

Recommendation for a Provincial Ban on the Cosmetic Use of Pesticides

A Background Paper

Manitoba Round Table for Sustainable Development

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Summary

The Manitoba Round Table for Sustainable Development recommends that the Province of Manitoba establish a full ban on the sale and use of pesticides for cosmetic purposes. This ban should include the non-essential, cosmetic use of chemical insecticides, herbicides and fungicides for residential, institutional, and recreational facilities, near water and all urban and rural areas.

Cosmetic use does not include essential use such as for the protection of human health, agriculture and forestry.

Definitions

Pesticides: Includes insecticides, fungicides, herbicides and other synthetic chemicals used for the control of insects, fungi, weeds, and other pests.

Cosmetic Pesticides: Pesticides used in lawn and garden care for aesthetic, non-essential purposes on private and public property. (Adapted from Health Canada, 2011)

Human Health

In 2004 the Ontario College of Family Physicians reviewed the existing relevant literature including 30 high quality reviews and over 250 primary research studies. They found that many pesticides used in Canada for cosmetic lawn and garden care are associated with serious adverse health effects, including the following:

- Triazine herbicides increase the risk of breast cancer.
- The herbicide 2,4-D is linked to non-Hodgkin's lymphoma.
- Phenoxy herbicides and carbamates increase the risk of lung cancer.
- Glyphosate and Glufosinate herbicides are linked to congenital malformations in developing foetuses.
- Mothers living in homes that use pesticides in the home and garden during pregnancy increase the child's risk of developing childhood acute lymphocytic leukemia.

- Children of occupationally exposed workers have increased risk of developing kidney cancer.
- Pyrethrin insecticides are associated with increased risk of Parkinson's disease and chromosomal abnormalities.
- Diseases such as Parkinson's, ALS (Amyotrophic lateral sclerosis), and Alzheimer's are associated with long-term pesticide use. (Ontario College of Family Physicians, 2004)

Lawn and garden pesticides used for cosmetic purposes have been shown to raise the risk of cancers in adults and children. This applies not only to the homeowners and their children, but also to the occupationally exposed applicators and their children. There is evidence that the general population is also at increased risk due to the use of pesticides.

As a result of this weight of evidence collected through hundreds of scientific studies over the past three decades, a large number of health care groups have called for the complete ban on the sale and use of cosmetic pesticides. The Ontario College of Family Physicians, the Canadian Paediatric Society, the Canadian Cancer Society, the Canadian Nurses Association, the Canadian Public Health Association, the Toronto Board of Health and numerous other health professional associations have all called for the banning of cosmetic pesticides (Bassil et al., 2007).

Environmental Concerns

The use of cosmetic pesticides increases the risk of contamination of ground and surface water. Domestic well water can become contaminated with harmful chemical residues causing risk to rural families and communities. Surface water bodies receiving runoff from cosmetic pesticides can negatively impact wildlife such as fish and waterfowl.

Precautionary Principle

The Precautionary Principle states that if an action or policy has a suspected risk of causing harm to the public or the environment, a lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation (United Nations General Assembly, 1992). There is extensive evidence on the serious negative health and environmental impacts from the use of cosmetic pesticides. Therefore, some dissenting views and a lack of full consensus on scientific evidence should not prevent action against the use of cosmetic pesticides.

Cosmetic Pesticide Legislation/Regulation in Canada: A Jurisdictional Scan

Across Canada, most provinces have restrictions on the use and sale of cosmetic pesticides. Many provinces have legislated outright bans. Cosmetic pesticide use is high in Manitoba, and its use has been increasing, as is indicated in the figure below.

