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

**Pollinator Health: A Proposal for Enhancing Pollinator Health and Reducing the Use of Neonicotinoid Pesticides in Ontario**

Submission to the Ministry of Agriculture, Food and Rural Affairs: EBR Registry Number 012-3068

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**Registered Nurses' Association of Ontario** **L'Association des infirmières et infirmiers autorisés de l'Ontario**
158 Pearl Street, Toronto, ON M5H 1L3 ~ Ph. 416 599 1925 ~ Toll-free 1 800 268 7199 ~ Fax 416 599 1926 ~ www.RNAO.ca

**RNAO response to *Pollinator Health: A Proposal for Enhancing Pollinator Health and Reducing the Use of Neonicotinoid Pesticides in Ontario***

The Registered Nurses' Association of Ontario (RNAO) is the professional association representing RNs, NPs and nursing students in all settings and roles across Ontario. It is the strong, credible voice leading the nursing profession to influence and promote healthy public policy. RNAO's dual mandate is to speak out on nursing and health issues, and that includes environmental determinants of health. Accordingly, we are pleased to respond to the government proposals on pollinator health, as posted to the Environmental Registry under EBR Registry Number 012-3068.

RNAO has been advocating with other health and environment organizations for action on neonicotinoids ("neonics") for some time,[1] [2] as the research is clear: our pollinator invertebrates are in deep trouble and neonics are part of the problem. We were very pleased that the government has proposed strong action, with a goal of reducing over-winter mortality of honey bees to 15 per cent by 2020 and reducing the number of acres of corn and soybean using seed coated with three specified neonics (imidacloprid, thiamethoxam, and clothianidin) by 2017. For us, that is a very important and laudable step forward. Continuing forward, we are calling for a full ban on all uses of neonics, to better protect the environment.

Neonics are insecticides. They work by attacking nerve receptors in insects. They are toxic to animals, but more toxic to insects than to mammals. Lethal and sub-lethal exposures are both problematic. We know that sub-lethal exposures can compromise the health of pollinators, which makes them susceptible to diseases and parasites. Neonics are water soluble, which means they can readily move into bodies of water. They are also persistent, which means they can, over time, continue to compromise animal and insect health. Biodiversity suffers not only due to the direct effects on vertebrates and invertebrates; the removal of many pollinators from the environment affects the success of plants and removes a substantial source of sustenance from creatures further up the food chain. We are particularly concerned with the widespread preventive use of neonics without a requirement to investigate whether insects of concern are even present in numbers that could affect crops. Moreover, routine preventive use of pesticides preempts consideration of agricultural approaches that work with the environment rather than in conflict with it.

The government is on strong grounds to move quickly on neonics as there is a broad consensus that neonics can harm pollinators and other invertebrates and vertebrates. The research has been summarized by the *Task Force on Systemic Pesticides,* which examined more than 800 peer-reviewed scientific papers on the topic over the past 20 years and published its conclusions in 2014 (see appendix).[3] The Environmental Commissioner of Ontario has provided a brief summary of science on neonicotinoids (see

appendix).[4] Both conclude that neonics harm pollinators and that action is necessary. In the face of the evidence and the concern that use of neonics adds to the toxic load we all carry, a precautionary approach is warranted. The onus to prove safety and effectiveness ought to rest with the proponent of a given toxic. The evidence on adverse effects was sufficiently compelling that the European Commission voted to restrict the use of the three neonics listed above for two years.[5] [6] [7] This happened after the European Food Safety Authority identified that neonics represented significant risks to bees.[8]

**The Pollinator Health Proposal**

Government is already working with agricultural partners to reduce neonic use. It is also supporting farmers with relevant research and financial support. It makes sense to continue that collaboration and support. The government proposal supplements that work by quite properly addressing key dimensions of pollinator health:

- reducing pesticide exposure
- protecting and enhancing pollinator habitat and nutrition
- monitoring and research on disease, pests and genetics, and
- adaptation to climate change and weather challenges through diversification and increase of pollinator populations

There are all welcome steps, with the devil coming in the details. With sufficient resources appropriately directed, the latter three measures can be effective. We urge the government to invest resources commensurate with the importance of the sector and the urgency to protect biodiversity.

The portion of the proposal attracting the greatest attention is the regulation of neonics. That is unsurprising because of the various interests involved. RNAO calls on the government to make its "aspirational target" of 15 per cent over-winter mortality of honey bees by 2020 into a firm target. The supportive "aspirational target" of an 80 per cent reduction in soybean and corn crops using neonic-coated seed by 2017 would help to realize the mortality goal.

RNAO asks the government to go further. A complete ban on all uses of all neonics would be more protective still. The government must also structure its controls so that environmental exposures to neonics in any form drop dramatically. It would not help if an 80 per cent drop in use of neonic-coated seeds is accompanied by sharp increases in foliar spraying of neonics. And of course, the controls must prevent neonics from being replaced by even more toxics pesticides.

**RNAO Recommendations**

1. Proceed with the proposed plan as a first step, making the "aspirational targets" into firm targets.

2. Apply the controls to all neonics in all applications.

3. Make the usage target an 80 per cent reduction in all neonics by 2017.

4. Commit to a full ban on all uses of all neonics as the next step forward, and to be achieved by 2020.

5. Ensure that any reduction in neonics does not trigger an increase in the use of other pesticides that could offset some or all of the environmental benefit of the neonic reduction.

**References:**


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