

BACKGROUNDER: Busting the myths about cosmetic pesticide bans

CONTEXT

Pesticides used on lawns and gardens for cosmetic purposes expose people, pets and ecosystems to unnecessary and potentially serious harm. Unfortunately, there are a lot of myths out there about the effects and utility of cosmetic pesticide bans. We drafted this document because we think it's important for you to know that laws restricting the use of cosmetic pesticides are an important step toward protecting health — particularly the health of children. That's why health groups such as the Canadian Cancer Society have been vocal supporters of cosmetic pesticide bans across the country. We also want you to know that restricting cosmetic pesticides does not mean lawns and public spaces will be overrun with weeds. It just means using safer weed-control methods.

Myth No. 1: Provinces, cities and towns become overrun with weeds when they ban cosmetic pesticides.

Quebec was the first province to implement a cosmetic pesticides ban in 2006. Since then, Ontario, Nova Scotia, New Brunswick, Newfoundland and Prince Edward Island have adopted laws to restrict cosmetic pesticides. To date, cities and towns in these provinces have not become overrun with weeds.

This is because there are alternatives to conventional chemical pesticides. A cosmetic pesticides ban only prohibits the sale and non-essential use of pesticides that pose significant risks to human health and/or the environment. Natural weed-control products, as well as lower-risk non-toxic pesticides and biopesticides, remain on the market and can still be used for cosmetic purposes. Certain lawn care practices can also be used to effectively control weeds. These practices include overseeding, topdressing, and mowing high.¹

Even in jurisdictions without cosmetic pesticide bans, many picturesque landscapes and gardens are free of chemical pesticides (e.g. the Manitoba Legislature garden in Winnipeg). Examples of beautiful pesticide-free gardens from across Canada can be seen at <u>David Suzuki</u> Digs My Garden.

By phasing in implementation of province-wide bans, governments have allowed opportunity for public education, leading to a smoother transition away from chemical lawn care practices.

Myth No. 2: Cosmetic pesticide bans are ineffective. People will just find a way around the ban and will keep using the same products.

As with any law, a segment of the population may continue to engage in prohibited activities despite a cosmetic pesticide ban. This does not necessarily mean that a ban would be

¹ See Mario Lanthier, "Surviving a pesticide ban: the Ontario experience" (March 2010), *HortWest Magazine*, online: http://crophealth.com/wp/wp-content/uploads/2012/04/CropHealthcom-Sustainable-Diversity-Lawns-Ontario-experience.pdf; "Non-Essential Pesticide Frequently Asked Questions" (22 March 2011), online: Government of Nova Scotia http://www.gov.ns.ca/nse/pests/non-essential.pesticides.QA.asp; "Ontario's Cosmetic Pesticides Ban" (04 March 2009), online: Ministry of the Environment.

ineffective or futile and it is no reason to question the utility of the ban. Rather, concerns around non-compliance highlight the need for proper enforcement and public education.

Many cosmetic pesticide bans have been effective to-date. For instance, after Quebec prohibited the use and sale of many lawn pesticides in 2006,² the number of households with a lawn or garden that used pesticides in Quebec decreased from 15 per cent in 2005³ to four per cent in 2007.⁴ In Manitoba, where the provincial government is currently considering legislating to restrict cosmetic pesticides, the cosmetic use of pesticides in households with a lawn or garden hovered at a whopping 43 per cent in 2007 — one of the highest rates in the country.⁵ In B.C., where there is no ban on cosmetic pesticides, 25 per cent of households with a lawn or garden still use chemical pesticides.⁶

Reducing these numbers would go a long way toward ensuring that children and pets playing in lawns and parks in provinces such as B.C. and Manitoba are not needlessly exposed to pesticides that could jeopardize their health.

Myth No. 3: Cosmetic pesticide bans are unnecessary because Health Canada already registers these substances for use in Canada.

Although Health Canada registers pesticides for use nationally, it suggests limiting their use and reducing any unnecessary exposure to them. ⁷ Furthermore, Health Canada does not recommend calling these substances "safe", basing its registration decisions instead on a determination of "acceptable risk."

Scientific studies are increasingly showing that exposure to pesticides — including pesticides currently approved for use in Canada — can pose serious adverse health risks, including cancer, respiratory problems, reproductive problems and neurological diseases. Children are also at a higher risk of pesticide exposure because of their proximity to the ground, their stages of development and their lower overall weight as compared to adults.

