

---

# Pest Management Regulatory Agency

## ***Information Note***

---

July 2006

### **Assessing Human Health Risks During Pesticide Review in Canada**

This Information Note is intended to provide Canadians with an overview of how potential effects to human health are assessed during the review of pesticides. It also includes information on the measures put in place to protect Canadians.

#### **Pesticide Regulation in Canada**

Pesticides are stringently regulated in Canada by Health Canada's Pest Management Regulatory Agency. Before a product is approved for use in Canada, it must undergo a thorough science-based risk assessment and meet strict health and environmental standards. If the use of a product poses risks to human health or the environment, it is not registered for use in Canada. Furthermore, all pesticides registered prior to 1995 are being re-evaluated using the most modern scientific risk assessment approaches to ensure they meet current safety standards.

A science-based risk assessment includes the following:

- a health assessment that looks at the potential for a pesticide to cause adverse health effects such as cancer, birth defects and endocrine disruption;
- an examination of all sources and routes (oral, dermal, inhalation) of potential exposure to a given pesticide, including exposure through diet, from drinking water and from contact with treated areas like lawns and gardens;
- an estimation of the amount of pesticide that people, including children, may come in contact with, both during and after a pesticide application;
- a human health risk assessment that determines the toxicity in relation to the amount of exposure in all potentially exposed populations, including children;
- an environmental risk assessment that considers risks to plants, birds, mammals, aquatic organisms as well as fate in the environment; and
- an assessment of value as it relates to the efficacy of the product being assessed.

For any re-evaluation of a pesticide or registration of a new one, the PMRA reviews the available information on the product, including epidemiology studies, toxicology studies and foreign reviews, before proposing a decision to all stakeholders. As a matter of policy and as required by law under new *Pest Control Products Act*, the PMRA publishes a consultation document for a comment period that invites all interested parties to provide comments and feedback on the proposed decision. These comments are reviewed and considered when preparing the final decision.



The PMRA will also consult with other regulatory authorities, such as the United States Environmental Protection Agency, the European Union and other member countries of the Organisation for Economic Co-operation and Development, to compare reviews and decisions.

As part of its assessments, the PMRA estimates the amount of exposure to which a user and bystander(s) could be exposed through use of the product. A pesticide will only be approved if this estimated exposure raises no concerns. Once this is determined, the PMRA will ensure the label directions indicate the appropriate use instructions to best minimize exposure. Therefore, it is highly important that the person using the product carefully follow the label directions.

The PMRA also sets the maximum residue limits (MRLs) on food commodities, which are enforced by the Canadian Food Inspection Agency. An MRL is the likely maximum pesticide residue on a food. It is set only after the PMRA has confirmed that any pesticide residues that could be consumed is acceptable.

### **Responsible Use of Pesticides**

It is good practice to reduce or eliminate any unnecessary exposure to pesticides. Canadians can and should seek opportunities to minimize their exposure to and reduce their reliance on pesticides. As such, the PMRA supports integrated pest management practices, an approach combining biological, cultural, physical and chemical tools to manage pests. In doing so, pest control benefits are maximized, while health and environmental risks are minimized.

If Canadians choose to use pesticides, they should use products only for their intended and approved use while following the directions on the label. These directions specify how you must use the product so that it poses no health or environmental concerns. To prevent accidents, pesticides should always be stored safely, in clearly marked containers and out of the reach of children.

### **Need More Information?**

The following links on the PMRA website provide further information on the topics discussed in this document:

#### **Pesticide Risk Assessment Process**

##### ***Fact Sheet on The Regulation of Pesticides in Canada***

[www.pmra-arla.gc.ca/english/pdf/fact/fs\\_pestreg-e.pdf](http://www.pmra-arla.gc.ca/english/pdf/fact/fs_pestreg-e.pdf)

##### **or for more details on the PMRA and pesticide regulation in html format**

[www.pmra-arla.gc.ca/english/aboutpmra/about-e.html](http://www.pmra-arla.gc.ca/english/aboutpmra/about-e.html)

##### **Science Policy Notice SPN2000-01—A Decision Framework for Risk Assessment and Risk Management in the Pest Management Regulatory Agency**

[www.pmra-arla.gc.ca/english/pdf/spn/spn2000-01-e.pdf](http://www.pmra-arla.gc.ca/english/pdf/spn/spn2000-01-e.pdf)



**Science Policy Notice SPN2003-03—*Assessing Exposure from Pesticides in Food A User's Guide***

[www.pmra-arla.gc.ca/english/pdf/spn/spn2003-03-e.pdf](http://www.pmra-arla.gc.ca/english/pdf/spn/spn2003-03-e.pdf)

**Science Policy Notice SPN2002-01—*Children's Health Priorities within the Pest Management Regulatory Agency***

[www.pmra-arla.gc.ca/english/pdf/spn/spn2002-01-e.pdf](http://www.pmra-arla.gc.ca/english/pdf/spn/spn2002-01-e.pdf)

**Responsible Pest Management**

***Healthy Lawns Strategy***

[www.healthylawns.net](http://www.healthylawns.net)

***Pest Notes***

[www.pmra-arla.gc.ca/english/consum/pnotes-e.html](http://www.pmra-arla.gc.ca/english/consum/pnotes-e.html)

***Action Plan on Urban Use Pesticides***

[www.pmra-arla.gc.ca/english/pdf/hlawns/hl-ActionPlan-e.pdf](http://www.pmra-arla.gc.ca/english/pdf/hlawns/hl-ActionPlan-e.pdf)

