



# RNAO

Registered Nurses' Association of Ontario  
L'Association des infirmières et infirmiers  
autorisés de l'Ontario

July 11, 2008

Mayor Lynn Peterson and Councillors  
c/o Office of the City Clerk  
City Hall, 500 Donald Street East, 3<sup>rd</sup> floor  
Thunder Bay, Ontario P7E 5V3

Dear Mayor Peterson and members of the City of Thunder Bay City Council,

The Registered Nurses' Association of Ontario is the professional association of registered nurses in Ontario. In speaking to our mandate to promote healthy public policy, RNAO advocates for by-laws that ban the use of pesticides for nonessential purposes. Research shows that pesticide by-laws combined with education and outreach are far more effective than education and outreach alone.<sup>1</sup> Thunder Bay has been engaged in a lengthy consultation on a pesticide by-law, and we are very pleased that you are considering such a by-law.

We are aware that provincial legislation (Bill 64) could eventually impact municipal pesticide bylaws, but it is uncertain if that would happen and when. RNAO is working with other partner organizations to amend that legislation and leave municipal pesticide legislation intact. We thus urge you to pass a strong bylaw and implement it as soon as possible, so that Thunder Bay citizens can sooner enjoy the health benefits of this protection. Your action would also remind the Province that municipalities remain concerned about pesticides and other environmental health issues, and encourage the Province to meet municipal expectations about nonessential use of pesticides.

As nurses, we have substantial concerns about the use of pesticides:

1. There are many epidemiological and laboratory studies linking a range of health problems to pesticide exposure. The problems include:
  - Cancer, birth defects, reproductive damage, neurological and developmental toxicity, immunotoxicity, and endocrine disruption.<sup>2 3 4 5 6</sup>
2. The risk to health comes not only from active ingredients, but also from so-called inert substances.<sup>7 8 9</sup>
3. We are concerned that existing controls, through Canada's national pesticide regulatory system, do not adequately protect children from the special risks that pesticides pose to them:<sup>10</sup>
  - Children tend to get greater exposure whenever pesticides are released because of their behaviour and play;
  - The developing organs and tissues of children are more vulnerable to harm;
  - Children are even exposed to pesticides in utero, when crucial physiological development occurs; and,
  - Children have a longer time ahead of them for exposure to pesticides and to develop resulting health problems.

4. Synergistic and cumulative effects can heighten the damage due to pesticides.<sup>11 12</sup>
5. Detection of pesticide damage in individuals is difficult, as physicians and other health professionals are not generally well trained in recognizing pesticide poisoning. Furthermore, the effects of pesticide damage are often only apparent after many years. Thus, people do not receive early warning signs that would allow them to take action in time.

RNAO believes that health considerations must be paramount in this debate. The precautionary principle dictates that we insist on proof of safety, rather than waiting for proof of harm. To quote the Canadian Cancer Society, “when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically.”<sup>13</sup> In view of the known risks, RNAO sees no justification for the cosmetic or nonessential use of pesticides. Pesticide by-laws protect all citizens and other living beings, including those who choose not to use pesticides but are exposed to pesticides used by others.

This issue is very important to nurses, and we applaud Thunder Bay for considering this significant public health measure. We urge you to pass the strongest possible by-law controlling the nonessential use of pesticides, and urge you to consider the Peterborough pesticide by-law model, with exemptions only to protect human health.

Mayor Peterson and Councillors, polling shows strong public support for pesticide by-laws across the province, and you can count on the support of registered nurses as you seek to build a safer and healthier environment.

With warmest regards,



Doris Grinspun, RN, MSN, PhD (cand), OONT.  
Executive Director  
RNAO

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<sup>1</sup> E.g., Canadian Centre for Pollution Prevention and Cullbridge Marketing and Communications (March 2004). *The Impact of By-Laws and Public Education on Reducing the Cosmetic/Non-Essential, Residential Use of Pesticides: A Best Practices Review*. 3.

<sup>2</sup> Sears, M., C Walker, RH van der Jagt, P Claman. (Apr 2006). “Pesticide assessment: Protecting public health on the home turf”, *Pediatrics and Child Health*, Volume 11 Issue 4: 229-234.

<sup>3</sup> M. Sanborn, M., K.J. Kerr, L.H. Sanin, D.C. Cole, K.L. Bassil, C. Vakil (Oct. 2007). “Non-cancer health effects of pesticides: Systematic review and implications for family doctors”, *Canadian Family Physician* 53:1712-1720.

<sup>4</sup> K.L. Bassil, C. Vakil, M. Sanborn, D.C. Cole, J.S. Kaur, K.J. Kerr. (Oct. 2007). “Cancer Health Effects of Pesticides: Systematic Review”, *Canadian Family Physician* 53:1704-1711.

<sup>5</sup> For an extensive review of the literature on the human health effects of pesticides, see *Pesticides Literature Review*, Ontario College of Family Physicians (April 2004). Accessed July 11, 2008 at <http://www.ocfp.on.ca/local/files/Communications/Current%20Issues/Pesticides/Final%20Paper%2023APR2004.pdf>.

<sup>6</sup> Solomon, Gina, O.A. Ogunseitan, Jan Kirsch (2000). *Pesticides and Human Health: A Resource for Health Care Professionals*, Physicians for Social Responsibility and Californians for Pesticide Reform.

<sup>7</sup> The EPA encourages manufacturers to refer to “inert ingredients” as “other ingredients” because an inert classification does not mean non-toxic (US Environmental Protection Agency (2006), *Inert (other) Ingredients in Pesticide Products*, accessed July 11, 2008 at <http://www.epa.gov/opprd001/inerts/>.

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- <sup>8</sup> Attorney General of New York (1996), *The Secret Hazards of Pesticides: Inert Ingredients*, February.
- <sup>9</sup> Journal of Pesticide Reform (1999), *Are "Inert" Ingredients in Pesticides Really Benign?*, Summer, Vol. 19, No. 2., 8.
- <sup>10</sup> Sanborn et al, 167.
- <sup>11</sup> Tuormaa, Tuula (2006), *The Adverse Effects of Agrochemicals on Reproductive Health*, Foresight, the Association for the Promotion of Preconceptual Care, accessed July 11, 2008 at [http://www.foresight-preconception.org.uk/booklet\\_agro.htm](http://www.foresight-preconception.org.uk/booklet_agro.htm).
- <sup>12</sup> Steingraber, Sandra (2005), *The Precautionary Principle vs. Regulation: Are We Living in a Chemical Stew?*, Keynote address at 9<sup>th</sup> Annual Conference on Women's Health and the Environment, October 24.
- <sup>13</sup> Canadian Cancer Society (2006), *Cancer and the Environment*, December 4, accessed July 11, 2008 at [http://www.cancer.ca/ccs/internet/standard/0,3182,3172\\_1434293210\\_langId-en,00.html](http://www.cancer.ca/ccs/internet/standard/0,3182,3172_1434293210_langId-en,00.html).