

## **OPHA Resolution on the Non-Essential Use of Chemical Pesticides on Public and Private Lands**

A resolution adopted at the 2001 OPHA Annual General Meeting

*Code:* 2001-02 (RES)      *Status:* Active

### **RESOLUTION**

WHEREAS the protection of human and environmental health should be the absolute priority in pest management, especially the protection of children and other vulnerable populations;

WHEREAS reports published in the scientific and medical journals point to associations between pesticides and numerous human health effects;

WHEREAS research regarding the impact of pesticide exposure on human health effects is complex, raises methodological difficulties and ethical concerns, making it unlikely that the health effects on humans will ever be clear;

WHEREAS in the absence of conclusive evidence to prove a causal relationship between certain pesticides and human health, appropriate measures should be taken where there is reason to believe that a pesticide is likely to cause harm (“Precautionary Principle” and where applicable the *Health Protection and Promotion Act* s.13 “reasonable and probable grounds that a health hazard exists”);

WHEREAS Health Canada’s Pest Management Regulatory Agency has recognized the need to take action on the use of pesticides in the urban setting by initiating a Healthy Lawn Strategy to help reduce Canadians’ reliance on pesticide use;

WHEREAS of the 7000 pesticides approved for use in Canada many have not been evaluated to account for the vulnerability of children and current standards for risk assessment;

WHEREAS certain pesticides persist in the environment, migrate beyond the application area and have been detected in Ontario’s drinking water supplies, resulting in the general public being inadvertently exposed;

WHEREAS alternative, non-toxic methods of pest prevention (e.g. Integrated Pest Management) exist;

AND WHEREAS the recent decision of the Supreme Court of Canada upholds the power of municipal governments to restrict the use of non-essential pesticides within their communities and some communities, including Toronto, Waterloo, and Caledon are engaged in this process.

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THEREFORE BE IT RESOLVED, that the OPHA urge Ontario municipalities to restrict the non-essential use of chemical pesticides on public and private lands.

THAT the OPHA urge the three levels of government to work together to strengthen legislation governing pesticide use, reduce the non-essential use of pesticides, educate the public about the health effects and alternatives to chemical pesticides, and promote Integrated Pest Management Strategies.

THAT the OPHA advocate to the MOHLTC for adequate resources for Ontario public health units so that they may act as a resource to municipalities on pesticide reduction initiatives, to educate the public about the health effects of pesticides as outlined in the Mandatory Health Programs and Services Guidelines, Health Hazard Investigation Program.

THAT this resolution be forwarded to the Ontario and Federal Ministers of Health, the Ontario Minister of the Environment, the Federation of Canadian Municipalities, the Association of Municipalities of Ontario and Ontario public health departments and Boards of Health.

THAT the OPHA collaborate and network with other health and environmental organizations that support restricting the non-essential use of pesticides, including the Campaign for Pesticide Reduction Ontario.

THAT the OPHA request to meet with the appropriate government bodies at the federal, provincial and local level to express our membership's concern on this matter, and to request their support to take action to restrict the non-essential use of pesticides.

## **BACKGROUND**

The precautionary principle states that the absence of scientific certainty should not be used as an excuse for inaction where there are potentially serious threats to human and environmental health. There is sufficient suggestive evidence of health and environmental threats from pesticide use to warrant actions to protect the public. In light of this information, there is an important role for public health organizations in advocating for restrictions to the non-essential use of pesticides.

Pesticides are agents used to reduce or eliminate pests, such as unwanted plants, animals, insects and other living organisms. The term pesticide is broad and includes, but is not limited to, substances that specifically act on insects (insecticides), plants (herbicides), rodents (rodenticides), spiders (arachnicides), and fungi (fungicides) (Standing Committee on Environment and Sustainable Development, 2000). Most pesticides in use today are based on chemical warfare research discoveries made during the Second World War. Pesticides do play a role in agriculture and ensuring public health, however, their non-essential use, such as lawn-care, raises concerns. There is no widely adopted definition of non-essential use of pesticides, however the focus of this resolution is their use on public and private lands. For the purposes of this document, "non-essential use" of pesticides refers to their use in certain situations where the application is purely an 'aesthetic pursuit' (Reference citation June, 2001, Supreme Court Ruling: Hudson vs. Spraytech). Alternately, essential use of pesticides includes uses of pesticides for the protection of public health, production

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of food, and use in the forestry industry.