Serious concerns have also been raised regarding the approach to pesticide registration taken by Health Canada, including that it assesses chemicals one at a time, regardless of the fact that many chemicals act in similar ways and pose similar health risks, raising questions about the cumulative risks of real-life exposures to hundreds of these chemicals on a daily basis.¹⁰

⁶ *Ibid*.

² "The Pesticides Management Code" (March 2011), online: Government of Quebec <<u>www.mddep.gouv.qc.ca/pesticides/permisen/code-gestion-en/index.htm</u>>.

³ Statistics Canada, "Households and the Environment, 2006" (February 2008), online: Statistics Canada http://www.statcan.gc.ca/pub/11-526-x/11-526-x2007001-eng.pdf> at p 22.

⁴ Statistics Canada, "Households and the Environment, 2007" (July 2009), online: Statistics Canada

http://www.statcan.gc.ca/pub/11-526-x/11-526-x2009001-eng.pdf> at pp 14 and 27.

⁵ Ibid.

Health Canada, "Pesticides and Health" (2007), online: Health Canada < http://www.hc-sc.gc.ca/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/contaminants/pesticides-eng.pdf>.
 Margaret Sanborn et al, "2012 Systematic Review of Pesticide Health Effects" (2012), online: Ontario College of Family

Margaret Sanborn et al, "2012 Systematic Review of Pesticide Health Effects" (2012), online: Ontario College of Family Physicians http://www.ocfp.on.ca/docs/pesticides-paper/2012-systematic-review-of-pesticide.pdf?sfvrsn=6. See also "The U.S. National Toxicology Program 11th Report on Carcinogens" (2005), online: National Toxicology Program http://ntp.niehs.nih.gov/ntp/roc/toc11.htm; International Agency for Research on Cancer, "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans", online: World Health Organization http://monographs.iarc.fr.

⁹ Canadian Partnership for Children's Health and Environment, "Child Health and the Environment – A Primer" (August 2005), online: CPCHE http://www.healthyenvironmentforkids.ca/sites/healthyenvironmentforkids.ca/files/cpche-resources/Primer.pdf>.

Tom Muir, "Safety is more a theory than a practice; 'Use as Directed' impossible as far as pesticide labels go", *Hamilton Spectator* (21 November, 2008), online: Canadian Partnership for Children's Health and Environment

Another criticism that has been voiced is that in conducting its risk assessments. Health Canada does not adequately incorporate scientific evidence regarding human exposures in the real world, relying heavily on industry-supplied laboratory animal toxicologic data that is more limited in nature. 11

A final point to keep in mind regarding pesticides registered for use in Canada is this: accidents can and do happen. In 2007, the David Suzuki Foundation compiled data on acute pesticide poisonings in Canada for all pesticides, including cosmetic use pesticides and found that over 6,000 cases of pesticide poisonings are reported in Canada annually, with almost half of these cases involving children under the age of six. Acute pesticide poisonings can be caused by exposure to pesticides in homes or other buildings, or in settings such as lawns or gardens. accidental ingestion of pesticides or consumption of food containing pesticide residues. 12

Provinces and municipalities have an important role to play in regulating the sale, use, storage and disposal of pesticides.

Myth No. 4: A pesticide registered for use in Canada is safe when used according to instructions on its label.

Hundreds of commercial pesticide products available for sale in Canada cannot be sold in other countries, often due to health and environmental concerns. 13 Scientific studies are increasingly showing that certain pesticides, including pesticides currently approved for use in Canada, can pose serious health risks.

Even when used according to instructions, pesticides can affect non-target plants and animals. posing environmental and health risks. As highlighted by the Manitoba government in Play it Safe: A Consultation on Cosmetic Lawn Pesticides, "pesticides may drift in the air, leach into the soil or runoff into waterways and not remain on an individual's property. Pesticides may be tracked indoors where residues can exist in carpets and clothing for long periods of time even up to one year."14

Accidental ingestion by children is another serious risk.

Myth No. 5: Cosmetic pesticide bans pose risks to public health and may harm wetlands and atrisk native species due to invasive weeds.

Cosmetic pesticide bans adopted by Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland and Prince Edward Island only apply to the non-essential use of certain pesticides for aesthetic purposes. These laws explicitly state that such pesticides can nonetheless be used where public health or safety is an issue.

