



**Submission to Law Amendments on Bill 61:
Non-essential Uses of Pesticides**

From the IWK Health Centre

*Prepared and submitted by Dr. C. Robin Walker, Vice-President Medicine, IWK Health Centre
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Support for a ban on non-essential pesticides

The IWK Health Centre strongly supports a provincial ban on non-essential pesticides as proposed in the Government of Nova Scotia's Bill 61. **Later in this submission (see page 3), we outline two suggestions related to the Bill's content and the Regulations** that will be developed in connection with the Bill.

Firstly, we agree that the application of pesticides for lawn maintenance is non-essential. As we will discuss below, we believe there is sufficient evidence that pesticides may cause harm, particularly to children, to support a ban on their non-essential use.

The major reason for this is that this use is of cosmetic value only. Lawn care pesticides provide no health benefits to the lawn owner nor his/her neighbours, and possibly, in fact, pose health risks to both – unlike when pesticides are used to control pests that may cause disease. Further, lawn care pesticides provide no significant economic benefits to the home owner and his neighbours, unlike the argument that can be made for pesticides used in agriculture, forestry, etc.

Our second reason for stating this use is non-essential is that there are highly effective alternatives that do not pose the same potential health risks. The reality, therefore, is that even the desired cosmetic results are perfectly attainable without the use of pesticides.

As outlined in greater detail below, there is sufficient evidence of possible harm to health, particularly in children and the fetus, to take a precautionary approach. There is also, in our view, convincing evidence that only a provincial 'ban' that ensures pesticides are not generally available can be effective in significantly reducing exposure.

Studies suggest that pesticides may be associated with serious health problems in children in particular, such as problems in pregnancy and birth defects, neuro-developmental disorders, certain cancers, and other effects that might occur over a long period of time.

Children are especially sensitive to pesticides as their internal organs are still developing and maturing. In relation to their body weight, infants and children eat, drink and breathe more than adults, thereby increasing their exposure. And certain behaviours, such as playing on floors or lawns, or putting objects in their mouths, increase a child's exposure to pesticides used in homes and yards.

Pesticides pose extra risks to a developing child. During critical periods in human development, exposure to a toxin can permanently alter the way an individual's biological system operates. Further, pesticides may block absorption or use of important nutrients necessary for normal healthy growth. And if a child's excretory system is not fully developed, the body may not fully remove these substances.

Several studies have demonstrated excess cancer risk in children exposed directly or indirectly to pesticides. These associated cancers include: brain cancer, kidney cancer in children born to occupationally exposed men, and excess acute lymphocytic leukemia in children whose mothers used pesticides in homes and gardens during pregnancy. 2,4-D, for example, is still widely used and has been associated with increased risk for non-Hodgkins leukemia. Reproductive effects of concern include increased miscarriage, fetal death, infertility, intrauterine growth restriction, and birth defects.

In short, data on the health risks associated with pesticides raise serious concerns. Available science shows:

- convincing evidence of excess cancer in exposed children;
- probable evidence of neurological effects; and
- possible evidence of reproductive effects.

Add to that the fact that children have higher exposure and greater sensitivity to toxicity, then I would suggest that the responsible approach is to prohibit the use of non-essential pesticides in Nova Scotia.

There is also now an abundance of research showing that voluntary reduction and education alone are ineffective in reducing pesticide use. This should not be surprising as the same has been true for many other public health initiatives. For example, even though education on automobile seat

belt use was effective in increasing the public's knowledge of the value of seat belts, actual use of seat belts did not increase markedly until legislated.

To date, province-wide prohibition of cosmetic pesticides is the only option that has proven successful in significantly reducing pesticide use. In particular, the province of Quebec has been successful in its efforts to reduce pesticide use through province-wide prohibitions. Indeed, Quebec is the only Canadian provincial jurisdiction that has seen major reductions in pesticide use. As noted in Nova Scotia Environment's discussion paper made available earlier this year, Ontario implemented a provincial pesticide ban in April of 2009 which includes even broader prohibitions on products than Quebec, but data on pesticide use since introduction of the Ontario legislation are not yet available, as is the case in New Brunswick which has also enacted legislation, albeit including rather weaker provisions. New legislation banning the sale and use of many non-essential lawn care pesticides also just came into effect this April in Prince Edward Island.

About 100 Canadian municipalities have enacted by-laws restricting use of pesticides for cosmetic purposes. In the Maritimes, Halifax was one of the first major cities to pass such a by-law. Unfortunately, recent evidence has shown that if the products are still able to be legally sold (as municipal by-laws cannot legislate the products' availability) use of pesticides decreases modestly at best. We would not suggest that the right of a municipality to pass by-laws that go beyond any provincial legislation be restricted; municipalities should retain the right to pass their own legislation after a provincial law is implemented (unlike in Ontario). But the role of municipal governments should be considered supplementary to provincial prohibitions and not used as the sole measure for restricting pesticide use as it is insufficient by itself.

Comments on Bill 61

Now to the content of the Bill itself. As mentioned, we are pleased this legislation has been proposed. Upon review of Bill 61, we would like to suggest that the following be considered as final legislation is prepared.

The IWK Health Centre is pleased to note that the legislation will contain a list of permitted products rather than trying to define all the products that are not allowed. We support defining permitted products since this will help prevent products about which we have insufficient knowledge, but which are not listed as unapproved, from being introduced after the legislation has passed – a significant problem elsewhere. There are always new products in development, but these should not be allowed until there is sufficient evidence of safety. The approach proposed by Nova Scotia Environment will help ensure that only those products about which we already have

strong evidence of safety are used in this province. Our one request to the Government regarding this list of approved products, however, is that health experts be consulted in its development so that the list is 'vetted' with the health interests of the fetus and child in mind. The IWK Health Centre would be happy to be involved in such consultations.

Our one concern with the provisions proposed in Bill 61 is that the proposed ban does not include home vegetable gardens. The Bill focuses heavily on lawn care and this is appropriate given the quantity of pesticides used for this purpose. However, many vegetable gardens are located in residential settings. This is a concern for two reasons. First, it could be used as justification for stores to continue to carry a broad range of otherwise prohibited products, thus opening the door to their widespread use by consumers, even for lawn care. Second, use of pesticides in home vegetable gardens poses exactly the same risk to children in the neighbourhood as use of pesticides for lawn care – that is, the pesticides will disperse in the air and/or soil and/or ground water; children may play in or near the vegetable garden and ingest pesticide residues; and, of course, children may eat vegetables from home gardens that carry pesticide residues. We recommend that the legislation include a complete ban on home use of cosmetic pesticides for any purpose and clearly distinguish residential use from the applications permitted in the legislation, such as agriculture.

The IWK Health Centre supports allowing municipalities to pass their own supplementary by-laws. Currently, the right of Nova Scotia municipalities to pass pesticide by-laws is restricted (it is only permitted in HRM). While municipal by-laws alone have proved insufficient, we believe that municipalities should regain the right to pass their own legislation even after a provincial law is implemented. The provincial legislation should establish the minimum standard, but communities that wish to go further should be able to do so, providing a greater measure of harm reduction for their populations.

Thank you for allowing us to make this submission. Inquiries on its content can be directed to Dr. Robin Walker via the IWK Health Centre Public Relations Department at 470-6740.