

January 21, 2019

Health Canada
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To Whom it May Concern,

Re: Defining vulnerable populations - A first step towards a policy framework on vulnerable populations

The Canadian Environmental Law Association (CELA) is pleased to respond to this consultation. We have addressed the issue of toxic substances and vulnerable populations, particularly with respect to fetal and child health, for over 30 years, including as a founding partner of the Canadian Partnership for Children's Health and Environment (CPCHE).

Indeed, over ten years ago, CPCHE published the results of a national multi-stakeholder policy consultation convened in cities across Canada. In *First Steps in Lifelong Health: A Vision and Strategy for Children's Health and Environment in Canada*,¹ CPCHE emphasized the need for clear policy at all levels of government recognizing the unique vulnerabilities of the developing fetus and child to toxic chemicals. CPCHE's multiple policy recommendations were grounded in what was already very strong evidence about greater susceptibility during multiple stages of development. This evidence was and remains particularly strong for the greater vulnerability of the developing fetus. Likewise, an aspect of greater vulnerability is the reality of greater exposure during sensitive life stages for many reasons, including the fact that some sub-populations are even more highly exposed than the general population, again for multiple reasons, especially under conditions of poverty. CPCHE also called for specific recognition of, and action on, fetal exposures that occur in the workplace.

A clear definition of vulnerable populations within a policy framework for same is thus necessary and overdue in Canada. We have also recently proposed including a definition of vulnerable populations in the *Canadian Environmental Protection Act*.²

The consultation paper offers a proposed definition as follows:

“a group of individuals within the general Canadian population who, due to either greater susceptibility and/or greater exposure, may be at greater risk than the general population of experiencing adverse health effects from exposure to chemicals”

¹ Online at: <http://www.healthyenvironmentforkids.ca/resources/first-steps-lifelong-health-vision-and-strategy-childrens-health-and-environment-canada-re>

² See Castrilli, Joseph, Proposed Amendments to CEPA, 1999. Canadian Environmental Law Association, October 15, 2018. Online at: <https://www.cela.ca/proposed-ammdements-CEPA>

The paper then offers a range of explanatory statements related to both biological susceptibility and greater exposure. In our view, so long as these additional explanatory statements are clearly linked to the definition of vulnerable populations, the proposal is, in large measure, robust, commendable, and would capture the elements we have included in our proposed statutory language (and in CPCHE's work for nearly twenty years), subject to the comments below.

We particularly appreciate the inclusion of greater biological susceptibility of the "developing fetus during pregnancy." Stated thus, it should be clear that a pregnant woman's exposures are the central concern since it would be pregnant women and not fetuses who must constitute the "group of individuals" contemplated in the definition.

We are also especially supportive of how this document recognizes the important reality of substandard housing and other low-income circumstances contributing to higher exposure. This fact is well supported in evidence recently gathered by the Public Health Agency of Canada in a national profile.³

The document should be made more explicit in noting the vulnerability of the fetus *in utero* with respect to both greater susceptibility and greater exposure. The document really only includes fetal vulnerability in the description of the reasons for greater biological susceptibility, at least with unambiguous language. For exposure, while the list of issues/circumstance that can contribute to greater exposure might be interpreted to include fetal exposure due to maternal exposures, the reality that such fetal exposure can and does occur is not clear. A simple clarifying edit could be to modify the introductory sentence in advance of the list to state (edit noted in highlighted text):

For the purposes of the proposed definition of vulnerable populations, individuals, **including pregnant women**, with greater exposures may include:

Not clearly included however are preconception exposures, for both women and men, among populations with higher exposures, (e.g., due to occupational exposures, substandard housing, etc., i.e., the other circumstances listed in the consultation document). Such exposures, among both men and women, are known or suspected in contributing to reproductive or developmental impacts. The document does not clearly anticipate the intergenerational impacts of pre-conception exposures.

Nor is the exposures-specific list sufficiently clear on the fact that chemical exposures often arise from the use, including deterioration via wear-and-tear, of consumer products. An example of where two of these shortcomings in the document arise, (i.e., not clearly addressing fetal exposure and not adequately addressing exposures via consumer products), is the reference to the choice during risk management of bisphenol A (BPA) to prohibit its use in polycarbonate baby bottles. While this regulatory action was worthwhile, it was far too limited to address the time of greatest vulnerability (*in utero*) and the many other sources of BPA in consumer products.

³ Public Health Agency of Canada, 2018. Key Health Inequalities in Canada - A National Portrait. Online at: <https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html>

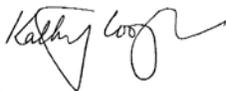
Another area that the document overlooks entirely is the vulnerability that arises from the cumulative exposure to multiple environmental chemicals.

We also note that the document references the *Pest Control Products Act* as an example of chemicals management legislation that specifically requires consideration of vulnerable populations, a reference to the so-called “PCPA factor” that allows risk assessors to apply an additional up to 10-fold safety margin in risk calculations. This approach under the PCPA likely cannot address the very low exposures associated with endocrine disrupting substances. However, regarding the application of the PCPA factor in situations other than very low dose, endocrine toxicity, we wish to clarify and amend statements we made to Health Canada in November of 2018 in response to an earlier draft of this proposed definition. That is, while we have strong misgivings about the implementation of the PCPA factor, notably that it is far too rarely applied, or applied it too limited a fashion, we have always supported its inclusion in the PCPA and continue to do so.

In conclusion, CELA supports the overall content and intent of this consultation document, including the reference to multiple exposure/biomonitoring and longitudinal studies that must continue and indeed be expanded to provide a Canadian-specific data and research foundation to support robust regulation of toxic substances. We also strongly support statements made with respect to a policy framework that needs to more adequately address Indigenous Peoples and populations differently and disproportionately affected by exposure to toxic substances particularly under low socio-economic circumstances.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION



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***About CELA:** The Canadian Environmental Law Association (CELA) is a non-profit, public interest organization and legal aid clinic established in 1970 to use existing laws to protect the environment and to advocate environmental law reforms. CELA works toward protecting public health and the environment by seeking justice for those harmed by pollution or poor decision-making and by changing policies to prevent problems in the first place. As a specialty clinic funded by Legal Aid Ontario, our primary focus is on assisting low-income people and disadvantaged communities.*