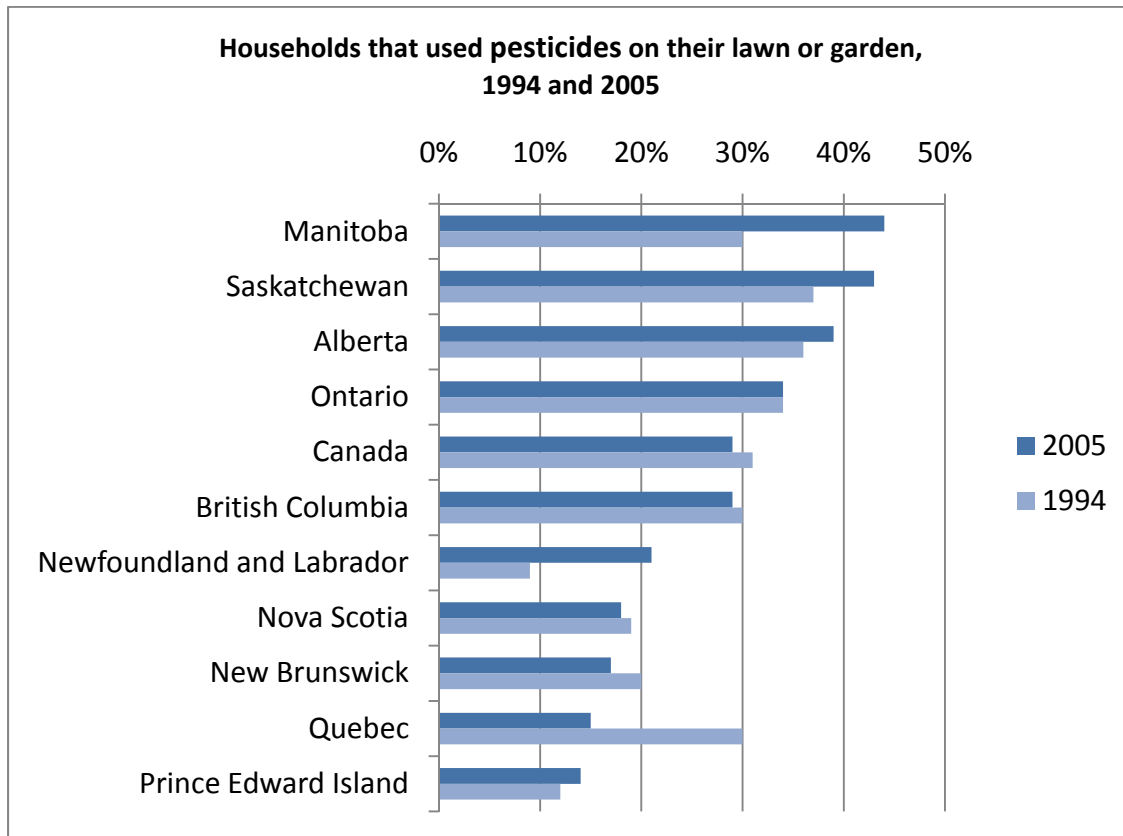


Figure 1. Household Pesticide Use in Canada, 1994 and 2005 (from Statistics Canada, 2008)

A Summary of Provincial Action on Cosmetic Pesticides in Canada

Jurisdiction	Action on cosmetic pesticides
Canada	Fertilizer-pesticide combination products cannot be sold after December 31, 2012.
British Columbia	2005 <i>Integrated Pest Management Act and Regulations</i> regulates the sale, containment, transportation, storage, preparation, mixing, application and disposal of pesticides.
Alberta	2010 ban on weed-and-feed lawn products that combine fertilizer and weed killer, mainly 2,4-D.
Saskatchewan	N/A
Manitoba	January 1, 2009, the use of lawn fertilizers containing more than one percent phosphorus is restricted on residential lawns, urban parks and golf courses.
Ontario	2009 ban on cosmetic pesticides prohibits sale and use for cosmetic purposes excluding golf courses, some sports fields, specialty turf, forestry and agriculture.
Quebec	2003 <i>Pesticides Management Code</i> prohibits the sale and use of about 20 “active ingredients” in some 200 lawn pesticide products.
New Brunswick	2008 regulatory changes under the <i>Pesticides Control Act</i> ban the sale and use of more than 200 over-the-counter lawn care pesticide products, including the use of products containing 2,4-D for domestic lawn care.
Newfoundland and Labrador	2003 Pesticides Control Regulation of the <i>Environmental Protection Act</i> bans the sale of pesticide-fertilizer combination products to un-licensed people. In 2007, fertilizer/herbicide products, commonly referred to as “weed-and-feed” products, were banned.
Prince Edward Island	2010 general regulations under the <i>Pesticides Control Act</i> institute ban on domestic lawn care pesticides including combination products, concentrates requiring dilution, hose-end products, granular products and those containing 2,4-D.
Nova Scotia	April 1, 2011, no person shall use or cause or permit the use of a pesticide in, on or over a lawn (there is a list of exempted pesticides). After April 1, 2012, no person shall use or cause or permit the use of a pesticide in, on or over an outdoor tree, shrub, flower or other ornamental plant (there is a list of exempted pesticides). There are exceptions for forestry, agriculture and golf courses.

Federal

All pesticides used in Canada must be accepted for use (registered under the federal *Pest Control Products Act*) by the Pest Management Regulatory Agency (PMRA) of Health Canada.¹ Before a pesticide is registered, the manufacturer must provide scientific data and information on:

- Product effectiveness in Canadian conditions
- Toxicity to humans, animals, and plants
- Food and feed residues
- Product fate in the environment
- Chemistry of the pesticide

The PMRA makes a registration decision after a complete review of the scientific data, safety, effectiveness, and merits of the product. When a pesticide is registered, it is given a unique *Pest Control Products Act* (PCP) registration number. This registration number appears on the pesticide label. Pesticide applicators have specific responsibilities under the federal *Pest Control Products Act*. Those responsibilities include:

- Possessing and using only registered pesticides
- Following the instructions contained on the pesticide label
- Ensuring that the pesticide is used, stored, and disposed of safely

Two private member bills (Bills C363 and C368) were introduced in April 2009, neither passed a first reading. The bills called for a moratorium “on the cosmetic use of chemical pesticides in the home and garden, on recreational facilities such as parks and golf courses, and near water, until scientific and medical evidence showing that such use is safe has been presented to Parliament and confirmed in a report prepared by a parliamentary committee”.² The bill was reintroduced in 2010 as Bill C368.

