

June 10, 2003

Partnership For Pesticide Bylaws

*Ontario College of Family
Physicians*

*Registered Nurses Association of
Ontario*

*Canadian Association of
Physicians for the Environment*

Humane Society of Canada

*Association of Early Childhood
Educators, Ontario*

*United Steel Workers of
America*

*Canadian Environmental Law
Association*

*Toronto and York Region
Labour Council*

Great Lakes United

Environmental Defence Canada

*International Institute of Concern
for Public Health*

*Breast Cancer Prevention
Coalition*

Pesticide Free Ontario

Toronto Environmental Alliance

*Women's Healthy Environments
Network*

The President and Members of the Standing
Committee on Urban Planning, Land Use Planning,
The Environment and Sustainable Development,
Direction du greffe,
275, Notre-Dame Street East,
Suite R-126, Montreal, H2Y 1C6

Dear Members of the Standing Committee on Urban Planning, Land Use Planning, the Environment and Sustainable Development:

Cosmetic pesticides – those chemicals used to control pests in outdoor spaces like lawns and gardens – are unsafe and unnecessary for the maintenance of green and healthy green space. With current regulations, it is virtually impossible to avoid exposure to these chemicals. We therefore wish to communicate our strong support for a bylaw in your community to phase out pesticides and protect health, with special emphasis on protecting children and other sensitive populations. Bylaws should be accompanied by vigorous public education initiatives on safer alternatives. Such a bylaw has recently been passed in the amalgamated City of Toronto and will come into effect April 1, 2004. We cite the following reasons:

1. Cosmetic Pesticides Are Unsafe

- Acute effects of pesticide exposure range from irritation of the nose, eyes and throat, burning, itches and rashes to nausea, vomiting, headaches and general malaise;ⁱ
- Scientific studies reveal links between pesticide exposure and higher risk of leukemiaⁱⁱ, non-Hodgkin's lymphomaⁱⁱⁱ, soft tissue sarcomas^{iv} and prostate cancer^v;
- Children are particularly susceptible to harm from pesticides, both in utero and during childhood. Pesticides may cause birth defects^{vi}, developmental delays^{vii}, hyperactivity^{vii}, behavioural disorders^{vii}, motor dysfunction^{vii}, nervous system disruption^{viii} and immunotoxicity^{ix}. Pregnant women exposed to pesticides have susceptible fetuses that may be harmed by the synergistic interactions of many different, poorly understood chemicals, interacting with genetic vulnerabilities. For example, research in Quebec has shown that fetuses with higher exposures to pesticides, in combination with a genetic constitution that makes them poor metabolizers of chemicals, have an increased risk of acute lymphocytic leukemia as young children^x. Children have greater exposure to pesticides due to increased food and water consumption/kg body weight compared to adults, as well as higher respiratory rates, and closer proximity to the ground and floor^{xi}.

- Other susceptible subpopulations which have not been adequately addressed regarding potential adverse health effects of pesticides include the elderly, those with chronic illnesses such as lung disease and asthma, those on medications, those with allergies and sensitivities, or those with kidney or liver pathology, who cannot metabolize or excrete properly.
- Studies have found cosmetic pesticides to contaminate urban watersheds – the source of drinking water and key to ecological sustainability – throughout the Great Lakes basin.^{xii}
- The issue of cumulative exposure is not yet being addressed when pesticides are evaluated in Canada. Further, the scientific ability to do so is highly complex, controversial and only just being developed. Hence, the “safe” level of a pesticide continues to be decided based on the toxic effects of that pesticide alone. There are dozens of pesticide residues in Canadian water and food sources, many of the same pesticide class, which can have additive and multiplicative effects. The additional exposure from lawn and garden applications has not been quantified.

2. Pesticide Exposure is Currently Unavoidable

- We are exposed to pesticides in virtually all aspects of our lives. Canada’s regulatory framework allows for the continued development and use of cosmetic pesticides while depriving us of the right to live protected from these exposures. The pesticide industry publicly promises continued use of chemicals for the maintenance of lawns and gardens.
- After application of pesticides to lawns or gardens, children have measurable blood levels of pesticides due to skin absorption, inhalation, and from consumption as they mouth objects or transfer the pesticide from their hands to food. It has been demonstrated that children can absorb enough pesticide through their skin to produce acute toxicity.^{xiii} Pesticides tracked into the home continue to be a source of exposure for long periods after applications, because there is no sunlight to help break them down.^{xiv}

3. Cosmetic Pesticides Are Unnecessary

- Healthy, disease-resistant lawns and gardens are possible through chemical-free horticultural methods. A growing sector of pesticide-free lawn care and landscaping companies provides opportunities for workers and industries interested in phasing-out chemicals.^{xv}

For these reasons, we have come together to support the adoption of municipal pesticide bylaws that result in the elimination of non-essential pesticide use, and to oppose the exclusive adoption of voluntary initiatives advocated by the pesticide industry.

