



# Pesticides and Child Health

## The Position of the Canadian Institute of Child Health

This paper presents the position of the Canadian Institute of Child Health regarding the use of pesticides in general and the \*non-essential use of pesticides in particular.

The Institute has long been an advocate for the health of children. We have advocated for a number of laws and programs to better protect the health of children including; removal of phthalates from children's toys, and the mandatory use of both child seats and bicycle helmets.

CICH also advocates the implementation and use of the Precautionary Principle to better protect the health of children - we don't have to look farther than the health effects of the widespread use of lead in our economy to see how precaution would have protected the health of children. The Precautionary Principle, in summary, states that where there is some evidence of serious harm final definitive proof should not be necessary before action is taken to protect human health.

Precaution is especially important when the health of children is threatened. Children are especially vulnerable to health threats from environmental hazards. Pound for pound children eat, drink and breathe more than does an adult, resulting in a relatively higher dose of any environmental contaminant. Their body has different capabilities to rid itself of contaminants - the detoxification abilities of very young children are less than an adult's. Young children have more hand to mouth contact than do adults and one way that infants explore their world is to put objects in their mouths: as a result they are likely to ingest more contaminants. Children are nearer to the ground than adults resulting in a greater exposure to many contaminants. Young children cannot read and often will not pay attention to signs and warnings - they will go onto a recently sprayed lawn! Lastly it is important to note that the foetus and child are growing and developing very quickly. Brain development is exceedingly complex and occurs early in life, other organs mature less quickly. Although the processes

involved in human growth are not yet fully understood, they are known to be exceedingly complex and dependent on thousands of chemical messages. Manufactured pesticides are effective because they are toxic chemicals. It is easy to see how a small exposure to such toxic substances could cause a profound effect that might not become apparent until long after the exposure, a particularly important consideration with regards to children.

There should be no question that pesticide exposure ought to be a cause for concern, for example in an article published in the journal "Environmental Health Perspectives" ("Pesticides and Childhood Cancer" by Shelia Hoar Zahm and Mary H. Ward, June 1998) it was stated that "the majority of children's exposure to pesticides comes from home, lawn and garden use of pesticides". They go on to tell us that "Parental use of pesticides in the home or garden during pregnancy (father or mother) or nursing (mother) was associated with a 3 to 9 fold increase in childhood leukemia in a case-control study in Los Angeles County".

Dr. Graham Chance writes (in an article published in Paediatric Child Health Vol 6 No 10 December 2001) that, "Organochlorines ... are acknowledged carcinogens and, based upon animal studies, are suspected teratogens (causes birth defects), immunotoxins and endocrine disruptors". He goes on to state that other classes of pesticides also have similar known or suspected human health impacts.

The Canadian Institute of Child Health has stated to the Standing Committee on Health of the Canadian Parliament on April 25, 2002 that "In the case of pesticides to be used for purely cosmetic reasons around schools, child care centres and homes, we feel that the only acceptable risk is zero risk, as there is no justification for risking a child's health for a weed free lawn!"

We have repeatedly stated that CICH is in favour of banning the non-essential use of toxic chemical pesticides. While it cannot usually be shown definitely that a particular health outcome is caused by a spe-

## ***Pesticides and Child Health (cont'd)***

cific chemical pesticide exposure, the weight of evidence suggests that there is a link between pesticides and a number of conditions including neuro-behavioural problems, endocrine disruption and cancer. No matter how small the risk is, the possibility of it impacting upon the health of children when it is totally avoidable, is unacceptable. We recognise that, nowadays, all human beings have a body burden of many foreign chemicals that can potentially cause harm. The position of the CICH is that it is unacceptable to add to any child's body burden when it can be avoided. Clearly, this is not only a scientific issue; it is a moral and ethical concern as well. We encourage individual families to avoid the use of potentially toxic pesticides and we ask that all municipalities pass by-laws and regulations that better protect the health of Canadian children by reducing their exposure to pesticides to the unavoidable minimum.

While we call for both personal and local action we also call upon the Federal and Provincial authorities to address pesticide use by implementing the Precautionary Principle to avoid the exposure of

children to chemical pesticides. Senior levels of government must support scientific research in the public interest that will facilitate better risk assessments of chemical pesticides. They must also implement laws, regulations and programs that are protective of the health of all Canadian children no matter what community or circumstance that they live in.

CICH also calls for more and better programs that support the non-toxic pest control alternatives and for governments of all levels to provide citizens with information on the safer health-friendly options for pest control.

\*In our present state of knowledge there are some essential uses for pesticides.

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