesticides in the womb can lead to issues in child neuro-development, such as autism and ADHD, respiratory problems such as asthma and some lung diseases, and highlights "...the importance of reducing exposure when possible and of using proper protective equipment when exposure is necessary."

The Canadian Cancer Society's "...call for a ban is based on our careful review of the scientific evidence and our assessment of the risks and benefits of cosmetic use of pesticides. While connection between pesticides and cancer isn't conclusive at the moment, we are very concerned about the growing body of evidence suggesting pesticides may increase the risk of several different types of cancers. We concluded that since cosmetic use of pesticides has no known health benefits and has the potential to cause harm, we would advocate for a ban on the use and sale of pesticides for this purpose."



The society also notes the issue can be more complex as there can be health and production benefits to using pesticides, especially in agriculture. "Our call for a ban does not apply to using pesticides in agriculture to grow food, ensure public health and safety or prevent environmental damage. In these instances, the issue is much more complex since there can be health benefits in controlling pests."

Other organizations asking for a ban on the use of cosmetic pesticides nationally and in Manitoba include the Canadian Breast Cancer Foundation, the Canadian Association of Physicians for the Environment, the Leukemia and Lymphoma Society of Canada, the Canadian Pediatric Society, the Parkinson Society of Canada, the Western Canada Wilderness Committee, the Learning Disabilities Association of Canada, the David Suzuki Foundation, the Campaign for Pesticide Reduction! Manitoba, the Green Action Centre, Nature Manitoba and Chemical Sensitivities Manitoba.

The Association of Manitoba Municipalities supports restricting cosmetic pesticide use to licensed applicators. This would ensure cosmetic pesticides are applied safely and would help control pesticide use because only licensed applicators would have access to these types of pesticides.

# DO STUDIES SHOW THAT CERTAIN POPULATIONS ARE MORE AT RISK THAN OTHERS?

Research is increasingly providing more information on the potential risks to children. Infants and young children may be more vulnerable given their relative body weight, rapid body and brain development, ability to detoxify chemicals and given their behaviour - crawling on lawns and floors, putting their hands in their mouths and their proximity to the ground.

In 2007, a study by the David Suzuki Foundation found that more than 6,000 cases of pesticide poisonings are reported in Canada each year. Of those, 2,832 cases involved children.

Pregnant women, the elderly, those with chemical sensitivities and pets may be at more risk than the general population.

#### HOW DO PESTICIDES AFFECT THE ENVIRONMENT?

Pesticides can leach through the soil and end up in groundwater and surface water. Once in lakes and streams, they may also become a threat to aquatic life. Some chemicals become more concentrated through the food chain, resulting in long-term negative effects to animals, such as an inability to successfully reproduce. In addition, fish and wildlife may accumulate concentrations of toxins making them unsuitable for human consumption.

Manitoba Conservation and Water Stewardship collects water samples from rivers, lakes and streams across the province and conducts analyses for the concentrations of pesticides. The majority of pesticides analyzed are not detected in surface waters in Manitoba. Pesticides that are occasionally detected rarely exceed guidelines for the protection of aquatic life.



#### IF HEALTH CANADA APPROVES PESTICIDES, WHAT'S THE PROBLEM?

Risks can be managed or mitigated by the proper handling of pesticides by following the directions for use, and pesticides are approved by Health Canada based on proper use.

Health Canada does urge minimizing pesticide exposure and promotes the use of alternatives where possible.

Health Canada does warn that "...pesticide application should only be done when there are no children, pregnant women, elderly persons, pets or animals present."

The Canadian Cancer Society notes that,"...registration by the PMRA does not mean that a pesticide is safe or without risk. When PMRA registers a pesticide, it means that risk to both human health and the environment is minimized –but not eliminated- if the product is used for its intended purpose and according to label directions. In its assessments, PMRA does not differentiate between cosmetic and non-cosmetic use. A pesticide may have an acceptable risk for one use, but in the Society's view, no risk is acceptable when used for cosmetic purposes."

Another federal government agency, the Canadian Centre for Occupational Health and Safety advises, as with all chemical exposures, that it is good practice to use products as little as possible (or not at all) or to use a less toxic substance.

Health Canada says: "Pregnant women should follow the additional safety precaution of not entering a pesticide-treated area for 24 hours after the pesticide has been applied."

It should also be noted that the "precautionary principle" suggests that where there are threats of serious harm, a lack of full scientific certainty should not be a reason to postpone cost-effective measures, especially when considering impacts on children.

This prevention-based approach is set out in *Manitoba's Sustainable Development Act*, which says: "Manitobans should anticipate, and prevent or mitigate, significant adverse economic, environmental, human health and social effects of decisions and actions, having particular careful regard to decisions whose impacts are not entirely certain but which, on reasonable and well-informed grounds, appear to pose serious threats to the economy, the environment, human health and social well-being."