The Supreme Court of Canada affirmed the right of municipalities to restrict the use of pesticides on both public and private property. Pesticide bylaws are a necessary

complement to federal and provincial regulations in order to fully guarantee the rights of citizens to be protected from pesticide exposure.

We support precautionary municipal bylaws that would include public education programs and phased-in prohibitions of cosmetic pesticides on private property.

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- ⁱ Reigert, J.R. and J.R. Roberts. 1999. *Recognition and Management of Pesticide Poisonings, Fifth Edition*. U.S. Environmental Protection Agency and Briggs, S.A. 1992. *Basic Guide to Pesticides: Their Characteristics and Hazards*
- ⁱⁱ Leiss, J., Savitz D. 1995. Home pesticide use and childhood cancer; a case control study. *Am J Public Health* 85:249-52 and Daniels O., Savitz D. Pesticides and childhood cancers. *Environ Health Perspect* 105(10).
- ⁱⁱⁱ Cox C. 1995. Dicamba. *J Pesticide Reform* 14(1). and Morrison, HI et al. 1992. Herbicides and cancer. *J Natl Cancer Inst*: 84 (24) 1866-8.
- ^{iv} Dick J. et al. 1997. Pesticides and cancer. *Cancer Causes and Control* 8:420-43. and Smith, JG and Christophers, AJ. 1992. Peroxy herbicides and chlorophenols: a case control study on soft tissue sarcoma and malignant lymphoma. *Br J Cancer* 65 (3): 442-48.
- ^v Van Der Gulden et al. 1996. Farmers at risk for prostate cancer. *Br J Urology* 77 (1): 6-14.
- ^{vi} Brender, JD, Suarez, L. 1990 Paternal occupation and encephaly. *Am J Epidemiol*. 11:517-21. and Sever LE et al. 1997. Reproductive and developmental effects of occupational pesticide exposure: the epidemiological evidence. *Occupational Medicine; State of the Art Reviews*. 12 (2): 303-25.
- ^{vii} Guilette, EA et al. 1998. An anthropological approach to the evaluation of preschool children exposed to pesticides in Mexico. *Environ Health Perspect*. 106: 347-53.
- ^{viii} Ecobichon D. 1994. Organophosphorus ester insecticides. In: *Pesticides and Neurological Diseases* (Ecobichon DJ, Joy RM, eds). CRC Press, Boca Raton, FL; pp 71-250.
- ^{ix} Voccia, I et al. 1999. Immunotoxicity and pesticides: a review. *Toxicol Ind Hlth*. 15: 119-32
- ^x Infant-Rivard, C et al. 1999. Risk of Childhood Leukemia associated exposure to pesticides and with gene polymorphisms. *Epidemiology*, September 10(5):481-487.
- ^{xi} National Research Council. 1993. *Pesticides in the Diets of Infants and Children*. National Academy Press, Washington, DC.
- ^{xii} Struger, J et al. 2002. Pesticide Concentrations in the Don and Humber River Watersheds (1998-2000) and Struger, J et al. 1994 "Chapter 6: Environmental Concentrations of Urban Pesticides" in *Current Practices in Modeling the Management of Stormwater Impacts*. CRC Press. Boca Raton, FL. pp 85-98.
- ^{xiii} McConnell, et al. 1993. "Health Hazard Evaluation Report in Pesticides", in *Pesticides in the Diets of Infants and Children*. National Research Council. National Academy Press, Washington, DC.
- ^{xiv} Nishioka, M.G. et al, 2001. Distribution to 2,4-d in air and on surfaces inside residences after lawn care applications: comparing exposure estimates from various media for young children. *Environmental Health Perspectives*. 109, pp. 1185-91.
- ^{xv} See the Organic Landscape Alliance (www.organiclandscape.org)