The *Pest Control Products Act* (Canada), administered by Health Canada's Pest Management Regulatory Agency (PMRA), has control over the manufacture, importation and registration of products in Canada. The PMRA reviews health and environmental assessments on new pesticide products before they can be registered (Standing Committee on Environment and Sustainable Development, 2000). It should be noted that 407 of the 550 active ingredients in pesticides in use today were registered before the standardized toxicological guidelines were developed in 1994 (Standing Committee on Environment and Sustainable Development, 2000). While Health Canada is planning to re-evaluate the active ingredients in pesticides, and their products that were registered prior to 1994, this is a slow process. (NB: The re-evaluation of the seven most common active ingredients used in lawn-care products, is targeted to be completed in 2001 (PMRA, 2000).

Over 76,000 pesticide products are registered for use in Canada (Standing Committee on the Environment and Sustainable Development, 2000). At least 50 million kilograms of herbicides, insecticides and fungicides are used in hugely diverse situations, including agriculture, lawn care, fish farming, homes, child care centres, golf course maintenance, flea control on pets and head lice control on children (World Wildlife Fund, 2000).

Over time and with heavy use, many pesticides are losing their effectiveness as the organisms they are designed to eradicate develop resistance. It has been documented that 514 insect and mite species, 150 plant diseases and 188 weed species have developed resistance (WWF, 2000). This can promote even heavier pesticide use and necessitates the ongoing development of new products.

A growing number of reports published in scientific and medical journals associate specific pesticides with adverse acute and long-term effects on human health. Immediate effects from acute pesticide exposure include vomiting, eye irritation, coughing, nausea, breathing difficulties and blurred vision (Briggs, 1992). Chronic, or long-term, health effects include:

- birth defects (Brender, 1990; Munger, 1992; Sever et al. 1997),
- negative pregnancy outcome (e.g. stillbirth) (Sever et al, 1997),
- non-Hodgkin's lymphoma (Cox 1995; Toronto Public Health, 1998),
- soft tissue sarcoma (Dick et al, 1997),
- childhood leukemia (Leiss et al, 1995; Daniels et al 1997; Lowengart et al 1987),
- learning disabilities and neurological effects (Ontario College of Family Physicians, 1998).

The potential of chemicals to affect the human endocrine system is a growing concern. Though known endocrine disruptor pesticides such as the organochlorines (e.g. DDT, chlordane, lindane and aldrin) are no longer used in Canada, not all pesticides in use today have been adequately tested for

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their multi-generational, long-term effects which may manifest themselves in future generations (Toronto Public Health, 1998; Wade, undated).

A number of methodological issues affect the degree to which it will be possible to ever establish a causal relationship between most pesticides and their effects on human health. Research limitations include:

- the ethical issues surrounding the exposure of humans to chemicals designed to kill,
- the fact that very little research has been conducted on the exposures in non-occupational environments
- the uncertainties inherent in extrapolating from animal data,
- the fact that epidemiological studies tend to examine pesticides as a group, often making it difficult to identify particular pesticides that may be of higher concern
- the synergistic effects of active and inert ingredients combined, are unknown
- the fact that inert chemicals do not have to be identified on the product label, and many are known to be capable of producing acute and chronic health effects
- the difficulties in establishing which particular ingredients, either active or “inert”, are causing the harm
- small sample sizes and weak designs, and
- the inability to accurately measure individual doses of pesticides that people are exposed to (Hoar Zahm , et al, 1997; Morrison, 1992; Toronto Public Health, 1998.)