<a href="http://www.healthyenvironmentforkids.ca/news-info/safety-more-theory-practice-use-directed-impossible-far-theory-practice-use-directed-impossible-use-directed-impossible-use-directed-imposs

pesticide-labels-go.

11 Dr Niel Arya, "No one can prove pesticides are 'safe'", *Ottawa Citizen* (5 June 2008), online: Canadian Partnership for Children's Health and Environment http://www.healthyenvironmentforkids.ca/news-info/no-one- <u>can-prove-pesticides-are-safe</u>>.

12 David Suzuki Foundation, "Northern Exposure: Acute Pesticide Poisonings in Canada" (June 2007), online: David Suzuki

Foundation foundation <a href="foundation

¹³ See, e.g. David R Boyd, "The Food We Eat: An International Comparison of Pesticide Regulations" (October 2006), online: David Suzuki Foundation http://www.davidsuzuki.org/publications/downloads/2006/DSF-HEHC-

¹⁴ Government of Manitoba, "Play it Safe: A Consultation on Cosmetic Lawn Pesticides", online: Government of Manitoba http://www.gov.mb.ca/conservation/envprograms/pdf/june 20 pesticides release.pdf > at 7.

For example, under Ontario's Cosmetic Pesticides Ban, "pesticides can be used to control plants that are poisonous to the touch, such as poison ivy; insects that bite, sting, are venomous or are disease carrying, like mosquitoes; and animals, insects or plants that may cause damage to a structure or infrastructure, such as termites." ¹⁵

Exemptions to cosmetic pesticide bans apply in the context of protecting natural resources. For instance, in Ontario, where an invasive species poses a detrimental risk to health, the environment or the economy, or where the banned pesticide is needed to protect a native plant, animal or rare ecosystem, the Ministry of Natural Resources can approve the use of pesticides for those purposes.¹⁶

Myth No. 6: Sports fields will convert to artificial turf if cosmetic pesticides are banned.

The argument that sports fields will convert from grass to artificial turf because of a cosmetic pesticides ban is unfounded. The decision to install artificial turf instead of natural turf for a sports field can be a due to a number of factors. As of 2007, use of artificial turf was already on the rise in western Canada, ¹⁷ before most provinces implemented cosmetic pesticides bans. Even without a cosmetic pesticides ban, ¹⁸ Vancouver touts nine state-of-the-art sports playing fields that use artificial turf. ¹⁹ On the other hand, BMO Field, a soccer stadium in downtown Toronto, switched from artificial to natural turf in 2010, *after* Toronto adopted its pesticides ban in 2004 and *after* Ontario's cosmetic pesticides ban took effect in 2009. ²⁰

Myth No. 7: Cosmetic pesticide bans are bad for farmers.

Cosmetic pesticide bans do not apply to agricultural practices.²¹ However, Ecojustice supports and encourages the use of organic farming practices.

There are many important differences between cosmetic and agricultural pesticide use. For instance, pesticide application is often more intensive for landscaping than for agriculture. Lawns and gardens are closer to where most people live and where children play. Pesticides used for aesthetic purposes in these areas are therefore a potentially significant source of involuntary exposure.

As with forestry, there are valid health and environmental concerns around pesticide use in agriculture, but these should be addressed through separate measures.

^{15 &}quot;Ontario's Cosmetic Pesticides Ban" (04 March 2009), online: Ministry of the Environment http://news.ontario.ca/ene/en/2009/03/ontarios-cosmetic-pesticides-ban.html>. See also "Non-Essential Pesticide Frequently Asked Questions" (22 March 2011), online: Government of Nova Scotia http://www.gov.ns.ca/nse/pests/non-essential.pesticides.OA.asp.

essential.pesticides.QA.asp>.

16 "Ontario's Cosmetic Pesticides Ban" (04 March 2009), online: Ministry of the Environment http://news.ontario.ca/ene/en/2009/03/ontarios-cosmetic-pesticides-ban.html>.

¹⁷ Mike Jiggens, "Demand for synthetic lawns on the rise in Canada" (April/May 2007), *Turf and Recreation*, online: Mirage Putting Green http://www.mirageputtinggreen.com/docs/Turf-Rec-2.pdf>.

Although Vancouver does not have a cosmetic pesticide ban, it does have a bylaw which places certain restrictions on the use of cosmetic pesticides. See, e.g. "Pesticide Use Restriction By-Law for 2006", online: City of Vancouver http://vancouver.ca/engsvcs/solidwaste/grownatural/pesticideUseBylaw.htm.

