



April 8, 2024

Right to a Healthy Environment Implementation Framework Team
Legislative and Regulatory Affairs Directorate
Environment and Climate Change Canada
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Re: Submission in response to consultation on the Implementation Framework for a Right to a Healthy Environment under the Canadian Environmental Protection Act (CEPA), 1999

We write today as the **Canadian Partnership for Children's Health and Environment (CPCHE)** to express our enthusiastic support for the recognition of the Right to a Healthy Environment through the modernization of the *Canadian Environmental Protection Act, 1999 (CEPA)* through Bill S-5, *Strengthening Environmental Protection for a Healthier Canada Act*. This essential rights-based framework has the potential to ensure that all children in Canada are protected from environmental exposures to toxic substances that jeopardize their health, disrupt the normal development of their growing bodies and brains, increase the risk of developing chronic diseases later in life, and exacerbate health and social inequities. We applaud the government's efforts to pass this historic legislation and pursue a public engagement process to ensure that the implementation framework will ensure equitable, accessible and meaningful opportunities for this right to be realized for all people in Canada.

CPCHE is a national collaboration of organizations with overlapping missions that have been working together for more than two decades to improve children's environmental health in Canada (www.healthyenvironmentforkids.ca). Our aim is to increase awareness, mobilize knowledge and catalyze action on children's environmental health concerns, with a specific focus on preventing/reducing exposures to toxic chemicals and pollutants during the vulnerable stages of fetal and child development. Our intersectoral perspective and rigorous adherence to scientific evidence and grounded expertise have positioned CPCHE as a respected source of information on children's environmental health issues.

CPCHE urges the implementation framework to consider the specific vulnerabilities of children to toxic chemical exposures in all environments where children live, learn and play. Compared to adults, children are more exposed to toxic substances in their environments because of differences in size, intake and behaviour. They are also more susceptible to adverse effects of toxic exposures because their immune and metabolic systems are immature, and their brains and organ systems are undergoing rapid and dynamic development that opens up windows of vulnerability to harm. The health implications of *in utero* and childhood exposure to toxic substances are wide ranging and include respiratory disease (including asthma),¹ metabolic dysfunction and development of

¹ Dick S, Friend A, Dynes K, et al. A systematic review of associations between environmental exposures and development of asthma in children aged up to 9 years. *BMJ Open* 2014; 4: e006554. doi.org/10.1136/bmjopen-2014-006554

Type 2 diabetes,² impaired cognitive development^{3,4,5}, and the development of several chronic diseases into adulthood, such as cardiovascular disease, obesity, Alzheimer's disease and cancer.⁶ Preventing exposure to toxic substances across childhood development (including pre-conception and prenatally) is essential to promoting the health of all people in Canada.

There is increasing and substantial evidence that even low-level exposures to ubiquitous toxic substances contribute to adverse outcomes in children,⁷ including disruption of children's cognitive and behavioural development.^{8,9} Nearly 8 % of children in Canada have a learning or behavioural disorder.⁷ Scientists have demonstrated that early-life exposures to toxic chemicals contribute to neurodevelopmental disabilities including autism, attention-deficit hyperactivity disorder (ADHD), dyslexia and other cognitive impairments such as reduced IQ, inattentiveness, memory challenges and anxiety.¹⁰ The impacts on children and their families are considerable, as are the population-level effects.¹¹

As outlined in our landmark [Vision & Strategy](#) document, CPCHE has long advocated for an integrated framework for children's environmental health protection in Canada that prioritizes action and investment in (1) research, (2) law and policy, and (3) on-the-ground protection. This integrated framework includes robust implementation of the right to a healthy environment and public right-to-know; application of the precautionary principle; modernized chemical assessments that consider aggregate, cumulative, synergistic and low-level effects, potential subclinical, latent, and intergenerational effects, and disproportionate exposures and vulnerability to harm experienced by marginalized populations; prioritization of vulnerable life stages; and enforceable means to ensure environmental justice for disproportionately affected communities.

We welcome the work toward the development of an Implementation Framework for the Right to a Healthy Environment that supports modernized and effective chemicals management under CEPA. We urge the Government to ensure that this framework will deliver on each of the following:

- 1) Adopt a **definition of a healthy environment that recognizes the critical links between the physical environment and human health**, and that explicitly accounts for **environmental injustice**, disproportionate exposure and risks, and inequity.
 - a. Include all environments where children live, learn and play within the conceptualization of a healthy environment: including home, learning environments (schools and child care settings), outdoor environments and indirect exposures (e.g. reproductive and *in utero* exposures through parental occupational exposures).