# IF COSMETIC PESTICIDES WERE RESTRICTED, WILL MY LAWN BECOME COVERED IN WEEDS AND SEEDS DRIFT?

Many homeowners carefully tend to their lawns and this will continue as it has across most of Canada where cosmetic pesticide regulations have been in force. However, some of the methods and applications may vary.

Healthy chemical-free lawns are an asset to families, communities and the environment. Weed control should be encouraged. There must always be efforts to guard against the risk of seed drift. Work continues to raise greater awareness of the safer alternatives to cosmetic pesticides.



As Manitobans become more aware of safer alternatives, weed control may in fact increase. For example, it is reported that Halifax saw a significant increase in both the number of lawn care companies and employees per company since the enactment of a cosmetic pesticide ban.

Health Canada supports reducing reliance on pesticides and, along with provincial and municipal governments, has developed information encouraging homeowners to adopt environmentally sound lawn care practices and to only use pesticides when necessary.

# WHAT OTHER OPTIONS ARE THERE FOR GETTING RID OF WEEDS WITHOUT USING COSMETIC PESTICIDES?

Organic lawn care is increasingly popular internationally. Recommended practices to build a strong lawn that prevents weeds include: mowing high with sharp blades, natural fertilizing, overseeding, aeration, infrequent, deep watering and using new easy-to-use manual weeding tools.

In provinces that have banned cosmetic pesticides, such as Nova Scotia and Ontario, there are a number of eco-friendly products available for use by homeowners and industry. Biologically-based pesticides, such as pheromones and microbial pesticides, are becoming increasingly popular and may be safer than traditional chemical pesticides. Corn gluten-based products and iron-based products are available. Organic insecticides and herbicides are now also widely available.

Some entities have adopted an integrated pest management approach which incorporates pesticide application into a management system that uses pesticides, after all other controls such as biological, physical, mechanical and preventative have been tried. This method monitors patterns of infestation and encourages environmentally friendly approaches.

# ISN'T THE USE OF COSMETIC PESTICIDES ON MY OWN PRIVATE PROPERTY A PERSONAL ISSUE?

Pesticides may drift in the air, leach into the soil or runoff into waterways and not remain on an individual's property. Further, pesticides may be tracked indoors where residues can exist in carpets and clothing for long periods of time – even up to one year.

#### WHAT ABOUT PESTICIDES ON YOUNG CHILDREN'S SPORTS FIELDS?

The province is also looking at ways to reduce exposure to pesticides on playing fields and spaces used by children.

Many schools in Manitoba, are minimizing or eliminating pesticide use.



# WHAT ABOUT THE PROVINCIAL GOVERNMENT'S OWN COSMETIC PESTICIDE USE?

Any cosmetic pesticide regulation introduced for lawns will apply to government lawns as well. The lawn of Manitoba's Legislature is today maintained without chemical pesticides.

The province also uses pesticides to manage noxious weeds and other weed and pest problems on right-of-ways. Manitoba is now developing options to effectively reduce pesticide use on public spaces generally through the expanded and rigorous use of integrated pest management. This will be developed over the next two to three years. It will require training and awareness as well as facilitating pilot initiatives to demonstrate the effectiveness of this approach.

#### WHAT ARE SOME OF THE OPTIONS FOR EFFECTIVE PESTICIDE REGULATION?

The following are some options that could be implemented alone or in combination:

#### 1. Further restrict the sale of pesticides used for cosmetic purposes

- limit sales to licensed pesticide applicators only
- prohibit all sales of cosmetic lawn pesticides

#### 2. Further restrict the use of pesticides used for cosmetic purposes

- prohibit the application of home use cosmetic pesticides
- allow cosmetic pesticide use as part of integrated pest management
- require buffer zones around spray zones
- enhance signage requirements when pesticides are applied
- only allow licensed applicators to apply cosmetic pesticides
- focus regulations on lawns used by infants and young children
- develop restrictions for other turf used by infants and young children

#### 3. Provide more information

- raise awareness about the concerns associated with cosmetic pesticides
- promote integrated pest management and environmentally-friendly alternatives to cosmetic pesticides



#### WHAT ADVICE IS THE PROVINCE SEEKING?

Do you have concerns about pesticides used for cosmetic purposes?

Do you support a different regulation of cosmetic pesticides?

How should the provincial government best regulate cosmetic pesticides?

Any other comments?

Please email your comments to cosmetic.pesticides@gov.mb.ca or mail them to Environmental Programs and Strategies Branch, Manitoba Conservation and Water Stewardship, 1007 Century Street, Winnipeg, Manitoba R3H 0W4 by October 1, 2012.

While all comments are appreciated, responses to individual comments will not be provided.