British Columbia

[The *Integrated Pest Management Act \(IPM\) and Regulations*](#) replaced the *Pesticide Control Act* and Regulations in January 2005. This legislation regulates the sale, containment, transportation, storage, preparation, mixing, application, and disposal of pesticides. This legislation requires certain pesticide applicators be certified. It also prohibits the use of a pesticide in a way that would cause an unreasonable adverse effect. The IPM Act and Regulations is administered by the Ministry of Environment.

¹ For more information regarding pesticide regulation in Canada see: www.hc-sc.gc.ca/cps-spc/pest/index-eng.php. Health Canada provides a fact sheet that outlines federal, provincial and municipal responsibilities at: www.hc-sc.gc.ca/cps-spc/pubs/pest/fact-fiche/reg-pesticide/index-eng.php

² For the text of the Bill and the current status see: <http://www2.parl.gc.ca/Sites/LOP/LEGISINFO/index.asp?Language=E&query=6804&Session=23&List=toc>

The [Cosmetic Pesticide and Carcinogen Control Act](#) received a first reading in April 2010, but did not pass onto a second.

Notably, individual municipalities in British Columbia have banned the use of cosmetic pesticides. These include Vancouver, Richmond and about two dozen other B.C. communities

Alberta

In 2010, the Alberta government banned the sale of weed-and-feed lawn products that combine fertilizer and weed killer, mainly 2,4-D, due to concerns such mixtures led to overuse of chemicals. Overuse results in higher concentrations of the chemical 2,4-D downstream from urban areas than is found in rural areas.

A weed and feed ban restricts the use of products that contribute to water pollution, but allows homeowners to use herbicide-only products.

Ontario

Ontario passed legislation implementing a “cosmetic pesticides ban” that took effect April 22, 2009. The requirements of the ban are detailed in Ontario Regulation 63/09 and the *Pesticides Act*, which was amended by the *Cosmetic Pesticides Ban Act*, 2008.³ The legislation:

- Generally prohibits the sale and use of pesticides for cosmetic (i.e., “non-essential”) purposes but excludes golf courses, some sports fields, specialty turf, forestry and agriculture
- Establishes 11 classes of pesticides:
 - One class of pesticide may not be sold or used
 - Another class may be sold and used according to label directions without any additional restrictions
 - Another class of products has both “cosmetic and non-cosmetic” uses, with specific rules provided for vendors to follow when dealing with potential purchasers (intended to ensure that purchasers do not use these products for cosmetic purposes)

³ See: www.ene.gov.on.ca/en/land/pesticides/news.php

Quebec

Quebec regulates pesticide use under a *Pesticides Management Code* instituted in 2003⁴ under the *Pesticides Act*. The code, among other provisions:

- Prohibits the sale and use of about 20 “active ingredients” present in some 200 lawn pesticide products registered under federal legislation which are listed in a Schedule of the code
- Requires pesticides to be sold “behind-the-counter”
- Prohibits the use of most pesticides inside and outside child care centres and schools
- Lists 14 “low or reduced risk” pesticides (such as borax, silicon dioxide and acetic acid) that are explicitly authorized for sale and use in public places such as schools and child care centres under a specific Schedule of the code
- Prohibits the sale and use of pesticide-fertilizer mixtures for lawns
- Allows use of prohibited pesticides by golf course operators and requires operators to submit a “pesticide reduction plan” to the ministry every three years⁵
- Prohibits the application of pesticides less than three metres from a body of water

New Brunswick

New Brunswick conducted a public consultation on “lawn care and landscape pesticide use” in 2008⁶ and introduced regulatory changes to the provincial *Pesticides Control Act* in the fall 2009 legislative sitting⁷ including:

- A ban on the sale and use of more than 200 over-the-counter lawn care pesticide products, including the use of products containing 2,4-D for domestic lawn care
- As of February 2010, requirements for Integrated Pest Management (IPM) accreditation (involving training and certification) will be included in all operating permits for professionals and companies (such as golf courses and other businesses) companies and individuals carrying out lawn care services involving commercial grade pesticides

The ban took effect on January 1, 2010; the products listed below are no longer available for retail sale in New Brunswick:

- Combination Products: Fertilizer/Herbicide combinations, Fertilizer/Insecticide combinations
- Hose-End Products: Herbicides applied using a garden hose over large areas
- Concentrates and Products Requiring Preparation: Pesticide products that require mixing, diluting, or some form of measuring prior to application

⁴ See: www.mddep.gouv.qc.ca/pesticides/permis-en/code-geste-en/index.htm

⁵ See: www.mddep.gouv.qc.ca/pesticides/permis-en/code-gestion-en/guide-golf/index.htm

⁶ See: www.gnb.ca/cnb/Promos/Pest/index-e.asp

⁷ See New Brunswick government News Release of June 2009 at: www.gnb.ca/cnb/news/env/2009e0865ev.htm

- Granular Spreadable Products: Granular or pelletized herbicide products
- Pesticide Products Containing 2,4-D: Pesticide products that contain 2,4-dichlorophenoxyacetic acid

Newfoundland and Labrador

Newfoundland and Labrador regulates pesticides under the Pesticides Control Regulation of the *Environmental Protection Act*.⁸ The provincial regulation:

- Bans the sale of pesticide-fertilizer combination products to unlicensed people (while still permitting purchase by commercial applicators)
- Limits broadcast application⁹ of a pesticide-fertilizer combination product containing the herbicide 2,4-D by licensed applicators to one application per lawn per year

Prince Edward Island

The Prince Edward Island *Pesticides Control Act* and General Regulations applies restrictions on the use of cosmetic pesticides which came into effect on April 1, 2010.

Banned domestic lawn care pesticides include:

- Combination products (e.g., fertilizer-herbicide blends)
- Concentrates requiring dilution before use
- Hose-end products (also concentrates)
- Granular products
- Products containing the active ingredient 2,4-D

As part of this initiative, lawn-care pesticides will not be used on crown-owned property, with the exclusion of golf courses. The new legislation does not affect the use of pesticides for agricultural or forestry purposes.

Homeowners

As of April 1, 2010, homeowners may not purchase or apply any of the over 240 pesticides that meet the criteria of the [Over-the-Counter Products banned list](#).

⁸ See: www.assembly.nl.ca/Legislation/sr/Regulations/rc030057.htm

⁹ The term “broadcast application” refers to spreading over an entire surface area (e.g., a lawn or field).

Nova Scotia

The 2010 *Non-essential Pesticides Control Act* applies to lawn care and ornamental plants on residential, commercial, government and institutional properties such as hospitals, long-term care facilities, schools, parks and recreational facilities. The sale and use of pesticides not on the list will be prohibited on lawns as of April 1, 2011. The legislation will extend to ornamental shrubs, flowers and trees on April 1, 2012. The regulations are accompanied by a list of allowable pesticides, which includes those considered to pose a reduced risk to humans and the environment.

Forestry, agriculture (including home vegetable and fruit gardens) and golf courses are exempt under The Exceptions to Prohibitions on Non-essential Pesticides Regulations.

Recommendation

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 recommends that the Province of Manitoba establish a full ban on the sale and use of pesticides for cosmetic purposes. This ban should include the non-essential, cosmetic use of chemical insecticides, herbicides and fungicides for residential, municipal, institutional, and recreational facilities, near water and all urban and rural areas.

References

Bassil, K.L., C. Vakil, M. Sanborn, D.C. Cole, J.S. Kaur and K.J. Kerr. 2007. Cancer health effects of pesticides: systematic review. *Canadian Family Physician*, 53:1704-1711.

British Columbia Ministry of Environment. 2009. Cosmetic use of pesticides in British Columbia: public consultation paper. <http://www.env.gov.bc.ca/epd/ipmp/regs/cosmetic-pesticides/pdf/consultation-paper.pdf>. Last accessed April 4, 2011.

Health Canada. 2011. Cosmetic pesticide bans and the roles of the three levels of government. <http://www.hc-sc.gc.ca/cps-spc/pubs/pest/fact-fiche/gov-roles-gouv/index-eng.php>. Last modified January 17, 2011.

Ontario College of General Physicians. 2004. Systematic review of pesticide human health effects: pesticides literature review. <http://www.ocfp.on.ca/local/files/communications/current%20issues/pesticides/final%20paper%2023apr2004.pdf>. Last accessed April 4, 2011.

Sears, M., C. Walker, R.H. van der Jagt and P. Claman. 2006. Pesticide assessment: protecting public health on the home turf. *Paediatric Child Health*, 11:229-234.

Statistics Canada. 2008. Environment accounts and statistics division system of national households and the environment 2006. Catalogue no. 11-526-X, page 22.

United Nations General Assembly. 1992. Rio Declaration on Environment and Development. June 1992, A/CONF.151/26 (Vol. I).