² Alderete TL, Chen Z, Toledo-Corral CM, et al. Ambient and traffic-related air pollution exposures as novel risk factors for metabolic dysfunction and type 2 diabetes. *Curr Epidemiol Rep* 2018; 5: 79–91. doi.org/10.1007/s40471-018-0140-5

³ Winneke G. Developmental aspects of environmental neurotoxicology: lessons from lead and polychlorinated biphenyls. *J. Neurol. Sci* 2011; 308 (1–2): 9–15. doi.org/10.1016/j.jns.2011.05.020

⁴ Forns J, Davdand P, Esnaola M, et al. Longitudinal association between air pollution exposure at school and cognitive development in school children over a period of 3.5 years. *Environ Res* 2017; 159: 416–21. doi.org/10.1016/j.envres.2017.08.031

⁵ Perera FP, Li Z, Whyatt R, et al. Prenatal airborne polycyclic aromatic hydrocarbon exposure and child IQ at age 5 years. *Pediatrics* 2009; 124(2): e195–202. doi.org/10.1542/peds.2008-3506

⁶ Cooper K, Marshall L, Vanderlinden L, and Ursitti F. *Early Exposures to Hazardous Chemicals/Pollution and Associations with Chronic Disease: A Scoping Review: Executive Summary*. A report from the Canadian Environmental Law Association, the Ontario College of Family Physicians and the Environmental Health Institute of Canada. 2011. <https://cela.ca/early-exposures-to-hazardous-pollutants-chemicals-and-associations-with-chronic-disease-a-scoping-review/>

⁷ Birnbaum L, Jung P. From Endocrine Disruptors to Nanomaterials: Advancing Our Understanding Of Environmental Health To Protect Public Health. *Health Affairs* 2011; 30: 814–22. doi.org/10.1377/hlthaff.2010.1225

⁸ Arbuckle TE, Davis K, Boylan K, Fisher M, Fu J. Bisphenol A, phthalates and lead and learning and behavioral problems in Canadian children 6–11 years of age: CHMS 2007–2009, *NeuroToxicology* 2016, 54: 89–98. doi.org/10.1016/j.neuro.2016.03.014

⁹ Rauh VA, Margolis AE. Research Review: Environmental exposures, neurodevelopment, and child mental health – new paradigms for the study of brain and behavioral effects. *Journal of Child Psychology and Psychiatry* 2016; 57; 7: 775–793. doi.org/10.1111/jcpp.12537

¹⁰ Grandjean P, Landrigan P Neurobehavioural effects of developmental toxicity. *The Lancet Neural* 2014; 13: 330–38. [doi.org/10.1016/S1474-4422\(13\)70278-3](https://doi.org/10.1016/S1474-4422(13)70278-3)

¹¹ See, for example: <https://littlethingsmatter.ca/2018/02/13/developingbrain>

- b. Consider that there is an abundance of evidence that exposures in all manner of settings and environments are currently causing harm to children. A healthy, clean environment is one where there is an absence of contamination, where there are no chemicals known or suspected to interfere with children's health and development. It is towards that goal that the right to a healthy environment framework should be oriented.
 - c. In order to be precautionary and address scientific uncertainty as well as intergenerational concerns, the definition of a healthy environment must address inherent hazards of substances. Taking action on hazardous substances only at the point when exposures are sufficiently high that demonstrable and significant harm has occurred is consistent with neither a rights-based framework nor precaution.
 - d. The health and sustainability of all living systems must be understood to be inextricably tied to human health, where ecosystem level harm is indicative of harm to human health, even if not yet clinically observable.
 - e. Adopt a holistic definition of health that: includes physical and mental health as well as subclinical and indirect impacts on health and wellbeing; encompasses the well-being of present and future generations; and recognizes and draws on, *inter alia*, Indigenous ways of knowing and the grounded expertise of people affected by environmental harms and injustice.
 - f. Prioritize populations who have disproportionate exposures and/or risks from toxic chemicals, pollution and environmental injustice within all of the above settings, including children (from conception through fetal development, childhood and adolescence), pregnant people and women of reproductive age, Indigenous peoples, racialized people, workers facing occupational exposures, people living on low income and who are otherwise marginalized, those living with multiple chemical sensitivities and other chronic conditions, and seniors.
- 2) Ensure alignment with the Wingspread definition of the **precautionary principle**¹² such that robust precautionary policies and programs are in place which prevent environmental exposures from harming the vulnerable stages of fetal development, infancy and childhood, in recognition of the fact that exposures during the earliest stages of life are powerful determinants of health in later years. In this context, the proponent of an activity, rather than the public, bears the burden of proof.
- a. Precautionary measures should be taken even in the absence of scientific certainty about the ability of a substance or activity to cause harm. In the absence of sufficient information to determine whether a substance is toxic, the implementation framework should ensure that the principles of precaution, environmental justice, and intergenerational equity are fully supported.
 - b. Especially when balancing "reasonable limits" to this right, consider that many substances have no safe level of exposure (one such example is lead). As such, any level of exposure to such substances, especially considering the multiplicity of concurrent exposures that are the current reality, should be considered inconsistent with the right to a healthy environment. Implementation of the right, and corresponding regulatory policy, should aim for virtual elimination as opposed to an "acceptable" level of exposure or threshold.
- 3) Support of the **public's right to know** by ensuring transparency in the collection and use of environmental data, requiring labelling of all toxic substances in consumer products, and establishing a "presumption of non-confidentiality" to protect the right to know about substances, except where a claim to confidentiality has been fully demonstrated.