These, and other concerns, have led many government and non-government organizations (e.g. pesticide manufacturer/user organizations) to reduce reliance on pesticides and turn to Integrated Pest Management principles. Integrated Pest Management (IPM) is a sustainable approach to pest management, emphasizing pest prevention, use of reduced risk products and application of pesticides only when necessary. The Pest Management Regulatory Agency (2000) has outlined these strategies in their *Action Plan on Urban Use Pesticides*. In detailing IPM Partnership Projects, PMRA has identified one goal of sustainable pest management as being ‘to meet society’s needs for human health protection’.

Collectively, we have an obligation to protect human health. The “precautionary principle” (Environment Canada, 2000) states that the absence of perfect scientific certainty should not be used as an excuse for inaction where there are potentially serious threats to human and environmental health. The research is strongly suggestive, but not one hundred percent certain, that many pesticides do pose potentially severe health risks. Precaution would dictate that the potential risks of non-essential uses of pesticides should be avoided.

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The recent Supreme Court of Canada (2001) decision upholding a municipal by-law banning the cosmetic use of pesticides within municipal boundaries in the small community of Hudson, Quebec is a recent example of the change in public attitudes towards pesticide use. The Court's decision also recognizes the legitimate role of municipal government in addressing local concerns about the use of unnecessary poisons in the urban environment. This strong, positive signal marks a crucial shift in society's tolerance of the risks posed by pesticide use.

Groups from multiple sectors are active on reducing the non-essential use of pesticides. These include but are not limited to the Federation of Canadian Municipalities, the Canadian Nurses Association, the Sierra Club of Canada, the Canadian Environmental Law Association, Toronto Environmental Alliance, Healthy Lawns Healthy People, the World Wildlife Fund of Canada, Campaign for Pesticide Reduction Ontario, and Canadian Organic Growers.

The precautionary principle states that the absence of scientific certainty should not be used as an excuse for inaction where there are potentially serious threats to human and environmental health. There is sufficient suggestive evidence of health and environmental threats from pesticide use to warrant actions to protect the public. In light of this information, there is an important role for public health agencies in advocating for restrictions to the non-essential use of pesticides.

The increasing number of scientific and medical reports associating specific pesticides with human and environmental health effects, the potential of pesticides to act as endocrine disrupters, and the limitations of research to establish causal links between pesticides and specific health effects, emphasizes the need to act quickly to control pesticide use.

As representatives of public health agencies, we have an obligation to protect human health, keeping in mind the concepts of the precautionary principle: where there are potentially serious threats to human and environmental health, lack of scientific certainty shall not be used as a reason for inaction. We must act now in advocating for restrictions to the non-essential use of pesticides!

## **IMPLEMENTATION STRATEGY**

The resolution will be implemented by the Pesticides Sub-Committee of the OPHA's Environmental Health Working Group, with the cooperation of the OPHA Board and Executive, should it be required. Copies of the background paper and the resolution and an accompanying letter will be sent to the Ontario and Federal Ministers of Health, the Ontario Minister of the Environment, the Association of Municipalities of Ontario, the Federation of Canadian Municipalities, the Association of Local Public Health Agencies, health and environmental organizations that have expressed an interest in reducing the non-essential use of pesticides, Ontario public health departments and Boards of Health. The Pesticides Sub-Committee of the Environmental Health Working Group will also collaborate and network with other health and environmental organizations that are working to reduce the non-essential use of pesticides. We will be requesting that these organizations endorse this resolution, and contact the appropriate bodies at the local, provincial and federal level, requesting action to restrict the non-essential use of pesticides. This could include strengthening legislation governing pesticide use, and supporting collaborative agendas to reduce pesticide use.

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Lastly, the Sub-Committee will monitor progress toward the recommendations through the Federation of Canadian Municipalities listserve on pesticide reductions.

## REFERENCES

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2. The policy statement addresses an issue that is currently relevant to public health in Ontario.

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