 [&]quot;Artificial Turf", online: Vancouver Board of Parks and Recreation < https://vancouver.ca/parks/rec/fields/artificialturf.htm>.
 Bohdan Skorbach, "Natural Grass and GPS Sensors for BMO Field", *The Epoch Times* (29 March 2010), online: The Epoch

Bohdan Skorbach, "Natural Grass and GPS Sensors for BMO Field", *The Epoch Times* (29 March 2010), online: The Times http://www.theepochtimes.com/n2/sports/bmo-field-grass-32347.html>.

²¹ See, e.g. "Ontario's Cosmetic Pesticides Ban" (04 March 2009), online: Ministry of the Environment http://news.ontario.ca/ene/en/2009/03/ontarios-cosmetic-pesticides-ban.html; "Lawn and Ornamental Gardens – Non-essential Pesticides" (13 December 2010), online: Government of Nova Scotia http://www.gov.ns.ca/nse/pests/non-essential.pesticides.asp; "Province introduces lawn care pesticide ban" (18 June 2009), online: Government of New Brunswick http://www.gnb.ca/cnb/news/env/2009e0865ev.htm>.

Myth No. 8: Golf courses will go out of business with a cosmetic pesticides ban in place.

In provinces with cosmetic pesticide bans, golf courses have either been exempted or have been given a conditional exemption to cosmetic pesticide bans. In Ontario, golf courses can continue to apply cosmetic pesticides if they become accredited for Integrated Pest Management (IPM), prepare an annual report on how they have minimized their pesticide use, make that report available to the public, and present the report at an annual public meeting.²²

Many health and environmental groups have urged governments to adopt more stringent requirements for golf courses, given their significant use of pesticides. For instance, in calling for a provincial ban in B.C., the Canadian Cancer Society suggested that the use of cosmetic pesticides on B.C. golf courses should be banned within three years. Indeed, some golf courses have begun to voluntarily shift toward pesticide-free greens.

Myth No. 9: Cosmetic pesticide bans are bad for the economy.

Canadian Business Patterns data, compiled by Statistics Canada, shows that the number of landscaping/lawn care businesses operating in the City of Toronto between 2001 and 2006 increased by 30 per cent.²³ The City of Toronto's Pesticide bylaw came into force in 2004. Similarly, the number of landscaping/lawn-care businesses in Halifax grew by 53 per cent between 2000 and 2005.²⁴ Halifax's Pesticide bylaw came into full force in 2003.

In terms of whether a cosmetic pesticides ban might influence whether a household hires a lawn care company to care for their lawn, data indicates that the proportion of households that hired a lawn care company in Toronto remained stable from 2003 to 2005.²⁵

Myth No. 10: Cosmetic pesticide bans do not improve environmental quality.

Water quality data shows that pesticide levels decrease in urban rivers and streams following cosmetic pesticide bans. One year after the cosmetic pesticides ban came into force in Ontario, concentrations in urban stream water of many pesticides associated with serious health and environmental risks, including 2, 4-D, dicamba, MCPP, total phenoxy herbicides and total insecticides, were significantly lower than they were before the ban. ²⁶ Bodies of water and the species that depend on them in provinces such as Manitoba and B.C. would similarly stand to benefit from cosmetic pesticide bans.

²² "Ontario's Cosmetic Pesticides Ban" (04 March 2009), online: Ministry of the Environment http://news.ontario.ca/ene/en/2009/03/ontarios-cosmetic-pesticides-ban.html.

²³ Toronto Public Health, "Interim Evaluation of Toronto's Pesticide Bylaw" (February 2007), online: City of Toronto https://www.toronto.ca/health/pesticides/pdf/interim_evaluation_report_02262007.pdf at p 20.

²⁴ Ibid.

²⁵ Ibid at 21

²⁶ Aaron K Todd, "Changes in Urban Stream Water Pesticide Concentrations One Year after a Cosmetic Pesticide Ban" (November 2010), online: Environmental Monitoring and Reporting Branch Ontario Ministry of the Environment

http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/stdprod_080108.pdf. See also: Aaron K Todd, "Pesticide Concentrations in Ontario's Urban Streams One Year After the Cosmetic Pesticides Ban", IPM Symposium (10 January 2011), online:

http://www.landscapeontario.com/attach/1295274330.MOE_Update_-_Aaron_Todd.pdf>.