¹² Raffensperger C, Tickner J. *Protecting public health and the environment*, 1999, Island Press.

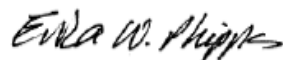
- 4) Adopt a **framework toward continuous improvement, intergenerational equity, non-regression, and biomonitoring** such that the body burdens of environmental contaminants in each subsequent generation of children born in Canada are progressively reduced.
- a. Given the current reality of ubiquitous exposures to harmful substances, the implementation of the right to a healthy environment should ensure that future generations have a healthier environment than current generations.
 - b. Robust and sustained longitudinal biomonitoring research, including birth cohort studies that build on and expand successful research initiatives such as the Maternal-Infant Research on Environmental Chemicals (MIREC) and that are inclusive of socio-economically marginalized and disproportionately exposed populations, are essential to measuring and demonstrating the commitment to continuous improvement that is inherent in a rights-based framework.
 - c. Similarly, investments should be made in ecological monitoring (e.g., the Integrated Chemicals Mixtures Project) in light of the interconnections between ecological and human health and to proactively seek out the early warning signs of harmful chemical/pollutant impacts (e.g., via sentinal species).
 - d. Regrettable substitutions, as well as continued use of toxic chemicals known to be persistent, should be considered forms of regression, inconsistent with a right to a healthy environment.
 - e. Intergenerational equity also demands urgent and effective action to reduce greenhouse gases and their contribution to climate change.
 - f. Ensure that the consideration of balanced factors in the determination of “reasonable limits” to this right is in fact balanced. For example, health implications must be evaluated through a broad lens (i.e., cumulative and intergenerational impacts and with consideration of the inextricable links between healthy ecosystems and human health) and must be given at least equal standing to other balancing factors. Economic assessments must account not only for potential impacts on proponents of an activity, but must robustly and proactively consider potential economic benefits (e.g., reduced health care and societal costs) as well as metrics of societal well-being.
- 5) Align with **Indigenous rights**, including Free, Prior and Informed Consent as mandated by the *United Nations Declaration on the Rights of Indigenous Peoples*.
- 6) Address **barriers to participation** in the development of the Implementation Framework and **unequal access to justice** in the realization of this right.
- a. Proactively and meaningfully engage populations listed above – i.e., those with disproportionate and cumulative exposures to toxic chemicals and those affected by inequitable distribution of resources and power – to ensure implementation mechanisms will adequately support awareness, access to information, capacity, participation and engagement, and access to necessary supports, such as technical and legal advice and financial support.
 - b. Address intergenerational equity through broad engagement of diverse age groups, especially youth, in decision-making processes.
 - c. Expand public engagement and consultation processes such that they will inform the framing of societal needs and priorities in the context of chemicals management and environmental protection. Such processes should occur well in advance of and beyond the confines of the narrowly-scoped risk management process for individual chemicals/chemical categories.

- d. Develop public communications that expand public knowledge of sources and contexts for chemical/pollutant exposures, via fulsome labelling and disclosure of chemical substances and the utilization of precautionary messaging. As noted above, the public's right to know about chemical substances requires sparing and transparent application of confidential business information provisions, and only when fully justifiable.

With the realization of the Right to a Healthy Environment now before us, Canada has an unprecedented opportunity to ensure the well-being of human populations and the ecosystems upon which all life depends, while demonstrating proactive leadership on the global stage. A robustly developed Right to a Healthy Environment Implementation Framework, firmly rooted in the precautionary principle, continuous improvement, environmental justice and grounded expertise of communities facing disproportionate exposures and risks will improve the lifelong prospects of children, today and in future generations. Conversely, a collective failure to enact a meaningful, accessible rights framework under CEPA will mean that the bodies and brains of our children will continue to be affected by harmful and often unnecessary exposures to toxic chemicals via products and environmental pollution, with their lifelong prospects – and by extension the prospects of our nation – needlessly curtailed.

We applaud the Government of Canada's efforts to date and urge you to exercise your leadership in ensuring a proactive, robust, meaningful and vigorously enforced Right to a Healthy Environment under CEPA, for the benefit of Canada's peoples and our environments, now and into the future.

Yours sincerely,



Erica Phipps, MPH, PhD
Executive Director

Signed on behalf of:

Canadian Partnership for Children's Health and Environment (CPCHE) – Partner Organizations*



Canadian Partnership for Children's Health and Environment (CPCHE) – Affiliate Organizations*



NB: CPCHE's views and recommendations on the Implementation Framework for the Right to a Healthy Environment have also been shared with the Honourable Steven Guilbeault, M.P., Minister of Environment and Climate Change, and the Honourable Mark Holland, M.P., Minister of Health

*For more on CPCHE including the full list of CPCHE organizations, please visit: www.healthyenvironmentforkids.ca